# **Czech University of Life Sciences Prague**

Faculty of Economics and Management

Department of Economics

# **Diploma Thesis**



# Economic evaluation of Visegrad brand

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# **DIPLOMA THESIS ASSIGNMENT**

Tamás Ivan

**Economics and Management** 

Thesis title

Economic evaluation of Visegrad brand

# **Objectives of thesis**

-To identify the economic and agriculture posi on in Visegrad countries

-To find the way how to increase the amount of food products in each Visegrad country with origin

from the other three Visegrad countries

-To evaluate the necessity of crea on of Visegrad brand

-To construct the Visegrad brand

# Methodology

Research

Comparison

Questionnaire

Synthesis

### The proposed extent of the thesis

60 pages

# Keywords

Visegrad, agriculture, brand, product

# **Recommended informa on sources**

Johnston Bruce F. and W. Mellor John, The Role of Agricultural in Economic Development, Vol 51, No. 4 (Sep., 1961), pp. 566-593, published by American Economic Associa on

Pindyck, S.Robert, and L. Rubinfeld Daniel. Microeconomics. Upper Saddle River, N.J.: Pearson/Pren ce Hall, 0130165832,9780130165831,2009

SHARP, G. and CAPSTICK C. W. THE PLACE OF AGRICULTURE-IN THE NATIONAL ECONOMY. 5 NOV 2008, DOI: 10.1111/j.1477-9552.1966.tb01977.

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# Declaration

I declare that I have worked on this diploma thesis titled "Economic Evaluation of Visegrad brand" on my own with the use of only those literature resources which are listed at the end of this work.

In Prague on

.....

Tamás Ivan

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#### Economic evaluation of Visegrad brand

#### Summary

Due to Globalization the number of multinational companies and supermarkets have increased in the world as well as in Central Europe. It is a very successful and useful step which facilitates the life of everyday people. The consumers can buy any product they want at cheaper price than ever. The companies would do everything to satisfy and keep their consumers. It is clear that the owner of benefits from this situation is the consumer.

Unfortunately as everything, this situation has a negative side too. The decreasing number of domestic goods and producers is one of the negative consequences. The main goal of the thesis is to explain why the creation of Visegrad brand is an important step in alliance of V4 countries (CZ, SVK, HUN, PLN). Furthermore it shows how the brand would help to domestic producers and what impacts would it has. To get a real picture and useful result firstly it is necessary to get a clear picture about the Visegrad alliance, specifically how is the member states economy and agriculture operating, concretize the exports and imports of these countries, identify the main export and import partners of V4 countries, analyse how the domestic trademarks of these countries are functioning and how does their structure look like.

Finally the thesis determines the deficiencies of the above mentioned areas. Necessary part of this research is also construction and processing of questionnaire where both consumers and producers are surveyed in order to understand better the significance of this branding strategy. Based on the results a regression analyses will be made. With the help of the results of the above mentioned areas the paper shows a complete operational structure of the brand and justifies why the creation of Visegrad brand is important and necessary in V4 alliance.

#### Key words

Visegrad, agriculture, economy, brand, product

#### Ekonomické ohodnocení Visegradské značky

#### Souhrn

Globalizace je důvodem ke vzrůzstajícímu počtu mezinárodních společností a supermarketů ve světě stejně jako ve střední Evropě. Tento krok je vnímán jako užitečný a úspěšný usnadnujě běžný život běžných lidí. Spotřebitelé mají možnost koupit jakýkoli produkt dle jejich volby a současně levněji než kdy jindy. Společnosti udělají vše pro udržení a uspokojení tužeb zákazníka. Je jasné, že zákazník je v této situaci ve výhodnější situaci.

Bohužel, jako všechno i tato situace má svá negativa. Klesající počet tuzemských výrobků a výrobců je jedním z negativních důsledků. Hlavním cílem práce je vysvětlit důvody nutnosti vytvoření Visegrádské značky jakožto důležitého kroku pro státy společenství V4 (CZ, SVK, HUN, PL). Dále to ukazuje, jak by tato značkoa pomohla domácím výrobcům a jaké dopady by to mělo. K získání reálného obrazu je nejdříve nutné získat jansou představu o Visegrádské alianci, konkrétně jak fungují ekonomiky a agreární sektor v jednotlivých členských státech, konkretizovat export a import těchto zemí, identifikovat jejich hlavní vývozní a dovozní partnery, analyzovat jak fungují domácí ochranné známky jednotlivých zemí a jak vypadá jejich struktůra.

Na závěr práce identifikuje nedostatky ve výše zmíneních oblastech. Nezbytnou součástý tohoto výzkumu je také tvorba a vyhodnocování dotazníku, kde jsou oba jak zákaznící tak producenti dotazováni, aby byl lépe pochopen významm této brandingové strategie. Na základě výsledků šetření bude provoedena regresní analýza. S pomocí výsledků z výše zmíněných oblastí, práce ukazuje kompletní operační struktůru značky a odůvodňuje důležitost vytvoření Visegrádské značky v rámic V4 aliance.

#### Klíčové slová

Visegrad, zemědělství, ekonomie, značka, výrobek

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# 1. Introduction

Central Europe is in the heart of Europe. The nationalities in Central Europe have common and similar religious traditions but somehow they differ from each other. Populations here speak similar languages but also they somehow differ from each other. On the other hand one thing links them forever, their history. The Central European nationalities always had a stressful relationship but when it was necessary they always found the way to each other.

"The "Central European identity in politics" is a difficult topic to discuss for two reasons. Firstly, the concept of Central Europe and, therefore, also the concept of a common identity, are somewhat elusive; secondly, while there are some positive traditions in Central Europe's political history, there are also features that are problematic.

. . . . . . . . .

It is clear that the identity of Central Europe, and its contribution to pan-European politics, is a rather mixed bag. On the one hand, Central Europe can, once it has become part of it reinvigorate the EU. Central Europe's notions of civil society and the importance of human rights can in some ways mitigate the relativist tendencies present in today's Western democracies.

At the same time, Central Europe needs to overcome some of its less positive legacies, especially its weak political institutions, ineffective governance, and a degree of provincialism. Membership in the European Union is an excellent opportunity to modernize the region's institutions and elevate political discourse to Western standards.

In some ways, Central Europe can also serve as a useful bridge between the West and the East, as it understands both cultures. "<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Central European Identity in Politics. (n.d.). Retrieved February 23, 2016, from http://www.pehe.cz/prednasky/2002/central-european-identity-in-politics

# 2. Aims, hypotheses and methodology

# 2.1 Main aims

The Diploma Thesis deals with economic evaluation and creation of Visegrad brand. The main aim is to construct the Visegrad brand. To get successfully this phase first of all the thesis has to identify the economic and agriculture position of Visegrad countries. Furthermore another aim is to find the way how to increase the amount of food products in each Visegrad country with origin from the other three Visegrad countries. The last important aim is to evaluate the necessity of creation of the Visegrad brand.

# 2.2 Methodology

#### **Research:**

Nonrecurring research: Has been used to evaluate the Visegrad alliance since the change regime till the present days

Indicative research: has been used to evaluate the agriculture cooperation between the V4's

# **Comparison:**

The second method of comparing comprises measurements, investigation and objectification has been used. More detail to compare the V4's indicators in the field of their historical development of agriculture and economy from 1989 to present days.

#### **Questionnaire:**

Two types of questionnaires have been made, the first for consumers and the second for producers. The questionnaire was filled in by 200 consumers and 200 producers divided equally between the V4 countries. The questionnaires are illustrative questionnaires because in the case of consumers there are more than 60 million potential consumers. In the case of producers the number is lower but still many thousands of farmers and producers are in V4. In the questionnaire closed questions have been used. Furthermore, Likert scale type has been chosen for the possible answers.

# Synthesis:

Logistic regression model will be used on the results of questionnaire, where the dependent variable will be the willingness to accept the brand and the independent variable will be the age, gender, type of respondent and home country of the respondent.

# 2.3 Hypotheses

- The domestic foodstuffs in all V4 country's supermarkets are over 60% on average
- With the creation of national brands the V4 countries have increased the sales ratio of domestic foodstuffs
- With the applying of the Visegrad brand the amount of foodstuffs in each Visegrad country with origin from the other three V4 countries would increase

# 3. Theoretical section

In the followings the Visegrad alliance will be analysed and presented too. After that the thesis will describe the economic, agriculture situation of Visegrad countries. Furthermore it will show their trading partners and their main exported and imported goods, products.

# 3.1 The creation of V4 alliance

The demographic location, the similar culture and tradition and the close historical relationship was always a basis for cooperation. All four countries are small open economies. Unfortunately in the past it was not typical for these countries because they were members of the Soviet Union. During this era they strongly depended on the Soviet economy and this characterized their economy too. The result was that their share on the world trade was very low. At the beginning of the 1990's in all four countries has started the democratization process. They wanted to catch up to the western countries and they have made important steps to build up the market economy in their countries. The result of these effects has aroused the idea of regional integration.

#### 3.1.1 The history of V4

The Visegrad alliance has started in 1335 when Hungarian king, Károly Róbert initiated a reunion in Visegrad with the Czech king, John Luxemburg and the Polish king, Casimir III. The three kings agreed about the creation of a new trade route, for strengthening the trade between the three kingdoms and in mutual military defence. This was very important economic and defence step because the Habsburg Empire was a big danger for all three kingdoms. They have realized that together they are stronger and they can easier make steps against the Habsburg Empire.

#### 1. Figure: The map of Visegrad countries



Source:www.diplomatonline.com

After the change regime the situation was similar. They knew their aims could be most effectively achieved if they cooperate. In February 1991 for Hungarian initiation the Visegrad reunion was repeated. Hungarian Prime minister, Antall József, Polish president, Lech Walesa and the Czechoslovak president, Václav Havel signed a memorandum. The main goal of this memorandum was to move away from the Soviet system and get closer to the Euro Atlantic integration. In the 1990's the Visegrad countries were the most developed regime changed countries. Except Slovakia they become members of OECD and NATO. In November 1991 they have created the basic criterions of the free trade. The agreement extends on many industrial and agricultural products, for the reduction of tariffs.

"In the early 1990s, after the historical changes and the fall of the Iron Curtain, the countries of Central Europe—Czechoslovakia, Hungary, and Poland—were faced with the emergence of another enormous task: To integrate our young democracies into European and trans-Atlantic structures. At that time, we embraced the Euro American notion of democracy with two basic aims in mind: To strengthen our own democracies and to render impossible any return to totalitarianism. It was clear that we couldn't achieve such ambitious goals if our three countries were to compete with each other on the international stage. On the contrary, we could only reach our aims through close cooperation."<sup>2</sup>

The Visegrad cooperation does not institutionalize representatives of the Visegrad countries to have regular meetings. The official meeting of the heads of governments takes place once a

<sup>&</sup>lt;sup>2</sup> Havel, V.: The Visegrad Dream Still Relevant Today. In: Jagodzioski, A. (ed.), The Visegrad Group – A Central European Constellation. E. Bratislava 2006, pp. 54-55.

year. The presidency of the Visegrad alliance is every year changing between the four countries.

### 3.1.2 The International Visegrad Fund

The International Visegrad Fund is the only physical result of the Visegrad cooperation. This institution was created in June 2000 in Bratislava, Slovakia. Slovakia is the only country which is adjacent with the other three members of V4. This is the main reason why this location have been chosen. The aim of the fund is to strengthen the cooperation between the four countries in the field of culture, education, cross-border cooperation, science and tourism.

The member countries have to equally pay to the fund's budget. The budget of the fund in 2010 was 6 million EUR. The Visegrad Fund has four kinds of programs. The programs are small, standard, strategic and Visegrad competition programs. From this budget can get money non-governmental organizations, local and regional councils, schools, universities, private companies and private persons.

2. Figure: Visegrad Fund



Source: www.visegradgroup.eu

#### **Programmes of the Visegrad Fund:**

# **"Small Grants:**

They are intended to support the implementation of projects involving co-operation between various entities from the V4 countries (e.g. NGOs, local governments, universities) in the areas of the IVF activity (see above);

Closing dates for applications are 1 March, 1 June, 1 September and 1 December each year; the maximum IVF allocation per project is EUR 6000, whereas the IVF contribution may not exceed 70 % of the total cost of project implementation, and the grant is extended for the period of up to 6 months (even if the project implementation is expected to last longer).

#### **Standard Grants:**

They are designed to support the implementation of projects involving co-operation between various entities from the V4 countries (e.g. NGOs, local governments, universities) in the areas of the IVF activity (see above);

Closing dates for applications are 15 March and 15 September each year;

The IVF allocation per project is higher than EUR 6000, whereas the IVF contribution may not exceed 70 % of the total cost of project implementation, and the grant is extended for the period of up to 12 months.

#### **Visegrad University Studies Grant:**

It is intended to promote the development of courses of study or study programmes (in the area of humanities and social sciences) focusing upon issues closely related to the V4 countries;

Higher education institutions may apply for the grant award, amounting to approx. EUR 10 000 per course or EUR 40 000 per study programme.

The nearest closing date for application is 10 November 2013.

#### **Visegrad University Studies Grant – Joint-Degree Program:**

Grants may be extended to university departments or faculties and/or research centres/organizations that submit a joint-degree study programme with a convincing long-term prospective of student intake;

the last deadline for submitting grant applications expired on 10 April 2013.

#### Visegrad Strategic Programme (Strategic Grants):

Strategic grants support important, long-term strategic projects implemented by institutions from all the four Visegrad Group countries working in liaison;

Projects must focus upon priorities set out for the given year;

Grants are extended for the period of up to 3 years (approx. EUR 30 000 is usually allocated per project), whereas the IVF contribution may not exceed 70 % of the total cost of project implementation;

The last deadline for submitting grant applications expired on 15 April 2013.

# **Flagship Program:**

It is intended to support long-term strategic project, contributing significantly to accessing the unique experience of the V4 countries, as far as the transition to democracy, integration process and regional co-operation are concerned;

The so called Flagship Projects should promote reforms, political and economic integration with the EU, civic society formation and an overall transformation of the Eastern Partnership countries;

The IVF supports only projects implemented by partners from all the four Visegrad Group countries and at least two Eastern Partnership countries working in liaison;

The nearest closing date for application is 30 September 2013.

### Visegrad Scholarship Programme

Visegrad scholarships are intended for study in Master's degree courses or postgraduate (post-Master) studies or research for the period of 1 to 4 semesters at any accredited public or private universities or accredited Academy of Sciences institutes in the V4 countries, or other countries (see below). "<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> MŠMT ČR. (n.d.). Retrieved March 10, 2016, from http://www.msmt.cz/eu-and-international-affairs/international-visegrad-fund?lang=2

# 3.1.3 Central European Free Trade Agreement

The Central European Free Trade Agreement or in the short version the CEFTA was created in December 1994 in Krakow. The aim of the agreement is to facilitate the free trade between the member countries and to promote involvement into the European integration. The CEFTA countries implemented the free trade of industrial products and in the field of agriculture they have created the mutual benefits system.

In 1996 Slovenia, in 1997 Romania, in 1999 Bulgaria and in 2002 Croatia has joined the CEFTA agreement. In 2004 the Visegrad countries and Slovenia became members of the European Union. It meant that the CEFTA agreement has lost validity for them. In 2007 Romania and Bulgaria followed the above mentioned countries. In 2006 Macedonia joined the CEFTA. During 7 years the agreement had 2 members until in 2013 Croatia joined the EU. Now we can say that the CEFTA agreement is totally unnecessary because the EU free-trade agreements with other EU countries and with third countries ensure the same conditions as CEFTA.

### 3.1.4 V4 and the EU

The V4 members signed the association agreement to the European Union in 1991 in Brussels. The Council of the EU dealt with the V4 application to EU since 1993. They performed application criterions for the V4. They had to guarantee the democracy, the rule of law, the human rights and respect, protect the minorities. They had to build up a functioning market economy. This was very important because the EU wanted a warrantee that after the join the new members will fit to the market forces and to the competition within the EU. Furthermore the V4 had to take on the EU's political, economic and financial objectives and they had to be open mind for the join of new countries. In 1997 in the conference of Amsterdam the EU had evaluated the candidates. In 1998 the accession negotiations started with Hungary, Czech Republic, Slovakia, Poland, Slovenia, Cyprus and Estonia.

On first of May 2004, the Visegrad countries became full members of the European Union,. However, the idea of the Visegrad Group was not die, the join gave many new ideas. The join of the Visegrad Group to EU was successfully implemented and it put into a new dimension the V4 cooperation. In May 2004 the representatives of V4 countries have performed the new aims of V4 cooperation in the new Visegrad Contract. It means that the focus is on common interests and they pragmatically seek to exploit the opportunities of common actions. They have realized that intergovernmental cooperation is very important but on the other hand the cultural and civil dimension is also a determinative element of the V4 alliance. Furthermore they agreed that the cooperation must be continue in the field of International Visegrad Fund, the Schengen cooperation, energy, infrastructure development and culture. Finally they declared that they have to help the Western Balkan countries in the Euro Atlantic integration.

#### 3.1.5 The present and the future of the V4 alliance

"The establishment of the Visegrad Group represents an important event in the modern history of our nations and countries. It significantly contributed to overcome the division of Europe imposed after World War II and facilitating the integration of our countries into the European and Euro-Atlantic structures; the "Declaration on Cooperation between the Czech and Slovak Federal Republic, the Republic of Poland and the Republic of Hungary in Striving for European Integration", signed in Visegrad on 15 February 1991, 20 years ago, laid the foundations and put in place a long-term framework for the modern forms of political, economic and cultural cooperation. The Visegrad Group countries seized the historic opportunity afforded by the fall of Communism in 1989, developed a successful cooperation and based their mutual relations on friendship, good neighbourliness and shared values. The Visegrad cooperation continues to enhance democracy and civil society in Central Europe. Nowadays, the Visegrad Group is a recognized symbol of successful political and economic transformation and, in many areas, also a model for regional cooperation. The Visegrad Group (V4) countries have become constructive, responsible and respected partners in Europe in implementing EU key priorities and programs and, through their input, have contributed and will continue to contribute towards the processes of political and economic integration in Europe, including EU and NATO enlargement, in order to promote the prosperity, security and stability of the continent.

The Visegrad Group has become a well-established brand and a respected partner. It will remain open to cooperation based on common values with countries and other regional groupings through the V4+ format. We are convinced that the Visegrad Group, guided by the

principles of cooperation and solidarity enshrined in the Lisbon Treaty will continue to fulfil its important regional mission."<sup>4</sup>

With the year of 2004 started a new dimension of V4's life. As I mentioned they had to redefining the Visegrad cooperation ad their aims and goals also. From that period there were signs that the cooperation is weakening. Unfortunately many factors have made more difficult the common work. There are historical and national disagreements between the countries, mostly between Hungary and Slovakia. After that they did not agreed in basic energetic questions because Slovakia and Hungary are the mostly dependent on the Russian energy in Europe. Czech Republic and Poland are less dependent from them. This fact led to several misunderstandings. Furthermore in many other problems the members had a different standpoint. Last year was a very serious tension between Poland and Hungary regarding to the Ukrainian situation.

Despite many problems during the years the cooperation can show many results and today the V4 cooperation is again strong and well effective. The economic situation of four country's economy is similar so they have to solve very similar problems. On April 10, 2010 the leaders of commercial and industrial chambers signed an agreement of strengthening the connection and cooperation between the chambers. The essence of the agreement is that the V4 will have a common standpoint in the issues which are affecting the EU's economy, they will explore mutually beneficial opportunities in the field of car industry, energy sector, food sector, electronics, tourism and logistics.

In the field of defence policy for Polish initiative regarding to the current Ukrainian situation they will create a common army with 3000 soldier for the 2016 year. Furthermore they are planning to develop their cyber security cooperation mechanism and create a common V4 aerial surveillance.

The common security policy's another important area is the energy sector. As it was mentioned they had many times disagreement in this question but the best solution for all members was the development of a north-south energy corridor thus decreasing the Russian impact in Central Europe.

<sup>&</sup>lt;sup>4</sup> The Visegrad Group: the Czech Republic, Hungary, Poland and Slovakia | The Bratislava Declaration of the Prime Ministers of the Czech Republic, the Republic of Hungary, the Republic of Poland and the Slovak Republic on the occasion of the 20th anniversary of the Visegrad Group. (n.d.). Retrieved from http://www.visegradgroup.eu/2011/the-bratislava

They have realized if they develop and connect their transport infrastructure their economy will be more effective. Existing element of the comprehensive development program is the Hungarian-Slovak transport agreement.

The euro crisis has made clear that they need to strengthen the group's representation in the rapidly developing countries of the world. Because of that for Czech initiative they have opened a Visegrad house in Vietnam which is supposed to represent the V4 countries.

Of course we can not forget that the huge migration has gotten closer the member countries. Now in Europe only they have such an opinion that Europe has to protect and defend their borders. The answer for the illegal border crossings was that Hungary has closed their green border between Serbia and Croatia. Poland, Czech Republic and Slovakia sent a military help to Hungary.

Between the V4 countries was many unsolved problems but it has to be realized that alone they are small and weak but if they join together they are strong. These four countries have common culture, tradition, religion, moral values. Because of that reasons there is a need to focus on the common interest not on the differences. Today the V4 cooperation is stronger than ever and this is only the beginning.

# 3.2 General and economic overview of the V4

# 3.2.1 General information

Central Europe is very similar in its geographical conditions but totally different cultures and nations live there. Despite that fact during the centuries they realized that they can achieve big results only together.

# Hungary

Hungary is located in the heart of Central Europe, more specifically in the Carpathian basin. Its neighbours are Slovakia and Ukraine from north, Romania from east, Serbia and Croatia from south and finally Slovenia, Austria from west. Its territory is 93 030 km<sup>2</sup>. Its population is 9 937 628. This number was five years ago over 10 million but since 2004 has continuously decreased. 85,6 % of its population is Hungarian, the rest is Bulgarian, Romany, Croatian, Polish, German, Romanian, Serb and Slovak. 37.1% of the population is Roman Catholic, 11.6% is Calvinistic, 2.2% is Lutheran, 1.8% is Greek Catholic and the rest did not want to admit his/her religion. Its capital is Budapest with 1 729 000 inhabitants. The official language is the Hungarian and the official currency is the Forint (HUF).

# Slovakia

Slovakia is located in Central Europe also in the Carpathian basis. Its neighbours are Poland from north, Ukraine from east, Hungary from south and Czech Republic, Austria from west. Slovakia is the only country which has borders with all V4 countries. Its territory is 49 033 km<sup>2</sup>. Its population is 5.5 million. From that 80.7% is Slovak, 8.5% is Hungarian, 2.2% is Romany and the rest has other nationality. 68.9% of the population is Roman Catholic, 10.8% is Evangelical, 4.1% is Greek Catholic and the rest is atheist. Its capital is Bratislava with 428 000 inhabitants. Its official language is Slovak and currency is EUR since 2009.

# **Czech Republic**

Czech Republic is located in the west side of the Central European. In other words it is the westernmost country in Central Europe. Its neighbours are Poland, Germany, Austria and Slovakia. Its territory is 78 866 km<sup>2</sup>. Its population is 10 512 400. There are 63.7% Czech, 4.9% Moravian, 1.4% Slovak and the rest 30% has another nationality. Czech Republic is the most atheist country in the Europe. 10.3% is Roman Catholic, 0.8% Protestant, 54.6 has other religion and more than 30% is atheist. Its capital is Prague with 1 249 026 inhabitants. Its official language is Czech and the official currency is the Czech corona, CZK.

# Poland

Poland is located in the north side of the Central Europe. It is the biggest country in Central Europe and in Visegrad alliance also. Its neighbours are Germany, Czech Republic, Slovakia, Ukraine, Russia, Lithuania, Belarus and the Baltic Sea. Its territory is 312 685 km<sup>2</sup>. Its population is 38 562 189. There are 96.9% Polish, 1.1% German, 0.2 Austrian and 0.1% Ukrainian. The Roman Catholic religion is the most strongest in Poland, approximately 87.2% of the population is Roman Catholic. Furthermore 0.4% is Protestant and the rest is not specified. Its capital is Warsaw with 1 722 000 inhabitants. The official language is Polish and the official currency is Zloty.

### 3.2.2 Economy

The V4 countries economy is very similar. Not just only because of their location but all countries had a similar role in the Soviet Union. Today the V4 countries are developed countries and their national economy consists mainly of industry and services.

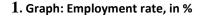
"In the late 1970s, the stagnation of the socialist economies, that produced a deterioration of the living standards of the population, made a need felt in many countries to move towards a market economy, as the only way to overcome the gap between these economies and the western-like market economies in terms of efficiency, economic development and socioeconomic welfare. From the early 1980s, a number of socialist countries in central and Eastern Europe started to introduce economic reforms in this direction, yet without questioning the fundamentals of the socialist economy. However, in others no reform was undertaken at this stage.

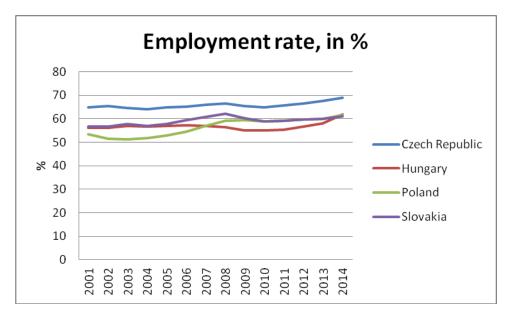
The economic situation in the republics and countries of the socialist block further deteriorated in the late 1980s and this, alongside the wish for political freedom and independence from the soviet and communist rule, led to the sweeping changes that took place as of 1989 in the central-eastern part of the European continent and the Baltic region. The political and economic "block" led by the Soviet Union disintegrated, and each soviet republic or "socialist" country started to build its own way to what was seen as the system that had been able to better guarantee freedom and sustained economic prosperity."<sup>5</sup>

# Hungary

Hungary is a developed, agricultural-industrial, international trade sensitive country. It is poor in minerals and energy sources, because of that needs to import a significant quantity of raw materials. After the change regime Hungary was transformed from managed economy to market economy. A big crisis and a collapse of Eastern European markets followed the transform. After the years of decline the economic indicators increased. At the beginning of the 21<sup>th</sup> century the private sector produced the 80% of the GDP. The country joined the NATO in 12<sup>th</sup> of March 1999 and the European Union in 1<sup>st</sup> of May 2004. During the 2008's world economic crisis Hungarian economy had a serious downturn. The country got a big financial package from the IMF and the EU. The GDP decreased for 2009 by 6.8%. Fortunately the country escaped from the economic collapse because of the government's strict regulations and actions. From 2010, the second Orbán government has made many changes in the field of economy and finance and finally in 2013 they have decreased the deficit of the general government below 3% compared to the GDP. The result was that the EU terminated the excessive deficit procedure against Hungary.

<sup>&</sup>lt;sup>5</sup> Economic Reforms (Transition to a Market-Based Economy) - International Cooperation and Development -European Commission." *International Cooperation and Development*. N.p., n.d. Web. 15 Dec. 2015.





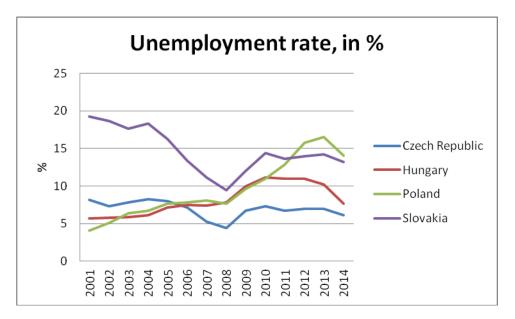
Source: http://www.oecd.org, own graph

Since the year of 2010, Hungary mostly has successful economic solutions and the result was also similar. Hungary could handle the situation and today the Hungarian economy is stable and has one of the best indicators in the EU. The Hungarian unemployment rate has decreased since 2010 from 11,7 % to 7,7 %. The employment rate from 2010 to 2104 has increased from 55 % to 61,8 %. The minimum wage has increased by more than 85 EUR in the same period. Its GDP in 2014 was 129.4 billion EUR and the inflation rate was between 0 and 0.5%.

# Slovakia

Slovakia is an independent country since 1993 when it was separated from Czech Republic. After the separation the Slovak economy significantly decreased, specifically in 1998. The current account deficit reached the 11% of the GDP and the country's total external debt reached the 62% of the GDP. The 1998's elected government has made serious changes in the transformation of the planned economy to the market economy. The result was that in 2000 a record value foreign capital (1.2 billion EUR) flowed into the country. This tendency had continued in the following years. Between 2001 and 2003 the restructuring was significant, the privatization and the bank sector got into foreign hands. The macro economy stabilized, the economy increased, the export expanded and they tried to drive back the corruption. On the other hand the unemployment rate is high, strong challenge to the country the state budget's and current accounts' deficit cuts and the modernization of the health

insurance system. The effect of the world economic crisis reached Slovakia too. The result was that the GDP continuously decreased.



2. Graph: Unemployment rate, in %

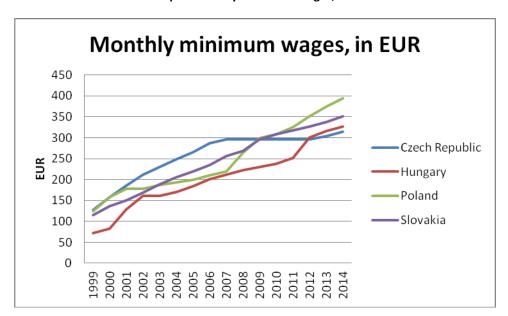
Source: Source: http://www.oecd.org, own graph

Despite the world crisis the country's GDP has increased in the past years and during 4 years they was capable to increase it by 9.44 billion EUR. Today the GDP is 94.2 billion EUR. The unemployment rate since 2010 to 2014 is stagnating around 14%. On the other hand the employment rate is increasing. Now it is 62.5% compared to the 2010's 58%. The minimum wage has increased by 45 EUR and in 2014 it was 352 EUR. The inflation rate is around 0%.

# **Czech Republic**

Czech Republic is a very rich country in its raw materials (brown coal, black coal, kaolin). Heavy industry, lass and porcelain industry, the pencil manufacturing, furniture production has a big tradition in Czech Republic. The most important sector in industry is the machine manufacturing mechanical engineering (vehicles, metallurgical equipment, locomotives, and agricultural machines). Their spa waters are popular around the world. The tourism is one of the most important leading sectors of the economy. Among the post communist countries Czech Republic's economy is the most stable. The main reasons of increase are primarily the export to the western countries, especially into Germany and the foreign investments. In 2001 more than 5.4 billion EUR foreign investments were realized in the country. On the other hand the lack of the budget and current account is very high. The implementation of structural

reforms, the privatization of banks, communication and energy sector and the restructuring of large companies are priorities of the country. Between 2005 and 2007 the Czech economy significantly increased. Due to the crisis after 2008 the GDP decreased by 4.9% but the Czech government was able to solve the problem and the economy for the year of 2012 was stabilized.



#### 3. Graph: Monthly minimum wages, in EUR

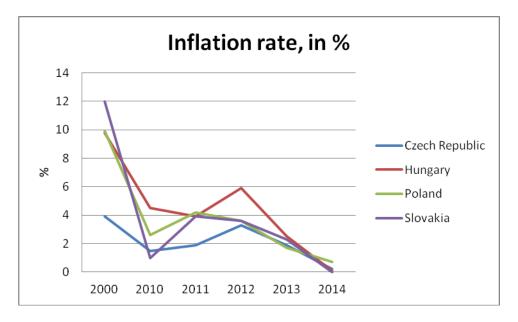
Source: http://www.oecd.org, own graph

In the next year, in 2013 there was a big increase in the GDP, but today with 2 billion EUR is less than in 2010. However, in the field of employment and unemployment rate the economy did well, because since 2010 we can see at the previous case an 6% increase and at the latter case there is a 1.7% decrease. The employment rate today is 70% and the unemployment rate is 5.8%. The employment rate is the biggest within the Visegrad countries in Czech Republic but its minimum wage had the smallest increase since 2010 because it increased only 21 EUR and today it is 317 EUR. The inflation rate is similar to Slovakia, it is around 0%.

# Poland

The economic liberalization which has started since 1990 has led to the stabilization of the Polish economy. Until 2009 they produced 5% GDP increase in every year and they drove back the unemployment which was permanently over 15%. In the EU Poland was the only one country which during the world economic crisis has avoided the recession. On the other hand for the Polish government are waiting a lot of things to develop. They have to develop

the road and rail infrastructure, introduce business friendly reforms, increase employment rate, decrease the expenditure of the public sector, reduce the tax and speed up the privatization.



4. Graph: Inflation rate, in %

As it was mentioned Poland is the only one country which perfectly handled the economic crisis. Its GDP between 2010 and 2014 increased by 67.9 billion EUR and now it is 517.3 billion EUR. Its employment rate is between 62% and 63%, however in 2010 it was only 58%. Its unemployment rate is 9.6%. During 5 years its minimum wage increased by 93 EUR which is also the highest in the alliance. Its inflation rate is 0.7%.

### 3.2.3 Agriculture

Agriculture was always a key player in the Central European countries' national economy. Since the 17<sup>th</sup> century the role of agriculture has continuously increased. Between 1949 and 1991 the agriculture determined the V4's national economy. After the change regime the sector lost its power and today gives less than 3% to the GDP in all V4 countries.

"When comparing rural and urban areas, the former are often associated with high environmental values, but even more with a backwardness in terms of income and

Source: http://www.oecd.org, own graph

employment opportunities, the migration of young, skilled people and a low population density. ... Often stated reasons for this backwardness are the lack of agglomeration advantages, the low endowment with infrastructure and human capital, as well as the effects of structural changes in the economy towards a growing importance of services and globalization... In addition to these problems, which are characteristic for rural areas in many regions of the world, those in Central and Eastern Europe have also had to cope with the transition from the socialist central planning systems towards a democratic society and a market economy.<sup>36</sup>

# Hungary

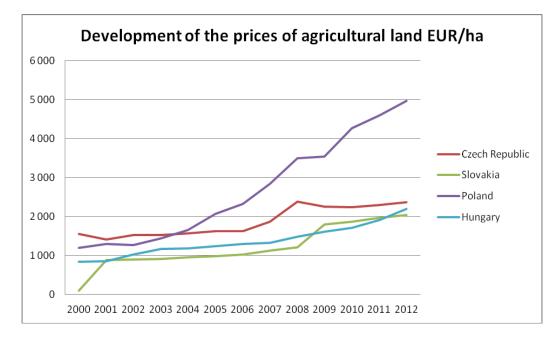
The agriculture was always an important sector in Hungary's culture, tradition and history. Hungary was always a typical agricultural country. It is understandable, because its natural features and conditions are perfect for agriculture. Half of the country's territory is an arable land.

After the World War II unfortunately the agriculture's role in the economy started to decrease. The first step was that the Soviet regime took away the farmers' and land owners' lands and the state had become the only one owner. From that period the old owners had to work on their lands as workers. The collectivization was held between 1948 and 1961. Many farmers lost their land. After the change regime they could get back their lands. The main problem was that they did not have appropriate machines, because the machines were old and it was a property of the state. The second problem was that their scions mostly did not have leaning to husbanding and if yes in that case they did not have enough money or the privatized land was too small.

The country's most important crops are the wheat, corn, sugar beets, potatoes, sunflower seeds and several types of fruits. Viticulture also has a significant role in the agriculture. In livestock breeding the cattle, sheep, pig and poultry are the most determinants.

<sup>&</sup>lt;sup>6</sup> NETWORK OF INDEPENDENT AGRICULTURAL EXPERTS IN THE CEE CANDIDATE COUNTRIES 2004, p. 1, Institute of Agricultural Development in Central and Eastern Europe (IAMO), Halle (Saale), Germany.

#### 5. Graph: Development of the prices of agricultural land EUR/ha



Source: http://ec.europa.eu/eurostat, own graph

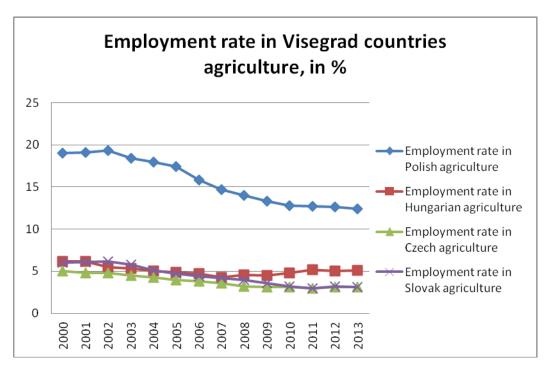
The number of employed people in agriculture during 25 years decreased from 744 516 to 426 294 workers. This is more than 300 000 persons decrease. This number demonstrates very well how the agriculture lost its position. Furthermore the agricultural area since 2000 has decreased from 5853 to 5200 thousand of hectares. On the other hand the land prices continuously decreased. Today one hectare of arable land is around 2300 EUR. Of course with this number Hungary has the cheapest land prices in Europe. Unfortunately the average wage in agricultural sector is 458 EUR. The agricultural share in GDP is 2.4%. With this number the agriculture is the smallest participant in national economy.

# Slovakia

Slovakia was in similar situation during the communist regime as Hungary. On the other hand compared to Hungary, the agriculture was not the primary sector in Slovakia. Slovakia is the smallest country in the V4 and almost the half of the country is covered by mountains.

The agriculture in this era was a subordinate to industrialization. Today only the 30% of the country is cultivated. From that only the half is utilized. The most important crops are the wheat, barley, sugar beets, corn and fodder crops. On the relatively poor soils of the mountains the most determinant crops are the oats, potatoes, flax and rye. Furthermore

vineyards, tobacco and fruits have also a significant role in the Slovak agriculture. In the livestock breeding the pigs and cattle are relevant. However sheep breeding is determinative in mountain dales. Slovakia has a big quantity of forest but its production of forests products is small. Only 30% of forest has been destroyed since the change regime but reforestation proven approach in Slovakia.



#### 6. Graph: Employment rate in Visegrad countries agriculture, in %

Source: http://ec.europa.eu/eurostat, own graph

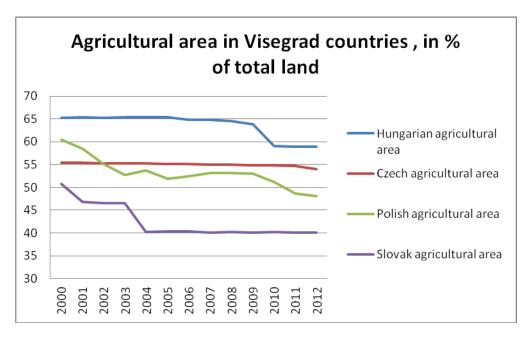
The share of agriculture on GDP is around 2.5% which is not surprising. The number of employees today is 77 000. This number was the double in 2000. Despite the fact that the agricultural area is only one-third of the country, during 15 years it continued the decrease. The land prices are cheaper than in Hungary, they are approximately between 2000 and 2200 EUR. In Slovakia the agricultural wages are the closest to the country's minimum wages. The average wage in agriculture is 432. This is the smallest within the V4.

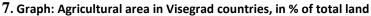
# **Czech Republic**

The Czech agriculture is the most developed in Central and in Eastern Europe. The country does not have a shortage of agricultural land but it is still less effectively used then in western countries. After the change regime the state controlled farms were restored to their original owners as in other post communism countries. However small land owners did not want to

receive back their lands, instead, they often were allotted a plot of comparable worth at another location. The agriculture today is totally liberalized. 25% of agricultural lands are cultivated by individuals, 35% by cooperatives and 40% by corporations.

The most important crops are wheat, barley, rye, oats, sugar beets and potatoes. In livestock breeding the pigs, cattle, sheep and poultry have a dominant role. The hops have also popular because it is used in breweries. The Czech beers are very popular. In Moravia the wine industry is traditional. In the 1980's the acid rain caused a serious damages, because of that the reforestation largely used in Czech Republic.





Source: http://ec.europa.eu/eurostat, own graph

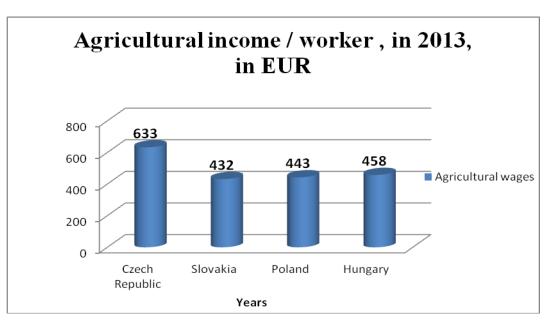
The agricultural wages are the highest in Czech Republic within the V4. It is 633 EUR on average. Unfortunately the share of agriculture in GDP is under 2%. The employment in agriculture during 15 years decreased by 100 000 persons and now it is 168 200 employees. The price of agricultural land as in every country is not expensive but it increased in the past years. Now 1 hectare can be bought for 2375 EUR on average. This is interesting fact that the agricultural land since 2000 has decreased only by 2000 km<sup>2</sup>.

# Poland

The Polish agriculture was the biggest in the Socialistic regime. This is true within the V4 for today too. It had and has the biggest output in total. After the change regime the Poland farm

incomes has started to decrease very fast as the prices of industrial products rose and the Polish food had to compete with higher quality imported western products. Many state farms collapsed after 1989, as did the system of state purchase upon which much of the private sector had relied. Because of that in the 1990's the agriculture in Poland has started to shrink.

Nonetheless, the Polish agriculture has the world's biggest production of rye and potatoes. Other important crops are wheat and sugar beet. Soil quality is very different in Poland. In central and northern Poland is poorer than in other areas. In livestock breeding the beef cattle, dairy cows and pigs are determinants. Poland in the past decades became integrated into the global economy because half of its agricultural exports went to the EU. Poland is the only country in V4 which has sea. Nevertheless, its fishing industry is small and not relevant.



8. Graph: Agricultural income/worker, in 2013 in EUR

Source: http://ec.europa.eu/eurostat, own graph

The Polish agricultural share in GDP is similar to other three V4 countries. It is between 2.5% and 3%. The employment rate in agriculture significantly decreased but there are still more than 2 million workers in this sector. The agricultural area has decreased from 189 170 km<sup>2</sup> to 148 835 km<sup>2</sup>. The price of agricultural land is the highest in the alliance. It is around 6000 EUR on average. On the other hand the wages in the sector is similar to Slovak or Hungarian.

# 3.3 Trade of V4 countries

During the communistic regime the Visegrad country's trade was similar. They had to adapt to the quantity and fixed prices not to the quality. Their biggest exporter and importer was the Soviet Union. This called planned economy. After the change regime they had to adapt to the new conditions and had to compete with other European countries which had more skills and more modernized machines.

"After the Visegrad countries' accession to the EU in 2004, one of the most remarkable developments was the sudden upturn in their mutual trade. In 2007 the value of aggregate intra-Visegrad trade was two and a half times higher than in 2003. The rate of growth in these countries' trade with the EU 15 (the 'old' member states) was only half as much. Also, individual Visegrad countries showed higher export growth rates to other Visegrad members in the post-accession period than in the years before EU accession. These developments are reflected in the changes in the geographical distribution of trade. While the relative significance of intra-Visegrad trade increased substantially both in the immediate pre-accession years (2000-2003) and the immediate post-accession years (2004-2007), the shifts in favour of intra-Visegrad trade were stronger in the years after accession in the case of all four countries and in both exports and imports. Three years after the EU accession the relative significance of intra-Visegrad trade attained the level it had reached in 1985 that time still under the extreme protection from global competition provided by the CMEA."<sup>7</sup>

# Hungary

Between 1949 and 1991 Hungarian trade was made by the Soviet Union countries. In another words the Soviet Union was the main trading partner of Hungary. In the 1990's, after the change regime Hungary accumulated a big amount of trade deficit. The reason was that the country was not prepared for the competition of global market forces. In the era Hungary was very indebt and it had to use its income from export for repayment.

<sup>&</sup>lt;sup>7</sup> Revival of the Visegrad Countries' Mutual Trade after their EU Accession: a Search for Explanation, The Vienna Institute for International Economic Studies, Neil Foster-McGregor, Gabor Hunya, Olga Pindyuk, Sandor Richter, Research report, Jul 2011, Rahlgasse 3, A-1060 Vienna

In the end of the 1990's Germany, Austria, Italy and France became the most important and determinant trading partner of Hungary, while the export and import from former Soviet countries had decreased constantly. In 1996 Hungary became a member of Organization for Economic Co-operation and Development (OECD).

In the 2000's the industry and services have strengthened within the national economy and the agriculture slowly but certainly lost its power. The machinery and transport equipment was Hungary's main import item and export item too. The main trade goods of Hungary are machinery equipment, vehicle parts, telecommunication equipment.

Hungary's total value of export in 2014 was 90 billion EUR. The food and live animals were only 6.67 billion EUR from that. The biggest part has the machinery and transport equipment which is 55.66 billion EUR. Today Hungary's exports key destinations are Germany, Romania, Italy and France.

Fortunately the value of import is smaller than the export. The total import is 79.4 billion EUR. Similar to export the machinery and transport equipment are the biggest participants of the import with 39 billion EUR. Today Hungary's imports key destinations are Germany, Russia, China, Austria and Slovakia. Within the Visegrad countries Hungary has only with Slovakia a determinative and strong trade relations.

Top 5 products exported	Top 5 Products imported	Top 5 Export destinations	Top 5 Import origins
Cars (4.7%)	Crude Petroleum (5.1%)	Germany (25%)	Germany (23%)
Broadcasting Equipment (4.6%)	Petroleum Gas (3.7%)	Romania (6.5%)	Russia (9.3%)
Video Displays (4.2%)	Packaged Medicaments (3.3%)	Austria (5.3%)	China (6.2%)
Vehicle Parts (4.1%)	Vehicle Parts (3.1%)	Italy (4.8%)	Austria (6.2%)
Spark-Ignition Engines (3.6%)	Telephones (3.0%)	France (4.7%)	Slovakia (4.8%)

1. Table: Trade	Hungary - 2014
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Source https://atlas.media.mit.edu/en/profile/country, own table

# Slovakia

Slovakia was in similar situation as Hungary during the communistic regime. Because of planned economy it had to focus only on the trade of Soviet Union and its members. After the change regime Slovakia heavily depend on foreign trade to increase and raise its economic growth. After the brake up of Czechoslovakia the trade with central and eastern European countries has decreased and with western European countries has increased. Slovakia has started to trade mainly with EU member states after the join the EU. The trade with Czech Republic remained significant despite the many confounding factors which were caused by the political situation of the two states.

Slovakia's export and import value is smaller than Hungary's but it is understandable because it is a relatively smaller country. The total value of Slovakia's export in 2014 was 78.7 billion EUR. From that the food and live animals were only 2.5 billion EUR. The biggest participant is the machinery and transport equipment with 37.52 billion EUR. It is not a big surprise because many car manufacturers have factories in Slovakia. In other words the car industry is the main player in the Slovak national economy. Slovakia has strong export relations with Germany, Czech Republic and with other EU members. It's most determinative export products are vehicle parts, cars, vehicle bodies and video displays.

Top 5 products exported	Top 5 Products imported	Top 5 Export destinations	Top 5 Import origins
Cars (18%)	Vehicle Parts (8.0%)	Germany (22%),	Germany (16%)
Video Displays (8.0%)	Crude Petroleum (5.2%)	Czech Republic (12%)	Czech Republic (12%)
Vehicle Parts (5.3%)	Petroleum Gas (3.9%)	Other Europe (12%)	Poland (6.7%)
Refined Petroleum (4.7%)	Broadcasting Equipment (3.7%)	Russia (9.0%)	Austria (6.1%)
Vehicle Bodies (3.1%)	LCDs (2.5%)	South Korea (8.5%)	Hungary (5.8%)

## 2. Table: Trade - Slovakia - 2014

Source https://atlas.media.mit.edu/en/profile/country, own table

In case of import the total value is 69.15 billion EUR. The machinery equipment have the biggest part but the manufactured goods are significant too. The main import partners of the country are Germany, Czech Republic, Austria, Poland and Hungary. Slovakia is the only one Visegrad countries which have determinative trade relations with all V4 member states.

# **Czech Republic**

Czechoslovakia was one of the biggest foreign traders in Eastern and Central Europe until 1991 when the country broke up on Czech Republic and Slovakia. In the 1990's the Czech export has decreased by 75%. After the join to EU the situation has changed. Czech Republic successfully caught up and became a determinative country in Central and in Eastern Europe as well. Today Czech Republic is the 30<sup>th</sup> largest economy in the world and 6<sup>th</sup> most complex economy according to Economic Complexity Index. In the 21<sup>st</sup> century Germany has become the main export and import destination of the country.

Top 5 products exported	Top 5 Products imported	Top 5 Export destinations	Top 5 Import origins
Cars (10%)	Vehicle Parts (5.3%)	Germany (30%)	Germany (26%)
Vehicle Parts (6.8%)	Computers (5.1%)	Slovakia (7.4%)	China (11%)
Computers (6.3%)	Petroleum Gas (3.5%)	Poland (5.3%)	Poland (7.3%),
Rubber Tires (1.6%)	Crude Petroleum (3.3%)	France (5.3%)	Slovakia (6.4%)
Telephones (1.6%)	Office Machine Parts (2.2%)	United Kingdom (5.0%)	Russia (4.9%)

3. Table: Trade – Czech Republic - 2014

Source https://atlas.media.mit.edu/en/profile/country, own table

Czech Republic is similar to Hungary in its Population and territory. On the other hand as it was mentioned its GDP is bigger and its total value of export and import is bigger too. The amount of export in 2014 was 147.42 billion EUR. This is one and a half times bigger than Hungary's indicator. As in the previous countries the export value of the food and live animals is not relevant. It is only 4.64 billion EUR. The biggest players in the export are the machinery equipment with 79.5 billion EUR, the manufactured goods with 25.5 billion EUR

and miscellaneous manufactured articles with 14.56 billion EUR. The key destination of export is Germany, Poland, Slovakia, France and United Kingdom.

The total value of import is 137.41 billion EUR. The import of food and live animals is bigger than the export by 2 billion EUR. The biggest imported goods are machinery equipment by 55.7 billion EUR, manufactured goods by 25.8 billion EUR and chemicals by 15.54 billion EUR. The most important import countries for Czech Republic are Germany, Poland, Slovakia, China and Russia. It is clear that Czech Republic has a very good import and export relations with Poland and Slovakia. Only Hungary is missing but the reason can be that Hungary is not a neighbour country.

# Poland

The end of the communism heavily affected Poland's trade. Poland was the biggest exporter of coal and machinery to the Soviet Union. However, as the previous mentioned countries, Poland had to adapt to the new market conditions too. In the 1990's Germany has become the biggest export and import partner of the country. In the end of the 1990's and at the beginning of the 2000's Germany accounted for 25% of Poland's import and 35% of export. On the other hand Italy is also significant trade partner of Poland. Furthermore Russia is the most important source of energy imports.

Top 5 products exported	Top 5 Products imported	Top 5 Export destinations	Top 5 Import origins
Vehicle Parts (4.9%)	Crude Petroleum (9.4%)	Germany (23%)	Germany (22%)
Cars (3.3%)	Vehicle Parts (2.9%)	United Kingdom (6.6%)	Russia (11%)
Seats (2.4%)	Cars (2.6%)	France (6.0%)	China (8.9%)
Refined Petroleum (2.2%)	Packaged Medicaments (2.2%)	Czech Republic (5.8%)	Italy (5.3%)
Video Displays (2.1%)	Computers (2.0%)	Russia (5.2%)	France (4.1%)

4. Tab	ole: Trade	e – Polan	d - 2014
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Source https://atlas.media.mit.edu/en/profile/country, own table

Poland has the biggest total value of export and import within the V4. It is understandable because Poland is the biggest country in Visegrad alliance. On the other hand Poland is the only country which has to import more than export.

The total value of export in 2014 was 166.53 billion EUR which is very close to Czech value. The export of food and live animals is the biggest within the V4 but it is only 15.2 billion EUR. The biggest exported goods are machinery equipment by 65.5 billion EUR and manufactured goods by 35.4 billion EUR. The most determinant export destinations are Germany, United Kingdom, France, Czech Republic and Russia

The import is approximately 184.7 billion EUR. As in previous cases the machinery equipment, manufactured goods and chemicals define the imported goods. The main import origins are Germany, Russia, China, Italy and France.

# 4. Practical section

In the Practical session the trademarks of the Visegrad countries will be described and distuinguished from each other. Furthermore the analyses of questionnaire will be analysed. The next topic is the Logistic regression model which is made on the results of questionnaire. The last step is the Creation of Visegrad brand.

# 4.1 Protection of domestic product

# 4.1.1 Trademarks of domestic foodstuffs

The protection of domestic foodstuffs and domestic farmers, producers is highly important in all Visegrad countries. The origin protection is a priority for all V4 countries. Because of this reason many trademarks have been created to protect the rights of domestic foodstuffs and their producers and give them positive discrimination. The domestic foodstuffs can get the sign of these trademarks if they fulfil the requirements. Of course every trademark has another requirements and often occur that within one country several trademarks are already present.

# Hungary

In Hungary 5 brands or trademarks are protecting the domestic foodstuffs. Each focused in another specific products. The name of trademarks are the Hungarian product, Quality Food from Hungary, Premium Hungaricum, Hungarian Quality Product Award and the Poultry Product. The biggest is the Hungarian product which has more than 1500 domestic foodstuffs.

**The Magyar Termék - Hungarian Product** trademark was created by the Hungarian Product ltd. in February 2006. The creation of the trademark was a result of a cooperation of 13 Hungarian companies. The main goal was to restore the honour of Hungarian labour and product with common budget and communication.

#### **3.** Figure: Magyar Termék - Hungarian Product



Source: http://www.amagyartermek.hu/

The core capital was 100 million HUF and hereinafter 0,5 % of the product's turnover will be paid to the capital. The organization has 14 members now. Only those products can get the trademark which fulfil and agree with the requirements and values. The trademark can be received by an independent quality expert committee which firstly will analyse the product deeply. The trademark can not be sold to the supermarket's foodstuffs and low quality products. Only those kinds of products can wear the brand which were produced in Hungary and firstly they are placed on the Hungarian market. Now there are approximately 1500 products which wear the sign of the trademark. The Hungarian Product has 3 categories.

- Hungarian product: produced in Hungary of 100% domestic ingredients
- Domestic product: produced in Hungary at least 50% of domestic ingredients
- Home-processed products: Processed in Hungary but mostly the product contains import-derived ingredients

The operator of the **Kíváló Magyar Élelmiszer - Quality Food from Hungary** trademark is the Agrarian marketing Centrum which is an organization of the Ministry of Agriculture. Today more than 70 companies and 300 products are entitled to use the trademark. The aim of the trademark is to protect the domestic farmers and producers, influencing consumer decisions, the development of the consumer culture and the strengthening the country's image.

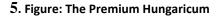


4. Figure: Kíváló Magyar Élelmiszer - Quality Food from Hungary

Source: http://agrarmarketing.itthon.hu/

The trademark can be received by a tender which is judged by the evaluation committee of the Quality Food from Hungary. The trademark proves that the given product's quality is perfect and it is domestic. Every company, farmer and producer can apply for trademark which's product is prominent at least in one property and fulfil the requirements of the Hungarian Food Codex.

**The Premium Hungaricum** is supporting the high quality traditional products within and outside the country. The trademark is focusing mainly on small and medium-sized enterprises because the innovations of these firms often do not get adequate financial support for the successful market access and development.





Source: http://www.premium-hungaricum.hu/

In 2009 were established the chain stores of Hungarian Product by the initiation of Premium Hungaricum organization. This is a franchise system which primarily support the market access of family businesses and small and medium-sized enterprises which mainly produce Hungarian goods. The trademark wants to help to those distributors who have a handicap because of the expansion and spreading of multinational firms and supermarkets. Until today more than 40 stores have joined the initiation.

The Magyar Termék Nagydíj - Hungarian Quality Product Award is a civic initiation tender system. Its main goal is to reward domestic products which fulfil the EU's quality, environmental and consumer protection requirements to strengthen consumer's trust in domestic goods.



6. Figure: Magyar Termék Nagydíj - Hungarian Quality Product Award

Source: http://www.termeknagydij.hu/

The system was established in 2004. During this period 171 tender's more than 2000 products deserved the Hungarian Quality Product Award. Within the winners are 100% owned Hungarian firms but mixed ownership firms also. For the award every form can apply yearly.

**The Baromfi Termék - Poultry Product** denotes a narrower range of products. The trademark has placed on the market in 2002 by the Poultry Product Council. The trademark can be used by those Hungarian farmers whose product was grown and processed (cut, packaged) in the country. The product has to comply with Hungarian and EU's regulations and the quality assurance arrangements which were prescribed by the trademark regulations.

7. Figure: Baromfi Termék - Poultry Product



Source: http://www.mbtt.hu/

# Slovakia

One trademark is functioning in Slovakia, this is the **Značka Kvality - Quality Food**. This is a national program for the purpose to protect agricultural products and foodstuffs. It was established in 2004 by the Agricultural Ministry and it is operating till today as well. The brand is the identification of the domestic products and foodstuffs.



8. Figure: Značka Kvality - Quality Food

Source: http://www.znackakvality.sk/

To get the brand the product has to contain at least 75% domestic ingredients. In that case the added water is not calculated to this percentage. All phases of the production process are performed in Slovakia. If some material can not be produced or harvested in Slovakia in that

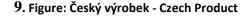
case the producer has to denote and a committee will decide whether the product can wear the brand or not. If some product has high standard, than it will get Quality Food GOLD sign. Before a successful apply of a product a quality control will be made by the Ministry of Agriculture. Now there are 500 products and 80 producers in the system.

# **Czech Republic**

In Czech Republic exist many trademarks which purpose to protect the domestic products and guarantee their quality. The biggest is Czech Product, but the Klasa, Regional foodstuff, Vím, co jím, Healthy food, Regional brands, Czech Product and Bio.

As it was mentioned the Český výrobek - Czech Product is the biggest trademark in Czech Republic. It has 1976 products in 515 stores. Perhaps the most patriotic quality mark. Requires not only Czech ingredients, manufacturing, but Czech employees also. It is a big project of Český výrobek s.r.o. The firm yearly supports the project by 1 million CZK. License fee is 30 000 CZK in the first year and 20 000 CZK in the following years for all products.

The requirements to get the sign of the trademark are the followings: Production process in Czech Republic, the product must contain at least 50% domestic ingredients. If the conditions can not be kept, 100% Czech employment must be used during the production processes, the products must not contain reprint.





Source: http://www.ceskyvyrobek.eu/

**Klasa** was established in 2003 by the Ministry of Agriculture. The brand is one of the oldest and the most widespread trademark in Czech Republic. Approximately 224 firms are in the program and more than 1200 goods wear the logo of the trademark. Main goal of the Klasa is to guarantee the quality of Czech foodstuff and to orientate consumers on Czech products. The control and quality is made by the bodies of the Ministry of Agriculture. On the other hand the government yearly supports the trademark by 200 million CZK.

10. Figure: Klasa



Source: http://www.eklasa.cz/

The product has to have higher standard than the other products on the market at least in one character. Furthermore must fulfil another conditions to get the sign. The conditions are regular delivery to stores, make clear the place of origin and the percentage of ingredients on the product's package, and must not contain mechanically separated meat (reprints). Which is interesting the private foodstuff brands which can be bought only in various kinds of supermarket chains (K-classic – Kaufland, Tesco product, etc.) can not get the sign of the trademark. Furthermore if the alcohol beverages fulfil the requirements, they can earn the protection of trademark. The only one exception is the wine.

**Regionální potravina - Regional foodstuff** is a smaller project of the Ministry of Agriculture. It supports small and medium-sized entrepreneurs in the regions. Until now 373 foodstuff has successfully joined the system. The most important criteria is that the product must be connected to the region and traditions. Secondary aim is to buy foodstuff from local producers because with this movement we support our farmers, producers and buying from local manufacturers the distribution routes and paths are shorten. In another words the trademark has ecological aims too.

#### 11. Figure: Regionální potravina - Regional foodstuff



Source: http://www.regionalnipotravina.cz/

The logo clearly determines that from which region the product comes from. The product must contain domestic ingredients in 70%, otherwise can not wear the logo. The firms whose products earn the logo can not have more than 250 employees. Another criteria is that the product must be strongly connected to traditions, raw materials and technologies of its place of origin. The trademark is financed by the government by 50 million CZK yearly.

Vím, co jím – I know what I eat is a specific trademark which primarily deals with the quality of the food not the origin. Monitors the content of harmful nutrients which cause lifestyle diseases such as obesity and diabetes. Granting is governed by the criteria of the World Health Organization and the UN Food and Agriculture. The criteria are refreshed in every 2 or 3 years.

Now exactly 300 food products has the certificate of this trademark. The trademark cooperates with more than 20 firms such as Unilever or Albert chain stores. The producer has to pay yearly 6000 CZK for each product which wear the brand. The project budget is 4 million CZK yearly. The brand control the value of saturated and Trans fatty acids, salt, sugar and some food energy in fibre (bread).

12. Figure: Vím, co jím – I know what I eat



Source: http://www.vimcojim.cz/cs/

**Zdravá potravina – Healthy food** perhaps is the healthiest concentrating trademark in Czech Republic. The System Civic Association Healthy food reflects not only the impact of food on health, but also the nature. Food must meet the basic nutritional requirements, must not contain Es or another artificial flavours. Today 100 products wear the brand. The association yearly gives the certification and the fee is 5000 CZK for each product.

# 13. Figure: Zdravá potravina – Healthy food



Source: http://www.zdravapotravina.cz/

Product must get 20 points during the evaluation. Assesses the product in terms of eight categories. Most points can be obtained if the product does not contain chemicals, it is produced in Czech Republic, it has ecological package. If the product earns another trademarks, it will give extra points to the product.

**Regionální značky – Regional brands** support small enterprises, farmers and environmentally sustainable businesses. It has 24 local groups. 730 products wear the logo of the trademark, 381 are foodstuffs. Association of Regional brands gives 5 million CZK every year to support the initiative. License costs companies 1,500 CZK per year. Further support is from EU. The added value of the brand is that there is a horizontal cooperation between firms which have the certification.

Every product must be produced in Czech Republic in a specific region. Furthermore 100% domestic ingredients and materials.

# 14. Figure: Regionální značky – Regional brands



Source: http://www.regionalni-znacky.cz/

There is an another Český výrobek - Czech Product trademark in Czech Republic which is smaller than the previous one but still determinant on the market. The brand is guaranteed by the Food Chamber of the Czech Republic. Foodstuff must contain Czech ingredients and produced in the territory of Czech Republic. It was established in 2011. Most of the products which wear the logo are made by big food companies, firms such as Madeta, Kofola, Kostelecke uzeniny or Hame. 1200 products wear the logo. Trademark is financed from the use of the brand. It is approximately 1 million CZK in each year. Firms pay for one product between 1500 and 100 000 CZK. Big firms has tax benefits.

15. Figure: Český výrobek - Czech Product



Source: http://www.foodnet.cz/

In case of meat the product must be from local farms and defeats to get the logo. The main ingredient of meat products must be completely domestic. In case of dairy products the product must not contain substitutes such as vegetable fats or soy protein. Canned vegetables must contain at least 60% domestic ingredients, cucumbers at least 70%, pastry 55% according to its weight.

**Bio** is a trademark of organic products. The trademark is available since 2010. The product which wear the logo must be compliance with strict rules for agricultural production. The control of products is made by three organizations. Logo has two versions, Czech and EU.

16. Figure: Bio

# PRODUKT EKOLOGICKÉHO ZEMĚDĚLSTVÍ

Source: http://www.bio-info.cz/

Product's ingredients must be harvested and produced at least 95% ecologically. Very strict measure on agricultural production: crop rotation, pesticides, fertilizers and antibiotics for animals, food additives. During the production must be used local resources such as fertilizer and animal feed. Can not be used GMO's (Genetically Modified Organizations).

# Poland

In Poland exist 5 trademarks for quality and origin protection. However these trademarks are focusing rather on quality than on origin of the food product. These brands are the followings: Quality tradition, QMP System, PQS Pork Quality System, QAFP, Program of Awarding Polish Food Products.

**Jakość Tradycja - Quality Tradition** is the first system in Poland which protects the Polish traditional food products. The trademark is the proof that the food is traditional and its quality is on the highest level. The system was established in 2007 by the Polish Chamber of Regional and Local Products, trade organization of producers and Union of the Provinces of the Republic of Poland. Its main goal is to reward high quality foods including traditional products.

# 17. Figure: Jakość Tradycja - Quality Tradition



Source: http://www.warsawvoice.pl

Only those kinds of products can get the logo which ingredients and production methods are characterized as traditional. It means that the product has to have at least 50 years history, otherwise can not wear the brand. The product can not contain GMO's and the ingredients have to come from organic farms. Before get to the system the product has to successfully fulfil the inspection and the origin control. This method guarantees that the product fulfils the required conditions. The system is open for all farmers, agricultural producers from Poland and from other countries. The Polish producers are in advantage. Today 39 wear the logo of the trademark.

**QMP** – **Dobra Wolowina** – **QMP system** is a certification system which was made by the Polish Beef Association. It was accepted in 2008 by the Ministry of Agriculture. The main goal of the trademark is to guarantee the production of good beef meat. The system is open for beef and cattle producers, livestock carriers, and meat producers. The QMP system describes and defines the all process of the beef production, from its breeding, production and processing to its packaging and labelling. Approximately a few doyens of farmers and producers are in the program, but their number is continuously increasing.

#### 18. Figure: QMP – Dobra Wolowina – QMP system



Source: http://www.pzpbm.pl/

**Pork Quality System – PQS** is high quality food production system. Main aim is to support a lean pork into the market and keep a high quality standard. The system guarantees that all levels of production are on the highest quality. System is open for all producers and farmers, so it means that all pork producers can join the system. The trademark guarantees quality and identification of the products. Each participant of the producer chain can join if they fulfil the requirements and the PN EN 45011 norm. The trademark is a close cooperation between breeders, pig producers and meat processors.



19. Figure: Pork Quality System – PQS

Source: http://polskie-mieso.pl/

**Quality Assurance for Food Products** – **QAFP** is a quality system designed mainly for pork parts as well as leg, neck and loin. Furthermore poultry, chicken, goose and turkey products also can wear the brand. The system is controlling and regulating of each production

process and thus guarantee the quality of the product. Starts with farmers, after that the logistic system, food processing plant and lastly the final stage when the product is being labelled. The system is open for everybody who can meet the criteria and requirements.

# $20. \ \text{Figure: Quality Assurance for Food Products-QAFP}$



Source: http://eko-znaki.pl

**Programme of awarding Polish food products** is a brand which awards the Polish products which has the highest quality. It was approved and established by the Ministry of Agriculture and Rural Development. It gives information to the consumers about the product so the consumer can easily buy the best quality products. The system's main goal is to increase the quality level of the Polish food products and promote the good and tasty domestic products around the consumers.

# PRIMA DOBRA ZYNNOS

21. Figure: Programme of awarding Polish food products

Source: http://www.ambra.com.pl/

# **European Union**

"The following EU schemes encourage diverse agricultural production, protect product names from misuse and imitation and help consumers by giving them information concerning the specific character of the products:

# 22. Figure: Protected Designation of Origin



# **Protected Designation of Origin (PDO)**

A protected designation of origin means the name of the region, specific place or, in exceptional cases, the name of a country that is used to describe agricultural product or foodstuff. The product's quality or characteristic features should be mainly or exclusively related to the specific geographical environment, as well as the natural and human factors appropriate to it. The whole of the technological process, meaning: production, processing and preparation, takes place in this specific geographical area.

# 23. Figure: Protected Geographical Indication



# **Protected Geographical Indication (PGI)**

A protected geographical indication means the name of the region, specific place or, in exceptional cases, the name of a country that is used to describe agricultural product or foodstuff originating from that region, place or country. This product has its specific, unique quality and reputation, it is reknown or has other features attributed to this geographical place

of origin. At least one of the three processes: production, processing or preparation of the product must take place in the defined area.

# ${\bf 24.} \ {\bf Figure: Traditional Speciality Guaranteed}$



# **Traditional Speciality Guaranteed (TSG)**

Speciality means a feature or set of features that clearly distinguish agricultural product or foodstuff from products similar to them or from products belonging to the same category. The features may be the taste, flavour or specific raw materials used for production. However, the method of presentation or packaging the product cannot denote a speciality. The product can be called "traditional", when it has been on the common market for the period of time equal to one generation.<sup>18</sup>

# 4.1.2 Domestic Foodstuffs in supermarkets

In every V4 country the domestic products somehow have positive discrimination. To protect the domestic producers, farmers and through them their products is a very important question. Because of that every government supports the increase of domestic products and goods in the supermarkets on their shelves. Unfortunately this support is not every time effective. The domestic products are well presented in national supermarkets or in other words the customer can find more domestic foodstuffs in those supermarkets the percentage of foodstuffs which are not made in the country is higher than the domestic ones.

The number of supermarkets chains in Hungary is 10. From those the Hungarians are 2. It means that the one of five supermarkets in Hungary is domestic. Unfortunately there are

<sup>&</sup>lt;sup>8</sup> Inspektorat Jakości Handlowej Artykułów Rolno-Spożywczych. (n.d.). Retrieved February 02, 2016, from http://www.ijhar-s.gov.pl/index.php/regional-products.html

significant differences between Hungarian and foreign chains. In Hungarian supermarkets the percentage of domestic foodstuff is 82%, while in foreign this number is 72%. On the other hand this difference is not as big and we can determine that it is not obvious for every supermarket chain that the domestic products are presented in their shops as well as in Hungarians. But the truth is that in domestic supermarkets this number is higher and for farmers and producers this is the important.

In Slovakia the number of supermarket chains is 14. From that 3 are Slovak which is also a good result. Unfortunately while the percentage of domestic good in national supermarkets is between 70% and 75%, in the foreign this average is only between 30% and 60%. With this statistic Slovakia's foreign supermarket chains are the last ones in the V4.

There are 8 supermarket chains in Czech Republic. Which is interesting and saddening that no one is Czech. According to many researches in these supermarkets the average of domestic foodstuff is between 50% and 70% which is better result than in Slovakia but worse than in Hungary or Poland. Unfortunately this percentage is not trustworthy because many companies refused to tell the answer about how many percentage of their foodstuffs is domestic.

There are 38 different supermarket and hypermarket chains In Poland. It is understandable because Poland's population and territory is much bigger than the sum of Slovakia's, Hungary's and Czech Republic's. Which is interesting that from this 38 supermarket chains, 16 are in Polish property. This average is very good because in these supermarkets the domestic foodstuffs have a bigger percentage than in foreign. According to many researches in the Polish supermarket chains the percentage of domestic goods is 90% and in foreign this number is 75%. On the other hand this number is very good result compared to the previous countries.

We can determine that the average of domestic foodstuffs in the supermarkets is satisfying. Unfortunately each other's products, goods in each other's supermarkets are less than 10%. The Visegrad brand is supposed to change this fact.

# 4.2 Questionnaire

Two types of questionnaires have been made, the first for consumers and the second for producers. The questionnaire was filled in by 200 consumers and 200 producers divided between the V4 countries. So it means that 50 consumers, and 50 producers was asked in Hungary, Slovakia, Czech Republic and Poland. The questionnaires are illustrative questionnaires because in the case of consumers there are more than 60 million potential consumers in the territory of V4. In the case of producers the number is lower but still many thousands of farmers and producers are in V4. In the questionnaires closed questions have been used. Furthermore, Likert scale type has been chosen for the possible answers. The answers from producers were collected mainly on farmers markets and supermarkets. From consumers the answers were collected through internet. The required sample size was based on 200. The confidence interval is 6.93. The confidence level is 95%. The population size is 60 000 000. From consumers and producers were asked 10 and 8 questions. The first three questions in both cases were about their home country, age and sex. The following questions were about their relationships with the domestic products and Visegrad brand. Unfortunately all statistics about the questions and answers could not be put here but the most determinative and important analysis of questions was chosen. In the followings there will be analysed 4 questions regardless to consumers and 2 questions regardless to producers.

# 1. What is the most determinant factor at your buying? - CONSUMER

In this case the responder had to choose the most determinant factor at her/his buying. He could choose more than one option.

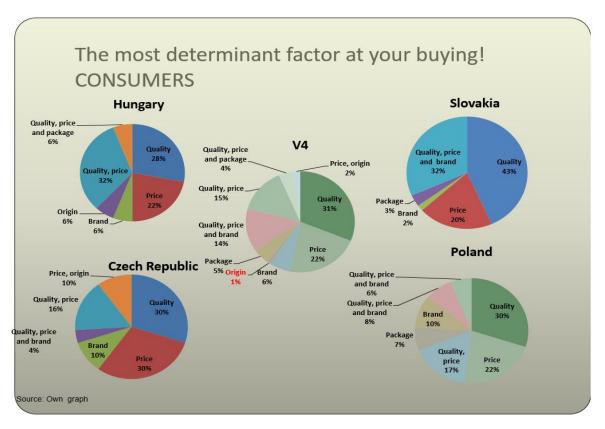
In Hungary in 32 % the quality and the price are the most determinant factors. After that the quality alone by 28 %, the price by 22 % and the origin, brand and quality, price and package got 6 %. It can be can determined that according to this in the case of Hungarian consumers the most determinant factors at a buying are definitely the quality and the price.

In Slovakia the quality is the most important for consumers. 43% of respondents have this opinion. The second one together are the quality, price and brand by 32%. Furthermore the price by 20%, package by 3% and brand by 2%.

In Czech Republic the quality and price got 30%. Quality and price together 10%, price and origin 10%, brand 10% and quality, price and brand together only 4%.

In Poland the same answers were given as in the previous countries. Quality was the most determinant by 30%. After that price by 22%, quality and price together by 17%, brand by 10%, quality, price and brand by 8% and package by 7%.

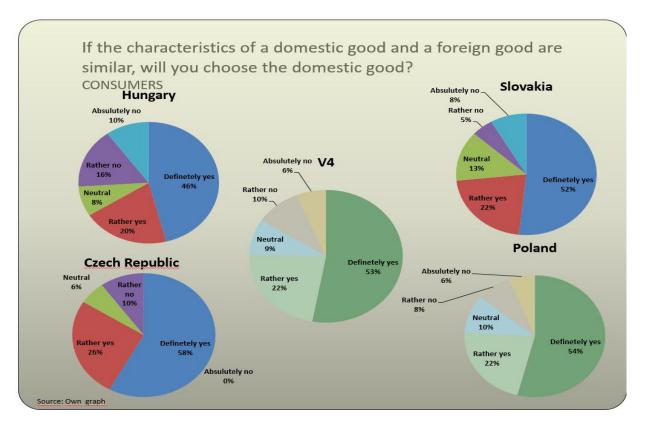
Summarized the results, overall the quality is the most important by 31% and after that the price by 22%. It is understandable because the consumer want to eat healthy food and on the other hand they want to do this with the least amount of money. Which is shocking that overall the origin got the last place which is 1%. It is a very bad result because it means that the consumers do not prefer the domestic goods at the buying and this is bad news for our farmers and producers.



9. Graph: The most determinant factor at your buying? - Consumers

Source: Own computation

# 2. If the characteristics of a domestic good and a foreign good are similar, will you choose the domestic good? - CONSUMER



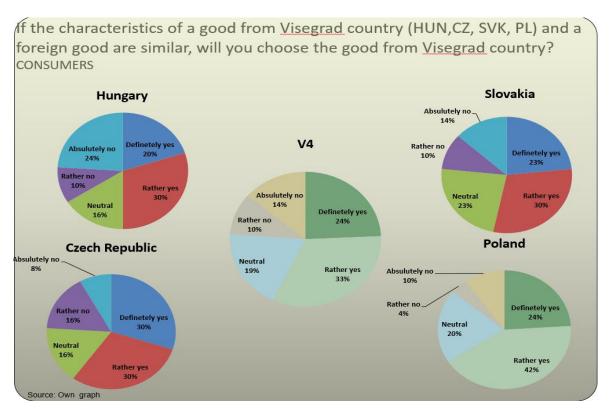
#### 10. Graph: Similar characteristics of domestic and foreign goods - Consumers

Source: Own computation

In this case the consumers had to choose between foreign and domestic goods if their characteristics are similar. The good news to our farmers are that in all V4 countries the proportion of yes is around 50 % and the rather yes is between 20% and 26%. The answers for yes In Hungary is 46%, In Slovakia is 52%, in Czech Republic is 58% and in Poland is 54%. In that case we can determine that the domestic goods are more important to consumers than the foreign goods. On the other hand it has to be like that.

# 3. If the characteristics of a good from Visegrad country (HUN, CZ, SVK, PL) and a foreign good are similar, will you choose the good from Visegrad country? -CONSUMER

At this question the consumers had to choose between domestic and Visegrad product. The result is not unequivocal and convincing than in previous case. In Hungary only 20% said definitely yes and 30% that rather yes. In Slovakia the percentage is similar, 23% and 30%. In Czech Republic 30% said yes and rather yes and in Poland 24% said definitely yes and 42% rather yes. Overall 24% said definitely yes, 33% rather yes, 19% was neutral at this question, 14% said absolutely no and 10% rather no. That example proves that we are rather Hungarians, Slovaks, Czechs, Polishes and Europeans but not central Europeans. The one of the most important purposes of V4 is that the central European identity has to be strengthen.

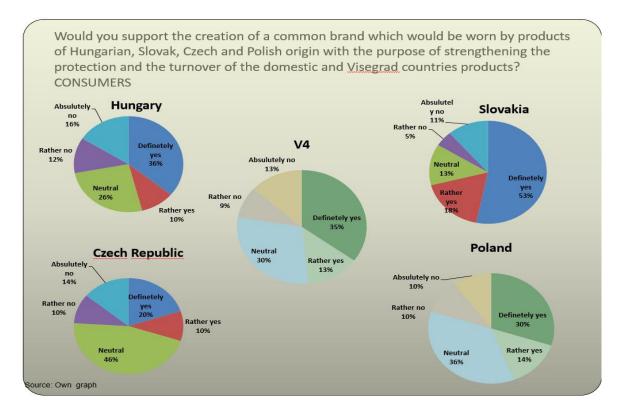


# 11. Graph: Similar characteristics of foreign and Visegrad goods - Consumers

Source: Own computation

4. Would you support the creation of a common brand which would be worn by products of Hungarian, Slovak, Czech and Polish origin with the purpose of strengthening the protection and the turnover of the domestic and Visegrad countries products? - CONSUMER

At this question the customers had to answer if they would support the creation of Visegrad brand or not. The result is not good because in case of Hungary only 36% said that they would definitely support, in In Poland 30% and in Czech Republic only 20%. On the other hand in Slovakia more than half of responders, precisely 53% said that they would support the brand. In all V4 countries neutral answers were the majority. It means that they rather do not know the problem and they do not feel in everyday life the benefits of domestic or Visegrad brands. In case of Slovakia is an important factor that only this country has borders with all V4 members. This can be a reason why Slovak customers support better the brand than the others. Overall 35% said they definitely support the brand, 13% rather support, 30% were neutral to this question, 9% said that rather no and 13% said that they absolutely do not support the brand.



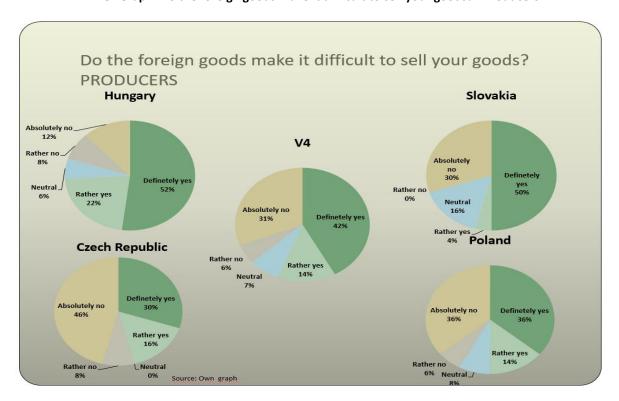
# 12. Graph: Support the creation of Visegrad brand - Consumers

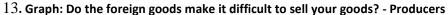
Source: Own computation

### 1. Do the foreign goods make it difficult to sell your goods? - PRODUCER

Here we can determine that in all V4 countries the foreign goods make it more difficult to producers, however there were producers who answered no, they are mostly from

sectors where they do not have that much foreign competitors or only in low level. For example bakery products, meat products or similar traditional products which are produced mostly in the territory of the country. However in Hungary and Slovakia more than 50% of producers think that the foreign goods make it more difficult for their businesses. In Czech Republic and Poland this proportion was around 30%. Which is interesting that in Hungary only 12% said absolutely not, when in the other three countries the proportion of this answer was 30%, 36% and 46%.

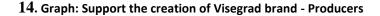


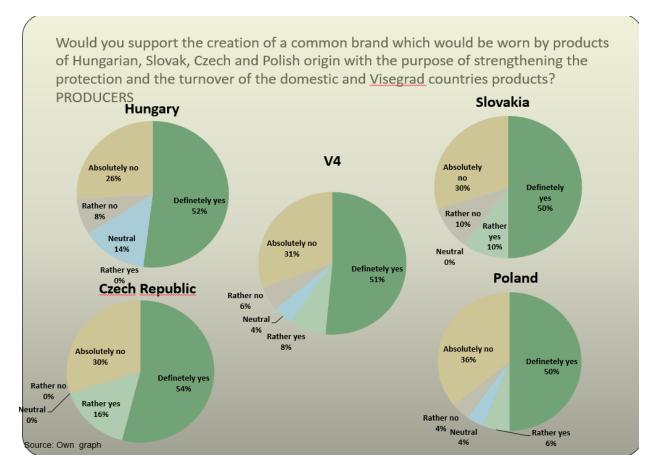


Source: Own computation

2. Would you support the creation of a common brand which would be worn by products of Hungarian, Slovak, Czech and Polish origin with the purpose of strengthening the protection and the turnover of the domestic and Visegrad countries products? - PRODUCER

In this case we can clearly determine that the producers support the creation of Visegrad brand. In Hungary 52%, in Slovakia and in Poland 50% and in Czech Republic 54% support the brand. It means that the producers need such brand as the Visegrad brand which could protect their interest effectively against foreign goods.





Source: Own computation

From these questions and answers we can conclude that the price and quality are determinant not the origin. The producers who have foreign competition think that it makes them difficult to sell their goods (Czechs are more confident). In case of consumers the commitment to domestic products is stronger than to V4 products. Producers want more support than consumers for V4 brand. The Central European identity is strengthening.

# 4.3 Logistic regression model

"A limited dependent variable is a variable whose range of possible values is "restricted in some important way. In econometrics, the term is often used when estimation of the relationship between the limited dependent variable of interest and other variables requires methods that take this restriction into account. For example, this may arise when the variable of interest is constrained to lie between zero and one, as in the case of a probability, or is constrained to be positive, as in the case of wages or hours worked.<sup>9</sup>"

A limited dependent variable, Y, is defined as a dependent variable whose range is substantively restricted.

The common cases are:

- binary: Y ε {0, 1g}
- multinomial: Y  $\varepsilon$  {0, 1, 2, ..., k} In this case the multinomial is used
- integer: Y ε {0, 1, 2, ...}
- censored:  $Y \in \{Y^* : Y^* \ge 0\}$

There was made the limited dependent variable analyses in the program Gretl. There were used 5 variables, where the willingness to accept the brand is the dependent variable Y, the home country X1, type of responders X2, gender X3 and age X4 are the independent variables. In all cases (Y, X1, X2, X3, X4) there were used dummy variables. There were used 400 observations, because 400 respondents were asked in the questionnaire.

- Y: 1 = definitely yes, 2 = rather yes, 3 = neutral, 4 = rather no, 5 = absolutely no
- X1: 1 = Hungary, 2 = Czech Republic, 3 = Slovakia, 4 = Poland
- X2: 0 = Producer, 1 = Consumer
- X3: 0 = Female, 1 = Male
- X4: 1 = 20-30 year, 2 = 30-40 year, 3 = 40-50 year, 4 = 50-60 year

<sup>&</sup>lt;sup>9</sup> Limited Dependent Variable Models - Econometrics Academy. (n.d.). Retrieved March 11, 2016, from https://sites.google.com/site/econometricsacademy/econometrics-models/limited-dependent-variable-models

#### 25. Figure: Gretl : Logistic regression model output

Model 1: Multinomial Logit, using observations 1-400 Dependent variable: Willingness Standard errors based on Hessian coefficient std. error z p-value \_\_\_\_\_ \_\_\_\_\_ Willingness = 2 

 const
 -2,53625
 0,691897
 -3,666
 0,0002
 \*\*\*

 Country
 0,156893
 0,157931
 0,9934
 0,3205

 Type
 0,844822
 0,358972
 2,353
 0,0186
 \*\*

 Gender
 0,0196760
 0,351310
 0,05601
 0,9553

 Age
 0,105394
 0,176443
 0,5973
 0,5503

 Willingness = 3 

 const
 -1,36527
 0,603413
 -2,263
 0,0237
 \*\*

 Country
 -0,183625
 0,138579
 -1,325
 0,1852

 Type
 2,37350
 0,397969
 5,964
 2,46e-09
 \*\*\*

 Gender
 -0,416271
 0,310322
 -1,341
 0,1798

 Age
 -0,193443
 0,154742
 -1,250
 0,2113

 Willingness = 4 

 const
 -1,28794
 0,700483
 -1,839
 0,0660
 \*

 Country
 -0,0550283
 0,176321
 -0,3121
 0,7550

 Type
 1,16156
 0,414716
 2,801
 0,0051
 \*\*

 Gender
 -0,719849
 0,403137
 -1,786
 0,0742
 \*

 Age
 -0,222568
 0,195444
 -1,139
 0,2548

 \*\*\* Willingness = 5 const -0,792600 0,493530 -1,606 0,1083 Country0,002697860,1192660,022620,9820Type-0,5072170,288008-1,7610,0782Gender0,4494650,2735521,6430,1004Age0,001290050,1335100,0096630,9923 \* Mean dependent var 2,545000 S.D. dependent var 1,601370 Log-likelihood -530,5140 Akaike criterion 1101,028 Schwarz criterion 1180,857 Hannan-Quinn 1132,641 Number of cases 'correctly predicted' = 175 (43,8%) Likelihood ratio test: Chi-square(16) = 85,6334 [0,0000]

Resources: Gretl, own computation

# $Y = \beta \ 0 + \beta \ 1^*X \ 1 + \beta \ 2^*X \ 2 + \ldots + \varepsilon \equiv X\beta + \varepsilon$

 $Y1 = -2,53 + 0,15X1 + 0,84X2 + 0,019X3 + 0,105 X4 + \varepsilon$  $Y2 = -1,36 - 0,18X1 + 2,37X2 - 0,41X3 - 0,19X4 + \varepsilon$  $Y3 = -1,2 - 0,055X1 + 1,16X2 - 0,71X3 - 0,22X4 + \varepsilon$  $Y4 = -0,79 + 0,002X1 - 0,5X2 + 0,44X3 + 0,0012X4 + \varepsilon$ 

- A small *p*-value (typically  $\leq 0.05$ ) indicates strong evidence against the null hypothesis, so you reject the null hypothesis.
- A large *p*-value (> 0.05) indicates weak evidence against the null hypothesis, so you fail to reject the null hypothesis.
- *P-value* very close to the cut off (0.05) is considered to be marginal (could go each way).

Except in two situations (Willingness = 2 and Type = 0,0186, Willingness = 4 and Type = 0,0051) the variables do not reject the null hypothesis because they are bigger than 0,05 so they are statistically insignificant.

# Which are significant on which level

Terefore, since the parameter estimates are relative to the referent group, the standard interpretation of the multinomial logit is that for a unit change in the predictor variable, the logit of outcome m relative to the referent group is expected to change by its respective parameter estimate given the variables in the model are held constant.

The results show the relative to the referent group:

For willingness level = 2, if a respondent is a consumer, he is 0,84 times more willing to pay for the analyzed brand than producer.

For willingness level = 3, if a respondent is a consumer, he is 2.37 times more willing to pay for the analyzed brand than producer.

For willingness level = 4, if a respondent is a consumer, he is 1,16 times more willing to pay for the analyzed brand than producer.

For willingness level = 5, if a respondent is a consumer, he is 0,5 times less willing to pay for the analyzed brand than producer.

# 4.4. The construction of V4 brand

After the previous analyses we have received a clear picture about the economy, agriculture, trade and trademarks of Visegrad countries. According to these sections, it is built up the Visegrad brand, which is supposed to unify all foodstuffs under one brand which are produced in the territory of V4 countries and their ingredients are mostly cultivated and produced also in V4 countries. The Visegrad brand has 4 main pillars. The first is the widening the V4 alliance in the field of agriculture, the second is the creation of visegrad brand, the next is the positive discrimination for V4 products and the last is the farmers market only for Visegrad products.

# 1. Widening the V4 alliance in the field of agriculture

To reach results in the field of agriculture between the Visegrad countries, the most important step is Strengthening the agricultural cooperation and increase the export and import of Foodstuff between V4. The Visegrad alliance today has three important forms of cooperation, namely military, economic and energetic cooperation. These topics must be supplemented by the agriculture. This is the first what the V4 must do to move forvard and create the brand.

# 2. Creation of Visegrad brand

26. Figure: Visegrad product



Source: Own picture

# Own sign:

Every Visegrad product which earns the usage of the brand, has to wear the logo of the brand or trademark.

# Ingredients:

The product which wants to get to the program has to contain at least 75% of V4 (Czech, Slovakian, Hungarian, Polish) ingredients to wear the logo of the brand, otherwise the product cannot wear the logo.

# Quality control:

Quality control and every regulation control has to be made by a special institute which has to be created by the V4 countries in Bratislava.

# Production:

All phases of the production process must performed in the territory of V4 countries. If some material or ingredient can be produced or harvested in the territory of V4, the previous mentioned special committee will decide whether the product can or cannot get the logo.

# Promotion:

Every V4 country has to separate an equal size of budget to guarantee the successful promotion of the brand.

# Membership:

The first three years usage is free for every product which wears the brand, but after that period the owner companies have to pay 0,5 % yearly of their product's turnover to the trademark.

# 3. **Positive discrimination of V4 products**

The countries has to find out how they can support the brand through EU or national subsidies, furthermore find a solution how to give tax incentives to Visegrad product, as well as control its legality and if it does not violate any EU or national law. Secondly with the help of the trademark they have to increase the products on each other's markets, especially those products which are traditional products of one V4 country but in the other three countries there is a shortage of this kind of product or does not exist equivalent product (e.g Kofola in Czech Republic, Goulash and Paprika cream in Hungary, Krowky in Poland or Sheep cheese in Slovakia). In that case these new products probably will minimal or not decrease the domestic products turnover because on the market there are not appropriate domestic goods which are similar or substitute of the new Visegrad product.

# 4. Farmers market only for Visegrad products

The final step has to be the creation of V4 farmers markets or grocery store chains in all V4 countries. This initiative will give a big possibility to promote the Visegrad products among the consumers.



#### 27. Figure: V4 Farmers market

Source: Own picture

# 5. Conclusion

The Visegrad alliance is a well-functioning and working collaboration. Its history has more than 700 years' basis and background. These four states have similar culture, traditions, religion and core values. Furthermore, their economy, agriculture and trade are similarly structured. These four countries are bounded to each other through many common determinant factors. During the history they were many times merged into one country. Of course this relationship was not always simple and they had many times difficulties with each other but they always were capable to manage it.

When they revived the alliance at the beginning of the 1990's, their most important aim was the successful European integration of the member countries. Nonetheless, after the successful join to the EU the alliance was not fell apart and today it is more powerful than ever. They realized that even the many differences there are more things to unify them.

As it was mentioned the Visegrad alliance is based on three important areas, namely energetic, military and economic cooperation. However they do not utilized the all potential options and possibilities of the alliance.

The Visegrad brand is one of the possible results of the V4 alliance. It would strengthen their domestic market power and their domestic producers, farmers. Furthermore it would also strengthen the member countries relations to each other. The Visegrad brand is a chance to create a bigger than 60 million's market. The Visegrad brand is a chance for our producers and farmers.

It has to be understood that the systems, countries, economies, ideologies, technologies constantly change during the history. However these four nations will always can count only with each other, because their history, present and future is bounded together.

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# 7. Annexes

# 7.1 Questionnaire

# **Consumer's questions:**

- Which is your home country?
- 1) Czech Republic2) Slovakia3) Hungary4) Poland
- How old are you?
- 1) 20-30 years 2) 30-40 years 3) 40-50 years 4) 50-60 years
- Gender?
- 1) Male 2) Female
- Do you control the origin of a good in case of purchasing?
- 1) Definitely yes 2) Rather yes 3) Neutral 4) Rather no 5) Absolutely no
- Please choose the most determinant factor at your buying!
- 1) the price of good 2) the origin of good 3) the quality of good
- 4) the package of good 5) the brand of good
- If the characteristics of a domestic good and a foreign good are similar, will you choose the domestic good?
- 1) Definitely yes 2) Rather yes 3) Neutral 4) Rather no 5) Absolutely no
- If the characteristics of a good from Visegradian country (HUN,CZ, SVK, PL) and a foreign good are similar, will you choose the good from Visegradian country?
- 1) Definitely yes 2) Rather yes 3) Neutral 4) Rather no 5) Absolutely no

- If a domestic good is better in its characteristics than the foreign good, but it is more expensive, will you choose the domestic good?
- 1) Definitely yes 2) Rather yes 3) Neutral 4) Rather no 5) Absolutely no
- Do you think it is important to have more domestic goods on the store's shelves?
- 1) Definitely yes 2) Rather yes 3) Neutral 4) Rather no 5) Absolutely no
- Please give reasons for your answer!
- Would you support the creation of a common brand which would be worn by products of Hungarian, Slovak, Czech and Polish origin with the purpose of strengthening the protection and the turnover of the domestic and Visegradian countries products?
- 1) Definitely yes 2) Rather yes 3) Neutral 4) Rather no 5) Absolutely no

# **Producer's questions:**

•	Which is your home country?			
1)	Czech Republic	2) Slovakia	3) Hungary	4) Poland
•	How old are you?			
1)	20-30 years	2) 30-40 years	3) 40-50 years	4) 50-60 years
•	Gender?			
1)	Male	2) Female		

- Do you think the foreign products have a better position in a competition with the domestic ones?
- 1) Definitely yes 2) Rather yes 3) Neutral 4) Rather no 5) Absolutely no
- Do the foreign goods make it difficult to sell your goods?
- 1) Definitely yes 2) Rather yes 3) Neutral 4) Rather no 5) Absolutely no
- According to your experience are the foreign goods better salable than the domestic goods?
- 1) Definitely yes 2) Rather yes 3) Neutral 4) Rather no 5) Absolutely no
- Please give reasons for your answer!

.....

- Would you prefer if more domestic goods were on the store's shelves?
- 1) Definitely yes 2) Rather yes 3) Neutral 4) Rather no 5) Absolutely no
- Please give reasons for your answer!

.....

- Would you support the creation of a common brand which would be worn by products of Hungarian, Slovak, Czech and Polish origin with the purpose of strengthening the protection and the turnover of the domestic and Visegradian countries products?
- 1) Definitely yes 2) Rather yes 3) Neutral 4) Rather no 5) Absolutely no