# Czech University of Life Sciences Prague Faculty of Economics and Management Department of Economics



#### **Bachelor Thesis**

# Foreign trade of the Czech Republic – Case study of export of cars

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#### CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

### **BACHELOR THESIS ASSIGNMENT**

Roman Polz

**Business Administration** 

Thesis title

Foreign trade of the Czech Republic - Case study of Export of Cars

#### **Objectives of thesis**

The main goal of the thesis is to analyze foreign trade of the Czech Republic with emphasis on export of cars. In the thesis will be discussed the biggest company in the Czech Republic which is ŠKODA and its export within European boundaries.

#### Methodology

This thesis will be divided into theoretical and practical part. It will also include comparative and descriptive methods of research.

#### The proposed extent of the thesis

40 - 60 pages

#### **Keywords**

foreign trade, export, import, balance of trade, the Czech Republic

#### **Recommended information sources**

ČESKÁ ZEMĚDĚLSKÁ UNIVERZITA V PRAZE. KATEDRA EKONOMIKY, – MAITAH, M. *Macroeconomics*. V Praze: Česká zemědělská univerzita, Provozně ekonomická fakulta, 2009. ISBN 978-80-213-1904-2. HOLMAN, Robert. Ekonomie. 3. aktualiz. vyd. Praha: C.H. Beck, 2002. Beckovy ekonomické učebnice. ISBN

80-717-9681-6

JENÍČEK, Vladimír a Vladimír KREPL. Foreign trade and development economics. Druhé. Prague: Czech University of Life Sciences, 2007. ISBN 978-80-213-1651-5

MARREWIJK, Charles van. International economics: theory, application, and policy. 2nd ed. New York: Oxford University Press, c2012. ISBN 978-0-19-956709-6

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Declaration			
I declare that I have worked on my b Republic – Case study of export of ca			
mentioned at the end of the thesis. As t	he author of		
thesis does not break copyrights of any t	nen person.		
In Prague on 8.3.2016		 	

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## Foreign trade of the Czech Republic – Case study of export of cars

#### **Summary**

The thesis is divided into two parts, the first part is theoretical and the second one is practical. The aim of the thesis was to analyze the significance of foreign trade of cars in the Czech Republic. The thesis tries to determine the international trade which is defined by the main economic factors. Mainly I focused on the foreign trade of the Czech Republic particularly on export. I analyzed the cars export of ŠKODA and tried to identify the conditions of its sales. The time period investigated is between years 1999 – 2014. This time period was influenced by two very important circumstances. The first and more positive one is the entrance to the European Union in 2004. Since then we can claim that the Czech economy developed in the right way. This milestone also allows us to compare the economic situation in each country before and after entering the European Union. This positive progress slowed down in 2008 when world depression worsen the situation across the whole world including situation in the Czech Republic. In the second part I wanted to see the relationship between Euro development and ŠKODA's sales. But because the sales are influenced by more aspects I tried to identify all of them which can have a direct impact on the sales and include them into consideration. This thesis not just explains how export is influenced but tries to find all possible connections between economic aspects.

#### **Keywords**

Foreign trade, globalization, gross domestic product, exchange rate, openness of economy, the Czech Republic, trade policies, automotive industry, ŠKODA

# Zahraniční obchod České republiky – Případová studie exportu aut

#### Souhrn

Tato bakalářská práce je rozdělena do dvou částí. První část je teoretická a popisuje zahraniční obchod a související ekonomické teorie. Snažím se také popsat mezinárodní obchod a ekonomické faktory, které ho definují. Ve druhé části této práce jsou tyto teoretické poznatky použity, abych blíže specifikoval export České republiky. Analyzoval jsem export aut značky ŠKODA a identifikoval všechny vlivy, které mohou ovlivnit export a tudíž i celkové tržby této značky. Zkoumané časové období jsou roky 1999 – 2014. Tento časový úsek je ovlivněn hlavně dvěma situacemi. První a pozitivní změna nastala po vstupu České republiky do Evropské unie v roce 2004. Tento milník nám umožňuje porovnat ekonomickou situaci před a po vstupu do Evropské unie. Bohužel tento ekonomický vývoj byl zpomalen světovou ekonomickou krizí v roce 2008. V druhé části této práci chci zjistit vliv vývoje Eura na celkové tržby značky ŠKODA. Aby byl tento vliv zanalyzován co nejpřesněji, beru v potaz veškeré ostatní vlivy na celkové tržby. Tato práce nepopisuje pouze ovlivnění exportu, ale snaží se zidentifikovat veškeré spojení mezi ekonomickými aspekty.

#### Klíčová slova

zahraniční obchod, globalizace, hrubý domácí produkt, měnový kurz, ekonomická otevřenost, Česká republika, ŠKODA, obchodní politika, automobilový průmysl

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#### 1 Introduction

We can define the foreign trade as exchange of goods, capital or services between countries. It consists of two components - export and import. Theoretically it should enable each country to produce just goods which they are able to make efficiently and import all other goods. This means that open economy offers to its citizens more products than close one. It brings up also many positive aspects including development of industrialization, or globalization. Lately I will also explain how it can lower costs and improve manufacturing conditions. (Obsfeld, & Rogoff, 1996)

To understand better the development of the Czech republic's foreign trade we need to go back to the roots. In this country the foreign trade was always very influenced by the political situation. Because of this we can divide the history in three time periods. After the breakup of Austria – Hungary a new country called Czechoslovakia was formed in 1918. Fortunately main production stayed on this territory. Thanks to textile, glass or heavy industries Czechoslovak's economy belonged to top ten economies of the world. However world economic depression in 1929 ruined also foreign trade and the total production of Czechoslovakia dropped down by 40 %. This depression even deepened in 1934 when Czech currency devalued and foreign trade was very weak. In 1948 a crucial political change occurred. During this totality all companies were transferred from private ownership and became nationalized. Also both export and import were aimed to eastern countries. Commodity structure changed completely as it was needful for totalitarian state. After these hard times a positive progress happened. The main goal was to switch export and import to developed countries, mainly to countries within Europe. This change brought up negative impacts. Big reduction of export concurrently with an increase of import from developed countries. This flowed into separation of Czechoslovakia into two states in 1993. This year the Czech Republic came into existence. Year by year the foreign trade started to increase thanks to collaboration with developed countries, also the framework of structure of today's commodity structure was established.

The Czech Republic profits from its tradition and history nowadays. Especially from machine industry as it produces personal cars, trucks, coaches, trams, locomotives, wagons, tractors or even ships and planes.

Due to quite complicated political history of the Czech Republic I think it is very interesting to see the relationship between Czech currency and Euro. Based on this relationship I analyzed the impact of this relationship on the most significant production and exporter of the Czech Republic – production of cars of ŠKODA. (KALÍNSKÁ, 2010)

#### 2 Objectives and Methodology

#### 2.1 Objectives

The main objective of this thesis is to analyze the foreign trade of the Czech Republic, more precisely I take to pieces one of its two parts, export. I focused on the export of cars of ŠKODA. We know that foreign trade plays a key for every economy especially for such open and small one as Czech economy. That is why I want to demonstrate and show the significance of ŠKODA. This analysis is followed by explanation of some basic economic terms which are necessary for understanding how foreign trade connects all world economies together. By this work all also try to classify the development of Czech economy and detect main affects as the entrance to European Union in 2004 and economic depression in 2008. I also focused on ŠKODA's strategy a tried to see how its sales changes during time period 1999 – 2014. Logically many aspects came into consideration but the point was to find out if the relationship between Euro development and total sales of ŠKODA are crucial for the company. To have the best results possible I had to analyze the ŠKODA's strategy in past years and see its future plans. Of course there are also some fluctuations in total sales which forced me to detect reasons.

#### 2.2 Methodology

For this type of work I decide to make methodological approach as extensive as I can and I established this thesis on descriptive and comparative analyses supported by the use of prognosis on base of trend. As the chosen time period is between years 1999 – 2014 I took the advantage of this and we can also compare the development of Czech economy before entering the European Union and after this procedure. Of course there quite big differences caused by it. We can also see the advancement of Euro currency as I used to see its impact non just on ŠKODA's sales but also on the Czech economy. Thanks to using theoretical findings in my second part we can see how beneficial or descructional Euro can be for exporters but also for a country's economy.

#### 3 Literature Review

#### 3.1 Theories of foreign trade

Foreign trade basically means exchange of services, goods or capital between countries. Thanks to this we are able to walk into a supermarket and buy a salmon from China, tea from Sri Lanka or whatever we are interested in. Obviously every country tries to satisfy needs of its inhabitants but sometimes there is not enough natural resources and therefore the country is forced to buy or trade goods, services with another country which is able to produce this particular goods by having significant resources.

Saying this, it is obvious that foreign trade takes a big role in economy. Economic system essentially describes trade, production or consumption of goods and services by households, firms, individuals or government within restricted area which is usually represented by state.

#### 3.2 GDP and DNP

To be able to compare economic power of a nation we need to measure it somehow. This process is very difficult because we need to calculate the value all of all goods and services produced in a given time period which is usually one year. As I already said this is a very complicated procedure which takes a lot of time and costs a lot of money. To be capable to make such calculations we need to overcome three steps. Primary statistics office needs to gather information about all goods and services produced and provided by companies which should be done in local currency. Then we have to decide if we will compare nation GDP or GNP. In last step we have set the rules about how we will do it which might seem easy but as you will see it is not. ("Gross domestic product", 2014)

#### 3.2.1 GDP

Gross domestic product is calculated as a final value of all goods and services produced within a certain area which is demonstrated by a country and is calculated for a given time period (usually one year). We also have to exclude net income from abroad. As already said, every economy tries to satisfy needs of inhabitants and as gross domestic product reaches a higher number we know that more products and services were produced to satisfy these needs. While calculating GDP we need to have in mind that it calculates with the market value of final goods. So we cannot consider the parts needed to produce a final good because all these intermediate acts are already included in the final price which is necessary for calculating GDP.

There are three approaches how to calculate GDP. The first one is called the expenditure approach. We put together the total value of expenditures on the final goods and services in a single year. Do not forget that we still have to count products which have not been sold so far but have been produced during the year. As the equation for counting GDP is as following: GDP = C + I + G + (X - M) where C stands for personal consumption such as expenditures on furniture, electronics, and food but also services. The letter I describes investments, meaning the firm's expenditures. As this category also covers inventory investment it is the place where we can find unsold goods as we have to include it into the GDP. Even here we need to focus because not every investment is included in gross domestic product. For example if you invest a certain amount of money to a company buying shares it is a not an investment which belongs to GDP because you do not buy a final product. The investments meant by I are the ones which companies make to buy new machines or engines, again we only count final products. Our letter G stands for Government's spending and X-M is the difference between export and import

The second approach is calculated the other way around. We call it the production approach or Value added method sometimes. There are three steps until we get the final number. At first we need to collect data and get gross value of output from all sectors. Then we have to calculate all the intermediate steps so nothing is taken into consideration twice. By this we mean costs of materials needed to produce final goods, services used or supplies. After this calculation we simply subtract the cost of intermediate goods from

gross value. The best way how to clear up this method is to give a simple example. Imagine that we have a firm which sells juices. Everything we produce by ourselves but we buy bottles from a different company. We sell juice in a bottle for \$10. But we buy bottles for \$2 each. If we will calculate each product separately we would get \$12. But from our product (juice in a bottle) we need to subtract the price of bottle which equals to 10 - 2 = \$8. So the final number that we include in GDP is \$10 because we take our \$8 plus the other firm sold their final product (the bottle) for \$2 therefore \$8 + \$2 = \$10.

The third way how to calculate GDP is the income approach. Here we need to sum up all the rents, profits, wages or interest income earned during one year in a certain place (state). If we compere these three approaches we should get very similar numbers, there could be little differences caused by rounding.

#### 3.2.2 GNI

Now we have to specify what is gross national product or gross national income. As we already know what GDP refers to. GNI is slightly different. GNI is the total value of services and final goods produced by labor and property by nationals of a country. Basically we can claim that GNP = GDP + Net Income from Abroad. If we want to explain this equation in words we can say that gross national income measures the production of all citizens of a country regardless where they work within one year. The differences between GDP and GNI is the income that citizens of our country earn abroad minus the income foreigners earn here. (Jeníček, & Krepl, 2007)

**Table No. 1: GNI 2014** 

Ranking	Economy	Millions of US dollars
1	United States	17 601 119
2	China	10 069 180
3	Japan	5 339 076
4	Germany	3 853 487
5	France	2 851 748

6	United Kingdom	2 754 110
7	Brazil	2 375 298
8	Italy	2 102 846
9	India	2 035 887
10	Russian Federation	1 930 436
11	Canada	1 836 937
12	Australia	1 519 375
13	Spain	1 395 889
14	Korea. Rep.	1 365 796
15	Mexico	1 235 721
16	Indonesia	923 738
17	Netherlands	863 031
18	Turkey	823 117
19	Saudi Arabia	759 271
20	Switzerland	733 448
21	Argentina	608 558
22	Sweden	596 878
23	Norway	529 301
24	Belgium	527 971
25	Iran, Islamic Rep.	527 970
26	Nigeria	526 467
27	Poland	521 847
28	Austria	427 313
29	United Arab Emirates	410 724
30	Venezuela	395 597
31	Colombia	380 813
32	South Africa	367 019
33	Thailand	363 356
34	Denmark	345 772
35	Philippines	344 006
36	Malaysia	321 700
37	Singapore	301 639
38	Hong Kong SAR, China	291 997
39	Israel	287 462
40	Egypt	273 120
41	Finland	266 027
42	Chile	264 761
43	Pakistan	260 332
44	Greece	242 002
45	Portugal	221 692
46	Iraq	219 883
47	Algeria	213 374
48	Ireland	205 984
49	Qatar	205 063

50	Kazachstan	201 806
51	Czech Republic	199 408

Source: ("Gross domestic product", 2014)

#### **Table No. 2: GDP 2014**

Ranking	Economy	Millions of US dollars
1	United States	17 419 000
2	China	10 360 105
3	Japan	4 601 461
4	Germany	3 852 556
5	United Kingdom	2 941 886
6	France	2 829 192
7	Brazil	2 346 118
8	Italy	2 144 338
9	India	2 066 902
10	Russian Federation	1 860 598
11	Canada	1 786 655
12	Australia	1 453 770
13	Korea Rep.	1 410 383
14	Spain	1 404 307
15	Mexico	1 282 720
16	Indonesia	888 538
17	Netherlands	869 508
18	Turkey	799 535
19	Saudi Arabia	746 249
20	Switzerland	685 434
21	Sweden	570 591
22	Nigeria	568 508
23	Poland	548 003
24	Argentina	540 197
25	Belgium	533 383
26	Venezuela	509 964
27	Norway	500 103
28	Austria	436 344
29	Iran, Islamic Rep.	415 339
30	United Arab Emirates	401 647
31	Colombia	377 740
32	Thailand	373 804

South Africa	349 817
Denmark	341 952
Malaysia	326 933
Singapore	307 872
Israel	304 226
Hong Kong SAR, China	290 896
Egypt	286 538
Philippines	284 582
Finland	270 674
Chile	258 062
Pakistan	246 876
Ireland	245 921
Greece	237 592
Portugal	229 584
Iraq	220 506
Algeria	214 063
Kazachstan	212 248
Qatar	211 817
Czech Republic	205 523
	Denmark Malaysia Singapore Israel Hong Kong SAR, China Egypt Philippines Finland Chile Pakistan Ireland Greece Portugal Iraq Algeria Kazachstan Qatar

Source: ("Gross national income", 2015)

#### 3.3 Comparison and impacts of GDP and GNI

In the tables above you can see comparison of GDP and GNI in 51 states. As you can see the differences are not that big so it does not really matter if we compare countries by GNP or GNI. Looking at the table it is clear that the United States of America have absolutely the largest economy in the world, this statement is valid for many years and if no unpredictable disaster will come it will stay this way. For me it is kind of surprising that only less than 20 European countries are included in top 50.

On the other hand I expected Germany to be number one in Europe. Even though there are a few aspects that do not suggest to be the strongest economy. For example German workforce is not extremely productive, children spend at school less hours than majority of Europe and the Germans work hours for one year in average is very low. All of these facts do not indicate the strongest economy in Europe but Germany benefited from accepting Euro currency instead of using its own stronger currency so called "Deutschmark". This

allowed Germany to increase export and therefore also its GDP. Germany is one of a few countries which is able to keep the balance of payment in surplus. What is typical for Germans is their mentality. It almost forbids them to borrow money which has a positive impact on their economy. By saying this I wanted to point out that we have to figure out which aspects are crucial for the economy and which aspects are less important. ("German economic strength: The secrets of success", 2012)

As GDP is used for many economic analysis and is usually taken into consideration while comparing the quality of life across countries. We have to mention which transactions also influences this scale but are included in GDP.

GDP calculates only with legal market, unfortunately it is impossible to include also transactions which are illegal because we do not know about them. With this connection we can mention prostitution which is a big problem in many countries and is almost impossible to get rid of it. GDP also measures only activities which have a market transaction so if you for example mow your garden by yourself it is not included in GDP on the hand if your neighbor hires a company to mow his garden it is included in GDP. Many critics also claim that GDP only measures the total output but it does not specify how this output influences your quality of living. That means that if you live in a small village and earn \$20 000 a year your quality of life can be higher than for a person who lives in the city and earns \$21 000 because this person needs to spend \$2 000 on things that you do not need in rural environment. Another two aspects which are not included in GDP appraisal and probably the most important two are that it does not measure the quality of environment and how leisure influences the quality of living. Of course every country could increase its total output by sadden the environment (i.e. lower pollution regulation) or by increasing average working hours but does it really have a positive impact on the quality of life? ("Gross national income", 2015)

#### 3.4 Globalization

As I try to explain how foreign trade works I need to focus on globalization as well. This word has many meanings and is explained differently by many people. I want to focus on economic globalization which refers to the increasing interdependence of world economies as a result of greater integration of goods, services, flow of international capital, labor and technologies. This phenomenon started to expand greatly in recent years. This growth of globalization across the world is caused by development of science and technologies. It reduces the costs of transport and communication in such a way which was unimaginable a few years ago.

Thanks to globalization we can say that our world is getting smaller and smaller. It has many positive impacts on world economy. Evidently it increases competitiveness in a market as also foreign sellers can fight over our domestic market which should bring higher quality of products and lower price. Globalization also increases the standard of living of developing countries as it can help them to borrow money from wealthier countries and then build new infrastructure or improve health care. (Marrewijk, 2012)

#### 3.5 Adam Smith's theory of free trade

The best way how to start with international trade is to mention Adam Smith and explain his theory which is crucial if we want to understand how international trade works. We should say that Adam Smith lived in the eighteen century in Scotland and his theories are still respected today.

His famous and let say the most important theory gives us a deeper explanation about the opportunity cost. He says that no regulations can increase the total amount of quantity produced. These regulations can just specify the direction of industry. We can identify this saying in our everyday lives. Naturally we do not want to buy things that we can make by ourselves. For this we have to make sure that making it does not cost us more than buying it. We can also mention the example Smith gave us. A shoemaker does not make his own clothes but buys it from a tailor. It would be much more expensive for a shoemaker to make his own clothes than to buy it. Here is why, let say it takes him 2 hours to make a

pair of shoes with a profit of \$5. If he will try to make his own clothes it would take him about 5 hours. To buy these clothes from tailor would cost him \$10. We know that he can earn \$10 in four hours which gives him one extra hour which he would otherwise spend making clothes.

By this simple example we realize how important this is for international trade. In other words it might be cheaper for countries to import goods or services from abroad. Obviously it is prosperous for the whole country as it was for the shoemaker because the consumption opportunity increases. (Marrewijk, 2012)

#### 3.6 Ricardo's contribution

Because of Smith's theory new questions came up. Many people were curious how it is possible that a country which is less powerful in all sectors can still trade with more efficient country? Answer to this question provided us Ricardo in the nineteenth century.

Once again let confirm this statement by another example. Let's have two countries X and Y. Country X is capable of making furniture and cars. To produce 100 pieces of furniture they need 10 workers and it takes them a month to make it. To produce 10 cars country X needs 20 people and it takes them 1 month. On the other hand county Y only needs 8 workers to produce the same amount of furniture in the same time and they only need 15 people to produce 10 cars in one month. You would think that country Y will produce cars and furniture and will not trade with country X at all. But that is not true. It is more beneficial for country Y to produce and export cars but not to produce furniture. This is what Ricardo calls the opportunity cost, in other words we have to give up the production of furniture to produce more cars. Even though they need fewer workers to produce the same amount. It is better for country Y to spend its capital in the production of cars and import more furniture from country X than it would be possible for them to produce by themselves by dividing the capital between these two productions. In economy we would say that country Y has absolute advantage over the second country.

To conclude this section I would like to draw up Adam Smith's idea. Any country should not produce and trade all goods they are capable of producing. Every country should

investigate at which sector they are the most efficient and produce these types of goods. By efficiency we should understand the ability of a country to produce more goods with the same input than another country. Doing this we should be able to reach the point where trade is beneficial for every country. ("Ekonomika", 2015)

#### 3.7 Opportunity cost

As we already mentioned opportunity cost I would like to explain it into more details as it is very important for the whole economy. In economy we will meet this problem whenever it is necessary to allocate scarce resources. Opportunity cost is basically the value of second best option that we have to give up due to the use of scarce resources. To make this choice a bit easier we usually use production possibility frontier (PPF). This graph enables us to see all possible combinations of two goods at the same time. We can use it for any two goods for this example let use videogames and books. Table 3 shows us all the possible combinations which can be done by using all resources. (Maitah, 2009)

Table No. 3: Opportunity cost

BOOKS	VIDEOGAMES
0	100
1	87
2	80
3	74
4	70
5	60
6	40
7	35
8	30
9	20
10	0

Source: own processing

This table shows us that we can either make 0 books and 100 videogames, 3 books and 74 videogames or 10 books and 0 videogames and so on. Looking at this table we can clearly see the opportunity cost. So if we decide to produce 3 books our opportunity cost is 26

videogames, this is calculated as the highest possible production of videogames (100 while 0 books can be produced) minus the number of videogames produced while 3 books are made so we get 100 - 74 = 26. We are also able to calculate the opportunity cost if we decide to change the quantity of one good. Let say we produce 5 books and 60 videogames but we want to produce 8 books. What will be our opportunity cost? The result is 30 videogames because if we change the production of books from 5 to 8 we have to sacrifice 30 videogames (60 - 30 = 30).

#### 3.8 Possibility production frontier

To understand the opportunity cost even better we will use also the graphical example shown below.

Consumer Goods

Z Pareto efficiency

C1

X Capital Goods

Copyright: www.economicsonline.co.uk

Figure No. 1: Possibility production frontier

Source: ("Monopoly power", 2015)

If you choose any point on the possibility production frontier (blue line) such as points A and B you are using you scarce resources efficiently. This utilization of all resources is also called Pareto efficiency. That means that the point Z is inaccessible at the moment. It is impossible to produce more products with these resources. The opposite of point Z is point X which is inside our PPF which means that we can use our scarce resources more

efficiently and therefore produce more goods with the same amount of resources. If we are inside the PPF we need to come up with a solution how to use our resources more efficiently which will help us to increases our production which influences GDP in a good way. As we reach the line of PPF our resources are used as efficiently as possible and we cannot improve our GDP (in this sector) we can just choose if we will produce good A or good B depending on the availability of resources and the production costs.

#### 3.9 International trade

In today's world there is a problem as developed countries usually trade between each other because it is not so prosperous for them to do business with developing countries. Of course every liberal country can choose who they will do business with. It is also influenced by tariffs and transportation costs. However developed countries try to help developing countries by importing goods from them or by borrowing them money. Do not be mistaken. I think it is not just their good will but they try to profit from it. Evidently trade can help developing countries to decrease their poverty, it can also reduce their input costs by showing them the "know how" which will help them to increase the value added on the goods they would be able to produce. All of this can increase their GDP and the quality of living. Probably it sounds a bit unthinkably but by helping developing countries we can also strength competitiveness in the market of developed countries. Many new products or higher quality products can be introduce to our market which will increase competitiveness and logically will reduce the prices. It can create new job opportunities in countries where it is much needed. I also think that trading with developing countries can bring more peace to the world because if you trade with a country you want them to be capable of producing the goods. So you want to protect it and contribute peace and economic stability for a given country.

The international trade started to change after World Word II enormously. It is obvious that the war influenced the trade in a negative way as much money had to be spent on soldiers, also the most of the production was related to the needs of an army and therefore there was no time and usually no goods to export. Since this horrible times international trade developed as much as we could not even imagine. Of course many arrangements and

organizations had to be established to control the right development and correctness of the trade so it got the face as it is today. ("International trade", 2015)

#### 3.10 Formation of WTO

One of the most important organizations which set and control the rules of foreign trade is the WTO (World Trade Organization). The origins of the WTO started in 1944 when there was a proposal to establish the ITO which means International Trade Organization. The main idea was to set the rules which all member states would have to keep while trading. The agreement of the ITO was reached in 1948 but at the end the American Congress blocked the formation of the ITO. Many historians declare that the Americans blocked the ITO because they were afraid it would lead more to nepotism than to liberalization of international trade. As a result of the attempt to form the ITO the General Agreement on Tariffs and Trade (GATT) was signed in 1947 in Geneva. After many years and after eight rounds of negotiations GATT was utilized as a building element of the WTO which was officially established on 1. January in 1995 in Geneva (the same as the GATT). The main goal of the WTO is to liberalize the international trade by avoiding trade barriers. This organization also has to control if all regulations are kept in a right way. It tries to put down nepotism and level litigations between Governments. Last but not least function is its collaboration with other international organizations.

The WTO is based on three principles which were drafted by the GATT. The first principle tries to remove discrimination. This is controlled by two sub categories. The first sub category says that if a GATT country access privileges to another GATT country then these privileges are valid for all GATT countries. The second sub category prescribes that all imported goods have to be treated in the same way as all products produced domestically. Now you could ask how the formation of the European Union is possible if such conditions are valid. The explanation is clarified by the next exceptions. The first exception allows countries to form a free trade area because it is understood as a step closer to a free trade which is considered to be a main goal. The second exception is valid for countries which want to help developing countries, here the world tries to help developing countries as already said in chapter 3.9.

#### 3.11 Multinationals

In this chapter I would like to talk about multinationals companies. The best way how to describe this firm is to start with an example. Imagine that you live in the Netherlands, you drive a Volkswagen car, your favorite food is a sandwich from Subway's and you drink Coca Cola with it. One day you decide to go visit your sister who lives in the United States. She is supposed to pick you up at the airport but at the very last moment she calls you that she is not able to come. Because you are hungry after a long flight you decide to grab a sandwich at Subway's and drink Coca Cola. Then you stopped a taxi and yes, it is a Volkswagen. If one company produces and sells its products in two or more countries then it is called a multinational company. Some multinational companies have factories all over the world and some just in three countries. These companies usually have a head office from where they are able to manage all other offices and factories. Sometimes when such a company gets really big its budget can be higher than some budgets of small countries. Of course it brings up many new possibilities for the company but also a few challenges for the economy of a "goal country" where a company wants to invest.

This action has many benefits for the country where a given company decided to do business. At the first place it is necessary for the firm to make usually quite a big investment. Just this fact should have a positive impact for the country. Thanks to this investment there should grew up new factories or offices which create new job opportunities for local people. While the company starts to employ people in a different country it has many advantages, mostly for the country where the factories are built. It is necessary for employers to give their new employees necessary trainings. It will increase the working efficiency of local people which is considered as a huge benefit and can be a helpful factor in improving local economy. Of course the company needs to bring up their "know how" so their business can work as they are used to which accelerates the improvement of technology in given country. This new investment also brings new goods and services which a country can consume and benefit from them. We should also mention the impacts on economy. It is more than clear that if a company builds a new factory in a different country their main goal is to export produced goods. This influences a balance of payments of nations in a positive way. Last but not least is that this kind of relationship can also develop friendliness between these nations (making business together). Saying all these facts leads to the fact that the quality of living in the country where the offices and factories are built is going to be better.

As everything in the world also multinationals have the second page. Unfortunately as these companies have enough capital to invest, they often become a monopoly in the market which of course has a negative impact on the economy. When investing into different countries many local businesses start to have problems if the investing company carries business in the same field. This can apply on supermarkets or small shops aimed on the same goods as the monopoly. This can cause that smaller enterprises are forced to go out of business. Another problem is that investing company usually does not care about environment in goal countries. This problem is even more dangerous in developing countries where people do not have enough knowledge and therefore agree terms because they only see the profit and do not realize how pollution and use of nonrenewable sources can ruin their state. It is more than obvious that firms want to invest in other countries to make higher profit. Investing into developing countries allows them so called "slave labor" when employers pay ridiculously low wages comparing to western standards. Multinationals often start a discussion if it is better not have any jobs at all or if multinationals are a good solution to this problem. Many experts argue that even a smaller local factory can have the same negative impact on the environment and should be regulated by government regulations. In my opinion it is necessary to do supervisions regularly and set the rules regardless in which country we work. I think there should be the same working conditions (working hours, minimal wages etc.) over the world. I know there is a long way until we can achieve this but at least some regulations are needful.

#### 3.11 Monopoly

In previous chapter I mentioned how multinationals can create a monopoly. Now it is the time to specify and describe it more deeply. A monopoly is defined as the only supplier of given goods and there no other similar product in market. In fact a pure monopoly is quite hard to find and is not that common. A good example is the Post Office in the United States. It is surprising but the Post Office is protected by the U.S. government as the only monopoly in the country. So it has the right to deliver letters across the United States and

while another firm wants to step in the market the Post Office can set the minimum price for which the second firm can sell at. So as seen on this example it is quite impossible to create a monopoly without help of government.

To set up a monopoly a few conditions must be fulfilled. The first possibility is that a firm an exclusive rights of scarce resources. Another possibility is the protection of government as mentioned before. And the last option is very similar to the first one by way of ownership of patens or copyrights which allows them to produce and sell products or services which other companies are capable of producing. These are the main chances how a monopoly can arise. Most developed countries have laws protecting the market from creation of a monopoly. Because once a monopoly exists it can pretty much control the price of produced goods as there is no other possibility for consumers to replace it.

Of course there are certain advantages and disadvantages while talking about monopoly. Let just specify the major ones as a monopoly is not so common in today's world. A big advantage can be the revenue a monopoly can make by exporting goods to countries where such goods are absent. The second advantage is quite questionable because it seems that it is not profitable for the firm. As they make a big profit by being the only producer on the market they have capital which they can invest in different ways. They can higher the barriers for other companies to enter the market or they can invest in the firm so they would be more efficient and capable of process scarce resources more efficiently which can save the environment.

On the other hand the disadvantages influence the final consumer more directly. As there is only one producer the supply is controlled more strictly and therefore there is only one or just a few possibilities what to buy. As the supply is regulated also the price is controlled and usually is set higher that it would be if more producers were in the market. All these changes lead to another economic setback for consumers. All of these controlling powers lead to a decrease of a consumer surplus. Consumer surplus very simply said is the difference between the price that consumer actually pays and the price they would be prepared to pay. If we talk about a consumer surplus the actual price has to be lower than the price a consumer would be prepare to pay. It is the capability of a monopoly that it can take the power over the consumer and lower the consumer surplus over time. A monopoly can also have a big impact on unemployment. As a monopoly usually produces lower

output than a competitive market it is very probable that the unemployment will be higher if there is a monopoly in the market. (Holman, 2002)

#### 3.12 Duopoly and oligopoly

More common types used in real world are duopoly and oligopoly. The only difference between these two is in the number of sellers. Duopoly, as the name predicts only has exactly two sellers on the other hand oligopoly has a few sellers in the market. By this we mean that those companies considered as an oligopoly should dominate the market but also other small firms can operate and be active in the market. In this type of market firms can enter and leave the market at any time. Of course even here are some barriers which have to be taken in mind. This type of market is very often represented by pharmaceutical industry or by firms providing health insurance. Even more notable it is within companies producing operating systems for smart phones (Google and Apple). As you can see to enter these sectors of business you need to have a large amount of money to invest and you will also need specific patents and licenses and therefore it is not easy to become active in these markets. That is the reason why only a few firms are capable of making business in this field. As there are only a few firms in the markets it allows buyers to choose from whom they will buy goods. This leads to a higher competition between producing firms which should theoretically lead to better quality products as they want to be better than their competitors. (Stiglitz, & Walsh, 2006)

#### **4 The Analytical Part**

#### 4.1 Economic development of the Czech Republic

Situation in which we can find the Czech Republic today was not always as positive as now. Due to a political reasons we could not import or export almost any goods until the 1990s when the borders opened and the foreign trade could start to grow. As you can see in table 4 the begging of foreign trade was not easy at all. Czech businessmen or even government haven't have enough experiences or even goods to sell abroad which logically lead to a deficit. Unfortunately the Czech Republic wasn't able to change by itself but it all changed by entering the EU in 2004. As you can see in the table 4 the Czech Republic had so called deficit until the year 2005. In next chapter I will try to explain why and how the European Union helped to turn deficit into surplus and what is more important how the Czech economy managed to maintain it. (Jeníček, & Krepl, 2007)

#### 4.2 Influence of the EU

Now we should have a deeper look on how the entering the EU influenced the Czech Republic and vice - versa. Entering the EU is beneficial for the Czech Republic in the long run as GDP grows every year since the admission with exceptions in year 2009 which is known as year of crises. In total GDP grew up by 21% percent since entering the European Union. With this growth goes hand to hand also the relationships with other nations.

A huge topic is also the utilization of EU funds. Even though the Czech Republic was able to get 26, 7 billion Euros from funds which is about 64% from all possible funds. There is still a problem that they are unable to put all the papers together to get all possible funds by which they are losing a big amount of money and this country is ranked as the worst EU member in ability to get funds. Not only the paperwork is the main problem, but also the corruption. This caused that the European Union frozen about four million euros from funds and there is still a possibility that the Czech Republic will have to return more than that if corruption will be proved.

Table No. 4: Foreign trade of the Czech Republic (billions CZK)

year	Export	Import	Balance	accord:	ference ing to a s year in	covering import by export in %
			_	export	import	
1993	421,6	426,1	-4,5	69,9	45,2	98,9
1994	458,8	498,4	-39,5	8,8	17,0	92,1
1995	566,2	665,7	-99,6	23,4	33,6	85,0
1996	601,7	754,7	153,0	6,3	13,4	79,7
1997	709,3	859,7	150,5	17,9	13,9	82,5
1998	834,2	914,5	-80,2	17,6	6,4	91,2
1999	908,8	973,2	-64,4	8,9	6,4	93,4
2000	1 121,1	1 241,9	120,8	23,4	27,6	90,3
2001	1 268,1	1 385,6	117,4	13,1	11,6	91,5
2002	1 254,9	1 325,7	-70,8	-1,0	-4,3	94,7
2003	1 370,9	1 440,7	-69,8	9,2	8,7	95,2
2004	1 722,7	1 749,1	-26,4	25,7	21,4	98,5
2005	1 868,6	1 830,0	38,6	8,5	4,6	102,1
2006	2 144,6	2 104,8	39,8	14,8	15,0	101,9
2007	2 479,2	2 391,3	87,9	15,6	13,6	103,7
2008	2 473,7	2 406,5	67,2	-0,2	0,6	102,8
2009	2 138,6	1 989,0	149,6	-13,5	-17,3	107,5
2010	2 532,8	2 411,6	121,2	18,4	21,2	105,0
2011	2 878,7	2 687,6	191,1	13,7	11,4	107,1
2012	3 072,6	2 766,9	305,7	6,7	3,0	111,0
2013	3 174,7	2 823,5	351,2	3,3	2,0	112,4
2014	3 628,6	3 176,6	452,0	14,3	12,5	114,22

Source: ("Zahraniční obchod se zbožím - přeshraniční pojetí - časové řady", 2015)

#### 4.3 Reaching the surplus

Especially the trade with Germany boosted as many barriers disappeared by becoming EU member. Here are some numbers which support my statement since entering the EU our export to Germany grew up by 59% and also import from Germany increased by 30% which advanced the total trade between Germany and the Czech Republic from 1, 2 billion crowns to 1, 7 billion. But also Czech Republic is becoming more important business partner for Germany. Ranked as number twelve among all trade partners skipping over India, Japan or Brazil. ("International trade", 2015)

This positive development in trade over the years is also caused by many economic and natural advantages which attract quite many investors. I think that one of the biggest advantages is the location, the Czech Republic is situated in the middle of central Europe which is a perfect position where to have warehouses or factories. Other reason why investors choose this country is its natural relief, high mountains, green plains, rivers, or deep woods are the aspects why spa resorts are having progress.

Of course there are more reasons why foreign investors prefer The Czech republic. I think these following economic preferences have even higher weight than the natural ones. For example Czech people are quite well-educated which creates good and effective labor force, especially in mechanical or electrical engineering and in automotive sector. Even though the labor force is on high level its wages are not as high as in other developed countries and it is also the reason why many workers tend to leave the county for higher salaries. Also the Czech Republic has quite stable social environment and minimum strikes or demonstrations of labor unions.

#### 4.4 Openness of the Czech economy

There are two main indicators how to analyze the openness or the intensity of foreign trade. The first one is to measure rate of export of total GDP or we can measure the volume of export per capita usually set in USD. Generally we can say that small economies have

higher rate of openness than big economies which are defined as countries with more than 50 million inhabitants. (Corlateanu, 2010)

The conclusion about the Czech Republic is that the rate of openness is increasing in long run in both indicators explained in chapter above. This leads to a statement that this country has one of the greatest dynamics while talking about rate of openness although if we compare the openness to similar economies we get very close numbers now but a few years ago the Czech Republic had really bad numbers. Which is closely explained in chapter 4.3. (Marrewijk, 2012)

#### 4.5 Czech export

It is important to mention that the Czech Republic makes almost a half of export and about 40% of import with countries which it shares borders with. That means that Germany, Austria, Slovakia and Poland play a very important role in Czech foreign trade. The most important country is Germany which covers about 28% of Czech foreign trade turnover.

As seen in the table from the year 2005 The Czech Republic is capable of reaching surplus which is supported by the start of doing trade with China, Russia or Ukraine. But once again the politics situation takes place as Russia declared embargo on food imported from EU countries including the Czech Republic. Unfortunately Russia forms about 4% of export so we will see soon how it influences Czech economy.

I want to focus on export of the Czech Republic because in last few years Czech government and firms learned how to profit from selling goods abroad. Huge credit can take the automobile industry which plays the major part. Not only ŠKODA but also other investors like to come to the Czech Republic for obvious reasons. Czech Republic owns a great location in the middle of Europe which allows a great access to European customers. It also brings logistics advantages supported by the membership in the EU. Czech Republic disposes of well-developed infrastructure and also owns a solid labor force which is mostly high educated. We also have to mention that investor can find many useful suppliers which are able to simplify their work. (Holman, 2002)

#### 4.6 Commodity structure

In the tables below we will find what goods and where the Czech Republic export the most. As we can see in table 5 we manly export machinery and transport equipment for many years. We can also see that export of these goods has growing tendency and will probably continue to grow. This industry is the biggest by far. We will get deeper explanation of this industry when I would talk about SKODA in more details. As a matter of fact all of nine goods mentioned in table 5 have increasing amount which testifies that the Czech economy is recovering. If we compare co – temporary year (2014) with year 2006 we can see that many sectors expanded by 100% which is a huge achievement. Biggest growth is registered in export of animal and vegetable oils which grew up 6, 5 times. The smallest progress is recorded in exporting manufactured goods, it grew up 1, 34 times. From this table we can know where the Czech Republic exports the most. Of course I wanted to show you the share of European market in Czech export. As you can see the percentage is decreasing every year but it is still above 80%. The biggest market inside the European Union is Germany. The second biggest market where the Czech Republic exports is Slovakia but is almost 4 times smaller than German market. Saying this we need to realize how Germany is important for our foreign trade. China, not just the most significant importer of Czech goods outside the EU but also started to invest huge amounts of money in the Czech Republic.

Table No. 5: Czech export - Goods

Export of goods by SITC in cross-border concept									
	2006	2007	2008	2009	2010	2011	2012	2013	2014
goods	export is	n billions	CZK		•	•	•	•	
Food and live animals	62,0	71,9	77,9	73,9	76,3	91,4	108,1	116,1	130,4
Beverages and tobacco	10,7	14,5	16,4	16,2	16,8	17,1	19,9	22,6	27,4
Crude materials	55,0	64,9	64,6	57,5	75,9	80,9	86,4	84,8	88,9
Mineral fuels	61,8	67,5	84,3	77,6	93,9	109,6	118,7	97,0	98,8
Animal, vegetable oils	1,6	2,1	2,8	2,9	4,6	4,8	9,2	9,2	10,4
Chemicals and related									
products	129,9	144,2	147,3	136,4	164,2	180,2	189,5	202,5	240,9
Manufactured goods	445,3	501,1	482,5	376,4	435,3	507,8	532,5	550,4	598,5
Machinery and transport									
equipment	1141,7	1343,4	1331,0	1145,5	1382,3	1576,3	1663,4	1710,9	1997,4
Manufactured articles	235,9	269,0	265,5	250,2	280,5	307,2	340,4	374,0	428,4

Source ("Zahraniční obchod se zbožím - přeshraniční pojetí - časové řady", 2015)

**Table No. 6: Czech export – Destination** 

Export	Export of goods in territorial structure in cross-border concept - Czech Republic								
year	Total	European Union (28)	Total export into EU (28) in %	China	Germany	Poland	Slovakia	United Kingdom	Austria
2006	2 144 572	1 847 861	86,16%	8 991	684 973	121 387	180 458	102 599	109 504
2007	2 479 235	2 125 758	85,74%	14 046	762 341	147 055	214 803	126 372	113 801
2008	2 473 736	2 119 018	85,66%	13 168	759 661	160 104	227 566	118 965	117 027
2009	2 138 625	1 820 338	85,12%	15 854	694 485	123 065	186 948	105 875	100 007
2010	2 532 795	2 134 869	84,29%	23 180	819 245	154 644	217 291	124 922	119 667
2011	2 878 690	2 398 098	83,31%	29 516	927 062	181 473	257 557	130 177	130 678
2012	3 072 597	2 495 734	81,23%	32 712	966 191	187 116	277 492	147 084	141 645
2013	3 174 704	2 572 990	81,05%	37 588	993 736	190 436	280 081	153 360	144 048
2014	3 628 826	2 981 972	82,17%	42 460	1161238	217 113	304 112	184 038	156 759

Source ("Zahraniční obchod se zbožím - přeshraniční pojetí - časové řady", 2015)

#### 4.7 Automotive industry

Automotive industry plays a key role not just in Czech economy, but also in the European Union and in all developed countries. In this country is also a specific situation because it influences more economic indicators than we imagine. Automotive industry makes about 25% of all industrial activities across the country. It employs more than 155 000 people and it forms 7, 5% of Czech GDP. It is also extremely important for export as about 23 percent of all exports is caused by automotive industry. ("Automobilový průmysl: Trendy budoucnosti", 2015)

This impressive achievement is underlined also by the productivity. The Czech Republic produces 118 cars on 1000 inhabitants. We can also monitor the progress as in 2001 this country produced about 461 thousand cars and nowadays it is more than one million. If we want to mention which companies produce the most. The results are very well known the main one is still ŠKODA, followed by Hyundai and TPCA ranked as number three. The selling results are very similar leading ŠKODA, followed by Volkswagen and with Hyundai on the third place. ("Analýza automobilového průmyslu", 2013)

Obviously, also this industry was influenced by the economic depression during 2008 and 2009 when people were not able to buy as much cars as now or before which forced he producers to lower the production. If we consider only the EU the biggest automotive market is in Germany, second is France and number three is Spain. The Czech Republic is ranked as number five. But if we compare how many cars each country produces on 1 inhabitant the chart looks completely different. First is Slovakia shadowed by the Czech Republic. In long run breakdown we can see the decline of importance in production of such countries as Italy or France. On the other hand countries as Romania, Slovakia and the Czech Republic are becoming more and more important. Interesting point is that in number of registered cars or in average age of cars there is an opposite situation and the western countries reach better results than their eastern neighbors. (Maitah, 2009)

### 4.7.1 Innovations in automotive industry

Automotive industry is going through changes that have ambitious to innovate and transform the whole industry on another level. These changes should affect not just technological changes on automobiles but also the mode of production.

The biggest expectations are from alternatives fuels. We can claim that every big automobile factory spends a lot of money into research and development of these fuels. What I find very interesting is that almost each automobile factory tries to develop different alternative fuels. For example ŠKODA focuses on compressed natural gas, Japanese companies spends the most money on hydrogen fuel cells and Audi developed new ecological fuel called e- diesel composed just from water and air. Of course there many other possibilities such as ethanol, vegetable oil or compressed air. The most emphasis is put on electrical power. How much each fuel will be used will depend on the amount of pumping stations, other very important factor is the distance that each car will able to pass on one charge and last but not least is the price of a car which uses given fuel. All these aspects will influence its usage and utilization.

Very user friendly innovation is being tested right know. The idea is to interconnect car and vehicle. It is not just about connection and we should be able to control our car by smartphone. This innovation will allow us to start engine, apply the breaks or park. As I said it is already being tested by Audi, Toyota or Mercedes but we will see it in city traffic in 2025 the earliest because it is not clear who will be responsible for possible car accidents. There is a change that all cars controlled by smart phones will be communicate between each other to minimize the accidents.

European Union also made regulations about Carbon dioxide more restrictive. This chemical compound is the biggest menace to environment caused by automotive factories. The limitation will change from today's amount of 130 g/kg to requested 95g/km in 2021. Also many new safety regulations will take place in 2018 such as airbags, anti- lock braking systems and electronic stability control. All of these safety attributes will be obligatory for all new cars from first of April 2018. Factories predict that only Carbon dioxide regulations will cost them about 13 billion Euros. They will have to use different, more expensive materials which are not as damaging for environment.

A big problem from automotive industry can be also the growing generation. In today's world of technology is used in our everyday lives. This caused a new problem called car sharing. For this new generation will not be as necessary to own a car. They just want to transfer from point A to point B. It is mostly used by young families or students who drive less than ten thousand kilometers a year. Thanks to application and their nonstop connection to internet they only sign a contract once and by using a chip they can use a borrowed car whenever they want and they only pay for a distance they really drove. Of course people will always want to own a car but it is a great example how technology affect this industry in a negative way as well. ("Škoda - výroční zpráva 2014", 2015)

## 4.7.2 Progress of automotive market

We can claim that the year 2014 lead to a positive growth of global automobile market. This positive advancement is mainly caused by the progress of markets in China, North America or South Korea. There is a slight growth of demand also in Europe with exceptions of markets in Russia and Ukraine. If we evaluate markets one by one I would like to start with Central Europe. Sales in this region increased by 14% in 2014. Visible growth can detected in the Czech Republic (growth by 16% comparing to year 2013). After many years of rundown in demand Western Europe finally recovered in 2014. The biggest demand was registered in Great Britain. A bit surprising is a cutback in the Netherlands or Austria. On the other hand Eastern Europe due to negative political reasons recorded a decline of 11%. This was mainly caused by the situation in Ukraine where the demand fell down by 55%. A very important market is in China where the situation is developing in a great direction and also in 2014 there was an increase of 5% in sales.

## 4.8 ŠKODA AUTO a.s.

ŠKODA is an automobile factory leading many statistics across the Czech Republic. This company is considered as the most respected one and is taken as one of the favorite one by the users but also by the employees. This is supported by winning the competitions

CZECH TOP 100 or CZECH BEST 100 in 2014. As I already mentioned that ŠKODA is popular between employees I also want to say why. In studies made by Universum where graduates pick their dream company, ŠKODA was in TOP 3 in both categories. ŠKODA ranked as number one in technology and number 3 in business where students from economic programs express their opinions. I think these results can confirm that this company set its strategy very well.

ŠKODA AUTO a.s. belongs in one of the most meaningful industrial concerns in the Czech Republic. It is one of the oldest automobile factories in the world as its roots can be found in 1895 when Václav Laurin and Václav Klement set up a new business which was a fundamental basics to today's ŠKODA. Nowadays this company with a tradition older than 120 years employs more than twenty four thousand people and only 14% of them obtained university degrees.

For more than twenty years ŠKODA is a part of a Volkswagen concern. During this period of time ŠKODA was able to produce higher volumes and is also able to come up with new types of cars. Vehicles with ŠKODA brand are made all over world as there are factories in Russia, China, India, Slovakia, Ukraine, Kazakhstan and, of course, in the Czech Republic.

ŠKODA's approach includes multiple important elements which enables the company to survive on top for so many years. As they sold more than one million vehicles they already have a new target, they want to reach a million and a half of sold cars per year. They also introduce a new or amended car every six months, they mostly focus on practical and smart cars such as Rapid, Octavia or Superb.

As I mentioned in chapter 4.7.1 it is very important for each company to innovate. For this reason ŠKODA decided to invest more than 45 million Euros on developing and technological center close to its biggest factory in Mladá Boleslav. It took two years to build this center and it will mostly test and develop new fuels and engines. All this is included in ŠKODA's motto "Simple Clever" which represents practical, sophisticated and clever procedures and solutions. ("Škoda - výroční zpráva 2014", 2015)

# 4.8.1 The location of Škoda production

Because ŠKODA produced more one million cars it is necessary for the company to spread its production effectively. Table 7 shows us where ŠKODA produces vehicles. Of course the crucial place is Mladá Boleslav where about 500 000 cars was made in 2014. This factory also employs more than fourteen thousands employees. Naturally it would not make much sense to make one car type in one country as it is cheaper to ship all cars over to a final destination. The production is logically divided into all factories so if you will have a closer look you can find out that in three factories in Mladá Boleslav, Kvasiny and in Bratislava are produced all car types which ŠKODA offers.

Table No. 7: Škoda factories

factory/ car type	Citigo	Fabia	Rapid	Roomster	Octavia	Yeti	Superb
Mladá Boleslav (Czech Republic)		х	X		х		
Kvasiny (Czech Republic)				X		X	Х
Bratislava (Slovakia)	X						
Kaluga (Russia)		X	X				
Novgorod (Russia)					Х	X	
Aurangabad (India)					X	X	Х
Pune (India)			X				
Anting (China)		X			Х	X	
Yizheng (China)			X				
Ningbo (China)					X		X

Source: ("Škoda - výroční zpráva 2014", 2015)

Foreign plans played a key role in reaching the record in sold and also produced cars in 2014. About 411 thousand of ŠKODA's cars was produced abroad and this trend is going to grow. It can seem strange but Czech employees can make an advantage from and I will explain why in a little bit.

China is the biggest foreign market and that is also the reason why there are already three plants, namely Anting, Yizheng and Ningbo. Around 300 000 vehicles were made in these

three plants last year. To be clear ŠKODA does not own any factories in China, all these plants are owned by Volkswagen and its Chinese partners. This type of production is called as licensed. In China there are many tariffs and duties which would ŠKODA have to pay. For this reason it is more reasonable for them to do it as explained. In reality ŠKODA gets a licensed fee from each vehicle produced in China. Even though the average profit from each car made in China is about three times lower than for cars produced in own factories and sold to the world. But do not be mistaken ŠKODA only exports know-how to China the development stays completely in the Czech Republic. Now the question is why ŠKODA keeps a part of production in China while the profit is remarkably lower. The explanation is expectable, this production in China reduces developing costs per each car for this reason are the earning from China very important and fundamental.

# 4.9 ŠKODA's sales between 1999-2014

Table No. 8: ŠKODA's sales between 1999 -2014

Year	Sales (mil. CZK)		Percentage
1999	110 409	domestic	19,0%
		outland	81,0%
2000	136 283	domestic	18,0%
		foreign	82,0%
2001	153 271	domestic	18,0%
		foreign	82,0%
2002	145 694	domestic	18,0%
		foreign	82,0%
2003	145 197	domestic	17,0%
		foreign	83,0%
2004	153 550	domestic	15,0%
		foreign	85,0%
2005	177 822	domestic	14,0%
		foreign	86,0%
2006	189 816	domestic	13,5%
		foreign	86,5%
2007	211 026	domestic	12,4%
		foreign	87,6%
2008	188 572	domestic	12,7%
		foreign	87,3%
2009	170 666	domestic	12,5%
		foreign	87,5%
2010	203 695	domestic	10,7%

		foreign	89,3%
2011	231 742	domestic	9,5%
		foreign	91,5%
2012	239 101	domestic	9,2%
		foreign	90,8%
2013	243 624	domestic	9,4%
		foreign	90,6%
2014	299 318	domestic	9,1%
		foreign	90,9%

<sup>\*</sup>domestic=within the Czech Republic, foreign= outside of the country

Source: ("Škoda - výroční zpráva 2014", 2015)

I want to analyze how ŠKODA developed over fifteen years. During this time not just sales changed, but also types of cars, plants and countries where ŠKODA sells shifted. We will now have a closer look which consequences were made by these changes. We know already know that currency can affect business in huge manners. I want to see the influence of Euro and Dollar advancement on ŠKODA's business.

Table No. 9: Euro's average

	Average	
Year	Bid	Ask
1999	36.84600	36.89868
2000	35.59814	35.64772
2001	34.11067	34.15478
2002	30.71901	30.91379
2003	31.81964	31.88584
2004	31.85748	31.95258
2005	29.74185	29.83627
2006	28.31609	28.36785
2007	27.73045	27.78192
2008	24.92843	24.98979
2009	26.40060	26.47755
2010	25.26572	25.32112
2011	24.55382	24.60994
2012	25.11335	25.16242
2013	25.93518	25.98787
2014	27.51001	27.55528
2015	27.26294	27.30837
2016	27.01697	27.04625

Source: ("Average Exchange Rates", 2016)

Table 8 clearly shows us that since the very begging the most of the production was sent abroad. Since 1999 the main region where ŠKODA exported was Western Europe, of course in 1999 all plants were in the Czech Republic so it was more difficult to export over the ocean or in Asia. We can notice that total sales have increasing values from year to year for almost all fifteen years. The only exceptions are years 2008 and 2009 for well-known reasons (recession) but ŠKODA happened to deal with problem very well and reached its maximum volume of sales in 2014 and this trend will continue due to a strategy which ŠKODA set. Unfortunately there is quite a high risk how the situation in Russia will continue which can affect the sales quite a lot. We can also see that ŠKODA tries to sell more and more cars abroad, this is caused by moving some production over to foreign countries and also by the effort to maximize the profit for which the globalization is a key factor. ("Škoda - výroční zpráva 2014", 2015)

### 4.9.1 Relationship between exchange rates and sales

It will be very difficult to see the impact of the relation between Euros – Czech Crowns on the export of ŠKODA because many factors have to be considered here. But as a matter of fact ŠKODA does about 90% of its business outside the Czech Republic, it is very important for this company to check and forecast the progress of foreign currency. Table 9 shows us that we get less and less Czech crowns for one Euro each year since 1999, what does it mean for such companies which are depended on export? They still need to lower production costs but meanwhile they need to improve quality of their products, in case of ŠKODA we are talking about quality of cars. Preferably each company wants to decrease their costs by the negative change of relationship between Euro – Czech crown to minimize or completely abolish this possible negative impact on exports which can be devastating.

I think ŠKODA makes all important and smart steps how to eliminate negative influences of Euro fluctuation. They used their profit from previous years to build factories in different countries or made settlements about production for example in China as we already mentioned. The same principle is held in Russia. Here you can see why ŠKODA uses these possibilities of producing abroad. Afterwards they can use the earned money to

build the developing center which reduces their costs per each car. Fortunately this reduction in cost also minimize the currency affect so now you can see how each steps influences the cycle of the whole company.

sales RELATIONSHIP BETWEEN EURO AND SALES ···· Trend 350 000 27.55 300 000 25,16 250 000 Sales (millions CZK) 27.78 35,32 25,98 24,98 24.60 29,83 200 000 34,15 31,88 28.36 150 000 26,47 31,95 30,91 35,64 100 000 36,89 50 000 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 Year

Figure No. 2: Relationship between Euro and sales

Source: own processing

Graph 2 shows us that the total sales of ŠKODA grows linearly since 1999 even though there were some fluctuations. What is noticeable is the drop during the economic recession in 2008 but Czech currency went from 24, 98 CZK to 26, 47 CZK for one Euro which indicates that there were other main influences than just foreign currency. But we can see another drop in 2002 which I think is mainly influenced by Euro changes also as in 2014 when sales reached their maximum and also Euro went from 25, 98 CZK per one Euro to 27, 55. So looking at this graph we can assume that there is some negative relationship as the sales increases Euro decreases. We thought that there should be a positive relationship but this way we can also see as other factors influence the sales and how ŠKODA is effective in innovation and marketing. ("Vývoj a technologie", 2015)

Let me now define the advantages and disadvantages of strong Czech currency. In this case Euro is cheaper for us which brings following benefits. Imported goods are cheaper, also the energy costs less because of its trading on stock exchange. We also have cheaper holidays abroad and also going shopping outside of our borders becomes more convenient. Then smaller inflation, lower costs of foreign experts or cheaper repayments of depths which leads in better performance of our economy in international comparison. But we need to see also the negative part of this situation. There is lower competitiveness of exporters which comes up also with lower profits. All at once the Czech Republic becomes less attractive for foreign investors and also is not so low-budget for tourists. The Czech Republic also gets lower dotation from European Union (if we convert it to Czech currency). It also devaluates savings of Czech citizens in Euros.

#### **5 Conclusion**

We all supposed that foreign trade is very beneficial for such an open economy as the Czech Republic is. But after we got into more details I realized how much it affects our country where we live. It is important to use all resources effectively and use all potential and thanks to economic theories we know how much and what to produce and export to be as efficient as possible. This development model was also supported by the entrance to the European Union which even simplified and supported the possibilities of export.

The main aim was to analyze the relationship between foreign currency (Euro) and its influence on ŠKODA's sales. It is clear that strong Czech currency just makes the advancement of sales more difficult and ŠKODA needs to compensate these losses. For ŠKODA the brand loyalty of customers is very important. Of course ŠKODA does everything what they can to keep it. This way they are able to increase sales despite of negative situation in Euro – Czech crown relationship. I think ŠKODA has a great strategy and if its sales are high in one year and the prediction of Euro development is negative ŠKODA's managers decide to spend money on development center or they decide to expand production in foreign countries which allows them to decrease final costs and to sell more cars in the future. This attitude made possible for this company to compete in foreign markets as in Russia or China which is becoming more and more important for this exporter. Due to statistics results we know that about 60% of people who once owned a ŠKODA car they will stay faithful to this brand when they will buy a new car. This number is very high and unique in this kind of business. Even Porsche does not reach these numbers. People need to feel safe in their cars which ŠKODA fulfills. Each car is also a symbol of standard of living. This is a great weapon of ŠKODA which sells and produces almost all types of cars. This is another advantage because almost every person can choose some type of ŠKODA cars and no matter what his demands are because ŠKODA covers almost all types. This allows ŠKODA to cover a big part of market in each country. Looking at graph 2 we can see clear and positive trend of sales during years. A prognosis on base of trend we can predict that the sales will continue to grow. As we consider that Euro will stay around 27 Czech crowns for one Euro in 2016 (table no. 9). So to conclude this analysis we can say that the foreign currency has a major effect on export and logically total sales but ŠKODA thanks to its research and strategy is able to minimize this problem. Basically it means that if the Czech currency gets stronger than the previous year ŠKODA needs to sell more cars or set higher prices to reach the same sales as in the previous year. ŠKODA auto is capable of doing it and set their future plans to maintain this mode. As we went through many aspects and we assume that the Euro will stay about the same we can predict the sales will increase again.

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