

**CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE**  
**Faculty of Economics and Management**



**BACHELOR THESIS**  
**Foreign trade commodity structure,**  
**case study of the Czech Republic**  
**export**

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## **Declaration**

I declare I have worked on the Bachelor thesis on my own and I have used only the sources mentioned in the references.

Prague, the 30th April 2009

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Eva Koubová

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*I would like to thank the supervisor of my bachelor thesis, Ing Mansoor Maitah, Ph.D., for his expert advices and valuable comments as well as for his patience.*

**Foreign trade commodity  
structure,  
case study of the Czech Republic  
export**

**Struktura komoditního  
zahraničního obchodu,  
rozbor exportu v České Republice**

## **Summary**

The foreign trade is an important part of Czech economy. It determines the economic growth of a country. Development of Czech export over last eight years shows how the Czech export changed before and after entering European Union. Because of its commodity structure the Czech Republic is main exporter of machinery and transport equipment. Even if the export of last year was not growing, the export takes significant share in Czech economy.

## **Keywords:**

Foreign trade, Commodity Structure, Export, Economic Growth, Czech Republic

## **Souhrn:**

Zahraniční obchod je důležitou součástí české ekonomiky. Určuje ekonomický růst země. Vývoj českého exportu za posledních osm let ukazuje, jak se změnil před a po vstupu do Evropské Unie. Komoditní struktura exportu České republiky je nejvíce zaměřena na export strojů a dopravních prostředků. Přestože export z České republiky za minulý rok poklesl, stále zaujímá významný podíl české ekonomiky.

## **Klíčová slova:**

Zahraniční obchod, Komoditní struktura, Export, Ekonomický růst, Česká Republika

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# 1 Introduction

Foreign trade, also called international or external trade, is the exchange of goods, services, and capital between nations, across an international borders or territories. It means a key role as a determinant of country's economic growth. Goods can be defined as finished products, as intermediate goods used in producing other goods, or as agricultural products and foodstuffs. Commodities are goods that are produced in large quantities by many different producers.

The trade across the borders allows a country to specialize in goods which can be produced most inexpensively and efficiently, and to consume more of goods than the country can produce or to consume goods which the country is not able to produce at all because of lack of its own resources.

By historic meaning foreign trade is the oldest and still important form of external economic relations. In history the wealth of a country was measured by goods owned by a country, especially in gold and precious metals. The objective of trade was to earn as much wealth as possible in return for the lowest possible costs. It was called mercantilism- Country preferred exports and obstructed imports and produced wealth and power by exporting manufactured goods in exchange for gold. The present shape of foreign trade started with the establishment of nation-states during the 17th and 18th centuries where leaders of states found that by promotion of external trade they could reciprocally increase the wealth and that would lead to an increase in their national power. During this period, new theories of international trade were established.

Commodity foreign trade specializes in trading of goods abroad. It has changed over the centuries. What was traded in middle Ages, it is not traded today. The development of people's needs influences commodity foreign trade.



## **2 Objectives of thesis and methodology**

The aim of this thesis is to analyze commodity foreign trade of the Czech Republic- specifically export.

The major objectives of this thesis are:

- To clarify and explain the special characteristics of the commodity foreign trade export
- To study how Czech export has developed over time

The natural starting point was to thoroughly examine the secondary data. They were collected through published literature, magazine articles and Internet articles. Next, primary data was structured and analyzed using marketing theory. The wide range of theories reviewed was necessary in order to impose structure on the wide array of opportunities and difficulties presented by the primary data.

Finally, the author will create case study of Czech export and its commodity structure.

## **3 Literature overview**

### **3.1 Functions of foreign trade**

The main purpose of modern theories of international trade is to look for answers on these questions:

- What is the significance of a country's integration into foreign trade, what are the benefits from this integration from the view of production and consumption conditions in individual countries?
- By what is the structure of international merchant exchange given? That means which products are appropriate for export and which are suitable for import, and why.
- By what exchange relations are products exchanged on the international market?

The economy of each country is different, but some basic functions can be defined:

- transformational function, the so called influence of foreign trade on a figuration of internal economic balance
- transmission function
- growth function
- foreign trade as a barrier of economic growth

### **3.1.1 Transformational Function<sup>1</sup>**

Transformational action of international trade represents historically first meaning of economic relations with foreign countries. The foreign trade transforms the structure of a country's production in demanded structure in area of use. So by the import of specific products it is possible to adjust the limits determined by environmental and economic conditions.

### **3.1.2 Transmission Function**

It brings information from abroad about produced goods and provided services.

### **3.1.3 Factor of economic growth<sup>2</sup>**

Other general purpose of country integration into an international division of work is succeeding of savings in national work. It is connected with the creating of specialized economic profile, and primarily in relatively small economies where the structure of internal economy is highly influenced by export productivity and the competitive ability of products of a certain country on international markets.

#### **CRITERIONS FOR THE CREATING OF SPECIALISM PROFILE:**

- differences in absolute measurement of labour expenses
- differences in competitive (relative) labour expenses
- differences in country facilities by individual producing factors (land, labour, capital)

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<sup>1</sup> PLCHOVÁ, B. and collective *Zahraniční ekonomické vztahy ČR*, 3<sup>rd</sup> edition, Publisher Oeconomica- Praha 2007, p.5

<sup>2</sup> PLCHOVÁ, B. and collective *Zahraniční ekonomické vztahy ČR*, 3<sup>rd</sup> edition, Publisher Oeconomica- Praha 2007, p. 6

- differences in reached technology
- differences in "human capital"
- geographical concept of competitive advantages

### **3.1.3.1 Differences in absolute measurement of labour expenses**

Adam Smith (1723-1790), probably the first economist and classical theorist in the world, tried to define the role of external trade in national economy. He explained the meaning of labour division as a source of growth of labour productivity and also sources of growth of nation wealth in his writing "Nature and Causes of the Wealth of Nations" (1776). He concluded that free trade is essential because it enables also loose integration into international labour division. By Adam Smith's theory, in international labour division country should orient on production of these products which are made by the cheapest way that is to say with absolutely the lowest labour expenses over against other countries. He said that the absolutely lower expenses for production of specific products are the result of natural conditions and the achieved level of economic advantages (qualification, technical level) which influence the productivity of expended human work.

#### **Model with absolute advantages<sup>3</sup>- production of 1 worker for given time unit**

	USA	England
Wheat	6 q	2 q
Cloth	2 m	4 m

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<sup>3</sup> PIPEK, J. and collective *Mezinárodní Obchod*, 1<sup>st</sup> edition, 1994, Vysoká Škola Ekonomická v Praze, p.10

In this model, the USA has absolutely lower labour expenses in the production of wheat because the same amount of work produces 6 q, while in England it is just 2 q. Conversely in the production of cloth, England has absolutely lower labour expenses where the same amount of work produces 4 m, while in the USA it is just 2 m.

### **3.1.3.2 Differences in competitive (relative) labour expenses**

The principle of absolute advantages was revised by another English economist and classical theorist- David Ricardo (1772-1823). He was one of the most important founders of the modern political economy. In his book "Principles of Political Economy and Taxation" (1817) he went out from Smith's theory about labour theory of value. He compensated differences in absolute advantages by comparative relative advantages coming from relatively lower labour expenses, spent by different countries on the production of compared products. The export of goods<sup>4</sup> at national prices higher than the level of world prices is not advantageous from the absolute profit point of view and could be favourable in terms of relative profit point of view

A less developed country with higher absolute labour expenses in all of its products will specialize on production and export these products where its absolute disadvantage is the lowest, so in the production of these goods the country has a comparative relative advantage. On the other hand the country with absolutely lower labour expenses for its goods will specialize on production and export of products which have the biggest advantage in absolutely lower labour expenses.

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<sup>4</sup> BENEŠ, V. and MAITAH, M. and SMUTKA, L. and TANNER, L. *Essentials of International Trade*, 1<sup>st</sup> edition, 2009, Czech University of Life Sciences, p.12

**Model with relative advantages<sup>5</sup>- production of 1 worker for given time unit**

	USA	England	
Wheat	6 q	2 q	3 : 1
Cloth	2 m	4 m	1.5 : 1

From the given model there can be seen comparative relative advantage for the USA in wheat production where the ratio of absolute advantages is better than in production of cloth. Relative advantage for England is for production of cloth where the ratio of their absolute disadvantages is less unfavourable compared to wheat production.

Conclusions of both classics of economic theory, which are essences of so called clear theory of international trade, can be defined as:

- all countries involved in an international trade will gain, if criterion for involvement in an international trade are comparative advantages based on gaps in relative (absolute) labour expenses
- highlighting the need of liberalization of external trade

Reservations from critics of classical theory:

- the approach is static, it does not take into consideration the possibility of a change in the level of unit expenses in dependence on change of production volume in consideration (for example decrease of unit expenses during the increase of production above domestic demand)
- abstraction from transactional expenses which can be crucial in decision about export and import

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<sup>5</sup> PIPEK, J. and collective Mezinárodní Obchod, 1st edition, 1994, Vysoká Škola Ekonomická v Praze, p.11

- it does not take the size of country in consideration, and this factor influences the level of domestic producing specialization as well as facilities of natural conditions
- the initial position of absolute and relative advantages is a result of historically different economic level of country and as such it does not bring even conditions to partners of international trade exchange- thus a challenge of reasons for liberalization in trade politics.

### **3.1.3.3 Differences in country facilities by individual producing factors**

Differences in country facilities by individual producing factors during involvement in international division of labour was defined by Swedish economists Eli F. Heckscher and Bertil Ohlin in their neoclassical theory- Factor Endowment Model- described in E.F. Heckscher's writing " The Effect of foreign Trade on the distribution of Income" (1919). Their theory works with these assumptions:

- different products are dissimilar in their production in relative demandingness on individual producing factors
- different countries are dissimilar in relative facilities by individual producing factors

Since the price of producing factor is dependent on relative wealth or singularity of factor, it is obvious that production of certain goods will be relatively cheap in individual countries if it is used the producing factor which is in relative surplus in a given country.

General conclusions of neoclassic:

- criterion of specialization is relative facilities by production factor
- comparative advantage results from cornucopia of factor

- copious factor is cheap in given country
- goods based on copious factor are cheap

Reservations from critics:

- abstraction from substitution of factors
- abstraction from international mobility of factors
- external trade causes price balance of producing factors

#### **3.1.3.4 Differences in reached technology**

After Swedish neoclassicists there come new modern theories based on growing impact of technical and technological progress influencing world economy. These theories explain changes in structure of international trade based on different science-technological development in various countries. One of approaches is theory of technological gap or imitation lag connected with the name of American economist V.M.Posner and his writing "Technical Change and International Trade" (1961). By this theory new given product exported from country A to country B has comparative advantage so long until Country B is able to start production of competitive good.

Technological gap or imitation lag will be given by time span between demand lag (time necessary for development of domestic demand for new good) and reaction lag (time necessary for domestic producer to be able to compete with substitutive domestic product).



### **3.1.3.5 Differences in "Human capital"<sup>6</sup>**

The most modern approaches to analyze criterions of international specialization emphasize crucial role of human knowledge, skilled qualification of the highest level as an assumption for dealing with high technology. Comparative advantage for involvement into international division of labour is derived from differences in levels of "human capital". This theory concludes about first mover advantages (the most dynamic comparative advantages) in external trade which are gained just by producers with top-class level of "human capital". Some theorists discuss that the first producer with top-class level of technology has real precondition to keep these highest comparative advantages for a long time (they argue by Japanese position in microchip production and so).

### **3.1.3.6 Geographical concept of competitive advantages<sup>7</sup>**

Some new theoretical approaches look for criterions about specialization and structure of country integration into international trade in the geographical factors. By the theory of P. Krugman the decisive factors of dependency are:

- centre and periphery – model of geographical concentration (production, trade) where the effectiveness of transport costs is decisive
- tendency to creating of given industrial localities and their inertia (in connection with geographically situated natural resources)
- factor of similarity as one of the factors influencing structure of foreign trade: climatic condition, national cultural traditions, differences in educatedness (small or big), political gap, religious differences etc.

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<sup>6</sup> PLCHOVÁ, B. and collective *Zahraniční ekonomické vztahy ČR*, 3<sup>rd</sup> edition, Publisher Oeconomica- Praha 2007, p.12

<sup>7</sup> PLCHOVÁ, B. and collective *Zahraniční ekonomické vztahy ČR*, 3<sup>rd</sup> edition, Publisher Oeconomica- Praha 2007, p.12

### **3.1.4 Foreign trade as a barrier of economic growth:**

There exist theoretical approaches which explain reasons and condition when the international trade from the view of potential growth factor can become a barrier. During this situation the meaning of external trade reverses, so diffusion of international exchange decreases sources and national revenue.

#### **The protectionist theories**

One of the main theories is the theory of infant industry by H. Carey and Friedrich List (1789-1846). F.List divided countries in stages of development: except the primitive hunting and pastoral stage, other stages of development are agricultural, agricultural-industrial, agricultural-industrial-mercantile. They concluded that if some industrial sectors of certain country are in their initial phases of development, so the country is not able to compete with other countries, free trade will mean harm to national economy. The theory recommends the protectionism until maturity of national industry. As the way of protection F.List required adoption of tariffs which would mean strengthening of national industry against foreign competitors.

Other theorist comes with similar approach. It is called "the impoverishing growth" by Indian economist Jagdish Bhagwati. It talks about economical decrease in less developed countries by the influence of increasing supply of export commodities of these countries. It can be caused if:

- country exports monoculture products or raw materials (country does not have developed manufacturing industry)
- supply of these products is inelastic, by big shrinkage of price supply increases

- these products are the only or the most important parts of export and if price decrease is big that it can not be settled by other supply increase, there comes an economic retardation of the given country

Generally accepted reasons for protectionism in international trade are:

- an example of developed economies is an example for reaching of economic development by the industrial progress
- primary products are not sufficient essentials for development because world demand is inelastic
- diversification of production and export is able to guarantee bigger stability of revenue growth, and simultaneously it lowers the dependency on external environment
- the speed of technical progress is higher in industrial production than in production of primary goods
- even development countries have certain potential comparative advantages in some industrial sector

### **3.2 Intensity of foreign trade in the Czech Republic**

Intensity of foreign trade compares different economies in international measure. It can be measurable by these indicators:

- Share of export in gross domestic product
- Volume of export in convertible currency (mostly USD) per capita

Gross domestic product (GDP)<sup>8</sup> is one way how to measure individual economies. It is defined as the total market value of all final goods and services produced within a given country for a given period of time (usually a calendar year). It is also considered as the sum of the value added at every stage of production (the intermediate stages) of all final goods and services produced within a country in a given period of time, and it is given a money value.

The most common approach to measure and to understand GDP is the expenditure method:

$$\mathbf{GDP = C + I + G + [E - I]}$$

C..... Consumption

I..... Gross investment

G..... Government spending

E..... Exports

I..... Imports

Some countries, especially those with a strong domestic market (USA, Russia, China, etc) have very small participation of foreign trade sector in GDP- more of less 10%. On the other hand, small countries such as the Czech Republic have a very significant participation of external trade sector in the GDP – more than 70%. The same case applies to countries such as the Netherlands, Belgium, Switzerland and Austria which are even more dependent on foreign trade than the Czech Republic.

Trade balance of a country is active when export is higher than import and otherwise trade balance is passive.

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<sup>8</sup> BENEŠ, V. and MAITAH, M. and SMUTKA, L. and TANNER, L. *Essentials of International Trade*, 1<sup>st</sup> edition, 2009, Czech University of Life Sciences, p.17

In long time horizon in world measure there exist some general propensities in rate of participation by individual countries into international labour division in dependence on type of economy. They can be characterized by correlative relations:

Negative correlation between economic dimension and rate of openness, it means the bigger economy is, so its average relative participation into international labour division is lower; the opposite conclusion is specific for small economies

Positive correlation between economic maturity and its level of participation into international labour division, it means the more developed economy of country, by equal economic extent more intensive participation into international labour division than the economy with lower level of economic maturity.

### **3.3 The Balance of Payment**

#### **3.3.1 Basic principles of the Balance of Payment**

The balance of payment<sup>9</sup> is the method which is used by countries to monitor all international monetary transactions in the course of a specific time, usually one quarter of a year or one year.

In the balance of payment there is also counted some tangible flows which are not followed by money flows immediately or in future. In part of it,

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<sup>9</sup> BENEŠ, V. and MAITAH, M. and SMUTKA, L. and TANNER, L. *Essentials of International Trade*, 1<sup>st</sup> edition, 2009, Czech University of Life Sciences, p.78

there are recorded a tangible transfers as an economic help and physical gift, barter and specifically real investments.

The balance of payment gives a specific view about country economic situation:

- situation of economy and its external functioning
- character of its development and specialization
- prosperousness of running economic politics in given country

The balances of payment of countries are organized in differently detailed segmentation in consideration of its utilization. They are segmented on the base of common traits known as a vertical balance of payments:

- Goods: In export and import items commodity is recorded by its price. Goods are divided by commodity groups.
- Services: transfer, storage, insurance, tourism, licenses, patents, incomes and costs from diplomatic representation, film charge etc.
- Revenues: There are counted incomes from home capital invested abroad, expenses connected with foreign investments in home economy, so there belong profits, interests, dividends and annuities. Also in the revenues there can be included profits from arbitrage operations with foreign currency and gold.
- Transfers (unilateral): For this category there are typical transfers which do not develop foreign claim or debt of country. Unilateral transfers represent payments which are not ordinary paid. Examples are economic help, grants to international institutions, transfer of labour income, gifts, foreign pension, alimony etc.

- Long-term capital: it is divided on direct investments (direct capital), portfolio of investments (indirect capital) and other capital. Direct investments include export and import of capital which exceed at least 30% of share in total stock capital, for example stocks, real investments or reinvestments of foreign profit. Portfolio of investments contents buying or selling of bonds and shares which do not fulfill condition characterizing the direct investments. Other capital involves government credits and also long-term private business credits.
- Short-term capital: This category includes short-term bank and business credits, movement of deposits, buying and selling short-term commercial instruments, trade with foreign currency etc.
- Reserves of foreign currency: It means liquid assets of foreign currency of central bank or other official institutions (for example ministry of finance).

### **3.3.2 The structure of Balance of Payment**

Each balance of payment organized by rules of International Monetary Fund is created by five basic items in its horizontal structure:

- Current Account
- Capital Account
- Financial Account
- Official Reserves/ Foreign Exchange Reserves
- Adjustments and Omissions/ Statistical Discrepancy

**1.** Current Account consists of the following items:<sup>10</sup>

a) Goods and services pertain to tangible and intangible commodities being able to satisfy human needs.

That means for example cars, clothing, computers, toys etc. There any export is considered as a credit because money is coming to specific country and import means debit for a country.

b) Services consist of transport, tourism, communication, building, insurance, financial, computational and informational services, license charges, and other trade services, personal, cultural, recreational and governmental services.

c) Incomes content of revenues and other compensations natives from work abroad, and revenues and expenses coming from flow of foreign investments- specifically dividends, interests and reinvested profit.

d) Current transfers have an international character. They are divided into official and other (private) transfers or also financial and physical transfers. They consist of governmental aids, donations, pensions, gifts, aliments, remittances and grants.

**2.** Capital Account encompasses international remittance of capital character. These transfers are related to a migration of population, remission of debts, and owner laws. Other transactions come from nonresidents in non produced non-financial assets (estates for representative offices, result of intellectual and industrial property like patents, industrial samples, copyrights and licenses).

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<sup>10</sup> BENEŠ, V. and MAITAH, M. and SMUTKA, L. and TANNER, L. *Essentials of International Trade*, 1<sup>st</sup> edition, 2009, Czech University of Life Sciences, p.78



**3. Financial Account consists of the following items:**

a) Direct investments are meant if foreigner gains 10% or more from a base capital of domestic trade company or cooperative and conversely. Other components of direct investments are provision or acceptance of financial aids.

b) Portfolio investments are investments into property and debt securities. In property securities it means stocks and in debt securities it means debenture.

c) Financial derivatives include time contracts (where the date of closure of agreement is different from the date of settlement) derived from based assets (stock, bond etc.). Czech Central Bank has monitored this item since 2000.

d) Other investments represent credits given to natives by foreigners or vice versa. They can be divided to short-term and long-term , or by credits provided or accepted by central bank, trade banks, government or other sectors.

**4. Official reserves/ foreign exchange reserves** are determined by central bank. They are divided in real and potential official reserves. Real official reserves are gold and convertible currency, and in potential official reserves there are credit restrictions of International Monetary Fund and mutual credits of central and monetary institutions of international importance. From these potential official reserves the biggest meaning has credits of IMF in system of Special Drawings Rights. Because the balance of payment as whole must be always even, the change in foreign exchange reserves must be recorded with opposite sign. So from this it can be figured that if there is a negative sign in the balance of payment, it means the foreign exchange reserves in the central bank increased in tracked time and vice versa. The amount of official reserves changes in consequences on interventions of the central bank where the bank sells and buys foreign currency as it needs. More changes in official reserves can happen in consequence of received revenues from current foreign

exchange reserves, utilization of credit in foreign currency or its payback by the central bank. The fluctuation of official reserves in Czech crowns happens in effect of strengthening or emasculation of national currency. If domestic currency weakens against currencies in official reserves in tracked time, so the currency exchange reserves expressed in Czech crown increases and vice versa. The balance of payments just records the official reserves of the central bank.

**5.** Adjustments and omissions/ Statistical discrepancy plays specific role in balance of payments. After balance of payments is assembled it is counted as a difference between credit and debit items because the balance of payments as whole must be always equal.

The balance of payments of a country is just the balance of flow of payment transactions in specific time, so it does not describe a situation of claim and obligations of a country to foreign countries. It can be a position of creditor or debtor.

### **3.4 Exchange Rate**

The exchange rate is defined as price of one currency expressed in units of different currency. Exchange rates are influenced by many factors such as domestic interest rates, inflation rates and intervention of a central bank in the international exchange markets. If the price of foreign currency is recorded in units of domestic currency it is called direct quotation and conversely it is called indirect quotation. If the price of foreign currency expressed in domestic currency decreases it is referred as an appreciation of domestic currency and conversely it is called as depreciation. A depreciated currency causes more

expensive import and domestically produced goods and export are less expensive and vice versa.

By the complex of rules, currencies are divided in:

- convertible currency
- nonconvertible currency

Nonconvertible currency is not traded in international monetary market. Its exchange rate is created by administrative decision, not by market. The exchange rate of nonconvertible currency does not express level and dynamics of basic economic factors of a country.

The exchange rate of convertible currency arises from interaction between supply and demand in monetary market. Growth of demand for specific currency induces increase of price (appreciation) of given currency and vice versa. The convertible currency is divided into:

- Fixed exchange rate
- Managed Floating exchange rate

In the currency with fixed exchange rate a central bank proclaims so called central par of exchange and stated oscillating zones. Market exchange rate moves freely among these zones, but if the exchange rate wants to leave the oscillating zones, a central bank must intervene to prevent appreciation or depreciation of a currency by selling or buying of domestic currency for foreign currency.

The central par of exchange in fixed exchange rate can be embodied not just in relation to one currency (national or multinational), but also in relation to basket of chosen currencies. If the central par of exchange of domestic

currency expressed in relation to basket of chosen currencies, domestic currency must be stable to whole basket not in relation to each currency in basket. Domestic currency can appreciate (depreciate) itself in relation to another currency if simultaneously it appreciates (depreciates) in relation to other currencies in basket. The share of single currency in basket is different – it depends on how big share of business of a given country is done in single currency.

Specific system of fixed exchange rate is called crawling peg. It is a system of fixed exchange rate with regular changes of central exchange rate. It enables better adaptation of exchange rate to market factors (central par of exchange changes in dependence on development of current account of balance of payment), and simultaneously it ensures stability of exchange rate.

In the currency with floating exchange rate a central bank does not have to intervene in monetary market. In reality a central bank intervenes sometimes but it is its own decision and it is not constrained by oscillating zones or central par of exchange rate. That is called managed floating exchange rate. Other kind of floating exchange rate is free exchange rate where a central bank does not intervene into market development of exchange rate. In reality each central bank intervenes in exchange rate of domestic currency sometimes. Free floating exchange rate can be used just by strong economic countries as the USA.

## **3.5 Foreign trade policies of the Czech Republic**

### **3.5.1 General aspects of trade policies<sup>11</sup>**

Theories of foreign trade conclude with free trade as a way of optimal allocation of sources in world measurement. There are some arguments for free trade:

- Increase of consumer's utility
- Optimal allocation of resources by comparative advantages
- Competitor's pressure on domestic producers
- Pressure on decrease of prices

But governments of individual countries or integrated blocks use various protectionist implements to reduce free trade. Some acceptable factors for temporary protectionism:

- protection of children industry
- problems with balance of payments
- transfer effect on employment and economic growth of country
- protection of national culture, traditions and safeness

Development of trade politics can cause following two kinds of conflicts:

- conflict between national interests and interests of integrated block
- conflict between high level of liberalization inside of integrated block and lower level of liberalization outside of integrated block

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<sup>11</sup> PLCHOVÁ, B. and collective *Zahraniční ekonomické vztahy ČR*, 3<sup>rd</sup> edition, Publisher Oeconomica- Praha 2007, p. 109

Foreign trade politics uses terms as inward-oriented policies (support of domestic production by increase of expenses of import) and outward-oriented policies (economic politics without actions against import and export). Formal distinction of both terms is done by these indicators:

Effective Exchange Rate for Imports (EERM) this indicator means total costs in domestic currency to actions of imported goods for 1 USD (include in costs: import price, import duty, cost for acquisition of import licenses, other import payments)

Effective Exchange Rate for Exports (EERX) this indicator represents total effect of domestic currency connected with gaining of 1 USD during export on international market (export price, export grant, credit advantage, depreciable advantage, tax advantage, customs postponement, customs restitution)

If EERM is higher than EERX it stimulates politics against import production- it is called inward-oriented politics. But if they are equal, it is called outward-oriented economic politics. And if EERX is higher than EERM so there exist inducements for domestic companies for export production. It is called ultra-export-promotion. The resolution of economic politics between inward and outward is dependent on factors influencing import or export.

### **3.5.2 Foreign trade politics of the Czech Republic before entering European Union<sup>12</sup>**

After the November 1989, the country focused on creating of condition for development of trade and economic relations with countries with political

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<sup>12</sup> PLCHOVÁ, B. and collective *Zahraniční ekonomické vztahy ČR*, 3<sup>rd</sup> edition, Publisher Oeconomica- Praha 2007, p.110

importance. So Czechoslovakia or the Czech Republic wanted to conclude bilateral or multilateral agreements, for example with Israel, Chile, the USA, Canada, Australia and etc.

### **3.5.2.1 Membership of the Czech Republic in General Agreement on Tariffs and Trade (GATT)**

General agreement on tariffs and trade was first multilateral and binding contract. It was negotiated in Geneva in the year 1947 and a validity gained 1st of January 1948. Czechoslovakia was one of the 23 founding members. Nowadays GATT has 117 members and its share in international trade overhangs 90%. From the establishing of GATT there has changed duty tariffs in average from 40% to 5% nowadays. But during the communist era Czechoslovakia was limited by other members as the USA by imposition of high duty tariffs on Czechoslovakian export to the USA. After splitting of federation GATT accepted both the Czech Republic and Slovakia as members of GATT. Important act of GATT was establishing of World Trade Organization in the year 1993 which the Czech Republic is a member of. To the Czech Republic it brings advantages as multilateral law and institutional framework for realizing of external trade, getting of base for enforcing trade political and economic interests of the Czech Republic and countries with the same interests as the CR against stronger economic countries.

### **3.5.2.2 European agreement with the Czech Republic**

The European Community concluded The European Agreement with the Czech Republic, Poland and Hungary in Brussels on December 16th 1991. It contents deals about break-up of mutual trade to fulfill conditions for free market. Some problems appeared there, for example antidumping actions of EU against Czech export of steel and other products to EU, no fulfilling of all medical and veterinary regulations of EU in Czech export, attempt of the CR to impose quota apple import from EU, higher competitiveness of products from

EU. The European Agreement was disadvantageous for the Czech Republic afterwards and the result of it was higher import from EU than export from the CR to EU.

### **3.5.2.3 The Czech Republic and Central European Free Trade Agreement (CEFTA)**

Central European Free Trade Agreement became valid in March of 1993. It is a contract between the Czech Republic, Poland, Slovakia and Hungary to support development of economic relations between these countries by dispersion of trade. This treaty was foundation for gradual disposal of trade restrictions. Because of this agreement there has been developed free market with 65 million inhabitants.

### **3.5.2.4 Other agreement of the Czech Republic**

On February 2nd 1992 there was signed agreement about free trade between the Czech Republic and member countries of European Free Trade Association (EFTA), for example Switzerland, Norway, Lichtenstein and Iceland. This treaty was important because of importance of market economics with relative small economic dimension in EFTA countries. It meant persnickety markets for Czech exporters.

### **3.5.3 Foreign trade politics of the Czech Republic after entering European Union**

The Czech Republic became one of ten new members of European Union 1st of May 2004. So the Czech Republic became part of the custom union declared by EU and uses the same custom politics against countries out of EU. By becoming a member of EU the Czech Republic lost its independence in creating of trade politics and participates on forming of mutual trade politics EU:



- part of legislative initiative of government of the CR assigns to European Commission and legislative decisive authority from parliament to Council of EU and European Parliament
- the Czech Republic canceled all contracts which are not compatible with a membership in EU., but it has still membership in WTO

### **3.6 Commodity Trade**

Commodity trade is one of researches which can be done by country about trade. Other research is about regional trade.

Commodity is a term for goods produced in large quantities by various producers. It was a term used for fungible exchange goods in foreign trade. This term was gradually used for all kinds of goods. International agreements about goods are also called commodity agreements.

The commodity structure of external trade<sup>13</sup> flows is analyzed using various internationally adopted commodity classifications, which have different level of detail and are based on different classification criteria.

It is divided by the Standard International Trade Classification (SITC) which is commodity classification of the United Nations. It was developed from its forerunner Minimum List of Commodities for International Trade Statistics by the League of Nations published in 1938. Categorization of commodities depends on their stage of production. The SITC has 10 main categories.

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<sup>13</sup> URL [www.czso.cz](http://www.czso.cz)

### **Division by the SITC:**

- 0 Food and live animals
- 1 Beverages and tobacco
- 2 Crude materials, inedible, except fuels
- 3 Mineral fuels, lubricants and related materials
- 4 Animal and vegetable oils, fats and waxes
- 5 Chemicals and related products
- 6 Manufactured goods classified chiefly by material
- 7 Machinery and transport equipment
- 8 Miscellaneous manufactured articles
- 9 Commodities and transactions not classified in the SITC

### **3.6.1 World Commodity Trade<sup>14</sup>**

The structure of world trade has been continuously changing. While in the past agricultural products and raw materials made up the main shares in the total world trade, nowadays the manufacturers have the main share in the total world trade.

There are huge differences in commodity structures of merchandise exports between individual regions. In the developed regions (Europe, North America, Asia), exports consist mainly of manufactured items (about 80%) and shares of agricultural products and fuel and mining products are about 20%.

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<sup>14</sup> BENEŠ, V. and MAITAH, M. and SMUTKA, L. and TANNER, L. *Essentials of International Trade*, 1<sup>st</sup> edition, 2009, Czech University of Life Sciences, p.94

## **3.7 Export**

The international trade has two parts: import and export. Export is described as selling of goods abroad without consideration of their form (products, producing and non-producing services, intangible laws). Export has two kinds:

- direct export which is done by direct trade conditions between original producer and end consumer abroad by one purchase agreement
- indirect export realized by sale connecting links

Internal export is called distribution of products on domestic market for foreign currencies. As invisible export there represents export of specific kinds of services (for example services of insurance, transport, tourist etc.).

### **3.7.1 Export institutions in the Czech Republic developed before entering European Union**

After the Velvet Revolution there was a need for support of export. As a base tools there were considered obvious devaluation of domestic currency and liberalization of foreign trade activities. In 1995 the Czech Republic approved the law about insurance and financing of export with state support. It brought more stabilized conditions for function of the only institution supporting export and it was an impulse for establishing of new institution supporting export with state assistance.

## **EGAP<sup>15</sup>**

EGAP is an abbreviation for Export Guarantee and Insurance Company. It was established in February of 1992. The main point was to provide credit insurance to exporters. After foundation of the Czech Republic EGAP became a joint-stock company owned by Czech state.

## **Czech Export Bank<sup>16</sup>**

This institution was established in July of 1995. Its purpose is to support of Czech export by financing of export credits. It is advantageous financing of Czech exporters with usual international conditions. The advantages are in level of rate of interest and duration of credit maturity. The Czech Export Bank is specialized bank owned by state and by law it is authorized of financing of Czech export with state donations. This type of financing orients on export of products which need long time on foreign markets to assert themselves (for example machines). The Czech Export bank obeys rules described in Consensus OECD and in agreements of International Union. These rules have to fulfill conditions about maximal time of credit paying off and minimal rates of interests.

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<sup>15</sup> PLCHOVÁ, B. and collective *Zahraniční ekonomické vztahy ČR*, 3<sup>rd</sup> edition, Publisher Oeconomica- Praha 2007, p.123

<sup>16</sup> PLCHOVÁ, B. and collective *Zahraniční ekonomické vztahy ČR*, 3<sup>rd</sup> edition, Publisher Oeconomica- Praha 2007, p.123

## **4 Case Study of the Czech Republic**

This part of the bachelor thesis is focused analyzing of the foreign trade in the Czech Republic, specifically export, its development over last years until present.

### **4.1 Current situation of the market**

The Czech market went through transformation since end of communistic era and ended by liberalization of the market.

The type of Czech economy<sup>17</sup> is relatively small with relatively high rate of industrial development, so it is theoretically possible to assume high intensity of international trade specifically from reasons of high requirements on transformational actions (noncomplex facilities of raw material, fuel, limiting dimension of internal market, human resources etc.). The external trade is one of dominating factors in reaching of internal economic balance in Czech economy.

### **4.2 Balance of payments in the Czech Republic**

In relation of GDP deficit of the current account of balance has not changed significantly since the year 2000. It is a deficit in value of 5.0 per cent to 6.5 per cent of GDP.

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<sup>17</sup> PLCHOVÁ, B. and collective *Zahraniční ekonomické vztahy ČR*, 3<sup>rd</sup> edition, Publisher Oeconomica- Praha 2007, p. 13

To lower the deficit of the trade of balance can be done by export-oriented productions, mainly production in car industry and informational and communication technology products.

**Table 1** - Current Account of the Balance of Payments (in per cent of GDP)

Years	2003	2004	2005	2006	2007
Trade Balance	-2,9	-2,3	-1,7	-1,4	- 1,0
Balance of Services	0,5	0,6	0,7	0,7	0,6
Balance of Income	-4,8	-5,2	-5,7	-5,8	-5,8
Balance of Transfers	0,6	0,8	0,7	0,7	0,6
Current Account	-6,5	-6,2	-6,0	-5,8	-5,5

Source: CNB, CSO, calculations of the MoF, [www.mfcr.cz](http://www.mfcr.cz)

The increase in balance of services depends on improvement of global economy and development of tourism.

Balance of Income has main share in the deficit of current account and it is done by reinvested profits of foreign investors. And balance of transfers is affected by financial flows from the EU.

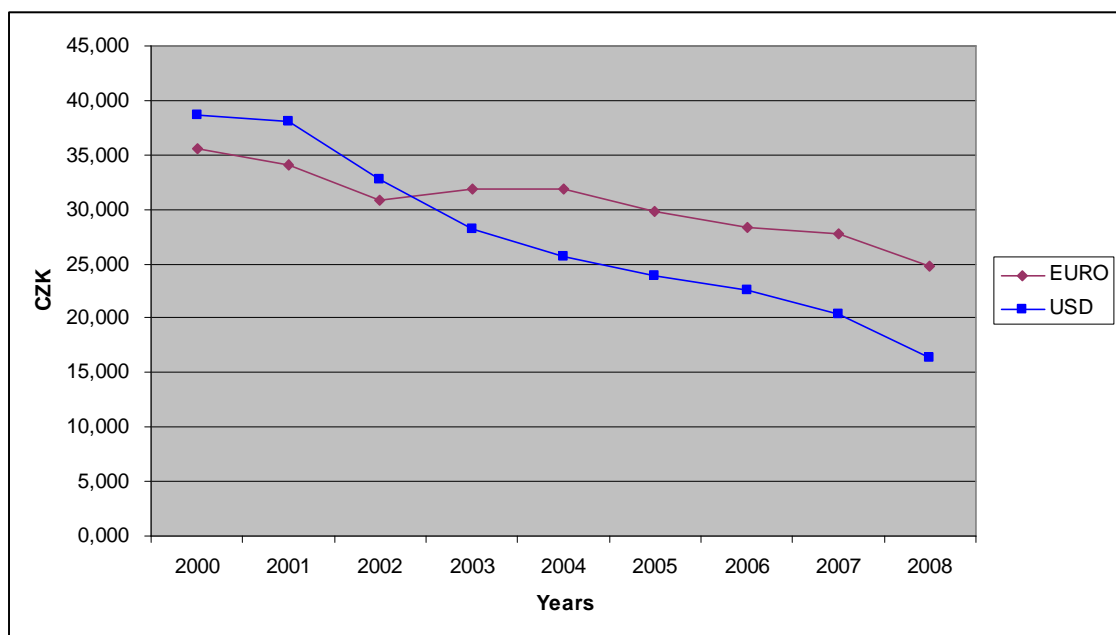
To cover the current account there is a need of a surplus in financial account which means inflows of foreign direct investments.

### 4.3 Exchange rate of the Czech Republic

The exchange rate is influenced by domestic interest rate, inflation and intervention of the Central Bank. The Czech Republic has floating exchange rate, so all these factors change the exchange rate to specific currency. The Czech economy can be described as an economy with low inflation.

As it is presented in the graph 1., during the last eight years the exchange rates for US Dollar and EURO to Czech koruna have been decreasing and it influenced its value. The Czech koruna was appreciated and it affects cost of export. Because of the appreciation of Czech koruna, the export is more expensive.

**Graph 1-** Exchange rate between Czech koruna and foreign currencies



Source: [www.czso.cz](http://www.czso.cz)

## **4.4 Commodity Export of the Czech Republic**

The Czech Republic is a country with high level of integration into international trade. In export the country favours products with the biggest competitiveness on the market. The Czech Republic has a long tradition in heavy industry- in mechanical engineering and metallurgy based on the raw material resources. There are other important industries which should be mentioned - the automotive, glass- making, armament, rubber making, energy and consumer goods industries.

The Czech Republic has completed transformation after end of communistic era and its current structure of international trade is different than 20 years ago. There has been a dynamical growth. To analyze foreign trade commodity structure helps comparative advantage profile of the Czech Republic.

The Czech Republic is a developed country so also its foreign trade commodity structure corresponds to it by more industrial production than agricultural, especially machinery and transport equipment, followed by other commodities and industrial products.

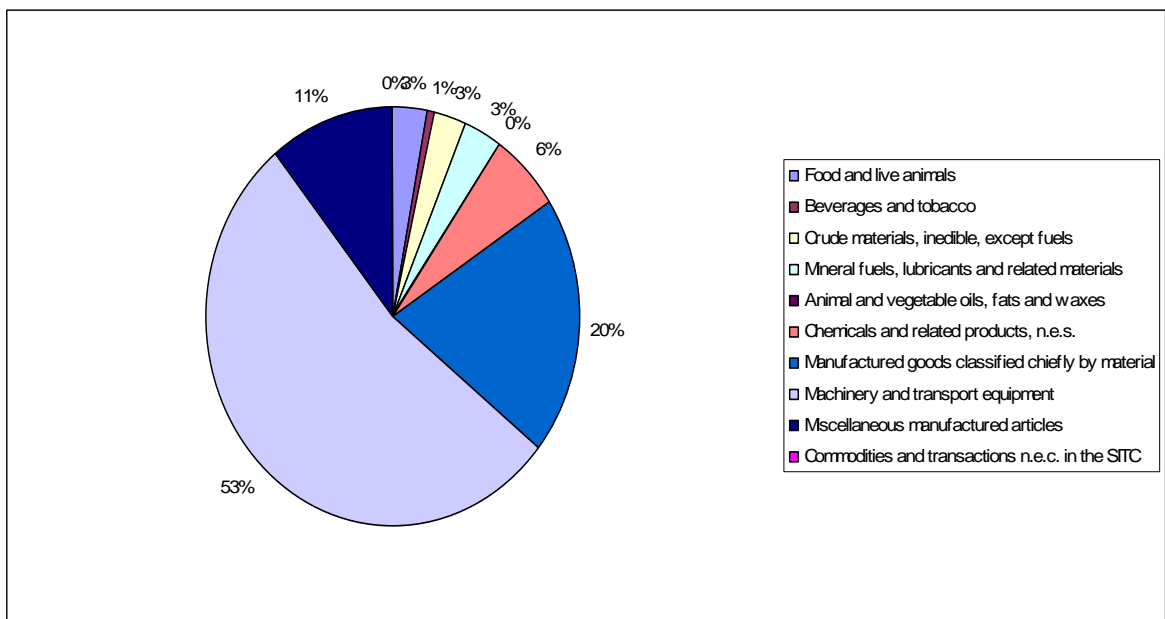
The following graph describes commodity structure of export by Standard International Trade Classification (SITC) in the year 2008. In the year 2000 the biggest share of exporting goods occupied the machinery and transport equipments (SITC 7) by 44 %. During last 8 years export of the machinery and transport equipments increased by 9 % to 53 % of whole production. The growth of machinery and transport equipment export lowered export of miscellaneous manufactured articles (SITC 8) and manufactured goods classified chiefly by material (SITC 6) around 5 % each over the last 8 years. The following groups have share in export of the Czech Republic: Manufactured



goods classified chiefly by material (20%), miscellaneous manufactured articles (11%), chemicals and related products (6%) and others.

Together these three classes (SITC 6,7,8) have around 85 % of Czech export, so last 15 % of export includes remaining groups. From the view of economic growth it is positive because the Czech Republic specializes on production with higher level of processing goods rather than on commodities with lower level of processing.

**Graph 2** - Commodity structure of export in the Czech Republic in the year 2008



Source: Czech Statistical Office

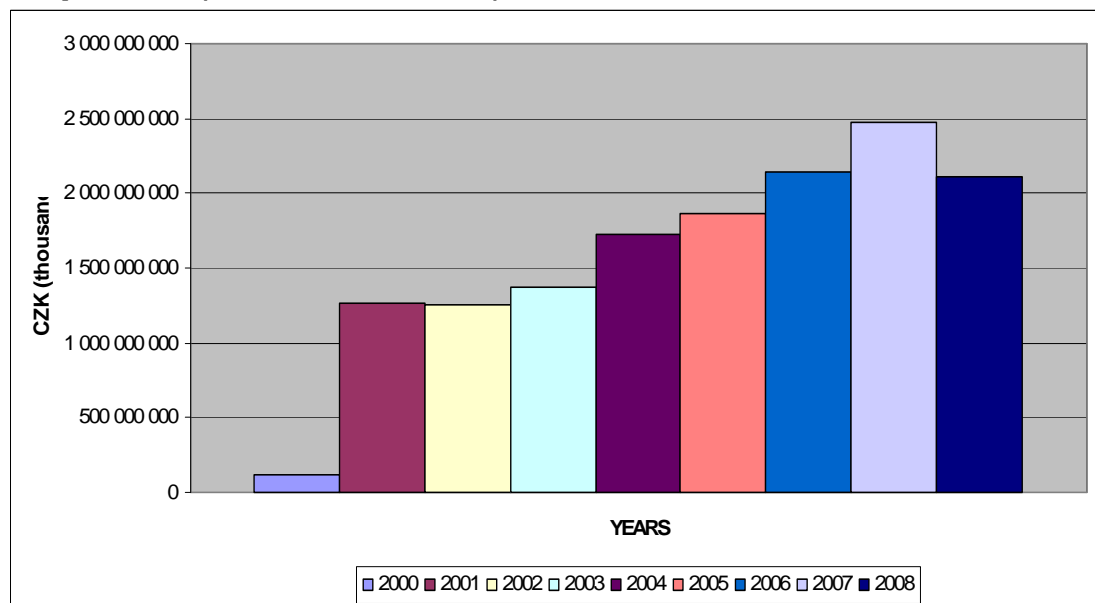
Machinery and transport equipment class mainly export road vehicles including air-cushion vehicles. It is 384 476 million CZK which represents 29 % of whole machinery and transport equipment export. The following groups of products have share in Czech exports: Electrical machinery, apparatus and appliances (17%); automatic data-processing machines office machines (13%);

general industrial machinery and equipment (13%); telecommunications and sound recording equipment (12%);

The export of the Czech Republic was increasing from the year 1989 and for the first time export exceeded 1 500 000 000 thousand CZK in the year of 2004 after entering European Union. But last year there was a little decrease caused by economic crisis influencing all factors of economy. One of them is unemployment growth.

In commodity structure of foreign trade of export there was fall in machinery and transport equipments (from 54,2 % on 53,5 %) and manufactured goods classified chiefly by material (from 20,2 % on 19,7 %). On the other side the position of agricultural and food products, chemical products (especially mineral fuels) strengthened.

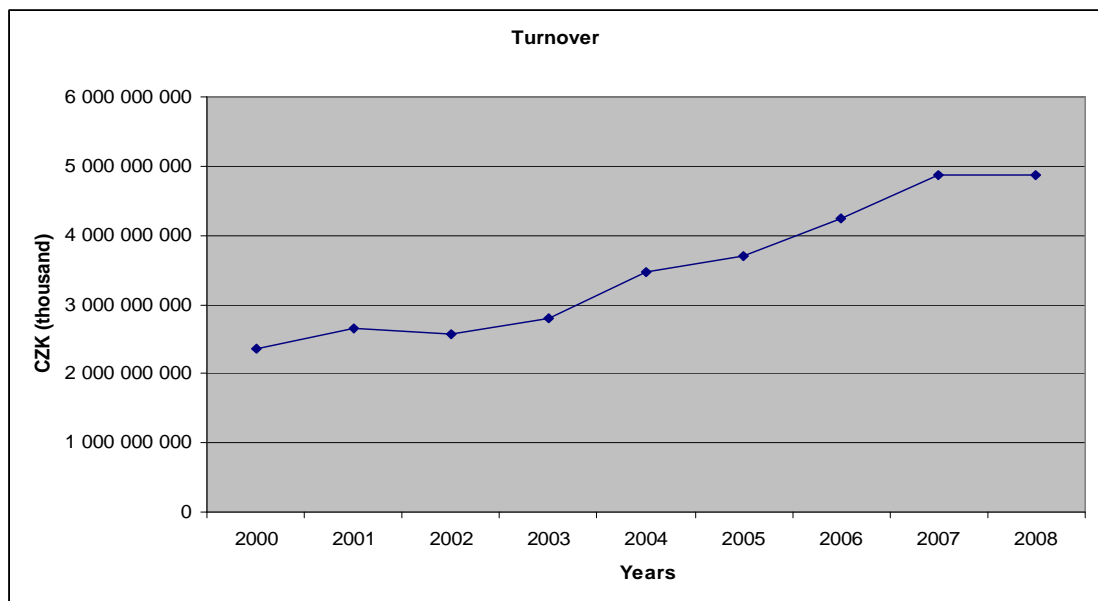
**Graph 3 – Export of the Czech Republic**



Source: Czech Statistical Office

In the year 2008 the foreign trade of the Czech Republic had lower turnover for the first time from entering European Union. In comparison of year 2007 the turnover of foreign trade decreased by 0,3 % and that is because of fall of export, import almost stagnated last year.

**Graph 4-** Turnover of the Czech Republic



Source: Czech Statistical Office

## 4.5 SWOT Analysis

### Strengths

- Geographical location for transit of commodities supports international transit of commodities
- Great geographical conditions offer relatively large amount of natural springs and other factors for development of spas

- Rich natural relief (highlands, lowlands, forests, lakes et.) develops excellent circumstances for tourism
- High degree of educatedness, skilled workers which is result of long socio-cultural development
- Long development of industrial production

### **Weaknesses**

- Small geographical area influences structure of raw materials or specifically deficiency of these raw materials
- Geographical conditions of mild climate limits production of some agricultural goods, for example tropical or subtropical product
- Limited number of inhabitants as workers restricts size of domestic market
- Ecological debasement of nature in the Czech Republic influences economic conditions in quality of environment
- Low competitiveness of industrial products on ambitious markets

### **Opportunities**

- Building second part of nuclear power plant in Temelín would lower demand for energy import
- Getting support for exporters from EU (to gain bigger share in international market for Czech goods)
- New technology as development equipment (because of relatively old technologies used in production, new technology should help to improve production)

## **Threats**

- Managed floating exchange rate alters value of Czech goods exported because it is mostly traded in currencies as US Dollar or Euro
- Strict tariffs and quotas limits production
- Risk of cancellation or non-renewal of export or import licenses can destroy exporters

## **5 CONCLUSION**

The commodity structure of export is influenced by demand of goods abroad and its competence to remain on international market. The foreign trade is one of the factors determining economic growth.

This thesis has examined the Czech commodity export by its structure and development before and after entering the European Union.

By the European Union the Czech Republic is considered to be one of countries with the fastest growing economy. That helps to strengthen Czech position on international market.

The Czech Republic is a developed country with specialization in industrial production. By historical meaning the industry matured during last century, tangibly in mechanical engineering and metallurgy based on the raw material resources of the Czech Republic.

Also the commodity structure corresponds to its industrial production and export. The biggest share of this commodity structure occupies machinery and transport equipments. That is a strong suit of Czech export.

During last eight years there was an increase in export except the year 2008 when a light decrease came caused by situation on the international market. But Czech export has big possibilities to keep a good position in the world export.

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## 7 Internet Resources

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