**Czech University of Life Sciences Prague** 

**Faculty of Economics and Management** 

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# **Diploma Thesis Abstract**

## The Foreign Exchange Rate and its Impact on Foreign Trade: Case Study of the Czech Republic

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#### **Summary**

Diploma thesis titled The Foreign Exchange Rate and its Impact on Foreign Trade: Case Study of the Czech Republic is focused on the development of exchange rates and their impact on foreign trade in the period 2007-2017 in the Czech Republic. In the diploma thesis there are used comparative, descriptive and statistical methods.

The first part of the diploma thesis describes the economic theory influencing the development of exchange rates and foreign trade of the Czech Republic. The second part is devoted to the characteristics of the Czech economy in terms of competitiveness and the structure of foreign trade. The development of exchange rate data and foreign trade is further analyzed, and this database is used for statistical analysis of the dependency of foreign trade and the exchange rate.

This diploma thesis identifies the influence and the correlation between the exchange rate and foreign trade and how this influence changed during the monitored period.

**Keywords**: Foreign trade, Exchange rate, Import, Export, Trade balance, Czech Republic, Intervention, Czech National Bank

### Introduction

Foreign trade is an integral part of the lives of all people in the world. It may seem that this economic phenomenon does not affect so much, but most of the products we use do not come from the Czech Republic, let's take a look at some merchandise products, and we usually find the state of origin in the description of these goods. It may be the state we are neighboring with, but it can also be a state on the other side of the globe.

In this diploma thesis is provided knowledge necessary to be acquainted with the theoretical background of foreign trade as well as the factors influencing this trade. When countries import or export products or services from abroad, foreign currency is used for this business, which is used in a particular foreign country and therefore foreign trade should be influenced by the value of the domestic currency as well as the foreign currency. This idea and economic theory has led to the creation of this diploma thesis, which deals with foreign trade as well as exchange rate on the theoretical and also practical level.

### **Objectives**

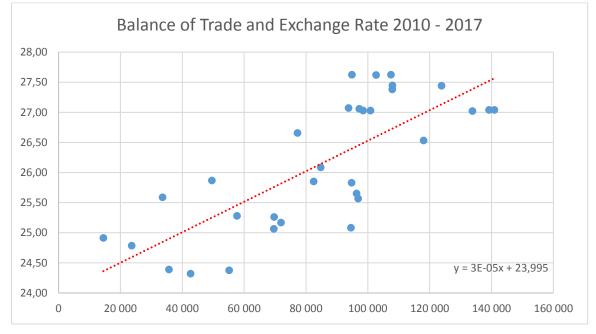
The main aim of this diploma thesis is to analyze foreign exchange rate EUR/CZK and compare it with the data about import, export and trade balance of the Czech Republic. The research time period is from 2007 to 2017 and there are used quarterly data. The reason for the quarterly data is the opportunity of implementation the statistical analysis in the shorter time period and not only in the whole period from 2007 to 2017. The reason for selection exchange rate EUR/CZK is because the main foreign trade partners are in the European Union, this is also the subject of analysis.

The main objective is to determine if there is some relationship between the export, import and trade balance with the exchange rate of EUR/CZK. And if there is some relation, is it positive or negative (reverse) relation, which is analyzed by the correlation statistical method and represented by the values of correlation and also by graphical representation. The aim is not only to analyze the whole time period from 2007 to 2017 but also try to analyze shorter periods which are characterized by some economic situation such as economic crisis or intervention by the Czech National Bank.

### Methodology

In this diploma thesis there are used comparative, descriptive and statistical methods. In the theoretical part there is used literature review of economic resources in both printed publications and internet sources are used. Every resource is listed in the end of this diploma thesis under the section references. The practical part is based on the data collected form the Ministry of Industry and Trade, Czech Statistical Office and Czech National Bank's webpages. Collected data are processed into the tables and graphs for better imagination and comparison. The analytical part is created by the statistical correlation of different time periods and various variables.

For a short interpretation there is Graph No. 26 from the statistical analysis where is used quarterly data from 2010 to 2017. On the horizontal axis there is trade balance of the Czech Republic in millions of CZK and on the vertical axis there is exchange rate of EUR/CZK. The correlation value for this two variables is 0.77 which is very strong positive correlation. In practice it means, that when the exchange rate depreciate and the Czech currency become cheaper for foreign countries in this graph we can see for example from the value 24.50 to 27 EUR/CZK, the foreign trade and especially export increases and import decreases so the trade balance is growing.



Graph No. 26: Balance of Trade and Exchange Rate 2010 - 2017

Source: Data from czso.cz, cnb.cz, mpo.cz, kurzy.cz; edited in MS excel with statistical tools (vertical axis EUR/CZK, horizontal axis: foreign trade in millions of CZK)

### Conclusion

In the statistical testing it was found, that there is relation between exchange rate and foreign trade and appearance of a certain pattern how the economic behavior could be interpreted. On the other hand there was also found that the dependence of foreign trade is not affected only by the exchange rate, but there is more factors which are affecting the foreign trade, such as economic situation or specifically the economic crisis after the year 2008. The more detailed interpretation of the statistical results can be found under the chapter named Discussion of the Statistical Results.

This diploma thesis is created to provide economic and statistical point of view on the combination of economic indicators such as foreign trade especially export, import and combination represented by trade balance and exchange rate of EUR/CZK. The reader should learn both the theoretical examples and the use of theory in practice by implementing analytical tools and interpretation of the results.

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