**Czech University of Life Sciences Prague** 

# **Faculty of Economics and Management**

**Department of Economics** 



## **Abstract of Diploma Thesis**

# Foreign trade of the Czech Republic - Case study of coffee import

Author: Bc. Tarek REBAI

# Supervisor: doc. Prof. Ing. Mansoor Maitah, Ph.D. et Ph.D.

© 2019 CULS Prague

#### **Summary**

The diploma thesis is focused on the foreign trade of the Czech Republic, namely on the import of the coffee in the years 1997 - 2017. The main aim of the thesis is to analyze the foreign trade of the Czech Republic with a focus on the import of the coffee. The thesis is divided into the theoretical and practical part. The theoretical part deals with world's production, growing conditions, different kinds of coffee beans and fair trade . It also describes the importance of coffee for the world economy, the major exporter and importer of coffee, the determinants of coffee exports and international organizations on the world coffee market. Practical part describes econometric analysis and its methods. This is followed by the analysis of coffee consumption in the Czech Republic in time period of 1997 and 2017. In the analysis of coffee consumption there is a single econometric model, which determines which factors significantly influence value of the coffee import to the Czech Republic. Furthermore, economic, statistical and econometric verification of the model is performed. Furthermore, variables elasticities are calculated, and the forecasts for all variables for years 2018, 2019 and 2020 are derived.

Keywords: Coffee, Import, Export, Foreign trade, Economy, Market

#### Souhrn

Diplomová práce je zaměřena na zahraniční obchod České republiky, konkrétně na dovoz kávy v letech 1997 – 2017. Hlavním cílem práce je provést analýzu zahraničního obchodu České republiky se zaměřením na dovoz kávy. Práce je rozdělena na teoretickou a praktickou část. Teoretická část se zabývá světovou produkcí, pěstebními podmínkami, různými druhy kávy a fair trade. Dále popisuje význam kávy pro světovou ekonomiku, hlavní vývozce a dovozce kávy, determinanty produkce kávy a mezinárodní organizace na světovém trhu s kávou. V praktické částí se zabívá ekonometrickou analýzou a jejímy metodami. Následuje analýza importu kávy do České republiky v období 1997 – 2017. V rámci analýzy importu kávy byl sestaven jednorovnicový ekonometrický model, který posuzuje faktory významně ovlivňující import kávy. Následně bylo provedeno ekonomické, statistické a ekonometrické ověřování modelu. Dále jsou zde vypočítány pružnosti proměnných a odvozeny prognózy všech proměnných pro rok 2018, 2019 a 2020.

Klíčová slova: Káva, Dovoz, Vývoz, Zahraniční obchod, Ekonomie, Trh

## Introduction

The coffee plant as a plant belongs to fruit trees that produce the fruits of the so-called coffee cherry. Coffee is grown in more than 70 countries. Most of the growing countries are located in a tropical and subtropical belt where the most suitable climatic conditions are to grow the coffee. There are around 6,000 types of coffee in the world, but the most common species are arabica and robusta (Veselá, 2010). The majority of arabica coffee grows in Latin America and the homes of robusta coffee for its lower processing demands, are some African but mainly Asian countries.

The coffee market in recent years has to deal with many barriers such as climate change and the environment. It also has to respond to changes and developments in world coffee preferences. All in conditions of high price inequality in the market, the rise in input prices for production and the sustainability of the whole industry. Improvement of the market environment for all participants in the coffee sector is the responsibility of the International Coffee Organization (ICO). The mission of this organization is to strengthen the global coffee sector and ensure sustainable development by establishing common and fair trade conditions. It brings together 94 % of all producer countries and 75 % of consumers. An important part of coffee trading is also a social impact on the grower himself, taking into account that most exporting countries are among so-called developing countries and countries of final consumption are the so-called advanced countries. For the development of coffee trade, it is important to know whether the volume of traded off-market is increasing. Producer countries and farmers themselves seem to behave in production rather towards quality or quantity.

Growth in consumption is influenced by global globalization and raising the standard of living, which leads to growing interest in luxury goods to which coffee is ranked. The largest consumers are the states of the European Union and the United States of America, the developed countries. conversely, the leading coffee producers are developing countries, where the profits from coffee production are often the largest share of total farm income. Now we are

in so called "the third coffee wave" which is characterized by a greater focus on the quality, origin and individual qualities of coffee (taste, aroma, acidity, etc.). Most of the imported coffee in the Czech Republic comes from European Union countries in the form of green coffee, roasted coffee and coffee extracts. Coffee extracts are used for the production of instant coffee, which is very popular in the Czech Republic.

### **Objectives**

The main objective of the diploma thesis is to conduct analyses of foreign trade of the Czech Republic with the intention of coffee import during the period 1997-2017. Partial aims are to analyse trade balance of the Czech Republic, to identify determinants influencing the import of coffee from the countries that exports this commodity, and test which of the determinant has an important impact on coffee import to the Czech Republic.

### Methodology

The literature review of the thesis is processed on a basis of available scientific articles and books with a focus on the foreign trade of rice, econometrics and statistics. The analytical part of the thesis firstly deals with the trend analysis of selected determinants of coffee import within the period from 1997 to 2017. This is followed by an econometric analysis in which the main instrument is an econometric model. The model is constructed through the transformation of economic theory into economic-mathematical model. There is performed one-equation econometric model, a linear regression model. In the first part of the econometric analysis, there is constructed economic model corresponding to the relevant economic theory, which is subsequently transformed into econometric model. The following step is the collection of data and its verification and the estimation of the formulated model.

The data are gathered from the International Coffee Organisation, Eurostat, Euromonitor, World Trade Organisation WTO, Czech Statistical Office and ICO and some other sources. The individual parameters of the model are estimated through the method of Ordinary Least Square. After the estimation, there are performed economic, statistic and econometric verification of the one-equation econometric model. The econometric analysis is concluded by the application of the model, which consists of calculation of elasticities and prognosis for the year 2018, 2019 and 2020. The analytical

part of the thesis is conducted using statistical test and techniques elaborated in Gretl software and MS Excel.

## List of references

### **Bibliography**

AUGUSTÍN, Jozef. U kávy o kávě a kávovinách. Brno: Jota, 2016. ISBN 978-80-7462 850-4.

ČECHURA, Lukáš. Cvičení z ekonometrie. V Praze: Česká zemědělská univerzita, Provozně ekonomická fakulta, 2014. ISBN 978-80-213-2405-3.

GUJARATI, Damodar N. a Dawn C. PORTER. Basic econometrics. 5th ed. Boston: McGraw-Hill Irwin, c2009. ISBN 978-0-07-337577-9.

SMEKALOVÁ, Barbora. Káva. 1. vyd. Praha: OTTOVO NAKLADATELSTVÍ, 2006. 64 s.ISBN 80-7360-395-0.

ŽAMBERSKÝ, Pavel a Josef TAUŠER. Ekonomie měnového kurzu I. Vyd. 1. V Praze: Vysoká škola ekonomická, Nakladatelství Oeconomica, 2003. 60 s. ISBN 80-245-0637-8.

VESELÁ, Petra. Kniha o kávě: Průvodce světem kávy s recepty na její přípravu. Praha: Smart Press, 2010. ISBN 978-80-87049-34-1.

### **Internet resources:**

ICO. The Story Of Coffee [online]. ©2014. Dostupné z: http://www.ico.org/coffee\_story.asp/

WTO | What is the WTO? - Who we are. World Trade Organization - Home page - Global trade [online]. Dostupné z: https://www.wto.org/english/thewto e/whatis e/who we are e.htm

Oxfam America | The power of people against poverty | Oxfam [online]. Copyright ©nl [cit. 25.03.2019]. Dostupné z: https://www.oxfamamerica.org/static/media/files/mugged-full-report.pdf

Home | CZSO. Český statistický úřad | ČSÚ [online]. Dostupné z: https://www.czso.cz/csu/czso/home

Euromonitor International [online]. 2018 [cit. 2018-03-14]. Dostupné z: http://www.euromonitor.com/

The Top Factors that Move the Price of Coffee. Futures knowledge [online]. 2017 [cit. 2017-10-28]. Dostupné z: http://www.futuresknowledge.com/news-and-analysis/softs/the-top-factors-that-move-the-price-of-coffee/