

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



**Diploma Thesis**

**Foreign Trade in Syria - Case Study of Iron and steel trade**

**Author:**

**B.Sc. Waseem Hossni**

**Supervisor**

**prof. Ing. Mansoor Maitah, Ph.D. et Ph.D.**

## **Abstract**

Syria was suffering from a massive conflict over the last years, this conflict originates big destruction. This conflict started lately to subsidence, keeping questions about the coming reconstruction era, what I see as an opportunity to do my thesis about the main materials for constructions which are the Iron and Steel.

The trade balance in Syria is more preponderant to Import due to the import of the manufactured goods, Steel and Iron definitely at the top of the list. Many changes happened lately in the trade partners as a result of the sanction can affect the trade trends and tendencies regarding many materials.

The imported steel and iron are the basic resources to meet the demand in the domestic market and there are many factors affecting these materials worth studying.

A good knowledge could be gained from this study about international trade explaining the main points should be known. Also a sufficient explanation to the steel and iron basic concept will have a good part in the literature review to make the practical part familiar.

The practical part will go deeply connecting both the international trade with Iron and steel for the specific case of Syrian iron and steel trade by presenting in figures the connectivity of these two topics. These data will cover the period between 2003 and 2017, and I would like to mention that I choose this period because it is combining between the two different eras in Syria (before the conflict and after the conflict) to make the sample more comprehensive and have more accurate results.

The Hypothesis has been tested in the practical part using the regression analysis had the result of existing relationship between Steel import as the dependent variable with (GDP growth, steel production, population, and exchange rate) as the independent variables. As a result, we had a model can explain the steel and iron market in Syria and shows the relation between the real values and the anticipated values from this model. This model will help in the future to have more understanding from a national or an investment point of view.

Keywords: foreign trade, international trade, iron and steel market, economy of Syria, regression analysis, import.

# **Abstrakt**

Sýrie v posledních letech trpěla masivním konfliktem, tento konflikt má za následek velké zničení. Tento konflikt začal v poslední době ustupovat a udržoval otázky o době rekonstrukce, což považuji za příležitost k provedení mé disertační práce o hlavních materiálech pro stavby, které jsou železo a ocel.

Obchodní bilance v Sýrii převažuje dovoz z důvodu dovozu průmyslového zboží, ocel a železo rozhodně na prvním místě seznamu. Dovážená ocel a železo jsou základní zdroje, které uspokojí poptávku na domácím trhu, a existuje mnoho faktorů ovlivňujících tyto materiály, které stojí za studium.

Z této studie by mohly být získány dobré znalosti o mezinárodním obchodu, přičemž by měly být známy hlavní body. Dostatečné vysvětlení základního konceptu ocel a železo bude mít dobrou roli v přezkumu literatury, aby byla praktická část seznámena.

Praktická část bude podrobně propojovat mezinárodní obchod se železem a ocelí v konkrétním případě syrského obchodu se železem a ocelí a na obrázcích představí propojení těchto dvou témat. Tyto údaje se budou vztahovat na období od roku 2003 do roku 2017 a rád bych zmínil, že jsem si vybral toto období, protože kombinováním dvou různých období v Sýrii (před konfliktem a po konfliktu) je vzorek komplexnější a má přesnější výsledky.

Hypotéza byla v praktické části testována pomocí regresní analýzy, která měla za následek existující vztah mezi dovozem oceli jako závislou proměnnou s (růst GDP, výroba oceli, populace a směnný kurz) jako nezávislé proměnné. Výsledkem bylo, že jsme měli model, který dokáže vysvětlit trh s ocelí a železem v Sýrii a ukazuje vztah mezi skutečnými hodnotami a očekávanými hodnotami z tohoto modelu. Tento model v budoucnu pomůže zintenzivnit podceňování z národního nebo investičního hlediska.

**Klíčová slova:** zahraniční obchod, mezinárodní obchod, trh železa a oceli, ekonomika Sýrie, regresní analýza, dovoz.

## **Objectives:**

The main aim of the thesis is to discuss the international trade in Syria and more deeply the foreign iron and steel trade in the country during 2003 to 2017, also to analyze the relation between some variables reflecting the economic situation view in Syria.

Sub objectives are having overview of the international trade globally, investigate about the steel and iron as an important material and the basic concepts about its trade globally, find out the essential changes over the time period and try to analyze it. Finally examine factors which might influence steel import.

The goal of the thesis is to use the correlation between these variables reflecting the economic situation in Syria (GDP growth rate, exchange rate, steel production, population and total imports) with the steel and iron import to facilitate the vision of the steel and iron import in the country and make it easy to expect the quantities needed for the future depends on predicting other variables.

**Hypothesis:** The mentioned above variables have an important effect on the steel and iron import that would create a model helps us to expect the value of this dependent variable.

## **Methodology:**

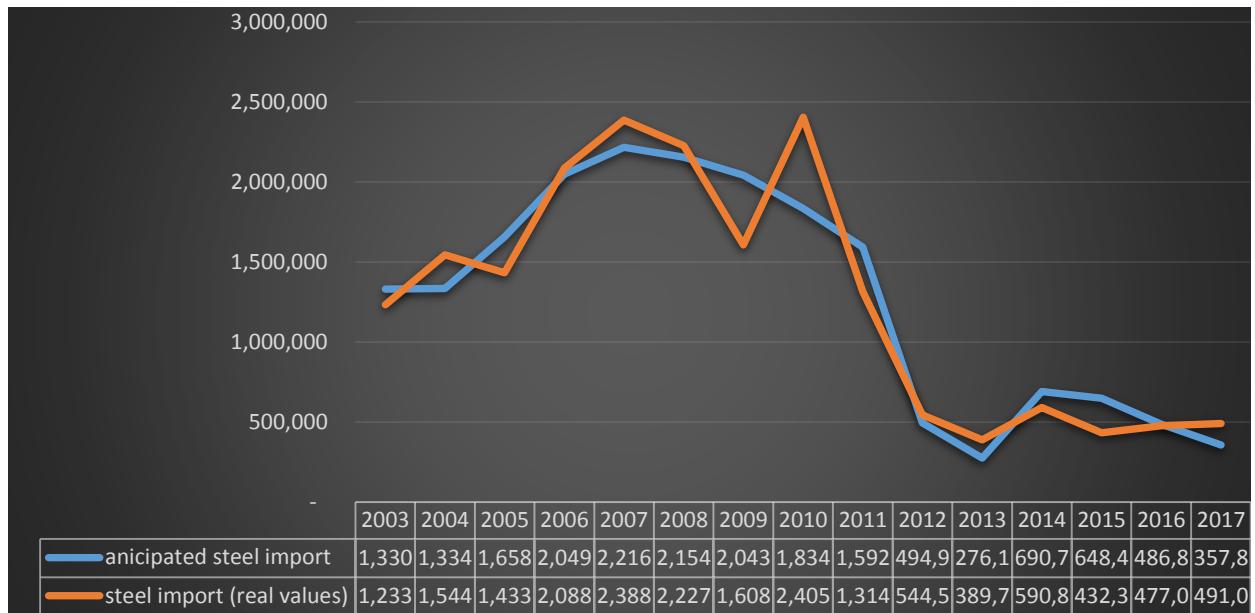
A number of methodological approaches will be used for doing this research. I will discuss a theoretical overview about the concept of international trade in general explaining the main ideas about foreign trade could come to the reader mind, as well showing my gathered information and deductions about the trade of steel and iron.

For practical part I will use quantitative research method to gather my data for the variables of (GDP growth rate, steel import, population, total imports, exchange rate, and steel import) in Syria for the years from 2003 to 2017.

The specific tool will be used to prove weather my hypothesis is right or wrong will be the Linear regression analysis for the gathered data. To figure out the factors are affecting the steel and iron import in Syria.

## Results and discussion:

**Figure 1: Real values with the anticipated value of Multiple Regression Model for steel and iron import**



*Source: (own calculation)*

As figure 1 above illustrates, the two chart lines in the graph are tight close to each other, and as a prediction function for the anticipated value of Multiple Regression Model I will point up the years 2004 and 2010 when the developed model was predicting the drop-down in the steel and iron imports and it was followed by the real values.

Based on the previous model I will discuss some results and try to interpret it, starting with the positive correlation we have between GDP growth and steel import, it is well known that imports ,in general, is part of the GDP calculation, but in some economies and in our case the GDP growth is encouraging the householders and firms to spend more on housing and constructing and even the government on infrastructure.

The correlation between prediction and import is negative obviously as more market is saturated by local product, more imports will not be needed, this is mostly noticed between 2014 and 2017. The impulse for this raise in production we notice was the scrap outgrowth as remnants of the destruction in the country, I have mentioned before that steel production in Syria based on scrap.

Interpreting the negative correlation between population and iron and steel import is conceivable out of the information I mentioned before in the population paragraph that 33.2

% of the population are under 15 years, and the growth of population were in this category, with the migration of the educated productive class also means fewer people who are able to generate revenue that means more depend on cheaper product what means depend more on the domestic product and less spending in general.

As a developing country with negative trade balance and few resources of foreign currencies, the central bank is controlling the flow of the country foreign currencies through providing the importers with their needs for transactions. This is how exchange rate affecting the steel and iron import and appears in the drop-down of imports, anchoring the rule of stable exchange rate stable economy.

## **References:**

- Abrams, R. K. (1980). International trade flows under flexible exchange rates. *Economic Review*, 65(3), 9-10 p.
- Akyuz, Y. (2003). *Developing Countries and World Trade: Performance and Prospects*, Zed Books, 14-26 p. ISBN 1842774107.
- Alhemesh M. (2011). *The Syrian Economy in Forty Years: An Analytical Study of Economic and Social Developments in Syria 1971-2010*. Damascus: Almanhal, 51, 72-78 p. ISBN: 9796500257280.
- Burgayev, K., Konovalov Y., 2001. *Iron and Steel Production*. New York- Hong Kong: The Minerva Group, Inc., 9 p, 96 p. ISBN: 0894991094.
- Fish, P. (1995). *The International Steel Trade*. Cambridge: Woodhead Publishing. 114 p. ISBN: 9781855731004.
- James T. (2014). *Factors influencing international trade*. Access on Jul 13, 2019 from [http://www.ehow.com/info\\_8210281](http://www.ehow.com/info_8210281).
- Madar, D. (2010). *Big Steel: Technology, Trade, and Survival in a Global Market*. Vancouver: UBC Press, 89-101 p. ISBN: 9780774858755.
- Seinhilber, S. (2008). *Strategic Alliances: Three Ways to Make Them Work*. Boston: Harvard Business Press, 113-114 p. ISBN: 9781422138694.
- Suranovic, S. (2010). *International Trade: Theory and Policy*, Flat World Knowledge, Incorporated Version 1, 5 p. ISBN: 9781936126453.
- Worrell, E., et, al. (1997). Energy intensity in the iron and steel industry: a comparison of physical and economic indicators. *Energy policy*, 25(7-9), 727-744 p.