

Czech University of Life Sciences Prague

Faculty of Business Administration

Department of Economics



BACHELOR THESIS

Summary

Economic analysis of crude oil commodity price

Ekonomická analýza ceny surové ropy

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1 Introduction

Today it is possible to see, how crude oil prices have been changing. We are living in an era when oil can cause wars or political crisis. Oil prices fall makes some countries poorer, high oil price allows transforming the own economy, because high oil incomes from oil export help to modernize the economy if the government uses it cleverly.

Formation proces of oil price can be impacted by many factors. In this thesis, I will try to specify this factors and analyze, how they work. So I chose this theme of my bachelor thesis because it is very actual and helpful to the wide audience. Mainly this problem concerns citizens of oil producing countries like I am.

In this bachelor thesis was shortly described crude oil prices evolution from 1970th to modern times, where we described main reasons, which caused global oil price changes, like Oil Shock. Further, I described supply of oil, demand for oil and market equilibrium on the crude oil market. In the practical part of the thesis I performed a regression analysis of the price function, regression analysis of the price function of the balance and the exchange rate and trend analysis of oil demand, supply and price.

2 Keywords

Crude oil prices, forecast,commodity, prediction, monetary policy, option pricing, demand, supply, elasticities, volatility,OPEC.

3 Objectives of thesis

The objective of this thesis is to analyze the main processes, that form the level and dynamics of world prices for crude oil. The empirical methodology aim is to determine significant factors influencing the oil price and to investigate their change over time.

4 Methodology

The theoretical part of the thesis is focused on theoretical aspects of oil price formation. This part was created with the help of oil prices curve analysis in historical retrospective. Here are definitions of the oil market, the supply of oil, demand for oil and factors, which impact prices in previous years and in nowadays. Analysis of speculative component on the oil market helped us in the next work.

The practical part is focused on practical implementation of noticed factors and market rules. For the better identification of the impact factors, I used the time-varying model and classical linear regression model (CLRM) with oil price return as the dependent variable and the

discussed factors as explanatory variables. I also used the SWOT and PEST analyzes that help investigate important areas on the oil market. SWOT analysis discusses the positives and negatives, opportunities and threats of this market. PEST helps to understand how each of the factors impacts business.

5 Main findings

There are many factors influencing oil price, but the main of them are the market supply of oil and demand for oil. All other factors have an impact mainly on supply and demand. Demand is highly dependent on economic growth in countries that import a lot of crude oil.

Modern crisis in oil exporters countries is caused by low oil price has serious reasons based on market supply and demand difference. At the moment supply of oil is bigger, than demand for oil. That is why there is oil price fall. Also crude oil price is impacted by political events, which happens in previous years and decades.

Time – varying model helped us to conclude, that the best tool, which can increase oil prices is reduced the supply of oil in connection with growing demand and consumption. From the analysis in historical retrospective, it is possible to confirm the effectiveness of this method.

According to the analysis of impact factors, we have forecasted crude oil price in the future. In the future price will increase, but the growth will be slow due to the inelastic supply of oil and demand for oil.

6 Conclusion

The research conducted within this work showed that the oil and gas sector remains not only basic for the economy of the oil exporting countries but also considerably defining its further development. The thesis revealed that globalization of world economy led to the transformation of the mechanism of functioning of the oil market.

At the moment real prices of oil are under the influence of three factors:

- 1) the intention of the USA to ensure own energy security;
- 2) movement of additional financial means as a result of the policy of U.S. Fed and European Central Bank from real production sector on the financial markets;
- 3) stagnation of economy of the developed countries.

7 References

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