# World Market Price of Oil Impacting Factors and Forecasting



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# World Market Price of Oil

Impacting Factors and Forecasting



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In the book, the dynamics of the world market price of oil has been anaylized in the historical aspect, influencing factors classified and new trends in development of the world economy in the modern world analyzed. Medium and long-term forecasting was carried out by means of econometric models under the theoretical and method-ological bases of forecasting oil price.

The book can be used for adoption of proper decisions of governmental authorities, including in forecasting of the state budget. Also, it may be useful for econoties, including in forecasting of the state budget.

mist scholars, doctoral students and higher school students.

### Introduction

In the light of new trends and challenges in the global economy, development of scientifically and practically substantiated forecast indicators of the factors influencing the price of crude oil of great strategic importance in the world markets for the medium and long-term periods, as well as understanding of the existing and expected processes and assessment of their effectiveness, are necessary.

In this respect, it is necessary to perform a complex review of reliable forecast outcomes, considering the main economic and noneconomic factors affecting the world market prices of oil, to obtain such forecasts and to develop an adequate fore-

casting methodology.

To develop adequate forecasting methods, firstly, the dynamics of the scope of demand and supply and the prices of oil in the economic—world market; oil reserves and dynamics of exploitation of major oil-offering subjects (Organization of the Petroleum Exporting Countries (OPEC), Russia, the USA, etc.); economic development dynamics of major oil-requesting countries (the USA, China, Japan, Germany, India, etc.); creation of alternative energy sources and their applicability to production; assessment of the impacts of the transmission mechanisms of natural—environmental—solar activity indicators on world oil prices; and study of perspectives on political conflicts, terror, polarization, globalization, and democratization processes are the main requirements.

In the first chapter of this volume, the factors influencing oil prices, the impact of solar activity on oil prices, and forecasting by econometric models—as well as theoretical aspects of trend models and forecasting methods for oil prices—are analyzed in a broad spectrum from scientific and practical viewpoints, and analytical

summarizations are made.

In the second chapter, the details are collected and processed to build econometric models under the theoretical analyses carried out in the first chapter in a logical sequence. It should be noted that the influence of solar activity on oil prices and the trend models of the daily oil price are established and tested.

In the third chapter, autoregressive integrated moving average (ARIMA), Holt, and trend models are set up to forecast oil prices in the world markets for the

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medium and long-term periods. Moreover, oil prices in the world markets and the price of Azeri Light oil in the world market are forecast for the long-term period.

It should be noted that the information collected for forecasting the factors influencing crude oil prices in the world markets for the medium and long-term periods are processed in Microsoft Excel and the econometric models are executed in the EViews 8 applied software package.

The scientific and practical forecast indicators obtained from the models set up to forecast the world oil market price and the price of Azeri Light oil in the world market, and the proposals made, may be used in speeding up socioeconomic development, in the processes of preparation of state budgets and production and implementation of state programs, in the actions to be taken in this regard and the respective assessments to be carried out, in preparation of the action plans of the Azerbaijan Oil Fund and the State Oil Company of the Azerbaijan Republic for the medium- and long-term periods, in formation of the country's macroeconomic policy and related scientific research works.

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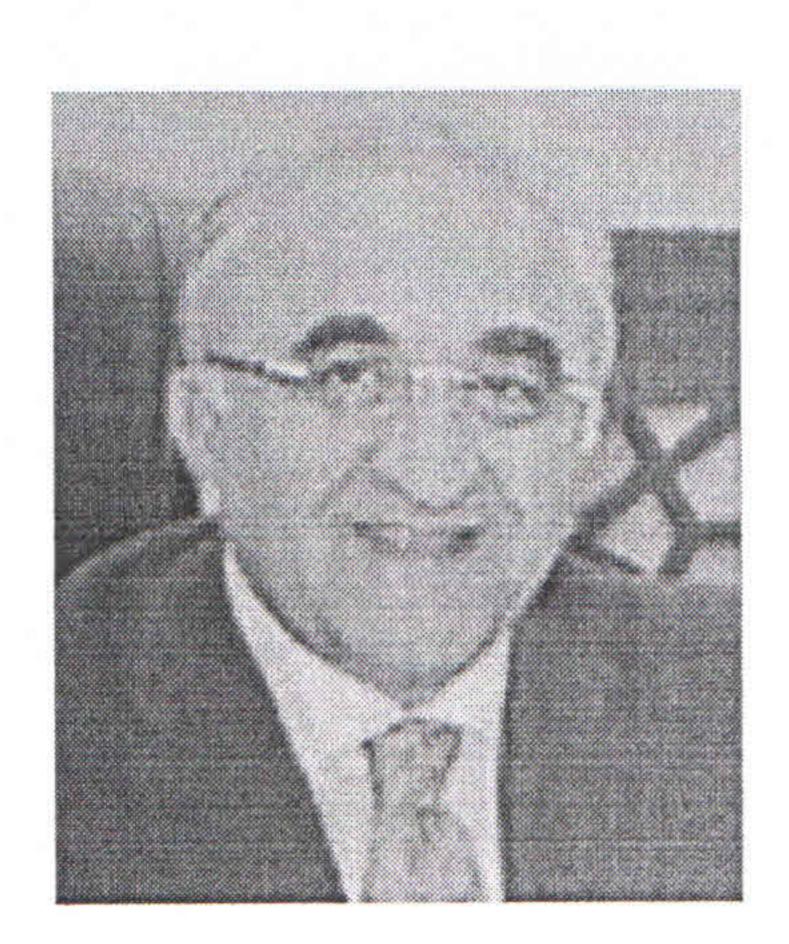
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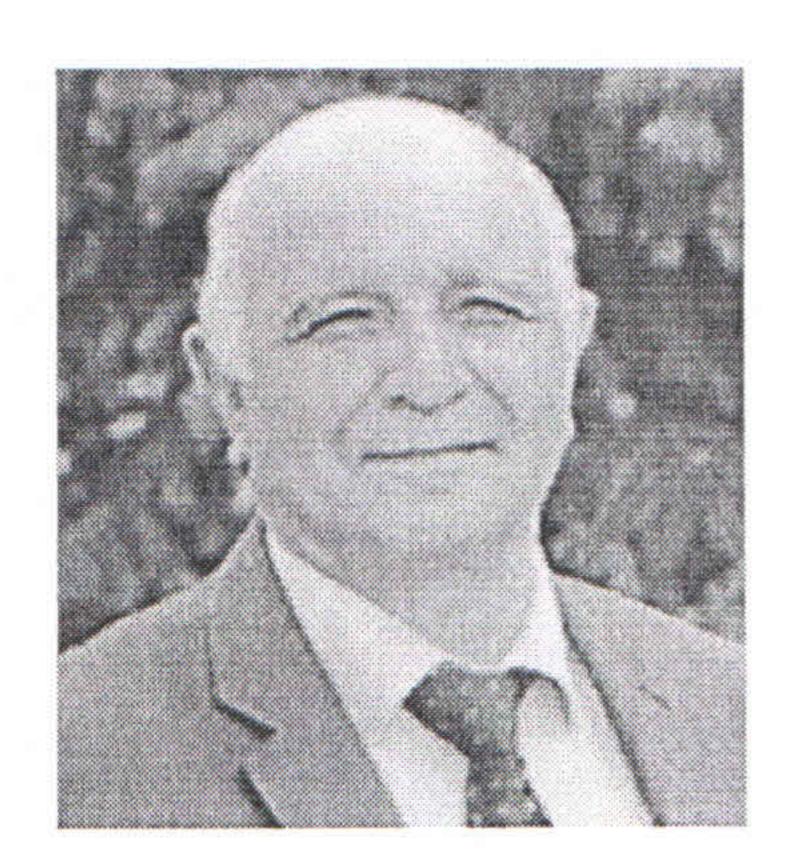
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