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Features of managing oil projects in the USA, China, Iraq, Kazakhstan and their impact on the economies of the countries

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Abstract. This article analyzes the features of oil projects in oil exporting and oil importing countries and their impact on the economy. The article reflects the current state of oil projects and identifies the main problems in the development of oil project management. The practical significance of the article lies in establishing the factors and conditions that determine the project approach to managing oil projects. The theoretical significance of this study lies in identifying the factors that determine the export- or import-oriented nature of national economies. The uniqueness of the study is determined by the methodological approach used to take into account macroeconomic factors in constructing a project approach to the management of oil projects in countries such as the USA, China, Iraq and Kazakhstan. The methodological basis of the study was the methods of content analysis, historical-chronological, statistical and comparative methods. The information base was the annual reports of oil companies, the results of oil market reviews by analytical agencies and OPEC metadata. The results of the study are presented in the form of recommendations for project managers, executives of oil companies and researchers studying project management issues.

Key words: project management, oil industry, export, import, development factors

Introduction

The world's reliable oil reserves are equal to 1.7 trillion barrels. 2.1% in the USA, 8.7% in Iraq, 1.58% in China, 1.8% in Kazakhstan, together makes up more than 13% of world oil reserves [1]. Despite the long history of oil exploration, new fields with huge reserves are being discovered in many countries around the world, such as Russia, China and others. According to scientists, huge reserves of hydrocarbons may be concentrated in the areas of the Arctic and Far East seas. The vast majority of reliable oil reserves are located in Asia, and the Persian Gulf Basin alone contains more than 48% of the world's oil reserves. For a long time, the leader in oil reserves was Saudi Arabia (16% of world reserves), but recently it was overtaken by Venezuela (18%) [2]. With the development of geological science and technological progress, new oil reserves are expected to be developed in the countries of the Caspian coast and in Kazakhstan as well. The level of global oil production is more than 3.6 billion barrels per year. However, while OECD countries are experiencing a decline or very slow growth in oil consumption, other countries are experiencing an increase in oil consumption of 3.0–3.5%, which supports the growth of its production worldwide by 1% annually [3]. The huge use of petroleum products even in the era of a green economy shows that oil consumption will accompany humanity in the coming decades and even centuries. The United States as the most conservative oil producer in the 20th century, China as a geopolitical and economic competitor of the United States and the second largest power in the world, Iraq, historically one of the catching up countries in the Middle East with an oil economy, Kazakhstan as the leader in oil production in the Central Asian region are of interest to oil industry research. The study found that U.S. drillers increased oil production far more than analysts expected in 2023, pushing output to record levels, while OPEC and its allies slowed supplies in an attempt to stem falling prices.[4] Based on the results of January-September 2023, the volume of oil supplies from the United States to world markets reached \$86 billion in monetary terms. As a result, this commodity became the country's largest export commodity for the first time since 2009, as evidenced by data from the Bureau of Economic Analysis released on November 7, 2023 [5]. Today's China is one of the largest economies in the world. The country ranks first in energy consumption and is the second largest importer of oil after the United States. Iraq has rich hydrocarbon reserves. In terms of proven oil reserves, the republic ranks fifth in the world and fourth in OPEC (145 billion barrels). This is 9% of world reserves and 18.4% of Middle Eastern oil reserves. Due to military conflicts, prolonged sanctions pressure and the lack of foreign investment, Iraq's subsoil has not been explored sufficiently to draw conclusions about the country's real energy reserves, which may significantly exceed proven reserves. Along with Russia, among the CIS countries, Kazakhstan could already be mentioned in such cases, since there is hardly be found another state in the world where production would double over the past five years (in 1999-2004 - from 30 million to 60 million tons), exports - two and a half times (over the same period - from 20 million to 50 million tons). The world's ninth-largest country could store twice its current proven oil reserves and is becoming attractive to many global investors, experts say. The specificity of oil production and refining is the project management used in its management, since each field initially begins as a new project. In this regard, the choice of this industry and these countries

determined the relevance of the study and served as an argument for conducting this scientific work.

The purpose of this study is to examine the factors that determine the influence of this industry on the development of the economies of countries and project management itself and to substantiate the key features of project management in the oil industry.

Tasks: Conduct a review of study current research in the field of project management of oil projects and establish the main factors determining approaches to management; based on a study of annual reports of oil companies and the results of analytical reviews of the oil and gas industry, establish the main features that determined the development of this sector of the economy in the countries studied; assess the impact of macro indicators on the development of national economies; identify the main problems facing the development of the oil and gas industry and develop basic recommendations for project management.

Scientific hypothesis – the export-or import-oriented development of the oil and gas industry in the country determines the features in the project management of the oil and gas sector. The higher the import dependence of the economy on oil, the more resources are used as capital for the implementation of oil projects, and the lower the profitability of this capital.

The materials for the study were data on oil production volumes in the USA, China, Iraq and Kazakhstan. The research material was scientific publications of foreign scientists on economic problems of oil and gas production and its project management. To study the impact of the implementation of oil projects on the development of national economies, statistical data, materials from international organizations, and relevant publications in the media were used. In addition, a database of the world's largest companies in the oil and gas industry and annual statistical reviews of the Organization of the Petroleum Exporting Countries (OPEC) were used.

Research methods. The study employed a multifaceted approach, encompassing content analysis, historical-chronological economic-mathematical, and statistical methods. The chronology of the development of the oil industry was analyzed using the historical and chronological method, while the economic and mathematical method was used to substantiate data on the production and export of raw materials. The social analytical method was used to identify the weaknesses and strengths of the influence of oil on the economy. Finally, data from the official websites of oil companies was collected, systematized and analyzed by the coefficient statistical method.

Literature review

In studies devoted to this issue, various aspects of project management in the oil and gas industry are discussed and studied. These include issues of dependence of the success of projects in the oil and gas sector on the managerial freedom of action of project managers and the level of compliance of their professionalism with the specifics of project management in the oil sector (M.Arifuddin, B.S.Wijanto) [6]. B. Ghasemi et al, in their work on Canadian oil and gas projects, examine the role of innovative ideas in project management and assess the industry's role in the country's development [7]. The study by V. Faghihi describes the specifics of all stages of the life cycle of an oil project and analyzes the best global practices in project management

in the oil and gas industry [8]. The results of the research work of L. Guoxin and other authors were generalizations of the model of advanced technologies and project management of shale oil and gas development [9]. The article analyzes the concept and content of full life cycle management of North American projects for the development of oil and gas resources. Early assessment and risk management, promotion of technological and management innovations to accelerate field development are identified as key factors determining the effectiveness of oil project management. According to a study published by the Rural Electrification Group [10], the three main industries to which project management is clearly applied are construction, aerospace and oil and gas. As noted in this study, projects in these industries are characterized by long-term nature, investment capacity and complexity of project management. The influence of exo- and endofactors that determine the development of the oil and gas industry in the context of global decarbonization trends is identified and argued. J.Salazar-Aramayo and other authors in their study examine the factors influencing the success of oil and gas exploration and production project management, revealing the role of using project management as a key strategy for maintaining competitiveness through increasing the ability to create value in their business. [11] The study of all previously described studies made it possible to clarify the key current factors determining project management in the oil and gas industry, including an emphasis on the determinants that influence the development of the industry itself and its mediating influence on the development of the national economy.

Results

The oil market has a significant impact not only on the development of national economies, but also on the global system of political, social and economic relations. Regardless of the level of development of the oil industry, oil projects are a key source of income and affect a wide range of industries. The literature review conducted allowed us to establish that the level of development of the global oil industry was influenced by various factors (Figure 1).

Technological	Economic	Political
<ul style="list-style-type: none"> • innovations in production technology based on the characteristics of the deposit • innovations in production technology based on methods, methods, equipment, conditions 	<ul style="list-style-type: none"> • Growth in technological consumption of oil resources due to the development of energy-consuming industries • Increase/decrease in oil prices • Expanding geological exploration and identifying new deposits • Internal socio-economic conditions (shortage of personnel, lack of investment) 	<ul style="list-style-type: none"> • Introduction of restrictions on production in the form of sanctions • Regulation of production within the country • Political instability (internal and interregional military conflicts)

Figure 1 – Factors that determine the features of the development of oil projects within the global economy

Note: compiled by the authors [7,8]

Taking into account the identified factors when developing approaches to project management in the oil and gas industry will reduce the impact of exo- and endogenous risks.

As part of this study, it is necessary to summarize in more detail the features of the oil projects of the listed countries. Oil projects in the United States have several key features that determine their impact on the country's economy. The United States has become one of the world's largest oil producers thanks to a revolution in shale gas and oil production. This has led to a reduction in dependence on oil imports and a strengthening of the country's economic position. Hydraulic fracturing (fracking) technologies have made it possible to extract oil and gas from previously inaccessible fields, reducing dependence on energy imports and strengthening the country's energy security. The United States has a variety of oil fields, including onshore, offshore, and shale deposits. This diversity makes it possible to diversify and ensure stability of oil production in various conditions. The United States is actively investing in the development of oil infrastructure, including pipelines, terminals and refineries. This helps to increase production volumes and ensures efficient transportation and processing of extracted oil. The study concludes that oil companies use various project management tools to gain access to resource projects around the world (Figure 2).

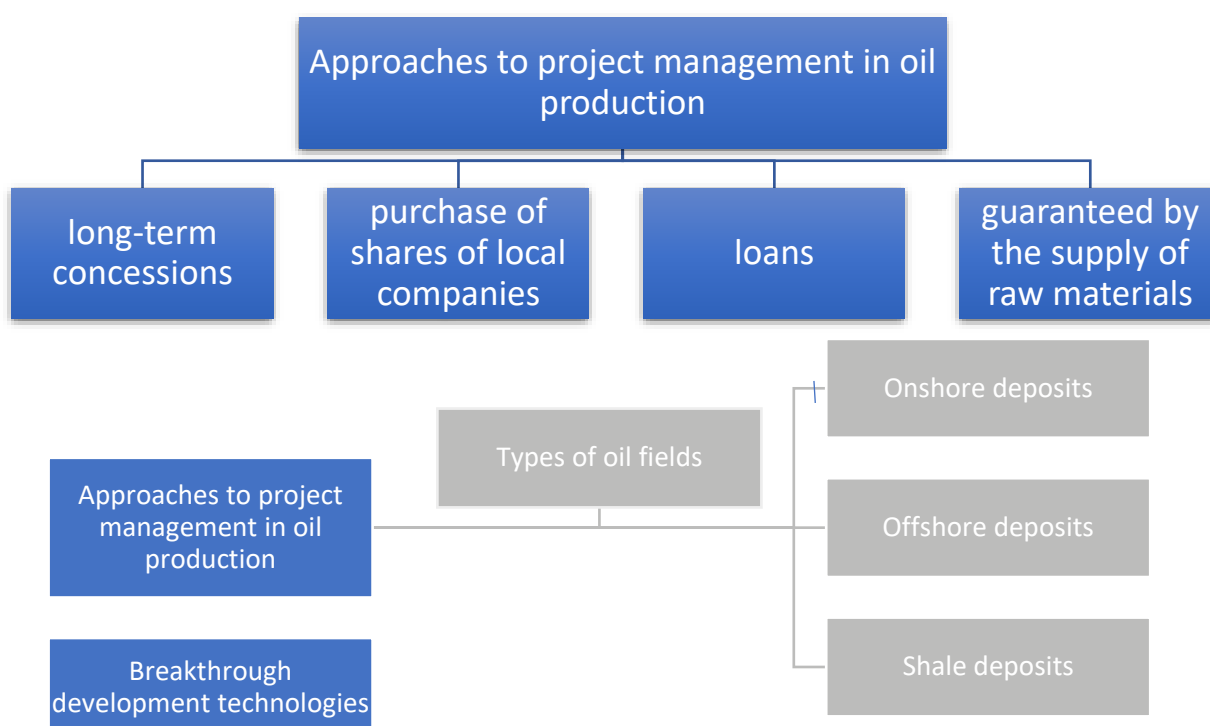


Figure 2 – Approaches to project management in oil production

Note: compiled by the authors based on the source [12].

In particular, oil projects in all countries studied have a significant impact on the country's economy. On the one hand, they provide thousands of jobs in oil production, transportation and refining. In addition, increased oil production helps reduce the trade deficit and boosts

energy exports, improving each country's balance of payments. However, the development of the oil industry in these countries is also of concern to activists among environmental and public organizations due to the potential negative impacts on the environment and human health. This includes the pollution of water and air resources, as well as the destruction of ecosystems.

Oil projects in China have their own characteristics that distinguish them from projects in other countries. China is a major consumer of oil, but it depends on imports for more than 70% of its consumption. This makes the country vulnerable to changes in the global oil market and geopolitical tensions in exporting regions. To meet its oil needs, China is actively investing in foreign oil projects and concluding long-term supply agreements with various producing countries. This helps the country to guarantee a stable supply of oil and reduce the risks of instability in the global market. The growth of China's economy is accompanied by an increase in energy consumption, including oil. China is striving to diversify energy sources, including the development of alternative energy sources and increasing the efficiency of oil use. This is due to both economic necessity and concern for reducing the carbon footprint and the ecological future of the country. The increase in oil consumption in China is accompanied by serious environmental problems, including air, water and soil pollution, as well as climate change. In response, the Chinese government is introducing stricter environmental regulations and investing in the development of clean technologies and alternative energy sources. The development of the oil industry has a significant impact on the Chinese economy, including job creation, investment in infrastructure and maintaining GDP growth. However, high dependence on oil imports also poses risks to the country's economic stability [13].

Historical events that occurred in Iraq created fully oil-dependent economy. Despite that, the country is facing political and social problems that make it difficult to develop its oil infrastructure. Iraq has huge oil reserves, making it one of the largest oil producers in the world. These reserves are distributed across various regions of the country, including the regions of Kurdistan, Basra and others. Uncertainty in the political environment and lack of investment may slow down the growth of the oil industry and the economy as a whole. Iraq is facing political instability and conflicts, which hampers the development of the oil industry. Internal conflicts, terrorist threats and strained relations between various ethnic and religious groups pose risks to investment and exploitation of oil fields. Despite its rich reserves, Iraq faces a lack of developed infrastructure for oil production, transportation and export. The need for large-scale investments in the construction and modernization of pipelines, terminals and other infrastructure remains urgent. Iraq's economy is heavily dependent on revenues from the oil sector, which makes the country vulnerable to fluctuations in oil prices and global market conditions. The lack of economic diversification poses risks to the country's sustainable development.

Oil projects in Kazakhstan have their own characteristics that determine their impact on the country's economy. Kazakhstan has significant oil and natural gas reserves distributed across various regions of the country, including the Caspian Sea, the western regions and the Kazakhstan's sector of the Caspian Sea. Large oil projects are being implemented in Kazakhstan with participation of international oil and gas companies. Almost all companies implement projects covering the full oil production cycle [14]. The ownership structure of the projects is represented by the capital of companies from different countries: the Netherlands (Buzachi

Operating Ltd), China (Sinopec, CNPC, CITIC), Italy (Eni), USA (ExxonMobil), Great Britain (Shell), France (Total), Japan (Inpex) [15,16].

The participation of foreign investors helps to attract capital, technology and experience to the development of the oil industry. Kazakhstan is an important exporter of oil and gas in world markets [17]. The strategic location of the country allows the use of transit routes for the delivery of energy resources to Europe, China and other regions. The infrastructure of the oil industry is intensively developing in Kazakhstan, including the construction and modernization of pipelines, refineries, ports and other facilities [18]. This contributes to an increase in oil production, transportation and export. Development of the oil industry in Kazakhstan, as well as in other countries, comply with environmental protection and social responsibility requirements. This is primarily explained by the specifics of this industry due to its environmental impact.

We outlined the key conclusions regarding the specifics of the implementation of oil projects in the USA, China, Iraq and Kazakhstan in the following Figure 3.

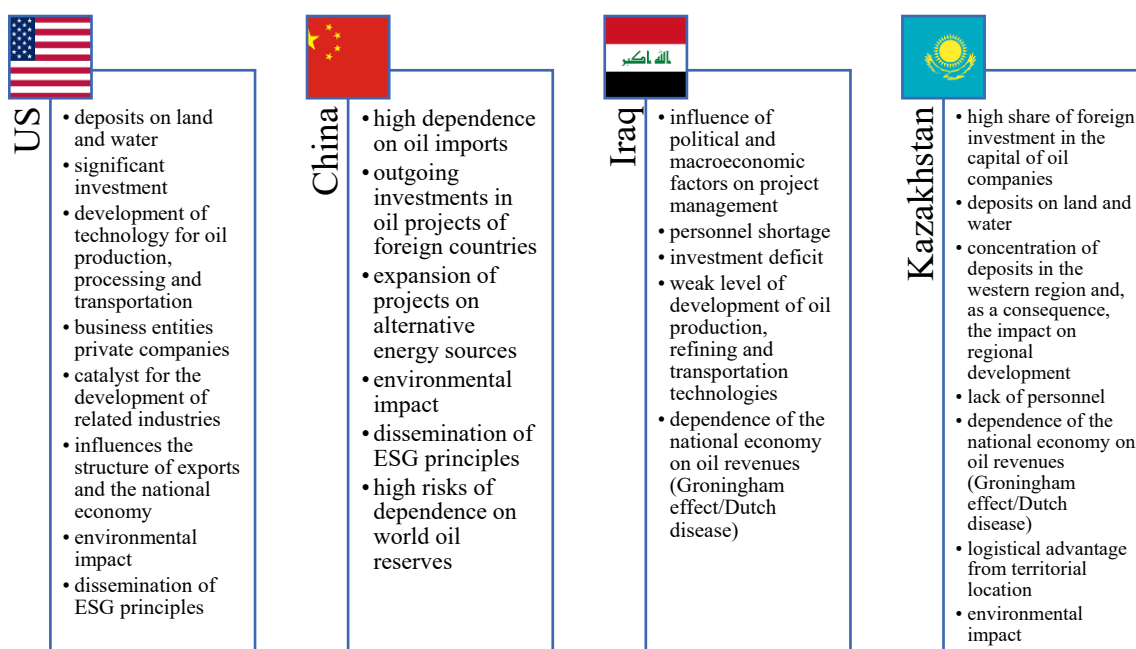


Figure 3 – The specifics of the implementation of oil projects in the USA, China, Iraq and Kazakhstan

Note: Compiled by authors [19,20,21]

Thus, the study made it possible to identify the following characteristic features. Oil projects in the United States play a key role in the country's economy, but their development is also accompanied by challenges in the field of ecology and public health. Oil projects in China have their own characteristics associated with high dependence on imports, the desire for diversification and solving environmental problems. These projects play an important role in the country's economy and require a balance between economic interests and sustainable development. Oil projects in Iraq play an important role in the country's economy, but face

challenges related to political instability, lack of infrastructure and dependence on the oil sector. The successful development of this industry requires solving these problems and measures to stimulate economic growth in other areas. Oil projects in Kazakhstan are of strategic importance for the country's economy, but their development requires consideration of environmental, social and economic factors to ensure sustainable and balanced development.

Despite the slowdown in economic development, the US economy is not as dependent on oil prices as the economies of some other major producing countries. The US economy is extremely varied. Although oil and gas production has been a catalyst for recent growth, it is far from the most important sector of the economy [18]. A key feature of the work of Chinese oil companies is the direct participation of the state in the management and distribution of resources. Almost all Chinese companies involved in the production and extraction of minerals are in one way or another affiliated with the CCP. This provides great opportunities for the Chinese state, because direct control over the extraction of mineral resources affects both pricing and the choice of points for exporting raw materials and finished products. Among other things, close attention from the authorities does not allow companies to go beyond the scope of their production activities, as can happen with similar companies in the United States. Features of the development of the oil industry in the countries selected for the study can be tracked according to the data on Figure 4.

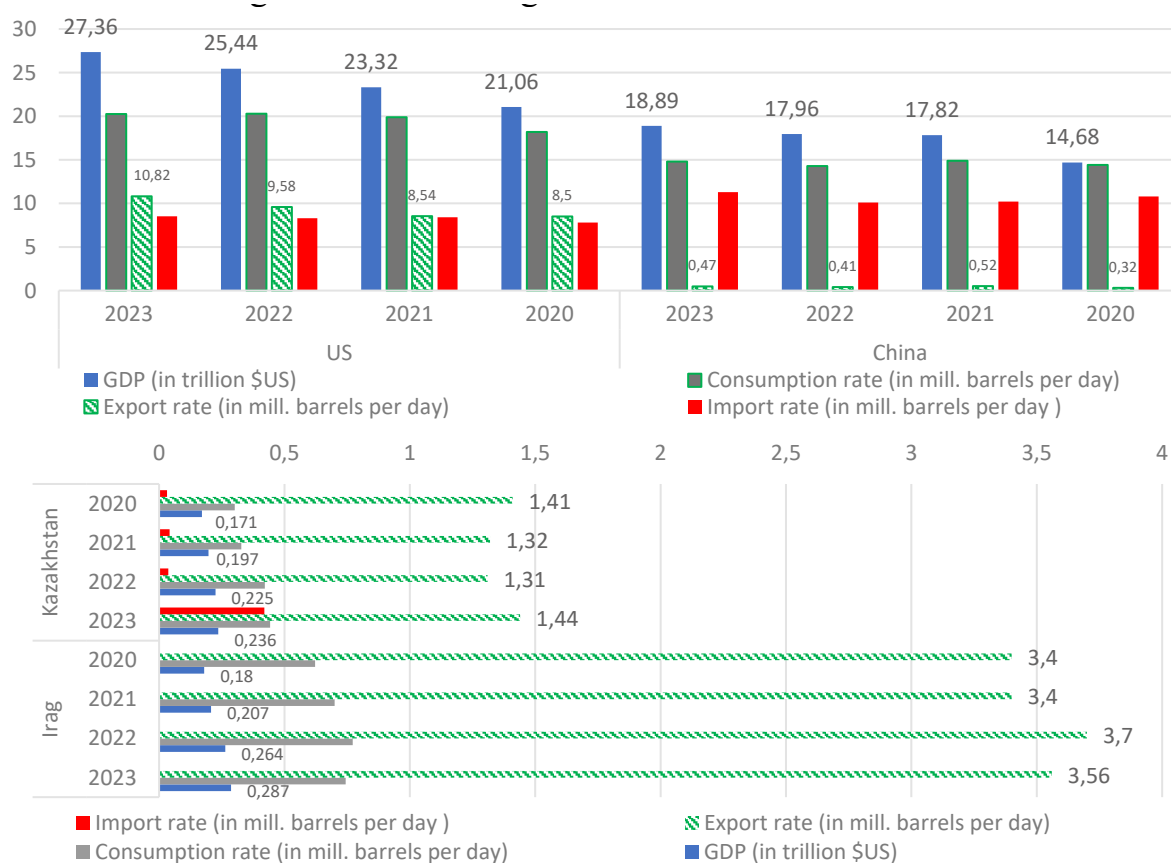


Figure 4 – Selected macro-indicators of the oil industry

Note: compiled by the authors based on the source [19,20,21]

The data presented in Figure 4 once again indicate the stable growth of the national economies of the USA, Kazakhstan and Iraq, and the restraining growth rates of the Chinese economy over the four years under study. The figure especially clearly shows the high share of oil imports in China and the low share of oil exports in this country. All this indicates special conditions for the implementation of project management in the oil industry.

According to NEA materials, during 2023, China produced about 208 million tons of oil, which is 1.6% higher than the 2022 volume. The rise was largely due to the growth of offshore production - up to 62 million tons. China's economy is heavily dependent on oil imports, and sustainable supply plays a key role in ensuring the country's energy security. High demand for energy, including oil, supports industrial growth in China. The development of oil projects contributes to the creation of jobs, attracting investment and stimulating the growth of related industries such as manufacturing, transport and construction. China is actively investing in foreign oil projects and concluding long-term supply agreements with various oil producing countries. This helps to ensure stable and reliable sources of oil supply for the country. Oil projects play an important role in China's economy, influencing energy security, economic growth, trade balance, investment in infrastructure and environmental sustainability of the country. China's economy cannot flourish smoothly as a growing country unless it receives adequate energy, particularly oil [19].

Oil production makes 94% of Iraq's impact and 90% of government revenue. 30 years of war provoked a deterioration in the Iraqi economy from oil production. It should also be noted that due to the fact that Iraq cannot explore oil deposits on its own, it should be noted that some of the oil projects are being developed by foreign companies. In particular, Gazpromneft is developing the Badra field (eastern Iraq), whose estimated reserves are capable of 3.0 billion barrels of oil. The development project is designed for 20 years with a five-year extension. Lukoil is leading the development of the West Qurna-2 field (South of Iraq) with geological oil reserves capacity of 35 billion barrels.

Iraqi oil is worn out by light, low sulfur and low tar types of oil as it has a density of less than 900 kg/m³, hence 844.3 to 867.6 kg/m³, sulfur content is not 3% and has low levels of asphaltene impurities. All this highlights a special approach to production technologies, since the implementation of such oil projects is much cheaper and more profitable. Project management in the Iraqi oil industry needs both to attract significant foreign investment and human capital in an era of technological evolution. Iraq's history weighs the potential downside benefits of increased production against potential long-term problems, interruptions in overproduction, and the country's ongoing oil power situation. All this was reflected in approaches to building project management in the oil industry [22].

It should be noted that the Government of Kazakhstan has approved a comprehensive development plan for large oil, gas and petrochemical projects for 2023-2027. In particular, the document provides for the implementation of large oil and gas projects in the Tengiz, Karachaganak and Kashagan fields, aimed at increasing oil production to 105.5 million tons and gas to 82.1 billion cubic meters by 2027. All this indicates the influence of public administration on the ongoing project management in the oil and gas industry. In particular, in the management of oil projects within Kazakhstan, the regional balance of the enterprises being organized is also

taken into account, depending on the location of the field [23]. Depending on the geographic, climatic and infrastructural complexity of the project being implemented, the possibility of government co-financing for the formation of the project infrastructure, social conditions and the availability of labor resources is taken into account.

As part of this research topic, it is necessary to cite the main oil projects of countries that affect the economy (in this case, we will study the example of the United States).

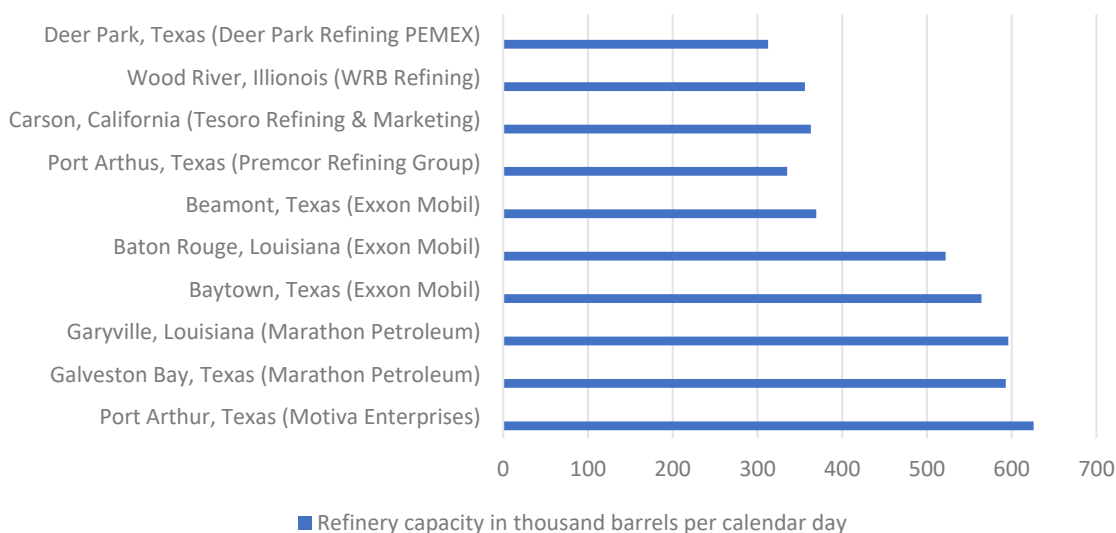


Figure 5 – Largest crude oil refineries by operable atmospheric distillation capacity in the United States as of 2023, thous.bar

Note – Statista Research Department, Jan 25, 2024 [24].

Motiva Enterprises' refinery in Port Arthur, Texas, is expected to be one of the largest refineries in the United States by early 2023, with a processing capacity of 626,000 barrels per calendar day. It is important to note that the nation's five largest refineries are all located on the Gulf Coast (PADD 3), with three located in Texas and two in Louisiana. These locations reflect not only the geographical distribution of oil fields, but also low financial costs, which influences project management. Thus, at each stage of the project life cycle, taking into account each factor that was identified as part of the study makes it possible to reduce management risks and increase efficiency. The United States is also conducting new geological exploration work in oil fields in order to preserve their resources as much as possible. Keeping some oil fields undiscovered is important for national security reasons, but requires appropriate project management. New geopolitical events in the future may cause problems with the import of petroleum products. However, oil production rates remain high compared to historical U.S. oil production rates due to the expected crisis with volatile oil and gasoline prices. The United States saw the solution to this problem only in increasing oil supplies. The US government in 2023 approved an oil and gas project in Alaska, which had previously drawn sharp criticism

from environmental activists. According to some estimates, the project could produce up to 180,000 barrels of oil per day, which is about 1.5% of US oil production [25].

ExxonMobil is also the largest oil company in the United States, according to research department Statista, based on annual market capitalization. The key characteristics of ExxonMobil are transnationality and a complete production chain. Despite the slowdown in economic development, the US economy is not as dependent on oil prices as the economies of some other major producing countries. The US economy is extremely varied. Although oil and gas production has been a catalyst for recent growth, it is far from the most important sector of the economy [26]. Table 1 below systematizes data that allows us to assess the level of development of oil companies and obtain additional conclusions from the study.

Table 1 - Key performance indicators of oil companies (absolute figures) [27.28.29.30.31]

indicators		Revenue (in mil. dollars)	Profit (in mil. dollars)	Equity (in mil. dollars)	Oil production volume (in thous. barrels)	Number of employees
company	year					
Exxon	2023	⇒ 334,697	↓ 36,01	↑ 204,8	↑ 2102	↓ 61500
Mobil (US)	2022	↑ 398,675	↑ 55,74	⇒ 195,05	↑ 2204	⇒ 62300
(R1)	2021	↓ 285,64	↓ 31,234	↓ 175,68	↓ 1393	↑ 63000
PetroChina	2023	⇒ 416,633	↑ 35,01	↑ 225,59	↑ 1399	↓ 375803
(R4)	2022	↑ 448,203	⇒ 29,979	⇒ 212,79	↓ 1213	⇒ 398440
	2021	↓ 361,747	↓ 22,298	↓ 194,95	↓ 1225	↑ 417173
CNOOC	2023	↑ 57,514	↑ 17,131	↓ 92,202	↑ 678	↑ 21993
(R2)	2022	↑ 58,29	↑ 19,558	↑ 112,6	↑ 623	↑ 21452
	2021	↓ 34,609	↓ 9,706	↓ 95,617	↓ 440	↓ 18887
NC	2023	↑ 20,893	↓ 2,089	↑ 38,299	↑ 172	↑ 49710
KazMunay	2022	↑ 22,214	↑ 2,953	↑ 37,653	⇒ 161	↓ 47526
Gas (R5)	2021	↓ 15,242	↑ 2,706	↓ 30,861	↓ 155	↓ 47437
Mangistau-	2023	↑ 1,926	↓ 0,1873	↓ 0,651	↑ 38,7	3228*
munaigas	2022	↑ 1,978	↓ 0,223	↓ 0,658	↑ 38,3	3228*
(R3)	2021	↓ 1,079	↑ 0,385	↑ 0,751	↓ 37,03	3228
Note: compiled by the authors based on the source [27,28,29,30,31]						
* No data, in this regard, we use the indicators for 2021						

The data presented in Table 1 allows us to draw the following conclusions. The peculiarity and specificity of project management in the oil and gas industry in different countries, due to the differences and geographical diversity of projects, and differences in the historical aspects of the development of oil fields, and other factors, explains the significant dispersion in the effective economic indicators of companies. Thus, the PetroChina-4 company (ranks 4th among the companies studied), demonstrating the best indicators in terms of revenue, has the lowest indicators in terms of ROS -5 (ROS ranks 5th among the companies studied), ROE-4,

Labor productivity(LP) -5, Revenue per employee ratio (RER) -3, while employing the largest number of employees. At the same time, ExxonMobil occupies overall 1st place in the overall rating of all absolute and relative indicators (Profit -1, ROS -2, ROE-3, LP -1, RER -1. Figure - 6). Ranking oil companies based on the results of their activities allows us to assess the level of project management. Regardless of the impact of exo- and endogenous factors, oil companies use investment resources quite effectively and provide a fairly high level of ROE.



Figure 6 – Key performance indicators of oil companies (relative performance)

Note: Calculated based on data from Table 1

The influence of specific factors on project management, systematized and reflected in Figure 3, taking into account the performance results of oil companies (Table 1, Figure 6), allows us to draw the following conclusions in general.

Project management in the oil industry requires taking into account the influence of external factors at each stage of the project life cycle: depending on the technological features of the project [32]:

- a) exploration and preparation of the oil deposit for further mining;
- b) mining of the deposit.

A field development project requires taking into account special stages of the life cycle, which consist of:

- geological exploration (prediction of oil and gas content, assessment of oil and gas accumulation zones, regional aerospace photography, geophysical and geochemical surveys, construction of regional seismic profiles, drilling of reference, parametric and structural wells, GIS);

- prospecting work (the stage of identifying and preparing objects for exploratory drilling; the stage of searching for deposits);

- preparation of industrial deposits for mining (stage of assessment of deposits; stage of preparation of deposits for mining).

Project management of oil projects for the development of found and developed fields has specific stages of the life cycle in the form of: the stage of intensive development of an oil field; maximum production level stage; the stage of decline in oil production and the late (final) stage of development. [32] Each of the implemented stages requires taking into account the identified factors (Figure 3).

Discussion

Negative Impact of Oil Project Management. The problems of environmental pollution, water resources and public health require attention and solutions from the authorities and business. In particular, speaking of environmental impact of oil production in studying states, article conducts that the US faces several problems: hydraulic fracturing problem, oil spills, and oil wells' abandonment. Hydraulic fracturing technology require large amounts of water and produce a lot of wastewaters, also using dangerous chemicals that damage water habitats. The biggest oil spill in last decades is the US was the Gulf of Mexico spill in 2010, Bureau of Ocean Energy Management and the Bureau of Safety and Environmental Enforcement of the US forced oil industry to review oil production technologies and environmental risks. Oil wells' abandonment becoming a big problem when old oil wells are treated wrongly causing environmental pollution and earthquake risks [33].

Chinese oil industry suffers mostly by oil spills and air pollution. With less advanced oil production technologies and bigger scale of production SO₂, NO_x, PM and VOCs emissions are creating huge treats to environment. Oil spills in such a huge amount of oil production also creates more problems comparing to the US. Studies shows that China releases more than 1.2 million tons of oil in the sea every year [34].

Iraq's environmental problems with oil production have world common issues such as air pollution, wastewater but Iraqi situation shifts focus on the human casualties. In the Nahra Omar settlement, in the Basra province, acid rains and toxic chemicals after oil production cycle cause more than 6 percent of the population of 1,500 either dead or are suffering from cancer

or related health conditions, with the majority of the people with health complications being under 25 years old [35]. Such problems are unique for Iraq in context of low safety level in oil production chain and no official data for amounts of air pollution and chemicals released in the environment.

Environmental challenges in Kazakhstan oil production industry have a lot common with other countries mentioned but also have particularities such as Caspian and Aral Sea problems. Both of them are located in oil production regions of the country. The problem with wastewater reveals in a new iteration. Caspian and Aral Sea are big closed water bodies that depend a lot on the water supplies around them. If Aral Sea problem became so burning that the lake almost disappeared, Caspian Sea on the other hand have a chance for bright future, which oil industry actively diminishes. Loss of water habitats, receding the water level and hydrocarbon pollution are the main Kazakhstan's oil industry issues. Approximately 70,000 to 90,000 tons of oil hydrocarbons are annually introduced into the Caspian Sea via river runoff, with an additional 29,000 tons originating from coastal sources. High concentrations of oil products are observed throughout the entire sea, with oil traces detected over an area exceeding 800 square kilometers around offshore drilling platforms. The total area affected by oil pollution in Western Kazakhstan is 194,000 hectares, with the volume of spilled oil surpassing 5 million tons [36].

Conclusion

The features of the development of oil projects in the presented countries and its impact on countries' economics have many national differences: historical events of the past, different paths of economic development, interaction between the state and the extraction of mineral resources' economic sector. However, modern economic and political trends, establishment of international organizations, as well as technological progress create an atmosphere in which, despite many differences, the oil production economy sector is a subject to shared laws and patterns.

Oil projects not only provide income and investment, but also influence global market dynamics and geopolitical relations. Currently, oil industry accounts more than 40% of global energy consumption. The global availability of oil supply does not mean that future demand will be at risk. Total production as a percentage of the inferred resource base has been relatively stable over the past 40 years, and this trend is expected to continue. In addition to the world's known reserves, there is still a significant amount of crude oil that has not yet been discovered in regions whose geology suggests a high probability of commercially viable reserves.

At the same time, it is worth remembering globalization; modern interconnected economic development has led to an imbalance in energy supply and demand. As a result, energy resources become both a serious problem for all countries of the world, capable of influencing global economic trends, geopolitics and international relations, and a solution to these problems. The development of a strategic energy corridor in this demand, as a vital guarantee of energy security has come to the forefront of global attention.

The results of the study allowed us to confirm the stated hypothesis. Thus, the export- or import-oriented mining of the oil and gas industry in the country determines the features in

the project management of the oil and gas sector. Carrying out a comparative analysis of the performance results of oil companies based on economic-statistical and coefficient methods made it possible to confirm the second hypothesis. The higher the import dependence of the economy on oil, the more resources are used as capital for the implementation of oil projects, and the lower the profitability of this capital.

Authors' contribution:

– development of the idea, collection and analysis of materials, writing the text - Han Naichao,
– construction of the research concept, design of the work, interpretation of the results of the work, critical revision of its content and approval of the final version of the article for publication - Adambekova A.A.

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Особенности управления нефтяными проектами США, Китая, Ирака и Казахстана и их влияние на экономику стран

Аннотация. В данной статье анализируются особенности нефтяных проектов стран-экспортеров и стран-импортеров нефти и их влияние на экономику. В статье отражено современное состояние нефтяных проектов, обозначены основные проблемы в развитии управления нефтяными проектами. Практическая значимость статьи заключается в установлении факторов и условий, определяющих проектный подход к управлению нефтяными проектами. Теоретическая значимость данного исследования заключается в выявлении

факторов, определяющих экспорто- или импортоориентированность национальных экономик. Оригинальность исследования определена методическим подходом, примененным для учета макроэкономических факторов в построении проектного подхода к управлению нефтяными проектами, в таких странах, как США, Китай, Ирак и Казахстан. Методической основой исследования послужили методы контент-анализа, историко-хронологические, статистические и сравнительный методы. Инфобазой послужили годовые отчеты нефтяных компаний, результаты обзоров нефтяного рынка аналитических агентств и метаданные ОПЕК. Результаты исследования сформированы в виде рекомендаций для проектных менеджеров, руководителей нефтяных компаний и исследователей, изучающих вопросы проектного управления.

Ключевые слова: проектный менеджмент, нефтяная отрасль, экспорт, импорт, факторы развития.

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АҚШ, Қытай, Ирак және Қазақстандағы мұнай жобаларын басқару ерекшеліктері және олардың басқа елдердің экономикасына әсері

Аңдатпа. Бұл мақалада мұнай экспорттаушы және импорттаушы елдердегі мұнай жобаларының ерекшеліктері және олардың экономикаға әсері талданады. Мақалада мұнай жобаларының ағымдағы жағдайы көрсетілген, мұнай жобаларын басқаруды дамытудағы негізгі мәселелер анықталған. Мақаланың тәжірибелік маңыздылығы мұнай жобаларын басқарудың жобалық тәсілін анықтайтын факторлар мен шарттарды анықтауда болып табылады. Бұл зерттеудің теориялық маңыздылығы ұлттық экономикалардың экспортқа немесе импортқа бағытталған сипатын анықтайтын факторларды белгілеуде болып табылады. Зерттеудің өзіндік ерекшелігі АҚШ, Қытай, Ирак және Қазақстан секілді елдердегі мұнай жобаларын басқарудың жобалық тәсілін құруда макроэкономикалық факторларды есепке алу үшін қолданылған әдіснамалық тәсілмен анықталады. Зерттеудің әдіснамалық негізіне болып мазмұнды талдау әдістері, тарихи-хронологиялық, статистикалық және салыстырмалы әдістер алынады. Ақпараттық негізі ретінде мұнай компанияларының жылдық есептері, аналитикалық агенттіктердің мұнай нарығын шолу нәтижелері және ОПЕК метрикалық деректері қолданылды. Зерттеу нәтижелері жобалық басқарушыларға, мұнай компанияларының басшыларына және жобалық басқару мәселелерін зерттейтін зерттеушілерге ұсынымдар түрінде қалыптастырылған.

Түйін сөздер: жобалалық басқару, мұнай саласы, экспорт, импорт, даму факторлары

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