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THE ROLE OF INVESTMENT FINANCING IN THE OPERATION OF A OIL REFINERY

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Abstract. This paper analyses the comprehensive investment framework for the restructuring of the oil refining sector in Ukraine. The *purpose* of the study is to identify priority areas, strategies and policies to facilitate structural transformation, increase competitiveness and promote economic growth in the sector. *Methodology*. The research is based on a comprehensive review of national and international literature on investment strategies in the oil refining industry. It uses a qualitative approach to analyse the critical components of an effective investment framework, including technological, financial, institutional and policy aspects. In addition, the study considers case studies and empirical evidence to validate the proposed strategies. *Results*. The study outlines a multifaceted approach to investment in the oil refining complex, based on a unified classification of high-tech goods and an industrial development strategy aligned with national interests. It advocates public-private partnerships and the implementation of national projects as key mechanisms for promoting industrial restructuring. Furthermore, the study emphasises the importance of reducing investment risks and optimising depreciation funds by introducing higher depreciation rates and incentives for high-tech enterprises. It recommends preferential financing tailored to the specific characteristics of the industry and structural modernisation. The research also examines alternative sources of investment, such as joint investment institutions and venture funds, and stresses the need for an enabling legal environment and investor protection. It emphasises the role of the foreign trade aspect of government policy in reducing tariffs on high-tech products and providing political and economic support for industry exports. The paper recognises the importance of regional policies in creating a favourable investment climate and advocates the establishment of industrial parks and innovation clusters tailored to regional specificities. This study provides a comprehensive investment framework to support the structural transformation of Ukraine's oil refining complex. By implementing the strategies and principles outlined here, Ukraine can facilitate economic growth, enhance its competitiveness in the global market and ensure the sustainable development of its oil refining industry.

Key words: investment environment, oil refining complex, structural adjustment, economic growth, competitiveness.

JEL Classification: E22, E29

1. Introduction

This policy brief explores the key role of investment finance in maintaining and expanding the operations of oil refineries. Refineries are important players in the energy sector, and their efficient operation has a significant impact on economic development. This study examines how strategic investments affect the productivity, competitiveness and sustainability of these facilities.

Overall, investment financing plays a crucial role in the development and successful operation of oil refineries. Efficient use of investments ensures not only the attraction of resources but also their efficient allocation.

Analysing different approaches to the definition of "investment activity", it was found that this concept goes beyond resource mobilisation and also covers the implementation of investments. Investment activity implies not only the intensity of attracting investments to an enterprise, but also the creation of conditions for their effective placement. For example, studies by the World Bank and the International Finance Corporation

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show that a 1% increase in private investment in developing countries as a percentage of GDP contributes to annual economic growth of 0.71%, assuming that other factors remain constant.

Oil refineries are critical to the oil industry and the energy sector as a whole. Investment financing is essential for the efficient operation of these enterprises and has a significant impact on their ability to attract resources, develop production capacity and achieve competitive advantage.

This study analyses the key role that investment finance plays in maintaining and expanding the operations of oil refineries. These facilities are an integral part of the production of various petroleum products, and their efficient operation is vital for economic development. It will examine how strategic investments affect the productivity, competitiveness and long-term sustainability of refineries. By comprehensively exploring key areas, the authors aim to shed light on the multifaceted relationship between investment financing and refinery performance.

2. The Need for Investment in Oil Refineries

Oil refineries play a vital role in the oil industry and the energy sector as a whole. Investment finance is essential for the efficient operation of these companies and has a significant impact on their ability to attract resources, develop production capacity and gain competitive advantage.

1. Technological development and modernisation. Investments in refineries contribute to the development of oil refining technologies and modernisation of production facilities. This allows companies to apply more efficient refining processes, reduce losses and improve product quality. Investments in research and development also contribute to the introduction of new technologies that improve production efficiency and reduce environmental impact.

2. Expansion of production and product diversification. Investments allow refineries to expand their production capacity and diversify their product range. This allows companies to increase production volumes, enter new markets and meet the diverse needs of consumers. Investments in production expansion also create new jobs and contribute to the social development of the region.

3. Energy efficiency and environmental safety. Investments in oil refineries can be aimed at improving energy efficiency and reducing environmental impact. This includes the introduction of advanced emission reduction technologies, waste management solutions and rational use of energy resources. Investments in these areas help companies comply with environmental regulations, ensure their sustainability and maintain long-term competitiveness.

4. Information security and protection. In today's digital era, refineries also need to invest in cybersecurity and data protection. Investments in appropriate technology, security systems and staff training help prevent cyber-attacks, data breaches and other information security threats.

The concept of "investment support" is subject to different interpretations and there is no unanimous consensus on its definition. According to O. Yu. Shylova (Shylova, 2012), investment support for business development can be considered as a subsystem of organisational and economic support aimed at covering production costs and accumulating resources for the purpose of expanding production capacity and product sales. These resources are allocated in accordance with the principles of long-term planning, optimisation and versatility. This means that investment support is aimed not only at meeting the current needs of the enterprise, but also at providing opportunities for long-term development and growth. It includes not only financial resources, but also other necessary resources required to implement investment projects and ensure the efficient operation of the enterprise.

M. I. Kisil defines investment support not only as the formation of financing sources for investments, but also as a combination of various conditions, resources, economic mechanisms, levers and measures necessary to ensure the normal (desired) course of investment processes (Kodens'ka, 2013).

This means that investment support covers not only financial resources, but also other necessary conditions and resources that guarantee the successful and efficient course of investment processes. These elements may include proper planning, organisational procedures, management decisions, legal support, strategy and policy development.

The purpose of investment support is to ensure the normal, rational and efficient course of investment processes by providing the necessary resources, mechanisms and conditions. This

helps to reduce risks, ensure sustainable development of the enterprise and achieve the set investment goals.

O. O. Kolesnyk defines investment support as a set of conditions, resources and measures necessary for the implementation of the investment process. This means that for the successful implementation of investment projects certain conditions, resources and measures are required to ensure the normal course of these processes (Kolesnyk, 2011).

According to S. V. Parakonnyi, investment support includes all types of tangible and intellectual assets invested in entrepreneurial and other activities with the aim of generating profit or achieving a social effect. This means that investment support includes various resources and measures that contribute to income generation and positive impact on the social sphere (Parakonnyi, 2011).

Various sources are used to support the investment development of the oil refining industry, including private and foreign capital, credit resources and internal investments of enterprises. Investment support is assessed through sectoral, facility and innovation aspects.

– **Industry-specific assessment.** This involves looking at the main activities that contribute to the development of the refining industry. This includes an analysis of the main sectors that contribute to the growth of the refining industry.

– **Object-oriented evaluation.** It focuses on investments in the acquisition and improvement of assets related to the production capacity of the oil refining industry. Investments aimed at improving the existing infrastructure and capacity in the industry are assessed.

– **Innovative aspect.** This dimension measures capital investment in the development of new production methods and technologies in the refining sector.

The unique nature of the oil refining industry makes investment support an objective necessity. However, financial challenges within the country's economy often make credit inaccessible to medium and small oil refining companies. In such circumstances, investment becomes an important source of funding for both current and future operations in the oil refining sector. This is because available capital is often insufficient and access to credit resources is limited (Myronchuk, 2012).

The state plays a crucial role in investment support for the oil refining industry. Its responsibilities include creating favourable conditions and regulating the process of attracting investment for the development of this industry. The key roles of the state include:

1. **Creating a legal and regulatory environment.** The government should develop effective legislation and regulations that will facilitate the attraction of investors to the oil refining industry. This could include special legislation, tax incentives, property rights protection and other market mechanisms.

2. **Financial support.** The state may provide financial support in the form of grants, subsidies or other forms of financing to facilitate investment in the oil refining sector.

3. **Infrastructure development.** Adequate infrastructure, including transport networks, energy systems, logistics centres, etc., is essential for the efficient operation of refineries. The government should support the development of this infrastructure to encourage investment in the refining industry.

4. **Market regulation.** The government should establish rules and standards for the oil refining market, including product quality, environmental standards, competition and other factors that may affect the investment attractiveness of the sector.

5. **Development of scientific and technical potential.** The state can promote the development of research institutions and innovative projects aimed at improving technologies in the oil refining industry. This may include investments in research and development of new methods and technologies.

In general, the state acts as a facilitator, creating conditions for attracting investment and promoting the development of the oil refining sector. Its role is to ensure a stable and attractive investment climate that fosters the industry's growth and supports the country's economic development.

4. Investment Sources and Strategies

According to the Law of Ukraine "On Investment Activity", the subjects of investment legal relations may be investors and participants. Investors are considered to be investment entities that decide to invest their own, borrowed or attracted assets, both tangible and intangible,

in investment objects. Participants in investment activities may be citizens and legal entities of Ukraine or other countries that facilitate the implementation of investments as executors of orders or on the basis of instructions from the investor.

The scientific literature notes that the subjects of investment legal relations in the oil refining industry are the state, legislative and executive authorities, local self-government bodies, foreign states, domestic and foreign legal entities interested in the development of oil refineries. These actors play different roles and have different interests in the development of oil refineries. Their investments in infrastructure, technology, enterprise and project development have a significant impact on the economic potential of the oil refining industry and ensure its sustainable development.

Undoubtedly, oil product manufacturers play a crucial role among the participants in investment relations that use investments. First of all, this applies to oil refining enterprises of various organisational and legal forms, such as oil refineries, chemical plants, petrochemical companies and others. However, it is possible that individuals, including business entities, may also use investments in the oil refining industry.

In the context of investment activity in the oil refining sector, it is important to consider both corporate structures, such as refineries and chemical plants, and the potential involvement of individual investors who can contribute to the development and growth of this industry.

A fundamental aspect to consider is the need to use all available sources of financing for investment activities in the oil refining industry. The most common sources of investment financing are own and borrowed resources. Own resources include profits, depreciation charges, non-repayable financial assistance and contributions from founders to increase the company's charter capital. Borrowed funds comprise various forms of cash that enterprises borrow and for which they pay interest or incur certain liabilities to creditors.

Based on the research of domestic and foreign authors on the topic of investment provision of enterprises, a classification of investment resources for active development and improvement of the efficiency of economic activity of an enterprise has been developed (Kalenska, 2015). The system of investment provision can be considered through several components:

1. Technical and technological component. It covers elements of the company's production and business activities aimed at technical and technological support for the production of goods and services. This includes equipment, production lines, vehicles, information technology and other production resources.

2. Material component. It includes the system of supplying raw materials, semi-finished products and other materials required for production in accordance with investment projects.

3. Innovation component. It includes a system for managing the company's innovation policy aimed at ensuring competitiveness.

4. Human resources component. It relates to the management of personnel involved in the implementation of investment projects.

5. Organisational component. Covers the internal structure of the enterprise, including departments, services and management responsible for decision-making within the investment security system.

6. Information component. It includes information technologies and resources that help in planning and implementing investment decisions.

7. Financial component. It concerns the formation and management of financial resources required to support the investment process.

8. Marketing component. Involves marketing methods and market research to achieve the company's investment objectives.

The analysis allows to identify priority areas of investment support for structural reforms in the oil refining complex of Ukraine within the framework of industrial, investment and innovation, institutional, budgetary, depreciation, credit, fiscal and foreign economic components of the state policy.

Investment priorities for structural changes in the oil refining complex should be based on a standardised classification of high-tech goods and industry development strategies. These areas include the following:

1. Restructuring the industry to reflect national interests and competitive advantages.

2. Reduction of energy intensity of production.

3. Decrease the industry's dependence on fluctuations in global markets.

4. Development of international cooperation based on the commercialisation of intangible assets

and cooperation in critical industries for Ukraine, such as space, aviation, shipbuilding, automotive, defence, and information and communication technologies.

5. Creation of powerful organisational structures capable of accumulating investment resources, promoting radical innovations, forming closed production cycles, and facilitating cooperation at the regional, national and international levels.

The state strategy for investment support of structural transformations in the oil refining complex should be based on partnership between the state and the private sector within national projects and use transparent mechanisms of public procurement and ordering. These mechanisms should align the interests of the state with the capital and innovation potential of private enterprises.

Given the insufficient level of development of high-tech sectors in the industry, it is necessary to consider expanding the list of national projects. This could be achieved by including initiatives that promote structural changes in the oil refining complex.

The state budget policy should facilitate the development of the oil refining complex by reducing the cost of loans through the state and local budgets, creating the necessary infrastructure at the expense of budget funds, and financing the acquisition of intellectual property rights from the state budget. In order to promote industrial development and structural transformation, it is advisable to review the depreciation policy, which provides for an increase in depreciation rates and the introduction of depreciation privileges for enterprises producing high-tech products. In addition, it is necessary to control the intended use of depreciation and the application of relevant tax benefits.

To support the development of the oil refining sector, Ukraine could consider introducing "reverse takeover" transactions, which would allow Ukrainian companies to acquire foreign companies registered in European jurisdictions. This would give them the status of international companies and potentially lead to a listing on European stock exchanges. Moreover, it is important to promote a regional policy aimed at creating industrial parks and innovation clusters, taking into account the specific characteristics of each region. Such an approach can contribute to local economic development and increase the competitiveness of the oil refining industry.

Priorities for investment support for structural changes in the oil refining complex should be based on a standardised classification of high-tech goods and a strategy for the development of the industry that takes into account the national interests and competitive advantages of the country. The state investment policy should be based on public-private partnerships and national projects that will contribute to the restructuring of the industrial complex.

To reduce investment risks, the consolidation and integrated use of investment potential within territorial clusters is an important component of the institutional aspect of government policy. Support for the high-tech industry sector involves cheaper loans, infrastructure development, and financing the acquisition of intellectual property rights from the state budget.

To ensure efficient use of enterprises' depreciation funds, it is necessary to implement a depreciation policy with increased depreciation rates and depreciation bonuses, especially for high-tech enterprises. To support industrial restructuring and expand credit support, concessional financing of investment projects should be introduced, taking into account industry-specific features and structural modernisation.

The foreign economic component of state policy should promote investment support for structural change by reducing customs duties on high-tech goods and services, as well as political and economic support for industrial exports.

5. Conclusions

Thus, supporting the structural transformation of the oil refining complex in Ukraine requires a comprehensive and strategic approach. Prioritising investment in high-tech industries, aligning national interests and leveraging competitive advantages are key principles that should guide government policy. Cooperation between the public and private sectors, backed by national projects, will facilitate the necessary restructuring of the industry.

To reduce investment risks and increase the efficiency of depreciation funds, it is important to introduce a policy of higher depreciation rates and introduce depreciation privileges for high-

tech enterprises. In addition, concessional financing of investment projects based on industry specifics and structural modernisation will stimulate industrial development.

Exploring potential sources of investment, such as collective investment institutions and venture capital funds, requires the creation of a favourable legal environment and the provision of guarantees to investors.

The foreign economic aspect of the government's policy should promote the reduction of customs duties on high-tech goods and services, as well as political and economic support for the industry's export efforts.

In parallel, regional policy should play a key role in creating an attractive investment climate and promoting the development of industrial parks and innovation clusters adapted to the unique characteristics of each region.

By adhering to these principles and strategies, Ukraine can effectively support the structural changes needed in its oil refining complex, contributing to economic growth and global competitiveness.

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