Trends and Patterns in the Economic History of the Energy Complex

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Research

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Abstract

The age-old history of capitalist countries includes the fact that many of these metropolitan countries, which, unlike their colonies, were producers, used various methods to gain global control over energy resources, as they were concentrated in the colonies. Control over strategic resources allows control over the national economy of any country as a whole. The article describes a broad-scale conflict in which resource dependence is directly proportional to the intensity of social production required for the effective functioning of the national economy as a whole.

Introduction

Industrial capitalism developed on the energy base of coal, and then the development of productive forces brought oil into their sphere. It happened about half a century ago. Initially used for lighting purposes, the liquid was soon introduced as an industrial fuel. The true meaning of oil has become clear only since the invention of internal combustion engines: first working on so-called «light» oil products and then heavy. Thus, the energy at the disposal of man has become more significant, it has made it possible to apply it in new, much more sophisticated and adapted forms.

Because oil, unlike coal, has been more efficient both in terms of production methods and in terms of the nature of the deposits, making production much easier, oil sources were sought by the large countries and by the organizations that they created (mainly concerns and trusts, i.e. monopolistic capital).

With the emergence and functioning of monopolistic associations, there is a close link between the economic and political life of the State and its concern for its own international situation. The appearance and development of the oil energy base caused a coup, able to compete with the «industrial revolution». By involving itself in the industrial production of oil, imperialism has been able to radically transform its structure. And because the world's oil reserves are limited, they have become the scene of fierce competition, which has continued to intensify over the next century.

The problem of the confrontation over the resource base is related to the problem of international geo-economic dialectics and imperialism, as was pointed out in the writings of K. Marx, who at one time emphasized that it is the world market production that is an inherent characteristic of capital. Consequently, globalization was, is and remains part of the capitalist economy and its social nature.

If socio-economic relations are analysed, that emerge in any market economy model, we can conclude that the spatial system is also one of competition and, at the same time, one of monopolistic practices. Because, first, there are «actions» of capital, manifested in the market forms of goods, profits, savings, etc. In modern economic conditions, this «action» has a supranational character and is realized through power based on the principle of extraterritoriality. Second, there is some «logic» of state-centric power, which is based on the principle of territoriality. If you combine these two processes, where the main actors are «capitalist» and «politician» (entrepreneur and power), we get the inevitable «conflict», because of which it is necessary to rethink the relationship between classical and new imperialism.

The conflict is associated with two phenomena - capital volatility and geographical proximity. This can be observed during the study of history, when for several centuries' classical imperialism, using political mechanisms and strategies allowing to act at the international level, controlled such «conflict». This influenced the relations between developed capitalist countries and non-capitalist formations, which led to the so-called «inter-imperialist rivalry».

Since imperialism typically splits monopolistic entities and the state, the emergence of oil as an energy base, multiplies and expands the process. At the same time, oil becomes a specific energy base of those industries that are connected with «manifestation» imperialism. Consequently, oil dominates where capitalism is the purest form of imperialism.

Results

The modern capitalist economy has three main types of mechanical energy: coal (steam engines); oil (internal combustion engines); and natural gas (LNG).

All forms of energy involved in production have the property of converting to electrical energy. This is a common process involving all capitalist States. The electrification of production is, above all, a technical process so obvious and real that it is prompted by the most elementary instinct of capitalist society, the pursuit of profit and competition. This is especially true not for the competition of individual small enterprises for which the transition to electrification might be too wasteful, but for the relatively large enterprises or enterprises group.

The intensive growth, rapid diffusion of electric energy, the constant process of converting all primary forms of energy into electric energy, instead of their direct use in production, is an indisputable fact. Moreover, on the basis of the data provided above, it can be argued that these phenomenon have become a clear sign of modern capitalist production. This is the energy base, the very foundation of industrial organization, a phenomenon that is inevitably radical and that must change the entire structure of material productive forces.

Quite naturally that the application of electric energy has received a sudden boost to its development just in the era of monopolistic capitalism, and in the era of giant capitalist associations, since the application of electric energy not only emerged during the period of capitalist society but also found the conditions for its further development.

Scale of development, diversification, internationalization and subsequent globalization – all these factors contributed to its transformation, which in turn facilitated the transition from monopoly to competitive market management. The post-imperialist era required new and effective ways, methods, instruments and mechanisms to reduce the risk of investment and to increase the capital intensity of new projects. Thus, one can imagine how the stages of development of energy development are constructed: from the stage of monopoly to the stage of competition (see Fig. 1).

Strategic interests and strategies of importers, exporters and major energy companies have changed accordingly. With the growth of energy companies, it is not individual contracts between individual market participants, nor even collective agreements within individual groups of participants, that have come to the fore, in quantitative terms, but completely different collective agreements between groups as such. The strategic interests (behavioural strategies) of consumer States, producing countries, large energy companies and many other international organizations have begun to change accordingly.

In global markets, increased competition and international interaction, taking into account inter-State regulation, have become interlinked. As market space has expanded, common legal frameworks have become increasingly important. Together with bilateral treaties and agreements, multilateral treaties that took into account the formation of common «rules of the game» in these market zones played an increasingly important role.

The formation of a single world energy market with common «rules of the game» was already based on the principles of fair competition. Many factors have influenced and continue to influence the processes: technological, economic, geopolitical, etc. Some accelerate the process while contributing to the formation of a global energy market, while others delay it.

An example is the natural gas market, which has provided a technical and economic opportunity for the trans-ocean transport of gas, and gas has become the main engine of international trade in recent decades. As such, it will remain for the next 15–20 years. Factors that have hindered the development of a global gas market include those that reduce the energy import requirements of energy-deficient countries and regions: energy efficiency growth, renewable energy penetration, economic crisis, geopolitics, and now - coronavirus pandemic.

The role of the technological factor in the development of the globalization of gas markets, where energy transport technologies are changing most rapidly, plays a major role, as the emergence and development of technologies for the transport of gas through large-diameter pipelines, opened up the possibility of regional gas markets. As a result, the development of liquefied gas transport technologies has paved the way for the formation of a global gas market. With increasing globalization, factors that create instability in the world market as a whole are emerging. Such factors include geopolitical and socio-economic relations between leading energy centres, environmental problems, the crisis of traditional models of extensive development, and the scarcity of natural resources, while continuing to be wasted. The authors of the article believe that these factors, which create instability in the world energy market, might not exist if the valuation and use of national wealth were part of the overall problem of the accumulation, generation and use of national wealth. Why the evaluation? Because valuation is an important task for any market, as for the state - to increase income in using elements of wealth in the production of GDP, and for the owners of companies - to increase market capitalization.

Conclusion

It was noted by many contemporary experts that the financialization of the global economy had drawn the attention of Western and domestic economists to the importance of the transition from capitalism to globalization. If the country is faced with a serious problem of the rational use of national wealth, it will not be resolved by any action or act on the part of the State to disrupt the delicate balance of its national economy. History has shown that the difficulties and ineffectiveness of the use of national wealth by the State are the consequences of limiting access to resources, and above all to energy.

Market-oriented reforms can be a solution only under the following conditions: if there is widespread access to resources; if there is sustainable government regulation to protect the long-term interests of the economy and society, etc. The search for balance between extremes is the story of capitalism's transition to globalization.

Abbreviations

LNG

liquefied natural gas; GDP: gross domestic product.

Declarations

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Authors' contributions

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Availability of data and materials

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Competing interests

The authors declare that they have no competing interests.

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Figures

Figure 1

Patterns of energy development