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# DRIVING FORCES OF ECONOMIC SYSTEMS IN THE CONDITIONS OF THE FORMATION OF HUMAN ENVIRONMENTAL SECURITY

Hryhorii Sharyi\*, Doctor of Economic Sciences, Svitlana Shara\*\*, Postgraduate Student, Viktor Dubishchev\*\*\*, Doctor of Economic Sciences National University "Yuri Kondratyuk Poltava Polytechnic"

\*ORCID 0000-0001-5098-2661 \*\*ORCID 0000-0002-6669-6667 \*\*\*ORCID 0000-0001-9460-7054

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**Introduction.** Economic theories and economic schools in every historical period of human development tried to describe the existing economic order and determine the ways of its progressive development. In this case, the authors take into account the cardinal influence on the evolution of economic theories of mercantilism, physiocracy, classical political economy, neoclassical economic theory, economics, marginalism, the German historical school, institutionalism, Keynesianism, neoclassical synthesis, monetarism, environmental economics.

Modern geopolitical challenges are concentrated most in the environmental sphere, in relation to global warming, which is deepened by the anthropogenic influence of mankind on the noosphere, with the deterioration of the environment and the formation of environmental risks for mankind.

Scientists of the world have started searching for methods and mechanisms of influence on production, consumption and mentality of mankind in order to overcome threats and modern environmental geopolitical challenges. A special place belongs to scientists in the field of economics. After all, only effective incentives and economic sanctions can form an environmentally safe environment for the development of mankind.

The main material of the study. Time determines the social significance of each theoretical and methodological component of a wide variety of theoretical and applied teachings in the field of economic science.

Scientists of the world, like humanity, are constantly searching for a panacea for human, economic, and especially environmental diseases.

Since ancient times, the evolution of economic theories points to their constant search. starting with early economic theories.

Thus, in the ancient world as early as the fourth millennium BC, when the first ancient Eastern state formations appeared and state forms of governance with a slave economy were established, economic thought began to be systematized into an economic theory, which society accepted as a guide to action in the implementation of economic policy. Therefore, it is no coincidence that it is believed that economic science was born precisely in the Ancient East, the cradle of world civilization. Even then, in the bowels of the natural economy of Eastern slavery ("the Asian method of production") with its inherent active participation of the state in economic processes, the scale of commodity-money relations expanded and the problems of the coexistence of state, communal and private property became more urgent. Later, during the first millennium BC, the need to understand the essence of economic categories and laws manifested itself no less acutely in the states of classical (antique) slavery of the VIII–VII centuries. B.C. times of Geosides, the foundations of the economic teaching of Aristotle and Xenophon, their further development in the works of the Saman school and F. Aquinas in the XIII century [1].

# Economy and operation of national economy

Mercantilists J. Colbert, Beaudin J., Stafford V., Mann T., Moncretien A. and other scientists saw wealth in money and in active protectionism, in supporting the expansion of trade capital, promoting the development of domestic industry, especially manufacturing. As a result, the "economic nationalism" of mercantilism gradually grew into a theory where the source of wealth was determined by natural resources, production, and especially agriculture [2].

Mercantilism as the first theoretical attempt to explain the essence of the capitalist mode of production arose on the basis of the generalization of the experience of the initial accumulation of capital and solved the practical issues of accelerating this process. Mercantilism was not an accidental phenomenon in the history of European economic thought. He had a real basis and solved the practical problems of that time.

Today's relevance of mercantilism is determined by its contradiction at the theoretical and methodological levels.

In general, the ideology of mercantilism is revealed by the following main provisions. First, wealth is only that which can be realized and is actually realized in money; that is, wealth is nothing but the accumulation of money. Secondly, production creates the necessary prerequisites for the formation of wealth, and therefore requires constant encouragement and development. Thirdly, the immediate source of wealth is the sphere of circulation, that is, the sphere where products are transformed into money. Fourthly, the sphere of circulation is at the same time a source of profit, which is generated due to the sale of goods at a higher price than the purchase price: G - G — money that generates money — this is the capital formula of the mercantilists. Fifth, not every circulation of goods and money is a source of wealth. The circulation of goods within the country, according to mercantilists, although enriches some individuals at the expense of others, does not increase or decrease the total amount of national wealth. The source of wealth is only foreign trade. Sixth, the balance of foreign trade must be active, that is, it is necessary to buy less from foreigners and sell more to them (however, the views of early and late mercantilists differed greatly regarding the understanding of the active balance).

Over time, the theory of the balance of money, trade balance and "economic nationalism" of the mercantilists gradually grew into a theory. where the source of wealth was determined by natural resources, production, and especially agriculture

Physiocrats of the XVIII century. led by F. Kahne brought economic theory to a new qualitative level [3].

Physiocracy, born in 1750, was a school of economic thought that based its basic ideology on minimal state intervention in the economy. In contrast to mercantilism and its strong commitment to government intervention in the economy, the physiocrats supported a freer flow. Current, based on the fact that there was a natural phenomenon in the economy, giving rise to part of the term "physiocrat" ("physis", nature in Greek), which itself regulated the market. Quenett, like Turgot, created one of the first schools against state intervention.

The wealth of peoples of Smith A., the theories of Malthus T. and Ricardo D. completed the process of formation of classical political economy, which was also strengthened by the quantitative theory of money of Boden J., Hume D. and other theoretical developments of the scientists of that time.

Smith A., in his studies on the nature and causes of the well-being of nations, first formulated the concept of a free market, when everyone benefits due to self-interest. The "invisible hand of the market" is formed in the triad of land, labor, and capital and is the classic foundation of economic theories. The special importance of natural resources and land was emphasized by Ricardo D. in the theory of rent.

Separately, it is necessary to single out the theory of the economic base of Kurt P., who proved the economic self-sufficiency of the economic life of individual cities in Denmark, which still forms the theoretical basis for the existence of the regional economy [4].

Smith's A. wealth of nations, theories of Malthus and Ricardo D. completed the process of formation of classical political economy, which was strengthened by the quantitative theory of money of Jean Beaudin, Hume D. and other theoretical developments of scientists of that time [5; 6].

Adam Smith, in his research on the nature and causes of the welfare of nations, first formulated the concept of a free market, when everyone benefits because of self-interest. The "invisible hand of the market" implemented in the triad of land, labor, and capital is the classic foundation of theories. The special significance of natural resources and land was emphasized by D. Ricardo in the theory of rent [7].

Economic theories of the XIX–XX centuries. continued the search for economic truth. Marxism developed the theory of labor and added value, which contains a number of advantages in the methodological sense and contradictions in the theoretical content in the conditions of monopolistic entrepreneurship, transnational corporations and relevant pricing mechanisms such as transfer pricing.

#### Економіка та управління національним господарством

Marginalists of the Austrian school formed the theory of marginal utility, trying to describe the economic processes of that time and giving them a logical and scientific conclusion. Today, marginalism is widely used in the analysis of economic processes of the school of neoclassicism, and followers of marginalism largely determine the economic face of economic science in the world.

Boundary values, subjectivism, statics, a course towards a market economy that is economically neutral to politics form the economics of Marshall A. [8].

Such schools as mathematical Pareto V., Clark J., American Stockman S. and Cambridge Marshall A., Fischer I. represent the neoclassical direction and describe economic mechanisms from the standpoint of the "demand-supply" model.

The neoclassical school is also united by methodical individualism, rationality of behavior and market equilibrium. It is systematically criticized by representatives of the Austrian economic school, from Menger K., Behm-Bawerk O., Wieser F. to Hayek F., who took the path of libertarianism (neoliberalism).

The macroeconomic theory of monetarism is also one of the main theories of modern neoclassical thought since the 1950s, led by Friedman M., which originates from D. Hume's "Essay on Money."

The American neoclassical school is unique in its own way:

- 1. Mainstream economics (orthodox mainstream) (Samuelson P., Northhouse V.).
- 2. Reaganomics (theory of promotion).
- 3. Theory of growth poles (Perroux F.).
- 4. Hypothesis of three sectors [4].
- 5. The raw material theory that forms the local economy (Innes G.).

The Cambridge school of neoclassicists is represented by the economic theory of A. Marshall, the neoclassical growth theory of Solow R., Swan T.

In general, the neoclassical doctrine of economic growth was formed on the basis of two sources – the theory of factors of production, originating from Sey J., Senior N., J. Mill J. Clark, and the concept of the production function, which takes into account the interaction of two factors – labor and capital.

The definition of the problem of growth by the classics of political economy Petty V., Smith A., Ricardo D., which is not ignored by the modern neoclassical school, but is used to a greater extent by Keynes J. and his followers. The neoclassical model of economic growth was developed by Solow R. in the 1950s and 1960s. This model shows how the three main factors of supply – capital, labor and scientific and technological progress – affect the volume of production, that is, economic growth.

Based on the above, it is natural to raise the question of economic growth and its basic principles in modern conditions. Thus, on the basis of classical models of economic growth, namely Harrod-Domar, Cobb-Douglas, Solow-Swan, it is legitimate to focus efforts on the development of the concept of their ecological content, which is what the authors of the article are working on.

Historical school with its methodology of the 19th – 20th centuries Rosher V., Hildebrand B., Zombart V., Weber M., Levytskyi A., Tugan-Baranivskyi M., Muller A., etc. started a qualitatively new stage of formation of economic knowledge in world economic science. Thus, the followers of Müller A. and List F. in Germany saw the problem of classical science in the fact that abstract generalizations did not reveal the full depth of economic phenomena and could not be used in practice. They applied a specific inductive method – the method of historicism to economics instead of the deductive method studied by classical and neoclassical theorists.

The historical school opposes a special theory of the development of the national economy to the general theory of the classics and, as one of the consequences, brought scientific thought to the institutional analysis of Hamilton V., North D., and Galbraith D.

Regulatory institutions of the state were raised in 1936 by Case D., when Keysianism formed the methodology of regulatory policy and the special role of the state in economic development.

The new classical theory was formed in continental Europe (Freinburd School) by a German group of scientists. Also, today there are new historical and social schools that are on the sidelines of economic science, but have the right to life.

Modern scientific schools:

- 1. Neokeysianism Kuznets S., Samuelson P., Tobin D., Solow R.
- 2. Neo-institutionalism Marg D., Coase R., Galbraith J., North D., Buchanan M.
- 3. Constitutional economics shape the modern economic and scientific worldview, if not the most.

# Economy and operation of national economy

The outstanding scientist Kuznets S. was born in Pinsk in 1901, studied as a student with the representative of the history school Levytskyi V. (1918-1921) in Kharkiv. In the USA, Kuznets S. created an economic theory of construction cycles (18-25 years), as housing renewal by new generations. He also created the economic theory of growth, which we refer to the institutional models of Neo-Keysianism.

Kuznets S. formed a new accounting theory, "taught the world to count" and introduced the concepts of GDP and GNP, and the "Kuznets curve" for equalizing income and losses over time became one of the assets of economic thought of the century.

In the 1990s, neoclassicists and institutionalists formed the latest theory of growth – the fifth main approach, where the state plays an important role in the process of economic development. That is, if in the 1980s the fourth approach considered state intervention to be the cause of economic problems, then the fifth approach justified this intervention.

Today, one cannot ignore the political economy of non-democratic regimes, which forms a special field of economic science, as well as the theory of state regulation by Chung S., the author of the "open door" policy in China, which led to the Chinese economic miracle.

Various scientists point to the solution of certain development problems, and the institutionalist Azarmadis K. proved that education ensures economic growth and this is important for the peoples of Africa and Asia.

Coase R. proved that transaction costs, property rights in the institutional structure, is not the only way to detinize the economy.

Institutional balance of rights and interests ensures economic development, and institutional equilibrium reduces transaction costs at the point of equilibrium to zero. In particular, the institutional balance of economic rights and responsibilities of subjects of economic relations reduces transaction and corruption costs to zero and detinizes the economy.

Separately, it is necessary to characterize a relatively new direction of economic theory: constitutional economics, which involves the formal anchoring of the economic system in constitutional norms: economic constitution, when the rules of the economic game bring the opportunism of subjects to the needs of society's development Buchanan J., Campbell V., McCormick R., Tollison R., McKenzie R., Barenboim P., Nersesianz V., Soto E., etc.).

In recent years, scientists are increasingly turning to the ecological and economic sphere. For example, Pinar K. (Canada) – defending the theory of institutional contracts, develops economic schools in the field of nature use, and especially water use.

Nobel laureate in economics Ostrom E. developed an optimal institutional mechanism for managing natural resources and, together with Williamson O. (representative of new institutionalism), built a management model where ecological resources are used without privatization, without expropriation, but directly "man – nature".

Scientists led by Shirley M.— the president of the Coase R. Institute, study exclusively the issues of resource supply and ecological and economic regulation. It is taken into account that environmental safety at work is the key to the country's environmental safety.

Environmental and social threats are huge and their general technique and methodology, evaluation criteria are necessary. Also, not only ecological bioindication is needed, but specific economic criteria for evaluating incentives and sanctions. For example, at the local micro level, we must answer that it is cheaper for humanity to burn 1 ton of coal, or to insulate a house, to make an engine that can run 100 km burns 1 liter of fuel, or drive the old one at the rate of 14 liters per 100 km, carbon-free metallurgy, which melts 1 ton of metal and energy costs for hydrogen.

The ecological revolution of public consciousness, which was initiated by Vernadskyi V., led humanity to environmentalism, which gave birth to environmentalism as a social ecological movement. States cannot ignore it and forming a paradigm of socially responsible management, taking into account the limitation of natural resources, form elements of environmental security and environmental economic systems of their countries [9].

Environmentalism reflects not only the need to take into account the limitations of natural resources, but also requires marketing to take into account the negative impact on nature when consumption increases, ignoring the negative consequences for the environment. Marketing should also be ecological.

In the modern world, ecological and economic theories are being formed:

- 1. Geographical determinism is defended by scientists: Taylor H., Smith R., Simple G.
- 2. Theory of climatic optima Huntington E.
- 3. Ecological marketing, on which the American marketing association took a position, starting from 1970.

#### Економіка та управління національним господарством

The formation of green business and green (carbon-free) economy is relevant today. In Ukraine, there is a strong incentive to reduce CO2 emissions to the European level – 250 kg per 1 ton of steel. Five metallurgical plants of Ukraine have reached the level of emissions of up to 250 kg, but this is only 5.5% of steel, or 1% of consumed electricity. In general, the environmental economy of the state is the climatic goal of our country, in all spheres without exception.

The mechanism of the newest "carbon" tax is being formed in the world, which significantly changes economic life in the sphere of consumption, production and will change economic mechanisms, priorities and the economic system.

#### Conclusions.

- 1) The special value of certain economic theories of economic schools, analysis in economics, is determined by the fact that different peoples and countries live in different economic times, that is, their economic life takes place in different economic time periods, but ecological life takes place in the ecological present.
- 2) It is necessary to maintain regulatory influence on the managing system or a separate object, because without influence the economic situation will only worsen, and the economic system will fall into a state of chaos and natural and economic entropy.
- 3) It is necessary to form a global and state economic system of incentives and sanctions and ecological and economic standards, a carbon tax, to carry out a planned revitalization of artificial objects and anthropogenic landscapes, including the stimulation of organic agriculture and green industry, as the newest global trend of human development.
- 4) Scientists, in constant search for various options for solving ecological and economic problems, settled on the concept of forming an institutional environmental economy, which most rationally incorporates the idea of sustainable development and has a compromise mechanism, predicting economic growth and environmental preservation. The environmental economy of the state is the economic goal of Ukraine in all spheres without exception.

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Hryhorii Sharyi, Doctor of Economic Sciences. Svitlana Shara, Postgraduate Student. Viktor Dubishchev, Doctor of Economic Sciences, National University "Yuri Kondratyuk Poltava Polytechnic". Driving forces of economic systems in the conditions of the formation of human environmental security.

The article reviews the history of economic teachings, their methodological principles in the context of the formation of ecological and economic theories and environmental economics and the global ecological and economic system. The special value of certain economic theories, economic schools and analysis in the economy is determined by the fact that different peoples and countries live in different economic times, and certain economic time periods have different regional institutional features. The need for regulatory influence on the economic system, with the aim of preventing the processes of natural and economic entropy, has been studied. It is emphasized that the need for the formation of world and state economic systems, incentives and sanctions, and ecological and economic standards and carbon tax. It was determined that the most rationally absorbs the idea of sustainable development and forms the mechanism of institutional balance and compromises, the institutional environmental economic system.

**Key words:** economic theory, environmental economics, ecological and economic norms, economic present, institutional balance.

### Economy and operation of national economy

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Шарий Григорій Іванович, доктор економічних наук. Шара Світлана Юріївна, аспірант. Дубіщев Віктор Петрович, доктор економічних наук, Національний університет «Полтавська політехніка імені Юрія Кондратюка». Рушійні сили економічних систем в умовах формування екологічної безпеки людини.

В статті оглядово розглянуто історію економічних вчень, їх методологічні принципи в контексті формування еколого-економічних теорій і інвайроментальної економіки та глобальної еколого-економічної системи. Визначена особлива цінність окремих економічних теорій, економічних шкіл та аналізу в економіці тим, що різні народи і країни проживають в різному економічному сьогоденні, а окремі економічні часові періоди і мають різні регіональні інституційні особливості. Досліджено необхідність регуляторного впливу на господарюючу систему, з метою попередження процесів природної і економічної ентропії. Підкреслено, що необхідність формувань світових та державних економічних систем, стимулів і санкцій та еколого-економічних нормативів і вуглецевого податку. Визначено, що найбільш раціонально вбирає ідею сталого розвитку і формує механізм інституційної рівноваги та компромісів, інституціональна інвайроментальна економічна система. Враховано, що економічні теорії та економічні школи в кожному історичному періоді розвитку людства намагалися описати існуючий економічний порядок та визначити шляхи його прогресивного розвитку. У даному разі авторами враховується кардинальний вплив на еволюцію економічних теорій меркантилізму, фізіократії, класичної політичної економії, неокласичної економічної теорії, економікс, маржиналізму, німецької історичної школи, інституціонвлізму, кейнсіанства, неокласичного синтезу, монетаризму, інвайронментальної економіки. Сучасні геополітичні виклики сконцентровані найбільше в екологічній сфері, щодо глобального потепління, яке поглиблюється антропогенним впливом людства на ноосферу, з погіршенням довкілля та формуванням інвайроментальних ризиків для людства. Вчені світу розпочали пошук методик та механізмів впливу на виробництво, споживання і ментальність людства, щоб подолати загрози і сучасні екологічні геополітичні виклики. Особливе місце належить вченим у сфері економіки. Адже тільки дієві стимули і економічні санкції можуть формувати інвайроментальне безпечне середовище розвитку людства.

**Ключові слова:** економічна теорія, екологічна економіка, еколого-економічні норми, економічне сьогодення, інституційна рівновага.

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