#### ΕΚΟΗΟΜΙΚΑ

УДК 339.9 DOI 10.32342/2074-5354-2023-1-58-1

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# LOGICAL DIMENSIONS OF THE GLOBAL ECONOMIC WORLD

The article addresses logical approaches to explaining the economic world. The introductory part reveals the general prerequisites for the logical analysis of large systems. The rest of the study is devoted to the logical structure of economic worlds: at micro-, macro- and mega-levels. In particular, the micro-level (firm, multinational enterprise) is analysed based on institutional logic. The macro-level of economics in a broad sense is outlined by deterministic (Laplace's) logic. Its essence is to consider the whole set of possible factors both economic and non-economic ones that affect the course of economic dynamics. The global level is mapped out by three deterministic logics: technical (technological), economic and political.

# *Keywords: logic, economic world, micro-level, macro-level, mega-level* JEL: *F01, D00, E00*

У статті розглядаються логічні підходи до пояснення економічного світу. У вступній частині розкриваються загальні передумови логічного аналізу великих систем. Решта дослідження присвячена логічній структурі економічних світів: на мікро-, макро- та мегарівнях. Логічні виміри економічного світу базуються головним чином на детерміністській логіці, заснованій на модальній та інституційній логіці кінця дев'ятнадцятого і двадцятого століть. Динаміка та структура мікрорівня (підприємство, фірма, багатонаціональне підприємство) пояснюється інституційною логікою, заснованою на американській школі (Р. Коуз, О. Вільямсон та ін.). Інституційна логіка у широкому розумінні включає цінності, норми, звичаї, які люди використовують у своїй повсякденній діяльності в масштабі певного простору та часу. Економічні інститути мають давню історію, супроводжуючи соціально-економічний розвиток від епохи неоліту до сучасності. Їх логіка була сформована рівнем соціального, економічного, технологічного, культурного розвитку різних людських спільнот ойкумени. Макрорівень економіки, з одного боку, визначається детерміністською (лапласовською) логікою. Її суть полягає в урахуванні всієї сукупності можливих факторів (економічних і неекономічних), які впливають на хід економічної динаміки. Індивідуальні потреби, уподобання, виробничі можливості, взаємодія індивідів створюють структуру неокласичної моделі економіки. Кейнсіанська детерміністська логіка має структурний характер, коли поведінка індивідів визначається загальним станом економіки в цілому. Логіка марксистського економічного аналізу, також відомого як наддетермінізм, походить від діалектики. З іншого боку, першочергове значення мають праці Т. Веблена, старої американської школи інституціоналізму та його сучасних представників (Д. Норт, Р. Нельсон, Дж. Вінтер). Інструментарій логічного аналізу мегарівня найбільше відображений у працях Г. Лейбніца, І. Канта, Р. Карнапа та у сучасній інституційній логіці. Логіку глобалізації, її історичні фази можна простежити відповідно до різних типів глобалізації у чотирьох просторово-часових вимірах: екстенсивності, інтенсивності, швидкості та взаємності та трьох детермінованих логіках: технічній (технологічній), економічній та політичній.

#### Ключові слова: логіка, економічний світ, мікрорівень, макрорівень, мегарівень JEL: F01, D00, E00

#### Introduction

Since ancient times scientists and philosophers have concerned themselves with the logic of the global world order. C. Ptolemy and N. Copernicus formulated the general worldview. In fact, the logical approaches to the global world are reflected in the works of G. Leibniz, S. Laplace, I. Kant, R. Carnap as well as in the works of modern researchers such as D. Chalmers, S. Kripke, G. Putnam, etc. G. Leibniz considered the logic of possible worlds in terms of modal logic. In his work in 1686, he speculated that 'each individual substance has a complete individual concept (CIC), which contains (or from which are deducible) all the predicates true of it past, present and future' (https://plato.stanford.edu/entries/leibnizmodal/#pagetopright).

The logic of Pierre-Simon Laplace, later known as Laplace's demon, was that the current state of the universe reflects its past and future. There was still the problem of having knowledge about the whole system of factors that affected its development, and superintelligence able to master it all. The author noted that 'given for one instant an intelligence which could comprehend all the forces by which nature is animated and the perspective situation of the beings who compose it – an intelligence sufficiently vast to submit these data to analysis - it would embrace in the same formula the movements of the greatest bodies of the universe and those of the lightest atom; for it, nothing would be uncertain and the future, as the past, would be present to it eyes' (Laplace, 1902). Given the time (1814) when those views were expressed, they were primarily about human intelligence. In the modern era, we can count on artificial intelligence platforms that can actually implement Laplace's ideas. At the same time, it should be noted that there is an extensive literature that denies or refutes Laplace's concept, mainly from the standpoint of theoretical physics. Carnap's vision of the logical world order was set is set forth in the fundamental works "The logical structure of the wand pseudo problems in philosophy" (Carnap, 2005), where he formulated the principles and methods of logical analysis, defined the object of logic, system and structure of complex formations. R. Carnap offered the following scheme of logical analysis. First, an epistemological analysis, or rather a theoretical analysis of the content of the experiment, should be carried out. This is an abstract, conceptual analysis. The first step is the "logical division" of the theoretical content of the experiment into two parts – an epistemologically sufficient component and an epistemologically necessary component. An experiment can be analysed in different ways – if there are several constituents, it is necessary to establish a logical relationship between them. In modern regression analysis, a similar procedure is to check independent variables for multicollinearity. If the first component is sufficient, then the second one is subject to rational interpretation due to the need to obtain sufficient and necessary experimental conditions. The logical character of the theoretical content of experiences, due to which certain constituents are dispensable relative to others, is to be called their overdeterminateness (see: Carnap, 2005).

In another paper, Carnap praised Leibniz's idea of a possible world, noting in particular that 'Leibnizian possible world is represented by his state – descriptions: a class of sentences containing, for every atomic sentence, either it or its negation' (*https://plato. stanford.edu/entries/carnap*). The modern author D. Chalmers, relaying on the work of Carnap, offers his own vision of the logical structure of the world. Chalmers argues that the world can be constructed from a few basic elements. He develops a scrutability thesis, saying that all truths about the world can be derived from basic truths and ideal reasoning. This thesis leads to many philosophical implications: a broadly Fregean approach to meaning, an internalist approach to the contents of thought, and a response to W. V. Quine's arguments against the analytic and the a priori etc. (*Chalmers*, 2012). S. Kripke recommended that his 'possible worlds' should be regarded as 'possible states (or histories) of the world', or just 'counterfactual situations', or simply 'ways the world might have been' (*Kripke*, 1972).

Logical analysis has two main approaches to a mode of thought, the Euclidean-Cartesian and the Babylonian (Dow, 1998). In this case, the mode of thought in the narrow sense means the ways (methods) of creating and presenting theories and means of implementing beliefs about the effectiveness or truth of our arguments. The Cartesian-Euclidean mode of thought uses basic axioms, deductive logic, mathematical tools, constructing mostly closed axiomatic systems (such as the general equilibrium system). According to this method, mathematics is the pinnacle of scientific purity. This mode of thought is also characterized by dualism (true/false view, positive/normative pattern, fact/thought, etc.). Structurally, the Cartesian-Euclidean mode of thought is universal. It deals with known and unknown knowledge, with knowledge known in principle. There is a certain conventionalism (agreement) that all knowledge is considered defined or at least equivalently defined (conceptual cognition in definiteness). Since the logical structure of this mode of thought depends entirely on the basic axioms, it is also called atomism or reductionism, which at the same time contributes to the widest possible recognition of this approach. In particular, the famous American school led by P. Suppes defends the axiomatic concept of the universe. The Babylonian mode of thought originates from the Babylonian Talmud, the teachings of the Stoics, the scientific thought of the ancient Romans. This style of reasoning was used mainly in theology and jurisprudence. In contrast to the Cartesian-Euclidean mode of thought, the Babylonian style is of an applied nature and operates in open systems.

At the same time, it should be recognized that to date, fundamental research on economic logic or the logic of economic theory is rare in the scientific information field (Skousen. 2014). An exception is the work of the Irish economist of the XIX century J. Cairnes' "Character and logical method in political economy" (Cairnes, 2001), where he, in particular, noted the contribution of A. Smith, T. Malthus, D. Ricardo, J. C. Mill in the development of political economy, emphasized the predominance of abstract deductive method of analysis, disagreed with the use of mathematical methods proposed by St. Jevons in "The Theory of Political Economy". We should also highlight some fragments in current publications on international, global political economy (McGrew, 2011; Andersson, 2020).

## I. Logic of economic micro-level

general considerations Based on about the logic of possible worlds, lets study the logical structure of economic worlds: micro-, macro- and mega-levels. The micro-level represents the logic of a company, a multinational enterprise (MNE) as the primary link in the economic world. As a multinational enterprise is one of the leading institutions of the world economy and international economic relations, the institutional logic specifies the coordinate system where the MNE evolves. Institutional logic in a broad sense includes values, norms, customs that people use in their daily activities on the scale of a certain space and time. Economic institutions have a long history, accompanying socio-economic development from the Neolithic era to the modern one. Their logic has been shaped by the level of social, economic, technological, cultural development of various human communities of the ecumene. During the XX century, the scientific interpretation of the logic of institutionalism was established, although, as an economic trend, institutionalism emerged in the late XIX and early XX centuries. What are the main features, principles, patterns, mechanisms of institutional logic that create a theoretical and applied basis for the analysis of the logic of MNE? The general definition of institutional logic is that it determines the path of development of a particular social world. Institutional logic includes a set of sound, experimentally tested rules and norms that determine the behaviour of individuals. institutions, which is to some extent predictable and regulated. The components of institutional logic are socially determined and are patterns of material practices, assumptions, beliefs, values, etc., according to which individuals organize and reproduce their material substance and social reality. Institutional logic has three main dimensions: normative, symbolic (cognitive), structural, and four forms: additional, competitive, multiple and hybrid. All these forms are manifested in the activities of the MNE. The normative dimension is determined by the type and system of rules, symbolic (cognitive) one depends on models of interpretation, structural dimension correlates with material supplies. There is also a system of multilevel, hierarchical institutional orders or idealtypes according to Weber, including market, corporations, professions, state, society, family, religion. An important area is the

logic of internal organisational relations, especially in the development of unification processes (mergers and acquisitions, strategic alliances creation, etc.).

General description of ideal institutional logic elements is presented in the Table 1.

The cornerstone of institutional logic is the value that permeates all its components, plays a formative, constitutive function.

In the field of economics, it is necessary to take into account the position of the founders of institutionalism. Thus, T. Veblen used the evolutionary logic of Charles Darwin, noting, in particular, that the struggle for survival had to take place in the form of cooperation (Mestrovic, 2010). The logic of Veblen's institutional building logic was grounded in traditions, customs, their evolution, influence on the behaviour of individuals and the American pragmatism philosophy (Almeida, http:// dx.doi.org/10.1590/0103-6351/2994). In evolutionary theory, Veblen singled out instinctive and cultural aspects, perceiving the latter as habits and traditions. In fact, institutions were created as a result of se-

Table 1

Type of logic	Source of legitimisation	Source of knowledge	Source of norms	Purpose
Market	Company's values	Market position	Own interest, rising the efficiency and profit	Coordination of the majority of relations in the society
Professional	Professional knowledge	Affiliation to the professional associations	Organisations and associations	Rising the reputation of experts
Corporation	Company's position on the market	Management staff	Employment in particular company	Rising the company's size and its diversification
State	Participation in democratic processes	Bureaucratic dominance	Source of observed norms: affiliation to nation	Increase in the common welfare
Religion	Transcendental dimension in the human life	Charisma of clergy	Affiliation to particular union	Increased presence of symbolism and religious interpretation in daily life

#### Properties of ideal institutional logic types

Source: Jagodziński, www.worldscient and ficnews.com

lective and adaptive processes, the selection of effective forms based on the inheritance of natural inclination to thrift, which Veblen called the fundamental principle with its roots going back to the scientific heritage of W. Occam and A. Smith.

# II. Macro-level of economic logic

The definitions and statements given at the beginning of the article, other modern approaches and concepts allow for formulating some principles on the logical preconditions of macroeconomic analysis in a first approximation. The macro-level of economics in a broad sense is defined by deterministic (Laplace) logic. Its essence is to take into account the whole set of possible factors (economic and non-economic ones) that affect the course of economic dynamics. Individual needs, preferences, productive capacity, interaction of individuals create the layout of neoclassical model of economy. Keynesian deterministic logic is structural in nature, when the behaviour of individuals is determined by the general state of the economy as a whole. The logic of Marxist economic analysis, also known as overdeterminism, is derived from dialectics. This logic is based on a much larger number of factors than the neoclassical one. For example, the decline in production is explained not only by reduced investment, consumption, lower stock prices and other similar determinants. These include many other examples such as economic changes in class structure, changes in climate and soil chemistry, changes in banking regulations, voting, and legal patterns, cultural shifts in consumption, taking on debt, business confidence, etc. (see: Wolf, Resnik, 2012).

According to Leontief, 'elaborated and extended by V. Pareto and his contemporaries and successors, the general theory of economic interdependence... promises to become a unified logical structure with two other fields of analytical inquiry, the theory of market mechanism and the analysis of the behaviour of an individual firm and of a separate household' (*Leontief*, 2007). The analysis of interdependence, according to Leontiev, is based on the theory of general equilibrium as an indisputable principle and the main core of economic theory. The structural interaction underlying the input-output model is directly related to Kant's transcendental logic and Carnap's general structural concept.

J. M. Keynes used fuzzy logic in his research to determine the hypothetical demand for money (*Dow and Ghosh*, 2009). Fuzzy logic allowed to expand the understanding of Keynesian monetary theory based on uncertainty and the creation of analytical tools for conceptualizing different views on the consequences of human logic.

In a narrow, pragmatic sense, the macroeconomic dimensions of the global world are to be explored on the basis of Lakatos' methodology and logic, Kuhn's paradigmatic logic, and Popper's situational According Lakatos' logic. to logic, neoclassical and Keynesian systems are considered as scientific research programs (SRPs) that have a hard core and a protective belt (*Lakatos*, 2003). The core of nonclassical theory is the general equilibrium model, while hypotheses and assumptions serve as the protective belt. The disadvantage of Lakatos logic is the lack of a mechanism of empirical corroboration. The problem with causal relations in macroeconomics is that empirical corroboration of specific causal relations is impossible. The only evidence that macroeconomists can provide in support of the hypothesis that X is a cause of Y, and that all sides accept as a neutral arbiter, reduces to a correlation between X and Y. And given the common cause principle, there are at least two further hypothesest hat are compatible with that correlation: the hypothesis that *Y* is a cause of X, and the hypothesis that there is a variable (or set of variables) Z that causes both *X* and *Y*.

Kuhn's paradigmatic logic points to the historical nature of economic paradigms (*Kuhn*, 2003). In economic science those are classics, neo-classics, Keynesianism, neo-Keynesianism, post-Keynesianism, new classics, new Keynesians, etc. Like Lakatos' logic, it does not provide empirical evidence, emphasizing, however, the consistent nature of changing economic paradigms in space and time. The issue of confirmation is raised by Popper in the work "Logic of scientific research" (Popper, 2010). Popper's situational logic has the potential to allow for scientific discoveries of that sort if a situational analyst (a scientist appleing situational logic) is understood as scientist who (a) accepts the rationality principle only conditionally (and is therefore protected against anomalies in the shape of patterns of irrational behaviour); who (b) realises that ideologies might lead to preferences for models that inadequately capture the situation at hand (and who therefore is able to roll back the influence of ideologies as much as possible); and who (c) can develop tentative models for the situation at hand (and is therefore familiar with adequate models for as many social situations as possible – a familiarity that is acquired through the study of causes that, like shifting liquidity preferences, can be ignored in many situations but have been relevant in earlier situations and might become relevant again). The hope is that this interpretation gives rise to a logic of macroeconomic discovery that might pass for an attractive alternative to the Kuhnian logic.

#### III. Mega-level

The logical preconditions for the study of the civilizational, global process should consider the scientific heritage of the logical schools of Antiquity (Megarian school), the Middle Ages, modern age and the present. The immediate tools of logical analysis of this complex phenomenon are mostly reflected in the works of G. Leibniz, I. Kant, R. Carnap and in modern institutional logic. Leibniz's creative legacy on a civilizational scale is primarily concerned with the idea of universal interdependence, expressively embodied at the present stage against the backdrop of globalisation and planetary integration. On this basis, political and economic unity is created along with the interdependence of a fragmented, vivid, heterogeneous world; the foundations of international civil society are emerging. The important point is Leibniz's views on possible worlds, that in the context of the civilization process can be specified in relation to three global civilizations and a number of local civilizations, which also claim the role of separate 'worlds'. Among those, according to S. Huntington and other famous researchers, there are not only interdependence, but also sharpening contradictions, clashes, military conflicts (Huntington, 1998). Leibniz's principles of non-contradiction, of sufficient reason, and others are of paramount importance for scientific analysis.

Kant's transcendental logic, according to its author, overcomes Plato's mysticism and Aristotle's scholasticism and reflects a general reality, i.e., is the logic of reality as opposed to formal, general logic (Kant, 2004). In the context of civilizational analysis, Kant's interpretation of logic as the relationship between observation and description, defining a world in which everything happens by rules, interpreting dialectics as possible and real (coinciding with the categories of Aristotle, Leibniz and Heidegger) are essential. According to some estimates, Kant's transcendental logic claims the role of basic logic as a logical synthesis of the objective definition of reality, as the logic of logic (Zeidler, 2000). The civilizational aspect of Kant's anthropological logical synthesis, in a simplified form, can be interpreted as the interaction of economic, political, cultural, religious, ethnic and other factors in civilizations. Economic, technological, historical, natural and geographical factors dominate in global civilizations (agricultural, industrial, post-industrial (noospheric and space). Local civilizations (Western, Islamic, Chinese, Indian, Japanese, African, Latin American, Orthodox) are based on values, religious beliefs, often have a territorial community, close mentality, traditions, customs, etc. Thus, these examples are a logical synthesis of the objective definition of reality, which is a global civilization, on the one hand, and local civilizations, on the other.

Carnap's Logical Structure of the World reflects the mega-level of the global economy. Its deterministic logic is widely used in modern analytical philosophy and economic theory. Indeed, cause and effect relationships are also a key to the analysis of civilization dynamics and structure.

What components are the determinants of modern civilization? Priority roles are claimed by scientific and technical factors, which are unparalleled in terms of speed, volume, impact on the economic, social, political, cultural and other spheres of public life. The information revolution, Internet technologies, electrification, and digitalization are significantly altering the image of civilization on a global and local scale (Schwab, 2016). Global networks are being established: information, production, innovation, value, corporate, trade ones, etc., where the subjects of different civilizations take part, and that in turn promotes their dialogue in the institutional dimension.

In this regard, the issue of the logic of globalisation naturally arises. In short, the essence of political economy is reduced to the study of the interaction of state and market and, accordingly, international political economy, (global) to the establishment of the relationship between international economic and international political relations. An important topic in the literature on globalisation is that the nation-state is declining, becoming too small for the big problems of life and too big for the small problems of life (Bell, 1997). Similarly, M. Castells argues that globalisation undermines the autonomy and decision-making power of the nation-state (Castells, 1997). The logic of the market is to locate economic activities where they are most productive and profitable; the logic of the state is to capture and control the processes of economic growth and capital accumulation. (Heilbroner, 1985). R. Heilbroner argues that the debate has lasted for centuries over the nature and consequences of the clash of fundamentally opposite market logic and state policy. The logic of economics and its impact on social and political organisation lies in what Samuelson called 'the most beautiful thing' in economic theory, namely in David Ricardo's Law of Comparative Advantage. The essence of this simple concept is that domestic and international society should be organized in terms of relative efficiency. The main content of the theory is to achieve a fundamental harmony of interests between states, firms, individuals and groups. Smith's theory of trade productivity is considered the classical logic of trade, Ricardo's theory is called the neoclassical logic of trade. The use of these logics shapes a systemic view of economic globalisation.

The logic of globalisation, its historical phases can be traced according to different types of globalisation in four spatio-temporal dimensions: extensity, intensity, velocity, and reciprocity between local and global development. According to these criteria, all stages of globalisation are quantifiable and need to be measured to know what phase of globalisation we are currently in (Talani, 2019). Four types of globalisation have the following specific definitions: thick globalisation, characterised by high extensity, intensity, velocity, and reciprocity; diffused globalisation, in which the first three dimensions are high, but reciprocity is low; expansive globalisation, where only the first two dimensions are high; thin globalisation, when there is only an extensity of connections. It is believed that the current phase is a form of thick globalisation. The components of this qualitative definition of globalisation are technological development, spilling over into the transformation of both the financial and the productive structures through the geographical restructuring of production and the establishment of a new global division of labour and power (GDLP). As a consequence of this structural transformation, the social and political systems also change, producing a polarisation of wealth, the subordination of politics to economics and the related decline of the nation state (Mittelman, 2000). The state modifies the perception of its role in the economy and in the provision of 'public goods', modifies the way they interact economically with each other in the international system, creating interdependences and international linkages. The multiplication of international or transnational relations and interactions produces a new complex and multilayered institutional framework. Not only has the state transformed internally, with respect to its domestic role, from the welfare state to the externally oriented competition state, but it has also modified its position in the international system with respect to the way in which it interacts with the other states. Whereas before globalisation its interactions with the international system relied heavily on security and defence, now the state, both in the developed and in the underdeveloped world, has shifted its priorities to business, trying to attract it, in particular, by:

- substituting the macro-level of policymaking with the micro-level (e.g. reduction of labour costs);

- cultivating a 'dynamic competitive' advantage which requires a more flexible economic structure;

- attracting foreign investment by adopting a neo-liberal macroeconomic agenda based on low inflation and a stable economy;

- promoting profitability and efficiency in both the public and the private sector (Cerny, 1999).

In conclusion, it should be noted characterized that globalisation is bv three deterministic logics: technical (technological), economic and political. Technical logics creates the preconditions global communications, movement for of goods, capital, labour, financial and intellectual resources between countries, regions and continents with unprecedented velocity and scale. However, during the Covid-19 pandemic, this trend slowed down somewhat. Thus, in 2020 the volume of world trade in goods and services decreased by 12%, foreign direct investment decreased by 35% and reached the level of 2005 (World Trade Statistics Review wto.org/english/ res e/statis e/wto2020 e; World Investment Report 2021, p. iv; 1). Summing up, we note that there are two main approaches to the logic of globalisation in international political economy, namely an orthodox one

and radical one. The first explains the logic of globalisation according to market dynamics, the second, as an imperative of capitalism (McGrew, 2011). Market dynamics is stemming from a special economic logic, in particular, efforts to achieve profits, wealth and high market positions in the process of deploying global economic integration and the location or distribution of economic activity. On the contrary, radical political economy in Marx's tradition interprets globalisation from the standpoint of the expansionist and universalist logic of modern capitalism. Thus, the specific economic logic of globalisation is based on both the market dynamics and the capitalism dynamics. The political logic of economic globalisation includes ideas, interests and institutions. The combination of the three logics of economic globalisation creates the preconditions for the formation of its theoretical, paradigmatic foundations.

## Conclusions

The logical dimensions of the economic world are based mainly on deterministic logic, grounded in Antiquity, Modern era and in the modal and institutional logic of the late XIX and XX centuries. The dynamics and structure of the micro-level (enterprise, firm, MNE) are explained by the institutional logic based on the American school (R. Coase, O. Williamson, etc.). The macro-level of economics, on the one hand, is defined by deterministic (Laplace's) logic. Its essence is to consider the whole set of possible factors (economic and non-economic ones) that affect the course of economic dynamics. On the other hand, the works of T. Veblen, the old American school of institutionalism and modern representatives (D. North, R. Nelson, J. Winter) are of paramount importance. The tools of logical analysis of the mega-level are mostly reflected in the works of G. Leibniz, I. Kant, R. Carnap and in modern institutional logic. The logic of globalisation, its historical phases can be traced according to different types of globalisation in four spatio-temporal dimensions: extensiveness, intensity, velocity and reciprocity and three deterministic logics: technical (technological), economic and political.

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LOGICAL DIMENSIONS OF THE GLOBAL ECONOMIC WORLD Anton S. Filipenko, Taras Shevchenko National University of Kyiv, Kyiv (Ukraine). E-mail: anton\_filipenko@ukr.net DOI 10.32342/2074-5354-2023-1-58-1

#### *Keywords: logic, economic world, micro-level, macro-level, mega-level* **JEL:** F01, D00, E00

The article addresses logical approaches to explaining the economic world. The introductory part reveals the general prerequisites for the logical analysis of large systems. The rest of the study is devoted to the logical structure of economic worlds: at micro-, macro- and mega-levels. The logical dimensions of the economic world are based mainly on deterministic logic, grounded in Antiquity, Modern era and institutional logic of the late XIX and XX centuries. The dynamics and structure of the micro level (enterprise, firm, MNE) is explained by the institutional logic based on the American school (R. Coase, O. Williamson, etc.). Institutional logic in a broad sense includes values, norms, customs that people use in their daily activities on the scale of a certain space and time. Economic institutions have a long history, accompanying socio-economic development from the Neolithic era to the modern one. Their logic was shaped by the level of social, economic, technological, cultural development of various human communities of the ecumene. The macro-level of economics, on the one hand, is defined by deterministic (Laplace's) logic. Its essence is to take into account the whole set of possible factors (economic and non-economic ones) that affect the course of economic dynamics. Individual needs, preferences, productive capacity, interaction of individuals create the layout of neoclassical model of economy. Keynesian deterministic logic is structural in nature, when the behaviour of individuals is determined by the general state of the economy as a whole. The logic of Marxist economic analysis, also known as overdeterminism, is derived from dialectics. On the other hand, the works of T. Veblen, the old American school of institutionalism and modern representatives (D. North, R. Nelson, J. Winter) are of paramount importance. The tools of logical analysis of the mega-level are mostly reflected in the works of G. Leibniz, I. Kant, R. Carnap and in modern institutional logic. The logic of globalisation, its historical phases can be traced according to different types of globalisation in four spatio-temporal dimensions: extensiveness, intensity, velocity and reciprocity and three deterministic logics: technical (technological), economic and political.

Одержано 14.12.2022.