(in Terms of the Wave Nature of the Innovative Economy)

BRONZE MEDAL

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Expressing appreciation and gratitude for awarding me the Kondratieff bronze medal, I would like to note that one hundred years have passed since the discovery of long economic waves or large economic cycles, but this theoretical concept has not lost its relevance. It is very significant that the idea of cyclicity and wave dynamics in the world economy was put forward in Russia (at that time, the USSR). We very much regret that the tragic fate of the great Russian scholar Nikolai Kondratieff did not let him finish his work on the theory of economic dynamics. But, having access to the results of his fruitful scientific work and extensive scientific heritage, we are obliged to develop and supplement the fundamental idea of cyclical transformations in the economy, which are conditioned by non-alternative trends and conjunctural tendencies of scientific, technological, socio-political, environmental-industrial, and other nature.

Unfortunately, the Russian science (including late Soviet and post-Soviet) significantly later began to reconsider the scientific heritage of Kondratieff about the large cycles and economic conjuncture. On the contrary, in the USA, back in the 1970s, renewed interest in the works by the Russian scientist emerged (and this is quite understandable: another large cycle had completed, and the world economy again fully demonstrated the significant impact of crises on all spheres of mankind's creative activity).

But, on the other hand, a number of prominent scientists such as Askar Akayev (2011: 109–124); Sergey Glazyev (1993, 2012: 27–42), Andrey Korotayev and Leonid Grinin (2012), *etc.* continue the research not only in the theory of economic statics and dynamics but also in the field of the fundamental

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basis of that theory, where a number of paramount academic issues have not been solved yet (here, we agree with Makasheva 2002), for example:

a) on the relationship between macro- and microeconomic context in large cycles;

b) on the role of time (as a meta-factor or meta-resource) in cyclical economic dynamics;

c) on the actual relationship between the duration of large cycles and the frequency of occurrence of technological shifts.

In 2012, an academician Askar Akayev, who was awarded a gold medal by the Kondratieff Foundation, presented a new scientific understanding of the works of the great Russian scholar in the form of an innovation-cyclical theory of economic development, having conducted a scientific synthesis of the works of Kondratieff and Schumpeter (Akayev 2013: 124–140).

This was not done accidentally because one of the important Austrian doctrine scientists who adhered to the ideas of marginalism not only enthusiastically accepted the concept by Nikolai Kondratieff about large cycles, but also integrated it into an innovative theory that was subsequently actively developed by both foreign and Russian scholars within the modern paradigm of the evolutionary economic theory.

It is obvious that the macroeconomic context of the theoreticalmethodological and scientific-practical interpretation of Kondratieff's works has received a powerful impetus of development in recent years. But the microeconomic context (and, first of all, in the context of small and medium-sized businesses) is still not extensively researched from the point of view of both the Kondratieff cycles and Schumpeter innovative waves, despite the fact that many Russian and foreign scholars have made foundational statements that the market and competitive success of economic agents depend not so much and not only on the level of their innovation activity (after all, the last thesis is an axiom and does not require proof); but rather on the ability to foresee the specificity of the forthcoming wave changes and the ability to proactively, *i.e.*, to implement the internal reforms, which are the essence of competitive advantages and key competencies in the future.

The author defines his scientific ideas on comprehending the theoretical research of Kondratieff and Schumpeter (including the modern paradigm in the form of the innovation-cyclic theory of economic development, which has been successfully represented in Akayev's works) as the doctrine of proactive approach to managing the dynamic competitiveness of corporate and business entities in the context of the Kondratieff – Schumpeter wave theory.

If the innovation-cyclical theory of economic development, proposed by Akayev along the lines of conceptual formulations by Kondratieff and Schumpeter, is of high scientific value and practical importance for resolving the global crisis problems, the scientific direction proposed by the author is aimed at eliminating local development crises of economic entities (both corporate and, first of all, small and medium businesses that are the growth drivers of national economy).

In his studies, the author proceeds from the philosophical-futuristic principle that 'the future is always uncertain, but it cannot be any' (Turchin and Batin 2015). Indeed, the potential for the development and growth, which could be accumulated by a business or a corporate entity, requires intensive development.

But at the same time, in his works on foresight design, the author focuses on the availability of knowledge (cognitive) resources among economic entities that can be transformed through key competencies into unique competitive advantages in the present and in the future. In fact, the microeconomic concept of the application of the theory of cyclicity and innovation waves complements the general evolutionary theory, as well as its separate provisions, successfully developed and substantiated by other Russian and foreign scholars whose scientific works were mentioned above. The extensive scientific base created within the past fifty years in the theory of strategic management and in the resource theory of firms (including within its dynamic paradigm) has made it possible to create a new understanding of the essence, laws of competitive and dynamically sustainable development of business entities in non-alternative trends that structure the economic space both from the institutional and the evolutionary-wave points of view.

I would also like to note that, on the basis of this work the author developed the following models and methods of research applied in the academic process and in the practice of management of economic entities in the real sector of the economy:

• methods for assessing the competitiveness of business entities, as well as tools for identifying reserves for obtaining new competitive advantages;

• models of foresight design of competitive future businesses on the basis of scientific and technological mainstream and long-term non-alternative global trends;

• concepts and roadmaps, which can be used not only in high-tech and venture, but also in traditional entrepreneurship.

Under the scientific guidance of the author, research papers (monographs) were written within the above cycle's paradigm. In addition, there were successfully written and defended PhD and doctoral theses, covering particular aspects of ensuring competitiveness and dynamic stability by updating the theoretical and methodological and research and practice bases of strategic management of business entities.

Thus, concluding my speech, I would like to emphasize that the main provisions for ensuring the dynamic competitiveness of business structures on the basis of the fundamental theses and hypotheses of the Kondratieff – Schumpeter theory are as follows:

a) There was developed an original scientific concept that allows formalizing a new model of entrepreneurship (in the economic, organizational and social aspects, since knowledge is certainly a social phenomenon) that incorporates both an innovation-cyclical and resource-methodological mechanism that describes the conditions and patterns of the formation of competitive advantages in the phase transitions of long Kondratieff and innovative Schumpeterian waves;

b) There were created methodological tools to support the managerial decision-making aimed at ensuring the dynamic competitiveness of business entities. This toolkit is based on foresight technologies that allow considering the possible trend of development of macro- and microenvironment, finding strategic growth points proactively formed due to intensive exploitation of cognitive resources and key competencies;

c) There was proposed the system-integrated academic complex, sought to be practically used not only in the management of dynamic competitive development of corporate and business entities, but also in the higher education academic process in order to consistently replace obsolete managerial and marketing approaches to the formation of knowledge in future economists and managers.

In addition, the author has personally developed a number of financialeconomic, economic-mathematical and logical-probabilistic models, the use of which makes it possible to study local and systemic problems of the development of business entities, sources and reserves of competitive advantages (including their vitality and ability to evolve), and predict the success of targeted and alternative development scenarios (including through medium- and longterm scanning of horizons), identifying the most optimal path of the movement of entrepreneurship from the present to the future.

More recently, the theory of evolutionary-cyclic macro- and microeconomic development has been supplemented by new research (Loghinov E. and Loghinova V. 2012) that interprets changes in the global economy from the perspective of multicyclicity and quasi-harmonicity of wave fluctuations. And this hypothesis opens a new direction in scientific and practical-oriented research. Kondratieff's theory of economic dynamics, including the innovationcyclical Kondratieff – Schumpeter theory, should, in my opinion, be successfully consolidated in the general modern economic theory, since we know that cyclicity is an evolutionary norm, and innovation is the determinant of the evolutionary norms' transformation, which provides the consistency of scientific theoretical concepts not only among them, but also with other most significant studies in macro- and microeconomic areas.

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