## *ACTUALITY THEORETICAL PROBLEMS OF POLITICAL ECONOMY*

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# ON THE WAY TO THE REGULATION BY CHEERFUL INTUITION (J. M. KEYNES)

The article deals with the methodological basis of the research system of organization management innovation. Identify and analyze some fundamental assumptions about the place and the role of public and private institutions in the coordination of economic interests of subjects of innovation-oriented economic environment, based on the scientific heritage of J. M. Keynes. The urgency of the spread of the investment multiplier theory to assess the influence of the multiplier effect of innovation on the Gross National Product is substantiated. Some aspects of the international experience of effective integration of innovation into the mainstream of public goods and services through the prism of NIS are disclosed. In the article is identified a number of activities that contribute to the intensification of the process of harmonizing the interests of the subjects of innovative activities to implement the strategy of innovative development.

***Key words:*** regulation of innovation, national innovation system, the multiplier effect of innovation, harmonization of economic interests.

**Problem statement.** Extraordinary problem of creating sustainable, well-functioning, competitive, poli-oriented truly innovation national production, which is an integral part of the global organic globalized production [1, p. 27] and must provide the optimum satisfaction of networking of needs, implementation the networks of innovative interests of its actors in modern conditions becomes complex, delineating the current and future contours that are immanent not only to it. In this context, institutional, organizational, technological sphere innovative activity become the objects of sets of issues, given their inherent contradictions, and understanding of

the dynamics of their movement not as primitive associations, but as a permanent process of their mutual influence.

Since the 70's XX century in most countries being formed the innovative models of economic development, from the middle of 90's of the XX century extends the term “new economy” (New Economy), which is “based on knowledge”, the core of which, according to M. Bailey, R. Lawrence, C. Shaw [2, p. 247], is “a bubbling cauldron of creativity and innovation”. This, in their view, in their turn causes to "the extraordinary gains in performance, including rapid productivity growth, rising incomes, low unemployment, and moderate inflation, that have resulted from this combination of mutually reinforcing advances in technologies, business practices, and economic policies" [2, p. 23], that mutually reinforce each other. Special urgency in recent years due to the significant benefits and positive externalities becomes the development and use of models of systemic organisation of innovation sphere.

In the movement of aforementioned trends over the last 25 years in our country carried out a continuous chain of reforms, ultimate goal of which is achieving fundamental changes in both the economic and the social order. The most complex and unresolved reformist challenge remains identify and ratio of the role of the state and the private sector in the innovative development of the Ukrainian economy, in forming NIS on the basis of multifunctional innovation-oriented market infrastructure.

**Analysis of recent research and publications.** In the educational and economic literature until the present time, there are many contradictory and even mutually exclusive interpretations of theoretical and methodological provisions relating to regulatory mechanisms innovative economy. Often some dependence of scientific research on given theme from the condition of economy in different periods of its development can be seen: or appear the ideas of active state regulation of the economy according to the postulates of economic theory of J. M. Keynes, or it turns negative perception of government intervention in the economy, and hence the criticism of any ideas and conclusions scientist becomes actual.

Proponents of “Economics” in their concepts are turning to consideration the innovation processes, extending the debate on adjusting the boundaries of state intervention in the economy and provide space market self-regulation. Through the "prism" of problems of interaction micro- and macro-level of the economy, they deepen the research of innovation. A Neo-Keynesians traditionally based on aggregated accounting features of propensities of the population, improving functional studies establishing conditions of economic equilibrium during underemployment resources in the developed market environment. As a “recipes” of stabilization of economic and innovative processes the followers of J. M. Keynes

propose to use the levers of government policy of income, improve distributive and redistributive relations.

The development of the theory of "rational expectations" and multifactor models of monetary growth in monetarists, inflation R. Lucas [3], consumption R. Hall [4], enriches the concept of innovation systems analysis by adaptation the forecasts and assessments of people to economic dynamics. Since, under the theory of "rational expectations" all necessary policy changes are immediately discounted by economic actors and are taken into account while choosing a current decisions, and "unforeseen collective effect" [5, p. 231] makes ineffective any anticyclical policy, so the use of various state measures requires not only take into account the presence of subjective expectations of the population, but also a techniques of adjusting these expectations.

Features of regulation of innovative processes is reflected in the works of leading domestic and foreign scientists, including them L. Van Deyn [6], M. Tugan-Baranowskii, J. Clark, N. Kondratiev [7], J. Schumpeter [8], B. Santo [9], V. Tarasevich [10] and others. Evolutionary models of innovative development discussed in the works of authors such as V. Bilotserkivets [1], O. Zavhorodnia [11], K. Freeman [12]. Mostly above authors discuss and explore the mechanisms and models of development of innovative economy at the macro-, meso- and micro levels.

However, we believe that in dealing with systemic organization of regulation of innovation despite the diversity of scientific concepts, is not superfluous to return to works of J. M. Keynes, as innovator and founder of macroeconomics.

**Formulation of aims of article.** Since the need to improvement paradigm of economic theory in accordance with the dynamic development of economy and society continues to persist, some fundamental provisions concerning identify and study the place and role of government and non-government institutions in innovation-oriented market economy that based on the legacy of J. M. Keynes with taking into account experience of foreign countries, are reviewed in the article.

**Presentation of main material of article.** In the study the emergence of innovative economy, according to some authors, the concept of NIS become the most significant event of our time [13]. These studies (in the field of innovation and technology) allowed to turn the "economy of science that brings sadness to the economy of hope" [14]. Terminology of NIS is firmly entrenched in the lexicon of researchers and those who make decisions [15]. Currently, the concept of National Innovation System (NIS) covers all the major components of the innovation process, including organizational, social, political and economic factors. This concept is widely used by researchers who make decisions at the regional, national and international levels [16]. It became the basis of innovation research, conducted by the

Organization for Economic Cooperation and Development (OECD), European Union, United Nations Conference on International Trade and Development (UNCTAD), the Organization for Industrial Development Organization (UNIDO).

What common ground are emerging between concepts NIS of and the fundamental teachings of J. M. Keynes?

It has become customary to link practical advice of Keynes on solving the problems of involuntary unemployment, but many programs in this area - the most practically significant consequence of its fundamental philosophical installation - rejection of attempts to establish a general and universal laws economic life. Readiness to question the approved norms and established notions concerning ethics and aesthetics under J. M. Keynes appeared as an intellectual radicalism (and, given that the proclaimed principles antidemocratic radicalism). Regarding economic theory, this willingness turned, first, as the ability to see the basic economic provisions of science, which he inherited from the previous generation of large economists of Cambridge, in-second, a flexible attitude to his own allegations. In the non-conformism's policy J. M. Keynes allowed to easily switch from one task to the other, using different methods of solution. Flexibility in policy - not a guarantee of success, but a necessary condition - and the example of J. M. Keynes it clearly shows. But the relationship of theory and policy at J. M. Keynes is the subject of special consideration. Learning the real state.

In the “General Theory of Employment, Interest and Money” [17] J. M. Keynes not only provides the theoretical foundations of macroeconomics as a science, but also offers innovative methods of recovery of the real economy in general, which in 30 years were represented in government economic stabilization programs in some states Europe and the United States. As adviser in the government of Great Britain J. M. Keynes develops much practical advice in the field of economic policy and first among academic economists receives from Queen the Title of Lord, which gave him the right to participate in meetings of the upper house of parliament in London.

And although, J. M. Keynes began his economic career as a follower of hot neoclassical wisdom, but research into the causes and mechanism Great Depression encourage him to become one of its critics. And about himself and about his colleagues, he notes in the most quoted part of his “General Theory”: “Practical men who believe themselves to be quite exempt from any intellectual influence, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back” [17].

J. M. Keynes showed that the economy as a whole cannot be adequately described in terms of simple market relations and factors what manage that "big"

economy is not just an enlarged version of factors that control the behavior of its "small" parts. The difference between macro- and microsystems makes a difference in the methods of analysis. Based on his own “revolutionary”, at the time, the research methodology, in spite of the prevailing economic views, J. M. Keynes identifies the need to avoid using state cuts in wages as a basic condition for elimination of unemployment, and also that consumption, given the psychologically caused by the human propensity to save is increasing much slower than income. By J. M. Keynes, “the largest proportion of successful action depends on the spontaneous optimism, not on sensible expectations ... Likely, our decisions lead to something positive, the consequences of which will be only after many days can be taken only through intuition cheerful”[17].

Under J. M. Keynes, the state have to displace private enterprises, stimulating demand in general (no matter what the government does, but while he spends, the economy rises). It shows why free market needs in the state: to start a manual starter economy and form what is lost and can be bought for money - confidence. It also introduces a factor that initial political economists ignored: people, the pursuit of profit, may become irrational, and this Irrationality is able to strengthen the financial capital. In correcting this J. M. Keynes saw the special role of the state in economic management: eliminate collective mistakes that no one can remove ourselves that, with our view, directly displays the theoretical study of the problem of considering and reconciling the interests of all the macro-economic actors.

J. M. Keynes demonstrated the need for active government intervention the economy and proposed a set of different financial instruments regulation. Although hi does not consider innovation as a condition of investment efficiency, but he was innovator of economic thought, develops and implements organizational innovation at the state level, lays the foundation for understanding the complex structure of NIS, which brings together the different levels (micro, macro) planes and aspects (technical, economic, psychological), and its proposals for the use of monetary and fiscal instruments of macroeconomic regulation measures have undoubted practical sense and specific conditions have proved promising.

It should be noted that the current development of NIS as never as before associated with the formation of such an environment, which generates and maintains in NIS lively intuition of movement for innovation in their production, distribution, exchange and consumption.

The national economy with the best level of performance Innovation, R & D expenditure, development of the knowledge economy have quite strong position in the world rankings that can be explained by a persistent multiplier innovation as a result of effective innovation. The modern theory of the multiplier can be extended to investment evaluation the multiplier effect of innovative systems.

The phenomenon multiplier in economics is based on two facts. First, the economy characterized by repetitive, continuous revenue streams and costs. Secondly, any change in income causes the change in consumption and savings in the same direction as the change in income. Primary, the change in the cost creates a chain reaction that although dies every next cycle, but leads to a multiple increase in net national product.

J.M. Keynes defines multiplier of investment as a ratio, showing growth national income as a result of investment growth. [17] In this case *k* is a multiplier value of investments. The method of calculating the multiplier investments to determine the increase in national income as a result investment growth can be interesting in their approach in determining the effect innovative changes.

The initial impetus to investment can give both business and government. Keynesian theory justifies the need to stimulate investment spending power. However, regardless of the sources of investment the higher economic actors propensity to consume, the more effect multiplier.

Investment multiplier model can be expressed as:

$$\Delta Y = k * \Delta I \quad (1),$$

where, $\Delta Y$ – increase in gross national income caused by the increase in value of investment costs $\Delta I$;

k – investment multiplier (coefficient), which shows the change of level of national income in response to changing investment.

Investment multiplier can be characterized as a change in consumption and savings of business entities:

$$k = 1/1 - MPC \quad (2),$$

where, MPC – marginal propensity to consume.

$$k = 1/1\text{-}MPS \quad (3),$$

where, MPS – marginal propensity to save.

The methodological approach used in determining in the formulas 2, 3 is interesting and can be further developed in the evaluation of innovative change.

The mechanism of action is based on the multiplier circuit revenues and costs economy, where the cost of some economic actors are converted into income other economic actors. Change in income leads to changes in consumption and savings. This increase in the gross national product is greater the higher economic actors in

the propensity to consume. Returning to the issue of innovation, of course, should agree with the conventional method of assessing the impact of increase innovation spending on growth of gross national product.

The initial increase in investment spending in the economy for innovation activity generates a chain reaction of growth of income innovation and its consumer spending, which leads to repeated increase in the gross national product.

Investment multiplier theory can be extended to estimate the multiplier effect of innovations on gross national product.

Investments in innovation have a significant impact on the growth of gross national product and increase the competitiveness of the national economy.

The impact of investment in innovation in key macroeconomic indicators can be presented as follows: increased investment in innovation leads to an increase in gross domestic product and gross national income, taking into account the multiplier effect, ie increase investment in innovation leading to growth in national output and total income society to value greater than the initial investment growth.

The mechanism of action of innovation multiplier based on the fact that additional investment in innovation change some entities converted to income of other economic entities received them as payment of innovative products and services. This income by participating in numerous chain of transformation, gradually reduced by the amount of savings and transferred as payment in consumer spending other subjects of the innovation economy, and so on.

Thus, the higher is the propensity to invest in innovation, the greater is multiplier effect. In general, the model innovation multiplier can be expressed as:

$$k = 1/1 - MPI \qquad (4),$$

where, MPI – marginal propensity to invest in innovation.

Marginal propensity to invest in innovation, in their turn, represents a further shift of investment in innovation in each additional unit of gross domestic product changes and changes ratio is defined as investment in innovation to changes in national output, ie:

$$MPI = \Delta I / \Delta GNP \qquad (5).$$

According to this important role is played coordination of actions of innovation that enhances the multiplier effect.

In innovative systems the multiplier effect closely related to synergistic effect. It is the ability to combine great effort number of people. Synergetic effect is to increase efficiency as a result of the integration, merger of separate parts of a single

system for through the so-called systemic effect. When you combine the new innovative structure can use a number of synergies that appear in result of pooling all participants of innovative system based on interests of consistency, their efforts are aimed at maximizing profits all participants. It should be noted that the synergistic effect of innovative systems may result from operational synergy effect agglomeration expanding the range of innovative products in the merger some industries in the overall system, the effect of combining complementary resources, functional synergy, synergy trading, financial synergies and savings, synergies command more.

Innovative development through the concept of the NIS is seen as process and result of interaction and integration of heterogeneous on goals and objectives structures engaged in the production and marketing of scientific knowledge and technology within national borders, national roots, traditions, political and cultural characteristics [7] and with certain degree of coherence (consensus) of EI of entity of IA.

Over the past decade, almost all countries there "Natural selection" effective forms of coordination of interests for effective innovations include the overall flow of goods and public services. So, develops and spreads risky venture entrepreneurship (launched USA), new forms of interaction innovation (Japanese experience), an international inter-firm cooperation in R & D (experience of Western Europe) and others. Analyze international development experience forms of reconciling the interests of the NIS in the example of some countries and regions.

The status of the leader of the United States annually confirmed ratings GII, is in TOP 10 (although in recent years and moved to 4th place) [18]. Leading NIS of US position in the world based on power and performance scientific and technological capacity, which is the core of economic development. Its feature is the reliance on self-development and innovative self-initiatives companies under pressure from hard competitive environment. It is extremely strong competition contributed to the emergence of new forms of coordination interests – organization (cooperative) innovations such as parks, business incubators, venture funds, special economic zones of innovation type. Factors that contributed to finding these forms are: increasing competition in innovation field while reducing the lifespan of technology; high level of innovation difficulty when their creation beyond the capacity of R & D even large companies. If the 70's of XX century 80% of innovations in the US independently developed by large companies, over the period from the end of XX – beginning of the level of government intervention in the development of innovative activity increases significantly. As a result, currently about two-thirds American innovations are based on partnership between the state and Business (expanding the

diversity of the coordination of EI of entity of IA) including research universities and government laboratories. [19]

Unlike the US, Japan initiated the formation of the NIS and the state borderlands XIX-XX centuries went by catching up (simulation model) – accelerated industrial growth based on borrowing selection, adaptation and diffusion of imported technologies. It was the state catalyst for private investment, which led to intensive formation large-scale, standardized production, efficiently deployed in the country, and having export orientation (due to low effective demand within the country).

However, as a result of the oil crisis Faced with resource Call 1970s Japan drastically change innovation strategy stressing the development of its own basic research program design interaction of private and public sector in the field of science and technologies with an emphasis on resource savings. Since the end of the twentieth century in Japan was taken course to transform the country from the "simulator" and "innovator" in creator technology, particularly in areas such as information systems, mecanotronics, biotechnology, new material. Modern innovation state policy aimed at coordinating various economic sectors for providing susceptibility to advanced scientific and technological achievements progress.

The main role in the formation and conduct innovation policy plays Department of Applied Science, Technology and Environment, Ministry of Economy, Trade and Industry. Ministry focusses on applied researches and supports the operation of research. State policy in Japan in the innovative development aims to transform the country from an importer licenses to their exporters.

NIS of Japan is developing high-tech industry by bringing private companies in projects, partly funded by the state. The initiator of promoting collective industrial research and development in the private is the state sector. This creates certain advantages at the stage of commercial the development of innovation, but affects the generation and testing fundamentally new ideas.

World experience shows that in the XXI century, forming international innovation systems in the EU and at the Organization for Economic Cooperation and Development (OECD) [20]. Both models ICs have advantages and disadvantages, but the first model (based on the integration group) covers all terms of innovation activities, all types of innovations and incentives involved internationally. The formation of the EU innovation system is parallel with the development of NIS in alliance countries.

International IP shaped by globalization and contributes to the interstate (cross-border) eyeballs and flows does not preclude their activation on the global environment. B. Karlsson [21] notes that within the EU there is most close interaction of national innovation systems of member countries, which are closely related to each other, for which there are objective possibilities for localization of innovation at the

supranational level. EU level consolidation IS significantly higher than the European system of knowledge in general, and ensured institutionally and politically. Control and regulation of IP EU carried out at EU level, but the national innovation policy continues to play a crucial role as funding research and development through EU funds is about 10% of total appropriations. [22]

Some niche in the evolution of the forms of coordination EI of entity of IA occupied the newly industrialized countries. Certain forms of the specific EI coordination of ID newly industrialized countries (NIC) have peculiarities of their NIS.

Among the factors common to NIK their formation may allocate NIS following: autocratic political regimes (or close to those), loyal to Foreign investors, who provided security guarantees their investments; “great army” of cheap labor and, in some countries (e g in Latin), a good source of raw materials and large domestic markets, restructuring of the economy in 50-60 years of the twentieth century formation there a powerful transnational corporations and strengthening their international expansion; huge economic assistance industrialized countries to those countries that find themselves in their specific political and economic interests.

Analysis of the formation NIS NIC allows us to formulate number conclusions (lessons).

The main ones are: 1) support market competition and transparency of financial and commodity markets, not the so-called “crony capitalism”, “capitalism for its” (a limited number of banks). The practice of Southeast Asia, especially Japan, have shown her that weak banks may cause irreparable damage to the economy even in developed countries; 2) improved distribution of information about the real state of the economy and the measures that the government is going to take on a particular subject. Concealment of information promotes the "sensitivity" loss of confidence in the Government and the country as a whole; 3) Application of subsidies, incentives, trade barriers, etc., to the government, regulating the economy, not cause her harm that expressed by the measures do not lead to brake economic growth; 4) a reasonable increase in loans because of the sharp increase could cause a significant increase in imports, worsen the balance of payments. The result of all this may be the outflow of foreign investment from the country, and eventually deterioration of its overall financial condition. In addition, borrowers in emerging markets (mainly banks and non-financial corporations) often used short-term loans to long-term investments (even in real estate projects for a period of commissioning 30 years). Therefore, when short-term loans withdrawn, borrowers could not cover short-term capital removed from their own liquid assets (lost their liquidity) even if sufficient reliable long-term investment; 5) special attention to the physical and human capital; 6) priority to social justice and equalization of incomes.

The world economy produced and tested in practice a number of measures to help intensify the process of harmonization of interests in order implement the strategy of innovative development. Among them: the implementation of innovative strategies and special programs at the national, regional and local levels; direct state subsidies and targeted provision of regional (local) authorities; local tax benefits to encourage regional development; formation of scientific parks and regional centers of advanced technology and innovation centers; creating small business incubators; attracting venture capital; mobilizing private sector resources to address regional problems technological development; improving information, communication, financial infrastructure; organization and management of innovation advising entrepreneurs.

However, it has to be aware that the strategy is implemented in practice and tactics of innovative development is the "art of the possible" and determined by difficult economic conditions. Because, common prescriptions no exist. Each and every location has its own approach to the challenges of innovation development based on their characteristics, traditions, available resources and needs.

**Conclusions and recommendations for further research.** In one of the chapters of the "General Theory of Employment, Interest and Money", namely "Concluding Notes on the Social Philosophy towards which the General Theory might Lead", John Maynard Keynes agrees with Johann Silvio Gesell that the "result of filling in the gaps in the classical theory is not to dispose of the "Manchester System", but to indicate the nature of the environment which the free play of economic forces requires if it is to realize the full potentialities of production. The central controls necessary to ensure full employment will, of course, involve a large extension of the traditional functions of government. Furthermore, the modern classical theory has itself called attention to various conditions in which the free play of economic forces may need to be curbed or guided. But there will still remain a wide field for the exercise of private initiative and responsibility. Within this field the traditional advantages of individualism will still hold good" [17].

The main problem of the formation and development of the National Innovation System is to ensure a coordination of executive authorities, public and academic institutions. In its turn it is not possible within a separate program of development the sectors of national economy, regions, and also by means of regional or sectoral management.

The solution of problems of the National Innovation System is suggested by comprehensive and systematic implementation of such its main goals as: creating a competitive sector of research and development and ensure its enlarged reproduction; development the infrastructure of innovation; creating a system of economic

incentives to modernize the economy through technological innovation; increasing the innovation culture.

The successful development of institutional innovation sphere in Ukraine is inhibit by system problems such as: lack of government strategy, management and consistent policy; incomplete privatization process, which is the natural antithesis to innovational that emerged in the market environment historically as the most effective way of capitalization of profits; on the global market of high-tech products has already formed a distribution of goods and services, therefore, Ukraine has consistently and systematically reconquer its place there; the dominance of the industrial principles in public administration of innovative sphere over functional.

Therefore, public administration of innovation processes, which is a determining factor of competitiveness of the national economy, should help to solve these problems and provide the increase of the share innovational factor in the growth of GDP. Accordingly require further research the following issues: create conditions to provide efficient operation of entities that provide (support the creation) and spread new knowledge and technologies and apply them in business; increase the share of innovative products in the growth of GDP; ensuring the integration of domestic sector of research and development to the world's scientific and technological environment; activation the involvement of intellectual property objects, material, financial and human resources for the technological development of the national economy; increase the share of innovative products in the volume of industrial production; increase the share of innovatively active enterprises in industry and share of high-tech industries sector in the structure of manufacturing industry; increase exports of high technology products and technology.

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