

THE MARKET OF INNOVATIONS: FACTORS, INCENTIVES, OBSTACLES AND PERSPECTIVES FOR EFFECTIVE FUNCTIONING

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Abstract:

The incentives and obstacles of effective functioning of the innovations are investigated in the article. It is determined that on the formation of the market and establishment of its equilibrium directly affects a number of system characteristics that established in the institutional environment, including such as: differing vectors of actions of economic (market) and political (political and legal institutes and state) factors of the development of national economy; formation of a “double standard” and various rules of the market game for different classes of participants; negative mutual influence of key institutes, which indicates that the state has no interest in establishing of transparent rules and eliminates the possibility of effective regulation in individual segments.

It is offered an author’s understanding of the market of innovations through the prism of institutionalism, the market of innovations is a complete range of social and economic institutions-organizations and joint structures and aims the economic exchange, that includes a common understanding of mutual benefit, the transfer of ownership, “transparent” and fair agreements on proportional sharing. It is proved that institutional factor in some situations that arise in the market is a natural limiter, controller of his freedom. Institute of the market of innovations is under the powerful influence of a number of informal and not always visible institutional the market of innovations. They include intuition of manufacturers, perception the innovations by individuals, feelings, motives of internal motivations of consumer behavior.

It is presented institutional structure of the market of innovations according to different levels of economic aggregation in order to obtain an overall vision of institutional design of the market of innovations. This structuring enables better determine with possible mutual influences and relationships between the “players” in the market of innovations.

Key words: the market of innovations, institute of the market, institutional structure, market incentives, demands for innovations, producing of new products.

JEL classification: L22, O17, O31, O32.

INTRODUCTION

There is an urgent necessity today to research the market of innovations from the position of institutionalism. Proof of this is the opinion of Russian scientist V. Polterovych who writes that “we do not have a complete description of most real institutes such as the market, exchange ...” [1, p. 32]. The market of innovations, as an institute, is no exception and too poorly studied. This is negative impact on its immediate development. In turn, this is reflected in certain institutional income and expenses, risks, capital and investments that would be objects of special researches in the innovative economy.

On formation of markets and establishment of its equilibrium, directly affects a number of system characteristics that emerged in the institutional environment, including such as:

- Differing vectors of actions of economic (market) and political (political and legal institutions and state) factors of the development of national economy;

- Formation of a “double standard” and various rules of the market game for different classes of participants, “point” (selective) using of laws in order to political fight and unfair competition. This creates insurmountable obstacles for formation of favorable institutional

environment and local institutional changes;

- Negative mutual influence of key institutes (for example, system of property rights protection and innovative system), which indicates that the state has no interest in establishing of transparent rules and eliminates the possibility of effective regulation in individual segments [2, p. 24].

KEY PLAYERS OF THE MARKET OF INNOVATIONS

Starting point of the development of theory of the market of innovations can be considered the paradigm of “structure – behavior – result” (SCP), presented by the Harvard school. This paradigm was criticized by representatives of the Chicago school. According to the American economist H. Demsetz [3] high market share and high profits are explained by third variable – efficiency. In the competitive interaction between sellers, increasing of market share and profits achieved by that seller, which has advantages in costs even in the absence of market power.

Considering the market of innovations through the prism of competition, a special place occupies neoAustrian approach (F. Khaieik [4]). Its principal feature is the interpretation of the competition not as a type of interaction between companies in the market but as dynamic process by nature. It is a question not about competition but about competitive order which requires institutional frame in the form of private property and freedom of contracts. The main idea of neoAustrian concept is that the government regulation always is inefficient and creates obstacles for economic development. Institutes of the market as a mechanism compensate failures of coordination. The market of innovations is regarded as dynamically changing, weakly structured environment. The relationship in it is difficult to describe by formal contracts, so an important role plays level of morality [5, p. 65].

The subjects of the institute of the market of innovations are the creators and consumers of innovative products. These can be: physical and legal entities in sphere of production of goods, provision of services, all possible institutes of innovative development at all levels of economic aggregation, innovators, conservatives. Institutional structure of the market of innovations according to different levels of economic aggregation shown in Figure 1.

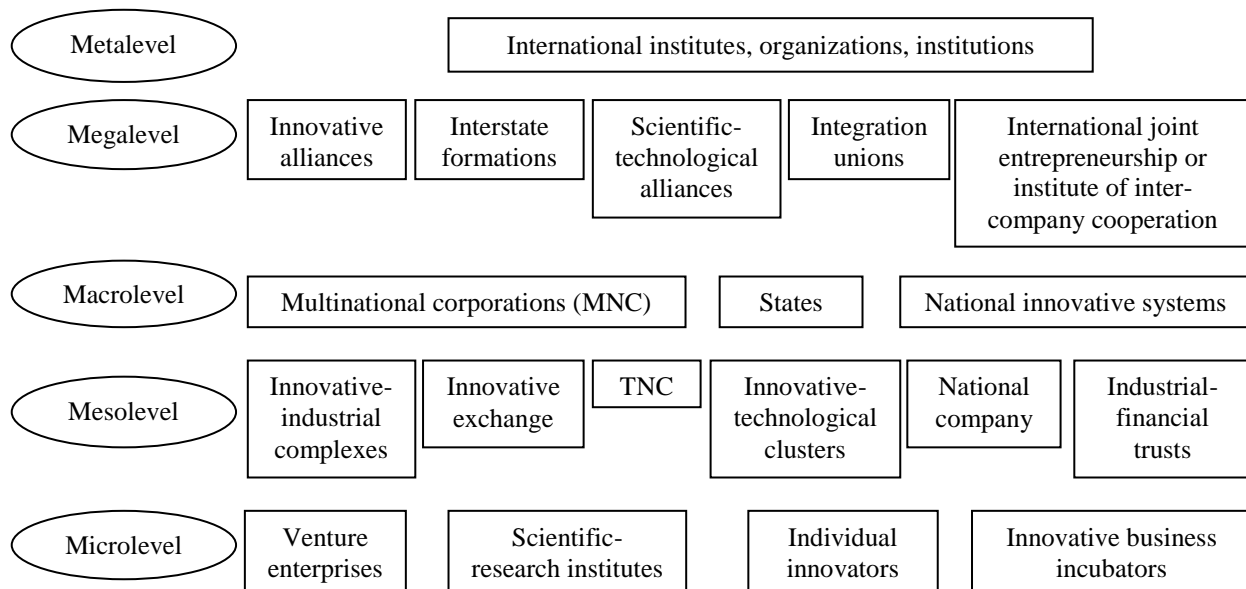


Figure 1. Institutional structure of the market of innovations according to different levels of economic aggregation (*development of authors*)

Objects of the institute of the market of innovations are subjects of buying and selling, namely: new technical tools, technology, creative work, information, innovative products/services, and various forms of production.

From the standpoint of institutionalism, the market of innovations is a whole range of social and economic institutes, organizations, institutions and joint structures and aims an economic exchange that includes a common understanding of mutual benefit, the transfer of ownership, “transparent” and fair agreements on proportional sharing. Institutional factor, in some situations that arise in the market is a natural limiter, controller of its freedom.

Paradoxically, but the market in its traditional understanding contradicts innovations. According to economic theory, only the correlation between supply and demand into conditions of free determination of prices in the market able to establish optimal proportions of the economy. In this formulation, the market does not create incentives for innovative activity [6, p. 25].

Ukrainian scientist L. Mikhailov considers the structure of innovative economy through the prism of types of markets and identifies two components:

- The market of innovations that form the scientific organizations, universities, scientific associations and other entities. On this market the key commodity is a product of intellectual activity that is subject of copyrights, which are decorated in accordance with applicable international, national, corporate and other legislative and normative acts;

- Capital market (investments). This market is a sphere rotation of capital, where, on the one hand, organizations and individuals engaged in the scientific field, and on the other hand – organizations and individuals who invest are the subjects [7, p. 15–16]. The main influence on market of investments exerts: macroeconomic policy of the state, legislation, securities market and information provision.

But, in our opinion, no full is the consideration of the structure of innovative economy through the prism of types of markets without market of goods and services. This market gives the answer, by sales of innovative products, to the question: “Was innovative activity successful?”. In the market of goods and services, failure can befall even the product that has high scientific and practical value, but does not meet interests of the buyer. For example, it may be high price on innovative product.

An important trend in the creation of innovative products/services is the convergence of new products. Convergence (from the Latin “Convergo” – “rapprochement”, “ascent”) is seen as rapprochement, assimilation of economies, their economic (institutional) mechanisms and economic structures, and is the inevitable consequence of a glut of product markets of innovations and large variety of product offering of innovations.

Under the influence of institutionalization of innovative economy and the convergence of new products in the market of innovations are forming:

- Novelties that combine products and technology;
- Grocery platforms;
- Co-branding novelties;
- Wellness-products;
- Novelties that bear innovation value or forgotten old;
- Innovations of business models that based on convergence of products, technologies and services [8, p. 89].

The frequency of “exit” on the market with small innovations promotes accumulation of information about consumer preferences, which is a source of knowledge for the next upgrade. However, individual consumer is not socially isolated person. His behavior is explained not only desires and needs.

Firstly, needs are always institutionally indirect. Secondly, there are clear folded “chains” of interconnections of goods through technological processes and market agents which is difficult to track mutual benefits for their individual consumers.

Thirdly, the market of innovations is a complex structure that can’t be reduced only to negotiate between sellers and buyers. When there are a number of producers and consumers appear no-exchange institutional relations. This is so called “horizontal relationships” between different buyers and sellers that are either in a state of competition or in secret collusion. This is also confirms that the market of innovations is characterized by exchange and competition processes [9,

p. 135].

FACTORS THAT DETERMINE DEMAND OF INNOVATIONS AND PRODUCTION OF INNOVATIVE PRODUCTS

If you look at the market of innovations through the prism of innovative process that the key will be offer: first offer of knowledge, then their commercial form, then – knowledge-intensive product. In such conditions, we have the market of innovations in the form of “supply – demand” (“creation – use”) [10, p. 57].

The primary basis, so to speak base, on which occur the relationships of supply and demand for innovations, is the production and its branch structure. Manufacturing of innovative product/service generates a demand for it. New types of raw, materials and new products appear, and therefore arise new needs and “die back” those of it who formed earlier [11, p. 87]. Examining the market of innovations from the standpoint of demand of its members, assuming that the base is a demand for innovation, we obtain the following scenario.

First, the starting is the desire of the consumer to receive high technology product/service. Innovation is designed to meet his claims better than he is satisfied without it. This desire must be solvent, conscious, so meet the high standards of consumption. Only if he meets specified conditions is formed demand for high-tech products. The amount of demand is the best signal for manufacturers of knowledge-intensive goods.

Second, manufacturers of innovative products/services create the demand commerce form of new knowledge, i.e. results of NRRDW that are useful for the production of new high-tech products/services. Demand of manufacturers is satisfied by performers of applied research. These performers are seeking to offer the results of their work, which can make products of manufacturers competitive.

Competition compels to refuse from established patterns, stimulates innovations and increases the perception of new technologies. Competition is not only “correctly forms prices”, but leads to sustainable investments and accelerated technological progress. As example are economics of South Asian countries.

Third, the market of innovations is characterized by the demand of performers of applied researches, which consists in need of new knowledge for commercial activity. It is satisfied by scientists who generate new knowledge.

Fourth, the demand of scientists is not important for an innovative process. It is connected with the fact that it is no different from the demand of other people. The demand is not driving of the creation of new knowledge. The cause of new knowledge is a special kind of curiosity. In this understanding of the innovative process, based on the market of innovations is a form of “demand – offer” (“use – creating”) [10, p. 57–58].

Price elasticity of demand is limiting the exceeding of price over marginal cost, acceptable for enterprises that operate in markets with imperfect competition. If the demand is inelastic, firms can increase the price in comparison with the costs to a greater extent than under of elastic demand. In addition, the lower the elasticity of demand, the easier it is for a dominant firm simultaneously to restrict output into industry and achieve significant economic profit.

The level of concentration is in the opposite according to the growth rate of demand: the higher growth rate of demand, i.e. the faster growing consumers’ market scale, that easier new firms enter into the industry and the lower the level of concentration. As a result degree of competitiveness of the market is higher.

Characteristics of demand, though may create barriers to entry into the industry, but are mostly beyond the control of the part of the enterprise. However, for companies that adhere innovative policy of development, the fact of dependency of the height of barrier from the pace of growth of demand for new (innovative) products is essential. This value lies in the possibility of purposeful regulation by them this factor of impact on the height of barrier.

For firms that “entrenched”, the ability to control the height of barrier is related with

additional costs, and the same way as it is observed in the case of product differentiation, but without the ability to use these additional costs for the price increase. Moreover, one can observe price reductions at inflated costs. It does not allow “weak” firms to rebuild manufacturing for production improved products and prepare for the “boom” of demand for innovative products [12, p. 57–58].

Therefore, it is important to take into account institutional factors reducing market barriers for insufficiently powerful, but innovation-oriented firms. Such firms are usually the sources of breakthrough innovations.

Subjective and objective factors of the market of innovations are market forces that “encourage people to create, improve, develop and exchange the results of their activities to solve their own economic, political and industrial interests or social needs” [13, p. 89].

Institute of the market of innovations is under the powerful influence of a number of informal and not always visible institutions of the market of innovations. These include the intuition of manufacturers, perception of innovations by individuals, feelings, motives of internal motivation of consumer behavior.

The market of innovations is located in dependence and coherence of the market of human capital. From the established high-quality institute of human capital and the presence in it creative professionals, skilled workers depends the emergence and “birth” of new ideas/technology that are fundamental to the emergence of an innovative product/service.

Oddly enough, to know and understand the market of innovations is impossible without dichotomy of “the market of innovations – risky enterprise”. But not for the reasons that the enterprise can “derive only from market failures” [14, p. 121]. On the contrary, the market of innovations needed as a mechanism of coordination of production of an innovative product that is made only in the framework of the risk enterprise and without which the market of innovations has not anything to distribute. “... The market, in contrast to the enterprise can’t produce. Accordingly, the market relations can only combine firms (production units) ... market relations are nothing like the relationship between already existing firms (or between such firms and consumers). Usually without firms those produce no product that must move and distributed between the markets” [15, p. 44]. Because the market of innovations can’t be a way of production, but replaced by other, preserving the role of the mechanism of selection of productive units and distributor of produced/released by them innovative products and services [14, p. 121].

INCENTIVES AND OBSTACLES TO THE EFFECTIVE FUNCTIONING OF THE MARKET OF INNOVATIONS

Market orients social and economic systems to obtain predictable results in the short term. While innovations aimed at future and on the long-term goals. Pricing in the short term and problems of regulation the market of innovations, ultimately stabilize by the structural dynamics of the market of innovations. The market of innovations thus gradually becoming an institute that promotes the transmission of motivation exchange [9, p. 136]. Mediator of innovative character links the consumer and manufacturer of innovations and arises from fluctuations of supply and demand a unified price.

Unified price is a prerequisite and a consequence of the aspiration of the market of innovations to the overall balance. If there were no uniformity of prices, then there would be opportunities to collect information about the homogeneous goods immediately. Installing the same general equilibrium, alignment of supply and demand for innovative product in the market interrupt exchange, which are characterized by a single price. Otherwise, the owners of the resource would have incentives to move capital and labor between industries that produce different incomes [16, p. 21–28].

Market incentives form in private companies desire to get quick return, while innovations produce results subsequently. For innovations is important to focus not on the market but on the industry. Consumers form the market, and sellers form the industry. On the market demand of

innovative products forms and the offer forms in the industry. Between institutes-organizations in the industry occurs interaction in the form of competition and cooperation [17, p. 110].

Cooperation in the innovative business affects on the rate of emergence of innovative product/service on the market, the correctness of its supply to consumer and service. Equally important in the market of innovations is quality of innovative product. Under it understood the unity of the properties and characteristics of innovative goods, services and maintenance that based on their ability to meet the needs. Quality of innovative product is the ability to create new needs. Only a small part of innovations (10 %) has a world novelty, while most of them (70 %) are a supplement to the palette of existing products or their modifications.

One of the characteristic features of postindustrial production of consumption in the economy is demassification – transition from mass production of products to small-scale production and to production for individual order, the emergence of many different stimuli for consumption, increasing value for consumers of the brand (trade mark). This is accompanied by the globalization of the markets, increasing complexity of products and reduction of their life cycle, enhancement of competition between the same types of goods, overburdened consumer by the flow of advertising. Trade mark of the innovative product facilitates the differentiation of offerings on the market of innovations and its positioning.

Positioning in the market of innovations is occupying certain place in consciousness of consumers that is different from competitors. Positioning takes place in the consciousness of the individual so that he could clearly tell himself and others why he prefers some innovative products. In Ukraine, is an effective method of popularizing of innovative product by spreading rumors.

In this connection, for improving the efficiency and competitiveness of the goods must be able to cultivate and spread rumors. Innovative products are easier positioning in the mind of consumer, because they are different from existing ones. Positioning is based on differentiation. For innovations is important enough differentiation from traditional offerings that are already on the market, as well as differentiation from new proposals of competitors [17, p. 111].

From the perspective of awareness are two types of consumers of innovative products/services, such as: strong consumers (those that have symmetric information) and consumers that adapt to market in conditions of asymmetric information. Information on the market of innovations is symmetrical, when the degree of uncertainty in decision-making is the same for all agents. Both objective and subjective information on the market of innovations have roughly the same probability, which is comparable with symmetry.

Objective information is symmetric for all agents of the market of innovations, whereas the subjective creates asymmetry. Thus, the consumer of innovative product/service is determined by four characteristics.

First, its individual consumerism multiplicity is a subset of commodity space. Secondly, it is equipped and together with the prices regulates its welfare. Third, its consumer preferences are determined by its taste and choice. Fourth, rational assumptions of consumers, which consist in maximizing of usefulness, are subordinated to restriction of his welfare [9, p. 136].

Since the market is an institute, which is studied by economic theory, it can be represented as a set of “actors”, each of which has its own liberty and interest, and recognizes this right enshrined by the other “actors” (first condition). Each of the “actors” is interested in getting some limited benefit or has this boon in abundance, so he interest in exchange for some other benefit (second condition).

These conditions are characteristic of the existence of the market of innovations. The market of innovations is an institute, because the “actors” who are involved in it, leave in the planning of their actions and the purpose of the presence of the above-mentioned conditions. If the market is no institutionalized, the consumer can't find sellers – no one will offer the necessary good. This happens because all the excess of goods must be socialization or destroyed because “excessive” good simply does not arise [18, p. 233].

CONCLUSION

From conducted research is clear that the analysis of the market of innovations from the perspective of its institutionalization allows developing innovative culture of the market, take into account additional factors of pricing. Legislative environment must provide the rights of consumers/buyers and producers/sellers prevent unfair competition.

Thus, the institute of the market of innovations is filled with its rules, regulations and mechanisms of their implementation and control and has the characteristics of a public good. It has several levels, namely: informal and formal rules randomly/ unexpectedly defined framework. There is an obvious the fact that without adequate institutional support the innovatization of national economy, increase the efficiency of the market of innovations and competitiveness of innovative type of the economy of Ukraine is impossible. This, in turn, requires from the government such activity that will ensure the creation and consumption of innovations.

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