Development of Economic Science Through the Concept of Economic Competition

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Abstract

Many authors present the term "competitiveness" in a sense of ability to defeat rivals to achieve goals. Moreover, many economists rely on the definition of "competition" as a "contest". Competition is a continuous trend of methods of strive in different areas constantly applying new approaches. Competitiveness can ensure the continuity of this process. Competition is a struggle, that is, the ability to take action in any situation at any time to overcome it. Competition is the contest of organizations in the same market sector with similar interests. The intensity and structure of competition affect its forms and level. In general, the concepts of competition and competitiveness are studied in depth and comprehensively in Economics. Despite of that there is no unified definition of these concepts among scholars, and each researcher provides various definitions from own perspective of the field of study. This article discusses the history of the concept of economic competition in chronological order. The authors analyzed the basic conceptual approaches of economic thoughts of the development of economic competition according to their classifications. The main attention is paid to the concept of competition in the economic sense. The author offers a vision of the concept of economic competition This indicates the complexity and importance of the issue, as well as the need for further theoretical and practical research in this area.

Key words: economic views, economic science, economic concepts, economic competition, types of competition.

Introduction

Early theories of competitiveness in the international labor division have based on the concept of comparative competition of advantages. The doctrine of historical competitiveness was formed in the XVI century. The School of Mercantilists, one of the schools of economic theory, believed that the country's competitive advantage could be achieved by limiting imports and using colonies for inefficient trade. This concept was criticized by A. Smith. He based his theory of absolute advantages. Adam Smith attributed the absolute advantages to natural factors: the availability of natural resources, a favorable climate and geographical location. According to this theory, the absolute advantages are the condition for competitive production.

Research Method

Theoretical and methodological framework of the study were derived from the Kazakhstani and international researchers and experts on economic competition. Also, monographic analysis, analytical grouping, analysis of logical and historical development methods were used. Structural and functional analysis, including complex systematic analysis in solving specific problems, principles of general scientific methodology, including induction and deduction, comparative methods formed the research methods of the study.

Research Results and Analysis

Many authors refer to Adam Smith and David Ricardo as scholars who founded the concepts of competitiveness and economics. According to Taranukha (2015), although the concept of competition is already used by the schools of physiocrats and mercantilists to explain the process of price formation, it was Adam Smith who founded the theory of competition. He gave a scientific and ideological meaning to this concept as the key to economic analysis and described it as a force that serves the interests of society in the pursuit of the ultimate goals of entrepreneurs. A. Smith presents the competition as a tool to bring the market to equilibrium.

In 1727, the first professor of economics Simon Peter Gasser became the head of the Department of Economic Theory at Gaul University. The first textbook on economics was "Economic, Political and Chamber Sciences", written by the professor. Only a hundred years later he was awarded the title of Professor of Economics in England. Adam Smith was a professor of moral philosophy. Before Adam Smith, almost all economic science were based on biological metaphors.

All his famous publications were influenced by his surroundings of that time. The fact that he was a member of the Oyster Club in Edinburgh together with well-known people like chemist Joseph Black, philosopher David Hume, Benjamin Franklin, James Watt and others facilitated it (Bryson, 2016, p. 94). A. Smith was awarded the title of "father of economics" for his research in the field of competition. He was the first to define the concept of "competitiveness" in the role of "invisible hand" as a competition that regulates the activities of market participants. Adam Smith states the "invisible hand" that regulates the market can only be observed in free competition. A. Smith created the principles of effective competition and also formed a universal mechanism of competition that promotes the optimal distribution of resources. However, in Graeber David's (2011, pp. 437-439) Debt: The First 5000 Years of History, Adam Smith is closely associated with the works of medieval Persian scholars al-Ghazali (1058-1111 A.D.) and al-Tusi (1201-1274 A.D.).

Next it is essential to highlight David Graeber's research of the medieval Persian scholars al-Ghazali (1058-1111) Nasir al-Din al-Tusi (1201-1274). Adam Smith cited and used arguments and facts, examples of the medieval economic Persian treatises. Adam Smith's division of labor into eighteen separate operations through his famous pin factory was in al-Ghazali's division of the needle-making manufactory into twenty operations in Ikhya. Smith claims that he himself had been in such a factory, which might be true, but an example of eighteen operations was published in 1755, 20 years earlier, in an article in the fifth volume of the French Encyclopedia, Epingle. Hosseini also mentioned that "Smith's personal library contained Latin translations of the works of Persian and Arabic medieval scholars" (Hosseini 1998, p. 679), so that he could make his examples directly from the originals. It should be noted that according to Yuval Noah Harari (2014, p. 326) the works of Adam Smith takes into account in the predictions of Muslim economists.

Despite there were the similarities and differences between the works of Adam Smith and the works of Muslim scholars, his contribution to the science of economics cannot be eliminated, especially in England. It was mentioned by Chang Ha-Jun (2007, p. 64) in his books “The Bad Samaritans”, “The Myth of Free Trade and the Secret History of Capitalism” stated that Britain was the first who ameliorated its economy by protecting its industry, subsidizing and granting monopoly rights. Just 84 years after Adam Smith's publication "Theory of the Wealth of Nations" in 1776 England, when it needed it and its economy recovered to eliminate its rivals, spread the theory around the world, and it became a popular theory. Also, it has been introduced into the economies of many, almost all countries with the help of international organizations. Thus, it was a considerable misstep for the economies of undeveloped and underdeveloped countries. Many countries were still struggling to maintain their weak industries, industries, and economies, not only through free competition. According to Chang Ha-Jun, today's rich countries are rich because they have other development strategies not the ones they have proposed, which is not widely distributed, so he calls them "evil Samaritans" in his work, and Adam Smith is first recognized as a patriot and then as an economist.

David Ricardo soon continued Smith's ideas. According to Ricardo, competition is a market regulator that determines prices and income, as well as a condition of profit from society in the form of "commodity advantage and a decrease in exchange value." His contribution to the theory of competition can be attributed to two things. The first is a special understanding of free trade competition. That is, he states that free competition is not only the elimination of class differences, but also a set of conditions for the open space for economic rationalism. This set concludes that selfishness restricts any social regulators that are subject to behavioral goals. David Ricardo was the founder of the ideology of economic liberalism. The second is the concept of the theory of comparative advantage. This theory proposes that countries should specialize in the manufacturing only the products which they can produce compared to other countries at the lowest cost and with high efficiency. In general, David Ricardo can be considered the founder of the theory of global competition.

There are many visions of the concept of economics competition, that it was decided to place the main ones in chronological order in the following table.

Table 1. Chronological view of the visions of economic competition

№	Period	Author	Description
1	2	3	4
1	XIV c.	F.Kene	Theoretical research on the concept of competitive relations and ideas about the role, place and role in the economy

2	XVI c.	Representatives of the Mercantilist school	believes that the country's competitive advantage can be achieved by limiting maximum imports and using the colonial countries in inefficient trade
3	1808 y. “The Theory of the Four Movements and of the General Destinies”	Charles Fourier	Instead of competition, production should be regulated and a monopoly will emerge from the concentration of capital.
4	1819 y. “New Principles of Political Economy”	Simonde de Sismondi	He said competition was the main cause of the social catastrophe
5	1825 y. “Lecture on Human Happiness”	John Gray	competition is caused by "... the conflict of interests of people in the distribution of labor and the use of capital."
6	1838 y. “The Mathematical Principles of the Theory of Wealth”	Augustin Cournot	described the concepts of monopoly, duopoly and "unlimited competition".
7	1848 y. “Principles of Political Economy”	John Stuart Mill	as a systemic factor of the market economy, which allows to establish laws governing prices, rents, profits and wages
8	1859 y. “Critique of Political Economy”	Friedrich Engels	Links competition with private property
9	1867 y. “Capital Vol 1.”	Karl Marx	It is said that the relationship that arises between capitalists
10	1871 y.	William Stanley Jevons	competition determined that the market condition would be the same price for all homogeneous products.
11	1891 y. “Principles of economic science. in three volumes”	Marshall Alfred	He developed a technological concept of competition.
12	1897 y. “The Pure Theory of Monopoly”	Francis Edgeworth	added that there will be an infinite number of sellers and buyers in the market, and that there will be no restrictions on behavior aimed at maximizing profits.
13	1904 y. “The Economists and the Problem of Monopoly”	J. B. Clark	supplemented by the requirement of unlimited mobility of resources.
14	1911 y. “The Theory of Economic Development”	Joseph A. Schumpeter	competition is a "creative disruption process", ie a "creative disruption" process that, in his view, drives competition to new discoveries.
15	1917 y. “Imperialism, the Highest Stage of Capitalism”	Vladimir Lenin	He developed the concept of monopolistic competition
16	1921 y. “Risk, Uncertainty, and Profit”	Frank H. Knight	Introduced the concept of mature competition
17	1930 y. “The Theory of Monopolistic Competition”	Edward Chamberlain	He developed a theory of monopolistic competition
18	1933 y. “The Economics of Imperfect Competition”	Joan Robinson	pays close attention to the criteria of competition and pays special attention to the role of the firm in it
19	1940 y. “Toward a Concept of Workable Competition”	J. M. Clark	"Workable competition" gave a clear description of monopolistic competition
20	1940 y. “Human Action: A Treatise on Economics”	Ludwig von Mises	Catholic competition
21	1949 y. “Individualism and Economic Order”	Friedrich A. Hayek	At the heart of the competition lies the "process of discovery."
22	1982 y. “Contestable Markets: An Uprising in the Theory of Industry Structure”	William J. Baumol	He gave the theory of "competitive market" as another aspect of monopolistic competition

23	1994 y. “Hypercompetition : Managing the Dynamics of Strategic Maneuvering(Hardback)”	Richard A. D'Aveni	Introduced the concept of hyper-competition
24	2002 y. “An Evolutionary Theory of Economic Change”	Richard R. Nelson and Sidney G. Winter	He studied the evolutionary component of competition
25	2002 y. “New competition. Institutes of Industrial Development”	Best M.	The concept of "new competition" was introduced, explaining competition through cooperation
26	2019 y.	Author’s version	Competition is a condition, condition or space necessary for economic processes to take place or for the economy to survive.
	Note: compiled by the author on the basis of research		

John Stuart Mill (1980) was one of those who further developed the concept of competition. He marked the concept of competition with the interpretation of a systemic factor of the market economy, which allows to establish governing prices, rents, profits and wages. Mille did not consider competitiveness so influential because he believed that its regulatory impact was limited by traditions and customs, and he developed this view further. The first is that competition is not suitable for all sectors of the economy, and if so, its impact is not the same. The second is that freedom of competition is not always a good thing, it should be limited.

Nevertheless, the representatives of the classical school, in turn, had critics and opponents. In particular, Simon de Sismondi (2007) described competition as the main cause of social catastrophe (mass collapse of small-sized manufacturers), and called on the government to save the population from "deadly competition." Saint-Simon Henri and Charles Fourier shared similar views. They claimed that competition should be replaced by production regulators. Surprisingly, Fourier said that competition would lead to the concentration of capital and predicted the emergence of economic monopolies, he called it "trade feudalism."

However, it was John Gray (1826, p. 67-71) who criticized the competition from different perspectives, he criticized it from economic and ethic perspectives. He considers the competition as a factor that disrupts the natural organization of the manufacturer’s turnover, as it restricts the recovery of labor costs and the growth of aggregate demand. By being one of the reasons for the creation of artificial boundaries of production the competition limits the growth of social wealth and creates poverty. The cause of this opposition is that the principle of organization of the competitive economic system is not a natural phenomenon, but human made. John Gray states that the competition derives from "... conflicts of interest in the distribution of labor and the use of capital." In short, in the opinion of J. Gray, the elimination of competition is in the hands of the people, and the key is in the hands of the country's leaders. This shows how anti-competitive it is, because, according to Adam Smith, the only enemy of competition is government regulation.

The concept of competition has not denied by Karl Marx, F. Engels and VI Lenin. They claim that competition arises not because of limited resources, but because of the specifics of economic management. As K. Marx (1867) states, "the division of social labor and independent producers are opposite to each other". At the same time, he says, private property is a form of realization of personal interests. This means that if limited resources are the foundation for a conflict of interest, then this conflict will only have the notion of competition if limited resources are obstructed by any person. In this case, this function is performed by private property. Therefore, according to K. Marx and F. Engels, the existence of competition is associated with private property. According to F. Engels (1859), "Briefly, as long as there is private property, everyone competes." In addition, it was K. Marx who provided the first scientific basis for the thesis that competition stimulates innovation, and the mechanism of its functioning creates the conditions for innovation. According to this thesis, despite the positive impact of competition on the development of the productive forces of society, he also noted its negative aspects.

The concept of competition also caught the attention of the famous ruler of that time, V.I. Lenin (1917). Thus, he founded the concept of monopolistic competition in the early twentieth century. He attributed the change in competition to the emergence of a monopoly that provides a dominant share of market demand and concentrates large production and financial resources. He saw the essence of monopolistic competition in the ability of the monopolist to influence the emergence of a competitive situation by choosing the method, type and industry of struggle. The monopolists were able to concentrate production capacity in their hands and regulate not only prices, but also industry barriers. The global nature of the monopoly created ample opportunities to optimize business and ensure its profitability. Thus, the monopoly violated the sovereignty of the consumer, affecting the formation of consumer preferences. Thus, Karl Marx, F. Engels and VI Lenin, being representatives of the Marxist school, formed new views of competition. These concepts have not lost their relevance to this day, so these theories are important for economics.

Joan Robinson and Edward Chamberlin made significant contributions to the study of monopolistic competition. J. Robinson's novelty lies in the fact that he pays close attention to the criteria of competition and emphasizes the role of the firm. It means that the focus of competition is on the firm and its products. The firm has certain authority over the seller of its goods. This power will be able to determine the price first, and then the terms of the market agreement, without thinking about the reaction of consumers. The firm is no longer a "price taker" but a "price setter". At the same time, for Robinson, a mature competitive market remains the ideal market to strive for. In addition, it was J. Robinson who was the first to define the indicators of competition other than the price index. He included the firm's competitive behavior in transportation costs, product quality, customer service, credit terms, reputation, and the role of advertising. According to Chamberlain E. the concept of competition is a dynamic phenomenon and the competitive advantages of the firm are recognized as a temporary phenomenon.

The founder of modeling the market structure is the French mathematician O. Cournot. In 1838, he described the concepts of monopoly, duopoly and "unlimited competition" as the main structures of the market. Formally, its typology is based on the number of enterprises in the market, but its main criterion is the market share of those enterprises. In a market structure, the presence of a single seller determines the volume of supply as a whole, and in the case of two sellers, a monopoly. And in "unlimited competition" the large number and small size of sellers, they control only a small share of the market, and none of them can influence the price.

Later, W. Jevons determined that as a condition of a competitive market, there will be one price for all homogeneous products. That is, because no one can influence the price, the price is considered normal, and market participants accept the price from the market. F.I. Edward added that the concept was based on the premise that there would be an infinite number of sellers and buyers in the market, and that there would be no restrictions on behavior aimed at maximizing profits. J.B. Clark supplemented these considerations with the requirement of unlimited mobility of resources. F. Knight completed this research by introducing the concept of "mature competition" in the scientific community. Thus, mature competition is a market situation in which no one and no one can influence the market price and the terms of the market contract (Robinson, 1986, p. 55).

The following researcher adds up his point of view. J.M. Clark (1940) in the 40s of the twentieth century, based on official evidence, put forward a theory based on the illegality of the assessment of market competition. A market with monopolistic characteristics (high level of concentration and small volume of sellers) can give competitive results. This is called "workable competition".

Further, in the 80s of the twentieth century, the theory of "competitive market" continued in the research of W. Baumol, J. Panzar and R. Willigom (1982), on the possibility that potential competition can operate a monopolistic market as a competitor. Due to the similarity of the mechanisms and results of the "competitive market" and "working competition", they were called "quasi-competitive markets". However, despite the attractiveness of market theory, the contestant did not find the support of other economists.

Joseph Schumpeter (1980), is one of those who studied the next competition from other perspective. His contribution to the study of competition is also significant. J. Schumpeter's "Theory of Economic Development" presents the main ideas of the concept of competition. For J. Schumpeter, competition is "... a constantly changing landscape in which new market segments, new production processes, new ways of marketing research and the emergence of new products." He defines competition as a force that impedes the establishment of market equilibrium and always destroys it if it arises accidentally. However, this is a violation that creates something new. Therefore, competition is a "creative process of disruption", that is, a process of "creative disruption" that, in his opinion, leads to new discoveries. The concept of Schumpeter competition is based on two prerequisites. The first is the hypothesis of diversity of firm behavior, and the second is the existence of entrepreneurship, which is a source of diversity of competition. According to him, the abolition of entrepreneurship led to the abolition of competition (Schumpeter, 2003, p. 187).

The next Austrian scientist, F. von Hayek (1948, p. 91), identified innovation in competition. In his 1940 book, Individualization and Economic Discipline, he noted that competition was rooted in a "process of discovery." According to Frederick von Hayek, the most effective ways to realize economic interests are determined through competition. At the same time, L. von Mises (2010, p. 259), introduced the concept of "catalytic competition". "Catholic competition" is like a biological competition, not a struggle for survival. "... the losers are not eliminated, they are pushed to the other side of society, but the strong are rewarded according to their achievements." As a result, according to L. von Mises and F. Hayek, competition is a force of uncertainty and disobedience to market participants. Competition is an unpredictable experience. It cannot be understood or measured. They say that competition can only be trusted as the best way to deal with market agents. Thus, competition is described as a delicate form of communication.

Michael H. Best (1990, p. 29) proposed a version of the "new competition". According to him, changes at the micro level should be considered as the driving force of competition. The peculiarity of Michael H. Best is that, firstly, he shifted the focus of analysis from the sphere of circulation to the sphere of production, and secondly, he paid attention to the organizational features of the firm. Its transition to "new competition" is explained by changes in the technological base of production. "Firms can not only compete with each other, but also cooperate to create joint and complementary investment strategies to establish the" rules of the game in the market. "

In the second half of the twentieth century, the competitive environment underwent radical changes. The reason is that the competitive environment has become global. Currently it is difficult to defend against the pressure of competitors, that is, there is an increase in the number and quality of competitors. The new microcompetition situation in this case was introduced by Richard D'Aveni (1994) under the name "hypercompetition". Hyper-competitive environment is the result of the following driving forces: 1) globalization, which causes changes in supply and demand, 2) polarization of markets, 3) lack of sectoral and geographical boundaries, 4) technicalization of business processes, 5) concentration of financial resources, 6) liberalization of international trade. Another feature of hyper-competition is the active involvement of the state in the development of competition rules in the world market. Thus, hyper-competition is a way to realize the dominance of state-owned monopoly capital in a global and innovative economy. It was M. Brown who continued Richard D'Aveni's research. He tried to study in depth the specific features and driving forces of hyper-competition.

According to Sagadiev (2003, p. 25), "… competitiveness, industrial-innovative development is becoming our industrial tradition. We have been providing them with resources, creating institutions, and now it is time to think of the efficient use of existing factors of production. ".

Conclusions

We have reviewed numerous researchers' view on the concept of competition. As a result of this research, we decided to give own vision of the concept of competition. In our opinion, competition is an integral condition for the emergence of economic processes, that is, the conditions for the emergence of any economic phenomena. The most of economic phenomena, that we encounter today, has appeared due to this competition. Otherwise, if the conditions for competition were not met, such phenomena as development or failure would not had occurred. Thanks to this competition, there are a variety of trends, a variety of economic phenomena. The winners of the competition are ahead, and the losers are behind, but because competition is an integral part, they do not stay in place, they continue to try in other ways, that is, to create other phenomena. Therefore, competition is an integral condition for the emergence of various economic processes. Competition is a necessary condition or space for economic processes to take place or for the economy to survive.

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