Evaluation of the 2008 Global Crisis with Behavioral Economics

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Abstract

It is rather difficult to explain the economic crisis which is starting in the United States in 2008 and rapidly spreading to all the countries of the world through the influence of globalization with the previous crisis theories. The other words, institutional mechanisms that are formed with classical economic thought's homoeconomicus human type, rationality hypothesis and "laissez faire laissez passe" are insufficient to understand this crisis process.

Behavioral economics, which has an important link between economic and psychological sciences in the analysis of individual decisions especially combining psychological assumptions with economic decision-making analyzes, draws attention with its approach to the 2008 global crisis. Behavioral economics refers to the cognitive ability of the individual in the decision-making process and cognitive decision making is more effective than rational computation. Traditional economists examine the behavior of markets and analyze income, prices, the amount spent, the relationship between savings and investments. Behavioral economists, examines human behavior by analyzing the processes of investment, price determination, saving and spending, including psychological factors that affect behavior such as people's motivations, attitudes and expectations.

The aim of this study is to draw attention to 2008 global crisis is not just a financial crisis but also a confidence crisis and how people come out of rationality in the decision-making process and how their cognitive intelligence comes to the forefront. In this direction, first of all, historical development of behavioral economics will be examined and uncertainty and under risk decision process will be evaluated within the framework of expectation theory. Then, the process of the emergence of 2008 global financial crisis will be considered and the crisis will be tried to be illuminated within the framework of behavioral economics.

Keywords: Behavioral economics, 2008 global crisis, expectation theory, psychology

JEL Codes : C01, E02, O40

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INTRODUCTION

The science economics, a social science, has included the methods of the different sciences in its analyzes in time. That psychology also take places among these sciences constrained person from being an existence making only rational decisions. Depending on the fact that there is also human factor on the basis of both sciences, and reasons underlying economic factors is based on psychological factors, the combination of the sciences economics and psychology sciences has become unavoidable, and behavioral economics has emerged.

In the relationship between economics and psychology, in the period when classical economics is dominant, it is seen that the thinkers emphasize human being and human behaviors. In neoclassic period becoming dominant after classic economics, psychology is firstly given place in economic studies but after the war, by ignoring the human factor in neoclassic period, the science psychology has replaced with the science mathematics. The process of divergence process of economics and psychology from each other has continued until 1950s and later, with combining of these two disciplines, behavioral economics has also gained importance.

Behavioral economics that becomes dominant after 1980 is a sub branch of the science economics. Passing beyond the approach of rational and mechanic human, it introduces the approach that people will be limitedly rational. Behavioral economics argues that individuals having limited rationality in making decision under uncertainty are more realistic. In 2008, global crisis, an uncertainty environment occurred in which individuals could not know how to behave with the assumption of rational individual of the theories of traditional economics. This case is an evident that the theories of traditional economics is inadequate. Behavioral economics aims to enlighten the process of being able to make decision under uncertainty. In this context, it comes to light that individuals make decision with limited rationality and limited abilities.

In this study, firstly defining behavioral economics, its change in historical process was dealt with. Then, describing making decision under uncertainty and risk and expectation theory, the formation of 2008 Crisis were evaluated in the framework of behavioral economics.

1. Definition Of Behavioral Economics

In the theory of classical economics, the rational human approach caused the predictions made for this theory to be unrealistic (Çekiç, 2016: 52). This concept was introduced to provide easiness in terms of describing economic events with the various models and, in general, accepts that in economic meaning, human behaviors will be logical and at the same level. However, it is rather difficult to find any example of this approach, accepted right in theory.

Behavioral economics, with its aspect differing from main economics that incorporates the features such as manipulative, insensitive and maximum instrumentalist the classic economics, dominant doctrine of economics, defines for economic actors, is a sub branch of economics trying to introduce more realistic approach. Behavioral economics occurring with combination of economics and psychology that are two sciences different from each other introduces its development in the framework of human behaviors of economic actors in market and their actions with constraints and complexities (Hatipoğlu, 2015: 3).

When regarded to the sciences of psychology and economics, it is seen that the essence of both scientific branch is primarily the element human. While the science economy is interested in the choices and preferences of human beings in economic meaning, psychology is interested in human behaviors and reasons underlying the behaviors realized. In this direction, behavioral economics accounts for the cause of that economic actors make illogical and irrational decisions in their economic decisions such as investing and saving.

2. History Of Behavioral Economics

Although behavioral economics do not conceptually take place in the literature until the mid -20th century as a sub branch of the science economics, the relationship of economics and psychology dates to the period of Adam Smith (Çekiç, 2016: 57). It is seen that in the study titled 'The Theory of Moral Sentiments', published by Adam Smith in 1759, he introduced the psychological principles of personal behaviors (Can, 2012: 93). In every economic period, psychology became a subject of the science economics, depending on the thinkers and conditions of the period experienced: In this scope, the historical development of behavioral economics is generally examined under four main headings. Behavioral economics first begins with the period of classical economics The second period is the early neoclassic period and post-war period following it. Finally, the period of behavioral economics is divided into two within itself as the first and second generation period of behavioral economics.

2.1. The Period of Classic Economics

Adam Smith, Jeremy Bentham and David Hume, among the classic theoreticians closely interested in psychology, attempted to explain the fundamentals of the human behaviors in economic area, utilizing the science psychology (Toıgonbaeva and Eser, 2011: 288).

Adam Smith puts forward the theories containing psychology in his studies. Especially, in his study titled “Theory of Moral Sentiments”, places emphasis on the concept “sympathy”. What Smith means with this concept he mentions in terms of inter –individual relationship expresses as a result of that the people put themselves to the state the other people where are in, that they better understand their states and that people behave to their respondents in the way that they want to behave from the others to themselves in the state experienced (Yılmaz, 2015: 5). When regarded from economic point of view, Smith argues that that a market is established on sympathy enables the people in that market to compete in fairer conditions and, thus, the level of economic welfare to increase. In Theory of Moral Sentiments, the concept sympathy as well as the phenomenon of self-love that is necessary and healthy as long as it is at the degree of egoism is given place and it is said that Smith is affected from the work by Bernard Mandeville, titled “The Fable of Bees”, written in the early 1700 (Çekiç, 2016: 58).

Adam Smith, again in his work with the same title, is interested in the directions of the individual decisions and preferences, and psychological phenomena such as overconfidence, intertemporal choice, and loss-aversion are examined. In another section of the study, Adam Smith focuses on the preferences occurring in social environments These preferences are the phenomena such as how feeling of confidence in the markets will form, justice, and self-sacrifice (Can, 2012: 93).

David Hume, another one among the thinkers of classic period, is also of the first serious critics of rationalism. In his studies, objecting to rationalism, he mentions about the negativities of absolute reason and that the reason is limited. Thanks to the idea of Hume, the points of view objecting to the approach of limited government, freedom, and individual differ and develop In addition, the fact that the individual behaviors will not always be rational comes to exist thanks to Hume (Kırlı, 2013: 101-104).

David Hume, beside limited rationalism, gives place to the phenomena such as passion, enjoying life, and obstinacy and states that these phenomena have effect on the choices and decisions of the people. Beside this, he emphasizes that in choices and making decision, the motivations such as earning and expenditure will be effective. Hume, in contrast to Smith, expresses that about sympathy, the people can feel the causes underlying their behaviors and,thanks to this, they can reveal their passions and, in this case, that sympathy sense of the people can increase (Toıgonbaeva and Eser, 2011: 289). The theory of passions that is essence of moral philosophy of Hume is quite important in terms of explaining how a main building block of individual psychology and how they will behave in a certain environment. According to Hume, that the passion and reason performs the different functions does not mean that the reason will be the motivation resource in alone. That the reasons help the passions be determinative about the good and bad features of passions, they do not completely help (Yılmaz, 2015: 6). Setting out from this thought, it is reached the conclusion that individuals cannot be rational.

Jeremy Bentham, another economist of classic period paying attention to human psychology and also the founder of rationalist instrumentalism, defines human being as an existence, expressed as homoeconomicus out of natural law and rights i.e. escaping from sorrow and anguish and pursuing pleasure (Akyıldız, 2006: 8). Jeremy, in his study, titled "Introduction to the principles of Morality and Legislation " he published in 1789, accounts for the individual acting in their interests with instrumentalism philosophy, whose ground is based on psychological hedonism. The concept of psychological hedonism means that the people is always in search for increasing their pleasures and that they avoid sorrow (Çekiç, 2016: 60).

The infrastructure of the expression of "the human being pursuing its own interests", based on traditional theory of economics, is determined by the concept "psychological hedonism". In the theory of traditional economics, human behaviors are shaped in such a way that human behaviors will raise the utility to maximum level and reduce the loss to minimum level. The view that that the individual utility reaches to maximum will also increase social utility becomes dominant led dichotomy between individual and society to be ignored and, traditional theory of economics is perceived as the theory consisting of calculating the pleasure and sorrow, when regarded from this point of view. In this context, hedonism psychology based on the basis of instrumentalist moral philosophy has become a pioneer for traditional theory of economics (Ruben and Dumludağ, 2015: 6).

In the second analysis, in the classic economics paying attention to psychology, the effect of psychology on especially English economists is much more and there are many economists, who are interested in both economy and psychology.

2.2. Early Neoclassic Period

As in classical economics, also in the period of early neoclassic economics, psychology is highly paid attention. The most important concept introduced in this period is marginal utility.

Upon that the labor –value theory introduced by Smith is collapsed by Jevons, the theory of marginal utility is developed. Although Jevons, who shares the same thought with Menger, argues that interest areas of economics by means of mathematics, in his theory he developed, can be expressed, he emphasizes the approach that utility is subjective. According to Jovens, utility cannot be measured by the various analysis methods but making observations toward the existing behaviors of the individuals and listing the preferences and decisions of the individuals, some predictions are made. Namely, according to Jevons, utility is only put in order (Bocutoğlu, 2012: 142).

Menger develops the value theory on the concept utility. According to Menger, the value that is completely subjective changes from the person to person. The value an individual appraises for a goods differs according to the preferences and incomes possessed. Therefore, cost does not determine the value of a goods. In addition, Menger, also considering psychological elements, emphasized the importance of consumer demand (Çekiç, 2016: 61).

While economists taking place in the group adopting the approach that economic events can also mathematically be expressed (quantitative approach) are Fisher, Jevons and Walras, There are economists such as Menger, Friedrich von Wieser, John Bates Clark and Böhm-Bawerk in the nonmathematical group called “psychological school”. Mathematical school tries to measure the utility of the last unit by attributing to formulas, while psychological school, to the emotional tendencies of consumer (Toıgonbaeva and Eser, 2011: 291).

Another neoclassic economist considering psychological factors in the economic activities individuals realized is Francis Ysidro Edgeworth. Edgeworth, in his study, titled “An essay on the Application of Mathematics to Mathematical Physical Moral Sciences”, brought the analysis ıf box diagram in the science economics. Edgeworth, using Fechener method, measures utility with the premise that “pleasure can be measured and all pleasures are proportional”. Another concept Edgeworth brought in the science economics is “adaptation law”. Adaptation law is that the utility provided by individual depends on the absolute quantity produced from goods and reference points of the quantity. Adaptation law is a psychological concept and corresponds to the concept of “reference point” in today’s economics.

Alfred Marshall, the prominent theoreticians ıf neoclassic economists and also the founder of micro economy, also interested in human psychology.

According to Marshall, individual is a social entity and this is not a theory, established based on the approachof economic human. Marshall comes to forefront with his work titled “The Principle of Economics”, published in 1980. In this work of him, there are many theoretical studies and he defines utility as pleasure or desire. He carries out these studies in order to measure pleasure. However, it seems that there is a contradiction in the essence of Marshallian study. Namely, on the one hand, it is argued that psychological hedonism is not a realistic approach in measuring utility, on the other hand, it seems that the accuracy of this approach is being accepted to measure utility. According to Marshall, spiritual cases are rather complex and, therefore, it is not possible to be able measure them (Yılmaz, 2015: 8).

Another prominent name of the period of neoclassic economics is also Irving Fisher. This definition is made by Thaler to Fisher, as known behavioral economist. According to Thaler, modern behavioral economist has three main characteristics, and Fisher has these characteristics (Çekiç, 2016: 62).

Fisher gives place to the psychological concepts in the subjects of monetary mistake and time preference He develops intertemporal preference theory to explain consumption. In this theory, the consumption of individuals are not only affected from economic factors such as income effect, but also it is affected personal factors such as habits, expectations of people from the life, controlling himself/herself, fashion, and precaution. Beside this, Fisher first emphasizing the concepts of perception and mistake suggests that the individual cannot differentiate nominal and real values and, because of this, that cyclical fluctuations will increase, falling in monetary mistake (Toıgonbaeva and Eser, 2011: 292).

In the early neoclassic period, the economists of the period generally paid attention to emotional psychology. The early neoclassic period examining the sciences of psychology and economics together continued until 1930s and brought many concepts in the literature.

2.3. Postwar Neoclassic Period

Together with neoclassic revolution, accepted that it corresponds to the first half of 20th Century, as a result of that psychological analyses become gradually distant from the science economics, what is under consideration is the increase of interactions of the sciences of mathematics and economics. The effect of psychology on the science economics replaced with mathematical expressions together with a revolution through the assumption of homoeconomicus (Demirel and Artan, 2016: 7).

Postwar neoclassic period, known as the divergence of economics from psychology, began in the second half of 1930s and continued until the second half 1950s. The famous thinkers of the period are Vilfredo Pareto, Paul Samuelson, John Hicks, and Roy George Allen.

Vilfredo Pareto, clearing economics from normative judgements with the assumption that it will not be affected from the social factors, only analyses economic actors. Together with this analysis, the assumption of economic human i.e. homoeconomicus, one of the main assumptions of classical economists, is also accepted by Pareto. Pareto, in terms of being able to make a correct evaluation against economic events and argues that economics becomes a science, argues that making analysis via experiment, observation, and abstracting are quite important criteria (Albayrak, 2003: 38). With this thought of Pareto, it is concluded that individual makes decisions, not behaving emotional, based on the theories gained precision through experiment, observation, and analysis.

Hicks, another economist who makes contribution to neoclassic economics, is for ordinal view and argues the view that utility cannot be measured. Beside this, he made analysis, using indifference curves. Hicks considers that cardinal utility is not adequate about explaining market and also, in the analyses, in which indifference curves are included, that individuals will not be affected from the social factors such as advertisement and habit. In the study, which Hicks and Roy George Allen carried out together in 1934, titled “Reconsidering Value Theory”, the concept of “marginal substitution rate” was given place and, with moving from this, a relationship between price belonging to a goods and income of person and demand for that goods was tried to be identified and the effect of change in price is divided into two as substitution effect and income effect; however, a new non-cardinal definition was made for substitute and complementary goods. Negative-slopped and convex assumptions toward indifference curves are not psychological and utility-based as also in the thinkers of that period (Yılmaz, 2015:11).

In the process of divergence of the sciences psychology and economics from each other, which began with Pareto, another economist, who pays attention to mathematical structure of market and sustain the way of economic behavior, is Paul Samuelson. In his work, titled “Fundamentals of Economic Analysis”, he mentions about many general economics. According to Samuelson, the theories, which are found in the scientific area, must be tested. Constrained optimization and hypotheses, whose opposite can be proved, he gave place in his studies, are of the most important ones (Çekiç, 2016: 65).

Postwar neoclassic economists ignored the psychology of individuals in economic events and tried to separate economics and psychology from each other. They did not take into consideration the causes underlying the choices of individuals, preferences made, and that individuals will face to how a problem as a result of motivation and disconnected the link between economics and psychology. Therefore, the premises of the thinkers of postwar neoclassic period . differ compared to the early neoclassic period. Namely, while the thinkers of early neoclassic period make assumptions about the preferences of the individual, the thinkers of postwar neoclassic period accepted the assumption that preferences are transitive

2.4.The Period of Behavioral Economics

Behavioral economics that emerged as a result of that the sciences economics and psychology, two different disciplines, are processed together describes why and how individuals make irrational decisions in the process of economic decision making. The relationship of economics and psychology that began Adam Smith, in the early periods it emerged as a study area, was termed as economic psychology or psychological economy and, in 1960s, this relationship was brought by some authors in the literature as behavioral economics.

The approach of behavioral economics introduces the importance of multidisciplinary study. In this context, it argues that people cannot only pursue profit, while making decision and that sociological and psychological factors should be considered. The movement point of behavioral economics is associated with the behaviors of the individuals in the real life in the stage of making decision and explains the way of making decision between economic choices (Kitapcı, 2017: 89-90).

While behavioral economics is not divided by economic historians into period at the beginning, nowadays, it is divided into two periods as first generation (old) behavioral economics and second generation behavioral economics.

2.4.1.First Generation (old) Behavioral Economics

In again becoming a current issue of the relationship of economics and psychology in 20th century, the important transformations occurring in the area of psychology has also an effective role. In this period, in which behaviorist school is dominant, the factors such as stimulation and reaction become the determinants of human behaviors, and learning process is not taken into consideration. Also, cognitive processes between the reaction and stimulation factors are ignored. Behavioral psychology is only focused on the things that can be seen by the eyes and be observed. In this context, in the analyses made, the element mind is also ignored. That behavioral psychology loses its dominance after cognitive revolution begins to confute the hypotheses argued in this school. Together with the technology that developed after Second World War, in the analyses toward behaviors, cognitive revolution as well as internal psychological processes and concept of mind gain importance. Cognitive revolution is to examine the cognitive processes in broader meaning. Although it is not possible to directly observe cognitive process, deductions about cognitive process can be made by the observable behaviors. This case enables to examine the determinants of economic behaviors and its determinants (Ruben and Dumludağ, 2015: 7).

In this period, while the economists such as Richard Cyert, Herbert Simon and James March from Carnegie school carry out the studies such as constrained behavior of firm, decision making process, and rationality, the group in the leadership of George Katona in Michigan School studies on macroeconomic subjects, consumer behaviors, and economic psychology. Beside this, Oxford School carries out the studies on the subjects of coordination and uncertainty; Sterling School, the subjects of integration and eclecticism; and the others, generally field studies (Yürük, 2017: 12-13).

The most important names of the early period are Herbert Simon and George Katona. These two names, also known as the founders of behavioral economics, attribute economics to a psychological basis that is more realistic.

Herbert Simon is known as one of the cognitive science, His work, titled 'A Behavioral Model of Rational Choice' published in 1955, is turning point of behavioral economics. Simon, in this work, mentions about the assumption of economic human and does not believe that human beings are homoeconomicus. Therefore, he argues that the assumption of economic human should be corrected. Simon also mentioned about the concept rationality. According to him, perfect or full rationality is not possible. The information individuals have is limitative. Therefore, Simon is interested in the model of limited rationalism (Can, 2012: 95). Through this concept, it is reported the problems the individuals face to and that the final ability of individual will be limited in solving these problems.

Another contribution Simon makes to behavioral economics is his study on making decision process. With this study, Simon gained Nobel Prize. Simon argues that limited rationality and uncertainty play an effective role in the process of making decision (Yürük, 2017: 14).

Simon emphasized that two sciences should be processed together, attracting attention that the decision stage needed for economics should be made clear and learning information and shed light to cognitive economics. The process of cognitive learning is a process paying attention to rationalization, cognition, reorganization, categorization, repetition, recognition, combination, and problem solving. Problem solving not only includes information collection but also representation of problematic state (Hatipoğlu, 2015: 30-31)

George Katono, known as the first pioneer researcher in the area of behavioral economics, in his book titled 'Psychological Economics' he published in 1951, invites economists to refer to psychological view for analyzing economic problems (Can, 2012: 94). According to Katona, empirically examining consumer behaviors in a country is accepted as starting point of behavioral economics. Generalizations made economic behaviors are formed by comparing the different cases. In this context, an important component of behavioral economics is psychology. Psychologic elements affecting the decisions such as expectations, attitude and motivation have an important place in economic analysis (Ylımaz, 2015: 24).

Katona, in the years of Second World War, made examinations on inflation and in the leadership of American Central Bank (FED), with the duty he undertakes in the study of Consumer Financing, he argued that being able to predict inflation rates is only possible to be with measuring expectations. Katona, as a result of examinations he made on inflation, stood behind the thought of that developing fiscal policies was necessary and drew attention that the concepts such as intention, attitude, and expectations should not be ignored (Çekiç, 2016: 66-67).

In another work, titled "Psychological Analysis of Economic Behavior' Katona published in 1951, his main thought is what shapes economic process are human behaviors (Toıgonbaeva and Eser, 2011: 297).

In general, in the years of 1950 and 1960, first generation behavioral economists facing to the inadequacy of economic analysis proceeded beyond the mechanical individual and aimed to find empirical laws definitely and rightly. The economists of this period, in their analyses, referred to computer simulations due to the complexity of behaviors and models, with empirical findings obtained, targeting to strength their assumptions, moved away from the neoclassic assumptions. Although the period of first generation behavioral economics shaped in 19850s and 1960s is remarkable, it could not change the basic direction of economics.

2.4.2.Second Generation (New) Behavioral Economics

Second generation behavioral economics represents that behavioral economics emerges as a sub branch of economics. Together with the emerging cognitive psychology, this process expressing cognitive revolution that forms as a result of that computer and technology are included in the studies of behavioral decision making and behavioral decision covers the developments corresponding to 1970s. In this period, many researchers argues that the belief and feeling should be included in economic decisions, because theses psychological factors such as belief and feeling are highly necessary in terms of rightness of predictions and ability to explain. In this context, together with cognitive revolution, that brain is an instrument producing cognitive information led the studies such as decision making and problem solving that affect the utilities, which is important in economics to be carried out (Hatipoğlu, 2015: 31-32).

Behavioral economics emerging with Kahneman ve Tversky combined economics and technological developed with the contributions of Thaler, Akerlof and many researchers

Daniel Kahneman ve Amos Tversky, psychologists, with combining economics and psychology, made contribution to the science economics These two psychologists divided their studies in the area of behavioral economics into three parts.

Firstly, Kahneman and Tversky, made the models, which are based on the theories limiting with the homoeconomicus approach , more questionable state. in order to prove that people can irrationally behave in the cases under uncertainty and risk compared to the other states. Kahneman, with his studies on economics and psychology, gained Nobel Prize in the area of Economics in 2002 (Çalık and Düzü, 2009: 3). Secondly, they developed expectation theory. Beside this, mentioning about the failures of the theory of expected utility, they stated that the decisions of individuals depend on some reference points of their pleasure and preferences. Lastly, these two psychologists studied the framing effect. Depending on this, they stated that a structure of a problems in fact affected the preferences of the individuals. Kahneman and Tversky, with the studies they carried out on the subject, made leadership to many studies carried out in the area of behavioral economics (Toıgonbaeva and Eser, 2011: 299).

Richard Thaler, Amos Tversky ve Daniel, with the studies they carried together with Kahneman, even they are sometimes mentioned as old behavioral economists, with those they brought in the literature, are remembered as new behavioral economists. In this context, the acceptability and awareness of behavioral economics increased. In this context, the acceptability and awareness of behavioral economics. With moving from consumer preferences, Thaler determining the deviations from normative theory, introduced the problem with self-control, regret effect, and low calculation of opportunity cost and later, combining deviations from the theory of rational selection and empirical models and shaping consumer theory via more developing empirical, combined cognitive psychology with micro economy.

Another prominent name is George Akerlof. The invagination of Akerlof, based on the general theory of Keynes, is to develop behavioral micro economics. Behavioral micro economics is an area more based on psychology and sociology and less on intuitions. Akerdof stated that the subjects including economics and psychology were macroeconomic subjects. Namely, a thought that is behavioral should be attributed to macro economy. Beside this, Akerdof likened economy to a lion. With the thought of that economy is wild and dangerous, he suggests that modern behavioral economics rediscovered the dangerous and wild sides of macroeconomic behaviors. With moving from here, according to Akerdof, the people interested in behavioral economics are also seen as lion tamer (Yılmaz, 2015:26).

In addition, Akerlof gained Nobel Prize in 2001 and the speech he gave emphasized mentioned about the important concepts such as loss-aversion and reaction, becoming fair, and monetary deception taking place in behavioral economics. He also emphasized the importance of these concepts in terms of poverty of society and job cycles (Çekiç, 2016: 71).

The most remarkable difference distinguishing the period of second generation behavioral economics from first generation behavioral economics emerges in the studies by Kahneman and Tversky. The approach of first generation behavioral economics, objecting the approach of main stream, tried to introduce a new model and the approach of second generation behavioral economics, protecting the main structure of standard model, updated the assumptions toward cognitive deviations and constraints. Opposite cases were tried to be explained with the new theories (Ruben and Dumludağ, 2015: 8).

3. Making Decision Under Uncertainty And Risk: Expectation Theory

Decision making stages of individuals have highly importance in terms of estimations toward future in the science economics and the various predictions. In this context, it is quite important to introduce the theory of the decisions to be made. The science economics, with the thought that individuals have complete information, assumes that the results of decisions under consideration are also known. Kahneman and Tversky examined the theory of making decision under uncertainty and risk and expectation.

According to Turkish Linguistic Institute, while the word uncertainty means the thing that cannot be obtained a definite information about it or is not certain, many economists, not finding this definition adequate, argue that uncertainty does not only correspond to information deficiency but it has to be dealt with the dimension time. Therefore, there are different definitions and approaches regarding the concept uncertainty affected from the fluctuations, through which the sciences psychology and economics. Firstly, uncertainty, reduced to risk, is absorbed by the theory of expected utility and later, observing that it diverges from the assumption of rationality, expectation theory is reached (Hatipoğlu, 2015: 35).

Although the theory of expected utility prevails for years as a normative, definitive, and effective model of making decision process under uncertainty, later, it exposed to the serious criticisms, because it is seen that this theory does not provide adequate definition in individual decisions. It is possible to see that individuals break the main principle of this theory with many events (Aksoy and Şahin, 2009: 8). In this context, expectation theory Kahneman and Tversky presented has gained highly importance. With this theory, it was introduced that the different values were charged to the loss and profits of the individuals due to psychological factors and a new epoch was marked in the science psychology as well as the science economics (Sefil ve Çilingiroğlu, 2011: 253).

Expectation theory, dividing the decision making process of the individuals into two parts, introduces its difference from the other theories. These two stages, known as organization and evaluation, have the elements they emphasize within themselves. Firstly, 6 elements making leadership to organization stage are put in order as coding, combining, separating, cancelling, making simple, and superiority. Coding, among these elements, depending on a neutral reference point, includes the offers to appear as loss and profit. Combining is that two expectations in the defined outputs is perceived like a single expectation. Separating expresses separating the risky and riskless areas between two defined outputs from each other. While the element canceling means that known between two outputs is ignored, superiority has a meaning that an output is viewed as superior than the other. The stage evaluating following organizing includes to select output not containing uncertainty introduced with these elements (Hatipoğlu, 2015: 47-48).

Khneman and Tversky, in their studies they put forward toward behavioral economics, ground on introducing the differences of what are objective and subjective. This understanding has become a reflection of expectation theory.

This theory is based on the principle of the decreasing sensitivity ıf what is not complete rational, loss-aversion. After individuals firstly evaluated the outputs obtained as loss or profit, they use their preferences for what is definite for profits and for what is risky for losses. While the theory takes into consideration the outputs that they are risky, it, also evaluating the weights of possibilities, positions the possible output. In this context, uncertainty is expressed in the scope of cumulative distribution under the name of forward expectation theory (Hatipoğlu, 2015: 50).

As a result, for expectation and forward expectation theory, it is said that they are theories, which are psychology-based, sensitive to change, and based on loss-aversion.

Although there are many economic areas that are consistent in expectation theory, these area show that the theory emerges with which events and phenomena. The existing study areas can be put in order as stock market, labor economics, macro economy, consumption goods, and consumer preference. In stock market, individuals hold the falling stocks in the long term and sell those rising. The phenomenon forming here is predisposition effect. Predisposition effect is expressed in the form that individuals holds goods whose value fall and that they enter the tendency to sell, when its value is risen. This attitude individuals show form predisposition effect with delay of losses and actualization of profit. In the area of labor economy, after individuals reach their targets they determine in a certain period, they reduce the effort to work. This case is explained with down-slope labor curve. In the area of macro economy, another study area, in which expectation theory is in consistency, although individual know that their incomes will fall, they do not reduce their consumptions. Here, the phenomenon indifference emerges against the news he/she will be bad return. In the area of consumption goods, that sensitivity of the individuals toward the goods put for goods to be bought is more than sensitivity for the discounts made forms the phenomenon of asymmetric price. Lastly, in the study area of consumer preference, the behaviors of consumers to be reluctant in the investments they make for the future to maintain their existing states forms the phenomenon status quo supporter (Yürük, 2017: 61).

4. 2008 Crisis in The Framework Of Expectation Theory

Due to the fact that the concept crisis is a relative concept, it is rather difficult to find a clear definition that is compatible with this concept. In social sciences, the concept crisis is used in equivalent to the concept of depression. Also, in the literature there are also concepts such as economy, finance, monetary and banking crises. Among these, when economic and financial crises are dealt, while economic crisis expresses the case emerging with shrinking occurring in domestic demand, fall in investments, high-rate unemployment that forms and, depending on these negativities, regression of welfare level, financial crisis states uncertainties occurring in financing markets or the case that balloon effect occurring in a financial asset together with its chain effect in all market the concept comes into light. The biggest balloon experienced in history emerged with mobilization in stock market in 1929 Great Depression. In the recent date, 2008 Crisis basically from the balloon that occurs depending on the increase of housing prices (Engin and Göllüce, 2016: 28-29).

2008 economic crisis, a finance based crisis, results from the mistakes made regarding credit applications in USA and problems about paying the credits allocated in housing market. Beside this, that securities and derivative products are overvalued is also evident of lack of inspection. That this crisis beginning in USA has affected all over the world in the short time is quite clear.

It is possible to examine the formation process of 2008 Crisis from many aspects. The first of these examinations is expressed as negativities resulted from the policies applied. Beginning from the year 1991, in USA, together with interest rates that is low and maintaining these low rates, the capital becoming plentiful led consumption expenditures of society to increase. Also, on the reason for house prices that increases, important steps were taken in the direction of supporting mortgaged housing credits. That demands toward mortgaged housing credits are met and that housing market is views as a profitable investment, leading the values of securities and derivative products to increase much more, created a balloon effect. Beside swelling occurring in house prices and derivative products, upon that FED increased interest rates in 2004 under the name of struggle with inflation, the problems with repaying mortgage credits allocated to low-income people begun to emerge. Together with house prices beginning to fall in respect of the process, this area moved from being a profitable investment and, together with the banks allocating mortgage credits, the banks funding credits also got into a jam (Engin and Göllüce, 2016: 29).

In summary, the reasons for 2008 Crisis can be put in order as due to the fact that interest rates are low, the increase of demand to mortgaged house credits; that banks allocate house credits to low-income group, without regarding ability to pay; increase in inflation rates and the decrease of house prices in this process; balloon effect forming as a result of lack of inspection on securities and derivative products; policy faults applied; and interbank investments.

In general, the existing theories of economics remain inadequate and are questioned in predicting and even accounting for crisis: In this context, behavioral economics, a different viewpoint, gains importance. Behavioral economics, attributing to psychology and emphasizing the deficiencies of individual mind, reveal the mistakes that can be made. There are two points behavioral economics deals with running of financial markets. First of these that investor psychology may not be rationally behave as accepted by traditional theories of economics, while the second is that the ability of investors to make arbitrage to wrong- priced assets is constrained. In 2008, global financial crisis, in these points behavioral economics emphasizes are seen on the decision makers. Therefore, together with the approach of behavioral economics, crisis can be better understood. Behavioral tendencies affected investor as well as the organizing and supervising institutes, credit rating institutes supporting investors, and markets.

On the reason for mental short way of representativeness, while the individuals makes predictions about future, they also consider the past values. In other words, they extrapolate the past. While the purchasers wanting to buy house in US house market predicts the increases to form in prices, they extremely extrapolate the price in the past. This case caused the purchaser in question to pay much more for the new houses and receive credit in high rates. Because of oversupply of credit, a balloon formed in house market. The effect of overextrapolation is seen he most on credit rating agencies. Sub threshold mortgage credits as a result of that these agencies the case of housing sector in the past over extrapolate to the future, subthreshold mortgage credits allocated led to the underestimations as a result of repayment of the debt. In addition, the belief that the rise in house price will continue is among these behaviors causing overextrapolation (Bayar and Kılıç, 2012: 186-187)

While individuals generally make investment, they are directed by the emotion of ambition and fear. Therefore, the thought that the consumption is lower than life standard directs the investors to the tendency to keep their savings in safe, maintaining monetary value of their savings. Also, investor takes high risks on the name of a growth that will occur in consumption, raising life standard, and obtaining high profit. The emotion of ambition individuals assume for this aim, when regarded from investor behaviors, has become main factor entraining to financial crisis. Long-term rise forming in the market encouraged investor. The pressure that investors establish on the fund and company managers for high return forced manager to take a risk.

Those working in banks and credit rating agencies in the crisis periods may have been reacted to the disturbance sense forming as a result of belief manipulation and cognitive incompliance. For example, stating that house prices have risen since the past and with the assumption of that this rise will continue, that the rate of not repaying the allocated credits will be at low level, they eliminate the disturbance that forms Bayar ve Kılıç, 2012: 187).

As a result of the dominant one of the senses of fear and ambitions creating two different effects on investor behaviors, there occurs fall or increase in risk-aversion. Fear leads to the assets that are highly safe but have low returns to capital inflow but capital outflow from the risky markets. That the sense of fear becomes dominant on investors causes risk-aversion and thus rapidly disposing the assets whose value falls. The sales made with the motive of panic raised the increases in price falls of the assists. In this context, the sense of fear at the beginning of global crisis, transforming into panic, increased value loss of assets. As a result of falls experienced in asset prices, investors experiences the rises in the behaviors such as avoiding loss and uncertainty together with fear. This case leads asset amounts to decrease. In the period of global financial crisis, upon that the existing speculative balloon to begins to collapse, that a rapid escape from derivative products made worthless the products of interest (Bayar and Kılıç, 2012: 188-189). Investors gives an excessive reaction to a bad news including insignificance and uncertainty. Excessive reaction standing out and avoidance from uncertainty in expectation theory are observed in the crisis periods (Hatipoğlu, 2015: 76).

Another behavior emerging in global financial crisis is herd behavior occurring in financial institutes. Financial institutes making investment by using create-distribute model, together with this model, are weakly structured. In addition, although the possibility is provided for selling the products at low price, together with the crisis, most of these agencies bankrupted.

The behaviors over optimism and over confidence are of the other factors that are effective in the formation of global financial crisis. These behaviors caused all faulty decisions as especially the decisions made by investors. The decisions made by investors, who are in over confidence, are ambitious, and care risk, made contribution to the crisis in negative direction. Before financial crisis, overconfidence toward market led risk to be evaluated in a missing way; in this context, the unbalance and vulnerabilities to form in the market were not cared. While allocating credit in the search of high return overvalues the gains, it led cost to be undervalued in terms of risk. That the irrationalist behaviors of the participants in USA housing market led the prices in housing market to increase in unsustainable way and to form a speculative balloon thanks to this. In global abundance experienced before global financial crisis, transaction size was enlarged and new derivative instruments were developed. Mortgage portfolios securitized were consisted from the debts in the different quality and it came to state of that investors cannot be evaluated. Therefore, investors accepted the assessments of credit rating agencies and their recommendations depending on this without reasoning. However, global crisis revealed the failure of these agencies and they made many mistakes in especially risk assessment toward financial products based on mortgage credits (Bayar and Kılıç, 2012: 189-190).

When 2008 global crisis is explained with the psychological basis, as a result of the wrong calculations made with the prices in the future and belied manipulation, while investor thrusting more to the information acquired through he prices in the past makes wrong calculations, he/she thinks of that the future will be like the past. After gaining one time, investor considering risk factors less becomes more enterprising and more risk bearer. As a result, together with 2008 global crisis, individuals, in contrast to rationality assumption, in an environment, in which they make social interaction with their cognitive abilities, make decides. In this context, the way of understanding irrational ,individuals and institutes, becomes possible the deductions of behavioral economics based on the reality (Fırat and Kurtoğlu, 2015: 95-96).

The point arrived as a result of the developments experienced in the sciences of economics and psychology, from 2008 crisis, process which they remain inadequate, in explaining to the present is in the direction of how to more contribute to the science economics, utilizing more the psychological behaviors of individual. At the beginning, while behavioral economics introducing that the traditional theory of economics have a certain limits with the empirical evidence was in tendency of forming alternative models, at the present, proceeding beyond this aim, it produces the political recommendations such as organizations of investment based tax plans, promotion of social savings, and tax and monetary policies (Toıgonbaeva and Eser, 2011:310-313).

That the real human behaviors are included in these studies carried out today increases the ability of economic theories to explain in the framework of economics much more. In addition, with the technological tools such as experiment, cervical images, and medical instruments, behavioral economics carry out the studies that are the nearest to the reality.

CONCLUSION

Although the emergence of behavioral economics representing combination of the sciences of psychology and economics dates to Adam Smith, it was accepted as a sub branch in the mid-20th Century. Historical process beginning with the period of classical economics, continuing as early neoclassic period, postwar neoclassic period, and period of behavioral economics, dates to the present time.

Following early periods in economics, with analyzes based on empirical and psychological observations, behavioral economics introducing the deficiencies of economic theories, it emphasizes that individual behaviors should be considered together with mathematics and quantitative observations. In this context, the thought that the individual will completely be rational and that he/she will carry individual utility to maximum remains away from the reality. Because individual is an existence which has the various psychological perceptions, feelings, and intuitions, which is in interaction his/her social environment, and which has unconscious motives. Thus, with his/her structural and characteristic features he/she has and the decisions he/she makes, it is quite natural him/her to behave irrationally. However, it is evident that individuals exhibits irrational behaviors under uncertainty or risk.

When 2008 Crisis is regarded from the perspective of behavioral economics, as in the other crises, the attitudes of avoiding concern and uncertainty are dominant. In case that individual faces to the loss and uncertainty, it is seen that the tendency of sorrow and aversion is more effective. Many studies carried out on this subject show that the best explaining psychological infrastructure of the collapse and formation of balloon before crisis is expectation theory.

As a conclusion, we see that with 2008 financial crisis, the people make decisions that are limited with their cognitive abilities and social environment and thus, move away from rationality. The way of understanding these individuals passes through reality based deductions of behavioral economics,, Under dynamic structure of the changing and developing world every passing day, in the area, in which uncertainty is dominant, individuals refer to their cognitive abilities. With the behavioral viewpoint that is the subject of the study, for understanding 2008 Crisis and individuals, it is necessary to evaluate in the cognitive framework out of mechanic framework. That especially crisis theories remain inadequate in explaining 2008n global crisis, it reveals the importance of that it is necessary for the individual to be evaluated together with behavioral economics.

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