

---

***ECONOMIC AND FINANCIAL CRISIS BETWEEN TRADITIONAL  
ECONOMICS THEORIES AND BEHAVIORAL ECONOMICS THEORIES***

**Andreea Gradinaru, PhD Student, "Al. Ioan Cuza" University of Iași**

*Abstract: The aim of the work is to achieve a theoretical analysis of the economic and financial crisis. To accomplish this we will make a foray among the main theories of thinking schools of traditional economic: keynesist school, monetarist school, the Austrian school, however, the main centre of interest of the study will be the presentation of the financial crisis from the perspective of a new branch of economic science: behavioral economics. What we want to emphasize is that behavioral economics, through multidisciplinary approach that proposes, can bring major improvements to classical theories of explanation of the crisis.*

*Keywords: economic and financial crisis, behavioral economics, cognitive dissonance, bubble, homo oeconomicus.*

### **1. Introduction**

The dynamic development of the society shows that throughout history, the economies of countries faced with stages of boom and crisis, which were repeated at short, medium and long intervals, fact supported in the most recent exhaustive study on the financial crisis: *This Time is Different*, by Reinhard and Rogoff.

Although it was thought that we learned the lesson of the crisis, and economists like John Maynard Keynes or Milton Friedman showed us different doctrinal positions on how to avoid falling prey to the economic tides, the facts show the opposite, so that, at present, almost the entire world is facing the deepest and longest recession in the history of postwar.

Although there are many voices who argue that the current economic crisis is rooted dramatically in lowering the cost of housing in the United States, we consider its fundamental causes as much deeper. Moreover, it is clear that the conventional economy, based on homo oeconomicus, can provide only incomplete explanations in relation to the subprime crisis. It starts from the premise that individuals are capable of accurate economical calculations and they can take the most rational decisions when it comes to their money, but the homo oeconomicus model established by Adam Smith proved to be only a theoretical construction. In reality, people take bad decisions, often repeating the same mistakes forever, they don't know to calculate risks and make economic operations emotionally motivated, the proof being the current economic situation.

As a result, an emergent side of the economy is trying to integrate the latest advances in psychology into a more flexible and realistic explanation of human economic behavior: behavioral economics. This takes into account all the fluctuations of human rationality, being disturbed whether by emotions, the herd effect, marketing techniques, or simply their inability to make economic calculations.

Behavioral economics is therefore a branch of economics that studies how the people actual make choices every day, putting into question the traditional economy postulates. Behavioral economists propose to broaden and improve the traditional ideas with decision-making models borrowed from psychology, by multidisciplinary approach that it proposes. However, it dispenses with some of traditional ideas, mainly the ideas that have underpinned the idea of economic rationality in the neoclassical design, that of *homo oeconomicus rationalis*.

Analysis of economic and financial crisis in behavioral perspective is necessary, especially because of the increasing importance that behavioral economics currently has, its study being animated by the advance that technological progress of the last few decades it has printed to humanity. The discoveries, mainly in the field of neuro-sciences, made possible a better understanding of the human brain and the foundations that are built on certain behaviors. In addition, the timing of the economic science crossroads came at present, marked especially by the greatest crisis since the Great Depression of 29-33's, brought into question the necessity of returning to origins, trying rediscovering the fact that beyond any abstracted model, formal and mathematical, the economy is a living science, having the human in its center.

## **2. Economic and financial crisis approach from the perspective of traditional theories**

At the level of economic theories, there is no agreement on an economic model of explanation of the crisis. There is not just one explanation of the causes of the economic crisis and consequently the anti-crisis solutions formulated in macroeconomic theory differs substantially from one approach to another.

The main thinking schools that put into question the problem of business cycle and economic and financial crisis are keynesist school, monetary school, Austrian School of Law and Economics.

The first thicking school is represented by John Maynard Keynes and his followers from Cambridge-England (Joan Robinnson) and Cambridge-Massachusetts (Gregory Mankiew and Paul Krugman). The latter is also known as the Chicago school and is represented in the first place by Milton Friedman, but also by R.J. Lucas. The most important thinkers of the Austrian School of Economics who had important contributions in terms of crisis theory are Ludwig von Mises, Murray N. Rothbard, F. A. Hayek.

The theories and explanations provided inside of the first two thinking schools and their versions as well (neokeynesist, post-keynesist and neoclassical theories), practically dominated economic thinking in the 20th century and still dominates it. The followers of Keynesism and monetarism accept the institutional arrangement in the field of monetary, financial and banking: fractional reserves, the Central Bank as a lender of last resort and paper currency. Moreover, they believe that the crisis is a further proof compared to those of the past, that the economy cannot function without the State intervention. Guilty, in their opinion, is the free market and the solution to this problem consists in increasing the role of the State, through the implementation of costly programs aimed to create artificial demand on the market.

Unlike them, the Austrian School of Economics economists argued, both in the context of the crisis of 1929, and at present as well, that at the base of economic cycles and at the crisis stood and still are institutions and institutional arrangements such as fractional reserves and paper currency (fiat money). They allow the banks the artificial expansion of the credit and the money supply, causing serious imbalances in the structure of capital and ultimately leading to severe financial and economic crisis. Furthermore, they consider that the excess of State suffocates the free market and, consequently, the initiatives of entrepreneurs, the public regulatory excess being a cause of the crisis.

### **2.1 Keynesist approach**

Keynesist explanation of the crisis starts from the assumption that on the market there is a *sudden collapse of investment* or a *sudden drop in demand for capital assets*. This decrease of investments lead to a drop in income, which leads the economy in a steady position with unemployment greater than zero. Another important presumption in keynesist theory is that the market does not have self-regulating resorts. Firstly, due to the *wage rigidity* which drop would not be possible to achieve a correlation of demand and supply in the labour market at a lower equilibrium wage. Secondly, due to *the preference for liquidity*, Keynes assumes that interest is not influenced *ceteris paribus* by the increase or decrease of the loan funds supply. In R. Garrison conception, the main emphasis in keynesist theory falls on the point of collapse of investment in terms of lowering consumption. Even though interest rates would drop, investment would not be encouraged because the fall in consumption would have an overwhelming contrary effect. (Garrison, 2001, pp. 161-162). The decline in consumption or the issue of "underconsumption", is still based as well on preference for liquidity or stockpiling. The decline in consumption have a negative connotation in the context of keynesist theory, and "underconsumption" thus becomes the target of anti-crisis policies, supported by keynesist positions.

An essential aspect in explaining economic crisis from keynesist perspective is the recessionary spiral effect that is supposed to involve the sudden collapse of investment.

Decrease in investment means a drop in social income, and the drop in income means, in turn, a drop in aggregate demand, of consumption. The decrease in demand for consumer assets leads to a decrease in demand for capital assets and investment, and this leads to a further lowering of social income, and so on (the recessionist accelerator principle). According to keynesist perspective, the economy trapped in this kind of recessionary spiral has no internal competence to come out of the crisis, and Government intervention is necessary both to prevent and to solve the crisis.

Keynesist anti-crisis solutions are obviously closely related to explanation of fluctuations and economic crisis. From keynesist approach, the anti-crisis policies must prevent the entry of economy in a recessionary spiral or to stabilize and restore the economy that entered the crisis into an optimal zone.

The remedies can be both fiscal and monetary policies. *Growth in government spending* can draw out the economy from recessionary spiral, because it is assumed that any increase in consumption leads to a more than proportional increase in demand for capital assets and investments (the accelerator principle). The increase of investment leads to an increase of social income and, ultimately, to an increase in demand for consumer assets, then

to a new increase in demand for capital assets, and investment. The increase of consumption and investment bring the economy at the optimal level of income, the level that the economy is in equilibrium with zero unemployment.

Fiscal policies role is the center of the classical keynesist theory, while monetary policies have a supporting role. In the context of keynesist theory the increase of the money supply through monetary policy measures (credit expansion) in the context of the crisis is likely to solve the problem of the so-called speculative hoarding. In the case of the Great Depression (1929-1930), keynesist economists argued the importance of fiscal policies in relation to the monetary policies during the crisis. In contrast, monetarist economists have argued the contrary, the fact that the monetary offer was not high enough to cope with the contraction during the Great Depression of 1929. With all these, neither Keynesian followers have not opted in the decades that followed the Great Depression for a severe monetary policy; on the contrary they have promoted a policy of cheap money to maintain a low interest rate for government loans.

## **2.2 The monetarist approach**

The monetarism followers believe that the main problem of the crisis of 2008 represents the Central Banks that have been given cheap and accessible loans. The consequence of such a policy has been exponential growth in prices of assets (especially real estate) which culminated in the creation of a bubble.

The entire financial system was on the brink of collapse: both the banks have seen how consumers cannot return the money, but also other financial institutions by purchasing secured mortgages were exposed to large losses.

To combat the crisis the monetarists believe that Central Banks should increase the money supply by injecting money into commercial banks then to purchase state bonds that allow the financing of some State projects. Furthermore they have the opinion that banks must be saved at all costs, that should not be left to bankrupt, being too important for the economic system.

## **2.3 The Austrian school approach**

Austrian school proposes a theory of economic cycles that provide explanations of economic and financial crisis such as the one we are going through. For the Austrians, the crisis have invariably a monetary issue.

Strongly believing in the smooth functioning of the free market mechanism, Austrian economists point to the State as the sole culprit for economic depressions, through its distorted, destructive interventions. State intrusion into the free market processes, through the action of central banks, support the expansionist process of crediting, in the absence of real resources in the economy.

Thus, the economy is inundated with "false money" without coverage in assets and services, and operators can no longer take the right decisions for consumption or investment. Even more so as for a while the excess quantity of money does not lead to an increase in prices of consumer goods, but finds placements in „investments” in real or financial assets.

The cheap or plentiful money and the banks compete to offer favourable loans, allowing all to live the illusion of enrichment. It is time that the price of shares in the stock market or property prices reach record after record, generating a speculative exuberance which is self-maintaining for a while. Only that at some point the illusion breaks, either because the Central Bank reduces the pace of currency for fear of inflation, either because investors are beginning to realise the increasing risks they assume.

Austrian economists is one position without equivocation: the State must give up any form of intervention in the free market economy, leaving the possibility to operate after their own rules. From the point of view of economic health and to end the economic depression as quickly as possible, the Government should maintain a rigid „*laissez-faire*” policy. Any involvement of the Government will delay and will prevent the process of market regulation; if the government intervention is minimum then the market regulation process will work faster and will result in a healthy economic recovery.

Therefore, the solution proposed by the Austrian theory indicates exactly the opposite of the keynesian theory: the Government must not be involved in any way in the economy and must be confined to stop its own inflation and reduce its budget.

### **3. Economic and financial crisis approach from the perspective of behavioral economics**

As a result of a short stop through the traditional economic theories of economic crisis, we could see that the followers of the above mentioned theories have been too concerned about saving and speeding up the bankruptcy of financial institutions and they have omitted a major factor of the crisis: the individual. On the one hand, the interventionists have considered that the states of the world must take efforts to save financial institutions that are too big to fail. To achieve this aim were used financial programs of hundreds of billions of dollars, without taking into account the repercussions that it could generate such inflationary pressures on the economy and without a serious concern regarding the fact that, in this situation, the ones who should endure the costs are the individuals. On the other hand most followers of liberalism have relied on the fact that these institutions are unhealthy results of State intervention and that their failure would have been preferable because it would allow a faster healing of the economy and because it would not affect individuals in the same manner.

Because none of this visions managed to establish as undeniable dogma, it is encouraged bringing into question as direction and possible solution to its deficiencies the behavioral economics subdiscipline.

The followers of this school try to explain the generalization of noneconomic behavior that preceded the crisis, to explain what individuals have indulged in behaviors that do not fit into the rules of *homo oeconomicus* and which are not rational in economic terms. They believe that both liberalism and interventionism, the human factor is analyzed in mechanistic terms and is regarded as a variable without the psychological element. In other words, traditional economic models are based on some abstract individuals: selfish and perfectly rational, on the one hand, and devoid of any trace of selfishness, always ready to sacrifice for the welfare of society, on the other hand.

Behavioral economists consider this approach as a wrong one because, they say, the individual is a complex person, with actions that materializes in failures and with

incomprehensible behaviors for the economy. They say that in reality people don't always act in the most logical way from economic point of view, but rather they make decisions under the influence of psychological factors. Individuals repeat the same mistakes over and over again, they don't know how to calculate risks and make business emotionally motivated.

### **3.1 The formation of real estate bubble - a behaviorist approach**

The financial crisis of 2007 is a highly debated topic in contemporary economy. Although there are different opinions regarding the way of manifestation, whoever is guilty of causing the crisis and what are the best solutions to be adopted, one thing is certain: the crisis has started as a result of a real estate bubble.

Starting from this assumption, the question that immediately comes to mind is: why and how did this bubble formed? The literature specific to behavioral economics includes numerous studies in this field, and in the following we will present several behavioral theories which try to explain why an asset has grown to be overstated or in other words why the real estate balloon has formed.

The first theory states that a bubble is formed when investors disagree over the future prospects of an asset and are faced with some short term sale constraints (Miller, 1977; Harrison and Kreps, 1978; Scheinkman and Xiong, 2003; Hong and Stein, 2007). The logic is simple: it is assumed that some investors are very optimistic about the prospects of an asset, while others are more reserved. In the presence of short term sale constraints, the price of the asset will reflect only the point of view of optimistic investors, the reserved ones staying outside the market. In other words, the asset will be overstated.

The second theory states that the bubbles appear because investors explore in the future the past results (Lakonishok, Shleifer, Vishny, 1994; Barberis, Shleifer, Vishny, 1998;

Greenwood and Hanson, 2010). This hypothesis is supported by Kahneman and Tversky (1974) by representativeness heuristic. Representativeness represents the situations where people have the tendency to establish something depending on the characteristics of the group (Barberis and Thaler, 2003, Kahneman, 2003).

The third theory is based on the assumption that the people rely on their ability to make predictions (Daniel, Hirshleifer, and Subrahmanyam M., 1998). According to this theory in their approach to estimate the value of an asset, investors gather and analyze informations, but they become very confident in their usefulness. For example, if an investor note that the informations about a particular asset are favorable, then he will be tempted to overstate the reliability of that information, and this will lead to overestimating the asset price.

A fourth theory states that investors who achieved gains after owning an active, become less risk averse because the so-called "house money" effect. In other words, since investors have had earnings in the past are less risk averse because any loss will be damped of prior earnings. Reduced aversion to risk of investors will cause them to buy the asset with even more enthusiasm, what will overestimate the price of the asset in question. (Thaler and Johnson, 1990; Barberis, Huang, Santos, 2001).

Among all the theories the most useful for understanding the behavior of the real estate market is the second theory which states that bubbles occur because of the heuristic called representativeness. This causes people to extrapolate the past when making predictions about the future. The theory is applied in the case of the recent real-estate bubble because

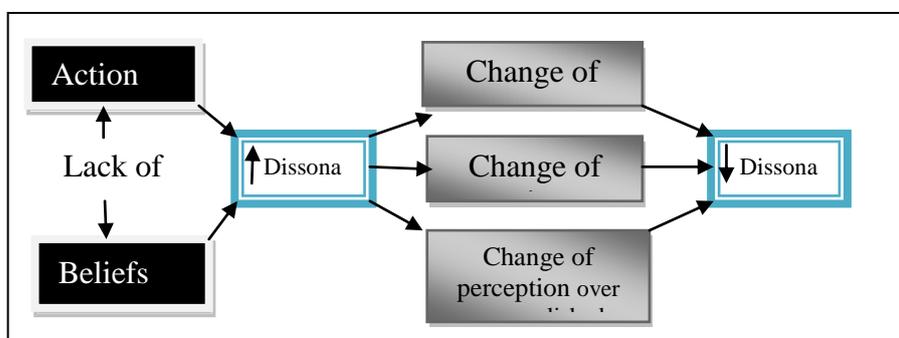
when buyers had to predict the future price of the houses, they extrapolated the growth of the past and so they paid more for their houses and thus have made risky loans. However, in order to generate a real estate bubble is not enough to assume that those who have bought houses they extrapolated. Since the houses were purchased with the help of external funding sources, it appears the idea according to which these sources have been also extrapolated. People have lived a life beyond their possibilities, and this could not last forever. Very motivated by bonuses, stock traders were very persuasive and they convinced the people with a low score in the evaluation of credit applications to borrow money, together with alluring payment terms. People who have borrowed money and have lived over their possibilities have not asked for how long this might take, and in this way they supported an artificial economic growth (Roubini, Mihm, 2010, pp. 70-142, Krugman, 2009, pp. 27-67, 102-145). In other words, the real estate bubble was formed because of a surplus credit granted to consumers mainly in the form of subprime credits. The question that arises is the following: If the population's propensity towards the speculation was known, why the banks have granted loans so easily? In other words, which is the reason that the banks have granted loans so easily to persons that lacked in financial coverage, although they were aware of the risks to which they were exposed?

### 3.2 Cognitive dissonance and the banking system

As surprising as it may seem, to us, the people, we don't like to be inconsistent. If there is a conflict between what we believe and what we do, we feel an discomfort that is the result of an inner mechanism called cognitive dissonance. Dissonance cognitive theory was introduced by Leon Festinger. This represents a stress state that occurs whenever a person has simultaneously two opinions which not only do not support each other, but rather, they exclude one another.

Psychologists have concluded that individuals often supplementary rationalize to synchronise their knowledge and to maintain their psychological stability. Considering that individuals change the behaviors and knowledges to reach harmony, they do not always act favorable to their own interests. The figure below illustrates this:

Figure 1 Cognitive dissonance



According to the literature it has been observed that cognitive dissonance often leads investors to maintain their losing investment positions despite of what logically would do, just to avoid having to admit that they made a wrong judgment. Moreover, often irrational

investors can not give up the financial instruments in which they invested even if they turn out to be losers. Also, cognitive dissonance can cause investors to ignore the new information that contradicts their initial decisions until the time they manage to gather enough informations which would justify the taken decision. Moreover the need to preserve the sense of self-esteem prevents the investor to learn from his own mistakes and leads him to believe that "this time will be different."

In the case of the banking system also the thing that fed the creation of real estate bubble and then breaking it in 2007-2008 there are similarly things. This can be explained by the fact that the bankers are people as well, predisposed to mistakes, errors and cognitive distortions. In this sense, behaviorist economists start from the hypothesis of cognitive dissonance. They argue that traders who worked at the loaning offices, they realized that financial lending solutions that they offer to people not only were risky for the previous ones, but they were a considerable risk for the institutions they were operating.

On the other hand those from the lending offices wanted to have a good image of themselves, to be able to think about their own person as the one responsible, that provides useful services to society. The two situations that they were facing created them a state of discomfort: cognitive dissonance. To escape this situation, they could refuse the people who did not met the necessary conditions for contracting a loan. However, due to the fact that for the achievement of financial performance indicators, linked in particular to the volume of loans, they were receiving substantial bonuses, they overlooked some shortcomings and made credit agreements. Furthermore they tried to manipulate their own thoughts, telling that in the end the situation is not that risky.

#### **4. Conclusions**

Therefore, what I have emphasized in this research is the fact that the traditional economy explains very well the development of an economic crisis. But to understand how it came to the formation of the real estate bubble and how to explain the banks negligence towards risk we need the behavioral economics. For an accurate analysis of the economic and financial crisis must be taken into account as well the subjective and psychological aspects of behavioral economics which moves the rational behavior from traditional terms presented by classical and neoclassical economic literature into new coordinates.

We believe that the answers provided by the economic psychology researches: the impact of emotions on the cognition, respectively of the psyche, for decision, may be integrated into a theory meant to provide a better interpretation of the phenomenon of economic and financial crisis. The study of economic phenomena which does not involve taking into consideration of those who by their own thoughts, decisions and through their actions, permanently, create these phenomena, is a deeply flawed option. In reality, as shown by the experience of the last years, the economic and financial environment evolves according to rules that are not completely understood, and the misunderstanding turned, in a first phase in the decisive factor of the spread of the crisis. Insufficient understanding of the behavioral mechanisms of human psychology, at the individual level, on the one hand, and at the collective level, on the other hand, worsened things to the point that the crisis took systemic proportions.

### References

1. Akerlof, G. and R. Shiller (2009), *Animal Spirits*, Princeton University Press.
2. Barberis, N., Huang, M., and T. Santos (2001), *Prospect Theory and Asset Prices*, Quarterly Journal of Economics 116, 1-53.
3. Barberis, N. and A. Shleifer (2003), *Style Investing*, Journal of Financial Economics 68, 161-199.
4. Barberis, N., Shleifer, A., and R. Vishny (1998), *A Model of Investor Sentiment*, Journal of Financial Economics 49, 307-343.
5. Daniel, K., Hirshleifer, D., and A. Subrahmanyam (1998), *Investor Psychology and Security Market Under- and Overreactions*, Journal of Finance 53, 1839-1885.
6. Garrison, Roger W. (2001). *Time and Money: The Macroeconomics of Capital Structure*. London: Routledge.
7. Greenwood, R. and S. Hanson (2010), *Issuer Quality and Corporate Bond Returns*, Working paper, Harvard University.
8. Hong, H. and J. Stein (2007), *Disagreement and the Stock Market*, Journal of Economic Perspectives 21, 109-128.
9. Harrison, M. and D. Kreps (1978), *Speculative Investor Behavior in a Stock Market with Heterogeneous Expectations*, Quarterly Journal of Economics 92, 323-336.
10. Kahneman, D. and A. Tversky (1974), *Judgment under Uncertainty: Heuristics and Biases*, Science 185, 1124-1131.
11. Kahneman, D., Tversky, A. (1979). *Prospect theory: An analysis of decision under risk*. Econometrica, 47(2), pp. 263-292.
12. Kahneman, D., Slovic, P., Tversky, A. (editori.). (1982). *Judgment under uncertainty: Heuristics and biases*, Cambridge, England: Cambridge University Press.
13. Katona, G. (1951), *Psychological analysis of economic behavior*, Editura McGraw-Hill, New York.
14. Keynes, J.M. (1970), *Teoria generală a folosirii mîinii de lucru, a dobânzii și a banilor*, Editura Științifică, București.
15. Krugman, P. (2008), *The Return of Depression Economics and the Crisis of 2008* (2nd edition), W.W. Norton & Company Inc., New York.
16. Lakonishok, J., Shleifer, A., and R. Vishny (1994), *Contrarian Investment, Extrapolation, and Risk*, Journal of Finance 49, 1541-1578.
17. Miller, E. (1977), *Risk, Uncertainty, and Divergence of Opinion*, Journal of Finance 32, 1151-1168.
18. Reinhart, C.M., Rogoff, K.S. (2008), *This Time is Different: A Panoramic View of Eight Centuries of Financial Crises*, NBER Working Paper.
19. Roubini, N., Mihm, S. (2010), *Economia crizelor. Curs fulger despre viitorul finanțelor.*, Editura Publica, București.
20. Schwartz, H.H. (2007), *A Introduction to Behavioral Economics: The complicating But Sometimes Critical Considerations*, în Social Science Research Network, [[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=960222](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=960222)].

21. Schwarz, B. *The Paradox of Choice. Why More is Less*, accesibilă în format electronic, Harper Collins e-books.
22. Scheinkman, J. and W. Xiong (2003), *Overconfidence and Speculative Bubbles*, Journal of Political Economy 111, 1183-1219.
23. Shefrin, H., Statman, M. (1985). *The disposition to sell winners too early and ride losers too long: Theory and evidence*. în Journal of Finance, 40(3), pp.777-790.
24. Shefrin, H., Statman, M. (2000). *Behavioral portfolio theory*. Journal of Financial and Quantitative Analysis, 35(2), pp.127-151.25.
25. Shefrin, H. (2009), *How Psychological Pitfalls Generated the Global Financial Crisis*, Working paper, Santa Clara University.
26. Shefrin, H. (2009), *How Psychological Pitfalls Generated the Global Financial Crisis*, Working paper, Santa Clara University.
27. Shleifer, A. and R. Vishny (1997), *The Limits of Arbitrage*, Journal of Finance 52, 35-55.
28. Smith, A. (2006), *The Theory of Moral Sentiments*, Editura Metz Libri, SaoPaolo, [[http://www.ibiblio.org/ml/libri/s/SmithA\\_MoralSentiments\\_p.pdf](http://www.ibiblio.org/ml/libri/s/SmithA_MoralSentiments_p.pdf)].
29. Taleb, N.N. (2010), *The Black Swan - The Impact of the Highly Improbable*, Editura Curtea Veche, București.
30. Thaler, R. and E. Johnson (1990), *Gambling with the House Money and Trying to Break Even: The Effects of Prior Outcomes on Risky Choice*, Management Science 36, 643-660.