

A Brief History of Homo Economicus From The Economics Discipline Perspective

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Abstract

Homo Economicus or economic man, which is the main postulate of classical and neo-classical theories indicate a rational person who makes decisions and pursues wealth for his self-interest. But, human-being is not a rational agent all the time. Because most of the time, some other factors determine human behavior than rationality. These could be repetition, imitation, or social norms. Therefore; behavioral economics, having introduced a distinctive perspective to economics, argues that people cannot make rational decisions and can be rational only to a limited extent in their decision. This study aims to present a historical perspective in molding the Homo Economicus in the Economics Discipline.

Keywords: Behavioral Economics, Homo Economicus, Economics, Classical Economics, Neoclassical Economics, Modern Economics

Ekonomi Disiplin Perspektifinden Homo Ekonomikus'un Kısa Bir Tarihi

Özet

Klasik ve neo-klasik teorilerin temel önermesi olan homo ekonomikus ya da ekonomik insan, karar veren ve kendi çıkarı peşinde koşan rasyonel bir bireyi belirtmektedir. Fakat insanoğlu her zaman rasyonel bir birey değildir. Çünkü çoğu zaman, rasyonellikten ziyade diğer bazı faktörler insan davranışını belirler. Bu nedenle; ekonomiye özgü farklı bir bakış açısı getiren davranışsal iktisat, insanların rasyonel karar veremediklerini ve kararlarında sadece sınırlı ölçüde rasyonel olabileceğini savunmaktadır. Bu çalışma, homo ekonomikus'un ekonomi disipliniinde kalıplaşmasında tarihsel bir perspektif sunmaktadır.

Anahtar Kelimeler: Davranışsal İktisat, Homo Ekonomikus, İktisat, Klasik İktisat, Neo-Klasik İktisat, Modern İktisat

1. Introducing Homo Economicus

Economics revolves around a central character that is an economic man or homo economicus. It refers to an idealized human being who acts rationally and with complete knowledge, seeks to maximize personal utility or satisfaction. To understand what the economic man means, we should explain the concept of rationality. Rationality, for economists, simply means that when you make a choice, you will choose the thing you like best. This is very different from the way we normally think about rationality. An active Homo Economicus can think and act and must know how to subordinate his thoughts and actions. It let the contents of his awareness reach their unique characters and be recognized by the person concerned as of the field of economics (Gattegno, 1984).

Homo economicus operates within the framework of a rational choice theory which making his or her choice based on individual preferences under constraints of scarcity and seeking efficiency, as he weighs the opportunity cost of various alternatives to find the best long-term returns from minimum immediate investment. The individual is assumed to possess perfect information to make an efficient choice even when the outcome is uncertain; an individual can make a judgment call based on expected utility. Individuals exhibit rational behavior which equates to acting consistently with one's utility function and constant rate of time preference, which is not context dependent (Logachev, 2016).

Homo economicus consistently chooses options to maximize positive or pleasurable with allowance for the reduced value of delayed rewards. Therefore once an individual chooses to pursue a positive behavior, he or she will not deviate from such intention. The standard theory presents a discount rate or a rate at which individuals discount the future relative to the present based on the opportunity cost of delay that is exponential in nature. Exponential curves are a form of normative economic modeling as they attempt to demonstrate subjective judgments of neo-classical assumptions and do not describe people's actual valuations. Modeling consistency of preference over time with a preference for smaller immediate rewards and longer ones in the future is expected. The rational agent in the model should not be discounted at a constant rate over time and should not want to deviate from original preferences to ensure the outcome that ought to be. The model does not allow for "irrational" behavior (Rodriguez-Sickert, 2009).

Economics in the first half of the 20th century was much more of a social science. Writers such as Irving Fisher and John Maynard Keynes stressed psychological factors in their explanations of economic behavior. With the mathematical revolution that began to take off in the 1940s with the likes of John Hicks and Paul Samuelson, economic agents began to be more explicitly optimizing. In the 1950s, economists who began formalizing the micro-foundations of Keynes developed more rational models; for example, compare Keynes's simple consumption function with the life-cycle hypothesis, and then with the rational expectations hypothesis of Muth, Lucas, and so on (Thaler, 2000).

1. The Ideas of Classical Period

The analysis of Xenophon's work "Oeconomicus" shows one of the earliest works coining definition of economics, but the definition is limited to Man and his management of the household. It has been known that although Xenophon's writing introduces a concept of economic man, Plato's Republic seems to become much more influential in the course of economic theory and history. In the Republic, Plato introduces a concept of a political economy where individuals are parts of a grand hierarchical order that can move towards a platonic "ideal" society if each individual performs their "true" function. Plato's concept of a political economy is similar to Adam Smith's idea of the "invisible hand" who is widely considered the father of modern economics (Wilson and Dixon, 2013).

After Greeks, Thomas Hobbes became influential in the discipline of economics by introducing his concept of the social contract and man's inherent self-interest. His work Leviathan establishes the idea that individuals are suspicious and self-interested in the most primitive aspects of our being. Accordingly, it is indicated that Hobbesian social contract and Leviathan, as with Plato's "ideal" Republic and Smith's "invisible hand" cannot be merely viewed from the perspective of the individual unit. There is a "third" person, a grand other that is persistently present as the higher moral order that guides society. It is a false idea to believe the individual is guided only by self-interest because even the Hobbesian perspective is deeply moral. Hobbes looks at individual actions in relation to the social contract or Leviathan, the larger social whole (Wilson and Dixon, 2013).

Economic historians appreciate the ever-changing aspect of economic man even while many of their colleagues in economics think the rational economic agent of neoclassical economics is the same kind of person as Adam Smith's economic man. Economists have always had their own ideas about such matters. When we combine the ideas from philosophy and economics about this, it could be said that the complex portrait of an economic man that was built up by the Scottish moral philosopher and founder of "classical economics," Adam Smith (Morgan, 2006:1-2).

According to Smith, the principal motivation for man to engage in exchange is "self-love". In "The Theory of Moral Sentiments," it is explained as follows: "Every man is, no doubt by nature, first and principally recommended to his own care and as he fitter to take care of himself than any other person, it is fit and right that it should be so. Every man, therefore, is much more deeply interested in whatever immediately concern himself, than in what concerns any other man" (Smith, 1759).

An original feature of Smith's theory is that self-love is inextricably linked with sympathy. By the term "sympathy", Smith denotes a faculty possessed by all human beings. It is a mechanism employed during social interaction, and without which, knowledge of others would be impossible. "Sympathy... is ... a power of the imagination which allows a person to put him or herself in another's place, to see the world through that other man's eyes, to feel its pressures and rebuffs through his or her sensitivities. It is a fellow-feeling, but it is not pity nor compassion, which are feelings with another over his sorrows and adversities; sympathy allows us to participate in any passion or experience of another. It is the ability we have as human beings to receive communication... from and about our fellows" For Smith, human interaction is not a straightforward matter. Human beings cannot know other human beings directly. However, the impossibility of direct knowledge does not prevent interaction based on indirect knowledge. The feelings of others are accessible by making them available as if they were our own. It could also be said that the principle of sympathy of Smith affected from "The Fable of the Bees" by Mandeville in which the emphasis of humans who need to be praised and approved (Bryson, 1945).

In "The Fable of the Bees", Mandeville argues that all people are selfish and this selfishness is both natural and virtuous. In line with Mandeville, qualities like kindness and honesty, instead of contributing to the improvement of the society, it regrets the progress. Vices appeared even in the smallest part of a society, allow almost all to live in paradise. The most obvious indicator of this is the prosperity and happiness of the societies in which all people are selfish. Because of everyone from lawyers to doctors and from barbers to clerics are thinking themselves in a selfish manner, unbelievable prosperity is being appeared in the society. Hence, behaving that are benevolent to give rise to a society in which life is impossible. The clearest reason for that is the pursuit of selfish purposes of oneself creates a spontaneous order. With this concept of spontaneous order, Mandeville has influenced Adam Smith and given him a ground for his 'homo economicus' (Günör, 2016).

According to standard economic theory, the basic characteristics of an agent are rationality and self-interest. Typically, economic man is characterized by self-interested goals and rational choice of means. The assumption of the economic man's persistently pursuing matters of self-interest has played a major part in the characterization of individual behavior in economics a very long time. The origins of the self-interest postulate are often traced to Adam Smith (1776). In "The Wealth of Nations", Smith adopts a very simplified version of human conduct. The economic behavior of Man in commercial society would be based on straightforward self-interest plus instrumental rationality. It is also significant in this context that self-love and self-interest are used interchangeably by Smith. To with the famous quote that "it is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner but from their regard to their own interest. We address ourselves, not to their humanity but their self-love, and never talk to them of our own necessities but of their advantages" (Smith, 1776).

It must be said that Smith does not see any contradiction between human definitions in his two works himself. They complement each other's work. He believed that every human has a basic desire to be accepted by others. To win this sympathy, people act in a manner of respect and admiration. This means that self-interest in economic life. Thereby, he asserts that sympathy and philanthropy are the preconditions for economic progress and wealth. Smith was followed by other economists, such as the philosopher/economist John Stuart Mill. He also held a similarly complex view of human nature and motivations (Hirsleifer, 1985).

Mill's (1861) famous essay "Utilitarianism" to begin with an almost is true of the hedonism of Jeremy Bentham who was an English philosopher. According to Bentham (1843), "nature has placed humanity under the governance of two

sovereign principles that are pain and pleasure. So it is for them alone to point out what we ought to do, as well as what we shall do.” In his book “Introduction to Principles of Morals and Legislation”, Bentham says that a motive is significantly nothing more than pleasure or pain operating in a certain manner. The motive is always some pleasure or some pain. Some pleasure of the act in question is expected to be a means of producing; some pain is expected to be a means of preventing. For him, pleasure and pain are the only possible motives to action, the only ends of which we can aim.

Similarly, Mill (1861) says, “Desiring a thing and finding it pleasant, aversion to it and thinking of it as painful are phenomena entirely inseparable, rather two parts of the same phenomena. To think of an object as desirable and to think of it as pleasant, they are the same things; to desire anything, except in proportion as the idea of it is pleasant, is a physical and metaphysical impossibility.” Mill (1861) claims we always desire that pleasure is the only object of our desire.

It is clear that Mill (1861) is unwilling to accept the Bentham’s (1843) view holding that all pleasures are qualitatively on a par. On the contrary, Mill (1861) argues that we must differentiate between ‘higher and lower’ pleasure. Utilitarianism, the ethical doctrine that the good of any action is tested by its contribution to the results, especially human happiness. It should be focused on what brings happiness to the greatest number. It tries to prove the rational and scientific foundation of morality. Rational based on calculation and scientific is based on observation. While Bentham (1843) thinks an action is right if it produces the greatest amount of pleasure rather than pain, Mill thinks an action, if only it conforms to generally accepted rules, creates the most pleasure for most people. Hence, Bentham (1843) considers quantitative pleasure, and Mill (1861) considers qualitative pleasure, not just quantitative pleasure (Mondal, 2016).

2. Ideas of Neoclassical Theory

Although the origin of the idea of ‘economic man’ is generally traced back to John Stuart Mill (1861), the Latin use of ‘homo economicus’ can be found in works of other 19th century economists such as Jevons (1879), Menger (1888), Walras (1874), Pareto (1905), and Knight (1921). During the dawn of the neoclassical school revolution, Jevons (1879), Menger (1888), and Walras (1874) developed and reformulated some of the classical assumptions. The neo-classical theory focused on the marginal utility to explain and understand consumer preferences detailedly. Richard Langlois (1995) states that the neo-classical framework explores “means and ends” as agent’s behavior reflects the solution to a logical problem of allocation. This foundation then allowed neo-classical economists to form the “logical problem with the mathematical problem of optimization” while incorporating elements of “utilitarian psychology.”

With the calculus of pleasure and pain, Jevons (1879) explained that rational people base decisions on extra marginal utility. Humans seek to obtain the greatest amount of what is desirable at the expense of least that is undesirable, and this needs to be connected to a commodity which is defined as an “object, substance, action of service which can afford pleasure or ward of pain.” It is implied that individuals possess all the necessary information to analyze various commodity alternatives, agents can then rank commodities in order of preference; utility value is inferred from observed preferences. People choose the best bundle under a given budget constraint. By observing several consumptions, choices can then allow for an estimation of an individual utility function which can be used to predict future choices.

Jevons (1871) paints economic man as a calculating consumer; his motivations and actions are defined in psychological terms that are fundamentally unobservable yet causally powerful in the larger economic system. Jevons’s portrait was inspired by the economic moral principle of utilitarianism and his belief that economic behavior should be characterized in the formal language of mathematics. Jevons’s “calculating man” is one of the characters who helped launch the so-called “marginal revolution” in economics (an event well-known to historians of economics). Menger’s “choosing man,” also a character from the marginal revolution, is another. As I suggest later, these two can be understood as the ancestors of mid-twentieth-century economics’ rational economic man (Morgan, 2006).

Knight (1921) argued that only by endowing calculating man with full information about everything in the economy, and with perfect foresight about the future, could the individual person make the necessary calculations that would allow him to judge accurately what actions to take in buying, selling, and to consume. And, only by assuming that

there were infinitely many of him and that each acted independently of the others, could neoclassical analysis depict the perfectly competitive economy necessary to arrive at an equilibrium outcome which maximized aggregate utility.

Menger's (1888) ideal type of economic man is located in his concept of the individual or "human economy" (in contrast to the "national economy" of the historical school' economists. Menger starts from what he takes to be the most vital elements of the human economy, namely: premeditative activity aimed as satisfying our material needs ... The direct needs of each economic subject are given in each case by his individual nature ... The goods available to him are strictly given by the economic situation of the moment ... Thus, the starting point and the goal of every concrete human economy are ultimately determined strictly by the economic situation of the moment (Menger, 1883).

Menger's economic man character was one who aimed and acted to satisfy his or her needs, given limited knowledge and given the constraints of his or her situation of the moment. His strict type of human economy was surely an ideal type, but the character of his model man was not "ideal" in quite the sense implied by Weber (1913) in discussing economic ideal type behavior as unaffected by errors, and so of a certain perfection. Austrian school economists have always believed that it is an important part of the character of being human to have limited knowledge, and we should understand that feature to be a part of their ideal type portrait of economic man.

Though the idealized neoclassical model of an economic man used by Knight was well-clothed with artificial assumptions about his knowledge and foresight, as we have seen, his underlying human character had become decidedly thin. The psychology of his character all but disappears in the mid-twentieth century when he gains the label "rational". While the classical economists had pared down Smith's well-rounded man to homo economicus, marginal and neoclassical economists such as Knight exaggerated certain of his characteristics—his calculating ability and his "perfect knowledge"—to create a more idealized model of economic man. From Adam Smith's rather rounded character—a fiction, but not yet a model—through Mill's model: homo economicus, to Jevons's calculating man, economic man portraits gradually became thinner during the nineteenth century. Each move was made as part of a simplifying strategy, to reduce the complexity of dealing with all human feelings and emotions and actions that flow from them and, at the same time to focus the attention on the explicitly economic aspects of man's behavior. This was the nineteenth-century economists' answer to dealing with human behavior scientifically. In neoclassical economics of the mid-twentieth century, the economic man held an idealized character; one no longer was taken to represent real man but to be an artificial character created by the economists (Morgan, 2006).

Pareto's and his contemporaries' anti-psychology stance resulted in the reformulation of consumer theory as an allegedly psychology-free theoretical construction. The reformulation was completed in the works of Hicks (1931), Allen (1934), and Samuelson (1937) and mainstream economics expelled any psychological and sociological notions found in earlier marginalists writings. The new concept of psychology-free economic rationality would also form the basis of the general equilibrium model that emerged during the same period. In the middle of the 20th century, Milton Friedman's essay on economic methodology was an effort to shield the rationality assumption from criticism, mainly originating from psychological research. In Friedman's opinion, psychological assumptions were largely irrelevant to the validation of theories. These developments completed the Paretian turn of mainstream economics (Drakopoulos&Katselidis, 2017).

In general terms, neoclassical economics is founded on the notion that people have limitless capacity for rationality, willpower, and selfishness. We set goals and pursue them with intellect by using available information and resources. Homo economicus presents an idealistic view of human nature, governed by rational behavior with the illusion of control, void of powerful emotions within an existence that is complex, dynamic, and chaotic. It can then be concluded that our decision-making is not governed by the context of thoughts, desires, feelings, values, and other intrinsic states. From this point of view, it could be said that the neo-classical model of rational choice has had limited success in explaining economic and certain non-economic behavior in simplified terms, but it has not been successful in explaining psychologically and ethically motivated behavior (Logachev, 2016).

3. Ideas of Modern and Post Modern Economics

In the closing decades of the nineteenth century, when the second marginalist generation of economists emerged, the influence of positivism as the dominant scientific philosophy became much more prevalent. Up to the beginning of the

20th century, there was almost no methodological objection regarding the incorporation of ideas from psychology into economic theories. After this period, a fundamental shift in economics took place, which is also known as Paretian turn. This conceptual change, initiated mainly by Vilfredo Pareto and completed in the first decades of the 20th century by John Hicks, Roy Allen, and Paul Samuelson, attempted to expel all psychological notions from economic theory. In the spirit of positivism, it is considered that economics should be freed from any philosophical or psychological notions that prevent the application of the positivist methodology. In the same conceptual tradition, Pareto believed that the construction of the fictional model of economic man was adequate for the needs of economic theory, thus clearly implying that psychological findings are not necessary. Similarly to Pareto, Irving Fisher was against the inclusion of psychological concepts in economics. It should be pointed out that Fisher thought of psychology as a ‘soft’ subject not worthy for consideration by the ‘hard’ science of economics (Gradinaru, 2014).

From the 1960s onwards, psychology gradually did make a return to economics. It has been known that Simon (1955) seriously questioned the sense of approximating people by homo economicus. He suggested looking at the information and computational capacities that humans possess and use this as the starting point for economic models. Simon won the Nobel Prize in Economics in 1978 for his pioneering research into the decision-making process within economic organizations. His studies aim to replace homo economicus with something more human-like fell largely on deaf ears. His studies are proof that homo economicus is not a good approximation of how people behave (Cartwright, 2011).

According to Simon (1955), main credit should be given to Daniel Kahneman and Amos Tversky. In the late 1970s, the theoretical and empirical validity of expected utility theory started to be questioned by psychologists Kahneman, Tversky, and Slovic (1982). These works marked the revival of psychological ideas in economic analysis. Kahneman and Tversky’s (1974) study is considered to have given the stimulus for the emergence of behavioral economics. The approach of Kahneman and Tversky had a strong orientation towards psychology, and many key ideas found in behavioral economics were stimulated by psychological literature. Daniel Kahneman won the Nobel Prize in Economics in 2002 for “having integrated insights from psychological research into economic science, especially concerning human judgment and decision-making under uncertainty.”

On the other hand, Smith (1962) performed a series of experiments to see whether basic predictions of the standard economic model about markets would prove correct. The dominant view among economists as recently as the 1970s was that economists, unlike chemists or biologists, would never be able to perform controlled experiments. Smith’s work on experimental economics, which began in the mid-1950s, challenged that view. Experimental economics seems to have led Smith to delve into a more complex reality of human motivation than is outlined in standard economics texts and classes. Always the empiricist, he does not assume that markets work but is open to seeing them work or fail. In 2002, Vernon Smith and [Daniel Kahneman](#) were awarded the Nobel Prize in economics. Smith received his prize “for having established laboratory experiments as a tool in empirical analysis, especially in the study of alternative market mechanisms.”

Another element that can be called as the ‘what equilibrium to choose problem’ is studied mainly by Selten (1965). The problem became apparent with the rapid progress of game theory in the 1950s and 1960s. The game theory looks to capture behavior in strategic situations and meant the demands on homo economicus became ever more stringent. Not only should he or she be selfish, rational, more clever than any economist, and the like, homo economicus also needs to be telepathic. Selten (1965) won the Nobel Prize in Economics in 1994, together with John Nash and John Harsanyi ‘for their pioneering analysis of equilibria in the theory of noncooperative games.’ More than anything else, it is known that the game theory was instrumental in the rebirth of behavioral economics. That is because it meant the next logical step in developing the standard economic model was to draw from psychology and use experiments. The standard economic model had hit a dead end, and behavioral economics was needed to move it forward. All in all, it can be said that behavioral economics has the potential to improve our understanding of economic behavior from so many different angles, and this eventually shone through (Cartwright, 2011).

On the verge of globalization where the decade marks the postmodern era, following Kahneman, a well-respected economist Shiller (1980) and Thaler (1987) also won the Nobel Prize in 2003 and 2017, respectively for their contributions to behavioral economics. They were the key proponents of the idea that humans do not act entirely rationally, played a crucial role in the development of behavioral economics over the past four decades. They represent an important step in economists’ acceptance of a more realistic model of human behavior that incorporates the various

foibles and frailties of human decision making. They provided both conceptual and empirical foundations for the field. By incorporating new insights from human psychology into economic analysis, they provided economists with a richer set of analytical and experimental tools for understanding and predicting human behavior. Their work has had a significant cumulative impact on the economics profession; it inspired a large number of researchers to develop formal theories and empirical tests, which helped turn a somewhat controversial, fringe field into a mainstream area of contemporary economic research (Wilkinson & Klaes, 2012).

Traditional economic research the human factor which is analyzed in mechanical terms and is regarded as a variable without the psychological element. This approach is inadequate since the individual is a complex person with actions that are materialized in failures and with incomprehensible behaviors for the economy. People do not always act the most logical from an economic point of view. They can make decisions under the influence of psychological factors. Individuals may repeat the same mistakes over and over again. The process of making decisions and enduring the consequences encourage people to make better decisions. Individuals do not know to calculate risks and make economic operations emotionally motivated. These ideas captured very well by a new direction of scientific research called behavioral economics. It is a new trend of economic thinking, which combines psychology with the economy and studies the individual in its many forms of manifestation that has the main hypothesis as human behavior. Behavioral economics has contributed to economics by emphasizing the necessity of examining the economic behavior of people from psychological aspects (Can, 2012).

4. Conclusion

Homo economicus has become a stronghold of neoclassical economics. Generations of economists, politicians, entrepreneurs, and institutions have relied on the homo economicus model without giving much thought to the gap between reality and theories that often fail. But the definition of the economic man has changed considerably throughout the centuries, as a traditional society, where the Man was merely a factor of production, evolved into a modern society that witnessed the birth of the individual. Therefore the role of the homo economicus is diminishing in contemporary economics. The homo economicus model should be adapted to the new reality by drawing upon our expanded knowledge of human nature, rationality, and decision-making. A shift in emphasis to man has revealed that psychology, the human mind, and emotions significantly influence economic processes.

This paper has attempted to demonstrate the concept of homo economicus in a historical perspective within the economics discipline. The homo economicus model seems to be the main weakness of neoclassical economics. From the neoclassical perspective, an individual endowed with the attributes of homo economicus does not exist in reality; such an individual is an impossibility, an exception that proves the rule. In modern economics, attempts should be made to reverse viewpoints, and the same approach can be used to relate behavioral economics to neoclassical economics, where weaknesses are questioned and looked at as anomalies. On the verge of the globalization where economics has come into a postmodern era, since 1980s, the field of behavioral economics has become a burgeoning one, as both economists and psychologists have expanded and developed the work of the pioneers. As more success has been achieved in explaining the anomalies of the standard model and in developing a complete body of theory, the field has now become a more respectable one, with a variety of journals publishing relevant research.

REFERENCES

- Allen, R. G. (1934). The nature of indifference curves. *The Review of Economic Studies*, 1(2), 110-121.
- Bentham, J. (1843). A manual of political economy. *History of Economic Thought Books*.
- Bryson, G. (1945). Man and society: The Scottish inquiry of the eighteenth century.
- Can, Y. (2012), İktisatta Psikolojik İnsan Faktörü, *Hukuk ve İktisat Araştırmaları Dergisi*, 4(2), 91-98.
- Cartwright, E. (2011), *Behavioral Economics*, Routledge: Taylor & Francis Group.
- Drakopoulos, S. A., & Katselidis, I. (2017). The Relationship between Psychology and Economics: Insights from the History of Economic Thought.
- Gattegno, C. (1984). Homo Economicus. Educational Solutions Worldwide Inc: New York.
- Gradinaru, A. (2014), "Behavioral Economics and The Need of Psychology in Economic Research", *The USV Annals of Economic and Public Administration*,1(19), 86.
- Günör, R. B. (2016). Bernard Mandeville'in Arılar Masalı Adlı Eseri Hakkında Bir İnceleme. *İdil Sanat ve Dil Dergisi*, 5(22), 521-536.
- Hicks, J. R. (1931). The theory of uncertainty and profit. *Economica*, (32), 170-189.
- Hirshleifer, J. (1985). The expanding domain of economics. *The American Economic Review*, 75(6), 53-68.
- Jevons, W. S. (1879). *The theory of political economy*. Macmillan and Company.
- Kahneman, D., Slovic, S. P., Slovic, P., & Tversky, A. (Eds.). (1982). *Judgment under uncertainty: Heuristics and biases*. Cambridge university press.
- Logachev, M. (2016). Akratic Homo Economicus: Does the Neoclassical Economic Theory "Rational Agent" Assumption Accurately Depict Human Nature?.
- Menger., C. (1888). Zur Theorie des Kapitals. *JNS*, v.51, [p.1-49](#)
- Mill, J. S. (1895). *Utilitarianism*. Longmans, Green and Company.
- Mondal, A. L. (2016). Mill's Critique of Bentham's Utilitarianism (Vol. 4). DOI: [10.14355/ijps.2016.04.003](#).
- Morgan, M. S. (2006). Economic man as model man: ideal types, idealization and caricatures. *Journal of the History of Economic Thought*, 28(1), 1-27.
- Pareto., V. (1905). Il Crepuscolo della Libertà", 1905, Rivista d'Italia. Manuale di economia politica, con una introduzione alla scienza sociale, 1906 [Italian 1906 ed: bk, av] [Expanded French 1909 ed, Manual d'economique politique]; [English 1971 trans. Manual of Political Economy].
- Rodriguez-Sickert, C. (2009). 30 Homo economicus. *Handbook of economics and ethics*, 223.
- Samuelson, P. A. (1937). Some aspects of the pure theory of capital. *The Quarterly Journal of Economics*, 51(3), 469-496.
- Selten, R. (1965). Spieltheoretische behandlung eines oligopolmodells mit nachfragerträgeit: Teil i: Bestimmung des dynamischen preisgleichgewichts. *Zeitschrift für die gesamte Staatswissenschaft/Journal of Institutional and Theoretical Economics*, (H. 2), 301-324.
- Shiller, R. J. (1980). Do stock prices move too much to be justified by subsequent changes in dividends?.
- Simon, H. A. (1955). A behavioral model of rational choice. *The quarterly journal of economics*, 69(1), 99-118.
- Smith, A. (1759). The theory of moral sentiments, ed. *DD Raphael & AL Macfie. Liberty Fund.(Original work published in 1759.)*

Smith, V. L. (1962). An experimental study of competitive market behavior. *Journal of political economy*, 70(2), 111-137.

Thaler, R. H. (1987). Anomalies: the January effect. *Journal of Economic Perspectives*, 1(1), 197-201

Thaler, R. H. (2000). From homo economicus to homo sapiens. *Journal of economic perspectives*, 14(1), 133-141.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *science*, 185(4157), 1124-1131.

Walras, L. (2013). *Elements of pure economics*. Routledge.

Weber, M. (1913) *The Theory of Social and Economic Organisations*, A. M. Henderson and T. Parsons (Trans) (New York: Free Press, 1947).

Wilkinson, N. and Klaes, M. (2012), *An Introduction to Behavioral Economics*, Palgrave Macmillan : St Martin's Press LLC.

Wilson, D., & Dixon, W. (2012). *A History of "homo Economicus": The Nature of the Moral in Economic Theory*. Routledge.