**Redefining the Economic Agent: A Psychological Approach**

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**Abstract:** The main intent of this article is to investigate the social nature of an economic agent in a realistic setting of the market. After a methodical and detailed reading of the classical writings by Adam Smith, Marx Weber and John Stuart Mill, it is found that apart from rationality, various other social factors have been talked about in their respective economic models, which would be discussed herein. All of the three economists believed that economic agents and their actions depend highly on the social, cultural and moral frame inside which they operate. In light of this, I re-consider the classical economic man as a model man and use the ideas from philosophy and psychology to redefine and reinterpret the definition of an economic man. There are two important ideas discussed in this article. First, the economic man need not maximize his utility, instead he merely satisfy his needs both on the basis of monetary as well as psychic income. Second, the essence of rationality, lies in choosing the ways to satisfice. An economic man can satisfy his expectations only when he seeks out new methods wisely to achieve them and not by choosing the best available option given to him at that moment. This way, contemplating the problem from the economist’s and philosopher’s point of view, will enable us to idealize the economic man, which is a standard way of thinking in the philosophy of science. The knowledge gained by this article will help us to understand the fundamental and primal necessities, required for the development of any new economic agent model.

**Keywords:** Rationality, Classical Economic Model, Economic Agent

1. Introduction:

The concept of economic rationality is widely used as the main assumption for the behavior of individuals in microeconomic models which appears in almost all economic treatments of human decision making. It can be described as any behavior appropriate to achieve one’s own goals, well within the limits imposed by the economic conditions and constraints. The goals in this context are primarily money motivated (maximum utility for the consumers and maximum profit for the producers) but in this article I reason that it can very well be any other personal incentive also, such as revenge, narcissism, self-interest etc (Hardin 1968). This is also popularly described as “psychic income” in the economic theory. I believe an individual has limited resources to his disposal and is unable to satisfy all of his or her needs, and to be happy and content he or she must make an optimum choice amongst various alternatives or devise a new one if needed. As a result, it can sometimes be said that economics is a social science, which refers more to a method than being a specific subject. It is about people and their interactions with each other and how they organize themselves to meet their needs and enhance their well-being (Hamilton 1980,1986)

One of the most commonly used concept, known as homo economicus, has been utilized since the early days of Political Economy. John Stuart Mill, one of the father of Political Economy said, “Political economy does not treat the whole of man’s nature as modified by the social state, nor of the whole conduct of man in society. It is concerned with him solely as a being who desires to possess wealth, and who is capable of judging the comparative efficacy of means for obtaining that end.” It is this concept which is still used in many [economic theories](https://en.wikipedia.org/wiki/Economic_theories). An economic man is portrayed as a human who is consistently [rational](https://en.wikipedia.org/wiki/Rationality) and narrowly [self-interested](https://en.wikipedia.org/wiki/Rational_egoism) [agents](https://en.wikipedia.org/wiki/Agency_(philosophy)) pursuing his subjectively-defined ends [optimally](https://en.wikipedia.org/wiki/Optimal_decision). He does so by making attempts to maximize [utility](https://en.wikipedia.org/wiki/Utility_maximization_problem) as a [consumer](https://en.wikipedia.org/wiki/Consumption_(economics)) and [profit](https://en.wikipedia.org/wiki/Economic_profit) as a [producer](https://en.wikipedia.org/wiki/Production_(economics)).  Note that this kind of "rationality" does not say that the individual's actual goals are "rational" in some larger ethical, social, or human sense, it only says that he tries to attain them at a minimal cost. For some classical authors, this character has general descriptive or explanatory reach that is applicable almost everywhere, while for others, it means that the character is not applicable directly anywhere in the real world because nowhere is such a person to be found. I agree with the latter, because economics is not only an abstract science, but at the same time a science of tendency laws, wherein general laws applied to the concrete cases of the world must always be modified by an account of the many specific causes. It should also be understood that human rationale is much bigger and complex than what we sometimes expect it to be and at times, it is capable of producing not so conventional and expected outcomes.

An interesting example of human rationality and its unconventional outcomes can be seen, when at times institutional forces (state regulation, ownership and governance norms) appear to take over in a market economy. In such times of institutional forces taking over, there is an institutional pressure on firms and organizations to adopt similar structures, strategies and processes. This would lead to make all the organizations more or less alike. This is often termed as “organizational isomorphism” (DiMaggio and Powell, 1983). In this concept, Government, industrial associations, and other social actors are the ones who define actions that are deemed acceptable and exert pressures on organizations for conformity. Organizations on the other hand, on the pretext of conforming to social expectations, imitate practices used by other organizations which end up in making them all look alike. We might think that now when all the firms think and act the same and there is no room for innovation, it should lead to stagnation. But Sherer and Lee (2002), citing human rational behavior theorized that economic agents and legitimate organizations are more likely to create and experiment with new technical rationales that differ from current standards precisely because they will have a higher status when they are different. This as a result would eventually lead to increased output and production. Hence, it can be said that at times it is normal for economic agents to think unconventionally and act outside the bound of expected behavior, thus achieving unusual outputs.

There are other economic rationality models present too, which in my view take specious assumptions of how economic agents can be understood and studied. But, I must admit that the recent financial, economic and public debt crisis has maligned my trust in the mainstream economic theory and made me question myself if is it really possible to offer an adequate description of economic reality. In my view, modern day economic agent and organizations operate in the frame of economic rationality per se, but not all the times their main intention is to maximize profit. Multinational companies, big corporations etc., can exploit their might, supremacy and wealth and are ready to incur some kind of monetary loss in order to address their wider social issues. Some of these social issues are self-image, pride, dignity, confidence, trust etc. I also think that the agents in modern day economic setting will use whatever it take including aggressiveness, competitiveness, revenge, deception, cheating to make their ends meet. Falk (2013) too in his research, showed that markets, as they are organized today, are undermining the ethical behavior. Although there has been some recent studies suggesting that the majority of decision makers are of the type of a “homo socials” with either only equity or an equity oriented fairness preference (Helbing 2013, Berger 2012), I would like to address the modern day economic rationality and irrationality proposition from a new and different point of view.

In the above context, I personally think that the economists have been a bit reluctant to understand the behavior of individual economic agents, except as something which is necessary to study and provide a foundation for macroeconomics. My intention in this article is to discern between how people ought to behave and how they do behave. In my view, it would be unfair to make any strong predictions about human behavior without taking the pain to understand the people themselves in the first place. Without denying the importance of self-interest and rationality in any economic model, I argue that we have failed to include some of the central problems of conflicts and dynamics with which society and human behavior have become more and more concerned nowadays.

In my endeavor to redefine and conceptualize the economic agent, I divide the present research article into two sections. The first half talks about the social nature of economic rationality in the works of the three most influential economists. A firm believer, of going back to start and the basics when you are stuck in a research, I choose to study the original writings of three most important economists of all time , namely Adam Smith, John Stuart Mill and Marx Weber. Adam Smith considered as the father of economics is best known for his two classic works: [The Theory of Moral Sentiments](https://en.wikipedia.org/wiki/The_Theory_of_Moral_Sentiments) (1759), and [An Inquiry into the Nature and Causes of the Wealth of Nations](https://en.wikipedia.org/wiki/The_Wealth_of_Nations) (1776). The latter, usually abbreviated as The Wealth of Nations, is considered as his [magnum opus](https://en.wikipedia.org/wiki/Masterpiece) and the first modern work of [economics](https://en.wikipedia.org/wiki/Economics). J.S. Mill is considered to be the father of political economy and one of the most influential philosopher of his time. He was a big proponent of utilitarianism and his work showcases the economic philosophy of free markets. As [Adam Smith](https://en.wikipedia.org/wiki/Adam_Smith)'s [Wealth of Nations](https://en.wikipedia.org/wiki/The_Wealth_of_Nations) had during an earlier period, “Mill's Principles” dominated economics teaching in the 19th century. Lastly, to understand the social factors in the rationale of an economic agent I picked Max Weber who was one of the prominent leaders of the German Historic School of Economics. He was a key proponent of “[methodological antipositivism](https://en.wikipedia.org/wiki/Antipositivism)”, arguing for the study of [social action](https://en.wikipedia.org/wiki/Social_action) through [interpretive](https://en.wikipedia.org/wiki/Verstehen) (rather than purely [empiricist](https://en.wikipedia.org/wiki/Empiricism)) means, based on understanding the purpose and meaning that individuals attach to their own actions.

This literature review served as the foundation of my research, and I believe that economic rationality and social behavior has become inextricably intertwined. As it is understood, the three economists believed that all of the economic actions are always context and environment dependent and take place inside a well-defined social context.

The second half, conceptualizes my view on the economic man which is a close realistic approximation for today’s world. My concern here is not with the relation of standard postulated models to the real economic world, but with the accuracy of answers to some well-defined psychological questions. I think the inability of any model to do so, put serious questions and constraints to the nature of models that can be admitted into the analysis.

2. Classical Economic Man:

Since the 18th century, economics have been revolving around a central character, called “economic man”. It is an imaginary figure which is able to satisfy economic models that push for consumer equilibrium. All of an economic man's choices are based on the fulfillment of his or her "utility function", meaning the ability to maximize any situation that involves choice. In the past, various prominent economists have come up with various definitions of economic man to devise their strategies in creating these model characters and put forward new economic theories. The very first and undoubtedly the most important yet complex portrait of economic man was built up by Adam Smith. He is also regarded as the founder of “classical economics”, who is held responsible till date to impose the idea of self-interested economic man onto economists. However as it would be seen in the later section on Smith, his economic man turns out to be a complex mixture of instincts, talents, motivations and preferences than just self-interest. Later, a bit of narrowing in the characterization of economic behavior came with the philosopher John Stuart Mill and his creation of homo economicus, a character explicitly restricted in his emotional range to economic motivations and propensities. In his work, I am able to see the glimpse of an economic agent whose central character is of a lazy and miser but effective at the same time. However, it was Marx Weber, who introduced the concept of “Ideal type” in his economic theory, trying to break away from the general economic theory approach. As it would be seen later in this article, an ideal type is formed from the unique characteristics and elements of the given [phenomena](https://en.wikipedia.org/wiki/Phenomenon), and is not meant to correspond to all the other [characteristics](https://en.wiktionary.org/wiki/characteristic) of any one particular case. It is not meant to refer to perfect things, [moral](https://en.wikipedia.org/wiki/Moral) ideals but rather to stress certain elements common to most cases of the given phenomena.

But as the time progressed, and so the development in economics, we see some modifications in the self-interest postulate from time to time. A few economists presumed that the individual can pursue self-interest more or less only in “isolation” and hence it cannot be applied to realistic scenarios. Frank Knight mentioned, “The purely rational action of the economic man requires the complete absence of personal relations, in effect requiring persons to treat each other as vending machines.” (Knight 1960). Stilger also said, “Though economists are aware that people’s tastes and motives are formed by social interaction, by culture and religion, and status, these are considered to be noneconomic factors and as such play little active role in the formal analysis.” (Stilger 1987). Although there are other prominent theory and ideas, mainly by Malthus, Jevons and Frank Knight, which would not be discussed in detail in this paper and I restrict myself to the first three economists only.

**2.1. Smith’s social individuals:**

Albert Hirschman (1977), gave a wonderful account of how the “passions” which ruled men’s behavior in ancient times came to be replaced by the “self-interest” motivation in modern times. But, after reading some of the original writings by Smith, I say that it is a mistake to think that self-interest is all what is there to Smith’s central economic character. In fact Smith’s economic man shows himself to be a complex mixture of instincts, sympathy, trust, motivations and preferences. In my opinion, it can be said that he explicitly condemned the individualistic action of an economic agent. This is on the basis of some of the important human faculties – sympathy, trust, motivation and preference which he mentioned in his writings. These qualities require individuals to connect to each other and can never be attained individually focusing merely on one’s self interest.

Talking about sympathy, in his book “Theory of Moral Sentiments”, he wrote, “Every man is, no doubt, by nature first and principally recommended to his own care; and he is fitter to care of himself than of every other person...” Smith also insisted that self-love is the only governing human action. There are many psychological motives that counteract the instinct of “self-love”, such as the “desire for social esteem”, “vanity”, and the “desire for an easy life”. He quoted that men living in societies besides seeking for “bettering their own conditions”, also seek for the “approbation” of their fellowmen (Smith, 1759). He also went ahead and said that the natural “interest of every man to live as much as his ease as he can”, is excessive when revenue predominates as a source of wealth leading to indolence and idleness, which definitely “corrupts the industry of those who ought to be maintained by the employment of capital” (Smith, 1776). In addition, he also wrote “how selfish so ever man may be supposed there are evidently some principles in his nature, which interests him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it”.

On trust, he mentioned the idea that the quality of political institutions affects the economic behavior of an individual in his book, The Wealth of Nations. “The comparison of the two most important British colonies, the constitutionally governed North American Colony, and that of the mercantile company which oppresses the domineers in the East Indies illustrate this.” (Vol I, 82). Moreover he wrote, the idea that “trust respond in the workmen” is an essential quality of labor that should be taken into account when it comes to estimate its remuneration (Vol I, 55). Smith believed that trust was one of the significant exceptions to his general rule of equality of wages between different employments (Vol I, 117).

Motivations and preferences too, were equally important for Smith. According to him, even if the primary motive of any economic action is self-interest, it is endowed with fellow-feeling, for economic exchange is civil and mutually advantageous, not exploitive and war like. Here, he talked about a series of motivations in economic behavior; prudence, which is the ability to foresee the consequences of actions, parsimony – to save in order to reap later and reasoning – to guide action towards an achievable end. These are the three motivations, when taken together create investment upon which the extension of the division of labor depends.

Talking about preferences, it can be noticed that Smith’s man likes to avoid risk and prefers his home country to overseas. The combination of his preferences determines the order of investment in the economy. This order of investment, taken at the aggregate level, is a necessary requirement in Smith’s theory of natural economic development. It also has the unintended beneficial consequences as it maximizes home employment and so increase the wealth of the nation in aggregate (Sudgen 2002).

Thus, it can be identified that Smith did introduce systematically moral elements wherever he believed them to be relevant in his economic theory. He believed that individuals understand themselves as being always part of a social whole and act consequently with emotions and moral sentiments.

**2.2. Mill’s economic rationality:**

It can be said that, John Stuart Mill primary intention was to construct Political Economy as a separate branch of social science. In defining the domain of political economy separate from other fields, Mill concentrated on only those aspects of man’s behavior which come under the realm of economics. He introduced the principle of economic behavior in his essay “On the method of Political Economy” in 1836. He wrote that every person is “occupied solely in acquiring and consuming wealth: and desiring as much wealth as possible, with as little sacrifice as possible.” It is understood that Mill emphasized on introspection as the main source of knowledge to understand the desires of a man and the nature of the conduct to which they prompt. Later in his book System of Logic, he introduced the systematic psychological observation as a method to establish the logic of behavioral dependence in economic theory in a more objective fashion than introspection. He said, “The psychological premises of political economy are the result of a long and accurate observation established by psychology and grounded on statistical or historical evidence.” (Mill 1843). In other words, psychology is a science where casual connections between mental phenomena should be established according to the known experimental methods, mentioning explicitly the method of agreement and the method of difference. As in his own words, “The more complex laws of human action … may be deduced from the simpler ones, but the simple and elementary laws will always, and necessarily have been obtained by a direct inductive process.” (Mill 1843). It can be said that Mill wanted to introduce systematic psychological reasoning in his economic theory in order to establish the behavioral principle through introspection. This is why he insisted that it is from Psychology –“the experimental science of human nature” – that the economist should borrow the psychological premises of Political Economy, and try additionally to ground them on statistical or historical evidence.

Mill also conceived a hierarchical structure at three levels to portray his ideas on Political Economy. At the first or the lowest level he placed the “laws of the nature of individual man (psychology)”, at the middle level the laws of human character formation which constitutes the subject matter of ethology. And finally at the upper or topmost level, he placed the laws of Social Science, which deals with the action of collective masses of mankind and the various phenomena which constitute social life. This kind of structure helped him to explain that the social phenomena are a result of an intermixture of causes, and every class of human affairs depends on its own specific needs (Zouboulakis 1997).

It is also observed that Mill’s explanation in Economics also fit well with “Methodological Individualism” (Zouboulakis 2001)., which holds the view that social phenomena, and therefore social explanation, must be grounded in the attitudes and behavior of individuals. According to Mill, social phenomena are the result of an “intermixture of causes” producing composite effects non-decomposable through the common experimental procedures. His idea of rationality describes how a person behaves during his /her economic activities under the influence of only one motive which is, “desire of wealth”. It should be noted that what Mill claims here is not that people always act this way, but only under “relevant circumstances”, i.e., when the determining cause of action is the “desire of wealth” . Moreover, because in real life the economic motive operates concurrently with a number of other non-economic motives, Political Economy is able to explain only what people tend to do during their economic activities.

To summarize, as pointed out above, Mill undoubtedly admitted the existence of social entities and their influence upon individual plans and actions. Nonetheless, individuals are neither isolated, nor independent from their social context. Their actions are socially embedded. The concept of economic behavior was therefore, according to Mill, one of the principal concept of the deductive reasoning of Political Economy. His idea of economic rationality describes how a person belonging to a particular background and in historical context tends to behave during his economic activities under the influence of only one motive – the desire of wealth.

**2.3. Weber on economic rationality:**

Till now, we saw how Smith’s economic man and Mill’s homo economicus in spite of being imaginary can be used in economic model. However, it is homo economicus which pointed out to a new way of abstraction. It says that by defining away the non-economic, we are left with a more strongly concentrated notion of economic behavior. This abstract forming concept was exactly exploited using the notion of an “ideal type”, an analytical label most closely associated with the work of the greatest German social scientist, Marx Weber. He believed that an ideal type was useful in theorizing and, although not directly applicable, but still very helpful to understand social science. He said, “The ideal type concept will help to develop our skill in imputation in research: it is no “hypothesis” but it offers guidance to the construction of hypotheses. It is not a description of reality but it aims to give unambiguous means of expression to such a description.”

This ideal types of social action when used in economic theory are thus abstract because they always ask what course of action would take place if it were purely rational and oriented to non-economic ends alone. This construction can be used to understand actions which are not purely economically determined but also which involves deviations, arising from traditional restraints, affects, errors, and the intrusion of other than economic purposes.

In my view, Weber wanted to explain the nature of social phenomena in an individualistic way. As in his own words, “…social collectives such as states, associations, business corporations, and foundations… must be treated as solely the outcomes and modes of organization of the particular acts of individual persons”. But unlike Mill he wrote, “How erroneous it is to regard any kind of psychology as the ultimate foundation of the sociological interpretation of action” (Weber 1922).

It can be presumed that Weber had no confidence in psychology as a possible foundation of explaining social action of individuals. As a result he proposed his own model of “explanatory understanding” which links the subjective meaning of an individual action with its objective influence. It is understood that, Weber wanted to construct theoretical models historically and objectively specific rather than applicable to all times and places. And when the historical context changes, one should build different models to grasp and explain these new social phenomena. This somewhat proves his willingness to create theoretical propositions that explain what would necessary occur if human actions were indeed “unequivocally directed to a single end” (Weber, 1922).

It can be learnt that Weber was highly influenced by the “Historical School of Economics” which emerged in the 19 century in Germany. Developed as an alternative to neoclassical economic theory and policy, it held the view that history was the key source of knowledge about human actions pertaining to economic matters and hence not generalizable over space and time. The Historical School emerged as a result of several intellectual influences, most notably Charles Darwin's theory of evolution. The success of evolutionary thinking led many thinkers, including Karl Marx as well as the members of the Historical School, to seek an evolutionary form of economic theory to contrast with the static theories of neoclassical economics. They criticized the neoclassical economics and objected to its atomistic and deductive nature as well as its static nature.

To summarize, Weber’s ideal-type of economic rationality is a realistic simplification highlighting the essential properties of any social reality.

# 3. Ontological and Epistemological view of Economic Rationality:

The central tenet of classical economic theory and homo economicus,is perceived to be a rational economic man, who makes fully calculated decisions in a rational manner to achieve the best possible outcome for himself. However after a detailed review of some of the prominent economists’ writings as mentioned above, I understand that although rationality is paramount to all the economic models, an agent cannot be confirmed to be a pure egoist, self-interested or utilitarian being. He is very much a social animal and his decisions whether economic or non-economic depend to a great extent on his social and cultural environment, he is exposed to.

In my view, economists have predominantly used two notions of the word rational: one which relates to reasoning behavior and the other to choosing behavior as Simon (1969) pointed out. He objected to this concept of perfect rationality and asserted that there should not be any doubt that the micro assumptions of the perfect rationality theory are contrary to the fact. According to him it is not a question of approximation; because they do not even remotely describe the processes that human beings use for making decisions in any complex situations. Simon concluded that neither do we have unlimited brainpower, nor the free time to scrutinize every bit of our decisions. Hence, our problem-solving abilities are limited by so called “bounded rationality”, which leads us to a set of basic rules of thumb called heuristics that we apply when making decisions*.* This kind of judgmental ability is undoubtedly shaped by our past experiences and cultural bias to some extent. We can also see some examples of seemingly irrational economic behavior in our daily lives which is caused by heuristics and biases. For example, we often lack self-control and overspend on things we don’t need. We are also occasionally altruistic, which conflicts with the standard economic assumption of human being a self-interested individual (Chapman,1969).

Additionally, the following research studies done in the past also support the idea of, why economic agents might not be very well versed to take purely rational decisions. First, it was shown that having too many choices and options for consumers today can make them less likely to conclude (Sanbonmatsu 1987). In a famous study of the so-called "paradox of choice", psychologists Mark Lepper and Sheena Iyengar (Iyengar, 2000) found that customers presented with six jam varieties were more likely to buy one than customers offered a choice of 24. Second, according to popular psychological theory of "hyperbolic discounting" people don't properly evaluate rewards over time, and hence rational choices based on desires and rewards seems fuzzy. It explains that people have a tendency to increasingly choose a smaller-sooner reward over a larger-later reward as the delay occurs sooner rather than later in time. Third, an experiment on how would a utility-maximizing subject behave in the binary choice experiment yielded interesting results. Although all of the subjects behaved differently, a majority of them were observed with what is called “event matching” i.e. the subject chose the two alternatives with relative frequencies roughly proportional to the relative frequencies with which they were rewarded. This is because humans don’t understand what strategy would maximize their expected utility and their responses are the outcome of certain kinds of learning processes (Vulkan1998, Robinson 1964). To summarize, it can be deduced that even in an extremely simple situation, subjects do not behave in the way predicted by a straightforward application of utility theory.

Brennan-Lomasky (1993) passively affirmed individual rationality in the context of democratic decision-making. They asserted that people can have rational expectations about the effects of different policies, but would still vote for those with the most emotional appeal. According to them even if people always have the same motivations regardless of context, this does not mean that those motivations will be expressed in exactly the same way; institutions do affect which "preferences" are revealed. The authors accept motivational neutrality but argue against behavioral neutrality. According to Brennan, although people carry the same utility function, but each institutional structure engages with different aspects of human motivation and hence the human behavior that emerges out is different.

An important milestone was achieved by Daniel Kahneman and Amos Tversky’s Prospect Theory (1979) which was built on Simon’s work and further relativized the assumption of rationality. They found out that most people are loss averse. Their negative perception of a loss would be more intense than their positive assessment of an equivalent gain. They concluded that people make probability assessments on the basis of particular indicators, known as anchors which are often arbitrary.

In his book, “Thinking fast and slow” (2011), Kahneman clearly differentiates between two systems of human thinking. System1 operates automatically and quickly, with little or no effort and no sense of voluntary control. It is an intuitive system of thought, in which judgements are made quickly and unwittingly. System 2 on the other hand is a rational system of thought, in which judgements are made on the basis of thorough consideration, which requires a certain amount of time. It allocates attention to the effortful mental activities that demand it, including complex computations. Its operations are often associated with the subjective experience of agency, choice and concentration.

After contemplating all of the discussion and arguments as discussed above, it made me think of ways to portray rationality from a different perspective. Since the early classical economic models, “rational” meant reasoned, goal-directed activity, a notion similar to the pursuit of self-interest we find in works of Smith and Mill. This approach can sometimes be seen under the realm of rational choice theory. A person’s choices are considered rational in this theory if and only if these choices can all be explained in terms of some preference relation. However I argue that it is rational in the second “choosing” sense, which is more closely linked to a realistic portrait of an economic man. Therefore choosing “rationality” of economic man should become a more important question than what are his motivations and desires.

I am however not the first one to argue in favor of choosing rationality concept. The marginal revolution effectively put the problem of economic choice at the center of economic behavior. First, Jevon’s analysis was concerned with how such decisions can be made to maximize utility from consumption assuming that utility was all of one kind. In this way he chose to give less attention to the nature of choice between different kinds of things. More is better than less, but beyond that Jevon’s account is quite limited. He presented no idea on way of choosing between equal utility-valued goods. Second, Carl Menger (1871) discussed individual and subjective valuation by assuming economic man as an economizer than a maximizer. According to Menger in a given situation, an economic man satisfies his different needs with different goods by choosing them in such a way as to satisfy those needs in a particular order. His subjective valuations based on introspection are concerned more with choices to satisfy different needs with given constraints, rather than with calculating the standard units of pleasure from consuming different goods as Jevon’s calculating man does.

In the marginalists’ conception whether it is Jevons or Menger, a man’s desires or his needs are primary and they dictate his valuations and hence choices. But, I argue that it is the valuations and choices which are dominant, and desires can only be maximized by “rational” valuations and choices. By doing so, making choices dominant over desires, I allow economic man to have the power to fulfil his desires, provided he choose rationally. The critical question therefore is, what does “choosing rationally” in making choices mean? To understand this question, we need to see it from an instrumental point of view. It must be understood that rational here refers to the method rather than the result, and is very subjective. It is quite possible and acceptable that different agents have different methods which seem to be rational and ethical to them, but not to others. Additionally, as said earlier, there would be cases, when the agent may incur loss, and would be perfectly capable to justify it rationally even if that is against his/ her own self interests.

In this regard, Oliver E. Williamson formulated the concept “opportunism”. He said, “there is nothing that constraints the self-seeking agent to embezzle funds or rob banks if he or she can to gain an advantage. He pointed out that the economic view of an economic agent includes lying, stealing, cheating and deception and he would clearly do it if he could.” On the contrary, some economists believe in psychological foundation of economic theory. Fehr and Gachter (2000) claimed that an economic man behavior is guided by social norms of fairness and reciprocity. As a result, it is quite possible that while following these social norms, agents might also sometimes act against their own self-interest. Croson in her findings confirmed this and said, “who have been deceived, and to whom the deception is revealed, are likely to punish their counterparts, even when this punishment is costly for them” (Croson 2004).

From the discussion so far, it can be asserted that an economic agent, do not think rationally all the time to achieve his self-interested goals. This is humanely not possible. The conduct of individuals is systematically influenced by the changing incentives and the social environment (Gerschlager 2005). The rational choice theory in my view reduces individual to a few individual characteristics. I am not opposing it, as I understand that a key feature of economic modelling is the focus on important aspects whilst disregarding the less important ones. I try to conceptualize the economic man theory in the same way by taking into account, some valid psychological factors. In my opinion, human decision making process is an extremely complicated phenomenon and is influenced by a large number of factors. Therefore the aim of any economic approach should not be to explain or delve deep into the actual behavior of any given person, but the behavior of large groups of individuals, under given situations. Additionally, the crux of the concept of economic rationality lies in the “choosing” sense, which in my view is more closely linked to realistic portrait of an economic man.

# 4. The concept of a modern economic agent

Until now, we have seen that we need important modifications in the concept of economic man to provide a fuller and better description of his characteristics. The classical economic man theory is about a man choosing among fixed and known alternatives, with each having a known consequence (Risen 2007). But at times when the social environment, perception and cognition starts to intervene with the decision maker, this model looks no more adequate to me. We therefore need a better description of the choice process, i.e. choosing wisely and rationally which recognizes that alternatives are not given but must be sought. To choose wisely and rationally involves some goals (short term and long term), some facts about the social environment, and some inferences drawn from the facts, values and the past experiences. The goals and values can be simple or complex, consistent or contradictory; the facts may be real or supposed, based on observation or the report of others; the inference may be valid or spurious. This helps us to visualize the whole interwoven fabric of influences that bear on decision making, without being bounded by the assumption of only self-interest that in my opinion limits the choice. The obvious question which comes in the mind now, is how to conceptualize an individual, capable of choosing rationally and wisely. In the following paragraph I try to give an overview and the important factors to be kept in mind while dealing with the modeling of the economic agent. A mathematical model trying to replicate this concept is currently under progress.

The foremost step is to set and define the objective of an economic individual clear. Just like the central assumption in homo economicus is that an individual strives to maximize his utility, I think an individual strives to maximize his comfort. The agent may not care to maximize utility, but simply want to earn which he regards as satisfactory, because he may obtain all other kinds of “psychic income” apart from monetary rewards which will make him content. Within this concept, if he is to satisfy his utility, then he will sometimes balance a loss of profits against an increase in psychic income, which he is willing to.

The concept of fulfillment and contentment is not to be seen anywhere in classical economic theory, but it enters prominently when studying the motivation in the field of psychology. In most of the psychological theories the motive to act stands apart from drives, and action terminates when the drive or urge is satisfied. Moreover, the conditions for satisfying an urge are not necessarily fixed, but may be determined by an aspiration level that adjusts itself up or down on the basis of experience. If I start to see the individual behavior in terms of this theory, I imagine the individual’s goals to be not maximizing utility but to attain only a certain level of utility, as his sole motivation is to be content rather than to maximize.

After careful studies and much needed literature review, I suggest the following two factors to be taken in account while trying to model the economic man and his decision making capability. The mathematical explanation and derivation for this concept is currently underway and would be discussed in a separate research article after it is completed. In the present article, I give a brief overview of these two factors, their necessity and a quick account on how to use them while trying to model the economic agent mathematically. In my opinion, this will provide a direction to anyone who wish to see and redefine the economic agent from a social and psychological point of view, thus depicting it’s close to real behavior.

The first important factor is agent’s expectations as it is definitely one of the building blocks of theoretical macroeconomic models. Economic expectations are crucial in determining economic activity as they affect economic decisions of consumers, and the same can be found in Keynes (1936), who emphasized its role in the amount of output, employment and savings. He concluded that there are two types of expectations. First type is the short term expectations, which is concerned with the price the producer expects to get for its product at the time he starts the production process. The second, the long term expectations, is connected with what the entrepreneur can hope to earn in the future if he purchases his products as an addition to his capital equipment. According to Keynes, the behavior of each individual company is determined by its short term expectations, which largely depend on the long term expectations of other parties. Muth (1961) said that the economy generally does not waste information and that expectations depend on the structure of the entire system. According to him the dynamic economic models do not assume enough rationality and needs to be edited. Mc Fadden (1974) showed that decisions made by people in random sample, combined with assumptions on the population distribution of preferences, will enable probabilistic estimation of choice models. They can be then used to predict population choice behavior in other settings.

Broadly, there are two major expectation paradigms and concepts,

Adaptive expectations (AE) represent a hypothesis in economics which states that people form their expectations about what will happen in the future based on what has happened in the past. It played a prominent role in the macroeconomics in 1960s when for example, the inflation expectations were often modelled adaptively in the analysis of the expectations-augmented Philips curve.

Rational expectations (RE) state that agents’ predictions of the future value of economically relevant variables are not systematically wrong in the sense that all errors are random. Equivalently, this is to say that agents’ expectations equal true statistical expected values. It is seen that at the theoretical level the rational expectations hypothesis proposed by Muth (1961) has gained general acceptance as the dominant model of expectations formation.

Evans and Honkapohja (2001) presented the updated approach in the form of “adaptive learning”. It is a dynamic concept that combines RE with a certain aspects of AE. The RE approach supposes that economic agents have knowledge about the economy, but the economists who postulate RE do not themselves know the parameter values and must estimate them econometrically. It appears more natural to assume that the agents in the economy face the same limitations on knowledge about the economy. So the concept of adaptive learning assumes that agents adjust and revise their forecast (expectations) rules as new data becomes available over time.

Taking lead from Kjelberg (2006), there are two most common methods for capturing expectations:

1. The vector auto regression (VAR) forecast method which estimates a VAR model and uses the output of sample forecasts of the model to estimate expectations of a variable.
2. The survey method, which measures expectations by asking a sample of people about their expectations of a variable.

Pesaran and Weale (2006) suggest two conversion methods for converting the proportions of qualitative answers from a survey into quantitative measures for the purpose of econometric expectations analysis:

1. The Probability approach of Carlson and Parkin ( 1975)
2. The regression approach of Pesaran (1984) and Pesaran (1987)

The second important factor is the Loss aversion concept taken from the Prospect Theory published in 1979 in the journal Econometrica as “Prospect Theory: An Analysis of Decision under Risk.”(Kanheman, 1979) The paper had mainly two folded results. First it demonstrated that, in laboratory settings, people systematically violate the predictions of expected utility theory. Second, it presented a new model of risk outlook called “prospect theory,” which effectively captures the experimental evidence on risk-taking, explaining the violations of expected utility. Although this theory is still widely viewed to know how people would evaluate risk in experimental settings, there are relatively few applications of prospect theory to be seen in economics. In my view, the main reason is because it is hard to know exactly how to apply it. It contains many remarkable insights, but at the same time it is not ready-made for economic applications. Although, researchers in the field of behavioral economics have put a lot of thought into how prospect theory should be applied in economic settings, it is still a big topic of discussion and research. In my analysis of how to include loss aversion, I typically see the problem of idealizing gains and losses as the major roadblock. The central idea in prospect theory is that people derive utility from “gains” and “losses” measured relative to a reference point (Samuelson 2016). But, in any given context, it is often unclear how to define precisely what a gain or loss is, as Kahneman and Tversky offered relatively little direction on how the reference point is determined. In this opinion, taking lead from the works of Koszegi (2006, 2007, and 2009) I propose to take an individual expectations or aspirations as the reference point to compute gains and losses. This would help us to derive satisfaction utility function as talked earlier, equal to the difference between consumption and expected consumption. In doing so, the satisfaction utility function exhibits both loss aversion and diminishing sensitivity. Koszegi and Rabin (2006) like other authors, emphasized that the bigger question is not whether we should replace traditional models with models in which people derive utility only from gains and losses, but rather whether it is useful to consider models in which people derive utility from both gains and losses and, as in traditional analysis, from consumption levels. In my view, if gains and losses matter then the consumption levels matter too, and it would be a mistake to ignore them.

The concept of a modern economic agent described in this section gives us a preliminary sense of the relative importance of the individual behavior; expectations, satisfaction, aspirations in economic decision making. Loss Aversion is the most basic idea in prospect theory, and should find a permanent place in economic analysis in my view. In the approach discussed, I tried to interweave economics with psychology on a wide range of question pertaining to individuals’ decision making behavior, I wish to understand. I see that the notions of satisficing and content behavior drawn largely from the field of psychology is challenging the classical picture of maximizing agent as put up by classical economic methods. Although it would be too optimistic to think that we could put together a model of economic man that would be at par with that of a real rational individual, but the new proposals in this section compel us to reason old theories and develop new ones, however inadequate they are admitted to be in the start.

**5. Conclusion**

This article presented a short history of the economic man’s model as adopted by some famous economists. Throughout the time history I see narrowing portraits of the economic man. From Adam Smith’s rounded (not only an egoist) character, to Mill’s model: homo economicus, to Weber’s ideal type man, economic man portraits gradually became thinner during the nineteenth century. It can be said that each model in the chronological order was meant to simplify and reduce the complexity of dealing with all human feelings and emotions that flow from them. In each case, the economic man model was well represented as real man, but in its simplest, purest, and abstract form, unaffected by other considerations. This abstraction looked to economists as a convenient and functional method over the alternative social science approaches in the nineteenth century of studying real economic behavior.

However the time has changed and the insights gathered by behavioral researchers can no longer be disregarded by the economists. The development in behavioral economics, experimental work and neurological investigations in understanding the human behavior are all becoming very relevant and important. This calls for a progressive shift from the traditional economic analysis towards behavioral and psychological economic analysis. The concepts and reasoning provided in this article will help the readers to understand the individual’s behavior in realist settings and apply them in creating new models.

**Bibliography**

1. Brennan and Lomasky. 1993. Democracy and decision: The pure theory of electoral preference. Cambridge: Cambridge University Press.
2. Berger, R., H. Rauhut, S. Prade, and D. Helbing, "Bargaining over waiting time in ultimatum game experiments," Social Science Research 41, 372-379 (2012)
3. Carlson, J. A. and M. Parkin (1975): “Inflation Expectations,” Economica, 42, 123– 138.
4. Chapman, L.J., & Chapman, J.P. (1969). Illusory correlation as an obstacle to the use of valid psychodiagnostic signs. Journal of Abnormal Psychology, 74, 271-280
5. Croson, R. (2004), Deception in Economics Experiments, in Gerschlager, C., ed., Deception in Markets. An Economic Analysis, Houndmills, Palgrave Macmillan, pp. 113-30.
6. D. Helbing, Economics 2.0: The Natural step towards a self-regulating, participatory market society, Evolutionary and Institutional Economics Review (2013),
7. DiMaggio, P.J. and W.W. Powell (1983), “The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields,” American Sociological Review, 48, pp. 147-160.
8. Evans, G (2000), “Expectations in Microeconomics: Adaptive versus Eductive Learning”, Association Francaise de Science Economique, Annual Congress, Paris, Sept. 2000
9. Evans, G. W., & Honkapohja, S. (2001). Learning and Expectations in Microeconomics. Princeton University Press.
10. Falk, A. (2013) A city-wide experiment on trust discrimination, [Journal of Public Economics](http://econpapers.repec.org/article/eeepubeco/), 2013, vol. 100, issue C, pages 15-27
11. Fehr, E. and Gächter, S. (2000), "Fairness and Retaliation: The Economics of Reciprocity," Journal of Economic Perspectives, 14(3), pp. 159–81.
12. Gerschlager, C., (2005), Beyond Economic Man:Adam Smith’s Concept of the Agent and the Role of Deception., Cahiers d’economie politique n49.
13. Gerschlager, C., ed., (2004), Deception in Markets. An Economic Analysis, Houndmills, Palgrave Macmillan.
14. Hardin, G. (1968) The tragedy of the commons, Science, 162 1243-1248
15. Hamilton, David L.; Rose, Terrence L. (1980). "Illusory correlation and the maintenance of stereotypic beliefs". Journal of Personality and Social Psychology. 39 (5): 832–845. [doi](https://en.wikipedia.org/wiki/Digital_object_identifier):[10.1037/0022-3514.39.5.832](https://dx.doi.org/10.1037%2F0022-3514.39.5.832)
16. Hamilton, D.L., & Trolier, T.K. (1986). Stereotypes and stereotyping: An overview of the cognitive approach. In J. Dovidio & S. Gartner (Eds.), Prejudice, discrimination, and racism (pp. 127-163). Orlando, FL: Academic Press.
17. Hirschman, A. (1977), The Passions and the Interests: Political Arguments for Capitalism before its Triumph, Princeton University Press
18. Iyengar, S., Lepper, M. (2000), When Choice is Demotivating: Can One Desire Too Much of a Good Thing, Journal of Personality and Social Psychology, 2000, Vol. 79, No. 6, 995-1006
19. Kahneman, D., Tversky, A. (1979), Prospect Theory: An Analysis of Decision under Risk, Econometrica, 47(2), pp. 263-291, March 1979
20. Koszegi, B., Rabin, M., (2006), A Model of Reference-Dependent Preferences, The Quarterly Journal of Economics, November 2006
21. Koszegi, B, (2006), Ego Utility, Overconfidence, and Task Choice, Journal of the European Economic Association June 2006 4(4):673–707
22. Koszegi, B, (2007), Reference-Dependent Risk Attitudes, American Economic Review Vol. 97, No.4, September 2007
23. Koszegi, B, (2009), Reference-Dependent Consumption Plans, American Economic Review, Vol.99, No.3, June 2009
24. Knight, Frank H. 1960. Intelligence and Democratic Action. Cambridge: Harvard University Press.
25. Kjellberg, H and C-F Helgesson. (2006) 'Multiple Versions of Markets: Multiplicity and Performativity in Market Practice', Industrial Marketing Management, 35, 839-855
26. Kjellberg, D. (2006). Measuring Expectations. In Working Paper Series 2006:9. Uppsala: Uppsala University, Department of Economics.
27. McFadden, D. (1974). Conditional logit analysis of qualitative choice behavior. In Z. P., Frontiers in Econometrics (pp. 105-142). New York: Academic Press.
28. Mill J.S. (1967){1836}, On the definition of political economy and on the method of investigation proper to it. In J.M Robson (ed.) Collected Works of John Stuart Mill, Vol IV. Toronto: Toronto University Press
29. Mill J.S (1973){1843}. A system of Logic Ratiocinative and Inductive. In collected Works, Vols VII-VIII. Toronto: Toronto University Press
30. Muth, J. F. (1961, July). Econometrica, Vol. 29, No. 3. Rational Expectations and the Theory of Price Movements, pp. 315-355.
31. Pesaran,M.H. and M. Weale (2006), Survey Expectations. In C.W.J. granger, G.G. Elliott, and A. Timmermann (eds.), Handbook of Economic Forecasting, Amsterdam: North Holland.
32. Pesaran, M. (1984). Expectations formation and macroeconomic modelling. In P. Magrange, & M. P., Contemporary Macroeconomic Modelling (pp. 27–53). Blackwell: Oxford.
33. Redelmeier, D.A., & Tversky, A. (1996). On the belief that arthritis pain is related to the weather. Proceedings of the National Academy of Science, 93, 2895-2896.
34. Risen, J.L, Gilovich, T., Dunning, D. “One-Shot Illusory Correlations and Stereotype Formation”, PSPB, Vol. 33 No. 11, November 2007 1492-1502 DOI: 10.1177/0146167207305862
35. Robinson, G.H., “Binary Choice in a Dynamic Environment”, Human Factors: The Journal of the Human Factors and Ergonomics Society, Vol 6, Issue3, 1964
36. Samuelson, L. (2016) Game Theory in Economics and Beyond, Journal of Economic Perspectives – Volume 30, Number 4 – Fall 2016 – pp 107-130
37. Sanbonmatsu, D. M., Shavitt, S., Sherman, S. J., & Roskos-Ewoldsen, D. R. (1987). Illusory correlation in the perception of performance by self or a salient other. Journal of Experimental Social Psychology, 23(6), 518-543
38. Sen, A.K (1977), Rational Fools, A Critique of the Behavioral Foundations of Economic Theory, Philosophy & Public Affairs Vol 6, No.4 (Summer, 1977), pp. 317-344
39. Simon, H. (1969). The Sciences of the Artificial. MIT Press, Cambridge, Mass, 1st edition
40. Sherer, P.D and K. Lee (2002), “Institutional change in large law companies: A resource dependency and institutional perspective,” Academy of Management Journal, 43(1), pp 102-119
41. Stilger, G.J. 1987. The Theory of Price Fourth Edition. MacMillan Publishing Company.
42. Sudgen, R. (2002), "Beyond Sympathy and Empathy: Adam Smith’s Concept of Fellow-Feeling," Economics and Philosophy, 18(1), pp. 63-87.
43. Tversky, A., & Kahneman, D. (1981, January). The Framing of Decisions and the Psychology of Choice. Science, New Series, Vol. 211, No. 4481, pp. 453-458.
44. Vulkan, N. (1998), “An Economist’s Perspective on Probability Matching”, Journal of Economic Surveys, Volume 14, Issue 1, Feb 2000 pp 101-118
45. Williamson, O. E. (1985), The Economic Institutions of Capitalism. Firms, Markets, Relational Contracting, London, The Free Press/Macmillan
46. Weber, M. (1978) {1922}. Economy and Society, Vol I. Berkeley: University of California Press.
47. Zouboulakis, M.S. (1997). Mill and Jevons: two concepts of economic rationality. History of Economic Ideas, 5:7-25
48. Zouboulakis, M.S. (2001). From Mill to Weber: the meaning of the concept of economic rationality, Euro J. History of Economic Thought 8:1 30-41 Spring 2001