

Equilibriums and Economic Rationality in “the House of Life”

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Abstract. *Subject to the conjuncture and economic system’s capacity to react, in one way or the other, to the advancing human society’s different actions, rationality exceeds the principle status entering an area of interpretation as a mechanism.*

The new rationality paradigm calls for a certain measure where the characteristic elements are able to alter, somewhat, the interpretation sense for rationality. The concept is updated and undergoes modernization gaining thus new valences and new optimizations to match the new economic paradigm. In conclusion, the new economic paradigm requires a new rationality paradigm.

Keywords: economic rationality, rarity exponentiality, abundance exponentiality, the cognitive dissonance in rational choice, “house of life”.

JEL Classification: D45, Q52, Q57.

Introduction

We name *rationality's economic problem* any theoretical problem, doubled by its pragmatic aspect, whose recognition factors are involved in achieving specific objectives, of day-to-day life. The fundamental criterion for assessing rationality is obtaining the maximum advantage according to the utilitarian calculation of the systemic consumption balanced by the available resources.

Economy principle casts its shadow enough to cover the rationality problem, without completely overwhelming it, in a fundamental sense. Active elements' intervention is necessary, progressively, with a contributory and identification role of the elements involved in improving the rationality concept's theoretical construction.

Typically, economists use excessively the rationality principle since they start at the exclusive interpretation of actions and of the joint potential of the production factors. The operation of explaining the consumption manner of the production factors involves, simplistic, narrowing the interpretation of rationality only to these dimensions. It leads to a substantial loss of conceptual content and sometimes even to the removal of the epistemological sense. It is clear that an improvement of the life and work system, of the human condition in essence, requires understanding of the rational actions undertaken by humans, why and how do the intent to achieve the expecting results through rational actions or less rational ones rapidly amended by reality.

Economic rationality undertakes, thus, responsibility for guiding human's actions towards maximizing the effects of income and wealth.

1. Historical rationality branch

Leibniz's Concept (1716) *Ratio sufficiens (Sufficient ratio)* has its origin in Aristotle's ancient formula *Rationis sufficientis* stating that any action has a basis regardless of its correspondence or not with reality (*Adequatio rei et intellectus*).

The concern for establishing the capacity and intellectual quality and behavior of the individual marked the evolution of the term since the wording of Homo sapiens (the rational-wise man) according to Linne's classification in (1758) to Homo Faber the classification given by Henri Bergson (1941) to the creative man.

Of course, along with the increasingly alert society's evolution in all its dimensions, Homo oeconomicus represented an abstract subordinated to the human instinct to live a life activity essentially economic, neglecting the other activities and, especially, the constraints.

From its origins man tried to survive on collective not individual solutions, writes L. Heilbroner (*Philosophers of earthly things*, 1994). It is suggestive the formulation according to which throughout society's development man has found only three solutions for achieving the goal of gain: the *power of tradition, authority's whip and market system*. It is clear that the three variants match the big steps of human society's development, suggesting the evolution in terms of maturity of thinking and individual's

mentality. If, at the beginning, gain was obtained through conquering campaigns expressing military strength and power in numbers, since the modern era, from the XVI century tradition has been replaced by innovation (industrial revolution).

Gradually, the evolution, improvement and strengthening of the institutional form of governing through authoritarian coercion, became the means for obtaining and accumulating profit. Currently, institutions no longer reflect reality because they are based on vertical hierarchical structures and on territorial-political realities characteristic to the state-nation. Or, it is known the tendency to minimize state's role in the context of globalization. Becoming anachronistic institutions generate distance, dangerous in terms of consequences, between their constantly growing capacity for solving big economic problems with globalization tendencies, and the demographic explosion accompanied by human exodus without borders. Institution fail at being malleable in terms of society's evolution; because of human actions, institutions correspond to the mentalities and procedural habits dictated by the individual.

In this conflictual context, market's development and exacerbation of competition mechanism added new components to the process of searching for new means for gain. Throughout this period, economic rationality's presence manifested differently due to individual's perception in relation to his own economic interest. Each will chose the most advantageous (pecuniary) way to satisfy its own interests.

According to Heilbroner, from the combined games of personal interests (even in the governmental authorial structures) it shows society's development and the performance of society's necessary functions. Considering this problem, the author, develops and argues the idea according to which human is a being eminently acquisitive, the profit motive being as old as man himself is.

Considering that the profit's motive, as it is economically perceived, emerges together with modern man's manifestation it means that the most widespread and compelling of the human activities intended to produce wealth is the art of knowing to look for wealth. Can this goal be achieved based and following the rationality principle?

The market is, in Heilbroner's opinion, to which we wholeheartedly subscribe, *the biggest social invention*, and according to Piketty (2015) the most active suffragette of the capitalist system. These assessments are based on the fact that, from the beginning, labor represented a natural way of life, later on becoming a means for maintaining the obtained condition and not for improving the social status. Gradually labour turned into a means in the struggle for enrichment and of inequalities in terms of capital (Piketty, 2015).

In the early 70s, specifically 1972 (following Argentina's example) the BARILOCH theoretical model was built, with no proven intention for economically implementing it, but only to verify its potential and practical validity. Unlike other global models (formulated in the spirit and fashion of the 70s) where the human factor is neglected or passed at the end of the factors row, factors considered to be development promoters, this innovative model has updated the central place of human in the development process.

The model focused on reinserting the concept of needs and necessities in contrast with the human goals and values. The construction of the model began with the modification of the degree of satisfaction of needs assessment process, restating thus, with new terms, the rationality principle in relation to the scopes and human values. The crises that emerge are likely to exacerbate the tensions between the resources, the abundance of offers and unjustified expectations. The consumption patterns and development paradigms change, and the increasing consumption of non-renewable resources question the economy models' perishability existing at the moment.

The dialog policy and confrontation between the rational development concepts and ecological is, not at all new. The current economic paradigm calls for a certain type of connection to the economic reality, connection that differs from one historical stage to another, taking into account the contribution and involvement of the internal and external factors to growth and economic development.

Same principle, different approach.

In J.F. Rischard (2004) paper "20 global problems, 20 years to solve them" the author makes a comparison between the demographic dynamics which leads to a *rarity exponentiality* regarding the non-renewable resources and the new global economy, characterized by an *abundance exponentiality*. The situation is due to economic revolution that triggered, in the last 20 years, an increase of population that lives in a market economy, from 1 milliard and a half to approximately 6 billion. The significance of this evolution lies in the abundance and market diversification that triggered changes of mentality, attitude and behavior of man-consumer. In this context, we consider as being necessary to signal the author's insistent demarcation, between the content of terms like new global economy and new economy. While new economy is interpreted through, rationality balanced between scarcity and abundance, the new global economy propelled problems valid in all countries regardless of their level of development.

2. The cognitive dissonance in rational choice

Economic rationality serves in different timeframes to different purposes and social interests. No wonder that, often, interpreting rationality is made using different methods: *technical method, market method and competitive method*. Each of these methods-approaches reveals a new facet of rationality based on the instruments used for the strict legal definition of the concept.

Extensive development model's "sclerozation" forced the decision to combine the production factors and a production organizational management under intensive development. It is indisputable that economic rationality as a principle served differently the two development criteria.

From a technical point of view, rationality requires reflection on the complexity of the technical apparatus obtained through the evolved production methods, and the performance of the technical system of the era. Within the economic situation, time and space manifest other dimensions and characteristics towards the specific area of physics.

Following the technological revolution two effects have proven their presence: one concerns the physical constant time-space modification that receive other interpretations and acceptions imposed by the economic environment; and the second, refers to reconsidering production factors hierarchy so that the knowledge and creativity will reach top position, neo-factors with the most solid and recognized influence in the last 20 years.

Choosing the methods and manufacturing technologies, of high performance production lines assumes rationality assessment "ex ante" as a forecasting approach to anticipate

The rationality analysis "ex post" requires, firstly, two approaches: one theoretical interpreted through the normative-positive report (connecting the need to resources) and the second, which seeks the temporal validity of rationality, perpetuating the result. Changing the paradigm for using the resources determined a new configuration of the economic facts chains.

The interpreted rationality using the *market's method* elevated market's mechanism, becoming thus the arbitrator, recognizing or denying the rational procedures or the limits of the decision-making rationality.

Trying to interpret rationality using the *competitively method* provides an answer to any measure and profit oriented actions, based on the rational vision subject to the interests of the competition participants.

Dedicated author, innovative and original with a fair opening towards economics and social, Nobel laureate for economics in 2001, George A. Akerlof together with William T. Dickens stimulates rationality interpretation starting with several different criteria regarding the correlations between individual and collectivity within the current economic and political evolution. We refer here to the cognitive dissonance theory underlying the irrational behavior, considered by Gary Becker "... random deviation from the economic rationality (Akerlof, 2009, p. 166).

The cognitive dissonance concept does not overlap the asymmetric information based on assumption and uneven informatics acknowledgement, incomplete or diverted from its correct essence. Related to choice rationality, the cognitive dissonance concept (Akerlof, 2009) labels human behavior and the changes in their attitudes in relation to modernization and society's evolution. The author makes three assertions: 1) human rational economic behavior is influenced, simultaneously, by the constraints imposed by the environment and their own beliefs regarding the environment, 2) individuals change their own beliefs (and options, N/A)"... *choosing informational sources capable to confirm their own desired beliefs*, 3) once formulated these beliefs persist in time.

Individuals underestimate environment's warning signs if they are contrary to their beliefs derived from earning interest. Even if they acknowledge the mismatch between their choice (which represents or not, advantages or safety) and environment warning signs, for the individual the benefits will be priority even if they exceed the costs.

In the end, the decision-making process will follow a model whose aim has consequences on welfare. Anxiety arises when the rationality principle does not coincide with the information the individual neglects or totally ignores.

It is clear therefore that an economic irrational behavior is predictable and not just by chance due to influences of the individual's subjective beliefs. Despite warning signs from the environment, humans will behave not following a rational economic model but their own beliefs. Even if the cognitive dissonance is not prominently present in all choice actions and rational economic behavior it becomes important when assessing the protection regulations "... *in understanding the legislation regarding innovation, advertising and social insurance*" (Akerlof-Dickens). However, cognitive dissonance influence remains defining in terms of the protection legislation (of the individual and of the environment).

Individuals like to believe that they always take the correct decisions. The cognitive dissonance model, as Akerlof and Dickens claim not only provides the systemic difference between interpreting the information but also the differences in receptivity to new information according to individuals' preferences. Paradoxically, those for which information is inconclusive in making a decision have spent more time in their purchase than those that did not put high value on the information assessed as unsuitable to their beliefs. Moreover, the third statement regarding the durability of the cognitive dissonance effects can be verified when the decisional behavior, even if it is inconsistent with the environment's warning signs, is perpetuated.

Akerlof-Dickens' model assumptions regarding the cognitive dissonance can be explained and tested as having practical basis within the current and highly publicized case of the Volkswagen Group.

Remaining in public's attention, new aspects regarding the misconduct and disclosure of company's policy (regarding technical data and car's performance) bring out many irregularities on incorrect market information, and therefore of the buyer.

The economic and global dimension of the scandal triggered by faking the pollution tests passed directly on the automotive market globally including on the used car market, on the respect given (how, where and to what extent) the provisions of the legislation for environment protection, on the European emission standards, and last but not least on the motivation of individual request and purchaser's decision.

Internal combustion engines, in addition to combustion gases (carbon dioxide, water vapor, sulfur dioxide, nitrogen dioxide) pollute with incomplete combustion products (carbon monoxide, aldehydes, carbon monoxide, nitrogen, etc.). Carbon dioxide and water vapors resulting from combustion have no toxic action but are "greenhouse gases". Unburned hydrocarbons have carcinogen effects and some emissions (carbon dioxide and the nitrogen) at high concentrations have irritant effects, being even toxic.

Lead emissions are eliminated in the atmosphere by auto shipments with spark ignition engines. Because of the negative health effects the pollutants determine, the automobiles must be equipped with catalytic convertors that cannot tolerate fuel "enhanced" with lead. Thus, in The USA, emissions have decreased by 96% because of implementing the national legislation on reducing the use of lead fuel.

A report of the World Health Organization and United Nations Environment Programme (UNEP) estimated recently that 30% of urban residents of North America and Europe are exposed to unacceptable high concentrations of lead in the air. Almost the entire amount of carbon monoxide polluting the cities' air comes from vehicles' exhaust emissions.

Worldwide transports contribute with 20% to the total emissions of carbon monoxide, and in Europe, with 63%. In this context, the strategies for reducing the amount of carbon monoxide involves mainly the control over the vehicles emissions, namely through catalyts that convert a good part of the carbon monoxide into carbon dioxide.

Carmakers' responsibility is great. How is it possible to launch on the market a car with "apparent" installations for emission reduction?

Regardless of the warning signs from internal sources of the manufacturer, information from IT regarding the use of a program to easily fool the pollution test or from the fact that the tests were performed in showrooms and not under drive conditions, have constituted (considering the three premises of Akerlof-Dickens model) *examples of cognitive dissonance putting their mark on the economic rationality of buyers decision.*

Triggering a true economic war between the beneficiary states of Volkswagen cars and Germany the manufacturing country had as an initial effect, the outlining an emergency plan with punitive and recovery effects regarding the damage caused by the emissions on the environment and population. For example, Australia one of the largest Volkswagen importers charged a fine from the German manufacturer of \$ 780.000 for each sold car.

Surpassing the European economic scandal (the German concern recording a loss in the first assessment of 78 billion euro, that is 6 times more that its profit) the faked test problem on exhaust emissions gave warning on the gap between the companies interest to boost their sales and profits and the warning signs proven by the effects on the environment. Although automobile's market decreased their sale price (secondhand car market by 10%) due to the above-mentioned situation following a European-wide survey no substantial change in demand has been found. The individuals interested in purchasing a VW car appreciates further on, the quality, well know performances, the traditional technical level of the German manufacturer, without being influenced, in a definitive manner, by the exhaust emissions of the car.

In this context, Akerlof-Dickens' formulations check out.

Firstly, despite the international warning signs regarding the harmful effects of the exhaust emissions on man and environment, individuals will balance the benefits for acquisition and the effects (externalities) that can exceed the benefits. In this model of behavior for the individual, a clean environment matters less than the speed his car can attain. Secondly, it checks out also the perpetuation of individual's beliefs. Once well "stuck" in his mentality, these beliefs despite the risk derived from the cognitive dissonance, will be lengthy projecting them traditionally and intergenerational.

3. Information volatility in economic decision

The new global economy means new markets, new products, innovated production technologies mentalities, attitudes, and completely and irreversibly changed behaviors. All these generate new tempting opportunities for the producer-consumer but at the same time tensions pressing and falling into current demand and offer responsibility.

More than ever Daniel Bernoulli statements are currently of resonance (Swiss physicist, 18century) who was concerned, in addition to liquid and gas mechanics, with the pathology of risk probability and of the decisional consequences. He argues that any decision linked to a risk is subject to the objective reality and a subjective vision, the two being equally essential and inextricably linked.

Following the interpretative interconditional thread, author Emanuel Picavet (1996, pp. 1-2) philosopher and expert in social and political sciences epistemology approaches the theory of social choice in the same registry Arrow (1987) and Sen (2004). He claims, originally, that rationality is a matter of economic philosophy implying a philosophical vision on the social sciences' part. From this point of view, the rationality analysis in his vision will be made theoretically and practically through a complimentary approach of the positive ratio (traditionally reserved for social sciences) and regulatory (reserved to philosophical approach).

Permanent and wide open topic subject to opinions, choice and decision rationality attracted other different approaches.

Author Russ Roberts (2015, p. 65) in his paper *How can Adam Smith change your life* refers to the limits of individuals rational choices, in a concise and inspired sense:,, *"Understanding the limits of reason is an alarm signal reminding us that we are not as smart as we think; we are not perfect seekers of truth."* In this context it becomes clear that being aware does not mean being against reason.

Following the same interpretative registry of the rational component in de rational decision Peter L. Bernstein's opinion takes form (2014, p. 193) in his paper *Against gods. The remarkable story of risk* " We find in the attraction he manifests towards the issue of risk of taking a rationally uncertain decision, a concept closely related, in terms of its essence, with the one formulated by Russ Roberts. In a concise manner, Bernstein discloses the decision-making process, under uncertainty; do not rely on reason but rather on calculations.

We find here an interference with Akerlof-Dickens's cognitive dissonance theory. The conceptual bridge between authors lies in *the role of information that is analyzed objectively by rational people*.

Another common point of view, by Bernstein and Akerlof Dickens is the one concerning the way the individual reacts to new information overlaid on the set of priorities or preferences.

Cognitive dissonance takes its toll on the process of selecting that information which agree and fold on the individual's priorities and perennial mindset. For example, even in

the context of public disclosure of defamatory information to the VW Concern's policy, the buyer of VW cars remains convinced and closely linked to the belief that his choices and decisions were rational. Paradoxically, faced with the evidence, the purchaser maintains its initial choice.

Information becomes the guide for decision-making. Motivation of a decision is based on rationality norms, which are interests and needs. The triad information, decision, rationality takes form. The real world provides endless information regarding the environment, perishable information due to the speed of the social and economic life in the "house of life". Many of these are deliberately or involuntarily overlooked, due to individual's concentration on other purposes, of the moment, that meet the needs of utility or profit. Time (seen as physical and economic) becomes the most obvious factor of transposing development over horizons of decades; accordingly, the new sustainable development paradigm in the "house of life" implies choices of the development and economic growth forms and computing the opportunity cost of the decisional act.

However, errors are possible and completely random (Taleb, 2009) without being influenced by subjectivism-objectivism of the decision maker. Concerned with the impact of the least probable, the author explains how rational choice influences individual's behavior faced with isolated events, with strong impact and from which individuals try to discern visible indicators before the event's manifestation in order to avoid these situations in the future and to make them predictable.

Earth's natural balance is seriously jeopardized because of massive deforestation and intensification of communications through transports. Eliminating the true causes of these environmental disasters can be achieved by changing the specialists', in all fields, way of thinking and by technological and design revolution of transportations.

Now when the right to nature self establishes as a primordial imperative, the individual must organize his priorities and undertake actions to maintain order in the "house of life".

Limited interests estrange the individual from the practical problems of his decisions sometimes with consequences hard to estimate. Excessive consumption of fuels that currently satisfies the need for movement on a planetary level will determine as international statistics show, a destruction of the ozone layer, an increase in the number of dermatological cancers, an unprecedented pollution of the planetary ecosystem, an increase in the size of oceans and seas due to the melting glaciers, etc.

Aware of the fact the he has to give-up a nonperforming economic management, the individual must focus on value. Thus, individualization of man within nature has brought only winner's loneliness. It was found that, once again, the most dangerous things are ...victories! A victory against nature, assiduously prepared inclusively by the economic theories makes no exception.

Theory's façade adaptations to the increasingly evident anomalies towards economic reality do not help theory or the practical activity that uses it. It is necessary to go deeper in order to reinterpret the phenomenon of obtaining value considering the laws and

natural sciences demands creating the economic value of a combination between economy and the value of physics. (Bran, 2009)

„*Our existence, as individuals, would not be possible without continuous supplying with value,*” argued the same author.

Conclusions

One of the behavioral and mentality difficulties of the individual is not recognizing his dependence on the “house of life – Terra” and on the sun, which represents and confirms the fact that individual’s statute as a component and not as the master. This infatuation comes from human’s pride and ignorance, from erroneous education and selfishness manifested when distributing the economic-financial results.

Restoring and protecting what seems to be inexhaustible becomes the most stringent objective in an era where predominated the unconsciousness of the existential limits.

Reconciliation of the present individual with the future individual will be made following the path of reassessing its behavior and way of action by revising the selfish mentality of the present life and ensuring economic viability and not only, of future generations.

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