

Competitiveness of the «economic man» in the XXI century

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Abstract. The article analyses the evolution of the «economic man» in terms of the formation and development of the industrial economic system. According to our hypothesis, as the system that demanded an «economic man» transforms into some other system, the «economic man» himself must also transform into a new being; otherwise, his competitiveness will either be undermined or lost. There are three stages of this transformation: individual, national and, supranational. The author observed the transition from the complete rationality of the «economic man», guided by a purely market equilibrium, to the pseudo-market (social) equilibrium of the «socio-economic man». It is absolutely reconciled with the principle of partial optimization (satisfaction). Note, that the effectiveness is the criterion of its sustainability. As a result, it allows us to conclude the ability of the «economic man» to maintain competitiveness in the XXI century, but only through his transformation from full rationality to limited one, from purely economic to socio-economic-ecological one. Also we made a forecast concerning with the increase in the rationality of non-economic goals of cooperation, mutual benefit, the coupling of knowledge and technology to spiritual, moral, cultural and ethical principles and norms. All mentioned actualizes M.I. Tugan-Baranovsky's prediction on the fate of political economy, made more than a hundred years ago.

Keywords: competitiveness, «economic man», rationality, efficiency, the principle of full optimization, the principle of limited (partial) optimization, market equilibrium, pseudo-market equilibrium, stability of the economic system.

JEL codes: B10, B20, D62, E10, F63

For citation: Natalia S. Brillante, & Galina A. Rodina. (2023). Competitiveness of the «economic man» in the XXI century. *Journal of regional and international competitiveness*, 4(1), 4.

Introduction

The term «economic man» is strongly associated with Adam Smith is almost 250 years old (Smith, 2016). Its existence is related to the emergence, formation and development of the capitalist socio-economic formation (in the terminology of the formational approach), or the industrial economic system (in the terminology of the civilizational approach). Therefore, it is possible to conclude that as the system presented a demand for an «economic man» transforms into some other system. indeed, the «economic man» himself is also transformed into a new being (and, perhaps, it will no longer be quite a person with a new adjective reflecting his essence, but a kind of humanoid being)? As regard to the appearance of a possible rival, the «economic man» will not lose its competitiveness, in particular, in the globalized and digital XXI century?

And if we look back, will it not turn out that there has always been an «economic man», just for the time being the demand for him was not manifested in society due to the dominance of relations of non-economic coercion and, consequently, the main character for a long time remained an «extra-economic man»? As an argument, we can refer to the mainstream understanding of the subject of economics as the search and choice of the most rational use of limited resources. Since all resources sooner or later reveal their limitations, the question of effective treatment of resources is the universal economic issue. So the rational «economic man» is also universal? At least until this resource limitation is overcome. But in this case, the subject field of theoretical economics will become impoverished, and the world will transform beyond the economy – into a kind of post-economic space. Then the «non-economic man», reborn with the beginning of the capitalist era

into an «economic», evolves into a «post-economic man»?

Overall, the article is devoted to the search for answers to the designated challenges.

Main part

The «economic man» in the industrial economic system formation epoch (XVIII-XIX centuries)

Homo economicus (from Latin, – «economic man», or «rational man») is a person freed from personal, non-economic, dependence and makes his own free choice, guided by the results of his economic activity. By A. Smith, he seems to be guided by someone's invisible hand, his own selfish goals. As a result, the whole society wins. A. Smith's arguments are quite convincing and it is difficult to disagree with them. Indeed, the baker, who bakes fresh buns, thinks that offered on time fresh buns, tailored to the tastes of customers, will bring him more profit. Baker's activity is very useful for the society, too. It is not necessary to prevent the «economic man» from being guided by a mysterious «invisible hand», i.e. perfect competition (Smith, 1976).

Later neoclassical marginalism of A. Marshall with his famous «Marshall cross» (Marshall, 1993) considered the criterion of efficiency as a purely market equilibrium, allowing the consumer to maximize the overall utility, and the producer – profit. If an equilibrium quantity of products (Q_E) is produced and sold by the equilibrium market price (P_E), then limited resources are spent rationally. These signals of pure market equilibrium guided the «economic man» (Fig. 1).

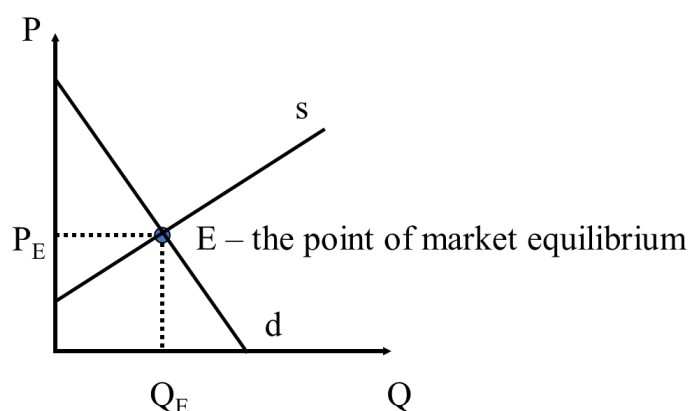


Figure 1. Marshall 's Cross

Source: composed by authors

Indeed, the further adjustment of this version of rationality was based on the graphical interpretation of the market equilibrium.

The «economic man» of the mixed economic system era (XX century)

With the evolution of a purely market system (note, we use this term, focusing not on the dominance of the free enterprise system, but on the insignificant role of the state in the economy), the criterion of efficiency also evolved into a mixed system. Also we should note the emergence of monopolies in the last third of the XIX century as a factor of the great influence on the competitiveness. Thanks to J.M. Keynes (Keynes, 2007), economics provides the thoroughly understanding the market mechanism and its disability to ensure macroeconomic equilibrium with total use of resources. The main reason is its inability to analyse the external effects properly.

Previous classical (neoclassical) economic schools ignored it because they were guided by the thesis «supply creates its own demand». According to J.-B. Say's theory of the three production factors, each owner of a factor of production, selling it, bought «his» share of the national product, equivalent to the income received for the realized factor of production (Say, 2000). By this model, the market monitored all the factors and formed the right price signals for the «economic man». The challenges of economic development made the economic science of the XVIII-XIX centuries to emerge and form the industrial economic system. Moreover, we considered this issue 10 years ago (Rodina, 2012). Economics dealt with this challenge.

However, the XX century, focusing on the problems of the effective operation of the already formed

industrial structure of society, faced the growing consequences of the so-called «invisible hand of the market». It was impossible for this form of economics to realise, that what is good for the «economic man» increasingly became bad or, at least, problematic, for the society. But we do not agree with Smith's faith in the «invisible hand». Because of there are fields of economics which are not corresponding to this theory. For instance, there is an issue of the influence this «invisible hand» during the pandemic.

Ignoring the discrepancy between rationality at the level of the individual and society can lead to the economical misunderstanding. Therefore, the revolutionary paradigm appeared. J.M. Keynes put forward the thesis «Demand breeds supply». Since the market itself is unable to assess externalities (they are external effects for it, although they really affect the welfare of so-called third parties), it provides distorted price signals to the «economic man».

The issue of externalities has revealed the need to take into account social (quasi-, pseudo-market) equilibrium. For instance, Yaroslavl has high anthropogenic impact on the environment: there are more than 14 thousand objects of polluting sources. For example, producing the economically demanded goods (gasoline, diesel fuel, kerosene, jet engine fuel and heating oil, base, compression, transmission and industrial oils, bitumen, paraffin wax products, aromatic hydrocarbons), PJSC «Slavneft-YANOS» releases large volume of hydrocarbons, carbon monoxide, carbon dioxide, various sulphur compounds, nitrogen oxides, solids, etc. into the atmosphere. It has a noticeable negative impact on the environment. It also generates a negative externality in the form of additional costs for caring the people health, preserving green areas and parks, and maintaining metal and other structures in proper conditions.

For instance, the internal (private) production costs of 1 liter of diesel fuel for the Arctic zone of the highest grade will be conditional 300 mu (monetary units). Then, in terms of the market, Q_E liters of this fuel will be produced and sold at a price not lower than 300 mu (Fig. 2).

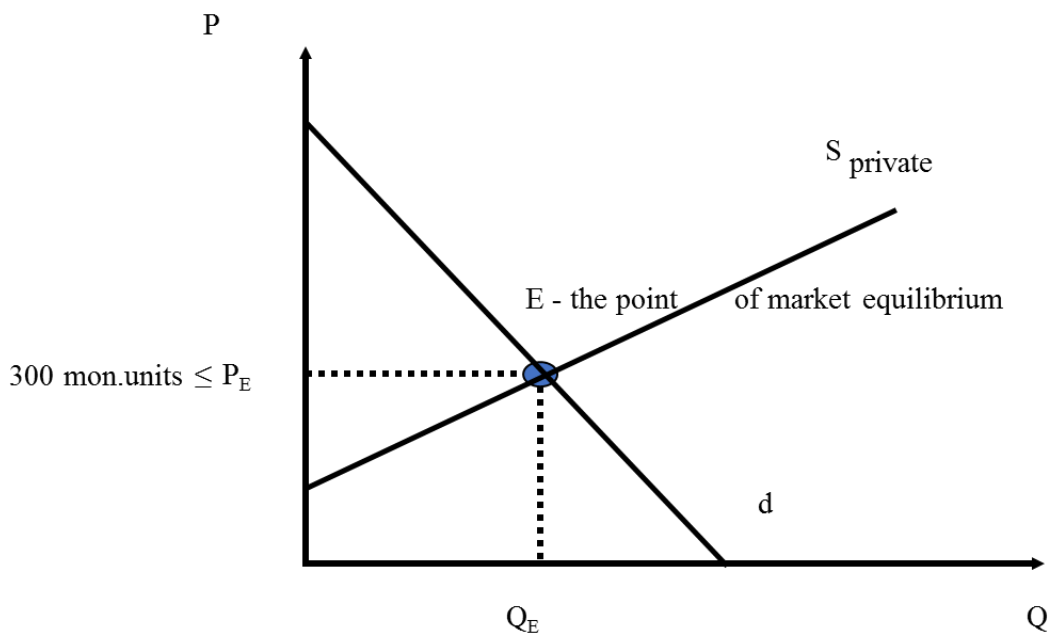


Figure 2. The Arctic fuel market excluding negative external effect

Source: composed by authors

However, the negative externality is a conditional 60 mu for every liter of Arctic fuel produced. In terms of the society, it increases the cost of production, shifting the supply curve to the left and forming a new equilibrium point E' . It is not a market, but a social (pseudo-market) equilibrium, according to which society cannot afford to produce Q_E liters of fuel and sell it at a price not lower than 300 cu. It's too costly. The rational volume of production is Q' , and its price is not lower than 360 mu (Fig. 3).

On the other hand, assume that a farmer in the Rostov region of the Yaroslavl region drained a swamp to expand chicory crops. He achieved the result. However, at the same time, the soil agrophysical properties of the neighbouring farmer improved, since the elimination of the swamp favourably affected soil formation and

fertility outside the plot of the farmer-initiator of land reclamation. In this case, there was a positive externality in the form of additional income of a neighbour farmer. The market, establishing market equilibrium, in this case, unlike the previous one, underestimates the amount of reclamation work that the society recognizes as effective (Fig. 4).

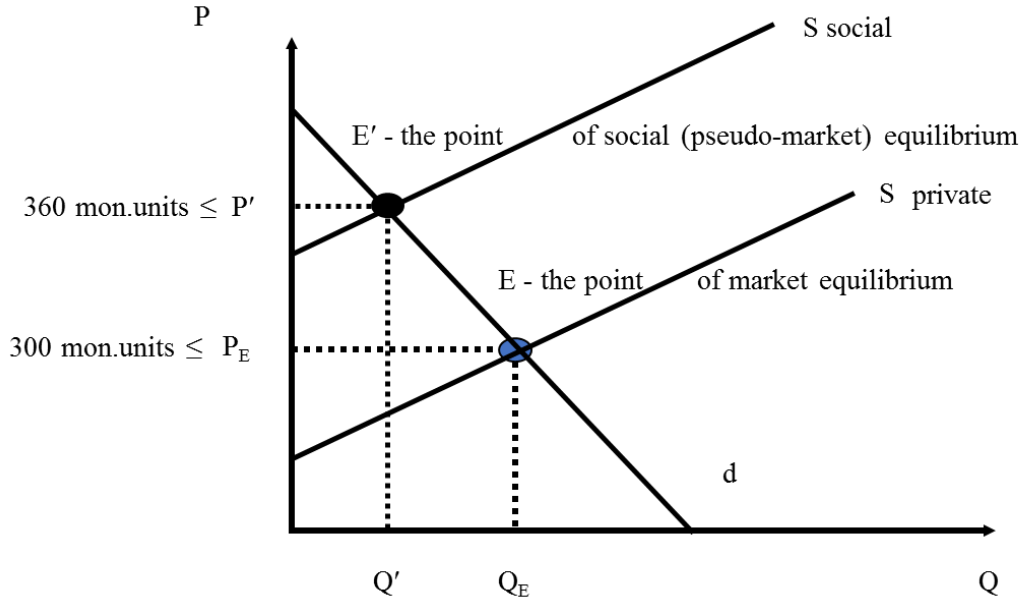


Figure 3. The Arctic fuel market taking into account the negative external effect

Source: composed by authors

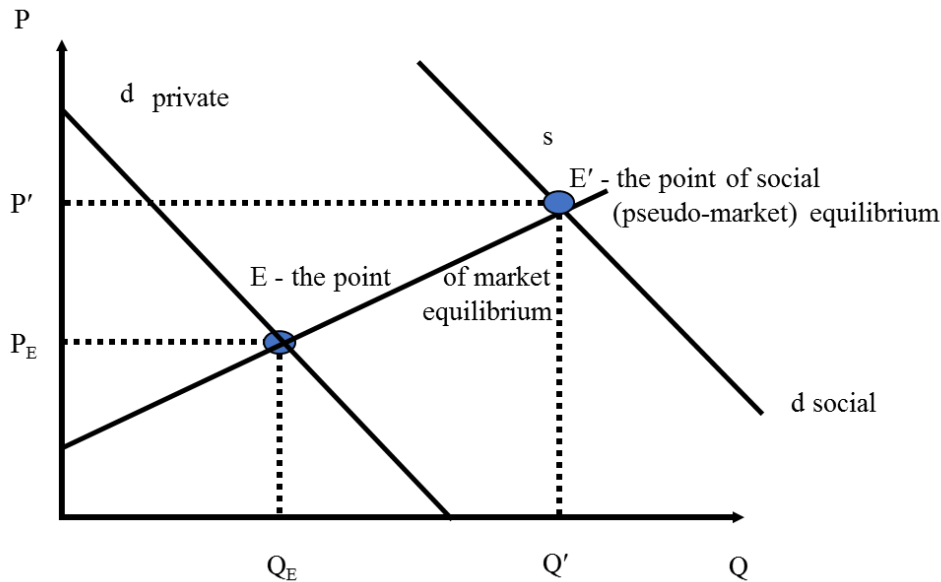


Figure 4. The market of land reclamation taking into account the positive external effect

Source: composed by authors

Thus, in the case of negative externalities, overproduction of goods occurs (and vice versa in the case of positive ones), but in both cases resources are spent inefficiently. The point of market equilibrium stop sends to society the real market signals about a rational approach to the allocation of factors of production. The functions of a rational signalizer are transferred to pseudo-market equilibrium. Since the market is unable to shift the economy towards this equilibrium. This mission is assigned to the government. The government provides one of two types of corrective measures: either a direct administrative method, or an indirect method of the taxation. The second method is also ambivalent: the problem is solved either through Pigou's tax (the main issue is to determine who is responsible for the damage and punish the infringer, and ideally to

help the victim of the negative externalities and encourage the initiator of the positive externalities) (Pigou, 1985). Also it could be solved through Coase's theorem (the main issue is not to find the guilty party and force him or her to compensate the losses, proprietary rights, which will help internalize the externalities, i.e., to transform externalities into internal costs. i.e., convert external losses into internal costs) (Coase, 2007; Coase, 1960).

However, the initial orientation towards maximizing utility or profit remains, although it undergoes a marked adjustment, which separates, separates both the market and social criteria of efficiency. The «economic man» at the micro level remains committed to the laissez-faire principle, while society at the macro level is interested in his transformation into a «socio-economic man». «As a result, for many decades of the XX century, economics was in a state of schizophrenic duality: if the actors in microeconomics were rational, then irrational economic agents in macroeconomics» (Kapelyushnikov, 2017).

The «Economic man» in the era of globalization (XXI century)

The processes of globalization and socialization led to the awareness of the global ecosystem vulnerability and the impossibility of the infinite influence sphere expansion in a limited space. The focus of the «economic man» on optimization (through maximizing utility or profit) was replaced by the recognition of the market regarding externalities fiasco, and then by the choice of limited rationality. Taking into account information and cognitive limitations, the principle of optimization was replaced by the principle of satisfaction (Auzan, 2017; Tumin, 2019).

Assume the situation of a consumer product choice in terms of two criteria – Q and P (for example, quality and price). The consumer has 9 possible options (letters «a» – «i»). Guided by the traditional understanding of the classical «economic man» optimality, then out of nine options, we will choose the option «a», which combines the most affordable price with the highest quality of products (Fig. 5).

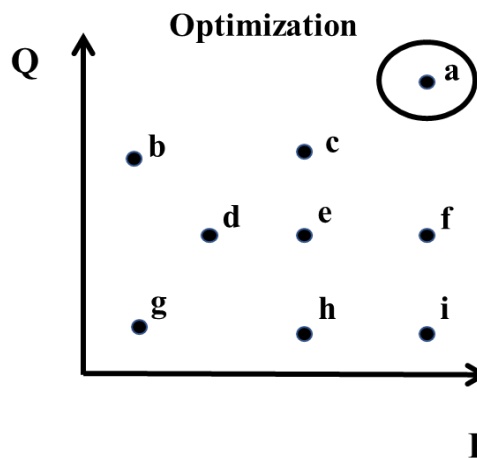


Figure 5. Choice by optimization principle

Source: composed by authors

Assume the consumer, instead of maximizing utility, will be satisfied with the acceptable for him, but not necessarily the maximum, level of product quality and availability of its price (denote them as Q' and P', respectively). Then the number of options chosen reduces from 9 to 5: «a», «c», «d», «e», and «f». Option «b» is rejected according to the criterion of price availability; options «h» and «i» – according to the level of product quality; and option «g» does not suit the consumer according to both criteria at the same time: it is too expensive and has a poor quality. The closest position to the minimum acceptable combination of price and quality is option «d»; the buyer will be satisfied with limited optimization instead of maximum (Fig. 6).

In 2015, the UN General Assembly issued the document «Transforming our World: the 2030 Agenda for Sustainable Development», which formulated 17 Sustainable Development Goals for the period 2016-2030. Goal No. 12 proclaims «transition to rational models of consumption and production». The term «rational model» in this context means «sustainable model», which is based on awareness of responsibility for future

generations in the global scale. «In addition to the well-known eco-oriented components, SDG12 includes such developing modern trends as the well-known sharing (joint consumption) and the less well-known concept of slowing down the rhythm of life (slow living), which has received the greatest development in the generation Z segment» (Tolkachev, 2022).

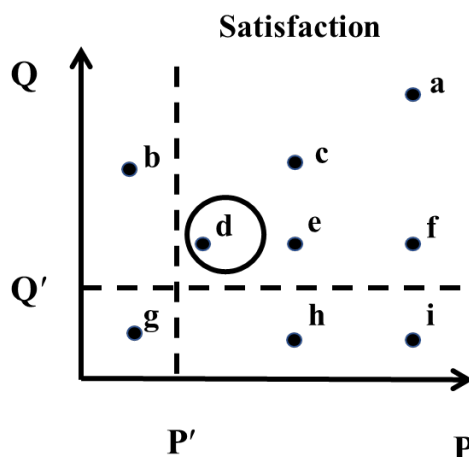


Figure 6. Choice based on satisfaction

Source: composed by authors

We dwell on the values of those who were born 10-25 years ago, i.e. nowadays they are either teenagers or university graduates. Thanks to IT-technologies development, these people, so-called, the first «digital generation», have an opportunity to do their work without leaving home, thereby spending more time with families. The unexpected result of combining these possibilities was economy. It significantly distinguishes the youth of the XXI century from the generation of their parents, as well as grandparents – generation X (born in 1965-1980) and partly Y (born in 1981-1996), who had their consumer's habits according to the consumer society behaviour. On the one hand, the work of the eBay platform – an electronic analogue of the «flea market» (existed in Russia until March 2022), the Craigslist electronic advertising site (operates in Moscow and St. Petersburg), foodsharing, carsharing, and other-sharing are all examples of the collective use of goods and services, practically a form of public cooperatives and joint consumption, barter, and rent instead of ownership. On the other hand, it is the spread of the concept of the rhythm of life slowing down (slow living), which is based on consciousness of the choice of goods and services, especially the schedule and some kinds of food:

- avoiding fast and inexpensive food,
- avoiding of the mass market,
- choice of slow travel, allowing people to communicate with the family, local residents, and their culture.

Thus, rationality is the result of the interaction of natural and social systems.

The second stage, unlike the first, raised the problem of rationality from the individual to the social level. And the third, unlike the second, focused on the maximizing consumption. It deprives producers of the possibility of an extreme increase goods and services output and profits maximizing. There is an opinion, that the next stage will overcome the limits of the economy. And could link rationality with non-economic goals based «on cooperation, mutual benefit, mutual understanding, respect for national sovereignty, on the conjugation of knowledge and technology to spiritual, moral, cultural and ethical principles and norms» (Glazyev, 2022). Then economic rationality will be replaced by the «rationality based on the criteria of reason and culture» (Kolganov, 2022). However, this raises at least two issues.

Firstly, we can get trapped in terms of tautology (the term «rationality» derived from Latin. ratio – mind).

Secondly, if the non-economic goals of cooperation are laid in the foundation of rationality, the M.I. Tugan-Baranovsky's point of view: «Part of political economy will turn into a theory of economic policy, and

part of it will become part of a more general science of society – sociology,» (Tugan-Baranovsky, 1917) could be confirmed (Rodina, 2019).

Conclusions

According to the study, we reveal the fail of the classical «economic man» competitiveness in the XXI century. Ludwig von Mises also considered the ability to adapt to changes as a criterion of rational behaviour (Mises, 2005). The «economic man» adapted to the changes in his almost 250-year existence. However, this adaptation greatly transformed him from full rationality to limited, from purely economic to socio-economic-ecological one.

The XVIII-XIX centuries were the periods of appearance and formation of an industrial economic system (classical economic school), which needed a theoretical understanding of the optimization principle. The criterion of efficiency was proclaimed as a purely market equilibrium, which oriented the consumer to maximize the overall utility, and the producer – profit.

In the XX century, under the conditions of a mixed economic system (neoclassical and Keynesian schools), the criterion of efficiency get the understanding of pseudo-market (social) equilibrium while maintaining an orientation towards maximizing utility and profit.

In the XXI century, globalization led to consciousness of the global ecosystem vulnerability (a new institutional school). As a result, the principle of full optimization was replaced by the principle of partial optimization (satisfaction); sustainability has become the criterion of effectiveness.

Thus, the «economic man» transformed from the individual level – through the national – to the supranational. This allowed him to remain competitive, but only through his own total transformation.

FUNDING

The work was done on a personal initiative.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHORS' CONTRIBUTION

Galina A. Rodina – conceptualization, project administration, writing – original draft.

Natalia S. Brillante – formal analysis, writing – review & editing.

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Received 13.01.2023

Revised 15.02.2023

Accepted 22.02.2023