

Is Homo Economicus a Universal Paradigm in Economic Theory?

Maciej Meyer

*Gdynia Maritime University, Faculty of Entrepreneurship and Commodities,
Department of Trade and Services, Gdynia Poland
E-mail: m.meyer@wpit.am.gdynia.pl*

Homo economicus is a very well known concept but a question arises whether its omnipresence equals its real, not theoretical, universality. This paper touches on the problem of the role of the paradigm with reference to the rationality and self-interest principle as well as behavioural economics, cultural differences, social and biological aspects. Values are the common thread in these aspects but what is even more important is that values differ across the world in the same way cultures do. Therefore theories or models based on the aforementioned paradigm can not yield the same results if applied in culturally different countries.

Key Words: Homo economicus; Cultures; Cultural differences; Self-interest; Rationality; Economics.

JEL Classification Numbers: A100, A120, D010, D030, Z130.

1. INTRODUCTION

The Homo economicus paradigm has been present in economic theory for more than a century. It has also dominated many subfields of sociology, philosophy, political science just to mention some of them. It is abstract and pervasive in its nature and has been broadly discussed in the literature. However, many researchers find it imperfect and there has been a growing number of papers which show flaws behind reasoning of this paradigm. It has been used as an analytical tool as well as a model for the rational and self-interested agent who is maximizing his utility in a world of finite resources. Time has come to reevaluate its usefulness.

This paper is thought to deliver a different approach to this problem. Instead of looking for exceptions and erroneous assumptions in economic theory, an effort has been made to search for its universality in reality. The objective of this article is to contribute to the discussion on the Homo economicus paradigm by looking at behavioural economics, social and bio-

logical aspects as well as at cultural differences in order to examine whether the paradigm can be utilized in every part of the world. In particular, there is an urgency to redefine the notion of *Homo economicus* and the conception of truly universal economic agent. The thesis of the article is that *Homo economicus* does not exist as one permanent paradigm throughout the world.

This discussion, although theoretical in nature, is of paramount importance. Economic, but not only, theories are based on certain assumptions and these are based of certain values. Any mistake here leads to faulty results as the phrase “garbage in, garbage out” perfectly describes. Economic theories therefore may not work in some parts of the world or may bring surprising outcomes. The author uses both means of deduction, reduction, logical reasoning and literature study in order to support the thesis. There are two methodological issues that should be taken into consideration. First, there is a growing awareness of cultural differences in economics. Second, the dynamics of dynamics of economic theory development is dynamic, which means there has been a steady evolution of theory since Adam Smith or the antiquity era. Mainstream economics broadens its range of interest not to mention other currents. The process has been accelerating since the XX century.

I begin by reviewing the role of the *Homo economicus* paradigm in economic theory and by covering the problem of self-interest and rationality. Then, I move on to the criticism of the paradigm. Next, I touch on some aspects of behavioural economics with the aim of drawing a link between well known flaws of the model and values that leads to cultural differences and their meaning. I cover some other aspects, such as social and biological ones, and then conclude reflection on the implications. This all is to combine various sources and points of view in order to make the economic theory a better one in terms of predictability and versatility. Explaining anomalies and deviations between theory and reality should become just a little bit easier after accomplishing this task.

2. THE ROLE OF THE HOMO ECONOMICUS PARADIGM IN ECONOMIC THEORY

2.1. Self-interest in Adam Smith’s view

Hirschman (1977) points out how the concept of self-interest was changing in time along with the evolution of various trends and currents. It finally has been limited to economic meaning. Adam Smith was inspired by his antecedents but it is him who is considered the father of economics. Analysing this concept with the view of just one of his works, “The Wealth of Nations” (“An Inquiry into the Nature and Causes of the Wealth of Nations”) is debatable without taking also “The Theory of Moral Sentiments”

into consideration. They both represent a different position towards the problem of self-interest but it seems highly recommended to incorporate at least these two books (not to mention his correspondence) in order to gain a full and complementary insight into Smith's thinking.

It appears from "The Wealth of Nations" that it is the owners of the capital who can best take care of their business. Market relations seem to be based on egoism, not on love or compassion. It happens so because humans want to cater for their needs on way of exchange. Self-interest drives people to more frequent transactions and hence influences positively the state of economy. According to Mehta (2006), self-improvement arising from self-interest induces improvement in the natural course of events. Here comes the famous quotation from Smith (1776/2007, p. 16):

"It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages".

The guiding principle of human action is egoism called self-love by Smith. Every individual in the society can therefore contribute to the society's affluence. The Scottish economist and philosopher tries to search for the ultimate cause behind individuals' motivation and touches on the problem of values. He also stresses in his most famous book (Smith, 1776/2007, p. 66):

"No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable".

It is not only monetary incentives but also our relations with others that belong to human motivation. In his previous book *The Theory of Moral Sentiments*, Smith gives particular weight to the second aspect. He knows that human beings can suspend their selfish nature in the name of higher values or kind of moral judgment. The first chapter explains the empathy ('sympathy' in Smith's words) principle which is the answer and supplement to *The Wealth of Nations*:

"How selfish soever man may be supposed, there are evidently some principles in his nature, which interest 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" (Smith, 1759/2004, p. 11).

The Invisible Hand alone is not a perfect means of distribution in any society. The situation changes when it is accompanied by moral sentiments. Not only the rulers but also every individual acting this way stabilizes social behaviour and improves it towards perfection. When we take these two books into account and not only *The Wealth of Nations*, it turns out the author understands self-interest as a preference of human beings for long-term aims instead of immediate gratification. Taking values into consideration through sympathy, morality, ambition, compassion, or prudence

makes problems and interpretations acquire another significance. In fact, it is values that affect Smith's thoughts with reference to self-interest.

The self-interest principle is of paramount importance to economic theory. It is present mainly in microeconomics in the context of rationality of economic agents in the following theories: 1) the theory of rationality; 2) the theory of consumer choice; 3) the theory of the firm. It allows the theory to be grounded on a solid basis in terms of relative predictability and relative easiness of analysis of economic agents' behaviour.

2.2. Behavioural economics

Behavioural economics stems from questioning the principle of perfect rationality in economic theory. The literature on this topic has become very extensive and covers many anomalies in human behaviour which undermine the presence of this principle in economic agents.

The very first interest in this field can be traced down to the antiquity times although there was no mention of the terms we use today. The influence of the Greek philosophers was such that it left its mark on future scholars, including those in the XX century. Von Neumann and Morgenstern (1947) created the theory of expected utility and treated it as a normative theory of human behaviour. They tried to create a set of axioms or assumptions that form the basis for rational decision making. Thus the theory was evolving towards realism.

Simon (1947 and 1957) redefined the classical model of *Homo economicus* with his concept of bounded rationality. He criticised the assumptions of rationality which seemed to be obvious in simple models of utility and profit maximalization. The assumptions were based on humans having perfect information and seemingly unbounded computing power of the brain. He assumed the individuals could process limited number of information and they let feelings and emotions be superior to logic. Although Simon has been widely reviewed in the literature, it is worth noting achievements of another original contributor who is less known, Katona (1974, 1975, 1978). He was one of the first scholars who noticed economic behaviour is influenced by the environment and its changes, whereas human beings do not react to stimuli from the environment like automatic machines. Their motives, attitudes, tastes, hopes, and fears are variables which affect both the perception of the environment and behaviour. According to Katona, in order to understand economic processes one needs to include subjective variables and psychological factors into analysis. Economic theory enriched with the results of psychological research may supplement or sometimes change traditional analysis of supply, demand, income and consumption.

Levitt and List (2008) claim another watershed for behavioural economics came with the works of psychologists Kahneman and Tversky. Laibson and Zeckhauser (1998) state even that those two psychologists have

made behavioural economics research a part of the mainstream economics. Kahneman and Tversky (1979) found expected utility theory faulty because it gives equal weight on the prospect of loss and gain. People, if given equal choices but expressed in terms of probable loss and gain, tend to make decisions preferring the former one. This is because they put more value on avoiding loss than making gain.

Kahneman and Tversky (1974) initiated also works on choice under uncertainty and imperfect knowledge. They questioned the rationality principle of *Homo economicus* summarizing:

“How do people assess the probability of an uncertain event or the value of an uncertain quantity?... people rely on a limited number of heuristic principles which reduce complex tasks of assessing probabilities and predicting values to simpler judgmental operations. In general, these heuristics are quite useful, but sometimes they lead to severe and systematic errors”.

There are many more researchers who postulate an in-depth analysis of anomalies in decision making. Gowdy (2008) states that behavioural anomalies are crucial in this process and that one can not overestimate their importance in economic policies. Others agree that behavioural anomalies matter and they can affect politicians as well as investors, employers but also markets and institutions (Della Vigna, 2009). It is impossible even to mention all sources of inspiration in research on this topic. Apart from psychology it may also be philosophy (Elster, 1998), experimental economics (Camerer and Thaler, 1995), neuroeconomics (Sanfey et al., 2003; Sanfey, 2007), neurobiology (Damasio, 1994; Damasio and Carvalho, 2013), institutions (Bowles, 1998), etc. They all support the view that there are many anomalies in *Homo economicus*' rationality.

2.3. Cultural differences

When it comes to various cultures, values come to the fore as they constitute the essence of cultural differences. Values defined by Hofstede et al. (2010, p. 9) as broad tendencies to prefer certain states of affairs over others are rather static and they change slowly over a very long time. There are of course more definitions, but what is even more important is the problem of their universality. Is it possible to find common values in different countries? We can approach this concept in two different ways. First, we can state that various values across various cultures are more or less the same values. Second, we can treat them as variations of any value. For the purpose of this article I will take the first option into consideration and base the reasoning on the classical work of Hofstede (Hofstede et al., 2010), which first edition appeared in 1997. He describes national cultures from the angle of six dimensions: Power Distance, Individualism, Masculinity, Uncertainty Avoidance, Long-Term Orientation and Indulgence vs. Restraint.

Hofstede suggested that these are six main characteristics people in all societies have to cope with. They define cultures and affect values indirectly. They are defined as follows:

- Power Distance is the extent to which less powerful people accept unequal distribution of power in institutions and organizations. It is based on the viewpoint of those less powerful members;
- Individualism (in opposition to Collectivism) is present in societies in which social relations between individuals are loosely knit and they care only for themselves or their immediate families. In collectivist societies the opposite takes place - the relations are tightly knit and people care for and are integrated into wider ingroups;
- Masculinity (in opposition to Femininity) occurs when emotional gender roles are very visible in societies and men are tough, assertive, competitive whereas people in feminine societies are modest, tender, value interpersonal relations and care for the others;
- Uncertainty Avoidance is about feeling comfortable or uncomfortable when individuals are faced with ambiguous or unknown situations;
- Long-Term Orientation (in opposition to Short-Term Orientation) is present when people foster perseverance and thrift and are oriented towards future rewards instead of tradition and social obligations;
- Indulgence vs. Restraint means allowing free gratification of human desires in relation not to human desires in general but specifically to enjoying life and having fun. Restraint means that individuals are convinced that such gratification should be regulated and limited.

Among these cultural dimensions it is Individualism vs. Collectivism that attracts most researchers' attention when it comes to economic output. East Asian countries including East Asian tigers are highly collectivist, while the West and especially the USA represent highly individualistic cultures (Table 1).

There are different dimensions and values in different countries. They may have different sources but Lane and Ersson (2007) focus on ethnicity, civilizations (including religions) and historical legacies (and the colonial heritage). The problem with the concept of Homo economicus is that it appeared and was developed in the West, which is without a doubt culturally distinct from other parts of the world. This term was associated for the first time with the works of Adam Smith and David Ricardo.

It turns out that not everywhere in the world egoism as an indication of self-interest is so equally popular. It may be attributed to individualistic societies more often. Individualists place emphasis on self-reliance, hedonism, competition, and emotional separation from ingroups. On the other hand, collectivists prefer attitudes that reflect interdependence, sociability, and family integrity (Triandis, 1995). Different values in the world make

TABLE 1.

Most individualistic and collectivist countries / regions according to Hofstede.
Selected countries / regions out of 76.

Rank	Most individualistic and least collectivist	Most collectivist and least individualistic
1	United States	Guatemala
2	Australia	Ecuador
3	Great Britain	Panama
4	Canada total, Hungary, Netherlands (ex aequo)	Venezuela
5	New Zealand	Colombia
6	Belgium Flemish	Pakistan, Indonesia (ex aequo)
7	Italy	Costa Rica
8	Denmark	Trinidad, Peru (ex aequo)
9	Canada Quebec	Taiwan
10	Belgium Walloon	South Korea
11	France, Sweden (ex aequo)	El Salvador
12	Ireland, Latvia (ex aequo)	West Africa (Ghana, Nigeria, Sierra Leone), Vietnam, Thailand, Singapore, China, Bangladesh (ex aequo)
13	Norway, Switzerland German (ex aequo)	Chile
14	Germany	Serbia, Hong Kong (ex aequo)
15	South Africa	Malaysia

Source: Adapted from Hofstede et al.. (2010), pp. 95-97.

Homo economicus think different, and therefore such a concept based on certain assumptions can not yield predictable results when used in other societies. Assumptions should be different too but then the theory lacks cohesion. It is a point that has already been taken into consideration by international institutions (e.g. International Monetary Fund, The World Bank). They were promoting the same policies to most countries with the “one size fits all” approach. This has however changed in recent years, e.g. The World Development Report 2015 by The World Bank Group is focused on mind, society, and behaviour and was written with a view that “a more realistic understanding of choice and behavior can make development interventions much more effective. After all, people think fast and often automatically, respond strongly to social incentives, and use mental models or specific worldviews to interpret information and perceptions” (The World Bank, 2015).

2.4. Biological and social aspects

Alfred Marshall (1920, p. 772) declared that economics is a branch of biology broadly interpreted. Economic and biological systems share certain similarities as they are subject to complex and evolving processes. In view of Hirshleifer (1978) Adam Smith rested the essence of human economy, which is the division of labour, on biological instinct of mankind to exchange and economically interact with each other. Institutions are of paramount importance here because the Homo economicus tries to acquire resources through lawful and unlawful actions regardless law and regulations. Human behaviour is in fact an expression of individuals' genes.

Dawkins (1976) created the term the "selfish gene", reflecting the Homo economicus in biology. The evolution of biological life is driven by the genes and only the fittest individuals will survive through the process of natural selection. Strict competition requires ruthless selfishness, otherwise the genes will not attain reproductive success. This biological view reflects the narrow sense of the economic man. He lives in social surroundings and therefore has to take other factors into consideration. People cooperate while this behaviour has turned out to be beneficial for them. This is where social aspects should be given proper attention. Hirshleifer (1976) focused on sociobiology, stating that economics is interested in social behaviour of one of the higher mammals, and that fundamental concepts of the analytical structures in economics and sociobiology are very similar to each other.

Competition is indigenous to economics due to limited resources and it is present actually in all economic interactions. It may be beneficial to any society through its harmonising action (Smith's "Invisible hand") but, on the other hand, it may be detrimental too. Its level in societies depends on their values. Hofstede et al. (2010) noticed that in individualistic ones people put their own interest first, while in collectivist ones it is group good that matters most. Therefore, self-interest is expressed differently across the world. Optimal actions in economics are approached through utility functions and preferences. Individuals' choices are also affected by their risk attitudes (Starmer, 2000) and social preferences (Henrich et al., 2004) and these are also associated with cultural differences (Bontempo et al., 1997; Blais and Weber, 2006; Lund and Rundmo, 2009; Buchan et al., 2006; Fung et al., 1999; Kitayama et al., 2003).

The problem of social cooperation or complying with social norms has already been discussed by biologists with reference to altruism, although this term is not precise. Reciprocity and mutual support have determinants of helping in common. They are present in human as well as in animal societies, and not only in those higher ones. To a certain degree, it is so due to genetic endowment (the selfish gene) through evolution but Boyd and Richerson (1992) noticed that human groups have complex systems of punishment and rewards. Individuals comply with social norms because

they also act as a Homo economicus and therefore they are instrumentally rational. On the other hand, Homo sociologicus models underline the normativity of norms and carry with them the notion that people see norms as meaningful ties to others, but also to their cultures, values, symbols and intentions. Hofstede et al. (2010) proved that these are not uniform across the world.

2.5. Conclusions

It is a well known fact that the Homo economicus concept is a very theoretical one in its nature and imperfect at the same time. This idea is abstract, yet very needed in economic theory. It turns out it is also relative and it should not be applicable without reflection in theories in the whole world. The factor of cultural differences makes the difference among others. Individuals behave rationally within one culture but it is not so obvious if we take decision-making process in various cultures into consideration. This is why the Homo economicus paradigm is not universal. As has been shown, it can be discussed from the point of view of differences in values. They are the basis of cultural differences but are omitted in mainstream economics' theories.

The problem of universality of the paradigm has not been exhausted in this article and it probably will never be. This paper's fault may be that some other problems were not given proper attention. Such an objection is especially legitimate given its subject. However, this paper's role is only to give a certain perspective to the topic of Homo economicus and incite further discussion about it.

REFERENCES

- Blais, Ann-Renee and, Elke U. Weber, 2006. A Domain-Specific Risk-Taking scale for adult populations. *Judgment and Decision Making* **1**(1), 33-47.
- Bontempo, Robert N., William P. Bottom, Elke U. Weber, 1997. Cross-Cultural Differences in Risk Perception: A Model-Based Approach. *Risk Analysis* **17**(4), 479-488.
- Bowles, Samuel, 1998. Endogenous Preferences: The Cultural Consequences of Markets and Other Economic Institutions. *Journal of Economic Literature* **36**, 75-111.
- Boyd, Robert and Peter Richerson, 1992. Punishment allows the evolution of cooperation (or anything else) in sizable groups. *Journal of Ethology and Sociobiology* **13**, 171-195.
- Buchan, Nancy, Eric J. Johnson, Rachel T. A. Croson, 2006. Let's get personal: An international examination of the influence of communication, culture and social distance on other regarding preferences. *Journal of Economic Behavior & Organization* **60**(3), 373-398.
- Camerer, Colin and Richard H. Thaler, 1995. Ultimatums, Dictators and Manners. *Journal of Economic Perspectives* **9**, 209-219.
- Damasio, Antonio, 1994. *Descartes' Error: Emotion, Reason, and the Human Brain*. New York, Putnam Publishing.

- Damasio, Antonio and Gil B. Carvalho, 2013. The nature of feelings: evolutionary and neurobiological origins. *Nature Reviews. Neuroscience* **14**, 143-152.
- Dawkins, Richard, 1976. *The Selfish Gene*. New York, Oxford University Press.
- Della Vigna, Stefano, 2009. Psychology and Economics: Evidence from the Field. *Journal of Economic Literature* **47(2)**, 315-372.
- Elster, Jon, 1998. Emotions and Economic Theory. *Journal of Economic Literature* **36**, 47-74.
- Fung, Helene H., Laura L. Carstensen, Amy M. Lutz, 1999. Influence of time on social preferences: Implications for life-span development. *Psychology and Aging* **14(4)**, 595-604.
- Gowdy, John M., 2008. Behavioral economics and climate change policy. *Journal of Economic Behavior & Organization* **68(3-4)**, 632-644.
- Henrich, Joseph, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis (eds.), 2004. *Foundations of human sociality*. Oxford, Oxford University Press.
- Hirschman, Albert O., 1977. *The Passions and the Interests: Political Arguments for Capitalism before its Triumph*. Princeton, Princeton University Press.
- Hirshleifer, Jack, 1976. Economics and Sociobiology. UCLA Economics Department Working Paper #80, September, www.econ.ucla.edu/workingpapers/wp080.pdf (accessed: 11.11.2015).
- Hirshleifer, Jack, 1978. Competition, cooperation, and conflict in Economics and Biology. *Economics and Biology* **68(2)**, 238-243.
- Hofstede, Geert, Gert Jan Hofstede, Michael Minkov, 2010. *Cultures and Organizations. Software of the Mind*. New York, McGraw-Hill.
- Kahneman, Daniel and Amos Tversky, 1979. Prospect Theory: An Analysis of Decision under Risk. *Econometrica* **47**, 263-291.
- Kahneman, Daniel and Amos Tversky, 1974. Judgment under Uncertainty: Heuristics and Biases. *Science* **185**, 1124-1131.
- Katona, George, 1974. Psychology and Consumer Economics. *Journal of Consumer Research* **1**, 1-8.
- Katona, George, 1975. *Psychological Economics*. New York, Elsevier.
- Katona, George, 1978. Discussion. *American Economic Review* **68**, 75-77.
- Kitayama, Shinobu, Sean Duffy, Tadashi Kawamura, Jeff T. Larson, 2003. Perceiving an Object and Its Context in Different Cultures. A Cultural Look at New Look. *Psychological Science* **14(3)**, 201-206.
- Laibson, David and Richard Zeckhauser, 1998. Amos Tversky and the ascent of behavioural economics. *Journal of Risk and Uncertainty* **16**, 7-47.
- Lane, Jan-Erik and Svante Ersson, 2007. *Culture and Politics. A Comparative Approach*. Aldershot, Ashgate.
- Levitt, Steven D. and John A. List, 2008. Homo Economicus Evolves. *Science* **319**, 909-910.
- Lund, Ingunn Olea and Torbjorn Rundmo, 2009. Cross-cultural comparisons of traffic safety, risk perception, attitudes and behaviour. *Safety Science* **47(4)**, 547-553.
- Marshall, Alfred, 1920. *Principles of Economics*. London, Macmillan.
- Mehta, Pratap Bhanu, 2006. Self-interest and Other Interests. In: K. Haakonssen (ed.), *The Cambridge Companion to Adam Smith*. Cambridge, Cambridge University Press.

- Sanfey, Alan G., 2007. Social decision-making: insights from game theory and neuroscience. *Science* **318**(5850), 598-602.
- Sanfey, Alan G., James K. Rilling, Jessica A. Aronson, Leigh E. Nystrom, Jonathan D. Cohen, 2003. The neural basis of economic decision-making in the ultimatum game. *Science* **300**(5628), 1755-1758.
- Simon, Herbert A., 1947. *Administrative Behavior*. New York, Macmillan.
- Simon, Herbert A., 1957. *Model of Man: Social and Rational*. New York, Wiley.
- Smith, Adam, 1759/2004. *The Theory of Moral Sentiments*. Edited by K. Haakonssen. Cambridge, Cambridge University Press.
- Smith, Adam, 1776/2007. *An Inquiry into the Nature and Causes of the Wealth of Nations*. Edited by S. M. Soares. Amsterdam, MetaLibri.
- Starmer, Chris, 2000. Developments in non-expected utility theory: hunting for a descriptive theory of choice under risk. *Journal of Economic Literature* **38**, 332-382.
- The World Bank, 2015. Global Insights Initiative, www.worldbank.org/en/programs/gini (accessed: 08.02.2016).
- Triandis, Harry C., 1995. *Individualism and Collectivism*. Boulder, Westview Press.
- Von Neumann, John and Oskar Morgenstern, 1947. *Theory of Games and Economic Behavior*. Princeton, Princeton University Press.