ON THE HOMO SOCIONOMICUS (HS) MODEL OF RATIONALITY

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Abstract: The economic behaviour is modelled, logically and quantitatively, on the basis of the assumption of rationality, understood as the means-to-goal suitability, representative of this approach being the famous model of rationality homo œconomicus. Although this model has been adjusted, amended, and reformulated in order to bring it closer to the real man, all these "improvements" have proven to be simple superficial changes, not producing a qualitative leap in shaping the pattern of economic behaviour. The paper aims to start not from an economic perspective on human action, but from a social/sociological one. In this context, the study introduces a series of axioms that focus not on the economic interest, but on the social one, proposing a new rationality model of the individual, respectively of the group, namely the homo socionomicus rationality model. Finally, the study performs a qualitative analysis of proposed axioms demonstrating their consistency, coherence and completeness.
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1. The fundamental principle

The term *socionomicus* comes from the Latin word *socius* meaning companion, accompanying, and the Greek word *nomos* (*νομός*) which means law, regulation, norm. Thus, the term socionomy means the system of rules governing a social group of people, and *homo socionomicus* refers to the behaviour of such a group of people (which can be of any size and structure, from a family to a nation or to mankind in general). In our opinion, any association of at least two individuals, regardless of purpose, get, *eo ipso*, a social character (I would say, even a political character).

The fundamental principle of the *homo socionomicus* (HS) rationality model is the *principle of compliance*. To be noted that the term incipient and commonly encountered in the literature is that of *homo sociologicus*, but in order to preserve the suggestion of a rationality model (that is, the model containing/imposing rules) we have allowed ourselves to replace the suffix *logicus* with the suffix *nomicus*, especially because the term logicus suggests the idea of theory, while we need the idea of the rule. The proposal also has an aesthetic advantage: the three rationality models treated have the same suffix: *nomicus*. There is even a discipline called *socionomy*, but which aims at studying society as a whole and, above all, the social movement phenomenon. What we mean by the term *socionomicus* refers to the behaviour of the socially conditioned individual (especially at the level of the social group of proximity) and not to the behaviour of society (it seems to us that the difference between socionomicus and socionomy is analogous to the difference between social psychology and sociology) (Kuhn, 2008).

We consider that the following predicates of sufficiency could define the compliance: the criterion of behaviour is the compliance with the common rule:

- the common rule is the norm in force at the given social group level (NB: it is irrelevant how the rule in force at the level of the group is established: a) *authoritatively*, that is, by the most „authorized" individual (or sub-group) (e.g. by holding the power to do); b) *democratically* (by imposing the will of the majority). Consensus is a species of democracy, that is, the species in which the

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majority is identified with unanimity. Obviously, how to establish the common norm in social groups has nothing to do with the issues of freedom, which we are not discussing here);

- the axiology of the common norm (or, more specifically, the establishment of the common norm) only uses *social* utility values (minimizing the *social cost of opportunity*) (NB: minimizing the social cost of opportunity should take into account social preferences (a problem that should be addressed separately because of its complicatedness, on one hand, and its significance that goes beyond the question of economic rationality models, on the other hand);
- compliance to (or failure in) common rules on an individual level is determined also based on minimizing the cost of individual opportunity, but no longer refers, this time, to a lot of alternatives on economic decisions, as model HE does, but only to the two alternatives (compliance, vs. non-compliance with the common rule); this cost is provided in the structure of the common rule in the form of the sanction applicable by the social community in case of breach of the common rule (let's note that the sanction can be formal or informal (in the case of the informal norm, for example, the moral norm). Therefore, in the HS model, the opportunity cost is not purely monetary and even not liable to be „translated" into monetary costs (as in the HE model), but it may have different, imponderable meanings: social prestige, credibility, dignity, honour, etc.). In fact, to highlight the specificity of the social opportunity cost, we will use the negative externality concept associated with the common norm of behaviours.

2.   The set of axioms

We consider that the *homo socionomicus* (HS) model of rationality (Nozick, 1995) operates on the basis of the following four axioms, compatible and consistent with the fundamental principle, as well as with each other:

- (HS-A1) the social game is impure and imperfect;
- (HS-A2) the individual decision is taken to minimize the negative externalities associated with the decision taken;
- (HS-A3) the individual has limited capacity to instantly process available information on common behavioural norms;
- (HS-A4) the logical consistency of the calculation of the individual's behavioural decision may be fallible (It should be noted that this axiom does not „prescribe" the failure of the individual's decision-making process, but only the absence of the infallibility of the process. The inference from the premises provided by homo socionomicus is not necessarily invalid, but also it is not necessarily valid (as in the HE model).

Let us briefly characterize each axiom.

- <u>(HS-A1) the social game is impure and imperfect</u>

According to common acceptance, the „pure" feature refers to the character of social actors, their outputs and access to „play", while the „perfect" feature refers to the character of access to information and to information processing. On this basis, the (HS-A1) axiom does not retain, as shown below, the pure character from the HE model, but retains the perfect character of the latter model.

We understand by pure and perfect social game the social game „endowed" with the following predicates of sufficiency:

- a. the *atomicity* of the social actors: the social actors face a pre-existing normative system, which they cannot influence individually. They only have to obey this system or, by respecting its rules, change it, but, until the change, the rules are

definitely imposed (unconditionally) (NB: The rules for changing the normative system are, in most cases, democratic rules but, to the limit, they can also be non-democratic ones);

b. *non-homogeneity* of social behaviours: the logical equivalent of the economic product (economic) in the HE model is, in the HS model, the behaviour. Economic/social actors „deliver" behaviours to other economic/social actors, and these behaviours are strongly and necessarily idiosyncratic; How is the non-homogeneity of social behaviours explained in response to the common social norm? The explanation is also used in any generic system: the output of a system is the effect of the action of the transformation function on the input (from formal point of view: $y = f(x)$, where x has entered the system input, with y being noted the output from the system, and with f being noted the transformation or „production" function, i.e. how the input becomes output). As the „transformation function" is an imponderable idiosyncratic trait of every individual or social actor (depending on his axiological data, his economic or social interest, etc.), the social behaviour related to the same norm is usually heterogeneous at the level of the social group. There is, however, a limitation of this heterogeneity (which is, moreover, the logical basis for the possibility of recovering social predictability), namely under the impact of the *situational framework* which, likewise a geodesic, has the effect of uniformizing or homogenizing the social behaviours of individuals who act under the same social norm.

c. *unlimited (unrestricted) access to information*: given the much smaller amount of information on common behavioural norms compared to the amount of information on economic behaviour (production, consumption or saving decisions) in the HE model, the access to specific information (common rules) in HS is much greater facilitated. In principle, this access can be considered as complete without striking too much on the realism of such a thesis;

d. *entry/exit of social groups is restricted*: there are barriers (formal, but especially informal) regarding the access to social groups and, in particular, the change of belonging to a particular social group (Birth places the individual in a social group to which their parents belong, but as the individual evolves (including the acquisition of a particular instruction or intellectual status), he may „request" the change of membership to a social group that provides more chances for realizing their own life program. Although there are no rigidities in the case of castles or general states, certain frictions may arise and, in any case, one cannot presume (or postulate) the full freedom of movement of individuals among social groups (this rigidity is often generated by symbolic reasons).

In essence, this feature, which describes the first axiom of the HS model, says there is no full flexibility regarding the situational framework under which the individual chooses to manifest his social behaviour.

- (HS-A2) the individual decision is taken to minimize the negative externalities associated with the decision taken

First of all, it should be noted that this axiom does not postulate an altruistic behaviour, in the sense that the individual deliberately aims to produce minimal harm (negative externalities) to the other or to all the other participants in the social game. Minimizing negative externality refers to the fact that any violation of the common norm of behaviour is accompanied by the application of a sanction, and the individual is actually considering minimizing this sanction (NB: „charged" with the application of the sanction related to the violation of the common/social norm is, of course, the state/government,

through the social contract). Obviously, here we are considering the codified rules. There are, of course, sanctions for violating the moral norms of behaviour, but, in this case, the sanctioning authority is the community, generically considered.

Secondly, it is necessary to explain what is meant by minimizing the negative externalities created by the decision taken. In order to minimize (i.e. in order to optimize in general), there is a need for at least two alternatives to choose between. There is a common rule in relationship to a given behaviour, so there is no choice between two common rules concerning the same behaviour in order to choose to breach the rule which indicates the slightest sanction for that infringement (and yet this situation is possible, probably in much more cases than it would seem at first glance). Generally, therefore, choosing between alternatives will mean choosing between complying with the rule and not respecting the rule. Obviously, compliance with the rule „minimizes" the negative externalities created by the decision in question. It follows that in the HS model, the general trend of individuals is to be compliant with the common standard of behaviour (NB: We need to make a statement about the negative externality concept that the individual faces when a common rule is infringed. Indeed, the sanction appears to the individual in question as exercised by an „individual" (in this case, the state/government) from outside, so the first condition of the concept of externality is verified. Moreover, the individual who is to be subject to the sanction was not consulted (therefore, he/she did not agree, principled) on the applicability of the sanction in question (from a philosophical point of view, a common rule is opposed to every individual as something external, even if the decision to impose the sanction was taken democratically, that is, internally), so the second condition of the concept of externality is also checked. The fact that it is a negative externality is obviously from the fact that it has the content of a disadvantage (cost) with the individual in case is penalized).

- (HS-A3) the individual has limited capacity to instantly process available information on common behavioural norms

As social actors, individuals belong (formal or informal) to certain categories of social groups (socio-professional, cultural, ethnic, religious, etc. – here we can find as appropriate the suggestion of Pierre Bourdieu to view the social stratification in a topological way), which determines their processing possibilities (comprehension, calculation and evaluation) of social behaviour. Consequently, there is a variability in the degree of processing this information, depending on the concrete social affiliations. This axiom is much more realistic than the (HE-A3) axiom, although information on common norms of social behaviour is much more limited than information on all goods and production conditions of all economic actors in the HE model. Thus, the axiom postulates that individuals are aware of all the common social behaviour norms in force at the time they make their decision, but their ability to understand, evaluate, and therefore make informed decisions is limited. In fact, there is a legal principle that says no one can defend him/her with the lack of knowledge of the law (in the terminology of the present study, the word law will be replaced by the expression *common norm of behaviour*) (Kuhn, 2008). Thus, the legal liability (i.e. the bearing of the sanction, that is to say, the negative externalities associated with the common rule) acts irrespective of whether or not the individual involved in violating the common rule has knowledge about the existence of the rule in question. This principle has the following practical consequence: each individual must be concerned about knowing the rules of behaviour in force, so there is also a certain activism from individuals about knowing the common rules of behaviour.

There is, of course, both a quantitative difference from the (HE-A3) axiom (in the sense of reducing the amount of information needed to be processed) and a qualitative one (individuals have the implicit legal obligation to know the common standard of behaviour), but with however, the social structure of concrete individuals in society prevents the

functioning of an unlimited capacity of instantaneous processing of information of interest in the social behaviour.

- (HS-A4) the <u>logical coherence of the calculation of the individual regarding the social behavioural could be fallible</u>

First of all, the possible failure is due to the limited capacity of information processing of the common behavioural rules, as stated in the (HS-A3) axiom.

Secondly, the possible failure is due to the fact that individuals belong to different social groups, with their own group habitus, which generates „filters" to evaluate the set of common social behaviour rules in force at a given time (NB: The concept of *group habitus* that we introduce here is somehow a middle term between Bourdieu's concept of *habitus* (individual habitus – my note, ED) and our own concept of *situational framework* (Popper, 1981). Therefore, a broad development of behavioural issues within the HS model will include the three levels of habitus: individual habitus - group habitus - situational framework. The situational framework could be called, for reasons of terminological unity, *social habitus* (NB: many philosophers call such a social habitus with the term social structure, but there are some differences between them, firstly from the point of view of the extension: it seems the social structure is larger than the social habitus, because includes also the organizations). These filters generate different „colours" of evaluating the common rules, so different decisions of individuals belonging to different social groups. The idea of building a common benchmark (opposable to all social groups of individuals) of processing and evaluating the common social behaviour rules seems to be an error because it would detract from the realism of concrete (empirical) individuals' behaviour.

Therefore, a purely symbolic correspondence between the axioms of the HE model and the HS model could be as follows (Table no. 3):

Table no. 3. Comparative peculiarities of HE's and HS's axioms

	AXIOMS			
	A1	**A2**	**A3**	**A4**
HE	pure and perfect	optimizing	un-restricted	infallibility
HS	impure and imperfect	optimizing	restricted	fallibility

Source: author

3.   Qualitative analysis of the set of axioms
(a)   the consistency

- (HS-A1/HS-A2) impurity and imperfection of the „social market" is not contradictory to the choice based on the minimization of the negative externalities associated with the common norm of behaviour. Indeed, the optimization of the decision (whether or not to comply with the common social norm) is not hindered by the unlimited access to information on the common rule in question;
- (HS-A1/HS-A3) impurity and imperfection of the „social market" is not contradictory to the limited ability to instantly get and process information related to common rules of social behaviours;
- (HS-A1/HS-A4) impurity and imperfection of the „social market" is not contradictory with the (non-necessary) inferential fallibility of the individual;
- (HS-A2/HS-A3) minimizing the negative externalities associated with the common behaviour norm is not contradictory to the limited capacity of instantaneous processing of information related to common social behaviour norms;

- (HS-A2/HS-A4) the minimization of the negative externalities associated with the common norm of behaviour seems to be, however, contradictory to the potential inferential fallibility of the individual. Thus, if inference can be faulty, this means that there may be cases where the decision to choose between alternatives (in the standard case, the choice between respecting or not the common rule) is so as not to minimize the negative externalities associated with the common rule concerned. However, a closer analysis will reveal that this risk does not exist: indeed, at least in the standard case, it is obvious that the minimization of the negative externalities associated with a common rule of behaviour is only achieved if that rule is verified, that is, only when there is a compliance with the norm;

- (HS-A3/HS-A4) the limited ability to instantly process information related to common rules of social behaviour is not contradictory with the potential for inferential failure.

(b)   the convergence

- the axioms (HS-A1) and (HS-A2) are convergent in that the minimization of negative externalities in the decision to comply with the common standard of social behaviour is not hindered by the impure and imperfect conditions of the social environment („the social market"); the reverse relationship is also obvious;

- the (HS-A3) and (HS-A4) axioms are in turn convergent with one another in making a social behavioural decision regarding compliance with the common rule in force (imperfect instantaneous processing of information and the potential failure of the inferences made are obviously convergent);

- as in the case of the HE model, we consider that between the two groups of axioms (the first two and the last two) we can accept a convergence relationship.

(c)   completeness

1.   independence (non-redundancy) of axioms:

- (HS-A1/HS-A2) from the impure and imperfect nature of the social game cannot be deduced the possibility of taking the decision by minimizing the negative externalities associated with the common norm of social behaviour; also, making decisions by minimizing the negative externalities associated with the common norm of social behaviour is possible under other conditions than those provided by the impulse of imperfect social game;

- (HS-A1/HS-A3) from the impure and imperfect character of social game cannot be deduced the possibility of limited capacity of instant information processing; the limited ability to instantly process information does not lead to the conditions of impure and imperfect social game;

- (HS-A1/HS-A4) from the impure and imperfect nature of social game cannot be deduced the possibility of inferential failure; at the same time, the possibility of inferential failure does not logically lead to conditions of impure and imperfect social game;

- (HS-A2/HS-A3) from the minimization of the negative externalities associated with the common social behavioural norm cannot be deduced the limited capacity of the instantaneous processing of the information; from the limited instantaneous processing capacity of information cannot be inferred the minimization of negative externalities associated with the common social behaviour norm;

- (HS-A2/HS-A4) from the minimization of negative externalities associated with the common social behavioural norm, the possibility of inferential failure cannot be deduced; from the possibility of inferential failure cannot be inferred the minimization of the negative externalities associated with the common norm of social behaviour;

- (HS-A3/HS-A4) from the limited capacity of instantaneous processing of information cannot be deduced the possibility of inferential failure; the limited ability to process information cannot be inferred from the possibility of inferential failure.

We conclude that the set of axioms proposed for HS contains only primitive axioms (none of the axioms is a theorem of other or of the others).

2.   the functionality of the decision-making system:

- the *institutional criterion* (HS-A1): the impure and imperfect nature of the social game represents the institutional framework of HS model operation. As we have seen above, this axiom encompasses, in its turn, four institutional conditions in which the social decision is made and the social game unfolds (Quine, 2003);

- the *decision (behaviour) criterion* (HS-A2): the axiom of decision-making based on the negative externalities associated with the common rule of conduct (Sen, 1988), integrates the rationality criterion of the HS model (by integrating its fundamental principle - compliance principle); therefore, the rational decisions taken in this model will check this axiom, otherwise they will be considered irrational in relation to the HS model in question;

- *performance competence* (HS-A3): the axiom of limited instantaneous computation capacity (instantaneous processing of information) refers to the competence of the social individual within the HS rationality model; through competence (analogous to the case of language) is understood the ability of an individual to carry out specific and sufficient actions in a performative model (Mises, von, 2018), in our case the ability to execute specific and sufficient calculations to substantiate the decision made on the basis of the (HS-A2) axiom;

- *quality control of the decision* (HS-A4): the axiom referring to the inferential failure is the „control unit" of the HS rationality model; this axiom characterizes the fact that in the HS rationality model, the calculation made by the social individual may be incorrect, in the sense that it may be logically invalid (though not necessarily invalid).

We conclude that the set of axioms proposed for HS is operable, i.e. it has the minimum structure required to work.

Based on the two previous conclusions, we draw the final conclusion that the HS model's axiom set is a complete system.

4.   Some logical consequences of the set of HS axioms

- the *homo socionomicus optimizes too*, but not in relation to the economic decision itself, but in relation to the common rule governing decision making, namely the execution (or non-execution) of the successive act of making that decision;

- the *optimal decision is unique*: as with the HE model, choosing an alternative (in the case of HS model, compliance or non-compliance with the prescriptions of the common social behaviour norm) is unique;

- *there is a unique theoretical HS model*: the theoretical HS model is the model in which the axioms are checked as they are formulated above; as in the HE model, relaxations of axioms are possible because, theoretically, they are formulated at their maximum qualitative level (this includes the atomicity of the social actors, namely the unlimited access to information on common social behavioural norms, the content of the (HS-A1) axiom, and the (HS-A2) axiom, respectively). By relaxing these axioms, practicable „versions" of the HS model are obtained, as in the HE model;

- the *fundamental principle of the HS model* (compliance principle) is *integrated into the (HS-A2) axiom*: minimizing the negative externalities associated with the common social behaviour norm. Indeed, this minimization reveals the compliance or non-compliance of the social individual with the rules (common rules of social behaviour).

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