

Practical Reasoning in Economic Affairs: The HD Index as a Case Study

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1. Introduction

The French philosopher of science Gilles-Gaston Granger (1992) explains that in the domain of Economics we must take into account three aspects of economic rationality if we want to achieve a correct and complete analysis. According to him, these aspects are the epistemic (or theoretical), the technical and the axiological (or practical). Epistemic rationality refers to the logic involved in the description or knowledge of facts; technical rationality refers to the rationale of the adequation between means and ends; and axiological rationality refers to the reasonability and coherence of the ends. In recent times, we have observed a growing conscience about the relevance of the axiological rationality for economics, which had been almost completely forgotten during the last Century. Anthony Atkinson in an article suggestively entitled “Economics as a Moral Science” (2009: 794) claims that economists have never ceased in making welfare statements, whereas not limiting themselves to positive statements. One of the examples he put is the Human Development Index (HDI), constructed and published by the UN Development Program (UNDP) in its Annual Development Report (HDR). The HDI has epistemic, technical and axiological aspects. There is a logical way of knowing and building the Index as well as a better way of achieving the decided ends, and also a (sometimes “under-defined”, “under-argued” or hidden) rationale for defining these ends and their relative weights. The HDI is then an occasion to discuss whether economists, should intervene –and how to do so– in the definition of the ends or if, à la Robbins, they should limit to indicate the best way of seeking the ends decided in other stages.

In Section 2 of this paper, I will present a particular version of the notion of axiological or practical rationality. In Section 3, I will introduce a specific view of a related notion, i.e., “practical objectivity”. Then, in Section 4, I will argue why the proposed former notions apply to economic actions and economic science. The role of the economist will arise as a result of the previous analysis and will be described in Section 5. Finally, in Section 6 I will show by a case study, i.e, the Human Development Index (HDI), how practical reason and objectivity work in economics.

2. Practical Reason and Practical Science

Human reason has different uses and, accordingly, human rationality has different applications. One of these uses is pointed out by Philippa Foot (2003: 53) when she asserts that “human beings are rational creatures, in being able to act on reasons.” In effect, human beings decide what to do by using their reason. This use of reason, ordered to action, is called practical reason. Instead, the use of reason only for the sake of knowledge is called theoretical reason. Practical reason deals with the field of that

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that is feasible or possible for human beings to perform. Theoretical reason may deal theoretically both with the previously mentioned field along with the field of things that we cannot change. Theoretical reason originates beliefs about matter of facts while practical reason originates actions. By theoretical reason we know an order (or rationale) of reality, including actions, while by practical reason we know for the sake of impressing an order to actions. Practical reason entails a normative intention about actions. In this way, human reason adopts a normative function. This normative character is the specific structure of human action. As R. Jay Wallace (2008: 1) explains, “practical reason is the general human capacity for resolving, through reflection, the question of what one is to do.” Furthermore, practical reason thinks not only about what one ought to do, but also for what reasons and how one could achieve it: it is *about* action and *for* action, it is thought *in* action and *from* the action itself.

For Aristotle, a founder of the notion of practical reason, every action aims at a “good” that is the end or reason of this action (*Nicomachean Ethics* I 1). This is why for him reasons for actions are provided by goods or values. According to this position, we can establish an intrinsic link between moral goodness and practical reason (see Foot 2003: 64). Practical truth is the good of man. This good might be universal or contextual depending on the matter. Aristotle’s ethical program was to determine the specific content of human good. For him, there are some goods that are common to every man because they derive from the function of the human being and other goods that are relative to societies, persons and situations. In addition, he distinguished two levels: the theoretical knowledge about these ends, and the practical knowledge, decision and action in real life by reasoning “practically”.

According to him, both theoretical knowledge and practical reasoning deals with a constellation of ends of human or social life and also with means inasmuch as they fit or conform to this constellation. Additionally, the contributions of means to each individual’s end is a matter of another kind of rationality, i.e., technical or *poietical* rationality. The question of the allocation of means in order to achieve a specific end (that may be the formal end of utility or value) is different from the question of the decision on ends and of the conformity of those means to the complete set of ends of society or man. The first question is a matter of technical (later called instrumental) reason, while the second is a matter of practical reason. This is why for the Aristotelian theory of practical reason the statement “the end justifies the means” is unacceptable: practical reason does not concentrate in only one end, but considers a “horizon of totality” (Evandro Agazzi: 33). Technical rationality has more to do with the “how-question” of achieving an end and practical rationality with the “why-question” of means and ends. Finally, within the frame of the first question –the technical– we may consider how to best allocate those means in order to achieve the specific end: this is a matter of instrumental maximizing rationality, broadly used by standard economics.

This exposition, focused on the Aristotelian notion of practical reason leaves aside two relevant positions on practical reasoning, the Kantian and the Humean. According to Kant practical reason is separated or autonomous from theoretical reason. As Cullity and Gaut (1997: 20) affirm, this involves relying on fundamental claims concerning practical reason that are unjustified. For Immanuel Kant, there is not a theoretical science dealing with the practical field, but some convictions about practical principles. “These postulates”, affirms Kant, “are not theoretical dogmas but, suppositions

practically necessary” ([1788] 1952: 348). Instead, for Aristotle a rational theoretical inquiry about the practical field is possible. That is, for him ethics is a science.

Furthermore, according to David Hume, practical reason is an instrumental reason which depends and obeys motivational tendencies. Thus, while Aristotle’s view concerning the relationship between values and practical reason recognises valuable actions in themselves, Kant’s view is constructivist, in the sense that the action is valuable because it has been chosen, whereas Hume reduces practical reason to instrumental reason.

For Hume, a rational deliberation about ends is not possible and the deliberation on means is not embedded by the rational consideration of ends. His statement is very well known: “Reason is, and ought only to be the slave of passions, and can never pretend to any other office than to serve and obey them” (Hume [1739-1740] 1968: 415 -II, iii, 3). What move volition and action are passions, not reason (415). Passion chooses the ends and reason provides both the data on which passion is founded and the means to achieve that ends. In Hume’s version of rationality, “reason is to be seen as an instrument to achieve ends that are not themselves given by reason. We may say that an act is irrational if it is not the best means of achieving the ends that the actor himself had a view when choosing the act” (Robert Sugden 1991: 753). For Adam Smith, Hume’s friend, the content of good and evil is known by sentiments: reason cannot know it (*The Theory of Moral Sentiments*, VII, III, II, 7 and 8, [1789] 1984: 320). The common idea of both authors is that ends are not known and determined by reason. The paper of reason is the allocation of means for the sake of those ends. This conception is broadly adopted by modern social sciences. Raymond Boudon (2004: 57) very well describes the situation:

In general terms, the equation that assimilates rationality and instrumental rationality is so influent that social sciences’ most literature on rationality almost exclusively deals with instrumental rationality. In other words, social sciences tend to admit that the notion of rationality essentially applies to the adequacy of means and ends, actions and objectives, or actions and preferences. At most, they recognize that rationality can also take the form of a requirement of coherence or transitivity of objectives or preferences. But they avoid applying this category to the contents of preferences or objectives themselves.

This is the case of standard economics. However, a strong movement of rehabilitation of the Aristotelian notion of practical reason and science has arisen in the second half of the last Century, mainly in Germany. A collective work edited by Manfred Riedel (1972-4), entitled *Rehabilitierung der praktischen Philosophie*, could be mentioned as a hallmark for this wave of thought. Members of this movement conceive the practical paradigm as a reaction against the modern prevailing requirement of value-neutrality in the realm of the social sciences. For value-freedom supporters, scientific reason was only applicable to means. The ends were a matter of private decision, which surpassed the limits of science. This movement of rehabilitation of practical science considers that there is an entanglement of values and facts and that thus value-free science is an impossible enterprise. Even a descriptive list requires principles of selection (see Finnis 1982: 4). Leo Strauss warns about a peril of denying this entanglement (1959: 21):

It is impossible to study social phenomena, i.e., all important social phenomena, without making value judgments. (...) Generally speaking, it is impossible to understand thought or action or work without evaluating it. If we are unable to evaluate adequately, as we very frequently are, we have not yet succeeded in understanding adequately. The value judgments which are forbidden to enter through the front door of political science, sociology or economics, enter these disciplines through the back door.

If these values, which inevitably embed social thinking, are not rationally founded and established, we could be confronted with ideology. Frankfurt School also, by its critical diagnosis of modernity –a critique of instrumental reason– looks for practical reason. Max Horkheimer ([1967] 2007: 21), for example, maintains that when the original idea of reason was conceived, it was aimed for much more than the mere task of regulating the relation between means and ends: it was intended for the understanding of the ends themselves.

What is then the role of the value-free requirement of science? We will have to interpret it in another way. Value-neutrality should not be ‘officially’ leaving values aside, but ‘impartially’ reasoning about them. How could we neutrally describe social facts? This neutrality is only achievable through the scientific definition of the standards of practical reasonableness (see Finnis 1982: 12). That is, the way to manage the value-free requirement is not to put away values –something impossible– but to reason about them, and thus rationally determine the set that should be pursued. We may reason, for example, the arguments for a list of universal human rights. This is the task of practical science. We can see then that a conception of practical reason entails a parallel conception of practical science.

The main traits of it as conceived by Aristotle will complete this panorama. First, practical science acknowledges the inexact character of its conclusions, due to the contingency of human action, which stems from human freedom and from the singularity and complexity of human affairs. Secondly, practical science must be closely connected to a singular case. An adaptation to it, considering its cultural and historical environment, is necessary. A wise mix of adequately chosen scientific types and historic, cultural and empirical elements is the key to a correct interpretation of human action. Third, I mentioned the normative character of practical reason conducing to the normative character of practical science and its engagement with values. A fourth trait of practical science is its pragmatic aim. An abusive theoretical aim has invaded the realm of social sciences. A social science may have a theoretical aim, but it is always virtually oriented to action due to the essentially practical character of its subject. Last, we ought to mention the plural methodological devices of practical sciences. In his *Nicomachean Ethics* and in *Politics*, Aristotle admirably combines axiomatic deduction, inductive inference, dialectic arguments, rhetoric suggestions, imagination, examples, and topics. In a prudential science, all these methodological instruments contribute to its purpose.

Theoretical reason knows the ends and means but does not move into action. On the contrary, practical reason moves to action. In addition, practical science is the critical reflection on values in order to rationally discover or defining them and to show them to practical reason. Preferences and tastes must be regulated by practical reason. They are objects of rational inquiry and debate. The collapse of the fact/values dichotomy

requires the work of practical reason in order to achieve a rational discover or determination of the ends of actions, which are based on values.

3. The Meaning of Objectivity

Some hints about the contingency and situated character of the human action and the consequent inexactness of practical science have been advanced in the last Section. At the same time, some hints about sustaining some kind of universality and independence of some values were also advanced. “Objectivism” is “the view that the mind possesses objects, norms, or meanings of universal validity” (Wilbur Long 1942: 216) and the “doctrine maintaining that everything apprehended is independent of the apprehender” (Herman Hausheer 1942: 216). Both characteristics of objectivity, i.e., universality and independence, seem not to be appropriate for the practical field. However, I argued for the possibility of a rational inquiry in this field. The solution is to adopt a notion that could be labelled “practical objectivity”. I will base my argument again on Aristotle.

Practical reason focuses on local situations by necessity, because it is a field of actual individual or social practices which are always particular. Hence, the work of practical reason cannot be universal: it is relative to every agent. Nevertheless, this relativity or subjectivity does not entail relativism or subjectivism. The action must not be capricious. Moreover, Aristotle sustains that in the practical field we may find greater accuracy than in the technical field: “virtue, like nature, is more accurate (*akribestera*) and better than any form of art” (*NE* II 6 1106b 14-15). He also asserts that “each man judges correctly those matters which he is acquainted; it is of these that he is competent critic” (*NE* I 2, 1094b 28). Good practical reasoning requires experience, theoretical knowledge of principles, and good intention.

In respect to practical science, we also find these problems: entanglement of personal or social values and lack of universality. Concerning the first problem, I have dealt with it proposing that value-neutrality means practically reason and determines the values that are embedded in the research question. Let us go to the second problem.

As I mentioned in the previous Section, practical knowledge is inexact. As Aristotle maintains, “the same exactness (*akribeia*) must not be expected in all departments of philosophy alike (...) but only such as belongs to the subject-matter of each, and in a such degree as is appropriate to the particular line of inquiry” (*NE*, I 3 1094b 13-14 and I 7 1098a 28-29). However, as Richard Kraut asserts, Aristotle “is asking us to have different expectations of different fields: not *higher* standards for some fields and *lower* for others, but *different* standards” (2006, p. 87). Gauthier and Jolif make an interesting point (1970: II, 14) when they explain that Aristotle distinguishes three classes of facts: first, necessary facts which always occur in the same way, second, general facts which occur most times in the same way, and finally, accidental facts which scarcely occur in the same way (*Physics* II 5 196b 10 ff. and *Metaphysics* VI 2 1026b 27ff.). Exact sciences deal with the first category; physics and politics deal with the second; and the third cannot be subject-matter of any science. “General facts” are *hos epi to polu* (those that happen in many situations –but not by necessity and not always, *anankes kai aei*–). This is an expression not only used in the quoted passages of the *Metaphysics* and *Physics*, but also in the *Nicomachean Ethics* (I 2 1094b 21); in the latter with reference to the practical realm. Inexactness of practical science is based on this fact of dealing

with “general facts”. Given that for example, by definition, statistics deals with general facts it is clear that it cannot be, in that sense, an exact science. This does not mean a weakness but a rigorous adjustment to the nature of the subject-matter. For example, an adult literacy of 85% means that 85 of 100 adults know how to read and write, and 15 do not. That is, 85% applies to the whole, not to particular individuals. The real figures are 100% for literate people and 0% for illiterate: no person is 85% literate. In fact, the correct policy is not to improve 15% of the literacy of all the people, but to look for the 15% illiterate and to teach them. This figure (85%) is, however, true about the whole, and it is highly useful, because if we do not know that the literacy is 85% we will not look for the 15% who are illiterate. The statistician puts into brackets the contingency of the particular case but at the same time, he considers it. Nevertheless, this does not imply a lower level of truth, but practical truth, which is the suitable for this subject-matter.

However, can we not deduce from a practical reasoning of practical science a short list of practical universal principles applicable to all particular situations? I mentioned this possibility in the former Section. Aristotle deduces some “anthropological constants” from his observation of human beings and societies:

- i. Reason: “Man alone of the animals is furnished with the faculty of language” (*Politics* I, 2, 1253a 9-10). The word used by Aristotle to express language is *logos*. *Logos* also means reason, which is the source of language. Reason has a triple use: theoretical, technical and practical.
- ii. Sociability: “there is therefore an immanent impulse in all the men towards an association of this order” (*Politics* I, 2, 1253a 29-30). For Aristotle, social interaction is crucial for the development of rationality and men have this natural impulse towards association.
- iii. Language: man is the only animal furnished with this capacity. Language does not develop independently from society (*Politics* I, 2).
- iv. Communication, enabled by rationality, sociability and language.
- v. Moral sense: Aristotle asserts that “It is the peculiarity of man (...) that he alone possesses a perception of good and evil, of the just and the unjust, and of other similar qualities” (*Politics* I, 2, 1253a 14-18).
- vi. Capacity to look for common aims, as a clarification of the deep meaning of sociability. For him, these aims are shared by a family or a polis: these are not mere aggregations (*Politics* I, 2, 1253a 18-20).
- vii. Freedom. A different aim of the will or weakness of the will (*akrasia*) might lead to different ways of behavior, which might be called irrational, or asocial or immoral.

Additionally, Aristotle in his *Politics* distinguishes different kind of societies with distinct characteristics and ends. He studies the nature and ends of each kind and, then, he postulates the adequate organization and means of them. The research is performed by theoretical reason and the normative proposal is a task of practical reason. They should be performed for each case.

There are two more sources that allow generalization in practical sciences: first, a natural basis, like these “anthropological constants”, and like natural phenomena (as the recurrence of seasons); second (and compatible with the former), the recurrence of habits. This is because in the realm of human action “in most respects the future will be

like the past has been” (*Rhetoric* II 20 1394a 7-8). Hence, generalizations in practical science are actual dispositions or habits (see Wolfgang Wieland 1996). As Alasdair MacIntyre (1984: 102-103) explains, predictability in the social sciences is possible, although imperfect. This is often achievable thanks to knowledge of a) statistical regularities; b) of the way people carry out their need to schedule and coordinate their social actions; and c) also thanks to the awareness of the causal regularities of nature and of social life. This is why close contact with facts is necessary in practical science. The more stable the habits and tendencies the more predictable the outcomes. In any case, general tendencies may change: they are not firmly established universals. Aristotle develops a theory about the stability of habits (*Nicomachean Ethics*, VII, 9, 1151b 25-7 and VII, 10, 1152 a, 26-7). When habits are sufficiently stable as to constitute social institutions, practical science is firmly based. Therefore, institutions are very important for they consolidate tendencies and habits and facilitate accurate science. By all these means, practical events are not only accidental but “general facts” that *hos epi to polu*, happen in many cases. This provides the basis for practical generalizations and practical science.

In conclusion, first, practical science is less exact than theoretical science because its subject-matter, although often repeated, has greater variability. This does not mean that it achieves a “lesser truth” but a different truth. Second, practical science, however, is exact in that it knows the former. That is, its exactness does not mean absence of rigor. Quite the contrary: rigor in the practical field entails the acknowledgement of this inexactness. Third, practical reason may be exact in its conclusions thanks in part to its good exercise. Fourth, we can reach at a short list of universal principles based on “anthropological constants” of human beings. These are often expressed by the universal human rights. Fifth, we can also do some generalizations based on other natural causes and on personal habits and social regularities. These latter are strengthened by social institutions.

Finally then, practical objectivity is a reasoned knowledge, decision and action relative to a particular situation of individuals or societies. There are some shared principles that apply to any situation, but they have a very wide level of generality. They may influence but they should be completed with resolutions that are specific to each kind of situation. This position has some similarity to the one sustained by Hilary Putnam (1990: 178) when, quoting John Dewey, speaks about an “‘objective resolution of problematic situations’ –objective resolutions to problems which are situated in a place, at a time, as opposed to an ‘absolute’ answer to ‘perspective-independent’ questions. And that is objectivity enough.”² This objectivism is different from the one supposedly achieved by the anti-psychologist formalism of modern economics. While “practical objectivity” is full of content for specific situations this “formalist objectivity” is empty.

4. Practical Reason in Economics

Philosophers supporters of the existence of the practical reason’s field would never put in doubt the practical character of economic activity and, therefore, that economics is a practical science. Amartya Sen remarks the long tradition of this conception of economics, called by him “ethics-related”, from Aristotle to our days –although it is not

² The kind of reasoning of Dewey is mainly pragmatic greatly differing from Aristotle’s but both resulting concepts of objectivity can be compared. See Anderson 2005.

the most usual (Sen 1987: 2-4). In this Section, I will briefly consider some authors belonging to this tradition: Aristotle, Smith, Keynes and Sen. I will also mention a philosopher, Hilary Putnam and an economist that might cause surprise in this context: Lionel Robbins.

Aristotle refers to the economic life in dealing with *oikonomike*, a Greek adjective that means “economic”. He considers that *oikonomike* is the use of the things necessary for Good life, i.e., the life of virtues. For him, it is more than household management, as many economic historians believe: it deals with the house and also with the *polis* (cf. *Politics*, I 8, 1256b 12-4; I 10, 1258a 19-21; I 11, 1259a 33-6). *Oikonomike*, for him, is subordinated to Politics because the things it uses are necessary for the very existence of the *polis* (cf. *Politics* III, 9, 1280b 31-2).

For Aristotle, *oikonomike* can only be aimed at the good; it is essentially moral. He distinguishes it from another related concept, chrematistics, which is a technique subordinated to *oikonomike* dealing with the acquisition of those things used by it. This technique, on the contrary, is not essentially oriented towards the good. Therefore, while for Aristotle a harmful *oikonomike* is not thinkable two kinds of chrematistics can be considered: a subordinated, limited and natural one, and a wicked, unnatural, unlimited one. Taking into account the whole context of the treatment of *oikonomike* into the *Politics*, Aristotelian scholars have usually interpreted that it is a practical science (see, for example Reeve 2006, p. 206, Natali 1980, p. 117, Berti 1992, p. 89, Newman 1951, p. 133 and Miller 1995, pp. 6-11). In sum, for Aristotle *oikonomike* is a kind of human action regulated by practical reason and studied by a practical science.

According to Adam Smith political economy is “[a] branch of the science of the statesman” ([1776] 1952: 182 –Book 4, Introduction). Recent literature on Smith’s philosophy stresses the moral character of his conception of economics. Jeffrey Young, for example, in his book on Smith’s thought, *Economics as a Moral Science* (1997), states that for Smith the market is a social arena for actions in which knowledge of the sympathetic feelings of the impartial spectator is an operative factor in understanding market activity, price and distribution (1997: 56). The role of the impartial spectator in depersonalized societies and markets is that of “a bond of union and friendship” (61). “Wealth and virtue are complementary in Smith” (157) in the frame of a ‘benevolent model’ (69, 76) and a ‘virtuous sequence’ (184).

It is very well known that Lionel Robbins in his *Essay on the Nature and Significance of Economic Science* defines economics as an activity of allocating means in order to achieve given ends. He supported value neutrality excluding ends of scientific knowledge: “Economics is not concerned at all with any ends as such. It is concerned with ends in so far as they affect the disposition of means. It takes the ends as given in scales of relative valuation” ([1935] 1984: 30). Throughout the years, however, he finally maintained the need of a normative knowledge of economic reality. In his *Autobiography* Robbins tells that he had studied economic theory but that he quickly had realized that “all this was in a very high plane of abstraction (...) There was another level, however, on which economic analysis was conjoint with assumptions about the ultimate desirable ends of society which, (...) had no less a hold in my attention” (1971: 150). His historical studies of classical English economists gave him justification to pursue his new point of view. We can track through Robbins’ works the evolution of

this concept during the years.³ I will only refer to his 1980 Richard T. Ely Lecture at the American Economic Society Annual Conference, “Economics and Political Economy” (1981). Robbins explains that since classical political economy included value judgments, this term –political economy– was left aside and the term *economics* began to be used. His suggests reviving the term “political economy” in order to emphasize a knowledge that overtly deals with political suppositions and value judgments. Many economic matters correspond to this new and old knowledge. “In the application of Economic Science to problems of policy,” Robbins affirms, “I urge that we must acknowledge the introduction of assumptions of value essentially incapable of scientific proof” (1981: 9). The rejection of the scientific character of an investigation is still present in Robbins, but he admits the necessity of considering them.

It is interesting to see that it was precisely against Robbins view of economics that Keynes reacts and sustains that it is a moral science. This contention was included in two letters to Roy Harrod from 4 and 6 July 1938:

In the second place as against Robbins, economics is essentially a moral science and not a natural science. That is to say, it employs introspection and judgments of value. (1973: 297) I also want to emphasise strongly the point about economics being a moral science. I mentioned before that it deals with introspection and with values. I might have added that it deals with motives, expectations, psychological uncertainties. One has to be constantly on guard against treating the material as constant and homogeneous (1973: 300).

I want to remark that Keynes’ characterization of economics fits with the mentioned traits of practical science. It deals with values, reasons and uncertainties. This leads him to sustain that economics needs to consider the conditions of the specific situations that it is dealing with. He also considers the methodological pluralism of practical sciences, including “theory and fact, intuitive imagination and practical judgment” (1973: 335)

Finally, Hilary Putnam has powerfully sustained the collapse of the fact/value dichotomy (2002). He tries to “explain the significance of the issue particularly for economics” (2002: vii). He argues that ends matters in economics and that they can be discussed rationally. Ends cannot be separated from economics because description and evaluation are interwoven and interdependent (2002: 3). Putnam’s example of the recognition of his position in economics is Amartya Sen’s capability approach. Sen (2002: 51) complains about the arbitrarily narrow current formulations of rationality. He asserts that “rationality is interpreted here, broadly, as a discipline of subjecting one’s choices –of actions as well as of objectives, values and priorities –to reasoned scrutiny” (2002: 4). For him, “rationality includes the use of reasoning to understand and assess goals and values” (2002: 46).

Suppose then that we have accepted that economics is a practical or moral science. What does this actually imply for the behaviour of economists? This will be the topic of the next Section.

³ See my paper 1998.

5. The economists' role

Actual human actions are not mere allocations of scarce means given some ends to achieve. Ends are not only given but are also generated in the very process of action. James Buchanan maintains that “we must also acknowledge that men can choose courses of action that emerge only in the choice process itself” (1987: 78). Means and ends mutually interact and determine. Elizabeth Anderson has considered Dewey’s thought on this point. She notes,

(...) the character and value of means and ends was reciprocally determined. We do not first already have an end in view, with the only question how to achieve it. We lack a complete conception of our end until we have a complete grasp of the course of action that will take us there (2005: 8).

Hence, the mere consideration of the ends as given, reflects a truncated action which is not human. “Acting on such radically truncated judgments would be crazy”, Anderson affirms (*ibid.*). Ends and means interplay often conducing to a re-definition of ends. Given these characteristics of human action, what is the role of the economist?

First, we can consider a reflection about some absolute ends (universal human rights) that are unexceptionable. Here we find a first role of the economist: he must only try to allocate means in order to achieve them. But then the turn arrives for reflection on a second set of ends which are exceptionable, beginning with designing a rough sketch, and following with an adjustment to the real possibilities of achieving them with the given means. Here the economist must intervene and point out the limits of plans.⁴ The contribution of the economist is needed for this process of matching means and ends. (I am supposing the possibility of an interdisciplinary discussion about the ends.)

However, although I held that instrumental rationality must obey practical rationality, I do not devalue its possible contributions. As noted by Anderson, maximization has a local role within practical reasoning (1997: 45). There are fantastic examples of how much Economics contributes to diverse fields such as health and education, transportation and industries, regulations, privatizations, and integration, only to mention a few, provided that the practical constraints were also defined: for example, that basic education, or a number of medical interventions will be prioritised. Economics may also work with a set of ends which singular specifications could be appraised by cost-benefit analysis (Finnis 1997: 218-9).

However, the interplay between practical and instrumental rationality often becomes more than necessary. This stems from a variety of aspects of these ends which do not have strict economic value. All actions are performed by men and can affect men. The impact is not only appraisable in terms of cost-benefit analysis and, thus, practical rationality must enter into a game which continually engenders constraints. A possible example is deciding on whether to assign budget to the so-called First Generation Reforms or to Second Generation ones which cannot be assessed only through monetary returns. For instance, the reforms in justice and education are difficult to be assessed in economic terms and may thus be unfairly delayed. This is a political decision that, once

⁴ This interaction between instrumental and practical rationality gives us a hint of the limited scope of maximizing instrumental rationality. Ends may be modified: thus, the independent variables become dependent. How could we manage this?

taken, becomes a given for the economist who will then locally apply cost-benefit analysis. In the next Section, I will put the example of the Human Development Index (HDI).

Again, as asserted, there are occasions in which the relevant criteria to decide on ends are only strictly economic: this is the appropriate field of economics working alone. But as soon as the matter loses this specificity, economic calculation becomes more complicated due to the difficulties of expressing non economic values in economic terms. Summing up, the role of the economist will be, first, to be engaged and actively participate in interdisciplinary discussions concerning problems needing an interaction of means and ends. Second, the economist, as usual, will contribute with local cost-benefit analysis that must be included in any practical decision.

6. A Case Study: The Human Development Index

The aim of this Section is first to show that practical rationality and values are embedded in economic decisions and instruments, second to stress the relevance to show clearly these values, and lastly to assert the need for an established process for reasoning practically about them.

The HDI has a lot of prudential underlying assumptions that are technical and practical. One may wonder, however, whether they are sufficiently explained or argued by theoretical, technical and practical reasons. Theoretical reason should enter into play in order to define the terms involved in the HDI, technical reason is needed to solve its technical problems, and practical reason to justify prudential decisions and simultaneously appraise the impact of those technical solutions on the values.

Specifically when dealing with index numbers limitations appear which are originated in that they are being composed of heterogeneous variables. Different values of variables of different categories –let’s say comfort, velocity and security– are transformed into a dimensionless index with values from 0 to 1, to obtain a ranking – let’s say, of the attractiveness of cars. We calculate the ratio among the values assigned to each category and their extreme values, and then we calculate the average of the obtained ratios. Now, we do not have a *measurand* of comfort, km/h and a *measurand* of security, but “naked” numbers that can be added and that supposedly represent the attractiveness of cars. However, one realizes that this is a highly conventional rank based on many assumptions.⁵ What is incommensurable is made commensurable by adopting a conventional unit for each incommensurable variable, calculating the value of the variables according to these units, and adding a weighted proportion of the values of these variables (Boumans 2001: 326 and Morgan 2001: 240). This means that we are accepting *inter alia* the assignment of weights for each variable indicated in the index formula. This is a key for this conflation. The weight must be the “due” weight (Morgan 2001: 240). This is not easy when the categories weighted are qualitatively different (see Banzhaf 2001). It is actually useful to do this exercise, but we are all conscious that little changes in the composition of the index might drastically change the ranking results. This capacity to manage index numbers might become a manipulation. The way of avoiding it is to clearly show the decisions made together with their arguments. I

⁵ They are non-additive qualities: see, e. g., Cohen and Nagle (1934: 296).

think that this clearly shows how the technical aspects are intermingled with judgmental practical aspects: beliefs and values affect technical decisions. Allen (1951: 100ff.) considers technical problems concerning the choice of items, the choice of formula and the choice of base periods. However, these technical problems also involve values. Morgenstern, for example, after expressing his concern about the accuracy of data, considers technical problems, but he also recognizes “that we are here confronted with a political as well as an economic problem” (1963: 192).

As posed by Sen, capabilities are incommensurable. Incommensurability is often found in the practical realm. We can obtain an ordinal ranking by comparison of incommensurable categories, but a numerical ratio among the components will be only an inexact way of illustrating the ranking.⁶ We cannot commensurate income, longevity and literacy because they are measured by different units. We can only compare and rank them for a specific situation, and say, for instance, (in a very simplistic way) that for this country today it is more relevant to increase its income than to put effort on education; or instead that, having reached a determined level of income, the most relevant is to increase education. The HD Index Number decides a unique rank stemming from a comparison, makes it legitimate for any country, time and situation and assigns numbers in order to commensurate the corresponding variables and to achieve results. In the case of the HDI one third is assigned to each variable. We are in fact applying a ratio to an ordinal category (see Boumans and Davis 2009: 152; Finkelstein 1982: 19). It can be done, but the result cannot be considered as an exact number, but only as a general indication, mainly based on the weights assigned to each variable. As the first HD Report affirms, “The index is an approximation for capturing the many dimensions of human choices. It also carries some of the same shortcomings as income measures” (UNDP 1990: 1). This is also asserted by Sen who speaks of the HDI as a “measure with the same level of crudeness as the GNP” (1999: 318, nt. 41).

There is also the possible danger noted by Ludwik Finkelstein (1982: 11): “that once a scale of measurement is established for a quality, the concept of the quality is altered to coincide to the scale of measurement.” That is, for example, that we come to think that development consists in a combination of longevity, literacy and income, which is a poor concept of development.

Further problems of the Index Numbers are other technical problems and also problems related with the accuracy and homogeneity of data. The need of simplicity may go against realism. We cannot argue against using index numbers from these problems because they could be overcome. However, we must also consider that technical decisions might have an impact over practical aspects because different technical alternatives might imply different stresses on the results –equality or difference among countries in the case of the HDI.

The limitations of the HDI have been recognized and, however, the Index has been defended on practical grounds. Anand and Sen (1994: 2) recognize that there is a loss of information when using an aggregate number (a “scalar”) for a set of numbers representing individual circumstances (a “vector”). In the same vein, they (2000) affirm that the domain of the Human Development Report is much wider than what is captured by the HDI. For sure, the three variables chosen are not the only three. But as more

⁶ Scales of measurement in the social and behavioral sciences are nominal or ordinal (Finkelstein 1982: 26).

variables are added, they will all decline in significance. Then, “the income component of the HDI has been used as an indirect indicator of some capabilities not well reflected, directly or indirectly, in the measures of longevity and education” (2000: 86; see also 99 and 100). Regardless of all these limitations, the HDI is a worthy task. This is very well expressed by Paul Streeten (1994: 235):

It is clear that the concept of human development is much deeper and richer than what can be caught in *any* index or set o indicators. This is also true of other indicators. But, it might be asked, why try to catch a vector in a single number? Yet, such indexes are useful in focusing attention and simplifying the problem. They have a stronger impact on the mind and draw public attention more powerfully than a long list of many indicators combined with a qualitative discussion. They are eye-catching.

That is, the aim of the HDI is mainly practical. Then, the HDI has to be taken as an orientation that has to be handled with care, and refined through technical improvements, theoretical and practical reasons. The policy maker should go beyond the simple index and analyze its components in order to detect the fields which need improvement.

My main claim is that the theoretical definitions and practical decisions supposed in the HDI might not be sufficiently explicit or argued, and that a better definition of concepts and practical arguments should probably be made in order to improve the quality of the Index, and for the sake of a “fairer play”.⁷ What are these theoretical definitions and practical decisions?

The first practical decision is the election of the capabilities –education, health and a decent standard of life– and the corresponding measurable variables –life expectancy, literacy and income (this last as a proxy of the other capabilities). It sounds as a reasonable decision but the argument for this decision is not developed in the Human Development Reports. References to this decision appear in the first HDR:

Human development is a process of enlarging people’s choices. The most critical of these wide-ranging choices are to live a long and healthy life, to be educated and to have access to resources needed for a *decent* standard of living. Additional choices include political freedom, guaranteed human rights and personal self-respect (UNDP 1990: 1 and 10).

...at all levels of development, the three *essential* ones [choices] are for people to lead a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living. If these *essential* choices are not available, many other opportunities remain inaccessible (UNDP 1990: 10).

People are the real wealth of a nation. The basic objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives. This may appear to be a *simple truth*. But it is often forgotten in the immediate concern with the accumulation of commodities and financial wealth (UNDP 1990: 9, my italics in the three quotations).

⁷ These theoretical and practical insights are part of the so-called by Makiko Harrison (2002: 37) “outside criteria” needed to operationalize a theory of well-being.

As it says, the definition of these goals appears as a *simple truth*; but however this is not trivial, it has to be argued. Why are these choices, and not others, *essential*? What is a *decent* standard of living? Are life expectancy, literacy, enrollment and per capita Income a good way of measuring those choices? The 1993 Report (UNDP 1993: 105) adds:

The three dimensions of the HDI relate to one or many capabilities that they are expected to capture. Thus, longevity captures the capability of leading a long and healthy life. Educational attainments capture the capability of acquiring knowledge, communicating and participating in the life of the community. Access to resources needed for a decent standard of living captures the capability of leading a healthy life, guaranteeing physical and social mobility, communicating and participating in the life of the community (including consumption).

These, however, are utterances, not arguments. Let us see if they are more clarifications about each dimension. Concerning life expectancy, the HDR 1990 explains:

The use of life expectancy as one of the principal indicators of human development rests on three considerations: the intrinsic value of longevity, its value in helping people pursue various goals and its association with other characteristics, such as good health and nutrition. The importance of life expectancy relates primarily to the value people attach to living long and well (UNDP 1990: 11).

This intrinsic value of longevity is evident. To obtain these other goals as well as those mentioned characteristics would probably need more development.

Concerning knowledge, the Human Development Report (1990: 12) argues that literacy is the person's first step in learning and knowledge-building, but it recognizes that other variables should be taken into account (as in fact future reports did adding enrollment).

Concerning the third key component of human development, "command over the resources needed for a decent life", it is first recognized that taking per capita income as indicator has strong limitations, because it leaves aside non tradable goods and services and the distorting effects stemming from exchange rates anomalies, tariffs and taxes (UNDP 1990: 12). Additionally, the use of logarithm for the scale of incomes has two effects: firstly, it decreases the weight of the highest incomes; secondly, the average of the logarithm tends to increase when the income is more equally distributed. The first effect entails the decision of lowering the impact of the highest incomes on development (Anand and Sen 2000: 87). The second effect entails a preference for equality (Anand and Sen 1994: 3).

The assumption that income is an indirect indicator of other capabilities (than life expectancy and literacy) is a strong assumption because it means that income can "buy" these capabilities –which are surely a lot– and that their values are uniform and proportionally lower than education and life expectancy. For example, it is not clear that there is a necessary correlation between income and democracy. As the first HD Report recognizes, "there is no automatic link between income growth and human progress" (UNDP 1990: 10).

Summing up, pragmatic reasons indicate that a decision has to be made about the variables to take into account when building the Index. This decision might not be the best: As Sabina Alkire (Alkire 2002: 77) asserts, a “heroic specification is required.” Nevertheless, she also states that “[i]n the spirit of the capability approach the assumptions on the basis of which this specification takes place should be collaborative, visible, defensible, and revisable” (Alkire, *ibid.*). That is, we need to establish a process of decision. If not, we are making an under-illustrated practical decision: a practical decision without practical science.

The second practical decision is to assign an equal weight to the three variables. It also sounds reasonable but, this is not argued.⁸ The only reference to this is the utterance that all three of the HDI components are equally important and that thus deserve equal weight (UNDP 1991: 88). However, for example, people from a strong religious culture might consider that education or income, and even longevity, are not so relevant; and that they value religious faith –which cannot be bought– over the other variables. They might consider the Index as Europeanizing.

Within knowledge the decision of assigning two thirds of the specific Index to adult literacy and one third to the combined gross enrollment is also a practical decision. Given that enrollment implies literacy, the assignment of two thirds to adult literacy entails assigning more relevance to the present than to the future. Concerning enrollment, the decision of taking into account with the same weight primary, secondary and tertiary education, is not explained. Besides, the 2009 Report (UNDP 2009: 205-206) recognizes that combined gross enrollment ratios can hide important differences among countries given differences of quality, of grade repetition and dropout rates.

To take practical decisions without justifying them is not a good practice. If values are not rationally found and established, we could be accused of being ideological. The HDR has explicitly declared in its first Report that its orientation “is practical and pragmatic (...). Its purpose is neither to preach nor to recommend any particular model of development” (UNDP 1990: iii). However, the HDR continuously uses the verbs “should” and “must”: values are then entering through a back door. The way to resolve this is to reason and to decide about them.

There is a trade-off between the idiosyncratic and individual nature of capabilities and the establishment of a common index based on common values. That is, there is a trade-off between accuracy and universality-operativeness (see De Langhe 2009). But surely it must exist a proceeding for reaching a prudential agreement among reasonable people about the content of the “heroic specification”.⁹ As Flavio Comim (2008: 164) affirms, we need to establish “procedures for solving the trade-offs, conflicts and inconsistencies

⁸ For Lucio Esposito and Enrica Chiappero-Martinetti (2008: 3) “the act of *not* giving weights –equivalent indeed to the assignation of identical weights to each dimension– is itself a subjective decision motivated by the value judgment that those dimensions are equally valuable. (...) In the literature (...) the possible meanings of the statement ‘dimension *h* is more important than dimension *k* have not critically been searched for.”

⁹ Sen (1992: 117) affirms: “It is not unreasonable to think that if we try to take note of all the diversities, we might end up in a total mess of empirical confusion. The demands of practice, as well as reasonable normative commitments, indicate discretion and suggest that we disregard some diversities while concentrating in the more important ones.” The problem would be to decide what are important and what are not. It needs to be reasoned.

between different options”. We have to determine who, when and how should intervene in the process of acceptance or rejection of values: philosophers, economists, politicians of different colors and countries, general public. These proceedings should be stable, or at least the criteria for their change must be stable.

I am conscious of the difficulties involved in this claim. However, although it is not an easy task, we must try to look for a *reasoned* consensus about values. It is not only or always a matter of voting. In most cases we need previous research and development of theory. Given that values are involved we have to put them over the table; if not, they will always be reasons for criticism and disconformities. As Sen (1999: 80) contends, “the implicit values have to be made more explicit.” Finally, we also need to get a technical device or some form of measurement which guarantees an accurate measure of the observable variables. Additionally, there is a lot to improve about the quality of data.

The economist must intervene in all the processes: the definition of factors and of their weights, the construction of the Index, and the solution to their problems related with the accuracy of calculus and data. This should be an interdisciplinary work of people especially prepared for this type of dialogue.

7. Conclusion

The last 50 years, standard economics has focused mainly on an instrumental rationality analysis of economic events. This kind of analysis has some advantages: it tends to be exact and leave away the controversial problem of determining values. This, however, has been a self-deceiving strategy because the exactness has been mainly formal, devoid of relevant content, and values could not be taken away, but remained hidden in the assumptions.

In this paper I first explained what is theoretical, technical and practical reason and sciences focusing especially on explaining this latter concept. Then I proposed to adopt a version of objectivity, i.e., “practical objectivity”, as a goal of practical knowledge: that is, a situated or contextual objectivity. The truth achieved through this knowledge is not lesser than the one of theoretical knowledge. It is another kind of truth: that which can be rigorously achieved about a subject matter that is not universal but happens in most cases. In a following section I related the saga of economics as a practical science. Then, I proposed the role of economists in such a conception of economics.

In the last Section, I analyzed the Human Development Index as a case study. I showed practical rationality and values as they are intertwined in the economic decisions involved in instruments such as this Index. This Section also raises the relevance of showing clearly these values and the need of establishing a process for practically reason about them.

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