

# Two conceptions of economics and maximisation

Ricardo F. Crespo<sup>\*</sup>

1.5

Economics has evolved from a ‘domain-focused’ conception, i.e. the study of specific kinds of human activities, to a ‘scarcity-based’ conception, i.e. the study of a particular approach to all human choices. It thus enlarged its domain and narrowed its perspective: instrumental maximising. This paper maintains that economics should be domain focused, with a core of scarcity-based analysis of its domain, integrated into a broader analysis. It also holds that the scarcity-based analysis of realities falling outside the economic domain is not economics, but rather a social science broader in respect to the field but narrower in respect to the analysis, and thus partial in its conclusions. Section 2 introduces these versions of economics, Section 3 links them to specific conceptions of rationality, Section 4 provides arguments for the paper’s thesis and Section 5 deals with two related versions of maximisation and argues for adopting one of them.

1.10

1.15

*Key words:* Definition of economics, Definition of maximisation, Relation with other social sciences

*JEL classifications:* A11, B00, B40

1.20

## 1. Introduction

1.25

In a recent paper, ‘On the Definition of Economics’, Roger Backhouse and Steven Medema assert that ‘economists are far from unanimous about the definition of their subject’ (2009, p. 221). Uskali Mäki maintains that ‘economics’ is a dangerously aggregated notion: ‘there is no one homogeneous “economics”’ (2002, p. 8). Sudhir Anand and Amartya Sen remark that ‘economics has never been a subject on one tradition

1.30

Manuscript received 10 June 2011; final version received 22 March 2012.

*Address for correspondence:* IAE (Universidad Austral) and CONICET, Paraguay 1114 C1057AAR, Buenos Aires, Argentina; e-mail: [rcrespo@iae.edu.ar](mailto:rcrespo@iae.edu.ar)

<sup>\*</sup> IAE (Universidad Austral) and CONICET, Argentina. The paper was presented at seminars in the IAE (Universidad Austral), Universidad del CEMA, Universidad Nacional de Cuyo, Radboud University Nijmegen and at the VII INEM Conference, Xalapa, México, 2–4 July 2009. I acknowledge comments made by Ariel Casarin, Mariana Conte Grand, Natalia Conti, Sheila Dow, Clara Foresi, Mauricio Grotz, Floris Heukelon, Daniel Heymann, Frank Hindriks, Enrique Kawamura, Juan José Llach, Gustavo Marques, Uskali Mäki, Jaime Nubiola, Pablo Schiaffino, Esther-Mirjam Sent, Jorge Streb, Toine van den Hoogen, Aloys Wijngaards, Diego Weisman, Tom Wells and Gabriel Zanotti. D. Wade Hands’s three-page report on the paper has been particularly enlightening. Some of the material was taken from a previously published article (Crespo, 2011, Sections 1–3). I am grateful for the permission to use it provided by the *Journal of Applied Economics*. The usual caveat applies. I am indebted to Juliet Kunkel, Scott Crozier and Jenny Nadaner for stylistic corrections.

1.35

1.40

1.42

only' (2000, p. 2031). In summary, the definition of economics is still an open issue. Among the numerous visions of economics, two have dominated. As Ronald Coase (1978, pp. 206–7) pointed out, there are definitions of economics that concentrate on the study of certain kinds of human activities and definitions that make economics the study of a certain perspective of all human choices and their subsequent actions. In a previous paper (Crespo, 2011), I considered these two conceptions. In the present paper (which is a continuation of the latter), I consider two versions of maximisation related to those versions of economics. Section 1 introduces these two conceptions of economics. Section 2 links them to specific conceptions of rationality. Section 3 introduces arguments for a decision about what version of economics to adopt; first, by conducting a textual analysis of the words related to economics and, second, by providing theoretical arguments for the position stemming from the previous analysis. This part of the paper is based on Ronald Coase's (1978, 1998) position. Lastly, Section 4 considers two versions of maximisation related with those versions of economics and the arguments for adopting one of them and then discarding the other. It must be clarified that the paper is ambitious in scope. Further, it can be said that it is programmatic, as it aims to present and reflect on some basic issues rather than dealing with specific problems.

## 2. Two main versions of economics

A first group of conceptions of economics maintains that some specific human realities and activities, such as wealth, money, consumption, production and distribution, are economic, and it asserts that economics must deal with these issues. A second group stresses the role of scarcity and the need of a decision concerning how to allocate scarce means among given ends; this latter decision and activity not only apply to the 'economic realities or activities' considered by the first group, but also to most human actions. Lionel Robbins ([1935] 1984, pp. 9, 16–17) calls them 'materialist' and 'scarcity' definitions of economics and characterises them as 'classificatory' and 'analytical', respectively. Robbins mentions Adam Smith, Edwin Cannan, Alfred Marshall, J. B. Clark and Vilfredo Pareto as supporters of the first type of definition. Israel Kirzner (1976, p. 17), following Lindley M. Fraser (1937), terms these definitions 'type A' and 'type B': the first definitions design a particular *department* of human affairs and the second definitions as a particular *aspect* of human actions. Henry Phelps Brown (1972, p. 7) calls these definitions 'field determined' and 'discipline determined'. Stavros Ioannides and Klaus Nielsen (2007, pp. 7–12) consider two alternative answers to the question about what economics is: first, the study of the economy itself and, second, a specific method or approach. The two different versions of economics roughly correspond to Karl Polanyi's differentiation between the substantive meaning of economics and the formal meaning of economics (1968, pp. 139–40; see also 1977, p. 19). That is, either economics addresses a particular field of human reality or it is concerned with a particular aspect of it. I decided to adopt the labels 'domain-focused' and 'scarcity-based' conceptions or views of economics.<sup>1</sup> Historically speaking, the 'domain-focused' view of economics has prevailed over the 'scarcity-based' view.

<sup>1</sup> Wade Hands and Uskali Mäki suggested that I use the word 'domain' and Wade Hands suggested the expression 'scarcity based'.

Aristotle, Smith and Marshall illustrate some examples of authors adopting the domain-focused view. According to Aristotle, ‘the economic’ (*oikonomikê*) is the use of the material resources needed not only for life—in the sense of mere subsistence—but also for the good life (*Politics*, I). It consists of human actions aimed at the satisfaction of material for human necessities, which are for him subjective and relative, but not arbitrary (*Nicomachean Ethics*, V, 5). According to Adam Smith, political economy is a branch of the science of the statesman. Its object is to afford plentiful revenue for people and states (Smith, [1776] 1981, book IV, ‘Introduction’). Additionally, Alfred Marshall asserts:

3.5

Political Economy or Economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of wellbeing. (Marshall, [1920] 1962, p. 1)

3.10

Further:

Economics is, on the one side, a Science of Wealth; and, on the other hand, the part of the Social Science of man’s action in society, which deals with his Efforts to satisfy his Wants, in so far as the efforts and wants are capable of being measured in terms of wealth, or its general representative, *i.e.*, money. (Marshall, [1920] 1962, p. 41)

3.15

In this way, although there is room for enhancement, the domain of economics is roughly depicted: it is still basically composed of human activities dealing with wealth or material resources.

3.20

The other view of economics overcomes the still imprecise nature of the domain-focused view. Robbins defines economics as ‘the science which studies human behaviour as a relationship between [given] ends and scarce means which have alternative uses’ ([1935] 1984 p. 16). In other words, it is the science of a particular view of choice, which concentrates on the decision about the allocation of means that best satisfy the agent’s given ends. In this way, Robbins sketches out a determined and objective subject. Carl Menger titles Appendix VI of his *Untersuchungen* ([1883] 1985), ‘The Starting Point and the Goal of All Human Economy Are Strictly Determined’. He affirms that ‘Economy is really nothing else than the way which we travel from the previously indicated starting point of human activity to the previously indicated goal’ (Menger, [1883] 1985, p. 217). It travels a technical way, enabling the formulation of exact laws whose ‘formal nature is no different from that of the laws of all other exact sciences and of the exact natural sciences particularly’ (Menger, [1883] 1985, pp. 218–19). This point of view is beneficial to analyse almost every human action. Gary Becker’s research project (1976) follows this thread.

3.25

3.30

3.35

### 3. Economics and the range of rationalities

3.40

We may connect these two versions of economics with specific notions of rationality. From the wide range of different classifications of rationality available, here I adopt Max Weber’s. He distinguished four types of motives guiding social actions: instrumentally rational, value rational, affectual and traditional (Weber, 1978, pp. 24–5). Instrumentally rational is the action that aims to allocate means for the attainment of the actor’s ends. Value-rational actions are determined by conscious beliefs in the intrinsic value of some behaviour. Affectual are the actions guided by the actor’s affects and feelings. Traditional actions are determined by ingrained habituation. Weber argued

3.45

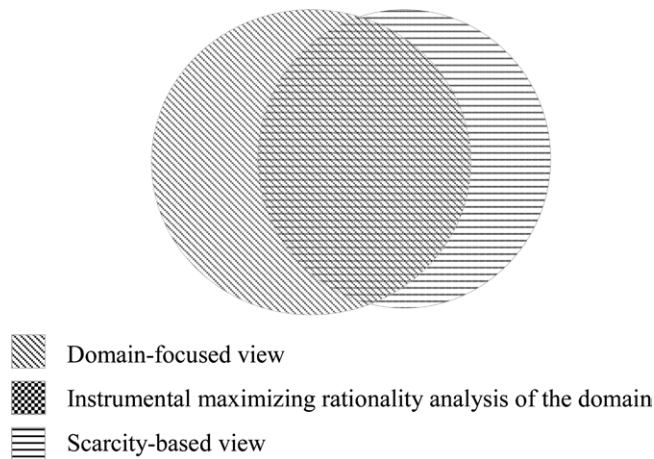
3.48

that although one specific form of rationality often prevails in each action, they are also oriented by various types of rationality. We may analyse social phenomena from different perspectives of rationality, such as instrumental or technical, moral, psychological and sociological. These three last perspectives of rationality might be included in the classical Aristotelian concept of practical rationality. Practical rationality deals with a constellation of human or social ends and with their means inasmuch as they fit with this constellation. Besides, the contribution of means to these ends is a matter of instrumental rationality (also called technical). Instrumental rationality has to do with the question ‘how’ to achieve an end and practical rationality with the question ‘why’ we look for this end. 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 maximising rationality, broadly used by standard economics. Strictly speaking, however, instrumental rationality does not necessarily include this qualification: technique should not be necessarily efficient. But, as Boudon has noted, there is a *psychological* tendency—not a logical implication—to consider instrumental rationality as a maximising rationality (Boudon, 2004, p. 47). For example, Herbert Simon’s (see, e.g., 1979) notion of bounded rationality and satisfying is an instrumental not maximising rationality (see González, 1997).

What kinds of rationality are involved in each view of economics? With regard to the domain-focused view, Marshall considers the influence of different Weberian rationalities in man’s business life: ‘[economists] deal with man as he is: not with an abstract or “economic” man; but a man of flesh and blood’ ([1920] 1962, p. 22). Phelps Brown, in his advocacy of this perspective, stresses taking into account ‘convention, mood, passion or culture’ and to consider ‘men who are in part gregarious, conventional, suggestible and inconsistent, as well as—also in part—competitive maximizers’ (1972, p. 7). As Keynes maintains, human decisions, including those concerning business, cannot be based only on strict mathematical calculation of the best alternative, since the basis for making these calculations hardly exists. For him there is an innate urge to act, based on some calculations but also on whim, sentiment or by chance (Keynes, 1936, p. 163). He also takes into account ‘motives of another kind, which are not “rational” in the sense of being concerned with the evaluation of consequences, but are decided by habit, instinct, preference, desire, will, etc.’ (Keynes, 1979, p. 294). In conclusion, the domain-focused view concentrates on a sector of human reality and activity, analysing it from different perspectives: instrumental, value rational, affectual and traditional.

The scarcity-based view is concerned with being instrumentally rational. John Davis defines this rationality in a way that resounds Robbins’ definition of economics: ‘Instrumental rationality is defined as the choice of actions that best satisfies an individual’s ends or objectives *however* those ends or objectives may happen to be characterized’ (Davis, 2003, p. 27). As also Davis asserts, ‘One reason that instrumental rationality theory has been attractive in economics is that having a single model of analysis makes possible a high degree of logical and mathematical determinacy in economic explanation’ (2004, p. 401). These two versions of economics jointly with their rationalities may be captured by Figure 1.

In Figure 1 the entire left sphere represents the domain-focused view of economics and the entire right sphere represents the scarcity-based view of economics, i.e. instrumental maximising rationality applied to the entire human reality. The domain-focused notion includes instrumental maximising rationality (the right area of the left sphere) and other types of human rationality (the left area of the left sphere) to explain the phenomena of



**Fig. 1.** *Two conceptions of economics*

5.5

5.10

5.15

the economic domain. The right sphere also has/contains two areas: the left one corresponds to the economic domain and the right to other domains of human life and action. The intersection of the spheres belongs to both views of economics: it is the instrumental maximising rationality applied to phenomena pertaining to the economic domain. In conclusion, we can see that the scarcity-based view is larger in domain, but it considers this domain under only one perspective of rationality, while smaller in its domain, the domain-focused view analyses this restricted domain from all the perspectives of rationality.

5.20

5.25

Coase describes the characteristics of the scarcity-based view of economics when he speaks about two tendencies in operation in current economics:

The first consists of an enlargement of the scope [domain] of economist's interests so far as subject matter is concerned. The second is a narrowing of professional interest to more formal, technical, commonly mathematical, analysis [instrumental maximising rationality]. This more formal analysis tends to have a greater generality [domain]. It may say less, or leave much unsaid, about the economic system, but, because of its generality, the analysis becomes applicable to all social systems ... economics becomes the study of all purposive human behavior and its scope is, therefore, coterminous with all of the social sciences. (Coase, 1978, p. 207)

5.30

Some questions arise at this stage. Given that both spheres discard a sector of the other, should economics discard its attention on the economic domain or on a precise perspective of analysis? Or are they compatible? The interesting interpretation by Tony Lawson (2003, ch. 6) considers that they are compatible. For some economists this would not be more than a semantic problem. I think, however, that the problem is more than just that. I will begin to answer these questions by regarding the meaning of the words involved in economic affairs and then I will add further theoretical arguments.

5.35

5.40

#### 4. Arguments for one version and against the other

##### 4.1 The meaning of economy, economic and economical

5.45

According to Aristotle, 'we ought to use our terms to mean the same things as most people mean by them' (*Topics*, II, 2, 110a, 16–17). Ludwig Wittgenstein has attested,

5.48

thus relating semantics and pragmatics, that ‘the meaning of a word is its use in the language’ (& 43, 1958, p. 20e). Although it is possible that ordinary language may be supplemented, improved and/or superseded by technical language, it is the *first* word, as J. L. Austin affirmed (1970, p. 185). As Josef Pieper (1998, p. 73) has postulated, although it is possible and legitimate to use in science technical terms with precise meanings, we should mistrust all conceptual determination departing from the common language of learned people. Science’s subject matter at least must conform to its ordinary meaning: it is natural that sociology deals with society, psychology with psyche and economics with the economy, meaning the things that people consider to be society, psyche and the economy. Marshall’s perception of economic terms is as follows:

Its [economics] reasonings must be expressed in language that is intelligible to the general public; it must therefore endeavour to conform itself to the familiar terms of everyday life, and so far as possible must use them as they are commonly used. (Marshall, [1920] 1962, p. 43)

Friedrich Hayek also holds that social science has to take into account the concepts and ideas of the people ([1952] 1979, pp. 27–8, 57–8, 61). Robbins, however, has asserted:

It is often urged that scientific definitions of words used both in ordinary language and in scientific analysis should not depart from the usages of everyday speech. No doubt this is a counsel of perfection, but in principle the main contention may be accepted. Great confusion is certainly created when a word which is used in one sense in business practice is used in another sense in the analysis of such practice ... But it is one thing to follow everyday usage when appropriating a term. It is another thing to contend that everyday speech is the final court of appeal when defining a science. For in this case the significant implication of the word *is* the subject-matter of the generalizations of the science. (Robbins, [1935] 1984, p. 5, n.)

This is Robbins’ argument for departing from Marshall’s definition of economics and to postulate his scarcity-based definition. One may wonder, however, whether economics, following Aristotle, Wittgenstein and Austin’s advice, should not deal with the reality signified by the words in ordinary language. Let us analyse, then, the ordinary meaning of the family of words related to economics.

We have the noun ‘economy’, the adjective ‘economic’, the adverb ‘economically’ and the science, ‘economics’. We often speak about the ‘economy’ as a system of economic interactions of a whole society, about the economy of a country, a person or a firm, or about economic realities or interactions: to buy, to sell. This meaning examines more closely the domain-focused view.

These economic interactions could be performed either economically, i.e. ‘as regards the efficient use of income and wealth’ (Webster, 1996, p. 618) or non-economically. This meaning makes reference to the scarcity-based view. Robert Scoon (1943, p. 312) differentiates between the adjectives ‘economic’ and ‘economical’ (related to ‘economically’) and sustains that Robbins conflates both reducing all the ‘economic’ to ‘economical’.

In summary, there is a sense of the words related to economics examining further the domain-focused view and another to the scarcity-based view. An economic decision or action (in the sense of the first view) might be non-economical (in the second sense).

However, the above-mentioned Webster’s definition of ‘economically’ confines the scarcity-based view of economics to the domain of ‘income and wealth’, thus restricting it to the intersection area of Figure 1. To act economically is a subset of the possible



rationalities guiding the economic domain. In everyday life there are a lot of economic actions that are not efficient. When I go grocery shopping I have no way of knowing whether I have made the most efficient purchases. I have my list of necessities and efficiency is only one of the factors affecting the purchase I have just made. In addition, we do not only adapt the means to achieve the ends but also the ends to the means. Nevertheless, nobody would deny that going shopping, regardless of efficiency, is an economic action. No one has spoken yet about aspects such as utility, value and maximisation (Scoon, 1943, p. 311).

7.5

Lastly, the ordinary understanding of economy leads to a domain-focused view of economics that includes the scarcity-based view. However, this is not only a matter of different ways of using words. In the next section I explore this further and add more arguments.

7.10

#### 4.2 Further arguments

Ronald Coase, one of the leader figures of the economic analysis of law, is considered to be an orthodox economist, who would presumably be a fierce advocate of the scarcity-based view of economics. However, he criticises this view. Given this position, the probably most representative figure of law and economics, Richard Posner (2006, p. 406), complains about his ‘paradoxical’ position. Let me repeat Coase’s appraisal of the scarcity-based view of economics:

7.15

7.20

This more formal analysis tends to have a greater generality. It may say less, or leave much unsaid, about the economic system, but, because of its generality ... economics becomes the study of all purposive human behavior and its scope is, therefore, coterminous with all of the social sciences. (Coase, 1978, p. 207)

7.25

Thus, according to Coase, we can distinguish two problems stemming from this view. The first problem is that it leads to an incomplete analysis of economic affairs: it ‘leave[s] much unsaid, about the economic system’. This is because instrumental maximising rationality is not the only rationality guiding the decisions and actions concerning the economic domain. ‘Irrational’ (from the point of view of the scarcity-based view) motives—passions, emotions, values, traditions and habits—influence those decisions and actions.

7.30

In response to this patent reality, modern-day economics is trying to insert non-strictly rational motives into its formal frame. It does so by reducing Weberian categories of behaviours—i.e. value rational, affectual and traditional—to instrumental rationality (von Mises, [1933] 1960, pp. 82–5). However, to reduce is not to consider. Furthermore, reduction cannot be done. Why? Because there are structural differences between instrumental rationality and other types of ends rationalities impeding a conflation between them (see Crespo, 2007). Ends are not homogeneous and consistent, but heterogeneous and often inconsistent, and thus resist the logic of maximisation.<sup>2</sup> This reasoning needs commensurability, because the different factors in play must be assessed in terms of a unique and common factor: utility (or value). As Nicholas Georgescu-Roegen states, ‘not all human wants can be reduced to a common basis’ (1954, p. 515).<sup>3</sup> Then, the correct strategy of a rationality of ends is not maximisation

7.35

7.40

7.45

<sup>2</sup> To act rationally, maximising jointly supposes (i) to have a well-ordered choice function and (ii) to act according to it. Both conditions might fail.

<sup>3</sup> See p. 520, where he considers the possibility of comparable alternatives neither ordinally nor cardinally measurable. On this possibility, see also Crespo (2007).

7.48

but a prudential harmonisation of ends. We can compare ends, but not commensurate them. Thus, the rationality of ends does not allow for formalisation: it is not an algorithmic process (cf., e.g., [Schmidt, 1994](#), pp. 246, 251). George Akerlof complains about this first problem raised by Coase: ‘Individualistic maximising behaviour constitutes an assumption that sharply restricts the domain of possible economic models’ (1984, p. 2). We should consider the consequences of psychological, anthropological and sociological aspects of behaviour for economic results (cf. [Akerlof, 1984](#), p. 3). Scarcity is indeed one characteristic of the economic domain, but only one. Then, the problem of the scarcity-based view is not that it considers scarcity, which is correct, but rather that it reduces the economic problem to it, which is highly unrealistic.

Margaret Schabas addresses this first problem in a recent paper. She states that one might suppose that economists study ‘the economy’, but she argues that this ‘over-arching entity is absent from mainstream theory’ ([Schabas, 2009](#), p. 3). The latter theory leaves aside institutions, power relations and properties that form the leading indicators of macroeconomics. She adds that this incompleteness is found in scientific economics but not in folk economics.<sup>4</sup>

The second problem remarked by Coase is that the scarcity-based view of economics also leads to an incomplete and confusing analysis of other social affairs. He asserts that ‘Economics becomes the study of all purposive human behavior and its scope is, therefore, coterminous with all of the social sciences.’ However, according to him, ‘the analysis developed in economics is not likely to be successfully applied in other subjects without major modifications’ ([Coase, 1978](#), p. 209), because the purposes of men in other social areas are quite different from ‘economical’ motivations. Scoon had forewarned this at the very birth of the scarcity-based view of economics when assessing Robbins’ scarcity definition:

I contend that, if you define economic in this way, it would include the political, the military, the legal, the medical, and all of the moral that is on a utilitarian basis; and thus the usefulness of the definition in enabling us to distinguish economics from other disciplines disappears. Choosing is not a specifically economic activity, and the introduction of scarcity does not alter the situation. ([Scoon, 1943](#), p. 311)

The political, military, legal, medical and the entire moral matters cannot be fully understood from an exclusive economic point of view. There exist other springs motivating these human realities, such as power, justice, courage or virtues. Then, economists should not try to export the maximising instrumental rationality to other social sciences. On the contrary, economists should try to import other forms of rationalities, ‘because it is necessary if they are to understand the working of the economic system itself’ ([Coase, 1978](#), p. 210). This is relevant for all the tasks of economics: the descriptive, explanatory and predictive. If economics has to deal with the economic domain it should consider both kinds of economic phenomena, i.e. economically (scarcity based) and non-economically performed. Economics, in its normative (which is not necessarily ethic but prescriptive) role, should probably propose to act economically: this might be the most important contribution of economics to the decision maker. This situation is paradoxical: economists are proud of its positive appearance; however, their science is mainly normative. Their logic is not real; it does not adequately describe, explain or

<sup>4</sup> Esther-Mirjam Sent also suggested in a previous presentation of this paper that academic economics tends to be scarcity based while everyday economics tends to be domain focused.



predict. The only thing they can do is to prescribe; but this might be also inadequate, because it is a prescription taking into account a partial perspective.

Thus, the so-called ‘economic rationality’ of the scarcity-based view of economics (the economically performed economic action) is, at best, only a part of the whole rationality of economic actions. The correct way of calling what is meant by ‘economic rationality’ would be ‘economically acting rationality’. A complete consideration of economic rationality includes ‘economically acting rationality’ and other rationalities that guide human action. One may wonder whether present-day economics is actually increasingly recognising all these rationalities that steer economic actions, through currents such as behavioural economics, neuro-economics, economics and sociology, economics of happiness, the capabilities approaches, complexity and hence witnessing a ‘reverse imperialism’ (Davis 2008, p. 350), or if as Jean Hampton asserts, ‘these theories are every bit as problematic as the “mother theory” they aim to surpass’ (Hampton, 1994, p. 196). If economics is to describe, explain and predict economic actions, it should take into account all these rationalities.

What is then the role of the old economic rationality, i.e. the ‘acting economically rationality’? It explains or predicts a part of the facts and may have a prescriptive task: the task of indicating the most effective way of doing things. As Robert Sugden (1991, pp. 752, 757) contends, rational-choice theory is a normative theory—in the sense of prescriptive.<sup>5</sup> However, this role has a caveat: to be conscious that this precept is only an economical advice, thus partial, which then should often be supplemented by others.

## 5. Two versions of maximisation

Let me tell you a personal story, supposedly favouring the domain-focused version of economics. Some days ago I was with a friend and colleague of mine from the economics department carpooling to the university, in order to save money—as the serious economists we are. Our conversation on the road was about the economic rationality of our recent purchases of cars. However, we finally confessed that the purchase had not been fully rational because we have a lot of little whims with regard to our cars. Many reasons or ‘loves’ other than acting economically intervene when buying cars. In addition to the tendency towards efficiency, we have inherited biological springs, psychological propensities, social pressures and a life history with all its influences and routines. The immediate reaction of economists will be to argue that these loves are part of the preferences and that we are actually maximising these strange preferences. That is, the economist will reason like von Mises, reducing all the reasons included in practical reason to instrumental maximising rationality. If this proceeding were correct, this would be a perfect answer to the contention against the scarcity-based version of economics: all the reasons would be included in instrumental rationality and this would be a simple and efficacious way of analysing the whole human field. The domain of economics would be identical to the whole human reality and the perspective of analysis would be the scarcity-based economics perspective. Then, if I want to maintain Coase’s position against the scarcity-based view of economics, I would have to solve the riddle involved in this argument.

<sup>5</sup> See also Robert Strotz (1953, p. 393), who affirms that ‘the Neumann–von Morgenstern axioms may properly be regarded as precepts of rational choice’ (see also p. 391; Shoemaker, 1982, pp. 537–8).

Where is the apparent mistake or the wrong step in the economist's reasoning? I hold that the confusion stems from equating two different notions of maximisation: maximisation as a metaphysical principle and maximisation as an empirical principle. Indeed, as Bruce Caldwell (1983, p. 827) points out, there is a fluctuation in economists' conceptions of maximisation. A legitimate notion of maximisation as a metaphysical principle—universally applicable to every human action—illegitimately and quite unconsciously transfers its universality to an also legitimate notion of maximisation as an empirical principle (thus falsifiable). (I am adopting a Popperian terminology; metaphysical principles are not falsifiable while empirical are.) Let me clarify these two versions of maximisation.

The first version, i.e. maximisation as a metaphysical principle, identifies maximising with rationality and rationality with acting intentionally. For example, von Mises ([1949] 1998, pp. 39, 241 ff.) sees maximisation and the concept of rationality as a general principle, the universal principle of all purposive action. Becker affirms that his 'analysis assumes that individuals maximise welfare *as they conceive it*, whether they be selfish, altruistic, loyal, spiteful, or masochistic' (1993, p. 386; original emphasis). If to maximise means to be rational and to be rational means to have an end, it is clear that all human actions are intentional, rational and maximising. If we accept this meaning of maximisation, the principle is completely legitimate. This version of this principle is the one discussed in the controversy between Boland (1981, 1983) and Caldwell (1983).

The second version is maximisation as an empirical principle. This is present, for example, in von Neumann and Morgenstern (1944, as explained by Strotz, 1953, pp. 390, 393, 397), in Savage ([1954] 1972, p. 97) and in Friedman and Savage (1948, p. 298; 1952, pp. 463, 473). Although Savage ([1954] 1972, pp. 20, 97) had interpreted maximisation, as Sugden (1991, p. 757) posits, empirically and normatively, his papers with Friedman slide towards the empirical interpretation, an explanation of real facts, admittedly imperfect, but useful as a heuristic device. To be an empirical principle means that not every human action is necessarily a maximising action and that there are criteria to establish if they are or not in each case. For example, a firm may or may not maximise benefits just as an individual may or may not maximise income.

Harvey Leibenstein (1982, p. 461), while defending this empirical version of maximisation, calls the metaphysical principle 'tautological' because it does not make room for falsification.<sup>6</sup> Leibenstein adds that this latter theory of maximisation is mathematics, not economics, and that the postulate of universal maximising behaviour by economic agents should be replaced by the idea of relative response to the size of the motivation (1982, p. 464). I think that the following quotation clarifies his position:

The problem may be partially semantic. A lot depends on how we interpret the word utility. One can interpret utility in such a way so that all behavior is subsumed under some version of utility maximization. But this would rob the concepts of utility and maximization of real meaning. If we are presumed to do something which has some degree of specificity, then there must be something else for which it can be said we are not feeling the criteria of the first type of action. In other words, the idea of utility maximization must contain the possibility of choice under which utility is not maximized. (Leibenstein, 1976, p. 8; see also 1981, 1982)

<sup>6</sup> To say that it is 'tautological' may be 'too much': first, because it is a valid anthropological principle and, second, because it may be useful also as a heuristic principle.

- This position—maximisation as an empirical principle—leaves the space open for economic actions that are not efficient. We can use maximisation as an empirical principle, taking into account that almost always it will not explain adequately the analysed situation. Only in the cases of strict economic rationality will behaviours apply. In this sense, the use of the maximising principle as an empirical principle is as a Galilean idealisation (which focuses on one cause of an event provisionally by placing the others into brackets), a valid scientific method (see [McMullin, 1985](#)). The concern should be that the other causes—rationalities—enter the scene when transitioning from abstract science to actual facts (a process of ‘concretisation’). 11.5
- Regardless of the aforementioned, both different notions, i.e. maximisation as metaphysical and as an empirical principle, might coexist. Still, they must be characterised in some way, because if not they might be wrongly equated. The problem is that in the first version—the metaphysical—maximising is equivalent to rationality, whereas in orthodox economics rationality is equivalent to constrained optimisation (maximisation or minimisation)—the empirical (see [Drakopoulos, 1991](#), p. 164). Then, economists need to strive to free themselves from committing a fallacy of ambiguity:<sup>7</sup> to attribute to one version of maximising the characteristics of the other. 11.10
- This possible confusion of terms has its explanation. After Hume, practical rationality has been reduced to instrumental rationality (see [Zafirovski, 2003](#); [Boudon, 2004](#), p. 57) and, as mentioned, there is a *psychological* tendency to consider instrumental rationality as maximisation ([Boudon, 2004](#), p. 47). Then, the whole logic of human action tends to gravitate towards a specific form of rationality, i.e. instrumental maximising rationality and to think that this is metaphysical and infallible. As [Hollis and Sugden \(1993, p. 5\)](#) assert, after Hume ‘every problem of rational choice becomes an exercise in maximisation’. Maximisation, however, does not exhaust the possibilities of all human actions or the economic actions. 11.15
- Additionally, there is another reason that induces economists to use the maximising metaphysical principle as if it were empirical. Once the decision is made on certain ends, it is possible to express it in terms of maximisation. We can account for the decision, calculating a ratio of substitution of the ends concerned. David Wiggins notes this, but he also warns that this claim is nearly vacuous because ‘it does not represent a falsifiable claim about the agent’s springs of action’ (2002, p. 371). Why is it unfalsifiable? Because this notion of maximisation is so wide that it is the same as saying that all actions have a reason, which is nearly a truism. This is different than what ordinary language means by to ‘maximise’ (cf. [Wiggins, 2002](#), p. 372). Wiggins relentlessly points out that, for him, utility theory is not a sketch but a caricature of human decisions and actions (cf. 2002, p. 390). Nevertheless, if we accept a change of vocabulary, and use maximisation as ‘having a reason for’, all we would have is a theory a posteriori, but not a guide for action concerning ends. A person can have a set of preferences and fail to maximise her resources in order to attain these preferences. However, when we contemplate the situation from outside of her, we can interpret that she had a different set of preferences that he had maximised. If we ask her, she will tell us that we are wrong. Let her, not the economists, decide about her preferences. Henry Richardson explains the problem in this way: 11.20
- 11.25
- 11.30
- 11.35
- 11.40
- 11.45

<sup>7</sup> On the fallacy of ambiguity, see [Copi and Cohen \(1998, ch. 6.4; 191 ff.\)](#).

[P]reference-based is not a form of commensurability useful in making choices but rather a way of representing choices once made. Saving the action-guiding role of the formalistic model by supposing some finally complete articulation of reasons, of dimensions of value or goodness, and of discriminations therein, is like telling Seurat that in order to place all the figures in his masterly afternoon scene of the Grande Jatte, all he has to do is first determine where to put all the points of paint on the canvas. The solution may be logically coherent, but it is totally impracticable, and puts the cart before the horse. If our practical knowledge were perfect, we would already know what to do. (Richardson, 1997, p. 102)

This is the reason why in the frame of expected-utility theory, Shoemaker (1982, pp. 539–40, 554) qualifies the maximising metaphysical principle as *postdictive* in order to stress its former post character. He adds that as an empirical principle it fails (Shoemaker, 1982, p. 552). Economics, expressing all human actions as maximisations, becomes an irrelevant theory ('trivial', says Shoemaker, 1982, p. 540), useless for making real decisions, as also John Rawls (1971, p. 558) asserts. That is, a posteriori, we can describe any situation as a maximising metaphysical situation. However, this description may be deceitful because it might not correspond to the actual preferences of the agent. As Wiggins also states, 'it does not give any empirical content to the idea of maximizing anything' (2002, p. 371). The maximisation metaphysical principle does not provide the way to uncover the deceit, because it does not admit falsification: it pretends to be infallible. It is as the story told by Daniel Bell (referred by Leibenstein) reads: a general visiting Russia was impressed by the marksmanship displayed on various walls. In every instance there was a bullet hole through the centre of the bullseye. When the general met the marksman and asked how he came to have such a good aim, he answered: 'Oh, Excellency, it's not so hard. First I shoot, and then I paint the bull's-eye' (Leibenstein, 1982, p. 460). In short, maximisation as a metaphysical principle may work as an *ex post* description, but we do not know if it is an accurate explanation; hence, in a best-case scenario, it would only be an *ex post* explanation. As Hollis and Sugden assert, 'A person whose decisions are consistent in Savage's sense acts as if making complicated utilitarian calculations, using measures of utility and probability to work out the expected utility of each of the acts amongst which he has to choose. But these utility and probability measures do not explain or justify choices' (1993, p. 7).

In summary, I think that I have explained the reasons why the argument for the scarcity-based view of economics that human beings always maximise is invalid. Maximising is an empirical principle that only sometimes applies as a good explanation for a specific conduct. To equate maximisation to rationality and intentionality might be a philosophical but not an economic principle, and it goes against the common usage of the language.

## 6. Conclusion

As a result of the double movement of enlarging the domain and narrowing the perspective, economics has been transformed into a science addressing something different than what is usually understood by people as the economy. Nonetheless, this argument does not suffice in order to revise its new scientific status. Coase and Akerlof do not consider the logic of maximisation to be enough to understand and to arrive at plausible predictions about the economic system. Its complexity requires a more sophisticated approach. We should be mindful of other logics in order to have a more complete vision and to predict more accurately.

- This does not discard the fact that economics should use the maximising logic. Moreover, economics does a great service by underlining the best way of attaining ends given the means. Nevertheless, one may wonder whether or not the rationality of economically acting is always desirable for humankind?<sup>8</sup> Human beings do not always want to act efficiently. The growing research on happiness has shown that efficiency does not always lead to it. As such, economic rationality in its normative role should probably also go beyond the scope of instrumental maximising rationality by incorporating other reasons. 13.5
- What is the role of the sector of the scarcity-based view of economics concerning the non-economic domain? I posit that this is not economics, but ‘instrumental maximising analysis of non-economic choice’, a part of a theory of human decision. It is at another level: the level of the analysis of social reality, though addressing it in a specific way. 13.10
- Given that other social sciences deal with the remaining spheres, Coase’s suggestion entails that economics should concentrate on a specific sphere of human affairs. It should analyse the economic system taking into account all the factors that determine how it works. He states: ‘I think economists do have a subject matter: the study of the working of the economic system in which we can earn and spend our incomes’ (Coase, 1998, p. 73). 13.15
- The extension of economics, therefore, should neither advance as an economic analysis of other social realities nor as a reduction of all social rationalities to instrumental maximising rationality. The better path to take involves adding other rationalities learned from other social sciences, to analyse the economic field. As Bruno Frey and Matthias Benz (2004, p. 68) maintain, the time has arrived for a change of direction: we should put the emphasis on *importing* insights from other social sciences rather than *exporting* economics logic to them. The limitation of this path is the difficulty incurred in managing it by formal proceedings. Hence, economics must become less technical and more prudential. However, this does not mean that it should neglect technique, but rather that it should increase the attention to social, psychological and ethical aspects. We must reinsert economics into the scope of the social sciences (Ioannides and Nielsen, 2007, p. 2). 13.20 13.25
- Finally, the paper argues against a possible argument for the scarcity-based view of economics: that we always maximise our preferences. It has shown that this argument is fallacious given that it is based on confusion between two different versions of the principle of maximisation: the ‘metaphysical’ and the ‘empirical’. The former is vacuous. Therefore, we have to adopt the second version, which leaves room for the very frequent possibility of acting without maximising. Consequently, it leaves room for non-maximising behaviours in the economic domain and, even more frequently, in other social domains. 13.30 13.35
- In conclusion, economics, being domain focused, possesses a core of scarcity-based analysis of its domain, integrated into a broader analysis. Similarly, the economical analysis (instrumental maximising) of realities falling outside of this domain is not part of economics, but rather of a social science that is broader in respect to the field but narrower in respect to the analysis, and thus partial in its conclusions. 13.40 13.45
- <sup>8</sup> For an analysis of the consequences of a scarcity-based political economy, see Llach and Crespo (2006). 13.48



## Bibliography

- Akerlof, G. A. 1984. *An Economic Theorist's Book of Tales*, Cambridge, UK, Cambridge University Press
- Anand, S. and Sen, A. 2000. Human development and economic sustainability, *World Development*, vol. 28, no. 12, 2029–49
- 14.5 Aristotle. *Nicomachean Ethics*, translated by W. D. Ross, Oxford, Oxford University Press
- Aristotle. *Politics*, edited and translated by E. Barker, Oxford, Oxford University Press
- Aristotle. *Topics*, translated by W. A. Pickard-Cambridge, Oxford, Oxford University Press
- Austin, J. L. 1970. *Philosophical Papers*, 2nd edn, edited by J. O. Urmson and G. J. Warnock, Oxford, Oxford University Press
- 14.10 Backhouse, R. E. and Medema, S. G. 2009. Retrospectives: on the definition of economics, *Journal of Economic Perspectives*, vol. 23, no. 1, 221–33
- Becker, G. 1976. *The Economic Approach to Human Behavior*, Chicago, Chicago University Press
- Becker, G. 1993. Nobel Lecture: the economic way of looking at behavior, *Journal of Political Economy*, vol. 101, no. 3, 385–409
- Boland, L. 1981. On the futility of criticizing the neoclassical maximization hypothesis, *American Economic Review*, vol. 71, no. 5, 1031–6
- 14.15 Boland, L. 1983. The neoclassical maximization hypothesis: reply, *American Economic Review*, vol. 73, no. 4, 828–30
- Boudon, R. 2004. Théorie du choix rationnel, théorie de la rationalité limitée ou individualisme méthodologique: que choisir? *Journal des Economistes et des Etudes Humaines*, vol. 14, no. 1, 45–62
- Caldwell, B. J. 1983. The neoclassical maximization hypothesis: comment, *American Economic Review*, vol. 73, no. 4, 824–7
- 14.20 Coase, R. H. 1978. Economics and contiguous disciplines, *Journal of Legal Studies*, vol. 7, no. 2, 201–11
- Coase, R. H. 1998. The new institutional economics, *American Economic Review*, vol. 88, no. 2, 72–4
- Copi, I. M. and Cohen, C. 1998. *Introduction to Logic*, New Jersey, Prentice Hall
- 14.25 Crespo, R. F. 2007. Practical comparability and ends in economics, *Journal of Economic Methodology*, vol. 14, no. 3, 371–93
- Crespo, R. F. 2011. Two conceptions of economics, *Journal of Applied Economics*, vol. 14, no. 2, 181–97
- Davis, J. B. 2003. *The Theory of Individual in Economics*, London, Routledge
- Davis, J. B. 2004. Collective intentionality, complex economic behavior, and valuation, pp. 386–402 in Davis, J. B., Marciano, A. and Runde, J. (eds), *The Elgar Companion to Economics and Philosophy*, Cheltenham, Elgar
- 14.30 Davis, J. B. 2008. The turn in recent economics and the return of orthodoxy, *Cambridge Journal of Economics*, vol. 32
- Drakopoulos, S. A. 1991. *Values and Economic Theory: The Case of Hedonism*, Aldershot, Avebury
- Fraser, L. M. 1937. *Economic Thought and Language*, London, A & C Black
- 14.35 Frey, B. and Benz, M. 2004. From imperialism to inspiration: a survey of economics and psychology, pp. 61–83 in Davis, J. B., Marciano, A. and Runde, J. (eds), *The Elgar Companion to Economics and Philosophy*, Cheltenham, Elgar
- Friedman, M. and Savage, L. J. 1948. The utility analysis of choices involving risk, *Journal of Political Economy*, vol. 56, no. 4, 279–304
- Friedman, M. and Savage, L. J. 1952. The expected-utility hypothesis and the measurability of utility, *Journal of Political Economy*, vol. 60, no. 6, 463–74
- 14.40 Georgescu-Roegen, N. 1954. Choice, expectations and measurability, *Quarterly Journal of Economics*, vol. 68, no. 4, 503–34
- González, W. J. 1997. Rationality in economics and scientific predictions: a critical reconstruction of bounded rationality and its role in economic predictions, pp. 205–32 in Ibarra, A. and Mormann, T. (eds), *Representations of Scientific Reasoning*, special issue of *Poznam Studies in the Philosophy of the Sciences and Humanities*, vol. 61, Amsterdam, Rodopi
- 14.45 Hampton, J. 1994. The failure of expected-utility theory as a theory of reason, *Economics and Philosophy*, vol. 10, 195–242
- Hayek, F. A. [1952] 1979. *The Counter-revolution of Science*, Indianapolis, Liberty Fund
- 14.48



- Hollis, M. and Sugden, R. 1993. Rationality in action, *Mind* (New Series), vol. 102, no. 405, 1–35
- Ioannides, S. and Nielsen, K. 2007. Economics and the social sciences: synergies and trade-offs, pp. 1–27 in Ioannides, S. and Nielsen, K. (eds), *Economics and the Social Sciences: Boundaries, Interaction and Integration*, Cheltenham, Elgar
- Keynes, J. M. 1936. *The General Theory of Employment, Interest and Money*, London, Macmillan 15.5
- Keynes, J. M. 1979. *The General Theory and After: A Supplement—The Collected Writings of John Maynard Keynes*, vol. XXIX, London, Macmillan
- Kirzner, I. M. 1976. *The Economic Point of View*, Kansas, Sheed and Ward
- Lawson, T. 2003. *Reorienting Economics*, London, Routledge
- Leibenstein, H. 1976. *Beyond Economic Man*, Cambridge, MA, Harvard University Press
- Leibenstein, H. 1981. Microeconomics and x-efficiency theory: if there is no crisis, there ought to be, pp. 97–110 in Bell, D. and Kristol, I. (eds), *The Crisis in the Economic Theory*, New York, Basic Books 15.10
- Leibenstein, H. 1982. On bull's-eye: painting economics, *Journal of Post-Keynesian Economics*, vol. 4, no. 3, 460–5
- Llach, J. J. and Crespo, R. 2006. Conceptions of human beings implicit in economics and in the practice of economic policy, pp. 447–97 in Malinvaud, E. and Glendon, M. A. (eds), *Conceptualization of the Person in Social Sciences*, Vatican City, Pontifical Academy of Sciences
- Mäki, U. 2002. The dismal queen of the social sciences, pp. 3–32 in U. Mäki (ed.), *Fact and Fiction in Economics: Models, Realism and Social Construction*, Cambridge, UK, Cambridge University Press 15.15
- Marshall, A. [1920] 1962. *Principles of Economics*, London, Macmillan
- McMullin, E. 1985. Galilean idealization, *Studies in History and Philosophy of Science*, vol. 16, no. 3, 247–73 15.20
- Menger, C. [1883] 1985. *Investigations into the Method of the Social Sciences with Special Reference to Economics*, New York, New York University Press [*Untersuchungen über die Methode der Sozialwissenschaften und der Politischen Oekonomie insbesondere*, Leipzig, Ducker & Humblot]
- Mises, L. von [1933] 1960. *Epistemological Problems of Economics*, Princeton, D. van Nostrand [Grundprobleme der Nationalökonomie, Jena, Gustav Fisher] 15.25
- Mises, L. von [1949] 1998. *Human Action: A Treatise on Economics*, scholar's edn, Auburn, Ludwig von Mises Institute
- Phelps Brown, E. H. 1972. The underdevelopment of economics, *Economic Journal*, vol. 82, no. 325, 1–10
- Pieper, J. 1998. El filosofar y el lenguaje, *Anuario Filosófico*, vol. 21, no. 1, 73–84
- Polanyi, K. 1968. *Primitive, Archaic, and Modern Economies, Essays of Karl Polanyi*, edited by G. Dalton, Boston, Beacon Press 15.30
- Polanyi, K. 1977. *The Livelihood of Man*, edited by H. W. Pearson, New York, Academic Press
- Posner, R. 2006. A review of Steven Shavell's *Foundations of Economic Analysis of Law*, *Journal of Economic Literature*, vol. 44, no. 2, 405–14
- Rawls, J. 1971. *A Theory of Justice*, Cambridge, MA, Belknap Press, Harvard University Press
- Richardson, H. 1997. *Practical Reasoning about Final Ends*, Cambridge, UK, Cambridge University Press 15.35
- Robbins, L. [1935] 1984. *An Essay on the Nature and Significance of Economic Science*, 3rd edn, London, Macmillan
- Savage, L. J. [1954] 1972. *The Foundation of Statistics*, New York, Dover
- Schabas, M. 2009. Constructing 'the economy', *Philosophy of the Social Sciences*, vol. 39, no. 1, 3–19 15.40
- Schmidtz, D. 1994. Choosing ends, *Ethics*, vol. 104, no. 2, 226–51
- Scoon, R. 1943. Professor Robbins' definition of economics, *Journal of Political Economy*, vol. 51, no. 4, 310–20
- Shoemaker, P. J. H. 1982. The expected utility model: its variants, purposes and limitations, *Journal of Economic Literature*, vol. 20, no. 2, 529–63
- Simon, H. A. 1979. Rational decision making in business organizations, *American Economic Review*, vol. 69, no. 4, 493–513 15.45
- Smith, A. [1776] 1981. *An Inquiry into the Nature and Causes of the Wealth of Nations*, Indianapolis, Liberty Fund 15.48

- Strotz, R. H. 1953. Cardinal utility, *American Economic Review*, vol. 43, no. 2, 384–97
- Sugden, R. 1991. Rational choice: a survey of contributions from economics and philosophy, *Economic Journal*, vol. 101, no. 407, 751–85
- Von Neumann, J. and Morgenstern, O. 1944. *Theory of Games and Economic Behavior*, Princeton, Princeton University Press
- 16.5 Weber, M. 1978. *Economy and Society*, edited by G. Roth and C. Wittich, Berkeley, University of California Press
- Webster's Encyclopedic Unabridged Dictionary of the English Language. 1996. New York, Gramercy Books
- Wiggins, D. 2002. *Needs, Values, Truth*, 3rd edn, amended, Oxford, Oxford University Press
- 16.10 Wittgenstein, L. 1958. *Philosophical Investigations*, 2nd edn, translated by E. Anscombe, Oxford, Blackwell
- Zafirovski, M. 2003. Human rational behavior and economic rationality, *Electronic Journal of Sociology*, [http://www.sociology.org/content/vol7.2/02\\_zafirovski.html](http://www.sociology.org/content/vol7.2/02_zafirovski.html) [date last accessed: 29 November 2010]

16.15

16.20

16.25

16.30

16.35

16.40

16.45

16.48