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The methodology of the Austrian school of economics: The present state of knowledge

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Abstract

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This paper is an attempt to systematize the methodological insights and contributions of the Austrian School of Economics and present them in their most up-to-date elaboration, thereby building on the earlier literature on the subject. It aims to improve on the publications listed above in two aspects. First, it takes into account the most recent conceptual developments that address some of the common misunderstandings of the Austrian methodological position, as well as some of its more insightful contemporary criticisms. Second, it organizes the presentation of the relevant material around several clearly specified methodological dimensions, while, in contrast to most of the abovementioned literature, keeping the description of the historical background behind the development of the Austrian method to an absolute minimum, as well as leaving out the non-methodological differences between the ASE and its intellectual rivals, thus aiming to make the presentation in question maximally focused and thematically unified.

This paper is an attempt to systematize the methodological insights and contributions of the Austrian School of Economics (hereafter ASE) and present them in their most up-to-date elaboration, thereby building on the earlier literature on the subject (White 1988; Selgin 1990; Huerta de Soto 1998; Hoppe 2007a). It aims to improve on the publications listed above in two aspects. First, it takes into account the most recent conceptual developments that address some of the common misunderstandings of the Austrian methodological position, as well as some of its more insightful contemporary criticisms. Second, it organizes the presentation of the relevant material around several clearly specified methodological dimensions, while, in contrast to most of the abovementioned literature, keeping the description of the historical background behind the development of the Austrian

method to an absolute minimum, as well as leaving out the non-methodological differences between the ASE and its intellectual rivals, thus aiming to make the presentation in question maximally focused and thematically unified.

What most notably distinguishes the ASE from what might be considered as the currently dominant neoclassical mainstream is partly a difference of emphasis with regard to specific economic problems that these intellectual traditions concern themselves with, but this difference should in turn be treated as derivative of the more fundamental methodological divergences between the two. To put it very briefly, whereas the neoclassical paradigm is model-based, empiricist and heavily reliant on mathematics (for a representative sample of relatively recent publications that describe its characteristic features, see, e.g., Blaug 1992; Clower 1994; Sims 1996; Hands 2001; Frey 2001), the ASE utilizes the causal-realist approach, aprioristic deduction (though clearly specifying the proper, extra-theoretical role of empirical data) and verbal logic. I shall elaborate on each of these competing methodological elements in turn.

Let me start from the divide between apriorism and empiricism. It might be worthwhile to begin by pointing out in this context that until the late 19th century it was the approach of the ASE (not called that way until that time) that was considered the reigning orthodoxy in economic theorizing, and until roughly the 1930s it was one of the main contenders for that title. Needless to say, the adjective “Austrian” in the name of the set of methods described in this paper indicates that it was the scholars from late 19th century and early 20th century Austria who were the most prominent and consistent opponents of the budding economic empiricism of that time in the form of the so-called German Historical School and, later, the neoclassical tradition. Carl Menger, the undisputed founder of the ASE, followed squarely in the footsteps of his methodological predecessors, the classical economists, such as Jean Baptiste Say (2001), Nassau Senior (1965), and John E. Cairnes (1965), all of whom considered economics to be an *a priori* science, whose principles have to be deduced from the axioms that comprise the logical structure of human action, available to us directly via introspection. As Nassau Senior puts it:

(Economic) premises consist of a few general propositions, the result of observations, or consciousness, and scarcely requiring proof, or even formal statement, which almost every man, as soon as he hears them, admits as familiar to his thoughts, or at least as included in his previous knowledge; and his inferences are nearly as general, and, if he has reasoned correctly, as certain as his premises. (Senior 1965: 2–3)

In other words, due to their axiomatic status, i.e., the fact that their denial generates a logical contradiction,¹ the abovementioned “general propositions” can be used as the starting point for a process of deduction whose outcomes are as

¹ For instance, denying that human action is purposeful behavior that utilizes scarce means to achieve given ends is itself an instance of purposeful behavior that utilizes scarce means (one’s time, one’s intellectual faculties, etc.) to achieve a given end (the refutation of the axiom of action).

incontestably true as the underlying premises, provided no logical error is made along the way.

The above points are part of the more comprehensive view known as methodological dualism (Mises 1966: 18), according to which a philosophical reflection on what are the appropriate tools for the study of specific areas of knowledge reveals that natural sciences, such as physics, should utilize very different tools than social sciences, such as economics. This is because their development consists in the employment of different cognitive faculties. The natural sciences utilize perception — since we possess no knowledge regarding the ultimate causes governing the operations of the external world, but seem to detect isolable regularities in them, the only promising way to advance their understanding appears to consist in formulating experimentally testable hypotheses aimed at explaining and predicting the facts of the external world by means of pinpointing the aforesaid regularities. In other words, scientific hypotheses are not meaningful in terms of being grounded in the ultimate principles of physical reality, since we are ignorant as to the nature of such supposed principles; instead, they are “operationally meaningful,” that is, useful in conducting experiments capable of explaining and predicting the facts that the abovementioned reality is composed of.

On the other hand, the social science of human action, that is, economics, should utilize introspection, since it is the only tool that allows us to reflect on the logical structure of purposive behavior, motivated by the pursuit of specific aims and realized by the selection of scarce means. As mentioned in one of the previous paragraphs, such a reflection should proceed by way of logical deduction, which, if based on correctly identified premises, will yield equally correct and causally (rather than operationally) meaningful conclusions. In other words, in the realm of economics the ultimate foundation of the relevant knowledge is available to the researcher from the start and allows for its subsequent ratiocinative development, while in the realm of natural sciences it is (possibly) forever hidden from him, but can be asymptotically approached through the discovery of isolable regularities that hint at its overall structure. As Cairnes puts it:

The economist may thus be considered at the outset of his researches as already in possession of those ultimate principles governing the phenomena which form the subject of his study; the discovery of which in the case of physical investigation constitutes for the inquirer his most arduous task. (Cairnes 1965: 89–90)

Thus, according to the deductivist framework, based on the principles of methodological dualism, universal economic laws exist, but they are discoverable through means other than those that serve to discover the universal laws of physics, chemistry or biology.

In distinct contrast, the predominantly or exclusively empirically oriented schools of economic thought contend either that there are no universally applicable truths regarding the structure of human action (as the German Historical School did), or that they do exist, but have to be discovered through the same means

as those utilized by the natural sciences, particularly physics (as the present-day orthodox neoclassicism contends).

The Austrian opposition (Menger 1985) to the German Historical School (exemplified by, e.g., Knies 1853; Schmoller 1900; and Sombart 1937) stemmed from the fact that the research method employed by the latter — i.e., statistical analysis of historical case studies, which was supposed to inform the researcher as to what institutional designs best serve the advancement of economic prosperity — was practiced under the assumption that there are no universally valid logical constraints on the results of such context-specific investigations. In other words, the proponents of the German Historical School suggested that with sufficient political wisdom and public willingness, there are no unbreakable rules and no inflexible features of reality that a design of a successful economic system must respect; in Ludwig von Mises' words: "what was needed in order to construct the ideal society, they thought, were good princes and virtuous citizens" (Mises 1966: 2). To the extent that such contentions were advanced by their intellectual opponents, the Austrians regarded the underlying historical analyses as potentially useful in generating sociological, psychological or anthropological knowledge, but irrelevant to the understanding of specifically economic phenomena.

On the other hand, against the methodology of the neoclassical tradition, epitomized by the views of authors such as Hutchison, Samuelson and Friedman (Hutchison 1938; Samuelson 1947; Friedman 1953), the Austrians advance the following three main objections: first, insofar as the economic laws "hypothesized" by the neoclassicists are logically unassailable (i.e., correctly deduced from propositions whose denial would generate a logical contradiction), all attempts to "prove" them empirically are based on a category mistake, similar to that committed by a geometrician wishing to measure various triangular objects in order to prove the validity of the Pythagorean theorem or a logician trying to make sure that the surrounding reality of empirical sense data contains no occurrences that run counter to the law of non-contradiction. Surely enough, the external reality would confirm both of their "predictions" and offer them the expected "corroborations," but realizing in advance that the nature of their research makes no such predictions necessary and no such corroborations needed might not only save them precious time, but also prevent them from straying from the intellectual direction whose exploration would be fully justified and desirable in view of the previously reached deductive conclusions. Moreover, following such an approach may also dissuade any would-be "social engineers" from checking experimentally whether implementing any given "social plan" that appears disastrously unworkable from the purely logical point of view would turn out to be so in actual practice.

Second, since in the realm of economics, unlike in the realm of natural sciences, there are no empirical constants and therefore no law-like regularities, but there is certainty with regard to the ultimate causes of the observed phenomena (these causes being human will and valuation), the Austrians contend that economic expla-

nations should consist not in predicting the occurrence of specific states of affairs (though they certainly do not claim that such predictions are impossible to make), but in making “the world around us intelligible in terms of human action and the pursuit of plans” (Lachmann 1977: 261–2). In other words, since in the realm of human action there are no isolable regularities to be discovered, the observed economic facts do not, as it were, speak for themselves — as any given set of data is more than likely to be compatible with a number of mutually exclusive hypotheses, one needs a logically consistent theory to separate the wheat from the chaff and single out that story which makes most sense. Without such a theory, the researcher will find himself at an interpretive loss, unable to answer questions such as, for instance, whether the U.S. got out of the Great Depression as a result of the New Deal policies or in spite of them, or whether the practice of central banking mollified or exacerbated (or perhaps even caused) the business cycles that occurred in the 20th century.

Hence, contrary to Friedman’s claim that “if you and I are both [apriorists], and we disagree about whether some proposition or statement is correct [...], in the end we have no way to resolve it except by fighting, by saying you’re wrong and I’m right” (Ebenstein 2001: 273), it is, in fact, “apriorism that resolves the intractable debates among empiricists, and not vice versa” (Long 2006: 20). In sum, to quote von Mises, “disagreements concerning the probative power of experience can be resolved only by reverting to the doctrines of the universally valid theory, which is independent of all experience” (Mises 2003: 30).

Third, since there are no constants in human action and no possibility to isolate experimentally its putative more fundamental constituents, and thus, a fortiori, there is no body of empirically (rather than deductively) discoverable economic laws with which new hypotheses should aim to cohere, the Austrians contend that the neoclassicist can always dismiss the relevance of the facts that appear to falsify his preferred hypothesis, thereby escaping into the safe haven of epistemological nihilism. After all, he might always claim that his hypothesis would work if only in any given case more (or less) variables were taken into account, if only certain processes operated with greater (or lesser) intensity, if only the relevant *ceteris paribus* clauses were specified more accurately, etc. For instance, he could suggest that the Soviet Union did not collapse due to the non-existence of private property in the factors of production within its boundaries and the consequent inability of the Soviet planners to perform cost-benefit calculations on the basis of genuine market prices, but due to a specific psychological defect on the part of the Russians, which prevented them from applying themselves to the establishment of a thriving socialist commonwealth with sufficient diligence. However, if only, say, Americans were to take up the same task, then an economic system characterized by allocative efficiency superior to that of free market capitalism would surely be put in place. Hence, it should not be thought of as undesirable to encourage the outbreak of a socialist revolution in the U.S., thus setting in motion another, this time more well-designed social experiment.

As seen on the basis of the above example, what the Austrians regard as the unavoidable nihilism of the neoclassical epistemology can serve as an inexhaustible source of intellectual excuses. On the other hand, any theory that has to meet the requirement of logical and deductive consistency does not run the risk of being infinitely malleable (and thus explanatorily vacuous).

Finally, it is worthwhile in this context to describe the role that the ASE attributes to empirical data. First, as was already mentioned earlier, even though it would amount to a category mistake to try to use such data to prove economic theorems, it is certainly possible to use them to illustrate the theorems in question. Such illustrations might be particularly convincing to those who lack the ratiocinative skills necessary to follow the logical steps leading to the conclusions that constitute the body of economic theory. Absent such skills, familiarizing oneself with the relevant facts is likely the only way in which such a person can be led to acknowledge the truth of certain scientific statements, although then she still faces the problem of evidential underdetermination, irresolvable without a solid deductive foundation to fall back on.

Second, even though the adherents of the ASE consider economics to be a branch of applied logic, which starts from the axiom of action (“human beings utilize scarce means in order to attain specific ends”) and proceeds by means of deducing from it a cumulative edifice of logically necessary propositions (Menger 1985; Mises 1985; Hoppe 2007a), its insights are, by definition, rooted in the world of empirical contingencies. Consequently, not so much in order to maintain its logical validity, but in order to establish its relevance to the world just mentioned, economic theory has to rely on a number of basic empirical assumptions, e.g., the assumption of human variability, scarcity of goods, the existence of as yet unsatisfied preferences, etc. (Rothbard 1957: 3).

In other words, even though, say, the Ricardian Law of Association, which says that specialization and division of labor increase productivity, is, according to the Austrians, as incontestable as the law of non-contradiction, it would be intellectually vacuous in a world in which all purposive agents would be qualitatively perfectly alike. Or, to take another example, the whole theory of market exchange would find no application in the Edenic world of superabundance, even though that would not in any way detract from its deductive cogency. The crucial thing to notice in this context is that here, unlike in the neoclassical tradition, the empirical facts are not the corroborative endpoint of economic research, but one of its foundational starting points.

Third, insofar as possessing a consistent theory is a necessary prerequisite for being able to interpret the observable economic facts, getting such facts right is a necessary prerequisite of being able to determine whether a given theory is applicable to the case at hand (Hayek 1966: 37; van den Hauwe 2007). Again, to take an example, the theorem of the impossibility of economic calculation under socialism could not account for the collapse of the Soviet Union if it were to be

established that there were, in fact, genuine market prices for the factors of production in the former Eastern Bloc.

Fourth, the emergence of as-of-yet unexplored empirical phenomena may indicate the direction in which theory should develop in order to come up with their logical explanation — in other words, their emergence should not be thought of as a confirmation or disconfirmation of previously formulated hypotheses, but as a stepping stone for a theoretical extension of the science of economics to those aspects of not yet fully understood real-world events, which, insofar as they are rooted in and follow from the fundamentals of human action, call for further, deductively sound elaborations of the underlying explanatory structure.

Finally, empirical observations might serve as an additional corroboration of the fact that the theorist did not make a mistake in one's deductions and inferences, or indeed point to potential flaws in one's logical edifice and suggest some new avenues for its development (or re-development) (Littlechild 1978; Mises 2003: 31). To illustrate this last claim, let us notice that, say, an engineer whose bridge collapses due to design flaws should not throw overboard the principles of mathematics, but rather go through his calculations again in an attempt to spot the algebraic errors he had made.

Let us conclude the discussion of apriorism and empiricism here and move to the question of why the adherents of the ASE, in distinct contrast to the majority of contemporary neoclassicists, are skeptical about the use of mathematical formalism in economics and thus stick to the language of verbal logic.

First, insofar as the Austrians regard anticipated individual utility as the cornerstone of all economic valuations — and in this respect there is little disagreement between them and the representatives of the neoclassical tradition — they consider the magnitude in question as unamenable to being represented in terms of numerical functions and symbols. This is because utility is a quality that is subjective, agent-relative, psychological and intensive (Robbins 1935; Rothbard 1956; Herbener 1997) rather than objective, agent-independent, physical and extensive. In other words, since there is no non-subjective, aggregative, spatially extended benchmark against which individual utilities can be measured, compared and added up, plotting social welfare functions or social cost curves falsifies the image of the reality of human action so as to fit it into an artificially simplified set of algebraic relations.

Moreover, even if one were to agree that there is nothing conceptually incoherent about measuring intensive or psychological magnitudes (for instance, there appears to be nothing inconceivable about ranking one's mood on an average day on the scale of 0 to 10), that would still not justify the practice of quantifying utility, since utility is ordinal rather than cardinal — it represents the ranks on one's value scale rather than cardinally measurable intensities. To illustrate the above point — it makes perfect sense to say that one prefers an orange to an apple (meaning that one expects to derive more utility from the consumption of the

former), but it makes no sense to say (unless it is said purely metaphorically) that one wishes to consume an orange 2.5 times more than one wishes to consume an apple.

Second, the Austrians object to representing the phenomena of market exchange in the form of equations. This is because every voluntary exchange of goods or services takes root in the fact that the transacting parties value the said goods and services unequally (Menger 1976: 179) — whenever a customer trades 10 pounds at a restaurant for a meal, he demonstrates that he values the meal more than the 10 pounds, and vice versa for the personnel of the restaurant. If such transactions did not involve the meeting of individuals with reverse value scales, they could not be thought of as mutually beneficial, and thus would not take place at all. However, neither is it permissible to represent market exchanges in the form of inequalities, since insofar as mathematics aims to describe empirical reality, it has to describe the objective numerical relations that constitute it, and no such relation constitutes voluntary transactions, which, as was already mentioned, are always based on the interaction of two subjective, mutually exclusive visions of reality, filtered through two different, mutually exclusive evaluative mindsets.

Third, since there are no constants in the realm of human action, the Austrians contend that the statistical analysis of economic data may serve as a useful tool for conducting historical studies of past economic conditions, but is unsuitable to making economic predictions with any degree of quantitative precision. This claim is motivated by the ASE's endorsement of the so-called frequency interpretation of probability (Mises 1957; Hoppe 2007b), according to which in order to be amenable to analysis in terms of the probability calculus, a given set of events needs to form a homogeneous collective the probability of occurrence of whose particular members tends asymptotically towards fixed limits. Dice rolls provide a good example of members of such a collective — they are all relevantly identical (i.e., their results are determined exclusively by the same set of unchangeable physical laws) and the more they are repeated, the more the probability of any one of them occurring approaches 1/6.

Fourth, to the extent that smoothly continuous curves are used to represent various economic phenomena, such as costs and revenues, the Austrians regard them as falsifying the image of human action, which is necessarily discrete, taking place at specific points in the decision-making process, points clearly and individually perceptible to the acting person.

Fifth, insofar as consumer demand patterns are represented in terms of indifference curves, the Austrians, who consider economics to be the science of human action, deem such a procedure logically inadmissible, since, in Rothbard's words:

Indifference can never be demonstrated by action. Quite the contrary. Every action necessarily signifies a choice, and every choice signifies a definite preference. Action specifically implies the contrary of indifference. [...] If a person is really indifferent between two alternatives, then he cannot and will not choose between them. (Rothbard 1956: 14)

It might be objected at this point that

the Austrian theorists need the notion of indifference to explain and mark off the notion of a commodity, and of a unit of a commodity. [...] Without the notion of indifference, and, hence, of an equivalence class of things, we cannot have the notion of a commodity, or of a unit of a commodity; without the notion of a unit (“an interchangeable unit”) of a commodity, we have no way to state the law of (diminishing) marginal utility. (Nozick 1977: 370–371)

The above could be thought of as a particularly poignant challenge for the representatives of the ASE, since it was the founder of the school, Carl Menger, who was among the scholars who first discovered and described the law of diminishing marginal utility, a milestone that allowed for solving the age-old water and diamonds paradox of value.

However, there exists a simple, though elegant, solution to this problem — in essence, it consists in realizing that whenever one wishes to obtain one unit of a given good while being confronted with a number of homogeneous, equally serviceable units of it, one does not really choose between those units. What one does instead is to choose between having a unit of the good in question and not having it (or having a unit of any other good one considers more desirable). In other words, in every situation of choice, one is indifferent between equally serviceable, homogeneous means capable of achieving a specific end, but not indifferent between achieving that end and foregoing it for the sake of any end ranked lower on one’s value scale (Hoppe 2005, 2009). In sum, instead of expunging the notion of indifference from economic analysis, the Austrians are careful to specify its proper role, namely, that of describing “the starting-point of action; [which] involves a specification of the present supply-constellation of homogeneous units of heterogeneous goods at an actor’s disposal” (Hoppe 2009: 64). However, since in practical terms it is only the actor himself who can make such a specification before he decides to act, and since to others its content is bound to remain to some extent evidence-transcendent (i.e., even if the actor informs them about it, he might lie, he might modify his value scale after divulging the information in question, etc.), embracing the concept of indifference along the Austrian lines does not mandate the use of indifference curves as economically meaningful constructions.

This concludes my discussion of the ASE’s doubts about the applicability of the mathematical method to economic theorizing. Let us now move to an exposition of the final methodological aspect of the ASE mentioned at the outset of this chapter — namely, its causal-realist approach. What is meant by causal realism can perhaps be best explained in the words of the school’s founder:

This is the ground on which I stand. In what follows I have endeavored to reduce the complex phenomena of human economic activity to the simplest elements that can still be subjected to accurate observation, to apply to these elements the measure corresponding to their nature, and constantly adhering to this measure, to investigate the manner in which the more complex economic phenomena evolve from their elements according to definite principles. (Menger 1976: 47)

Adam Smith and this [classical] school have neglected to reduce the complicated phenomena of human economy in general, and in particular of its social form, “national economy” to the efforts of individual economies, as would be in accordance with the real state of affairs. They have neglected to teach us to understand them theoretically as the result of individual efforts. Their endeavors have been aimed, rather, and to be sure, subconsciously for the most part, at making us understand them theoretically from the point of view of the “national economy” fiction. On the other hand, the historical school of German economists follows this erroneous conception consciously. (Menger 1985: 195–196)

In other words, the Austrians aim at specifying the empirical assumptions on which their deductions are built as accurately and consistently with reality as possible. This allows them to trace and work out the causal relations between various economic phenomena according to a clear logical progression. For instance, having identified individual valuation as a necessary and crucial component of human action, and hence as “the keystone of economic theory” (Rothbard 1956: 1), they proceed to impute value to specific consumer goods according to their ability to satisfy specific preferences of a given actor, and then to specific producer goods according to their ability to create the aforesaid consumer goods. Consequently, they resist analyzing the realm of economics in terms of “mutual determinations,” a concept borrowed from physics, which they regard in this context as obscuring or misrepresenting the actual causal relations between various elements of the logical structure of human action. As Rothbard describes the methodological approach of Samuelson (1947), one of the main exponents of physics-inspired economic positivism:

He falls back on Léon Walras, who developed the idea of “general equilibrium in which all magnitudes are simultaneously determined by efficacious interdependent relations,” which he contrasts to the “fears of literary writers” about circular reasoning. [...] The idea of mutual determination is appropriate in physics, which tries to explain the unmotivated motions of physical matter. But in [the science of human action], the cause is known: individual purpose. In economics, therefore, the proper method is to proceed from the causing action to its consequent effects. (Rothbard 1956: 14)

The difficulties that follow from adopting the abovementioned analytical framework may be illustrated by what the Austrians perceive as the internal inconsistencies of the Keynesian theory of interest rates:

Keynesians consider the rate of interest (a) as determining investment and (b) as being determined by the demand for money to hold “for speculative purposes” (liquidity preference). In practice, however, they treat the latter not as determining the rate of interest, but as being determined by it. The methodology of “mutual determination” has completely obscured this sleight of hand. Keynesians might object that all demand and supply curves are “mutually determining” in their relation to price. But this facile assertion is not correct. Demand curves are determined by utility scales, and supply curves by speculation and the stock produced by given labor and land factors, which is ultimately governed by time preferences. (Rothbard 1970: 786)

In addition to rejecting the framework of mutual determination as causally misleading, the Austrians shun the use of any analytically convenient fictions, such as collective agents and fully informed utility maximizers, thus remaining

consistent realists and methodological individualists. The neoclassicists, on the other hand, generally believe that

a hypothesis is important if it “explains” much by little, that is, if it abstracts the common and crucial elements from the mass of complex and detailed circumstances surrounding the phenomena to be explained and permits valid predictions on the basis of them alone. To be important, therefore, a hypothesis must be descriptively false in its assumptions; it takes account of, and accounts for, none of the many other attendant circumstances, since its very success shows them to be irrelevant for the phenomena to be explained. [...] Truly important and significant hypotheses will be found to have “assumptions” that are wildly inaccurate descriptive representations of reality, and, in general, the more significant the theory, the more unrealistic the assumptions. (Friedman 1953: 14–15)

In other words, according to the standard neoclassical position, as long as a given hypothesis yields correct predictions, one need not worry about the falsity of its assumptions. The problem with such an approach, however, is that the predictions generated on the basis of such hypotheses can be correct as a matter of sheer luck. If, for instance, one hypothesizes that there exists “a Constant Tolkienian Force in the universe that produces a Tolkien film every year” (Long 2006: 4), realizing full well that, for all we know, films are in fact produced in a very different way, but insisting that the postulated entity is nonetheless a good predictor, one may feel that his theory works for a number of consecutive years (2001–2003) before suffering a consistent series of disappointments from 2004 onwards.

In order not to fall prey to the above trap, the Austrians clearly distinguish between what might be called precise and non-precise abstractions (*ibid.*), where the former consist in specifying certain features as absent, whereas the latter in making certain features absent from specification. Hence, for example, the Austrian theory of entrepreneurship (Foss, Klein 2002; Salerno 2008) emphasizes the core qualities of an entrepreneur — the ability to forecast uncertain future events on the market and combine heterogeneous factors of production in ways consistent with the preferences of the buying public — while abstracting from other qualities that any actual entrepreneur undoubtedly possesses (race, age, weight, height, hair color, etc.). Such non-precise abstractions, although certainly omitting “the common and crucial elements from the mass of complex and detailed circumstances surrounding the phenomena to be explained,” are nevertheless by no means “descriptively false in [their] assumptions” or based on “wildly inaccurate descriptive representations of reality.”

Precise abstractions, on the other hand, are used by the Austrians not to make economic predictions, but to deduce the actual consequences of specific phenomena by comparing the reality they are part of with hypothetical worlds in which they are absent (Salerno 1994; Klein 2008). Thus, for instance, since in the never-never land of neoclassical perfect competition all actors possess full information, products are homogeneous and profits are non-existent, the Austrians conclude that the source of entrepreneurial profit is successful decision-making under conditions of uncertainty, which involves engaging in activities such as product

differentiation, advertising, price adjustment, etc. What in turn follows from this insight is that instead of suggesting that the actual markets would benefit from being forced into the unrealizable conditions of perfect competition, the Austrians, understanding that the so-called perfect competition means no competition at all, propose that what an economic theorist should focus on is the study and analysis of the discovery process whereby the market actors learn and utilize the information helping them to bring supply in line with demand, the process whose end point would be a perfectly competitive equilibrium were it not for the fact that the underlying market data (consumer value scales, the supply of consumer and producer goods of various orders, technological possibilities, etc.) are in constant, ceaseless flux.

Finally, it has to be mentioned in connection with discussing the causal-realist aspect of Austrian methodology that the analysis of human action based upon it always concerns the relationship between observed human behavior and its unobservable alternatives (Hülsmann 2000, 2003). This follows from the fact that every human action implies a choice, namely, an expression of a preference for a specific end to the exclusion of all alternative ends. It would not make logical sense to try to arrive at exact laws governing the structure of human action by recording the relationship between its various observable instances and its observable consequences, since, as I indicated earlier, due to the possibility of choice, in the realm of human action there are no empirical constants and no law-like regularities. However, the realm in question contains logical constants that govern the relationship between the observable effects of any given instance of action and the necessarily non-observable effects of its foregone alternatives. Thus, causal-realist analysis of economic phenomena assumes a specifically counterfactual character — it does not consist in comparing the state of the world before a given action occurred with the state of the world after it occurred, but in comparing the state of the world in which a given action occurred with the state of the world as it would have been had it not occurred.

Thus, for instance, even though the praxeological analysis of minimum wage suggests that laws fixing minimum wages above market-determined levels lead to unemployment (since they compel certain people to demand more than their discounted marginal productivity makes affordable, let alone profitable, for their potential employers), it does not suggest that introducing such laws will necessarily make unemployment higher in absolute terms, since their introduction might coincide with the emergence of some countervailing, employment-boosting factors (such as the appearance of new skillful entrepreneurs or more efficient technologies). What it does suggest instead is that introducing such laws will make unemployment higher than it otherwise would have been, thus focusing only on the logically necessary consequences of their implementation and abstracting from all the possible intervening contingencies that might exercise a countervailing influence on these consequences.

At this point, one might claim that putting the matter in those terms is still not exactly right. After all, one might argue, there is nothing logically impossible about a scenario in which a legislative decision to fix a minimum wage above the market-determined level causes all entrepreneurs whose businesses are adversely affected by it to become so outraged and so ideologically unified against it that they manage to overcome the collective action problem and jointly move onto the grey market, thus fully liberating their entrepreneurial energy and providing an immense boost to employment. In such a scenario, one could suggest, introducing a minimum wage law would make unemployment lower rather than higher than it otherwise would have been.

Such an argument, however, betrays a misunderstanding of what the counterfactual approach described in the preceding paragraphs consists in. A crucial point to note in this context is that the expression “than it otherwise would have been,” which is part of every praxeologically relevant counterfactual statement, is an effective equivalent of the *ceteris paribus* clause. In other words, it ensures that all the contingent effects of psychological nature that may result from a given action are abstracted from. What matters instead are its logically necessary economic consequences, which, of course, may prompt all kinds of psychological reactions on the part of affected agents, including those capable of reversing the economic consequences in question, but predicting, explaining and otherwise scrutinizing such reactions is beyond the scope of praxeological analysis. This is because praxeology focuses on the investigation of the logical structure of human action as such, not on the investigation of the mental content of specific instances of human action, the latter being the task of psychology, anthropology, history, and other empirical social sciences.

Having thus described the main characteristics of the methodology of the ASE, let me conclude by illustrating the advantages of its distinct features by reference to investigating a topic whose elaboration might serve as an example of what is often considered as a significant contribution of neoclassical economics: namely, the theory of public and collective goods, especially as it relates to the question of the theoretical desirability of the presence of a monopoly of force in any given system of political economy.

As the existing Austrian literature on the topic indicates (see, for instance, Fielding 1979; Brownstein 1980; Block 1983; Hoppe 1989; and Long 1994), the neoclassical arguments that aim at demonstrating such desirability are constructed against the background of static market conditions, the possibility to appraise individual cost evaluations from a third-person perspective, the possibility to detect external benefits in the absence of relevant preferences demonstrated in concrete actions, and other unrealistic assumptions. Moreover, they are often plagued by the fallacy based on the implicit suggestion that solutions to the problems stemming from the presence of non-ideal circumstances are to be implemented by a seemingly ideal problem-solving agency (Demsetz 1969).

The approach of the ASE appears to fit naturally the critical investigation of the above issues, since its core points of emphasis — causal-realistic analysis, the significance of logical deduction from self-evident premises, the subjective character of utility, the importance of time and intertemporal coordination, diachronic and synchronic uncertainty, the market process, and the role of entrepreneurship — are uniquely suited to the elaboration of solutions for overcoming problems in the real economic world, which is rife with sub-optimal conditions and circumstances.

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