

THE STATE AND ITS LIMITS

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A Critique of Economic Knowledge

THORSTEN POLLEIT

It may happen in a field of knowledge, for some reason or other, that accurate feeling for the goals of research coming from the nature of the subject matter has been lost. It may happen that an exaggerated or even decisive significance is attributed to secondary problems of the science. Erroneous methodological principles supported by powerful schools prevail completely and onesidedness judges all efforts in a field of knowledge. In a word, the progress of a science is blocked because erroneous methodological principles prevail. In this case, to be sure, clarification of methodological problems is the condition of any further progress, and with this the time has come when even those are obligated to enter the quarrel about methods who otherwise would have preferred to apply their powers to the solution of the distinctive problems of their science. (Menger 1985, p. 27)

What assigns economics its peculiar and unique position in the orbit both of pure knowledge and of the practical utilization of knowledge is the fact that its particular theorems are not open to any verification or falsification on the ground of experience. (Mises 1998, p. 858)

On questions of politics, economics, and social conduct, as well as on religious opinions, the method of authority has been used to root out, as heretical or disloyal, divergent opinions. (Cohen and Nagel 2002, p. 194)

1. On the importance of economic ideas

Ideas, economic ideas in particular, are at the heart of human action. It is ideas that make people take purposeful action. In this sense John Maynard Keynes (1883–1946) wrote: "[T]he ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else."¹ And Ludwig von Mises (1881–1973) noted:

The body of economic knowledge is an essential element in the structure of human civilization; it is the foundation upon which modern industrialism and all the moral, intellectual, technological, and therapeutical achievements of the last centuries have been built. It rests with men whether they will make the proper use of the rich treasure with which this knowledge provides them or whether they will leave it unused. But if they fail to take the best advantage of it and disregard its teachings and warnings, they will not annul economics; they will stamp out society and the human race. (Mises 1998, p. 881)

In view of the important role economic knowledge is rightly said to have for mankind, the key questions are first, where does economic knowledge come from, and secondly, how can one find out whether an economic theory is correct or false? In what follows I shall attempt to offer conclusive answers to these questions. In doing so, I am in a very comfortable position,

as I can draw on the work of brilliant authors, who have already dealt in great detail with these issues.² The problems of the *epistemological foundations of economics* are nowadays no longer enjoying much attention in academia,³ let alone among the public at large. However, this is entirely unjustified. For they are of utmost importance for scientific progress in economics and the reliability of policy prescriptions derived from them. The conclusion drawn in this article is that economics is *not* an empirical science, and that it can only be logically consistently conceptualized as an *a priori* science of human action.⁴

The article has been structured as follows. To start with, the scientific method of the natural sciences – which rests on *positivism*, *empiricism* and *falsificationism*, and which has nowadays become the accepted scientific method in the field of economics – will be critically reviewed and its logical inconsistencies will be pointed out (section 2). Then I will discuss why the scientific method of the natural sciences *cannot* be applied in the field of human action, and economics in particular – because the object of scientific inquiry in economics is *categorically* different from the object of scientific inquiry in the natural sciences; in this context it will also be shown how the validity of economic theories can be established (section 3). The issue of forecasting in the *a priori* science of human action will then be addressed (section 4), and finally the article will discuss why the “mainstream economics profession” nevertheless fervently supports the idea of employing the method of natural sciences in economics.

2. The scientific method of “mainstream economics”: a critique

Since around the second half of the 20th century, the scientific method of the natural sciences has been wholeheartedly adopted in “mainstream economics”. This scientific method rests on three epistemological pillars, namely positivism, empiricism and falsificationism. Positivism, which goes back to Claude Henri de Rouvroy (1760–1825), Comte de Saint-Simon (1760–1825) and his disciple Isidore Marie Auguste François Xavier Comte (1798–1857), represents a scientific doctrine.⁵ It holds that scientific knowledge comes only from observation; that there is no true *a priori* knowledge about reality; and that anything that cannot be observed, or measured for that matter, cannot be scientific. The positivists’ popular battle cry is: *Science is measuring*.

Empiricism is an epistemological theory, saying two things. First, knowledge is derived *only* from the sense experience (observation). Secondly, empiricism holds that sense experience is also the benchmark against which the truth of a scientific theory has to be validated. Meanwhile, “classical” empiricism has been replaced by falsificationism, a term closely associated with Karl Raimund Popper (1902–1994) and his Critical Rationalism.⁶ The key question for us is, however, whether or not the scientific method of the natural sciences can be applied to economics. To find an answer, the epistemological status of empiricism, positivism and falsificationism will first be critically reviewed.

Empiricism suffers from the well-known “problem of induction” (see Poser 2001, pp. 108–112). It means that observations of particular events do not, for logical reasons, provide a justification for generalizations, such as deriving economic laws. Take, for instance, the testing of the hypothesis “if A, then B”. Assume the test outcome confirms the hypothesis. Does this

validate the hypothesis? No, it doesn't. One can say that the hypothesis was supported by the test, but not that it will also hold up if it confronted with new observations in the future. And what if the hypothesis is not confirmed by testing? Must it be rejected as false? Again the answer is no. For it might be that new observations in the future will support the hypothesis. One can easily see that empiricism cannot provide something like scientific knowledge.

In fact, empiricism proves to be a logically contradictory and self-defeating doctrine. For the empiricist assertion is that all economic events are only hypothetically true. Upon closer inspection such a claim – namely that there is only hypothetically true knowledge about reality – is contradicted by the message of the empiricist proposition itself. For if the empiricist proposition (namely that all economic relations are only hypothetically true) is regarded as itself being merely hypothetically true, it would not qualify as an epistemological pronouncement. Empiricism would not provide any justification whatsoever for its claim that economic propositions are not, and cannot be, non-hypothetically true (that is, categorically, or *a priori*, true). If, however, the empiricist's claim is categorically true, it would belie its own thesis, namely that there is only hypothetically true knowledge – thereby making room for a discipline such as economics claiming to provide *a priori* valid knowledge about reality.

Positivism (or logical positivism) maintains that scientific propositions are either empirical or analytical. Analytical propositions are merely verbal conventions, or tautologies. They assert only what has already been implied in its definitions and premises (see Mises 1962, p. 5). How does positivism justify these tenets? The positivist propositions themselves must either be empirical or analytical (but can never be both). If they are empirical, they are only hypothetically true, and so they cannot claim to be valid once and for all (more will be said about this below). And if the positivist claims are interpreted as analytical, they represent merely verbal conventions (tautological information). They cannot claim to say anything scientifically reliable about reality. How can one ground any earnest scientific effort on positivism?

What is more, positivism claims that knowledge of reality must be verifiable, or at least falsifiable, by experience, and that any experience could potentially have been otherwise. How can such a claim be justified? If the sentence "Knowledge of reality must be verifiable" is empirical, it cannot claim to be apodictically true. To determine its truth value, the sentence "Knowledge of reality must be verifiable" would have to be empirically tested. However, any such tests could never tell us whether the positivist claim is true or not. And if the sentence "Knowledge of reality must be verifiable" is analytical, it would have no factual content whatsoever, and it also could not legitimately claim to be true. That said, positivism appears to be an inconsistent, self-contradictory, pseudo-scientific dogma.

Falsificationism is a cornerstone of Critical Rationalism as put forward by Karl Raimund Popper. According to him, the "problem of induction" is insoluble indeed. Popper therefore rejects the verification principle and recommends the falsification principle, which basically says that we cannot, once and for all, *verify* knowledge claims (theories). The best we can hope for is *not falsifying* them. In other words: Popper's falsificationism claims that human knowledge is only hypothetically true – that there is no such a thing as non-hypothetically true knowledge. As a result, the truth value of theories has to be continually tested against

experience, and one can only put trust in the validity of theories as long as they have not been falsified.

The falsificationist considers empirical evidence both as the source of knowledge and as the "benchmark" against which the truth value of a hypothesis must be tested. In this respect falsificationism doesn't differ from "classical" empiricism. The question here is: How does Popper's falsificationism justify its postulates, namely that all knowledge is only hypothetically true, that there is no such thing as non-hypothetically true knowledge? To make such a claim (saying that there is no non-hypothetically true, or *a priori*, knowledge), falsificationism inevitably takes recourse to non-hypothetically true knowledge (as they are apodictically claiming that there is *no* non-hypothetically true knowledge), thereby contradicting its very postulate.⁷

Furthermore, it is an indisputable insight that there is no "pure" observation, or experience, as observation is (and must be) theory-dependent.⁸ As theory pre-determines observation, the question arises: How do we know that the theory which is used for making observations is actually correct? To make things even more difficult: Given that "correct" theories may change over time, "correct" observations may change over time, too. That said, not only is the validity of theories under investigation continually called into question; the same holds true for the theories which are employed for making the observations that are needed for testing the validity of the theories under investigation. How can the falsificationist hope to ever come to any reliable scientific knowledge?

3. The alternative: the logic of human action

Ludwig von Mises calls for a *methodological individualism*. He argues that the scientific method of economics must be fundamentally different from the scientific methods pursued in the natural sciences. His main point is that the object of knowledge in economics is categorically different from those in the natural sciences. Four aspects justify Mises's claim.

1. The natural sciences deal with objects such as, for instance, atoms, stones and planets.⁹ These objects of knowledge do not act in the sense that human beings act. They *are moved*; they do not choose certain actions, or change their minds. Human beings, in contrast, do have preferences, formulate goals and choose between alternative actions.¹⁰
2. In the natural sciences one can typically detect regularities, or constants, in the sense of "If X, then Y" or "If X rises by a%, then Y changes by b%". Such (behavioral) constants are impossible to find in the field of human action. The reason is humans' ability to learn: one cannot deny that they have this ability without creating a logical contradiction.¹¹ If you say "Human beings cannot learn", you admit that you have learned at some point in the past, contradicting what you just have said (causing a *performative* contradiction). And if you say "Human beings can learn *not* to learn", you presuppose that learning is possible. This, however, is an *outright* contradiction and thus also logically false.

3. As one cannot deny that human beings have the ability to learn, the conclusion is that there can be no homogeneous events in the field of human action. In natural sciences, one can obtain, through repeatable experiments, homogeneous *basis sentences*, which can be used for testing the hypothesis under review. Such basis sentences, however, cannot be identified in the field of human action. This is because each and every human action is contingent and unique; it represents a non-repeatable event. Testing a hypothesis empirically, as is practiced in the natural sciences, would be entirely inappropriate; it could not be logically defended in the field of human action.
4. In natural science the scientist does not know anything about final causes. He rests his inquiry entirely on causality. For instance, he explains phenomenon *A* with phenomenon *B*; and then he explains *B* with phenomenon *C*; and so on. In the field of human action, however, the scientist actually knows the *final cause* of his inquiry at the outset: and that is the indisputable truth that humans act. In fact we know that "for the sciences of human action the ultimate given is the judgements of value of the actors and the ideas that engender these judgements of value" (Mises 1957, p. 306). The *a priori* – or self-evidently true – knowledge that humans act can be chosen as a non-disputable (*nicht hintergehbare*) scientific starting point.

While it cannot be vindicated as an empirical science, economics can be conceptualized as an *a priori* science of human action (which Mises termed *praxeology*). Its starting point is the irrefutably true sentence that "humans act". One cannot deny it without causing an intellectual contradiction. From the irrefutably true sentence "humans act", further *a priori* categories of human action can be logically deduced. For instance, human action is purposeful: with action the actor pursues a goal; action requires *means* to attain *ends*; means are *scarce*; action takes *time* (there is no such thing as timeless human action) and takes place under *uncertainty*; action presupposes cause-and-effect (*causality*); action implies (opportunity) costs; an action may succeed or fail in achieving a goal, and the actor is capable of making a profit or loss; actors have a *time preference*, which is always and everywhere positive, and its manifestation is the *originary interest rate*.

Any attempt to reject the *a priori* categories of human action would, and must, result in failure – for it would take human action to do so; and this would imply that the actor acts purposefully, employs means, incurs costs, etc. It is impossible to dispute or falsify the veracity of the sentence "humans act" and the categories it implies. Not only are attempts to dispute the truth of the logic of human action in vain. It would also amount to an outright intellectual confusion to think that validating the truth of the categories of human action and the theories derived thereof would require continual testing, as the proponents of positivism-empiricism-falsificationism would have to argue. In fact, the logic of human action provides the very foundation of epistemology (see Hoppe 2006c, p. 278). The categories of human action are, so to speak, the *conditions of the possibility of objective knowledge*, to borrow from the Prussian philosopher Immanuel Kant (1724–1804).¹²

If economic theories contradict the logic of human action, and the action-categories, they can be rejected as false. For instance, an economic theory that does not allow (explicitly or implicitly)

for action to take place through time contradicts the logic of human action – as it is (praxeo-)logically impossible to think of any timeless action. Or, take the theory that an increase in the quantity of money would be *neutral* in terms of income and wealth distribution. On *a priori* grounds one can explain that this economic theory cannot be true, for a rise in the quantity of money in the economy affects different people at different points in times to a different degree.¹³ With more time and effort, one can also demonstrate the praxeological impossibility of socialism.

4. On the issue of praxeological forecasting

How does an economist, who conceptualizes economics as an *a priori* science of human action, make forecasts?

From the logic of human action the economist knows that the future is uncertain. This, however, does not mean that *all* is uncertain.¹⁴ One knows, for instance, with absolute certainty, the truth value of the *a priori* categories of human action: that human action is purposeful, that people prefer a higher quantity of a good over a lower quantity of a good; that every effect has a cause; that the originary interest rate cannot fall to zero, let alone become negative; etc. From the logic of human action the economist also knows that there are *no* behavioural constants on human action: different people act differently to a given impulse at different points in time. He may therefore foretell the qualitative results of human action taking place under certain conditions, but he cannot make quantitative predictions.

Let us consider an example. The *a priori* science of human action tells us that a rise in the quantity of money *must* reduce the exchange value of the money unit: a higher quantity of money in the hand of an actor necessarily reduces the marginal utility of the money unit vis-à-vis non-monetary goods; and this must induce the actor (other things being equal) to exchange money for other saleable items (as their marginal value has increased vis-à-vis the marginal utility of the money unit). For as the actor supplies his money units and demands other saleable items, the exchange value of the money unit declines – compared to a situation in which the quantity of money has not increased. However, the *a priori* categories of human action do not suffice to produce a practicable forecast.

While the *a priori* science of human action can inform us about the qualitative consequences of human action, of course it cannot tell us anything about (future) concrete circumstances under which concrete human actions will take place and shape their outcomes.¹⁵ For instance, the *a priori* science of human action cannot tell us if and when the central bank will increase the quantity of money or change its interest rate; and it cannot reveal anything about the potential emergence of new technologies. What is more, the *a priori* science of human action cannot inform us how people will behave in the future. For instance, we cannot know *a priori* how the demand for money will change as a result of a particular increase in the money supply. Where can one get this kind of knowledge? This is where *thymology* comes in.

Thymology “is what everybody learns from intercourse with his fellows. It is what a man knows about the way in which people value different conditions, about their wishes and desires and their plans to realize these wishes and desires. It is the knowledge of the social

environment in which a man lives and acts" (Mises 1957, p. 266). Thymology does not provide *a priori* but *a posteriori* knowledge. It yields knowledge based on an understanding of past human action – the actors' preferences, judgments and choices – which allows us to tentatively form a view about their future preferences, choices and actions: "Out of what we know about a man's past behavior, we construct a scheme about what we call his *character*. We assume that this *character* will not change if no special reasons interfere, and, going a step farther, we even try to foretell how definite changes in conditions will affect his reactions" (Mises 1962, p. 50; my italics).

It all boils down to the insight that the praxeologically minded economist, when it comes to making forecasts, takes recourse to the *method of understanding*. As Mises notes: "The scope of understanding is the mental grasp of phenomena which cannot be totally elucidated by logic, mathematics, praxeology, and the natural sciences to the extent that they cannot be cleared up by all these sciences. It must never contradict the teachings of these other branches of knowledge" (1998, p. 50). In ascribing a character to an actor, using information about his past actions, one attempts to reduce the uncertainty as far as his future behavior is concerned.

Compared with the seemingly absolute certainty provided by some of the natural sciences, these assumptions [which are required when applying the method of understanding, *TP*] and all the conclusions derived from them appear as rather shaky; the positivists may ridicule them as unscientific. Yet they are the only available approach to the problems concerned and indispensable for any action to be accomplished in a social environment. (Mises 1962, p. 50)

Ludwig von Mises thus makes it unmistakably clear that praxeological prediction is *categorically* different from economic predictions made on the basis of positivistic thinking:

There is neither constancy nor continuity in the valuations and in the formation of exchange ratios between various commodities. Every new datum brings about a reshuffling of the whole price structure. Understanding, by trying to grasp what is going on in the minds of the men concerned, can approach the problem of forecasting future conditions. We may call its method unsatisfactory and the positivists may arrogantly scorn it. But such arbitrary judgments must not and cannot obscure the fact that understanding is the only appropriate method of dealing with the uncertainty of future conditions. (Mises 1998, p. 118)

5. On method and the political independence of economics

In this article it has been argued that economics cannot be conceptualized as an empirical science, and that it can only be consistently conceptualized as an *a priori* science of human action. It follows that the scientific method of the natural sciences – which is rooted in positivism-empiricism-falsificationism – cannot be applied to economics. If, however, the method of the natural sciences is nevertheless employed in economics, the consequences are devastating: it leads to scientific regression, and it is also intellectually pernicious as it promotes relativism in social and economic affairs. This latter aspect, which carries tremendous practical importance, will be explained in some more detail in the remainder of this article.

If the economist follows strictly the method of positivism-empiricism-falsificationism, he cannot reject from the outset even the most outlandish economic theory as false. Take, for instance, the following propositions: "Substituting socialism for capitalism makes people more prosperous"; "Replacing commodity money (gold) by unbacked paper money makes society richer"; "Taxation does not affect negatively the level of investment and thus future real wages"; or "A central bank pushing down the interest rate to zero supports material prosperity". The positivist-empiricist-falsificationist-minded economist would want to *test* these propositions, that is, try them out in practice, to find out about their truth value; in any case, he has no reason to reject any of them as false on *a priori* grounds.

Once the economics profession has fully embraced the positivist-empiricist-falsificationist creed, there is no way left to make a principled case against theories that can be unmasked, on *a priori* grounds, as false and harmful before they are put to a reality check. Even worse: if an economic theory, tried out in practice, did not live up to expectations, it would not mean that the economic theory was false. Its supporters would argue that the promised outcome had not been reached because of some "uncontrolled event". Making sure that this will not happen again, they argue that the theory should be given another try, and so the experimentation continues. The positivist-empiricist-falsificationist oriented economist can, in principle, immunize his economic theory indefinitely against any hard-hitting critique.

It doesn't take much to realize that political-ideological agitators would be excited if economics were to adopt the scientific method of the natural sciences – and if it were to become the ultimate, and de facto unassailable, authority determining what is right and wrong in economic theory and what is desirable and undesirable in terms of policy making. Under the positivist-empiricist-falsificationist creed in economics, society can easily be hijacked by political-ideological bigots, subjecting the lives of many (innocent and uninformed) people to an endless process of social experimentation and social planning – a process through which individual freedoms are crushed.

The scientific method of the natural sciences, when adopted in economics, helps the case of the state first and foremost. This is why governments try their very best to nurture the positivist-empiricist-falsificationist minded economists and bring them under their sway – by, say, providing economists with employment and granting them socially prestigious status. The alliance of those in power and the "intellectuals" has of course always been close. Such an

alliance is based on a *quid pro quo*: on the one hand, the intellectuals spread among the masses the idea that the State and its rulers are wise, good, sometimes divine, and at the very least inevitable and better than any conceivable alternatives. In return for this panoply of ideology, the State incorporates the intellectuals as part of the ruling elite, granting them power, status, prestige, and material security. (Rothbard 1973, p. 67¹⁶)

For the economist it becomes particularly easy to team up with the political agenda of those in power if the scientific method of the natural sciences has already become the methodological standard that is widely agreed upon by the economics profession. Under the motto "You scratch my back, I'll scratch yours" it allows the economist to promote and market the

government's (open or hidden) political agenda without raising any suspicion among outsiders of giving up, or compromising, his intellectual and scientific integrity. To conclude: The scientific method of the natural sciences, when applied to economics, contributes greatly to compromising the body of economic knowledge, doing great harm to the material well-being and individual freedom of a great many people.¹⁷

6. Scientific method matters

From what has been said earlier, it should have become clear that the question "What is the proper scientific method in economics?" is of utmost importance – for the scientific method determines what is, and can be, considered a correct or false economic theory. It is by no means an exaggeration to say that the acceptance and dissemination of false economic theories does not only lead to a lower material standard of living; it also threatens peaceful cooperation among people nationally and internationally. Fortunately, the intellectual errors and confusions that come with a scientific method in economics that rests on positivism-empiricism-falsificationism have already been unmasked, and a logically unassailable alternative – the praxeology – has been put forward.

This, in turn, raises the question: Why has praxeology not won the day? I do not pretend to have the final answer. However, I would hypothesize that the existence of the state (as we know it today) plays a crucial role in this context. It is the state that has the financial means and the political determination to bring the "economic intellectuals" under its sway. And once it has gained control over economic education in schools and universities, the state and its chosen economic intellectuals exert an overwhelmingly powerful influence on further scientific development in the field of economics. The state and its state-run education system in the field of economics are thus basically at the heart of the forces leading economics astray.

The state (as we know it today) is, of course, a rather powerful and terrifying adversary to choose to challenge. However, there is no way around the need to wrench the science of economics away from the hands of the state if sound economics is to be restored and preserved. The rise to dominance of the scientific method of the natural sciences in economics, observable since around the middle of the 20th century, is an example *par excellence* of an "abuse of reason" – if and when the praxeological arguments are taken into account. It is certainly no accident that this "abuse of reason" in economics has been accompanied by an ever greater state apparatus, which can be expanded strongly at the expense of individual freedoms and liberties.

The critique of economic knowledge, as unfolded in this article, is thus directly related to the weal and woe of the free society. Mises reminds us that:

[t]he body of economic knowledge is an essential element in the structure of human civilization; it is the foundation upon which modern industrialism and all the moral, intellectual, technological, and therapeutical achievements of the last centuries have been built. It rests with men whether they will make the proper use of the rich treasure with which this knowledge provides them or whether they will leave it unused. But if they fail to take the best advantage of it and disregard its teachings and warnings, they will not annul economics; they will stamp out society and the human race. (Mises 1998, p. 881)

These words emphasize the urgent need to abandon today's fallacious practice of using the scientific method of natural sciences in economics. The sooner, the better. For as Immanuel Kant noted: "It is never too late to become wise; but if the change comes late, there is always more difficulty in starting a reform" (Kant 1989, p. 6; my translation).

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Notes

- ¹ Keynes (1936), p. 383. He writes here further: "Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist."
- ² Most notably Ludwig von Mises (1881–1971), Murray N. Rothbard (1926–1995) and Hans Hermann Hoppe (b.1949).
- ³ One of the relatively few exceptions is Machlup (1978).
- ⁴ The term *a priori* denotes knowledge (about reality) that is self-evidently true; its truth value can be established independently of any sense experience. *A posteriori*, in contrast, denotes knowledge that is gained through experience. See Tetens (2006), pp. 36–37.
- ⁵ See Hayek (1979), esp. Part Two, pp. 183ff.
- ⁶ The important works are Popper (2002a and 2002b).
- ⁷ Popper provides a logical explanation, taking recourse to the *modus tollens* (which can also be called the "mode of denying"), a form of deductive inference he used. The argument (presented in the most simplistic way) goes like this: "If A is a bird, A has wings". From the observation "A has no wings" we can conclude "A is not a bird". See Cohen and Nagel (2002), Chapter V, esp. pp. 96–100. Clearly, the falsificationist assumes logic to represent non-hypothetically true knowledge.
- ⁸ This insight dates back to, say, Immanuel Kant (1724–1804), and it has been upheld ever since by leading epistemological scholars. For an insightful discussion in this context see, for instance, Hartwig (1977), pp. 86–100, esp. p. 95.
- ⁹ The issue of animal behavior will not be discussed here.
- ¹⁰ On the logic of human action see Mises (1998), part I; Rothbard (2009), Chapter 1; Rothbard (2011a), pp. 29–58, and 2011b, pp. 59–80; and Hoppe (2006c).
- ¹¹ See Hoppe (1983), pp. 25–26 and 44–46. It should be self-evident that every scientist assumes that there is an ability of learning for himself as well as for his audience.
- ¹² See Kant (2007), p. 189 (B 197, 198, A 158, 159). The full sentence is: "[T]he conditions of the possibility of experience in general are at the same time conditions of the possibility of the objects of experience, and thus possess objective validity in a synthetic *a priori* argument."
- ¹³ For an explanation see Mises (1953), pp. 137–140.
- ¹⁴ If there is uncertainty, there must be, for logical reasons, also certainty; in logic terms, uncertainty is the *correlative* of certainty. See Jevons (1888), pp. 25–26.
- ¹⁵ In this context see Hoppe (2006b), esp. pp. 239ff.

¹⁶ Of course, a cosy relation between economists and those in political power should make us suspicious, as Mises noted: "An economist can never be a favorite of autocrats and demagogues. With them he is always the mischief-maker, and the more they are inwardly convinced that his objections are well founded, the more they hate him" (Mises 1998, p. 67).

¹⁷ In this context, Hayek may be quoted, who noted in his "On being an economist" (1991, p. 36): "The economist knows that a single error in his field may do more harm than almost all the sciences taken together can do good – even more, that a mistake in the choice of a social order, quite apart from the immediate effect, may profoundly affect the prospects for generations."

This academic Festschrift is dedicated to H.S.H. Hans-Adam II, the Reigning Prince of Liechtenstein and contains exclusive original essays by international scholars and experts, who are in one way or another closely associated with the European Center for Austrian Economics Foundation and the Liechtenstein Academy Foundation. *The State and its Limits: The Economics and Politics of Freedom for the Third Millennium*, reflects Prince Hans-Adam's thought-provoking personal credo. The contributions not only confirm the profound international appreciation of Prince Hans-Adam's ideas and keen interest in the humanities at large. They also express our high esteem for his unwavering commitment to classical liberal thought.

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