

ECONOMICS BETWEEN ARGUMENTS: THE QUEST FOR A POSITIVE SCIENCE

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Abstract

The rationale of this paper research concerns on epistemological perspective over methodology of positive economics, hence the interest to outline the existence of the theoretical boundary between positive perspective on economics and normative perspective on economics. As normative economics is shaping economic policy, there is still huge interest to develop the core of economics as a science, and this approach has its methodological roots in positive background of economics. Positive economics relies on deduction, and this approach with more pitfalls of the classical deductive model could more integrate the two perspective on economics, as positive and normative.

Considering the evidence from this paper, this approach puts forward new highlights of epistemological thoughts on knowledge on the theoretical boundaries between positive economics and normative economics.

Keywords

economic methodology, economic method, positive economics, deductive model, operationalization method .

JEL Classification

A12, A13, B13, B41, E17

Introduction - Economic methodology versus economic method

Economic methodology helps us to understand economics as a science. Science means result of scientific research (Boumans and Davis, 2010: 3) but economists cannot become better if they do not see the general perspective. Philosophy of science helps them for that. Scientific research is based on: categories, classifications of data, presentations, explanations, measurement, predictions, testing and modeling data. To talk about something to be scientifically, these requirements are necessary to fulfill. In "Methodology of Economics", Marcel Boumans and John B. Davis present two major differences between economic methodology and economic method, as follows (Boumans and Davis, 2010: 4-5): First, related on the questions "why" and "how"? Second, related on the descriptive/prescriptive character. One of the most important question from science is "why?". Methodology of economics is researching how economist answer to the "why?" – type questions. Why prices change? Why consumer preferences change? Why do we have economic crisis? Why do not we use all the economic knowledge to prevent them? Meanwhile, economic method answers to "how?" It reveals procedures, tools, formulas, ways of thinking used by economists to answer to "why?" questions. At the question about changing preferences an answer might be: the development of the market, information asymmetry. Thus, the question "why?" do preferences of the consumers change becomes



"how?" does the development of a market affect the preferences of the consumer? How does information asymmetry affect it?

Let us presume that a buyer is willing to pay 20000 for a car. He has no choice, in town there is only one car dealer. He expresses interest and negotiate and get from dealer an offer of about 19000. He has a little gain of 1000. He has no other offer to choose, so he probably should consider a good deal and accept the offer. Why would he change his mind? What could happen? But during the night additional information came to him. How? In about a week, another car dealer will start business in town. More, in two months, the new model of the car he is intending to buy will be released on market. It means that old versions will be cheaper, at an approximate price of 14000-15000. In this new context, the behavior of the consumer changes. There is no more rush to make the deal. The consumer got negotiation power. Now the local market is more developed, and the information asymmetry works in his benefit, not anymore in the benefit of seller, as in the traditional case.

Economic method uses many examples and premises, hypotheses with implicit true value. For example, so there are the principle of maximum utility and the principle of maximum profit. Normally, if a man can chose between small profit and big profit, he eventually will choose the bigger profit. No one wants to gain a little, if is possible for more. Everybody wants to be as good as possible.

The second significant difference between economic methodology and economic method is related on the descriptive/prescriptive character. Therefore science is counting on the following fact: economic methodology is descriptive and prescriptive. Conversely, economic method has no value judgments, the method is applied as it is. For example, statistics, as an instrument of economic method, presents the result of a median indicator just as it is, without any moral or ethical implications, regardless its social, political or economic implications. The statistic indicator has signification, but has no value judgment. Descriptive means positive. Just as it is. Prescriptive, or normative presents an ideal context, how something ought to be. Nevertheless, methodologies cannot be good or bad. Though, the context analyzed through their filter can be (Robins, 1932).

Operationalization method

In theory, the words could be without operative meaning. It means that practically one cannot working with them, as to obtain results with practical relevance. In this case, theoretical terms must become operational terms. It might be said that they are operationalized. Let us examine the mainstream definition of unemployment — On unemployment, a person is unemployed if: a) he/she has no job, b) is searching for work, and c) is available to work. This is basic, very simple, everybody knows that. But statements b) and c) are mostly motivational than operational. Only seeing a man who does not work and simply stays, one cannot say for sure if he really wants to work or if he has searched for work, or did something in this aspect. Therefore, the two motivational terms have to be operationalized to be further useful for economic analysis. Thus, definition becomes: On unemployment, a person is unemployed if: a) has no job, but during the survey he presented proves that he is searching for jobs several weeks before and he is ready to work. b) he/she has already applied for several jobs and is waiting calls for settle interviews. Only at this level of operationalization, we can measure, asses unemployment.

On operationalize method, great math professor Percy W. Bridgman in his book Logic of Modern Physics published in 1927, asserted that: The meaning of a term is given by what a scientist can do with it, is not given by what theory claims can do with it. Also, Percy W. Bridgman claimed that operationalize method is an extreme form of empiric method. (Boumans and Davis, 2010: 14)

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The nomologic – deductive model of Carl Hempel and the pitfalls of deduction

In the 19th century, science was working after clear algorithms. All was beginning with direct and observation, free of any disturbing factor. Then, using induction, scientists were analyzing consecutive cases, which eventually have been leading to general laws. Afterwards, these laws and their supporting theories were verified matching the laws to empiric facts. This is the inductive perspective over science, and was a mainstream until the discovery of hypothetical-deductive model of scientific explanation (Blaug, 1994: 4). Explanation is the answer to "why?". And scientific explanation answer to the same question, but using a model, a law, a regularity matrix. Therefore it appeared the deductive – nomological (law) model of Carl Hempel. This model has EXPLANANS (meaning true statement from which it will emerge a law) and an EXPLANANDUM, which explains the mechanism of logic deduction. (Hempel et Oppenheim, 1948). Nevertheless, this model doesn't mean that if we accept an explanation, we surely shouldn't accepted a different one, too. The model has one or more laws, true statements and conclusions. For example, the law could be: when the price for a good is increasing, the demand for it is decreasing. Yet, Carl Hempel's model has a pitfall. Not all deductive correct inferences can be accepted as explanations. Let us analyse the following example, brilliantly presented by Marcel Boumans and John B. Davis (2010: 15): Law: Nobody who takes birth control pills under medical prescription gets pregnant. Statements: George takes birth control pills under medical prescription. Deductive conclusion: George does not get pregnant. As we can see, this cannot be an explanation, even the logic, deductive procedure is correct.

Another example could be: Law: At circus, or at zoo, the probability that animals would attack the tamers/animal trainers lowers, if animal get fed properly and in time. Statement: Pigeons get fed properly and in time. Deductive conclusion: Pigeons won't attack the tamers. This is not an explanation, generally, pigeons do not attack tamers or men.

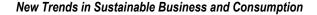
Another example could be: Law: When the price of a good rises, demand for it will lower. Statement: In pravoslavnic, Christian orthodox countries, the demand for meat is lowering every year between February and May. Statement: In these countries in this period the demand for meat has decreased. Conclusion: In pravoslavnic, Christian orthodox countries, meet demand lowers in that period because price rises. So meat prices have grown. Meat is a superior food, its demand is elastic related on price, it is very normal to lower when price rises. But the explanation is incomplete. In that period, every year, in Christian orthodox countries there is Easter. Some people, for example in Romania many enough, are fasting. That is way they don't eat meat, not especially because of the price.

Another example could be: Law: If the purchase power of a currency is growing, the exports of that country will be too expensive, therefore they will decrease. Statements: Chinese Yuan got more purchase power against the Euro, therefore in Italy the imports of food from China became expansive. Conclusion: Therefore, in Italy, imports of pasta from China will decrease. Nevertheless, in Italy is preferred Italian food products, and especially pasta made in Italy. Anyway, Chinese pasta, made of rice, are not a part of traditional Italian menu.

This is why we need antecedent domain, to overcome the limits of deductive – nomological (law) model.

The methodology of positive economics

In 1738 David Hume published "Treatise of Human Nature" and stated the famous proposition – "one can not deduce ought from is". His contribution for the difference between positive and normative can be synthesized in Hume's guillotine (Hume, 1987):





POSITIVE	NORMATIVE
is	Ought to
facts	values
objective	subjective
descriptive	prescriptive
science	art
True/false	Good/bad

Source: Black, 1970, p. 24 in Blaug, 1994, p. 112

"Is"-Statement are true/false but they are not telling anything about the status of the world. "Ought"-Statements asses the status of the world, approve or contest, appraise or accuse, and use arguments to convince the others.

In 1891 economist John Neville Keynes (father of great John Maynard Keynes) published "The Scope and Method of Political Economy", being one of the first who underpinned the difference between positive science – meaning what actually is, and normative science – what ought to be, claiming that there is a distinct positive science of political economy (Keynes, 1891:34-35). The often confusion between the two terms, positive economics and normative economics is to some extent inevitable. This is happening because there a permanent temptation for economists to shape the conclusions of positive economics if they are not fit to the goals. For example, if the government wishes to encourage the growth of population or the natality in a territory, it will reduce taxation and will offer houses and land and different tax cuts to those who wish to establish there. The government will cut taxes and will offer loans at preferential in poor areas for sustain their development. Conversely, the government is also able to raise taxes to protect national branches of industry, unable to face foreign competition. Therefore, if taxation is good or bad, it depends only of perspective and what government intends to do.

Positive economics is that form of economics freed of any ethical or moral content, or normative judgment. We need positive economics to discover systems made from general statements for appropriate predictions when context changes. Therefore, positive economics should make predictions. Some economist and philosophers wished that economics become a positive science like sciences derived from physics. But economics is related to human relationships, and the scientists by themselves can be a part of subject matter for investigation. Sometimes it is difficult to separate positive economics and normative economics (Koopmans, 1947). The two cannot be completely independent, because governments usually have future goals and need simulations. Simulations are to be made on the basis of already exists, so normative economics depends on positive economics. The differences in economic policy depend on differences of predictions of future economic consequences. For example, if there is economic growth, the predictions about government budget based on taxation are good. Therefore, the government will calculate that it can reduce taxation a little, without affecting the expected budget before the economic growth. Conversely, the budget might even grow a little. There is hope that the tax cuts will discourage the tax evasion and more economic agents will pay their taxes. Thus, more funds will be available to invest in infrastructure to create more jobs (Myrdal, 1953).

Positive science makes predictions and uses for this task: language for analysis and hypotheses to abstract the reality. Afterwards, the theory is assessed after its power of prediction and to explain classes of phenomena. Validation of the hypotheses is made by comparing its predictions and real life experience. Thus, there is the following cases: a) A hypothesis is rejected if its predictions are contested; b) A hypothesis is accepted if its predictions are not contested (it means that the hypothesis will be accepted until a better one

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will be available); c) A hypothesis gains great trust if its predictions resist to several attempts and still cannot be contested; d) A hypothesis is confirmed if its predictions fit with the real life experience. Nevertheless, one might said that a hypothesis will never be true, proved, but only accepted. The most interesting thing is that predictions can be done for the past as well, not only for the future. All that it matters is that the hypotheses are confirmed or rejected (Blaug, 1994). For example, the disappearance of settlers from Greenland and some villages in Alps between 1600 and 1700 lead to the hypothesis of climate change along with possible social and historical events usually to be blamed. Nowadays, technical progress allowed to date and to analyze chemically the samples of ice and rock and the hypothesis was validated. Between 1550 and 1850 in West Europe was a little Ice Age. During this period, temperature tumbled and famine raised, cities from cold are depleted of population and the glaciers shift destroyed the villages of high altitude.

The four types of the hypotheses assessment reveal that the validity of the hypothesis does not constitute sufficient criteria to choose between alternative hypotheses. If there is a hypothesis related with an observable fact, then there will be a multitude of hypotheses, maybe an infinity of hypotheses related with that fact. For example, if we observe that the quotation for a particular company tumbled on the stock market, on the main hypothesis that economic indicators will reveal a bad report about its future, then other different hypotheses could also be related to the case: deflation, too much invest or buy back of own shares, raise of purchase power of the national currency which make exports to expensive. With every data or additional fact the number of hypotheses should reduce and provide thus more accuracy. But it never will remain in the end only one. To sum up, when there are more hypotheses using the same data, the chosen hypotheses will be: the most simple to explain, the most probable to happen and the most fruitful fur further analysis, with soft methodological limits. And, important as well, a hypotheses is preferred if it has fewer prerequisites conditions (Blaug, 1944).

The boundary between positive economics might be a consequence because economics is claimed to be a said science. And this is a consequence of the fact that mainstream is relying on the following hypotheses: Man is a shellfish being and is interested mainly on his personal interest; man is interested on material wealth; life is a continuous trade-off between gain and loss, pleasure and effort and opportunity cost; man is in a continuous run and state of alert; man has to change permanently and to evolve, otherwise he will be surpassed; the market game should be perfect; competition should be pure and perfect; labor and capital should be homogenous; economics as positive science is a whole of conventions accepted on economic phenomena. Progress needs new hypotheses, not only acceted old hypotheses, inspiration, imagination, vision, intuition, more examples than theorems and definitions (Blaug, 1944).

Case study: Paretian optimum and positive economics

Paretian optimum is about efficiency of alternative arrangements for given needs: if markets are in equilibrium, there is no variation able to permit a better status for one man, without alters the status of at least one another man. Thus, men chose according to their own interests. There is no need to know what are these needs. It is enough for Paretian optimum to be considered just needs. Man has a map of preferences, meaning a map of wealth. If a man lives in a status A, and there is a status B better than status A, then man, if possible, will move from A to B. Pareto optimum rises the following situation: under what formula the switch from A to B of a man will affect the wealt of another man? Or under what circumstances a PPI should be gained? (potential Pareto improvement)? PPI means a compensation for wealth loss for a man, while another man has just gained something on expense of the other man. This is a true positive economics situation, because value judgments is only if one might analyze the content of PPI (Archibald, 1959: 327 in Blaug,



1994). Once again, Pareto optimum is an example of positive economics because is interested only on shift of satisfaction between two statuses A and B for one man, respectively the reallocation of satisfaction between two parties, once which gains, one which loses.

Conclusions

In all, the methodology of positive economics reveals old limits and new quests. On the one side, on theoretical field there is still interest to bring economics closer to the core sciences like mathematics and physics, whereas there is also practical interest to provide practical solutions to real life, and this means that social facts are to influence and lead to normative issues.

The main contributions of this paper is to provide a different perspective of the methodology of positive economics, and the implications of shifting to much to only one side, normative, or positive. However, the methodology of positive economics is open to be completed by normative economics, in order to provide the best solutions within the key frame of economic policy.

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