Is it economics? The case for a broad approach to economics research

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Abstract

This paper considers whether conventional approaches to economics research may be overlooking some possibilities. While emphasising certain types of data and analytical techniques, other aspects are downplayed. These alternatives may supplement and add value to existing work. The point is made by considering six perspectives: i) available information and efficiency in research; ii) "econometrics as history"; iii) theory as analogy; iv) questions for policy; v) data availability; and vi) outcome focus.

Introduction

Since submitting the abstract for this conference paper and giving some seminar presentations on the same theme, I have found that any ripples that I might cause would be miniscule in comparison to a major international initiative in the establishment of the World Economics Association.[2] Announced on 16 May 2011, it had over 3,500 members within a week. The first commitment in its manifesto is:

> To *plurality*. The Association will encourage the free exploration of economic reality from any perspective that adds to the sum of our understanding. To this end, it advocates plurality of thought, method and philosophy. (World Economics Association, 2011)

Many economists, when asked about the nature of economics research, will emphasise mathematical models and econometric techniques. For these approaches there are recognised conventions or criteria to follow. The same does not always apply to the same degree with research outside these bounds. Moreover, it has been suggested that "in recent economics it appears

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increasingly rare for individuals trained in different research approaches...to understand one another's research" (Davis, 2006, p. 10). Consequently, some forms of less conventional economics research could be considered risky, especially for research students, but also for those seeking refereed publications.

Despite the security of the familiar, there are good reasons for taking a broad view of economics research. Six possible explanations follow.

Six explanations

1. Available information and efficiency in research

Especially with new information technology, there has been a change in the volume and nature of available information and in the methods for analysing such data. In particular, textual data are more accessible and searchable internationally, with low cost access to many policy documents, for example. Given a change in the cost structure for undertaking research, it might be imagined that an efficient researcher familiar with economic theories of production would adapt the type and mix of research methods used.

This may require some adjustment for those accustomed to economics research in the form of mathematical modelling or econometric estimation. For such researchers, textual input occurs primarily at the literature review stage and has little significance for the actual analysis. However, it can comprise a larger part than just lit. review. Analysis of textual information has many forms and is itself research (Johnson & Christensen, 2012; McKee, 2003). Not only are documents a source of data, but also they may have additional significance. One such dimension is described by Prior:

> Approaching documents as topic rather than resource ...opens up a further dimension of analysis, which concerns the ways in which documents are used in social interaction and how they function...Examining the role of documents in a network generates questions about what documents 'do', rather than what they 'say'." (Prior, 2008, p. 112)

There is an additional dimension to this also. Research does not always require a new, distinct piece of analysis. Meta analyses are recognised as having value, but it is also acknowledged that novel combinations of existing knowledge can give valuable insights. Hence:

> "…every new innovation consists of a new combination of existing ideas, capabilities, skills, resources etc. It follows logically from this that the greater the variety in these factors within a given system, the greater the scope for new combinations of these factors, that is, new innovations…" (Fagerberg, 2003, p. 7)

A similar point is made also by Schumpeter (1934, p. 66) on new combinations, and Weitzman (1998) on recombinant growth. Katila (2002) made the point that new combinations can come from new ideas within an area, or the incorporation of old ideas from elsewhere, with "external knowledge" being more likely to provide unique developments.

While economists may simply state the information that is being used in a study, a more complete description of the research would explain why other readily available information is **not** being used. The significance of this point is emphasised in the concept of **"framing"**. This has been widely described as **"selection, emphasis, exclusion, and elaboration"** (Weaver, 2007, p. 143). In other words, the way we see phenomena depends on what we choose to include or exclude, as well as the aspects that we choose to emphasise or elaborate on. So the first point is that exclusion of information is not an inconsequential act. How do we justify excluding available information?

An alternative perspective on this point is described in the following section.

2. Econometrics as history

Econometric data describe situations that have already occurred. Analysis of these data is therefore a form of history. When compared to the rich variety of sources and methods used by historians, econometrics implicitly excludes much of this information from the analysis. Rather than treating this as a starting and unstated assumption, we could (and should) ask ourselves this question. **Can we justify not using these data?**

Figure 1 Data

Economics research might be enriched through inclusion of some of this additional material. This would commonly involve the use of alternative techniques in place of, or in addition to, the more conventional tools. Seen from an alternative perspective, historians may consider a wider range of relationships between the chosen variables than is commonly found in econometrics.

In an insightful series of lectures presented at Cambridge in 1961, Carr (2008) stressed that historical facts are not predetermined. Rather, it is the historian who selects from the wide range of information to decide which particular points are of historical significance. There are numerous influences on this choice, and, to quote another historian:

> Any account of anything is bound to be selective. The human intellect does not have the capacity for comprehending the sum of things in a single panoramic view. Selection is unavoidable, but it is also inevitably arbitrary; and, the greater the mass of information from which a selection has to be made, the more disputable will be the investigator's choice." (Toynbee, 1976, p. x)

The econometrician, by selecting only the information suitable for econometric analysis and using only the functional forms that can be estimated econometrically, is being selective by default. The framing is determined in large part by the research methodology, but it can be very important in shaping what is seen and not seen and the explanations arising from these observations. The second point is therefore that some common research techniques automatically exclude much available information.

3. Theory as analogy

> "GREENSPAN: Well remember...an ideology is...a conceptual framework...the way people deal with reality. Everyone has one. To exist, you need an ideology. The question is whether it is accurate or not. And what I'm saying to you is yes, I've found a flaw...
> WAXMAN: You found a flaw in the reality...
> GREENSPAN: Flaw in the model that I perceived as the critical functioning structure that defines how the world works.
> WAXMAN**:** In other words, you found that your view of the world, your ideology was not right.
> GREENSPAN: Precisely." (James, 2008)

Theoretical structures are frequently intended to give insights into real world phenomena. They may be thought of as representations of, or ways of seeing, the real world. This was Greenspan's perception and is suggested by the use by Kuhn and others of the term, "paradigm". However, this can be misleading. A **paradigm** is, "a system of ideas or theoretical principles that determine, maintain and reinforce our way of thinking about an issue or a topic" (Plowright, 2011, p. 177). It is a way of looking **at** something, and has been described as a form of framing, "In his book *The Structure of Scientific Revolutions* (1970) [Kuhn] suggests that science, at any given historical moment, is **framed** by a particular paradigm or worldview" (Hesse-Biber & Leavy, 2008, p. 2).

In contrast, an **analogy** is always an alternative representation. "Analogy" is therefore a more appropriate description of theory. A model is a model, not a view of the world. It is therefore more appropriately described by the term "analogy". This emphasises that the theory is an alternative structure which, it is hoped, resembles in some ways and may help to explain or understand the object of interest.[3] According to the blind men and the elephant, an elephant is "like a wall", "like a tree", etc. (Saxe, 1878). Similarly, from a range of perspectives we draw analogies. Markets are "like supply and demand diagrams", consumers made decisions as if according to indifference curves, and optimal decisions for the real world might be thought to match theoretical optimality criteria. We hope that there are similarities between the phenomena and the explanations, but they are not the same.

[3] IN the context of law, Sunstein (1993) considers there to be a distinction between analogical reasoning and the use of general theories, but the distinction could alternatively be considered in terms of the nature of the analogy.

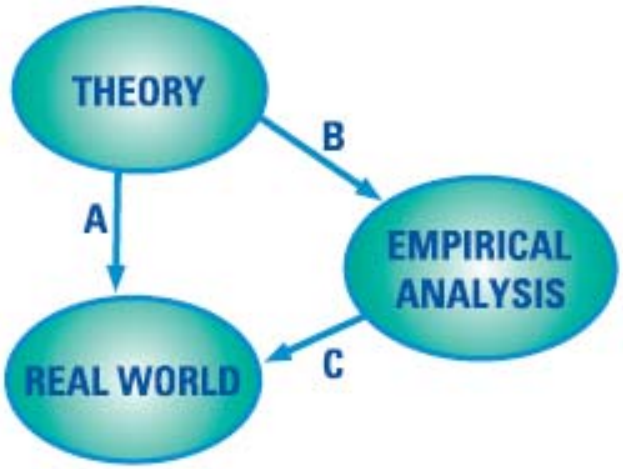
One area in which debate has arisen is that of positive versus normative perspectives as described in the notable Friedman (1953) article. Recent discussion on this point includes criticism of the assertion that a positivist perspective can be taken in the social sciences. Hughes and Sharrock suggest that the claim was based on an inflated view of the strength of the natural sciences arising from a focus on the achievements of physics. “Had the social sciences measured themselves against one or other of the natural sciences apart from physics...then the status of the social sciences *as sciences* might have seemed a good deal less problematic” (Hughes & Sharrock, 1997, p. 197). They suggest that geology would have given social scientists as more realistic analogy against which to set their standards and measure their achievements. It would therefore have provided a better basis for comparison.

The comparison with the physical sciences can be taken further. Plowright describes the scientific approach as a paradigm in which “the world we inhabit has an ontological reality, an existence that is not dependent on our perception, understanding or descriptions of that reality or world”, whereas “[a] constructivist paradigm, in contrast, claims that reality is mind-dependent and is socially constructed through the relationships, psychological activities and shared understandings that we all take part in” (Plowright, 2011, p. 177). He suggests that social phenomena, and hence the social sciences, depend on perceptions and hence do not fit the scientific model. His reservation about the social sciences is valid, but he overstates the position of the physical sciences. Even where there is an ontological reality, scientists are describing a perception of that reality through a framing process. While the object of study may have an existence outside our perception, this does not mean that our perceptions of the object are independent of the framing we choose to apply. The “theory as analogy” framing would therefore apply to all the sciences.

To take this point further, Kuhn (1970) with “normal science” and others, including Galbraith (1999) with his discussion on “conventional wisdom”, note that group culture and political influences serve to shape dominant views. "The work of Kuhn, and the sociologists of science... showed that scientific change had little to do with the shape science obtains through the application of a general rational method, and more to do with the fact that it is a social institution." (Hughes & Sharrock, 1997, p. 93) A similar point is made more generally by Hardin (2002) with his concept of “street-level epistemology”, which suggests that much of what we know consists of information and views passed on from others. While he places this in the context of the general public, the same applies elsewhere, including academic disciplines.

This alternative framing of our methods suggests an additional layer of investigation, or set of reservations, when applying theoretical approaches with the aim of explaining the real world. What assumptions are being made, and are they realistic for this particular application? What does the model leave out that we also have to consider? To return to the blind men and the elephant, if a policy works on a wall, can we conclude that it will also work on an elephant? We must remember that **the wall is not the elephant**. This point is indicated by arrow A in Figure 2.

Figure 2 Gaps in analysis



The ovals in Figure 2 for theory and empirical analysis are intended to represent the bodies of knowledge covering those respective areas. It is hoped that internally the rules of logic are followed. Neither of them represents the real world, however. The three arrows indicate where information from one area is applied in another. A and C represent theoretical and empirical findings which are used in an attempt to explain and understand the real world. Arrow B indicates that there is a jump from theory to empirical representations. All three arrows denote steps where one representation is taken to apply elsewhere, and often unstated assumptions are made.

Theoretical approaches present simplified representations , and so policy recommendations developed within one approach may prove less than satisfactory in their effectiveness or universal applicability when tried in practice. One paper which describes numerous attempted policy directions to improve public sector performance is Dunleavy, Margetts, Simon and Tinkler (2006). Table 1 in their paper lists “the key components of new public management” including such initiatives as purchaser-provider separation, quasi-markets, corporatisation and privatisation. They give summary assessments of 34 initiatives in “leading edge” countries. Of the 34, for 13 the trend

has been reversed, for 13 the trend has substantially stalled, and for 8 the trend is still spreading. It might be reasonably imagined that each of the 34 is based on a theoretical view of the way the institutions and society function.

The third point is thus that our representations of the real world do not portray the real world itself, they are no more than analogies.

4. Questions for policy decisions

There are many questions that economists might be expected to ask when considering policy questions. These include consideration of feasibility, magnitudes of achievable change, costs and benefits, alternative options, and timing of impacts, to mention a few. Model estimation only goes part of the way towards addressing these matters, although they are legitimate research questions in their own right. Nine such questions on policy implications from a single regression equation (path C in Figure 2) were presented in Birks (2008), in addition to policies to change the relationship:

1. Can you change X?
2. At what cost?
3. How much control is there over this change (how precise are the changes in X)?
4. How variable are the effects on Y?
5. What lags are there?
6. What is the **value** of the resulting change in Y (what is the benefit, does it outweigh the cost)?
7. Are there any distributional effects (gainers, losers)?
8. Are there any side-effects?
9. Are there other policy options available?

Broadly defined research questions would incorporate additional factors such as these, even though they might have to be addressed using less formal structures. In addition, markedly different approaches to policy research can be found elsewhere in the social sciences. These suggest that there may be other dimensions that may be of value. The approaches include action research (Birks, 2010; Stringer, 2007) and grounded theory (Strauss & Corbin, 2008). Both of these differ from the "detached observer" view of research.

Action research has been described by Egon Guba as a reaction to the search for common, general findings (Stringer, 2007, p. ix), an approach inherent in econometrics. It often combines qualitative and quantitative methods and involves close involvement in specific situations. It is used especially in areas such as health and education where individual characteristics may be important.

Grounded theory allows insights from personal experience or involvement to assist in shaping what is seen and how it is seen. “One does not begin with a theory, then prove it, rather one begins with an area of study and what is relevant to that is allowed to emerge." (Strauss & Corbin, 1990, p. 23) It may be that a detached approach results in investigation of a limited range of possibilities arising from prior knowledge or belief. If so, it is potentially a highly restrictive perspective. Grounded theory could be criticised on the grounds that someone with personal experience cannot be an impartial observer. However, the impartial observer view of research has itself been widely criticised as unrealistic (Guba & Lincoln, 1994). Researchers are not operating in a vacuum, so impartiality may be illusory. Subjectivity may also guide ostensibly impartial, detached researchers as to what results appear reasonable. Conversely, there are many situations where personal involvement provides insights which can lead to fruitful analyses (as indicated by the etic/emic distinction mentioned by Guba and Lincoln[4]). Hence, “We can use the experience of [a personal example], not as data per se, hut as a comparative *case* to stimulate thinking about various properties and dimensions of concepts” (Strauss & Corbin, 2008, p. 80).

So my fourth point is that research questions, especially if based on a particular theory or technique, may leave additional aspects still to be considered for reasoned policy making.

There are two additional points that will be briefly mentioned.

5. Current knowledge and data

For many developing countries, changing institutional structure and data limitations affect the research possibilities. It may not be possible to undertake standard analyses. The existing knowledge base on the countries’ economic circumstances may be limited. For many students from overseas,

[4] “The etic (outsider) theory brought to bear on an inquiry by an investigator (or the hypotheses proposed to be tested) may have little or no meaning within the emic (insider) view of studied individuals, groups, societies, or cultures. Qualitative data, it is affirmed, are useful for uncovering emic views.” (Guba & Lincoln, 1994, p. 106)

their funding comes with a requirement that they do relevant country- and issue-specific research. What can be done with the available information to increase our knowledge of these economies? Alternative approaches, or, as the World Economics Association terms it, plurality, may be both required and desirable. The value of alternative additions to a knowledge base depends in part on the nature of the existing knowledge. For example, there may be value in analyses which focus on data definition and interpretation, understanding institutional structures, and applying evidence from elsewhere with associated reservations. Useful information on policy options may be found in the experiences of other similar countries, rather than concentrating on those economies and societies which have established databases and large volumes of existing research.

A fifth point is therefore that the value of new research should not be judged solely on the sophistication of the techniques or the quality of available data. It depends also on the existing body of knowledge, and this can vary from country to country, or issue to issue.

6. Focus on outcomes

Economics focuses heavily on equilibria and optima. However, issues of process and adjustment paths may also be important. This point is made somewhat unflatteringly for economics in the following quote:

> "In consequentialism, the consequence of an action justifies the moral acceptability of the means taken to reach that end. The results of actions outweigh any other consideration; in other words, **'the end justifies the means.'** Jeremy Bentham was an early and influential advocate of utilitarianism, the dominant consequentialist position. A utilitarian believes in 'the greatest happiness for the greatest number.'" (PHG Foundation)

It would be rare for equilibria and optima to be widely achieved, so we are commonly experiencing adjustment and second best environments (if we assume economics' "first best" outcomes to be really optimal). Even if they were to be regularly achieved, the means of achievement may also be of concern. A related point was made for different reasons by Tyler (2000) in his discussion of procedural justice. Briefly, people may apply the heuristic that, if proper procedures are followed, then the outcomes should be accepted. Consequently there is reason to pay attention to procedures. An additional call for broader assessments is made by DeMartino (2011, p. 32), who writes, "In practice the Pareto and Kaldor-Hicks efficiency criteria often serve as decision rules in

economics, even if in principle economists know that other criteria, too, should inform policy making".

A sixth point is thus that there is value in additional analysis of processes of change both for assessing desirability and for understanding feasibility, lags and adjustment.

Closing remarks

While it might be hoped that there are some absolute truths that can be determined as a result of research, all research involves decisions on the choice of questions, selection of the data and the choice of methods. Issues are framed in particular ways. Implicitly or explicitly, decisions are made to deny certain questions, to exclude some data and methods, to emphasise others, and to elaborate on some aspects but not others. As economists we would, in theory at least, suggest that an optimal decision comes from consideration of all the possible options. However, all research is bounded and choices are made. As Weaver and others state, there is selection, emphasis, exclusion and elaboration. Perhaps we should ask ourselves whether we can justify the particular denials and exclusions associated with our choice of approaches to research.

In terms of economics research, the above six points are intended to illustrate the range of possibilities for more diverse approaches and sources of information. The points also suggest that we should be aware of limitations inherent in any research. In particular, recognition of theories and models as analogies is a useful precaution against overstating the value of findings and understating the complexity of real world phenomena.

While such points indicate that caution is required, others, such as the comparison with history, suggest that as economists we may have been restrictive in the data and methods we have emphasised. Telling in this regard is Carr's description of the historian's selection from available information to specify what then become "the facts".

Our techniques implicitly make many of the choices about data for us. As demonstrated in numerous research methods texts, mixing quantitative and qualitative methods is becoming more common, and Guba and Lincoln's criticisms of positivist approaches in the social sciences cannot be lightly set ignored.

Additional issues are highlighted by the distinction between theory, empirical analysis and the real world. These lead to consideration of additional questions which should be asked when considering policy issues. This is important not only in its own right, but also as an indicator of the relevance of our research. Are we addressing economics questions for economists, or more general questions, or economic aspects of those questions, for a wider audience?

One term that has not been mentioned in this paper is "rhetoric". It was recognised by Adam Smith (1963) as being important for deliberation on policy and on law. The six points above suggest that we may be overstating the degree of our understanding or understating the complexity of the issues we consider. If so, there may be a rhetorical component in the presentation of our findings. This may be inevitable, but, if so, it should at least be recognised.

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