

SOME LEGACIES OF ROBBINS' NATURE AND SIGNIFICANCE OF ECONOMIC SCIENCE

Address To Conference Celebrating
the 75th Anniversary Of Lionel Robbins'
*Essay On The Nature And Significance Of
Economic Science.*

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“Surely it consists in just this, that, when we are faced with a choice between ultimates, it enables us to choose with full awareness of the implications of what we are choosing. Faced with the problem of deciding between this and that, we are not entitled to look to Economics so the ultimate decision.... But, to be completely rational, we must know what it is we prefer. We must be aware of the implications of the alternatives. For rationality in choice is nothing more and nothing less than choice with complete awareness of the alternatives rejected. And it is just here that Economics acquires its practical significance. It can make clear to us the implications of the different ends we may choose. It makes it possible for us to will with knowledge of what it is we are willing. It makes it possible for us to select a system of ends which are mutually consistent with each other.” (152)

II. The Methodology Of Intuitively Obvious Assumptions

“The efforts of economists over the last hundred and fifty years have resulted in the establishment of a body of generalizations whose substantial accuracy and importance are open to question only by the ignorant or the perverse” (1).

- Lest we have any doubt about their relevance: “It is a characteristic of scientific generalisations that they refer to reality” (104).
- Lest we have any doubt about their certainty: “[O]ur belief in these propositions is as complete as belief based upon any number of controlled experiments” (75).

Our response

Many of the intuitively obvious assumptions turned out to be wrong.

For example, Robbins has a very fine discussion of the proposition that “bygones are forever bygones” (52).

- As a normative proposition guiding those who wish to maximise something, this is important.
- But as a self-evident assumption on which to base positive predictions about behaviour, current research has shown it to be flawed. People’s behaviour often reveals them to be acting as if bygones did matter.

The view that economics can be about the world and yet be based on untested, intuitively obvious assumptions pervaded much of economics long after Robbins wrote.

General equilibrium theory as developed by Arrow and Debreu began by investigating an interesting question concerning the existence of a competitive equilibrium—a question first tackled formally by Walras.

- Arrow and Debreu established the existence of a competitive equilibrium under certain assumptions the main ones being
 - technology is given
 - tastes are given and market decisions are based on these tastes that in turn depend only on the goods and services an individual consumed.

- The assumption about tastes was long thought by many (most?) economists to be intuitively self-evident.
- That part of welfare economics that relates to welfare optimisation, rather than just to efficiency, is erected on these assumptions.
- Sen's capabilities approach (2000) was an elegant redirection away from this assumption further research as summarised by Layard (2005) showed that it could be seriously challenged on empirical grounds.
- Hence, the strong advice given, then and now, about policy measures required to increase economic welfare were, and still are, based on a very shaky foundation.

III. Facts As Illustrations Rather Than Tests

Three places of factual observations in economics

1. as “...a check on the applicability to given situations of different types of theoretical constructions” (116).
2. discovering constraints that cause behaviour to deviate from predictions.
3. may expose “...areas where pure theory needs to be reformulated and extended.” (118)

In summary: “Realistic studies may suggest the problem to be solved. They may test the range of applicability of the answer when it is forthcoming. They may suggest assumptions for further theoretical elaboration. But it is theory and theory alone which is capable of supplying the solution” (120).

“Ought we not to wish to be in a position to give numerical values to the scales of valuation, to establish quantitative laws of demand and supply?”

“...*there is no reason to suppose that uniformities are to be discovered.*”

So measurements taken at a particular time and place have no

“...*permanent* significance—save as Economic History” (109 italics in original).

I criticised this position in the first edition of *An Introduction to Positive Economics*

1. First, even if *a priori* reasoning suggests that a particular relation will not stay constant over time, only empirical observation can establish if this is so.
2. It is important to know just how stable or unstable any relation is.
3. even if there is substantial variations in the relation under consideration, only empirical observations can show if these variations appear random or systematic.

“First, if an economic theory is to be about the real world, it must be possible to imagine observations that would conflict with it. If conflicting observations cannot even be imagined, the theory is compatible with all states of the world and hence empirically empty. A great advance in making theory more relevant would be achieved if today’s editors insisted that each author state what factual observations would conflict with his or her theory, and, if there were none, to state the theory’s purpose. Second, a new theory should be compatible with (‘explain’) some existing facts and suggest some new one(s).” Lipsey in *Palgrave*

“internally driven research programs” (IDRPs), are driven by attempts to understand problems created by the programs’ models rather than problems arising from empirical observations related to the models.

- Often begins with a factual question.
- A simple model is developed yielding strong answers.
- Investigators then ask would these predictions stand up if we altered the model to make it more realistic.
- If empirical observations are used in the program’s later stages, the question is usually: Can the model be made to track the data?

"The policy issues related to economic growth are numerous and intricate. ... While the logical aspects involved in these exercises are much better understood now than they used to be, perhaps the weakest link in the chain is the set of empirical theories of growth that underlie the logical exercises. *Possible improvement of policies towards growth that could be achieved through a better understanding of the actual process of growth remains substantially unexplored.* It is partly a measure of the complexity of economic growth that the phenomenon of growth should remain, after three decades of intensive intellectual study, such an enigma. It is, however, also a reflection of our sense of values, particularly of the preoccupation with the brain-twisters. Part of the difficulty arises undoubtedly from the fact that the selection of topics for work in growth economics is guided much more by logical curiosity than by a taste for relevance. The character of the subject owes much to this fact." (Sen, 1970:33 Italics added)

“The first round of neoclassical growth theorising produced little of relevance because it started without a set of facts to be explained and to constrain its theorizing... [I]nternally generated questions produce internally directed answers. After nearly twenty years of intense activity by some of the worlds’ finest economists, not one word of advice could be given to policy makers that was not available 20 years earlier—except the potentially misleading advice that a society’s long-term growth rate was unrelated to its willingness to save.” (Lipsey, 2001:181)

“externally driven research programs” (EDRPs) contrast sharply with IDRPs.

Programs that are driven by, and constrained by, observed facts.

A good example is provided by the evolution of theories concerning monetary and fiscal policy through the long set of debates between Keynesians and old fashioned monetarists that raged through the 1950s, ‘60s, and 70s.

- The conclusion can be dated in 1980 when the Keynesian, James Tobin, joined the monetarist, David Laidler, in a debate that was subsequently published in the *Economic Journal* (Tobin 1981 and Laidler 1981)

- They differed on second order matters but revealed no discernible differences of underlying models or of fundamental assessment of what were the key relations that governed the economy's behaviour and what were the key policy conclusions regarding fiscal and monetary policy.
- Although it generated much heat the end result was much light.
- The extreme position of each of the two schools was moderated in the light of the accumulating evidence, until their differences were slight compared with their agreements.

IV. Absence Of Context Specificity

Universally applicable generalisations

“It has sometimes been asserted that the generalisations of Economics are essentially “historico-relative” in character, that their validity is limited to certain historical conditions, and that outside these they have no relevance to the analysis of social phenomena. This view is a dangerous misapprehension” (80).

Criticism

1. The preference functions that drive behaviour do appear to vary across societies, at least to some extent.
2. The failure of the rush to marketise the former USSR’s command economy
3. The IMF and World Bank’s one-size-fits-all view on correct economic policy as enshrined in the policy of ‘structural reform’ has proven to be a failure.

No economic analysis of historical processes

“Our models implicitly assume the institutional circumstances that underpin modern market economies, such as private property, limited liability, and the rule of law. They also assume the specific institutions involved in the West’s invention of how to invent... [that] made the West’s growth process self-sustaining.... Because of their structure, they apply only to countries whose growth depends to a significant extent on developing from their own resources new technologies, both fundamental and derivative. Thus, they are not meant to apply to countries whose growth processes are more or less completely driven by the diffusion of technologies developed elsewhere. Nor are they meant to apply to those whose GPTs are currently static and who seek conditions that would allow them to enter a period of sustained growth.

No economic analysis of historical processes

All these qualifications illustrate once again the issue of historical specificity: the richer the explanatory power of a theory and the more predictions that it makes, the more restricted is its range of applicability in both time and space. Finally, we observe that there is no single ‘correct’ way to make the historical specificity trade-off. All growth processes have things in common, and to deal with these, very general theories are helpful. But all growth processes also have many aspects that are more specific in time and place. To deal with these, and, therefore, to get to deeper levels of explanation requires less generality and more specificity.” Lipsey, Carlaw & Bekar *Economic Transformations* (467)

Explaining the emergence of sustained growth

“The conflict between Robbinsian generality and historical specificity can also be seen in theories of how the West turned the episodic growth of earlier eras into the sustained growth that was initiated by the two Industrial Revolutions.

- The highly popular unified growth theory (UGT) that model the take off into sustained per capital growth are general, containing nothing that would distinguish one economy from another.
- As a result, they predict that any country could have generated its own endogenous industrial revolution and the resulting transition to sustained growth. All that was needed was a sufficient passage of time.
- In contrast, most economic historians argue that local conditions were important in generating the West’s Industrial Revolution and the sustained growth that it ushered in.

No interest in technological details

“The technique of cotton manufacture, as such, is no part of the subject-matter of Economics...” (33). “Economists are not interested in technique as such” (37-8). “The precise shape of the early steam engine and the physical principles upon which it rested are no concern of the economic historian as economic historian—although economic historians in the past have sometimes displayed a quite inordinate interest in such matters” (41).

No interest in technological details

Most students and many theorists of economic growth see no need to have the kind of knowledge found, for example, in Usher's *History of Mechanical Inventions* (which is the book I suspect Robbins had in mind in labelling such interest “inordinate”).

The opposing view: technical change lies at the heart of long term economic growth and that to understand such growth sufficiently to develop policies to influence its magnitude and direction requires a detailed knowledge of technologies and of how they change such as is found in the writings of Nathan Rosenberg and Alfred Chandler Jr.

No interest in technological details

Two examples of this non-Robbinsian view.

Example 1:

We argue that the transition to sustained growth brought about by the two Industrial Revolutions was to a great extent the result of the culmination of three trajectories of technological advance that combined scientific and technological developments over several centuries:

- the steam engine
- automated textile machinery
- electricity

To understand these trajectories, why, how, and when, they occurred, and why they did not occur outside of the West, and why they turned episodic into sustained growth one needs to know a lot about technologies, including much of what is in Usher's great book.

No interest in technological details

Example 2

Vernon Ruttan (2006) has argued that changes in US institutions make it increasingly difficult for the US to develop of new general purpose technologies (GPTs), which are the main engine of long term growth.

- Cannot assess the strength of his argument, or its policy implications if it is true, unless one knows a lot about the technical details of GPTs
- Not just the kind of abstract models that are found in Helpman (1998), useful through they are;
- one needs to know the engineering details of GPTs and how they evolve over decades to become highly efficient, and universally used for multiple purposes.