Defining Economics: Robbins' *Essay* in Theory and Practice

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Defining Economics: Robbins' *Essay* in Theory and Practice

> Economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses. (Robbins 1935: 16)

I. Introduction

Robbins's *Essay* was significant in many ways. Its critique of interpersonal utility comparisons had an important effect on welfare economics (see Backhouse and Nisizawa, in progress). Its focus on the legitimate domain of science served to define what economists believed they could and could not say in their role as economists. Its arguments about economic generalizations and reality were an important contribution to discussions about the role of theory in economics. Here, however, we adopt a narrower focus, namely on the reception of its definition of economics as, to use a useful abbreviation, the science of scarcity.

Though Robbins minimized the novelty of his definition of economics, stressing its roots in particular in continental traditions, it was radical in its implications. In place of previous "classificatory" definitions, such as that economics is the study of the production and use of wealth, or the study of what contributes to economic welfare, his definition was "analytic": it identified an *aspect* of behaviour (Robbins 1935: 16-17). This had the implication that, insofar as it dealt with the influence of scarcity, "any kind of human behaviour falls within the scope of economic generalisations. ... There are no limitations on the subject-matter of economics save this" (ibid.). This laid a foundation that could be seen as justifying not only the narrowing of economic theory to the theory of constrained maximization or rational choice but also the "imperialism" of economists' ventures into the fields of law, sociology and political science.[1]

Though Robbins definition is often presented as self-evidently correct, the developments that it has been used to support were all keenly contested. In the 1940s and 1950s, the role of mathematical theorizing based on optimizing models was challenged on several fronts. The use and even legitimacy of economic imperialism were questioned by both economists and scholars working in the colonized disciplines. Furthermore, it is perhaps ironic that Robbins's *Essay* was published in 1932, when the world was at the deepest point of the worst depression ever encountered in the capitalist world. With US unemployment at 23 percent, industrial production running substantially below capacity and collapsed world markets for primary produce, it was arguably counter-intuitive (to put it mildly) to argue that the major economic problem of the day was related to scarcity.[2]

So how did economists respond to Robbins's definition of economics? Clearly, to trace its effect on practice is possible only by limiting the task in some way, for the influence of such ideas is typically pervasive and mixed with other influences of which authors may not even be aware. One way would be to focus on particular groups, individuals or organizations.[3] Alternatively, as is done here, it is possible to focus on explicit discussions of the definition. Discussions in academic journals are clearly important but because of the way definitions are typically used, attention also has to be

[1] This wording is chosen to avoid commitment on whether maximizing behavior and rational choice are or are not synonymous, or whether Robbins definition was in fact used to justify such approaches. The latter is, in part, the subject of this essay; the former is not relevant for our current concerns.

[2] But see the discussion of Samuelson's *Economics*, as well as note 15, below.

[3] For example, it has been argued by the younger generation centered on the M^{2}T (Methodology, measurement and testing) seminar, that LSE in the 1950s was dominated by Robbins's view of economics (see Lipsey 2000; de Marchi 1988).

paid to the reception of Robbins's definition in textbooks: definitions of the subject are typically something economists learn as students, not returning explicitly to them except under peculiar circumstances, when their conceptions face particular challenges.

2. The initial reception

Though Robbins portrayed himself as saying nothing original, the idea that his definition did no more than sum up the way economists thought about their discipline is a myth. Whilst his book, and the definition of the subject it provided, were welcomed, it was controversial and acceptance of his definition was much more circumscribed than is commonly believed. This is hardly surprising, for the book came at a time when the subject was in turmoil.

Though there is clearly the problem of small-sample bias, the reviews in the major academic periodicals indicated some of these differences very clearly. It is hardly surprising that Cannan (1932), in the *Economic Journal*, should defend his own definition of economics as dealing with the production of wealth. However, in his defense, the idea of an economic "machine" had wide resonance. The review in the *American Economic Review* had to wait till the second edition, when Peck (1936) observed that Robbins's view of economics ("the individual exchange variety") was too narrow and needed supplementing. Interestingly, the strongest praise for the book came from outside economics. Catlin (1933), in the *Political Science Quarterly* described it as a "brilliant book," protesting against empiricism; interestingly, in view of the "economic imperialism"[4] that came many decades later, his objection to Robbins's definition was

[4] Though note that this is not a new phrase, having been used, by Souter already in the 1930s: "The salvation of Economic Science in the twentieth century lies in an enlightened and democratic 'economic imperialism', which invades the territories of its neighbors, not to enslave them or to swallow them up, but

that it included politics! He commended the book to students of economics as well as politics. For the conventional view that the book contained little that was new, we have to go to an unsigned review in the *Journal of the Royal Statistical Society* (M 1933): however, as did many of those responding to the book at this period, the reviewer explained that Robbins was presenting the view of the Austrian school, suggesting it was not universally held.

Robbins's *Essay* did not settle the question of how to define economics (and implicitly how to do economics) but came early in a decade during which economic methodology was widely discussed. Book-length treatments in the following years including Souter (1933), MacFie (1936), Beveridge (1937), Fraser (1937), Wooton (1938), and Hutchison (1938).[5] Many of the published reactions to Robbins occur in reactions to *these* books, reducing the force of the problem that his ideas are more likely to be discussed by those who disagree with him than by those who simply accept what he has to say. Apart from methodological asides in articles on other topics, there were substantial methodological papers by Fraser (1932, 1938), Souter (1933), Spengler (1934), Knight (1934), Parsons (1934), Hutchison (1935), Machlup (1936), Leontief (1937), Ayres (1938), Durbin (1938), Harrod (1938), and Bye (1939). Towards the end of the decade, one reviewer described Robbins's book as having been the subject of protests from his professional colleagues. The situation was such that Robbins (1938), was moved to seek to

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to aid and enrich them and promote their autonomous growth in the very process of aiding and enriching itself" (1933: 94n).

[5] We leave open the extent to which this literature was a response to Robbins. Note that there is a significant literature on such problems before the Essay. On the other hand, Machlup (1936:39) for one sees at least parts of this literature as a response by economists who, whatever their attitude towards laissez-faire in economic policy, want laissez-faire to apply to their own practices, and object to the "regimentation" of their subject offered by Robbins.

disentangle what he called the “Live and dead issues in the methodology of economics,”[6] and the following year Bye (1939) could observe that there was still little agreement on the definition of economics.

Three themes, all arising out of Robbins’s *Essay*, can be picked out of this literature: economic theory versus empirical analysis; how economic theory is to be conceived; and the role of ethics in economics. Their significance lies in their reflecting important developments in inter-war economics. This was the period when institutionalism and neoclassical economics presented different ways of doing “scientific” economics (cf. Rutherford 1999). It was also a period when mathematical theory, though still a minority activity, was rapidly developing on both sides of the Atlantic, and economics was on the verge of coming to be seen as social engineering. There was also significant disagreement, going well beyond any disagreement over inter-personal utility comparisons, about the role of ethics in economics.

Robbins was seen by many as defending economic theory against empiricism. Thus Catlin (1933: 463) wrote that his *Essay* “marks one more stage in the passing out of favor of the exclusively historical institutional approach.” Others (Fraser 1932) questioned the justice of this description of institutionalism but nonetheless saw Robbins as arguing the case for economic theory against than empiricism. Amongst Robbins’s critics, Knight (1934: 237-8, 225) shared his aversion to quantification, but saw him as being too mechanical, arguing for a more organic conception of economics. Reviewing the second edition, Knight (1936: 425) went further, arguing that economics was purposive, concerning motives that were known to the student, and that had nothing to do with

6 Given the way methodological issues were often brought up in discussions of substantive issues, from economic planning to welfare economics, this represents a small, though significant part of the overall discussion.

prediction or control. Others argued that Robbins had failed to acknowledge sufficiently the importance of empirical work. Thus Hutchison (1935) criticized him for claiming that it was a virtue that the propositions of economic theory must be true: if they were tautologies, they could have no empirical content and induction was needed. In a similar vein, Durbin (1938) saw the problem with the discipline as being its failure to bring economic theory and applied work together, resulting in dissatisfaction with theory.

The charge that Robbins's definition reduced economic theory to something purely formal was expressed most forcefully by Dobb (1933: 590):

> Professor Robbins, who has carried this contemporary fashion to its logical conclusion, explicitly emphasises the purely formal character of economic theory, without, however, seizing the full implications of this statement. Economics, as a theory of equilibrium, he points out is unconcerned with norms and ends: it is concerned solely with constructing patterns for the appropriate adaptation of scarce means to given purposes. The corollaries of economic theory do not depend on facts or experience of history, but "are implicit in our definition of the subject-matter of Economic Science as a whole."[7]

Thus, although some writers saw merit in formalism as defined here (M 1934, Parsons 1934) others (Souter 1933: 377 *et seq*., Janes 1933, Parsons 1934: 536-7) were critical. Knight, as has already been pointed out, considered that it reduced economic theory to something mechanical.[8] Peck (1936) wrote Robbins's definition restricted economics to value theory – it was economics of the individualist exchange variety.

That it was not simply an older generation of economists who were taking issue with Robbins's view of economic theory is nicely shown by the example of Harrod. At a time when it was very unusual indeed for economists to talk in terms of models, Harrod (1938: 393) suggested thinking of theory as "a map or model in which individuals are seen as

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7 Dobb is quoting from Robbins (1932: 75).

8 His criticism of mechanical theories came out even more forcefully later in his review of Hutchison (Knight 1940).

informing each other of their preferences." Such a map was, Harrod argued, "to some extent hypothetical": it was fruitful through serving as a classificatory device, though it served to hide how little economists knew about causal sequences (1938: 407).[9] Thus although he was defending economic theory of the type that was rapidly being developed, he opposed Robbins strongly. Economic theory did not, he believed, justify the claims to certainty that Robbins made.

Even stronger were the criticisms of Robbins's attempt to exclude ethics from economic science. Fraser (1932: 557) argued that Robbins' view implied that rationality was an end in itself. Others (e.g. Spengler 1934: 315) pointed out that ethical judgments were needed if policy conclusions were to be drawn, and to claim that conclusions could be derived from pure theory was to smuggle in ethical judgments in a way that was misleading. Harrod (1938: 396) challenged economists to accept what common sense told them – that the marginal utility of income to the rich and the poor was different, irrespective of whether such judgments were thought "unscientific." Economics, for Harrod, was not so well developed that it could afford to dispense with such common-sense judgments.

During this period, not only was the conception of economics implied by Robbins's definition criticized on many sides, some economists went so far as to question the notion that there could be a single definition of the subject. Fraser (1932) questioned whether a precise definition was either possible or desirable. Probing more deeply, Souter (1933:384), in an argument that drew on attempts to define chemistry and physics as much as economics, argued that

[9] Harrod was of course concerned with problems of dynamics at this time.

> Neither the "material" nor the "analytical" method of "definition" can be employed to seal up the various disciplines in airtight receptacles - because these various disciplines cannot be so sealed up. ... The only way out of the false dilemma ... is in terms of a modern "developmental" logic which I am afraid Professor Robbins would characterize as "pseudo-Hegelian twaddle."

It was such a developmental view, Souter claimed, that lay behind the "garb of literature" employed by Alfred Marshall.

3. Modelling and the acceptance of the "Received View"

The debates over Robbins's definition of economics sketched in the previous section took place in the 1930s, against a background that was very different from that prevailing after the Second World War. Of the views discussed, it is Harrod's that, somewhat tentatively – for the word "model" is still consciously used as a metaphor, alongside that of a "map," points to the postwar era in which economists, in a way simply not true of the inter-war period, thought of themselves as modelers. However, though, as has been widely recognized, this shift was promoted in great part by the Second World War and the association of economics, in many minds, with operations research and economic engineering,[10] there was no sudden change. Economics in the "old" style carried on in the post-war period, and this was reflected in discussions of Robbins's *Essay* in the late 1940s. A contemporary who remarked on the transformation was Higgins (1947: 587) who observed that, war being over and there being no depression, and because "a new analytical machine" had become available, economists were free to think about the scope and method of their subject.[11] However, these new techniques did not incline him towards Robbins's definition: what had happened, he argued, was that institutional

[10] See Backhouse (2002: ch. 11); Morgan (2003).

[11] In response to his observation that for the previous 15 years economists had been too concerned with big issues to think about scope and method, one can only think that he was too busy to read the outpouring of literature discussed in the previous section.

economics (by which he meant empirical economics) had become the standard approach to the subject.

Spengler (1948: 2-3) observed that there was still no agreement on the subject matter of economics. He cited four definitions: that economics is what economics does[12]; Robbins's definition; Fraser's definition in terms of wealth, but seen as consistent with belief in scarcity; and Parsons's definition as concerned with the ramifications of economic rationality. Gruchy (1949) argued that Robbins's definition implied pure theory, and contended that, though pure theory was needed, economics was broader than this. He found such a broader view of the subject in the Cambridge tradition represented by Marshall and Keynes: in their hands economics was both abstract *and* humanistic. Keynes had managed to achieve a perspective on economics that came between Robbins's formalism and Veblen's cultural perspective. Elsewhere, Robbins's definition was argued to be both vague and to imply an economic theory based on certainty (Simpson 1949: 864) and to be limited (Mulcahy 1949). Robbins was picked out for some particularly strong criticism by Schuller (1949: 440):

> This "oyster" view of the field of economic inquiry, in the form of a school centrism, unfortunately is not confined to the [Marxist] Soviet Empire and its representatives abroad. In the western world today there is another school of economic theory which has been so sanctified by traditional acceptance and has remained so impervious to attach by its rivals here (including the Marxists), that it is identified, in the vocabulary of most of our economists, with economic theory as such. The members of this school regard themselves not as a school but as the only practitioners of the economic profession; ... they dismiss critics ... for being non economists – i.e., "sociologists," "psychologists," or "historians."

The example that he selects is Robbins, who "solves problems and enunciates verities not from the viewpoint of himself or his school but 'from the point of view of Economic Science'." To this, the following footnote is attached: "Such passages by orthodox

12 A twist on Knight who used the word "economists."

economists or Marxists often sound like variations on the ancient theme: ‘It is not I, a human sinner, that addresses you, but God, speaking through the mouth of His prophet’.”

This passage is worth noting for a number of reasons. First, it represents attitudes that are very familiar. Furthermore, not only does he claim, unlike most of the writers discussed here, that the Robbins view was very firmly established, but the strength of the attack suggests it comes from someone under threat. It is hardly a remark that would have been made by someone who thought institutionalism had triumphed. Evidence for the view that the Robbins definition might have been more widely accepted than methodological discussions in the journals suggest is found in Tintner (1953) who, in the course of trying to define economics, simply gives two definitions of economics: one was from Robbins; the other was from Lange (1945: 19) who offered a very similar definition (in an article notable for the absence of any citations), namely the “science of the administration of scarce resources in human society.” If it is simply the Cowles Commission adopting an “oyster” view of economics, it is notable that they have almost appropriated Robbins to their cause.

A significant figure at this period was Howard Ellis, editor of the AEA Surveys of Economics. He (1950: 3) saw economics as “concerned with the processes and results of free choice on the market,” deliberately defining it in such a way that choice of end fell within the subject. This theme, that the choice of ends could not be ignored, came up frequently (e.g. Streeten 1950; Lachman 1951; Shahan 1952), and Robbins continued to be criticized as an advocate of pure theory. The implication of this line of argument was that economics should be broader than the Robbins definition allowed. Thus McConnell (1955: 160-1) argued that “policy economics” was broader than what he chose to describe as “positivist economics”: it was about finding patterns but was also about evaluating rules, institutional and ideological contexts and evaluating the desirability of changes. Economics included not just “theoretical or analytical economics” but also welfare economics and other branches that took it beyond what Robbins considered economic science.

McConnell’s reference to “positivism” and the search for “patterns of uniformity” signals a significant shift in the emphasis, away from more traditional issues towards discussions of the economics in the context of prediction, testability and choice of assumptions. This change of emphasis came after economists began to respond to Paul Samuelson’s *Foundations of Economic Analysis* (1947) and became even more marked after Friedman (1953) began to affect the terms of the discussion[13]. Samuelson’s focus was on the importance of deriving “operationally meaningful theorems.” Not only did he not define economics (though the reader would infer that it related to maximization) but he argued that “logically there us nothing fundamental about the traditional boundaries of economic science” (Samuelson 1947: 9). His argument ran in terms of what should be taken as exogenous or endogenous; government, for example, might be in either category depending on the needs of the problem in hand. Gruchy (1949: 249) had portrayed Samuelson as adopting the Robbins view. Others, however, did not read him this way. Streeten (1950: 583) cited his comment that “it is fashionable for the modern economist to insist that ethical value judgments have no place in scientific analysis,” implying clear distance from Robbins.[14] Papandreou (1950), adopting Parsonian terminology, argued that *Foundations* showed that the “action” framework could be used in a different way:

[13] Friedman focused exclusively on the meaning of “positive” and not of “economics.”

[14] Streeten also commented that it was “impossible to believe that Robbins *really* meant what he said,” in which case he would not be in a minority of one in not holding the “economic-sphere” position.

where Robbins ended up with pure theory, Samuelson used the framework to derive empirical propositions. Robbins confined himself to the "back room" of pure theory, whereas Samuelson was started on the process of integrating the "front room" with concepts from the back room. Such a view agreed with Samuelson's own remark that Robbins's claims for deductive theory were "exaggerated" (1964: 736).

The way discussions of Robbins had changed by the 1950s is best shown by Machlup's (1955) article on verificationism. Robbins was listed as an advocate of "extreme a priorism," this being contrasted with Terence Hutchison's "ultra-empiricism": the former regarded economic theories as certain, whereas the latter required that assumptions as well as implications be tested. The assumptions of a theory should be understandable (a point Friedman missed), but induction was useful in giving confidence in hypotheses. At the same time, it was going too far to claim that all assumptions needed to be verified, for theories and models were analytical devices used for generating testable predictions. What Machlup was doing was combining an Austrian element with what had become the so-called "Received View" in philosophy of science, centered on the hypothetico-deductive model. It offered a defensible position between Robbins and his empirical critics that many economists found attractive. Broadly interpreted, it could encompass both Friedman's methodology and that of his one-time rivals at Chicago, the Cowles Commission, exemplified by Koopmans (1957).

By the early 1960s, though economists might still question whether the Robbins definition was adequate, the definition had come to be widely accepted. The general tone was not to argue the case for it, but to take it as generally accepted. Thus Johnson (1960: 552) started a very sympathetic review article on J.K. Galbraith's *The Affluent Society*

(1958) with the concession that most economists "would probably accept" the Robbins definition, "at least as a description of their workaday activities." Despite his view that it permeated economic theory, Johnson went on to review Galbraith's argument that society's problems concerned opulence, not scarcity, with considerable sympathy.[15] In reviewing linear theory, John Hicks (1960: 707) argued that "If we take economics as defined by Robbins, it is well covered by linear theory." He implies, without stating so explicitly, that Robbins's definition is an appropriate one to use. Princeton professor and former *JPE* editor Albert Rees's (1968: 472) definition in his essay on "Economics" for the *International Encyclopedia of the Social Sciences* was Robbins, through and through.[16] Kapp (1968: 2), who was defending an institutionalist conception of the subject as against the orthodox view, apparently felt compelled to allow that, in his estimation, Robbins's definition "characterizes very well the prevailing preoccupations of many economists." Those who used it did not give evidence to justify it (cf. the remarks by Lange, Samuelson, Tintner cited above). A definition of economics that only Rothbard (1957: 314), who saw Robbins as a fellow-praxeologist, was prepared to support unconditionally, had apparently come to be seen as being generally accepted.[17]

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15 This opulence argument was thought by some to be a legitimate critique of the Robbins definition, or to imply that it was at the very least outmoded. (See also Beckerman 1956.).Yet, as Johnson, Bronfenbrenner (1962: 255), and others pointed out, the issue is not the size of the physical stock of goods at some time or place, but rather the amount of the good that would be demanded at a zero price. By this definition, the problem of scarcity had been no more overcome by societal affluence than it was absent during the mass unemployment during the Great Depression.

16 "Economics … is the study of the allocation of scarce resources among unlimited and competing uses."

17 Mitchell (1960: 80), who was advocating the case for considering such ideas in politics, cited Robbins as having discussed scarcity in economics, and it is arguable that an endorsement of Robbins's view of economics can safely be inferred.

4. Textbooks

Robbins may have claimed that his ideas were not novel, but there was little trace of them in the leading Principles texts of the day, some of which had long pedigrees. The oldest, and most influential, was Marshall's *Principles of Economics*, renowned for defining economics simply as "a study of mankind in the ordinary business of life," but then going on to say that "it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of wellbeing" and as such is both the study of "wealth" and of "man" (1920: 1).[18] The next oldest, originally by R. T. Ely, the first President of the AEA, but later assisted by co-authors, of whom the most prominent was Allyn Young, of Harvard, offered a more traditional definition, harking back to John Stuart Mill: "economics is the science which treats of those social phenomena that are due to the wealth-getting and wealth-using activities of Man" (Ely et al, 1926). S. Howard Patterson and Karl W.H. Scholz (1927: 3), both of the University of Pennsylvania, offered a similar definition, suggesting that the subject "may be defined as the study of business, that is, of man's wealth-getting activities."

None of these, though, even begins to approximate the Robbins definition. Other textbooks offered no definition, either providing an illustrative list of economic problems (Garver and Hansen 1928) or arguing that none was required (Taussig 1927). Though one might deduce from Taussig's example, water, elements of a scarcity definition, the point he does not do this. The two major books post-dating the Great Crash but pre-dating Robbins's *Essay* both offer a definition bearing the hallmark of institutionalism: "Economics, then, is the social science which deals with the industrial activities of men"

[18] Marshall was extensively cited in the literature discussed in this paper. That is true of no other textbook writer.

(Bye 1931: 8) and “The subject matter of economics is industry ... [studied as] a complex of human practices and relationships” (Slichter 1931: 11).

Fairchild, Furniss, and Buck (1926) offer what may be the closes thing to Robbins in the English-language textbook literature of the time. Having identified “the insatiability of man and the niggardliness of nature” as “the foundation stones upon which rests the structure of economics” (1926: 8), they define economics as “the science of man’s activities devoted to obtaining the material means for the satisfaction of his wants” (p. 8), where material denoted something more than merely external objects.

Some of these definitions continued to be revised after Robbins’s essay, but none adopted his definition. Ely’s text (now become Ely and Hess 1937), is interesting as one of very few to provide a bibliography, dropped Mill, Cairnes and John Neville Keynes from its bibliography, and brought in Robbins’s *Essay*. However, it offered exactly the same definition as the fourth (1926) edition. On the other hand, it may be significant that the definition was immediately followed, not with sections on economics treating of man, but on sections on science: natural and social science, experimentation, theory and application. It is tempting to infer that Robbins’s *Essay* had caused the author, now presumably Hess rather than Ely, by then aged over 80, to emphasize economics as science rather than the more Marshallian human dimension. Fairchild, Furniss, and Buck, whose 1926 definition offered an intriguing compromise between the scarcity and the wealth definitions, carried their 1926 version through subsequent editions of their text,[19] neither citing Robbins nor inching their definition further toward his.

If the older generation cannot be expected to have taken to Robbins with enthusiasm, the same cannot be said of those writing new textbooks after 1932. Consider first British

[19] See, e.g., Fairchild, Furniss, and Buck. (1939).

textbooks, starting with Frederic Benham, one of Robbins's colleagues at LSE. He defined the subject implicitly in his first edition, saying that "the rationale of economic activity is to satisfy human wants by producing consumers' goods" (1938: 5). In his third edition, he came even closer to Robbins, referring to economic decisions as choices (Benham 1943: 5) and explaining that these involve opportunity costs. A few pages later (1943: 9) he wrote about alternative uses. But he neither reproduced the Robbins definition nor cited the *Essay*. Alec Cairncross (1944: 8) explicitly adopted a definition in terms of scarcity, but qualified it by saying that economics was concerned only with the social aspect of scarcity: when one person's decisions impinge on other people. Furthermore, his wording, "Economics is a social science studying how people attempt to accommodate scarcity to their wants and how these attempts interact through exchange," restricts the subject to an exchange economy. In the 1950s, Thomas (1952) reverted to the materialist definition in terms of wealth, and Nevin (1958: 6) offered another definition that referred to scarcity, material well-being and exchange. The influence of the Robbins definition is there, but it is heavily qualified.

If anything, North American textbooks tended to remain further from Robbins in this period. Consider, for example, Frank Knight's *The Economic Organization* (1933). Knight says that economics "deals with the social organization of economic activity," lately via the price system or under free enterprise (4). Knight found both the traditional definitions, such as Marshall's and the choice-based ones, over-broad and, as a result, "useless and misleading" (1933: 2).[20] In sharp contrast to the view that later became

[20] "Many definitions of economics found in text books fall into this error of including virtually all intelligent behavior. One writer has actually given as his definition of economics the 'science of rational activity.' Others find its subject matter is 'man's activity in making a living,' or 'the ordinary business of life.' Such definitions come too near to saying that economics is the science of things generally, of

associated with the Chicago school and its distinctive price theory tradition, Knight insisted that "economizing … does not include all human interests" and that it is both "error" and "vice" to "look upon life too exclusively under this aspect of scientific rationality" (2).[21] By the fourth edition of their *Economic Problems of Modern Life*, Patterson and Scholz (1948: 3) had expanded their "study of business" definition to also include "the social study of wealth and welfare" and "the study of pecuniary values" (supply and demand), but still had gotten no closer to Robbins. Boulding's (1941: 3) approach to the issue is not unlike Knight's, as he tells his readers that some definitions are too broad and others too narrow. In light of the view in the journal literature that Robbins's definition led to a conception of economics that was too narrow, it is interesting that Boulding argues that defining economics "as the study of human valuation and choice" was probably "too wide."[22] Perhaps reflecting the sort of frustration hinted at in Knight and Boulding, Tarshis (1947) explains that a formal definition is not appropriate and instead lists economic problems.

The distance of North American textbooks from Robbins is reinforced in the textbook which came to dominate the market, Samuelson's *Economics*. He clearly accepts much of Robbins's position[23]: it deals with the relationship between means and ends, and ends are not part of the "science." He even disputed the view that the existence of depression meant that economics was not about scarcity, for the "American way of life" requires

everything that men are for practical reasons interested in. Such a definition is useless and misleading" (1933: 1-2).

21 Knight goes on to say that, "Life must be more than economics, or rational conduct, or the intelligent accurate manipulation of materials and use of power in achieving results. Such a view is too narrow" (1933: 2).

22 He also considered Marshall's definition over-broad, but "the study of material wealth" and "the study of that part of human activity subject to the measuring rod of money" (Pigou's definition) too narrow (1941: 3). Boulding carried these characterizations through subsequent editions of his book. See, e.g., Boulding (1955).

23 Enough to cause Gruchy (1949) to read him as accepting Robbins's view of economics.

more resources than are available (1948: 16-17).[24] His focus, "What? How? For Whom?," with the addition of "When?" in a footnote, is not inconsistent with this, but it resonates equally with more traditional definitions in terms of production and distribution. In the second edition (1951), the footnote on "When?" was dropped, in favor of one pointing acknowledging his debt to his Chicago teacher Frank Knight. By the fifth edition (1961) the comment on the Great Depression not being a counter-example to the prevalence of scarcity was gone, and there was now a section on the "Law" of scarcity.

It would be incorrect, though to suggest that the scarcity definition was not to the forefront of some American economics textbooks in the 1930s and 1940s. Stigler's *The Theory of Price* (1946), for example defines economics as "the study of the principles governing the allocation of scarce means among competing ends when the objective of the allocation is to maximize the attainment of the ends" (12). Stigler, then, weds scarcity to maximization, though he does allow that "Scarcity is the most fundamental characteristic of an economic problem" (13).[25] Bowman and Bach (1946: 3) cite "economizing" as the "central problem" of economics and say that "A problem of 'economizing' arises when people want more of a thing than is freely available, and when there are alternative uses to which it may be put or different rates at which it may be consumed over a period of time." Likewise, Gemmill and Blodgett (1937, p. 22) define economics as "the social science that describes man's efforts to satisfy his wants by utilizing the scarce means provided by nature." Interestingly, they did not get around to giving this definition until the beginning of the second chapter, even though they spent the first chapter discussing the centrality of the satisfaction of human wants under

24 This view seems very prescient, especially to non-Americans aware of current environmental problems.

25 Stigler is a rarity in actually citing Robbins's *Essay*. See Stigler (1946: 13, 20).

conditions of scarcity. By the third edition, published in 1948, it had become the opening sentence of the book (1948, p. 3).

Scarcity definitions of economics became more prominent from the late 1950s onward. Stonier and Hague (1957: 3) suggest that economics is "fundamentally a study of scarcity and the problems to which scarcity gives rise." Nevin's third edition (1967: 5-7) wrote of scarcity as the foundation of economics, though he still emphasized its social character, relating it to exchange. Given the way Becker was at this time extending the boundaries of economic reasoning (not to mention later Feminist critiques of economics), it is significant to note the example Nevin gave: "But who can assess the value of a mother's services to her family in the home? The economist, at least, is too sensible to try." We leave it to others to unpack the gendered stereotypes involved.[26] In the USA, on the other hand, economics came to be defined in terms of scarcity, with fewer qualifications[27]—to the point where Bronfenbrenner could state already in 1962 that "Most of the current crop of textbook definitions of the subject stress" the scarcity hypothesis (p. 266). McConnell, in a textbook that went through four editions during the decade, offered a definition that is worth citing in full:

> Recalling that wants are unlimited and resources are scarce, economics can be defined as *the social science concerned with the problem of using or administering scarce resources (the means of producing) so as to attain the greatest or maximum fulfillment of society's unlimited wants (the goal of producing)*. (McConnell 1969: 23)

Though it is tempting to ascribe this to the influence of the Robbins view, it is worth noting the emphasis on social science and the use of the word "administering," echoing Lange's definition, cited above.

[26] Note that though Becker's work on the family came later, his analyses of discrimination, education, and the allocation of time had appeared by this time.

[27] See, e.g., Snider (1962); Keiser (1965); Fels (1966); Leftwich (1969); McConnell (1969).

At the graduate level, Friedman's *Price Theory* offered that "Economics is the science of how a particular society solves its economic problems. An economic problem exists whenever *scarce* means are used to satisfy *alternative* ends."[28] We get a good sense for the breadth of Chicago price theory in Friedman's opinion that this is " a very general" conception, one that "goes beyond matters obviously thought of as belonging to economics," although such is the breadth of economics today that his example of the allocation of leisure time seems rather quaint and leads one to wonder why there would ever be any fuss over excessive generality (Friedman 1962: 6).[29]

Two of the most dominant texts of the 1960s and 1970s were Samuelson's *Economics* and Richard Lipsey's *Introduction to Positive Economics*. Samuelson, whose *Economics* continued to go through new editions, remained the most important, not least because of its use internationally. By the tenth edition (1976), written with Peter Temin, he was offering what can only be described as an expanded version of the Robbins definition, which comes after five alternatives have been considered:

> Economics is the study of how people and society end up choosing, with or without the use of money, to employ scarce productive resources that could have alternative uses, to produce various commodities and distribute them for consumption, now or in the future, among various persons and groups in society. It analyzes the costs and benefits of improving patterns of resource allocation. (Samuelson and Temin 1976: 3)

Much of the expansion is purely expository, not changing the force of the definition at all (with or without the use of money; now or in the future) though the last sentence begs the question of how, if ends are not part of economics, one distinguishes between those

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28 This definition is repeated verbatim in his 1976 revision of the book.

29 Friedman was providing this definition in his lectures at least as far back as January 1947. See Friedman (2008/1947).

changes in patterns of resource allocation that are "improvements" and those that are not. If Economics is broader than "economic science" this is not explicit.

Perhaps the main new textbook, certainly judged in terms of sales, to emerge in the 1960s was Lipsey's *Introduction to Positive Economics* (1963). Lipsey is an important figure because, though he came out of LSE,[30] he was part of a group of young economists committed to replacing the Robbinsian emphasis on deductive theory with an economics based on measurement and testing. This was the meaning of the "Positive economics" in his title.[31] In the first three editions, he defined economics not with a single definition but by listing six economic questions, the closest he came to the Robbins definition being to refer to "*one of* the basic problems encountered in *most* aspects of economics, the problem of SCARCITY" (Lipsey 1971 (3rd edition): 50, italics added).[32] Though the use of capital letters implies that scarcity was a fundamental concept that the student must understand, the words "one of" and "most" make it clear that not the whole of economics. Economics cannot be deduced, as Robbins claimed, from one basic postulate, but has to be empirical. In the fourth edition (1975), this rejection of Robbins was even more explicit. After discussing six economic questions, he went on:

> Economics today is regarded much more broadly than it was even half a century ago. Earlier definitions stressed the alternative and competing use of resources. Such definitions focused on choices between alternative points on a stationary production-possibility boundary. Important additional problems concern failure to achieve the boundary ... and the outward movement of the boundary over time. (1975: 59)

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30 The dust jacket describes him as Professor at LSE, where he had been a Lecturer, though the title page correctly gives his position as Professor at Essex.

31 Cf. Lipsey (forthcoming).

32 The page number is significant. Unlike all the other texts, discussion of economics was preceded by a lengthy but non-technical explanation of the principles of modeling, including statistical methods, and the philosophy of science. The latter was Popperian rather than the Received View cited by Machlup (see above).

He distances himself from Robbins (though he is not named) by associating him with the past, and implicitly criticizing other textbook writers who were beginning to use this definition. Unemployment and growth are signaled as important questions from which an exclusive focus on scarcity deflects attention.

Subsequent textbooks, which are too numerous to survey, offer variations on the themes encountered up to now.[33] Scarcity is clearly considered central to economics, though the emphasis placed on it has varied; it is not always clear whether this is because authors see that it is limited in scope, or whether it is to make what might be a very abstract definition of the subject more digestible to newcomers to the subject. The Robbins definition appears to be in the background but to have been blended with other ideas. Significantly, it did not become universally accepted, Lipsey's textbook being the clearest example.

5. Economics Spread Its Wings

By the 1960s, the Robbins definition was becoming established in the textbooks, but there was little discussion of it in the journal literature, suggesting either that it had become accepted, or that it was simply something that was irrelevant to practicing economists. What did emerge in the 1960s and 70s was a progressive expansion of the *boundaries* of the field—an expansion that was at once consistent with Robbins's definition and yet reflected a view of the discipline that was likely far beyond anything

[33] It was not as though older definitions had been eradicated, however. Peach (1965: 15), for example ascribes his definition, that "Economics is the study of, and embraces all knowledge relevant to, the production of goods and services," to Keynes. Yet, he cannot resist pointing out a few pages later that "Economics has long been connected in people's minds with the notion of scarcity." (21) And Hailstones, writing in 1968, defines economics as "a science that is concerned with the production, distribution, and consumption of goods and services" (1968: 2).

Robbins might have imagined in 1932.[34] Thus we find Harry Johnson, also a professor at Chicago, stating in his LSE inaugural lecture that he considered "scarcity" and "choice" to be the two basic conceptual ideas underlying economics (1968: 3-4)—invoking Robbins in the process—and going on to argue that economics had become more useful because of the new work being done within this framework in areas including human capital theory, the economic analysis of time, the economics of information, and the economic theory of democratic political processes.[35] And already in 1968, Kenneth Boulding was referring in his AEA Presidential Address to 'the attempt on the part of economics to take over all the other social sciences', a movement that he labeled 'economics imperialism' (1969: 8).

While several scholars contributed to these early forays into areas previously considered non-economic, the process was led by Gary Becker, who, in the late 1950s and 1960s had begun to advance the case that traditional economic theory could be used to understand phenomena such as discrimination, irrational behavior, human capital, and issues in crime and punishment. Becker did not feel compelled to justify these early excursions by appealing to any sort of definition. In fact, in his classic article on crime and punishment, Becker suggested that economists may have avoided discussing illegal activity, not because it did not fall within the boundaries of economics, but because it was "too immoral to merit any systematic scientific attention" (1968, p. 170 n1).

Becker did address definitional issues in his *Economic Theory* (1971), defining economics as "the study of the allocation of scarce means to satisfy competing ends." He

[34] Robbins returned to the *Essay* in his 1980 address to the American Economic Association, but he did not comment on the expanding boundaries of economics, though he did reiterate his views on the appropriateness of his definition of the subject (1981: 2, 9).

[35] Johnson was referring to the work of economists such as T.W. Schultz, Gary Becker, George Stigler, and Anthony Downs.

immediately remarked on the breadth of this definition, noting that “It includes the choice of a car, a marriage mate, and a religion; the allocation of scarce resources within a family; and political discussions about how much to spend on education or on fighting a Vietnam war” (1971:1). He later pointed out that this definition was so general that economists often found it an “embarrassment,” needing to be qualified “to exclude most nonmarket behavior” (1976:4).[36] Becker acknowledged that economists tend to study the market sector, but he argued that economic principles developed for this purpose were “essential” for understanding much of what had been studied by sociologists, anthropologists and other social scientists (1971: 2).[37]

Becker suggested that Viner’s “what economists do” definition was emblematic of the problems with defining “a subject matter that has changed so much over time,” and, as if conceding that his definition did not seem to define a field called economics, argued that any definition of a discipline was inadequate. What was more important, he said, was “the economic approach” to human behavior:

> The combined assumptions of maximizing behavior, market equilibrium, and stable preferences, used relentlessly and unflinchingly, form the heart of the economic approach as I see it. (Becker 1976: 5)

Although this applied to all the social sciences, it could be called the economic approach because it was economists, not other social scientists, who had adopted it (something he wished to change).

Interestingly, not everyone associated with the expansion of the boundaries of economics was favorably disposed toward the Robbins definition. Both James Buchanan

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[36] In his *The Economic Approach to Human Behavior* (1976: 3), Becker mentioned three extant definitions of economics: “the study of (1) the allocation of material goods to satisfy material wants, (2) the market sector, and (3) the allocation of scarce means to satisfy competing ends,” noting that the last of these is the most general.

[37] He goes on to say, “This is a true example of economic imperialism!” (2)

and Ronald Coase protested against defining the field apart from its subject matter, with Coase (1977: 487) suggesting that the field involves the study of "the social institutions that bind together the economic system,"[38] and Buchanan preferring "the study of the whole system of exchange relationships" (1964: 220). Buchanan thought this subject of enough import to devote his 1963 Presidential Address to the Southern Economic Association to it, and he brought the Robbins definition in for strong criticism, calling it "all too pervasive," and suggesting that it "served to retard … scientific progress" (1964: 214).[39] Robbins's definition, he said, made economics about "a problem or set of problems" rather than "a characteristic form of human activity" (1964: 214). While accepting that the Robbins definition had become standard in the profession, Buchanan argued that economics should be conceived of as the study of markets, not of resource allocation, and thus that the Robbins definition should be replaced by one that emphasized market exchange, or catallactics (1964: 214).[40]

Buchanan was by no means the only prominent economist to argue the case for a market exchange definition. Boulding, who came from a very different position on the political spectrum,[41] offered a definition very similar to Buchanan's in his AEA Presidential Address:

> Economics specializes in the study of that part of the total social system which is organized through exchange and which deals with exchangables. This to my mind is a better definition of economics than those which define it as relating to scarcity or allocation, for the allocation of scarce resources is a universal problem

[38] Coase includes here firms, input and output markets, the banking system, etc.

[39] Buchanan also suggests that this definition did *not* accurately describe the state of the field in 1930: "Only since *The Nature and Significance of Economic Science* have economists so exclusively devoted their energies to the problems raised by scarcity, broadly considered, and to the necessity for the making of allocative decisions" (1964: 214).

[40] "In so far as individuals exchange, trade, as freely-contracting units, the predominant characteristic of their behavior is 'economic'" (p. 220).

[41] Both, though, had seriously engaged with political science.

> which applies to political decisions and political structures through coercion, threat, and even to love and community, just as it does to exchange. (1969: 4)[42]

Unlike Boulding, of course, Buchanan favored of the extension of economic reasoning to political structures (1964: 220), and in this sense did, like Becker, have an "outward-looking" streak. But Buchanan did not see the Robbins definition as necessary for the expansion of economics to other fields; the exchange definition could do the same, since, for Buchanan, politics is, at its heart, a collective exchange process.

Thus, while if the Robbins definition may have been widely accepted, there was still significant dissent.

6. Conclusions

Tracing the influence of a definition of economics is problematic, for economists have little cause to cite a definition, unless to disagree with it. There is the further problem that, though his succinct wording may have been novel, the idea that economics was about scarcity was, as Robbins pointed out, far from novel. Even if acceptance of the idea beneath the definition could be demonstrated (and this is difficult) it would be hard to establish his role. This problem is exacerbated by the fact that the main place where one would expect to find discussions of the definition of economics—in introductory textbooks—rarely cited sources. Had the initial reaction been one of, "Robbins has brilliantly expressed what we all know to be the essence of economics, but had never been able to articulate," and had textbooks suddenly started adopting analytical definitions in terms of scarcity and choice between alternative uses of scarce resources soon after 1932, the circumstantial evidence would be strong indeed. But it was not like

[42] Peck (1936) actually said that Robbins's definition was exchange-based. See p. 3, above. Kirzner (1965, p. 258) argues that Buchanan's definition can be subsumed under Robbins's definition, because the exchange process is a part of the struggle to deal with the problem of scarcity. One sees this reflected in the Cairncross (1944) and Nevin (1958) definitions, cited on p. 17, above.

that at all. Robbins's definition of economics was challenged from the start, and the published literature indicates that it had very few unqualified supporters and many opponents. From the point of view of the published literature, therefore, what emerges is a definition of economics that was initially rejected, because it implied a view of economics that economists generally found flawed, but which came to be widely, though not universally, accepted.

One interpretation of the evidence would be that it was only those who objected to his definition who chose to mention it in publication: those who agreed simply got on with doing economics, in the course of which they did not have to cite any definition of their field. This was possible is because doing economics does not require a definition of the subject. Yet it is not true that the definition had no consequence. The grounds on which economists objected to it were that it served to narrow economics, or to constrain its methods in ways that were thought unjustifiable. This was precisely because it was an analytical definition, which appeared to define a specific way to set about doing the subject. Because of this, it simultaneously both narrowed and broadened the scope of the subject. It narrowed it through suggesting that deduction could achieve more than many economists believed it could. It broadened it through freeing economists from being constrained to analyze a particular subject matter. Till around the 1970s, economists attached great importance to the latter, and many of the qualifications suggested to the definition serving effectively to tie Robbins's analytical definition down to what was considered the subject matter of economics. From the 1970s, as economic methods came to be applied to social and other traditionally non-economic problems, economists became less concerned about this.

There may, however, have been another factor at work. This was that, though he did not formulate it in these terms, Robbins' definition fitted well with acceptance of a rational choice model of behavior. As economists learned to apply rational choice to an ever widening range of problems, the Robbins definition came to be used more prominently in textbooks.[43] We ended up not so much with controversy over the Robbins definition, but with a controversy over subject matter versus approach, but with both positions based on an acceptance of some version of the Robbins definition.

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[43] Support for this can be found in Stigler's essay on economic imperialism, where he suggests that the increasing abstraction of economics, particularly via the widespread adoption of "the machine of maximizing behavior," brought on the "imperialistic age" of economics (1984: 312). Coase (1977) argues along similar lines, although he, unlike Stigler, was very critical of and pessimistic about these forays into other disciplines.

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