

Diskussion/Discussion

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The Pareto Principle: Another View

Comment on Jürgen Backhaus: The Pareto Principle (Analyse & Kritik 2/80)

Abstract: The Pareto principle is in fact the fundamental concept of welfare economics. However, it has serious analytical and heuristic limits, is selective and conservative in nature and use, and is heavily normative notwithstanding the pretensions by advocates of its positive character.

Introduction

I very much appreciate the opportunity to respond to Jürgen Backhaus's clever effort to bolster the Pareto principle as *the* fundamental concept of welfare economics and to finesse its major critiques without doing them complete justice. I find that while I agree, inevitably, with some of what he writes, I disagree with much.

In this article I will discuss principally (I) what the Pareto principle neglects and therefore its limits, (II) its selective and conservative role, and (III) the positive/normative question.

First, let me indicate wherein I agree.

(1) There is no question that the Pareto principle is the center of gravity of most, although by no means all, theoretical and applied work in welfare economics, public choice, the economic analysis of government, and so on. In that sense I agree with Backhaus's statement that the Pareto principle is — as an *empirical* fact — the methodological cornerstone of economics. That I find it very limited for positive analysis and rather selective, conservative, and normative are quite different matters.

(2) I find the Pareto principle to be very useful; indeed, I rather like it. Changes which benefit some people without injuring others (rank considerations aside), or changes to which all agree, are attractive. They seem to be indicative of unambiguous increases in welfare. I laud, along with A. Allan Schmid and others, the quest for Pareto-better institutional adjustments. As a committee chairman, for example, I generally have tried where possible to achieve consensus rather than follow majority rule. I have done so as a matter of personal style rather than deliberate principle. My critique of the Pareto principle should not be taken as blanket rejection of the principle itself. In this regard however, I would restate Backhaus's interpretation of my view: Rather than saying that I criticize the common use of the Pareto principle, not the principle itself (his note 27), I would say that, first,

I both like and find severe limits to the principle and that, second, I fault the common use of the principle, largely on the ground of those limits but also because it is used improperly in ways beyond its strict capability.

(3) I agree with Backhaus concerning a number of points regarding government: (a) Government control of the economy is subject to severe criticisms. (b) Governmental decision making processes do not stimulate markets. Nor should they be expected to do so. Rather, they represent different preference aggregating processes (although, as Randall Bartlett (1973) has argued, because the structure of private power operates in both market and governmental processes, the performance results in each often are quite similar). (c) The Paretian analysis can be used to intuit the ostensible welfare foundations of the state, rather than presupposing the existence of the state (although such intuition is by no means the equivalent of either historical analysis of the genesis of actual states or analysis of how states actually operate and evolve). (d) Changes introduced with considerable consensus may be more effective than radical "utopian" proposals lacking any real survival or reformatory qualities (although it must be understood that notions of degree of change, and of possible change, are subjective).

(4) I agree that decision making is not a costless activity. Backhaus introduces this point in a context of distinguishing Paretian unanimity from practical, constitutionally provided majoritarian decision making. But both unanimity and other costs limit decision making. Costs are a function of rights and rights typically are the point at issue. Costs are not absolute but are in part a function of the transaction cost and reward and incentive systems, and these are in part a function of rights. This is a good paradigmatic example of the limits of the Pareto principle: It makes a point important in the real world but in such a way as to obscure even more fundamental issues, here the rights governing opportunity set and cost-price structures.

1. The Limits of the Pareto Principle

Whatever one thinks of its normative/positive status, as a principle of policy analysis the Pareto principle is severely limited. It neglects a number of important considerations. The use of the principle requires that these considerations somehow be resolved. It is through the resolution of these considerations that additional normative elements inevitably enter all uses of the principle in policy analysis.

First, there is no unique Pareto optimal result or solution. Each Pareto optimal solution gives effect to the structure of power or rights which gives rise to it. Power structure₁ yields Pareto optimal result₁; power structure₂ yields Pareto optimal result₂; and so on. To speak then of a Pareto optimal solution is either to neglect the power structure on which it is based or to give effect to implicit normative premises as to power structure. Paretian policy analysis is either empty, formal and tautological, or presumptive.

Second, rights have a dual character: For party Alpha to have a right is for party Beta not to have the right and to be exposed to the exercise by Alpha of that right. This parallels the reciprocal nature of externalities: If Alpha can affect Beta, preventing Alpha's affect on Beta constitutes imposition of an affect on Alpha (for example, Alpha's pollution visited upon Beta is the reciprocal of protecting Beta's air or water by preventing or increasing the cost of production for Alpha). To speak, then, of *an* externality is to neglect its reciprocal.

Third, the frequently asserted conflict between efficiency and equity is misleading if not false: Efficiency exists in terms of *some* rights or power structure; the choice is not between efficiency and equity but between one rights structure or another, and that is a matter, inevitably, of equity.

Fourth, one result of the nonunique nature of Pareto optimality is that the Pareto principle alone cannot give recommendatory force to any particular Pareto optimal result beyond the fact that it is *a* Pareto optimal result. Unthinking invocation of the Pareto principle obscures the fact that there are many possible rights structures and therefore a necessity to choose between alternative Pareto optimal solutions. Use of the Pareto principle in the context of a particular power structure, whether an actual one or a presumed one, lends recommendatory force to the Pareto optimal result which would emerge. It thereby would function selectively to reinforce that power structure *vis-à-vis* the results of a different principle or different assumed power structure. Pareto superior "improvements" are thus in part a function of the initial power structure. The recommendatory force of any particular Pareto-better adjustment or Pareto-optimal solution derives from the acceptance of (a) the Pareto principle and (b) the power structure within whose confines only Paretian change is permitted to take place. In other words, in part, determinate Pareto-optimal solutions require the choice of both the Pareto rule *per se* and the presumed power structure, and the use of Pareto optimality gives effect to the latter choice and, as it were, often masks it.

Paretian change begins with the actual or an assumed status quo power structure. Paretian change is limited to only that change approved by consent, which gives effect to the pattern of consent or veto built into the actual or assumed power structure. Actually, this gives rise to selective and not merely conservative changes but I shall consider that point later.

Fifth, Paretians, in order to achieve a result deemed by them latent with Pareto optimality, often tend to advocate (selective) changes on nominally Paretian lines of reasoning without unanimous consent. Some power structure assumption is necessary. If the actual status quo power structure (as difficult as it is to specify) is not used, some other *is* used.

Sixth, the Pareto principle neglects, obfuscates, or gives selective effect to the reality of government within the status quo. It does this by neglecting the fact that there are two joint and interacting processes in society, one in which so-called voluntary exchange takes place within the status quo power structure, the other involving legal change in the definition and assignment of legal rights. The preeminent Paretian position, made so clear by James Buchanan, is that preferably only those changes made through voluntary exchange should take place.

This is what distinguishes the Paretian from all sorts of so-called interventionists. On this I want to make a number of very important points.

(1) The distribution of rights on the basis of which voluntary exchange takes place is due in part to the identification and assignment of rights by law (government) to certain parties and not others. One cannot eliminate this fundamental characteristic of the status quo (although one might amplify it by saying that government was no exogenous force in identifying and assigning rights; rather, it was influenced by the structure of hitherto existing private power). Nor can one rule out, as a matter of *positive* description, the operation of the process of rights redetermination by law, that is to say, legal change of legal rights, government now giving effect to different interests than formerly, something achieved, for example, by "deregulation". This process typically is not Paretian in character, due to the dual nature of rights. In society there is power play over rights or, more properly, over the use of government to give effect as rights to certain interests and not others or to change the interests to which government gives its support, a clearly non-Paretian process (in which the Paretian clearly and avidly participates).

(2) In the real world, the processes just described inevitably and necessarily involve ubiquitous nonconsensual losses (Samuels 1974a; Samuels and Mercuro, 1979; Samuels and Schmid 1981, 46–47). These losses also typically are non-compensated. The notion of compensation raised under the rubric of the Pareto principle is illusory.

(3) The invocation of the Pareto principle in any policy situation serves to assume the propriety of non-Pareto optimal changes taking place elsewhere and otherwise in society. The Paretian acknowledges the limits imposed by externalities, although they have attempted to finesse the question of externalities by invoking the so-called Coase rule. But externalities are inevitable and ubiquitous, which follows from general interdependence and their reciprocal character (Samuels and Schmid 1981, 51ff; Samuels and Mercuro 1979). The world of the Paretian is utopian and illusory: Only by selectively identifying externalities and rights can the Paretian conduct policy analysis.

(4) The Paretian tries to have it both ways with regard to legal change. For the Paretian does not ban legal change. Rather the Paretian makes a distinction between permitted constitutional action (legal change) and nonpermitted statutory or judicial action (legal change). The Paretian antistatist posture thus is further selective: The Paretian, in order to conduct policy analysis, (selectively) identifies and assigns rights (Samuels and Schmid 1976) and (selectively) permits or rejects the exercise of public choice through stipulating what can be (or presumably has been) done at the constitutional level and what (little) is permitted at the "interventionist" legislative or judicial level. By focusing on voluntary exchange the Paretian only seemingly neglects the fundamental and continuing operation of government; in fact, the Paretian necessarily gives (selective) effect to government.

(5) In all this the Pareto principle really provides very little help in understanding and explaining actual government decision making and policy (although its critique helps elicit certain fundamental processes of choice). In the real world,

there are conflicts over rights (whether or not fully defined in the status quo). The status quo, however defined, is not taken as given. One's rights include the right to seek and effectuate legal change of others' legal rights. There is mutual coercion and nonconsensual losses (not really negated by the pretense that pecuniary externalities are not losses or by the other casuistries of Paretian welfare economics to minimize recognition of nonconsensual losses). There are conflicts which refuse to be obfuscated and derailed by talk of limiting change to Pareto-better trades. Whether or not one likes this situation, it is these questions which are thrust upon government and of which the stuff of political life is so largely made.

(6) The Pareto principle neglects, and therefore is limited by, consideration of freedom. Although Paretian analysis emphasizes consent and voluntary exchange, it neglects the distinction between freedom *to* and freedom *from* and thereby also neglects the factors and forces which operate to form the structure of opportunity sets within which freedom *to* and *from* have meaning, that is, the alternatives between which one can choose and give one's consent. By neglecting considerations of the pattern of freedom — the distribution of freedom *to* and freedom *from* — the Pareto principle neglects the distribution of power and thereby freedom as an end or value in itself (Gordon 1980, 202; Rowley and Peacock 1975). Consent permits freedom *from* but power permits freedom *to*. The domain of power governs the domain of freedom. In neglecting these considerations of freedom, Paretian welfare economics studiously avoids questions of power. Alternatively, it can be said to give effect to the actual or assumed structure of power (and therefore freedom *to*), generally to mystify analysis with regard to power.

(7) In a similar fashion, the Pareto principle, in limiting consideration of justice to justice in exchange, neglects and is limited by considerations of other criteria of justice (as a value independent of freedom *per se*).

Quite aside, then, from considerations of freedom and justice, the Pareto principle is quite limited in its implications for welfare (points 1 - 5 above). Backhaus acknowledges the limited welfare implications of Pareto optimal moves. He quotes me as saying that "Pareto optimal transactions are only chosen adjustments within the opportunity set structure accorded by the status quo structure of power . . ." and objects to the qualification "only", saying that this "turns the otherwise correct statement of fact into a criticism". My use of the term "only" was intended to emphasize the limited welfare implications of the principle. If indication of the limits of the principle (that it involves only chosen adjustments within the existing or assumed power structure) is "criticism of the principle" then so be it: Every principle is limited by and open to criticism from the perspective of other considerations and other principles. The distinctive quality of every principle derives from what it excludes as much as from what it includes, and each principle is limited by and criticizable for what it excludes and includes. My critique is of the Pareto principle even in its most sophisticated and austere use, not merely of the vulgar uses to which it is so regularly put. My response to Backhaus's complaint with regard to my use of "only" should not, however, obscure his agreement on the important point indicating the limited character of Pareto optimality, namely, the

correctness of my argument that Pareto optimal transactions are (only) chosen adjustments within the opportunity set structure accorded by the status quo power structure.

Backhaus also notes my emphasis on the fact that the rules governing individual choice and the initial distribution of entitlements are themselves an object and result of power play. To this he says that integration of power considerations would mean that "the criterion cannot be invoked for the determination of an optimum situation . . ." This, of course, is precisely my point!

II. Selective and Conservative Role

Not only is the Pareto principle intrinsically quite limited but its use inevitably is selective and conservative.

First, the principle is fundamentally conservative. Economists as diverse as Mishan, Samuelson, and Baumol, among others, have recognized that absent unanimous consent or agreement to bring about a change, the use of the Pareto principle favors the status quo. It provides the already established or powerful a veto power to prevent change (Samuels and Schmid 1981, 48ff and passim). Backhaus's quotation from Frisch is disingenuous in view of the predominant understanding that use of the Pareto rule would limit change to that agreed upon through voluntary exchange, that is to say, consent.

Second, a principal use of the Pareto principle has been to finesse unacceptable legal change, ostensibly to rebut the use of government to bring about legal change of legal rights in favor of reliance upon market exchange. The Pareto criterion has been used as a strategy against legal change on the level of general principle. Insofar as the status quo involves earlier use of government the principle serves also to mask that use, in part often by pretending or seeming to hold that one can have an economy without legal action or legal change. The use of the Pareto principle, indeed, its very nature, functions to divert attention from the world of social relations, power structure, power play, conflict, and the inevitable losses consequent to market and other government action.

Third, in functioning conservatively, however, the Pareto principle inevitably operates, and is used, selectively. Paretians inevitably must selectively identify rights and nonrights (Samuels and Schmid 1976), an externality *vis-à-vis* its reciprocal, and constitutional *vis-à-vis* other legal change. With ubiquitous externalities that are reciprocal in character, the Paretian selectively channels policy analysis by identifying the externality in one way rather than its reciprocal. In so doing, the Paretian thereby gives effect to one interest as a right, rather than the opposing interest. The only way in which unique, determinate policy solutions can be adduced is by selective identification of rights, externalities, costs, and benefits (Samuels 1978). The Paretian seemingly would terminate the process of rights redefinition and reassignment but in fact does not and can not, for the Paretian himself exercises such judgment and role. Absent the substance given by selective antecedent often-

implicit normative premises, the Pareto principle would involve only the futility of empty formalism (Mishan 1972). The Paretian (at least the more sophisticated among them) recognize the necessity of legal social control. The problem is legal change of legal rights. Although in one respect the Paretian would limit legal change selectively to only Pareto-better changes, even this is compromised by acknowledging the role of constitutional change; in another respect, the Paretian finesses zero-sum conflicts by selectively accepting some specification of the status quo or by selectively assuming certain rights. In all these matters the Paretian is no more and no less activist than the most dedicated socialist or interventionist.

Backhaus refers to Pareto's distinction between "real" and "virtual" movements. But this distinction is misleading. It also is a good example of how Pareto himself was conservatively selective. Real movements for Pareto were those which assumed conditions and active influences as given. Virtual movements involved more or less deliberate alterations in one of those conditions (Samuels 1974b, 180; Pareto 1963, secs. 129–130). The conservatism enters through the premier status given the so-called real movements. The selectivity enters through the specification of the conditions and influences assumed as given and, further, through the failure to acknowledge, in juxtaposition to the maligned legal activism assigned to virtual movements, the deep legal involvement (through past legal activism) in the conditions and influences comprising the so-called real movements. By selectively defining the status quo (real movements), by selectively admitting certain desired actions of government to remain masked within the status quo, conservatives often have been able selectively to deprecate certain undesired government action as either government per se or legal change (thus, for example, defining freedom as the absence of legal change), much as the Marxist can assert that in classless communism there will be no state, only administrative machinery, because by definition the state is an instrument of class domination and absent class structure there can be no state.

Backhaus is quite willing to recognize, in certain contexts, the non-singularity of a Pareto optimum. Thus he says that such non-singularity does not imply that resort must be taken to some social welfare function. That, in my view is mischievous: Non-singularity *does* require resort to some further basis of decision making, as Pareto himself understood (for example, to ethics). That, after all, is what decision making — especially the hard decisions left to government — is all about. Decisions between alternative "optimal" solutions are worked out in the real world. In Paretian analysis they are reached by selective assumptions as to rights, externalities, and so on — as to whose interests count. Parties with parallel if not equally valid claims or interests somehow must be differentiated. Paretian practice gives selective effect to one of the consequences of the heterogeneity (class structure) of society recognized by Pareto himself, namely, "that rules of conduct, beliefs, morals, should be in part at least, different for the different parts of the society in order to obtain maximum utility for the society" (Pareto 1971, 95–96). The Paretian policy analyst continually puts himself in a position of determining utility *for* the society by introducing selective choices, often only implicitly and even unappreciated by the analyst, through the selective identification of rights and externalities, and so on.

Fourth, Backhaus is correct in arguing that the Paretian supports change (albeit on Pareto-principle conditions). Note, of course, that such change can take place only within, and selectively reinforce, the status quo or otherwise assumed power structure. The Pareto principle, however, as I have argued elsewhere, paradoxically also rationalizes non-Pareto optimal changes originating outside the immediate domain of the criterion (Samuels and Schmid 1981, 45ff.). But even more important is something which Backhaus also does not acknowledge: that the Paretian frequently encourages non-Pareto optimal changes (and thereby losses imposed without consent) in order to permit what are perceived to be presumptively Pareto-better solutions. The Paretian will generally oppose government regulation, for example. But in doing so the Paretian neglects the fact that Alpha's rights may be consequent to the dispensed regulation of Beta and further than elimination of the regulation of Beta imposes loss upon Alpha.

III. The Positive/Normative Question

Backhaus's article is uncertain as to both the precise positive *vis-à-vis* normative status of the Pareto principle and the specific respects in which it is or may be positive and/or normative. Let me make the following points.

First, Pareto optimality is a characteristic of equilibrium. Equilibrium theory may not be necessary and certainly is not sufficient to study market allocation of resources. But Pareto optimality itself is only an aspect of equilibrium. As such it is a matter of positive economics. But use of the Pareto criterion goes much further than delineation of a characteristic of equilibrium. Indeed, if it did not, welfare economics would be quite differently if not far less "developed" than it is.

Second, I agree with Backhaus that economic policy analysts can treat as positive subjects the analysis of particular alternative means to pre-chosen ends. But there is a difference between saying (a) what *is* the case, (b) what *ought to be* the case, and (c) what is *necessary or instrumentally useful* given what ought to be the case. To go from the (a) statement to the (b) statement and the (c) statement one must have some normative basis or premise on which to predicate the additional normative holding. The positive analysis of means derives its specific recommendatory force from the normative status of the end to which the means are instrumental. This is a very different form of positivism than a simply descriptive what-is-the-case statement. The latter may be called purely positive and the former conditionally positive. The difference involves a distinctively normative element (Samuels 1978, 1980a).

Third, the Pareto principle is normative insofar as it necessarily and inevitably involves selectivity, however only implicit and conservative that selectivity may be. Such selectivity has been shown above to be substantial. Thus Paretian analysis inevitably deals with normative substantive content, whether by virtue of the decision-making (that is, equilibrium-determining) forces resident in the economy *which in part reduce to power* or by the selections made by the analyst. This

includes but is not limited to specific identifications of externalities rather than their reciprocals. Thus it must be emphasized that utility (or ophelimity) is intrinsically a normative category: Equilibrium prices, for example, are coefficients of choice. It is positive to say something about the state of utility functions. But it is normative then to proceed with Pareto optimality as *the* "orientation" for "advice on economic policy" (Backhaus's terms). For all his emphasis on positivism, Backhaus is nonetheless interested in providing "advice on economic policy", and doing that is normative. It may be "only" conditionally normative but it remains selective and normative.

Fourth, the Pareto principle is not "minimally" normative. Rather it is thoroughly and deeply normative, however ambiguous its normativism may be (Samuels and Schmid 1981, 41–51; Samuels 1980b, 183 and *passim*).

Fifth, the choice of the Pareto principle as a rule is normative. The choice *per se* is normative. The systematic and almost exclusive use by economists of Pareto optimality excludes (and may obscure) other normative categories (Samuels 1980b, 181–182). It is normative to presume that "only" Pareto-better adjustments are good or define the universe of admissible policy discourse and welfare improvements. The choice of the Pareto principle involves the adoption of an analysis and decision frame and that is "an ethically significant act" (Tversky and Kahneman 1981, 458).

Sixth, the precise specification of the Pareto criterion varies so much as to permit further implicit normative elements to enter. Among other usages, the Pareto principle has been rendered as: changes which benefit some people without injuring other; a change which benefits or is approved by at least one person and to which no one else objects; equilibrium; no further gains from trade; unanimity; consent; exchange; and voluntary exchange. The differences in normative (and positive) nuances among these usages are substantial.

Seventh, specifications of solutions or situations as Pareto optimal tend strongly to be presumptive and nonoperational, nontestable, and nonrefutable (Samuels 1980b, 182), that is, laden with metaphysics, not positive analysis.

Eighth, Backhaus's argument in Part III of his article, involving the prisoners' dilemma analysis, will not sustain the Pareto principle as positive. The superiority of Backhaus's solution A over solution C is not value-free. It is not derived from a reality independent of values as Backhaus would have us believe. His analysis neglects the power-structure assumptions and other conflicts which delineate the situation. Certainly preferences have to be "taken into account" but the important questions neglected by his analysis are preferences for what and on which (whose) terms. The prisoner-choice model incompletely expresses the total realm of choice in society to which the Pareto principle has been applied.

Ninth, Backhaus's general argument for the existence of *a* state, but not for any particular state organization, says little that is helpful. Moreover, insofar as most Paretian analysis takes as given the existing state and its past economically significant actions, this is but another example of implicit normative premises entering ostensibly positive analysis. Insofar as the Paretian would deliberately introduce

changes in state structure or behavior, in order to bring about presumed Pareto-better arrangements, the Paretian is opting, here too, for a particular state organization. The Pareto principle in practice is no more silent or unselective about the state than it is about rights distribution.

It should be made clear that the normative status of the market is *not* at issue here. I urge, as a matter of *positive* analysis, recognition of the importance of the power structure which forms and operates through the market and the use of government with regard to that power structure as critical variables. The Paretian typically either is silent about these points or selectively channels their use. Anything which is ostensibly dispositive of or applicable to these issues, such as the Pareto principle as a mode of "advice on economic policy", is normative, having to do with either an ought or a conditional ought. It is normative as to whose interests shall count and the Paretians are power players in the process of deciding just that (Samuels and Schmid 1976).

IV. Conclusion

Let me repeat that in saying that there are serious limits to the Pareto principle, that there are widespread abuses of it, and that there are senses or respects in which it is thoroughly and deeply normative, I am not attempting to denigrate the principle. Advocates of the Pareto principle almost uniformly find such arguments to constitute repudiation. That they do so suggests to me the heavy emotional and ideological weight carried by the principle in modern economics.

If welfare economics is predicated on the Pareto principle, so much the worse for welfare economics and economics: It is only *Paretian* welfare economics. No wonder that Boulding (1966, 12) has said that economics constitutes a monumental misallocation of resources. Certain Paretian welfare economics involves a waste of analytical opportunity. But Paretians, like economists generally, desire to provide policy advice and recommendations with the aura of "science", *vis-à-vis* the more purely positive (but less glorious) explication of the allocation of resources and other performance consequences of the political economy. In desiring both determinate optimal solutions and specific policy recommendations, welfare and other economists have found the Pareto principle useful precisely because it has served a normative constraining role. That role also has endeared the principle to conservatives. Although Backhaus plays down the normative character of the Pareto criterion, another Paretian, McKenzie (1982), emphasizes the didactic (some would call it apologetic) role, intent, and content of economics; in other words, methodological individualism is a proxy for normative individualism. Pareto optimality is more than a symbol but that it is a symbol is a positive proposition. The Pareto principle is arcane. It typically can properly say conclusively much less than it often is taken to say. It handles important issues in a particular way — the framing role. It does not exhaust the positive or the normative economics of welfare.

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