

James Buchanan's Contributions to Social and Economic Thought: Citation Counts, Self-Assessment, and Peer Review

GAREY C. DURDEN AND STEVEN W. MILLSAPS

Department of Economics, Appalachian State University, Boone, NC.

The simple exchange of apples and oranges between two traders—this institutional model is the starting point for all that I have done.

—James M. Buchanan (1986)

Abstract. This paper demonstrates James Buchanan's impact on socio-economic thought through citation analysis of his published works, a discussion of Buchanan's own views of what his work means and is, and summary discussions of the assessments of other scholars. Thus the central themes of his work are illuminated as well. These themes include a deep distrust of government interference in the economy and in the personal lives of members of the polity, and his absolute conviction that collective decisionmaking should take place only within the framework of a contractual agreement, the fundamental principles of which have been derived through near unanimity.

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1. Introduction

The attention James Buchanan's contributions to economic and social thought has received has increased since he was awarded the 1986 Nobel Memorial Prize in Economics. In this paper, following Agnar Sandmo (1990, p. 62) we address the question: "What, in perspective, are Buchanan's main contributions?" We do so by performing a citation analysis,¹ in section 2, of Buchanan's most important books and articles, and by developing a "Buchanan on Buchanan" critique, in section 3, which is based on his 1986 paper "Better Than Plowing." A discussion of "The Profession on Buchanan," in section 4, focuses on contemporary peer views of the nature and substance of Buchanan's philosophy. Section 5 provides a brief summary and concluding remarks.

2. The Citation Analysis

Citation analysis, when certain limits are acknowledged (Quandt 1976), is becoming widely recognized as a useful means of ranking economics journals (Liebowitz and Palmer 1984), economists (Medoff 1989; Blaug and Sturges 1986), economics departments (Laband 1986; Hirsch, et al. 1984), and for assessing the contributions of particular individuals (Durden, Ellis, and Millsaps 1991). The citation counts presented here are in the spirit of previous efforts, and are intended to illustrate how a substantial scholar has influenced the work of many others.

While *The Calculus of Consent* (1962, with Gordon Tullock) is the most influential of Buchanan's writings, with over 1,200 citations to date, Table 1 shows that he has produced many other important books and papers. Nine of his books have been cited more than 50 times and his contributed papers and monographs have been cited extensively. Buchanan's papers have been published in journals which are among the best in economics, including the *American Economic Review*, the *Journal of Political Economy*, the *Journal of Public Economics*, the *Journal of Law and Economics*, the *Economic Journal*, and the *Quarterly Journal of Economics*.

Whether a given book or article deserves the "classic" label will always lie in the eye of the beholder. However, if a classic is defined as a work which is widely read and highly influential, many of Buchanan's works certainly qualify. According to criteria developed by Durden and Ellis (1993), *The Limits of Liberty* (1975), *The Demand and Supply of Public Goods* (1968), and *Public Finance in Democratic Process* (1966) are classics. *Toward a Theory of the Rent-Seeking Society* (1980) is a "pre"-classic, which means that the work is more recent but that it is on a yearly citation rate that is high enough to eventually lead to classic status. *The Calculus of Consent* is what Durden and Ellis have labeled "super"-classic. "An Economic Theory of Clubs," and "Externality," (with Stubblebine), both published in *Economica*, are classic articles.²

The breadth and depth of Buchanan's scholarly impact are summarized in Tables 2, 3, and 4, and in Figure 1. Table 2 shows total citations and lists those journals which have cited his work ten or more times. Over 6,000 citations have appeared in more than 500 different journals. In excess of 100 citations have appeared in eight different outlets: the *American Economic Review*, the *Cato Journal*, the *Journal of Political Economy*, *Public Finance*, *Public Finance Quarterly*, *Public Choice*, *Kyklos*, and the *Southern Economic Journal*. Table 3 lists the 1,100 plus citations appearing in 21 selected 'core' journals, which many consider to be among the most important in economics. Total citations per year through 1993 are shown in Figure 1. There have been more than 400 citations in two separate years, 1988 and 1993. Table 4 lists citations by journal discipline. These results offer persuasive evidence of the influence Buchanan has had, not only on economic science, but also on allied disciplines. Almost 60 percent of all citations have appeared in economics journals, but over 40 percent are spread over 25 other fields, from anthropology to urban studies, with relatively heavy concentrations in business, law, planning and development, political science, policy analysis, politics, and social science-interdisciplinary studies. There have been three citations from architecture, and 22 in natural science journals.

3. Buchanan on Buchanan

Buchanan's article "Better Than Plowing" (1986) is a personal recollection and reflection on his academic career, including comments on the relative importance of selected published works. Assuming that citation counts reflect the influence of a book or article, we compare Buchanan's self-appraisal with the reaction (as measured by citations) of members of the academic community.³

An early Buchanan article, "The Pure Theory of Public Finance," (1954) was published in the *Journal of Political Economy* and called for a tie-in between the theory of the state

and the norms for taxation. According to Buchanan "the point seemed so simple, indeed obvious, yet so locked in was the utilitarian mind-set of orthodox public finance that the article was widely cited as seminal."⁴ Apparently so, since the piece received 19 citations. Although in the early stages of his career, Buchanan had already staked out a position that he describes as "outside the mainstream" of his peers in social science. Buchanan describes two papers published in 1954 as containing "elements of much that was later to be developed in my contributions to public choice." "Social Choice, Democracy, and Free Markets" (April 1954)⁵ was a review article on Kenneth Arrow's famous book on the general impossibility theorem which made "the obvious point that the whole Arrow construction was inappropriate for a democratic society." A companion piece to the Arrow review article quickly followed, "Individual Choice in Voting and the Market" (August 1954). "Again, the points seemed simple but surprisingly no one had made such a basic comparison," says Buchanan. The paper (cited 24 times) and the Arrow review article helped establish Buchanan as a major thinker and writer in public finance.⁶

Following a year in Italy on a Fulbright grant, Buchanan directed his research toward the theory of public debt. His first (singly-authored) book, *Public Principles of Public Debt* (1958), stemmed from his realization "that the whole conventional wisdom on public debt was simply wrong. The time had come for a restoration of the classical theory, which was correct in all its essentials." This book (51 citations), along with some other works on public debt, was very controversial. Buchanan believed the ambiguity was partially of his own making and "laid plans to write a short book, which I consider my best work in economic theory, narrowly defined." *Cost and Choice: An Inquiry in Economic Theory* (1969) has been widely read and cited (116 citations).

As noted above, *The Calculus of Consent* (1962), co-authored with Gordon Tullock, has become a "super"-classic in public choice theory with over 1,200 citations to date. Buchanan states that there was no sense of discovery while writing the book. He describes the construction of the book as "essentially one of 'writing down the obvious' rather than opening up wholly new areas for inquiry." Yet, public choice theory became "obvious" to a great majority only after it was developed and properly explained in this publication.

Buchanan's most cited journal article "An Economic Theory of Clubs" (1966) is mentioned only in passing in the Plowing-narrative as, "a filling-in of an obvious gap in the theory of public goods." Judging from the response of the profession (over 200 citations) the gap had not been so obvious. Buchanan's work in the 1960's also produced *Public Finance in Democratic Process* (1966) which he describes as "a relatively neglected book. . . which contained implications for normative theory that remain unrecognized by modern research scholars." One-hundred seventy two citations provide evidence that the book was not neglected, but was recognized as a seminal contribution.

Buchanan "lost faith" in the effectiveness of government in the late 1960's and early 1970's with the explosion in spending rates and the proliferation of what he considered to be ill-conceived social programs, "seemingly divorced from the interests of citizens." Aided by the independent efforts of Winston C. Bush, Buchanan produced what he thinks to be "the most coherent single statement of my research program." *The Limits of Liberty: Between Anarchy and Leviathan* (1975), widely read, discussed, and cited (301 citations) focused on the reduction of personal liberties which can occur when too much power is

given to the Leviathan state. This controversial area of inquiry was opened even wider with publication of *The Power to Tax* (1980, with Geoffrey Brennan) which “as reviewers noted, . . . was to stand much of the conventional wisdom in normative tax theory on its head.” This book has been cited 153 times to date. A large share of Buchanan’s work during the 1975–85 decade “involved varying attempts to persuade my peers to adopt the constitutional attitude.” *Freedom in Constitutional Contract* (1978) (51 citations), *Liberty, Market, and State* (1985) (42 citations), and *The Reason of Rules* (1985, with Geoffrey Brennan) (65 citations) sought to enlighten and defend the contractarian-constitutionalist methodology.

4. The Profession on Buchanan

4.1. David Reisman

The extremely well-written and organized book by David Reisman *The Political Economy of James Buchanan* (1990) is an appropriate starting point for an examination of how Buchanan is viewed within the profession. Reisman’s book reinforces one’s understanding of the central motives of Buchanan’s work, and of his thrust in developing and applying the fundamental political-economic philosophy that has been the driving force of his intellectual life. Buchanan proposes as appropriate a normative view of the framework for economical-political action and does so with a single-minded determination perhaps equaled among other Nobel Laureates only by Friedman’s focus on the importance and proper role of money in a market economy. However, where Friedman’s contributions, important and lasting as they certainly are, are framed within more narrow confines, Buchanan’s work is, though relatively simple in its ultimate form, far broader, encompassing nothing less than the development of a proper set of rules, freedoms, and constraints for the political, economic, and social conduct of human beings in all walks of life.

Reisman sets the tone of his discourse by identifying primary influences on Buchanan’s political economy: they are such great thinkers as Adam Smith, Knut Wicksell, Alexander Hamilton, James Madison, John Jay, and George Mason. In later chapters, Buchanan’s intellectual debt to Friedrich von Hayek, Frank Knight, Israel Kirzner, and others with whom he had actual contact, is acknowledged. From this list it is relatively easy to surmise that the fundamentals of Buchanan’s political economy flow from an extremely skeptical view of Leviathan, and that self-interest is considered the guiding motive in exchange.

Buchanan rejects the notion of an organic composition of the polity and the attendant notion that there are universal truths which can lead directly to the “good society” when discovered and implemented by benevolent and altruistic policymakers. Rather, the political economy of Buchanan is rooted firmly in the belief that there are no absolute truths, and that entrusting too much power to any policymaker is a recipe for disaster. In this view, the appropriate framework for human interaction is a set of constitutional rules with free exchange or “catallaxy” as the appropriate method for allocating scarce resources.

To Buchanan, the proper role for the state is determined through the reasoned choices of free individuals, and the necessary methodologically individualistic, catallactic process requires a social contract which is agreed to by all and is binding upon all. Near unanimity is

necessary at the level of contract formation.⁷ For post-contractual public choices, less than unanimous consent may be appropriate because of the costs of reaching universal approval. Interestingly, less than unanimity, which is internal to the contract or constitution, must be a feature of the contract itself.

Reisman sees both parallel and opposing ideas in the contractarian philosophies of John Rawls (1971) and Buchanan. Like Rawls, Buchanan is less concerned with end states than with process.⁸ Both philosophers propose a "veil of ignorance" which is a pre-contractual state in which individuals, ignorant of their post-contractual mental, physical, or economic status, must agree upon the rules to govern social and economic interaction. Both Rawls and Buchanan believe that a just contract can emerge from behind the veil. The rules so derived will allow for maximum individual freedom, consistent with similar freedoms of others, and protection from both the predatory impulses of Leviathan and the chaos of anarchy. Rawls and Buchanan place individual liberty as the cornerstone of the just contract, and both see the contract as a document agreed to by risk-averse participants. For Rawls, risk-averting behavior results in lessening the extremes of wealth and income; for Buchanan, risk aversion results in rules which, at some cost to freedom, protect minority rights, and protect all from the extremes of the coercive state.

There are similarities between Rawls and Buchanan and, as Reisman demonstrates, differences as well. With respect to the first principle, Rawls believes that it would be irrational for the relatively affluent society to prefer increases in economic welfare at the expense of liberty.⁹ Here, we see evidence of a fundamental premise of Buchanan, which is that end states such as perceived by Rawls cannot be so easily divined. Buchanan concerns himself with process, with the "calculus of consent," which may lead to a state such as that envisioned by Rawls or some other state entirely. Central to Buchanan's position is the presupposition that free individuals, acting within the contract, have the right to choose any result, including the reduction of liberty for the increase of economic gain.¹⁰

With respect to the second principle, Rawls sees the contract (emerging from behind the veil) as one biased toward a general leveling of incomes and personal attributes, unless distributional inequalities are to the advantage of everyone. Inequalities of income or social characteristics will be such that the least advantaged benefit the most from such inequalities. Buchanan sees the Rawlsian conclusion as one which has no realistic underpinning since it is impossible to actually operate from behind the veil. In particular, it is foolish to expect that Rawls' model world has any chance to exist because the "haves" are not going to reshape the world in a way that clearly diminishes themselves. Again, Buchanan proposes that society work toward a generally fair set of processes and be satisfied with what results from interaction among free individuals. The "good" is that which emerges from process within contractual confines.

The democratic state, since it is founded on contractual, constitutional principles, which are themselves based upon consent of the governed, is preferable to alternatives. The decision rules to be divined within the democratic contract are subject to the criterion of cost-minimization. Reduction of decisionmaking costs is more likely the smaller the unit of authority; hence, decentralization will be a central feature of the polity. The consequences of political decisions will affect the rule to be used, and many decisions will be the result of informal interaction.¹¹

Reform of the contract in order to move society toward the "good" state is not easy in the Buchanan framework. This is because any existing state of affairs has been arrived at within the existing set of rules. It is here that Wicksell's concept of near unanimity comes into play since rule changes are inherently unfair when they contradict the status of one who has been a consistent rule-player prior to reform. Vote trading and vote selling are normatively appropriate in Buchanan's philosophy, since a vote is a scarce commodity, and trading and selling of scarce commodities is a fundamental basis of catallaxy. It is through logrolling, for example, that intensely felt preferences may be operationalized, and expression of intensely felt preferences is basic to exchange.¹²

Reisman provides insight into Buchanan's view of governmental failure, focusing on the destructive and mischievous activities of politicians, bureaucrats and academicians who are devotees of the Keynesian-based premise that political decisions can, with greater benefit than detriment, enhance the performance of the economy. The general problem is that political decisions are, in Buchanan's view, based upon the rational interests of individuals, rather than upon the altruistic promotion of the general welfare. Much of Buchanan's work repudiates the notion of altruistic political decisionmaking, especially as the notion seems applicable to Keynesian-like cures for economic ills. Buchanan sees the cure as much worse than the disease, since belief in beneficence inappropriately expands the role of government, and allows bureaucrats and politicians to use the resources of others in ways that would never occur within the individual exchange process.

Buchanan's work includes strong, normative, recommendations for constitutional reform. He sees as critical the need to:

- (1) Limit the mischief which inevitably arises through the representative system in which special interests currently thrive (an example would be a balanced budget amendment, needed because of the failure of institutions which are predicated upon the altruistic notion);
- (2) Significantly increase the percentage of yes votes (beyond the current 51%) required for widely felt collective decisions; and
- (3) Focus upon rules changes that will result in overall improvements, as opposed to the inconsistent and piecemeal nature of what now exists, with near-unanimous agreement as the base criterion.

Reisman provides a comprehensive and cohesive review of Buchanan's political philosophy. The principles of unanimity, individualism, and the theory of contracts are conceptually integrated, and Reisman again emphasizes Buchanan's position that, once the contract is delineated, what results is to be accepted, whether or not it is in accordance with one's own beliefs. Buchanan would clearly opt for end results like balanced budgets, protection of property rights, and greater economic and political freedoms. Yet, if this is not the case one cannot quarrel, because the constitutional process has been unanimously structured.

4.2. *Charles Baird and Anthony Atkinson*

Charles Baird provides a very substantive outline of Buchanan's work in relation to the Austrian school of economics, as developed by Carl Menger, Ludwig von Mises, Hayek, and others. The fundamental basis of the Austrian school of thought is that human behavior in an economic context cannot be definitively explained using mathematical models of constrained choice. The real world in which individuals interact

includes thorough-going subjectivism; consistent methodological individualism; an emphasis on exchange, or catallactics, rather than on economizing and optimizing; focus on real-world market processes rather than on equilibrium states; and a view of economics as an "explanatory," rather than an "exact," science within which there is a severely circumscribed role for mathematics and statistics (Baird 1989, p. 203).

Baird shows that Buchanan is firmly rooted in the Austrian tradition of approaching the study of economics in a broader context than, for example, Chicago school economists such as Stigler and Friedman.

The *Scandinavian Journal of Economics* provides an analysis of the works of each new Nobel Laureate in economics, the one for Buchanan being done by Anthony Atkinson (1987). In his research Atkinson located what is probably the "manifesto" for Buchanan's life work, namely his article "The Pure Theory of Government Finance," published in the *Journal of Political Economy* in 1949. In this paper Buchanan lays out the bedrock of his philosophy, which is that the state is not a cohesive unit but a collection of individuals whose interests must individually be considered in making public choices. Atkinson then gives a concise overview of the primary areas in which Buchanan has written. These include the previously noted connections to Wicksell and Knight¹³ and—on Buchanan's conception of the burden of the national debt¹⁴—the lesser known influences of the Italian school. A brief review of the *Calculus of Consent* is presented¹⁵ and, besides the usual discussion of Buchanan's constitutional philosophy and the pertaining rules for the interaction of free individuals, we also are introduced briefly to Buchanan's theory of clubs. Buchanan's club theory promotes placing public choices at the level of small decisionmaking units that can more easily reach something close to unanimity and appropriately allocate costs and benefits of political choices.

4.3. *Charles Rowley and Norman Barry*

A different set of explorations of Buchanan as performed e.g. by Charles Rowley (1987) and Norman Barry (1984) presents a more philosophical perspective in approaching his work.

Rowley (1987) provides deep and fruitful insights into the philosophical underpinnings of Buchanan's work. It is clear that Rowley, himself a public choice scholar of considerable merit, is a profound admirer of the intellectual contributions Buchanan has made. This applies to the benchmarks for Buchanan's ideas (small role for government, reliance on catallactics-based consent for making public choices, the role of self-interest in politics, etc.), as well as the inherent quality of his scholarship. Rowley sees Buchanan not as a

Socratic poser of leading questions but as one given to Platonic reflection, yet this reflection concentrates on process rather than end states as was characteristic for the Platonic school of thought. Those even remotely familiar with Buchanan will recognize here the clearing of truth, since his central theme (from his 1948 discovery of Wickssell's writings on the collective choice process to the present) has been the discovery and implementation of a proper contractarian framework for collective choices, with near unanimity as the benchmark from which all discussions are to ensue.

Rowley discusses Buchanan's position on the concept of efficiency which appears to be that, given a set of institutions and conditions, and freedom to make choices, the resulting end conditions are efficient. Specifically, there is no useful meaning with respect to the concept of universal allocative efficiency. This criterion of welfare economics is viewed by Buchanan as impractical, even counterproductive, leading to a much greater government-bureaucratic choice structure than is healthy for either efficiency or political-economic freedom.

With respect to the concepts of liberty and justice, Rowley sees Buchanan as adopting the Rawlsian position that these can be in conflict. Given a distribution of resources, liberty may not meet a central criterion: that justice requires fairness in the distribution or attainment of individual states of the world. While proposing that the first principle requires the most extensive liberty possible which does not unduly infringe upon a similar liberty for others, Buchanan apparently subscribes to the attendant principle that fairness requires a distribution within which inequalities are "reasonably expected."¹⁶ The principle of justice as fairness can only be formed behind the veil of ignorance, however, and the veil cannot be realized in the real world.

Barry (1984, pp. 579–80) argues that Buchanan sees himself in the classical liberal tradition, believing in the

efficiency value of free markets, the ethical value of individual liberty, the conceptual distinction between law and state, and the delineation of the respective spheres of compulsory and voluntary action. . . . Buchanan's social philosophy is structured around three interrelated concepts: agreement, Pareto Optimality, and the procedural approach to the evaluation of laws, policies, and institutions.

The significant feature of Buchanan's work is seen in his attempt to construct a theory of a free society which solves what Barry considers to be an insurmountable conceptual problem: that the Paretian exchange-based calculative approach is not really applicable to all problems of economic and social interaction which can occur in the real world. This is because the exchange process must begin with a state of being that is itself not derived from a process of free exchanges based on mutual advantage. Barry sees Buchanan's attempts to deal with this problem as incompatible with his simultaneous positivist and subjectivist rejection of the concepts of traditional natural law and natural rights. According to Barry, this dichotomy of purpose and philosophical underpinnings in Buchanan's thought has not been solved. Ultimate truth is entirely subjective, emanating from the agreement principle which is explicit in catallactic exchange. The source of morality is similarly not based on any natural law to which we are all subordinate, but is subjective, derived also from the agreement principle. Barry identifies an aspect of Buchanan's agreement principle which is decidedly negative. The intrinsic worth of principles such as freedom of choice, and even

application of legal constraints would seem valid in all circumstances. In the natural-law construct, if an individual or group were selectively denied these rights, the denial can be legitimately overridden without unanimity. Buchanan's agreement principle, taken literally, would not allow this.¹⁷

4.4. *Elias Khalil and Louise Halper*

Elias Khalil proposes a relatively negative view, derived from the writings of Sir James Steuart on the primary public choice paradigm, particularly as the paradigm undergirds *The Calculus of Consent*. The paradigm is, of course, that public sector choices, to be properly understood (and predicted) must be analyzed within the framework of rational self-interest. Khalil (1987, pp. 114–15) sees Buchanan as the

appropriate representative of neoclassical economics since he addresses its philosophical fundamentals and makes its maxims the underpinnings of political action, while Sir James Steuart is the best opponent to erect against him, since the state occupies a different, much more visible role in his scenario of economic development.

The philosophies of Buchanan and Steuart are seen as close to polar opposites, where the primary thrust of the former is the development of a constitutional process in which proper restrictions make it difficult for groups or individuals to take undue advantage, particularly in the use and control of economic resources. The Buchanan framework, according to Khalil, leaves no room for, and cannot explain the existence of the public-minded statesman. Steuart's philosophy recognizes that self-interest is a dominant motive, in the tradition of Smith, but focuses on the role of the great statesman in political-economic affairs. This great statesman is one who may lead an unwilling populace to produce public results which are beneficial to all. Steuart's view is essentially that the state is an organic entity in which the statesman provides the father figure for the political family. Buchanan, one easily supposes, would be quite strongly repelled by the thrust of Steuart's philosophy. Steuart's altruistic and morally superior statesman seems quite at variance with most of recorded history, although perhaps not entirely absent. Moreover, the rise of the superior statesman can be explained within the public choice framework.

Louise Halper¹⁸ (1993) provides us with a brief but effective explanation of the legal-based underpinnings of public choice theory, and of Buchanan's role in defining and distributing the theory through his writings and lectures. Halper notes two things in particular: the distrust which public choice theorists have for majoritarian rule which, they believe, often leads to income redistributions and other tyrannies of the majority, such as the taking of private property for public use; and, reliance on free exchange as the proper vehicle for all resource-using decisions, including those which are collective in nature. Buchanan's view of the state as a market and of market exchange as the superior paradigm is critically examined by Halper, as is his adherence to a constitutional-contractarian framework for human interaction. As she makes clear, Buchanan's work consistently rejects the claim of early welfare theorists that preferences can be aggregated to form anything resembling efficient collective decisions. Rather, a constitutional-contractarian environment in which

the state is primarily the protector of property rights and of individual freedom to make free choices in political and private markets, is the only legitimate approach. This is so because, at least in part, the constitutional-contractarian framework is really the only practical solution in a world where scarcity makes choices necessary. Halper carefully traces Buchanan's views on the characteristics of the ideal and proper state, and on his development of appropriate rules and responsibilities of the judicial and legislative elements thereto. Buchanan's appeal to the validity of Wicksell's unanimity is the primary focus of these discussions.

Halper is an explainer of Buchanan but does not necessarily support all of his views. In her critique, she chides Buchanan for his inability to give a normatively defensible account of the pre-political distribution of property. In tandem with the concept of unanimity, Halper sees this as ultimately detrimental, perhaps fatal to a democratic society. This is because, "In Buchanan's model of coerced unanimity, the status quo cannot be changed without unanimous consent no matter how the status quo came to exist" (1993, p. 257). Halper sees this as the codification of unfairness, given the power which economic and political elites (individuals and interest group members) command in a representative system.

A quote from Thomas Romer's article on James Buchanan's contribution to public economics (1988, p. 177-78) provides fitting closure to this peer analysis:

In all of this, Buchanan has remained steadfastly controversial. Though his analytical work is based firmly on the calculus of individual choice, his discussion of political organization has always had a moral concern. He has inveighed against Keynesians for undermining what he believes was a social contract against routine deficit spending. He is equally harsh on the Reagan administration for further eroding the moral consensus against burdening future generations with the excesses of today's deficits. He has taken mainstream economics to task for being driven by technique rather than substance, and has decried what he sees as the sterility of most theoretical work. He is no kinder to the bulk of empirical research, and as far as I know has never published an empirical paper. I suspect he even views much of the current work in political economy/public choice, as it becomes more fully integrated into the mainstream of economics or political science, with some dismay.

5. Concluding Remarks

In this paper we have attempted to give interested scholars an indication of James Buchanan's impact on socio-economic thought. To that aim we have provided a citation analysis to quantify the impact of his contributions, a discussion of Buchanan's own views regarding his work, and a summary of the assessment of other professionals.

The citation analysis shows that Buchanan's work has exerted and continues to exert a broad and enduring influence. There have been more than 6,000 citations in over 500 different journals encompassing a wide array of disciplines. Several books and articles have become classics, as determined by citation numbers. Buchanan's views, garnered from his 1986 paper, "Better than Plowing," provided insight into how his career has progressed,

and what he thinks of various career stages and of particular works. The citation counts show that his own assessment and that of his peers sometimes overlap, but some works have probably had greater impact (in terms of total citations) than Buchanan might have surmised, while others have been less influential than he believed. A concluding summary of the writings of selected scholars who have studied Buchanan's works was intended to provide readers with the positive and negative views of others. However, in a larger sense, we have tried to provide a taste of the rich "stew" that Buchanan has simmered for nearly 50 years. It is a strong, heady, and provocative mixture, deserving a more in-depth perusal than could be offered here.

Table 1. The Publications of James M. Buchanan Arranged by Total Citations

Citations	Books
1244	<i>The Calculus of Consent: Logical Foundations of Constitutional Democracy.</i> Coauthored with Gordon Tullock. Ann Arbor, Mich.: University of Michigan Press, 1962. Paperback edition 1965. Translated into Japanese 1979. Translated into Spanish 1980.
301	<i>The Limits of Liberty: Between Anarchy and Leviathan.</i> Chicago: University of Chicago Press, 1975. Translated into Japanese 1977. Translated into Italian (1979). Translated into German 1984.
301	<i>Toward a Theory of the Rent-Seeking Society.</i> Edited by J. M. Buchanan, R. D. Tollison, and G. Tullock. College Station, Tx.: Texas A&M University Press, 1980.
297	<i>Demand and Supply of Public Goods.</i> Chicago: Rand-McNally, 1968. Translated into Italian 1968. Translated into Japanese 1974.
228	<i>Democracy in Deficit: The Political Legacy of Lord Keynes.</i> Coauthored with R. E. Wagner. New York: Academic Press, 1978. Translated into Japanese 1979. Translated into Korean 1981.
172	<i>Public Finance in Democratic Process.</i> Chapel Hill, N.C.: University of North Carolina Press, 1966. Translated into Japanese 1971. Translated into Spanish 1973.
153	<i>The Power to Tax: Analytical Foundations of a Fiscal Constitution.</i> Coauthored with Geoffrey Brennan. New York: Cambridge University Press, 1980.
116	<i>Cost and Choice: An Inquiry in Economic Theory.</i> Chicago: Markham Publishing Co., 1969. Reprint University of Chicago Press, Midway Reprint 1979.
80	<i>Theory of Public Choice, I and II.</i> Edited with R. D. Tollison. Ann Arbor, Mich.: University of Michigan Press, 1984.
76	<i>The Public Finances.</i> Homewood, Ill.: Richard D. Irwin, 1960. Second edition 1965. Translated into Spanish 1968. Third edition 1970. Translated into Japanese 1972. Fourth edition (with Marilyn Flowers) 1975. Fifth Edition (with Marilyn Flowers) 1980.
65	<i>The Reason of Rules.</i> Coauthored with G. Brennan. Cambridge: Cambridge University Press, 1985.
57	<i>Fiscal Theory and Political Economy.</i> Chapel Hill, N.C.: University of North Carolina Press, 1960. Translated into Turkish 1965. Translated into Japanese 1972.
51	<i>Public Principles of Public Debt.</i> Homewood, Ill.: Richard D. Irwin, 1958.
51	<i>Freedom in Constitutional Contract: Perspective of a Political Economist.</i> College Station, Tx.: Texas A&M University Press, 1978.
42	<i>Liberty, Market, and State: Political Economy in the 1980s.</i> Brighton, England: Wheatsheaf Books, 1985. New York: New York University Press, 1985.
41	<i>Academia in Anarchy: An Economic Diagnosis.</i> Coauthored with Nicos Devletoglou. New York: Basic Books, 1970. English Edition 1971.
34	<i>What Should Economists Do?</i> Indianapolis, Ind.: Liberty Press, 1979.
30	<i>LSE Essays on Cost.</i> Edited with G. F. Thirlby. London: Wiedenfeld and Nicholson, 1973.
Citations	Contributed Papers
32	"An Efficiency Basis for Federal Fiscal Equalization." With R. Wagner. In <i>The Analysis of Public Output</i> . J. Margolis (ed.) New York: National Bureau of Economic Research, 1970, pp. 139–56.

Table 1. Continued

Citations	Contributed Papers
29	"Why Does Government Grow in Budgets and Bureaucrats." T. Borchering (ed.) Durham, N. C.: Duke University Press, 1977, pp. 3-18.
27	"From Private Preferences of Public Philosophy: Notes on the Development of Public Choice." In <i>The Economics of Politics</i> . London: Institute of Economic Affairs, 1978, pp. 1-20.
17	"Is Economics a Science of Choice?" In <i>Roads to Freedom</i> . E. Streissler (ed.) London: Routledge & Kegan Paul, 1969, pp. 47-64.
16	"In Defense of Organized Crime." In <i>The Economics of Crime and Punishment</i> . S. Rottenberg (ed.) Washington, D.C.: The American Enterprise Institute, 1973, pp. 119-32.
16	"The Samaritan's Dilemma." In <i>Altruism, Morality and Economic Theory</i> . E. S. Phelps (ed.) New York: The Russell Sage Foundation, 1975, pp. 71-85.
13	"Contemporary Democracy and the Prospect for Fiscal Control." With Richard Wagner. In <i>Fiscal Responsibility in Constitutional Democracy</i> . J. Buchanan and R. Wagner (eds.) Leiden/Boston: Martinus Nijhoff, 1978, pp. 1-9.
11	"Economics and Its Scientific Neighbors." In <i>The Structure of Economic Science</i> . S. Krupp (ed.) Englewood Cliffs, N.J.: Prentice-Hall, 1966, pp. 166-83.
12	"Public Goods and Public Bads." In <i>Financing the Metropolis</i> . J. Crepine (ed.) Vol. IV, <i>Urban Affairs Annual</i> . New York: Sage Publications, 1970, pp. 51-71.
10	"An Individualistic Theory of Political Process." In <i>Varieties of Political Theory</i> . D. Easton (ed.) Englewood Cliffs, N.J.: Prentice-Hall, 1966, pp. 25-38.
10	"Public and Private Interaction under Reciprocal Externality." With Gordon Tullock. In <i>The Public Economy and the Urban Community</i> . J. Margolis (ed.) Washington, D.C.: Resources for the Future, 1965, pp. 52-73.
Citations	Monographs
12	<i>Natural Liberty and Justice: Adam Smith and John Rawls</i> . Published lecture. Canton, Miss.: C. A. Moorman Series, Culver-Stockton College, 1976.
12	<i>The Inconsistencies of the National Health Service</i> . Occasional Paper No. 7. London: Institute of Economic Affairs, 1965.
12	The Consequences of Mr. Keynes. With R. Wagner and J. Burton. Hobart Paper 78. London: Institute of Economic Affairs, 1978.
Citations	Main Papers
258	"Economic Theory of Clubs." <i>Economica</i> XXXII (July 1966): 35-42.
214	"Externality." With W. C. Stubblebine. <i>Economica</i> XXIX (November 1962): 371-84.
100	"Polluters' Profits and Political Response: Direct Controls versus Taxes." With G. Tullock. <i>American Economic Review</i> LXV (March 1975): 139-47.
92	"Efficiency Limits of Fiscal Mobility." With Charles Goetz. <i>Journal of Public Economics</i> , I (1972): 25-43.
56	"Positive Economics, Welfare Economics and Political Economy." <i>Journal of Law and Economics</i> II (October 1959): 124-38.
54	"Politics, Policy, and the Pigovian Margins." <i>Economica</i> XXIX (February 1962): 17-28.
37	"Social Choice, Democracy, and Free Markets." <i>Journal of Political Economy</i> LXII (April 1954): 114-23.
35	"Ethical Rules, Expected Values, and Large Numbers." <i>Ethics</i> LXXVI (October 1965): 1-13.
32	"The Economics of Earmarked Taxes." <i>Journal of Political Economy</i> LXXI (October 1963): 457-69.
29	"Joint Supply, Externality, and Optimality." <i>Economica</i> XXXIII (November 1966): 405-15.
27	"In Defense of Caveat Emptor." <i>University of Chicago Law Review</i> 38 (Fall 1970): 74-83.
24	"Fiscal Institutions and Efficiency in Collective Outlay." <i>American Economic Review</i> LIV (May 1964): 227-35.
26	"Public Choice and Public Finance." <i>National Tax Journal</i> XXVIII (December 1975): 383-94.
26	"The Expanding Public Sector: Wagner Squared. With G. Tullock. <i>Public Choice</i> 32 (Fall 1977): 147-50.

Table 1. Continued

24	"Public Goods in Theory and Practice." <i>Journal of Law and Economics</i> 10 (1967): 193–97.
24	"Individual Choice in Voting and the Market." <i>Journal of Political Economy</i> LXII (August 1954): 334–43.
22	"Social Insurance in a Growing Economy." <i>National Tax Journal</i> 21 (December 1968): 386–95.
21	"What Should Economists Do?" <i>Southern Economic Journal</i> XXX (January 1964): 213–22.
21	"The Coase Theorem and the Theory of the State." <i>Natural Resources Journal</i> 13 (October 1973): 579–94.
20	"Taxation in Fiscal Exchange." <i>Journal of Public Economics</i> 6 (1976): 17–29.
20	"Peak Loads and Efficient Pricing." <i>Quarterly Journal of Economics</i> LXXX (August 1966): 463–71.
20	"Cooperation and Conflict in Public Goods Interaction." <i>Western Economic Journal</i> V (March 1967): 109–21.
19	"The Theory of Monopolistic Quantity Discounts." <i>Review of Economic Studies</i> (June 1953): 199–208.
19	"Principles of Urban Fiscal Strategy." <i>Public Choice</i> XI (Fall 1971): 1–16.
19	"The Pure Theory of Public Finance: A Suggested Approach." <i>Journal of Political Economy</i> LVII (December 1949): 496–505.
18	"The Relevance of Pareto Optimality." <i>Journal of Conflict Resolution</i> VI (December 1962): 341–54.
18	"A Contractarian Paradigm for Applying Economic Theory." <i>American Economic Review</i> LXV (May 1975): 225–30.
17	"Notes on the Economic Theory of Socialism." <i>Public Choice</i> VIII (Spring 1970): 29–43.
17	"Good Economics—Bad Law." <i>Virginia Law Review</i> 60 (Spring 1974): 483–92.
17	"Political Constraints on Contractual Redistribution." With W. Bush. <i>American Economic Review</i> LXIV (May 1974): 153–57.
16	"Politics, Property and the Law: An Alternate Interpretation of Miller et al. v. Schoene." <i>Journal of Law and Economics</i> XV (October 1972): 439–52.
16	"The Logic of Tax Limits." With G. Brennan. <i>National Tax Journal</i> 32 (June 1979): 11–22.
16	"A Hobbesian Interpretation of the Rawlsian Difference Principle." <i>Kyklos</i> 29 (1976): 5–25.
15	"The Institutional Structure of Externality." <i>Public Choice</i> XIV (Spring 1973): 69–82.
14	"Federal Grants and Resource Allocation." <i>Journal of Political Economy</i> LX (June 1952): 208–17.
11	"The Potential for Taxpayer Revolt in American Democracy." <i>Social Science Quarterly</i> 59 (March 1979): 691–96.
<hr/>	
Citations	Short Papers and Notes
68	"External Diseconomies, Corrective Taxes, and Market Structure." <i>American Economic Review</i> LIX (March 1969): 174–76.
52	"A Note on Public Goods Supply." With M. Kafoglis. <i>American Economic Review</i> LIII (June 1963): 403–14.
39	"Barro on the Ricardian Equivalence Theorem." <i>Journal of Political Economy</i> 83 (April 1976): 3337–42.
34	"What Kind of Redistribution Do We Want?" <i>Economica</i> XXXV (May 1968).
17	"Saving and the Rate of Interest." <i>Journal of Political Economy</i> LXVII (February 1959): 79–82.
11	"A Regional Countermeasure to National Wage Standardization." With J. Moës. <i>American Economic Review</i> (June 1960): 434–38.

Table 2. Journals Citing the Works of Buchanan Ten or More Times

Journal Name	Citations
Actualite Economique	10
American Behavioral Science Review	29
American Economic Review	191
American Journal of Agricultural Economics	74
American Journal of Economics and Sociology	44
American Journal of Political Science	37
American Journal of Sociology	10
American Political Science Review	75
American Political Quarterly	12
Annals of the American Academy of Political and Social Science	14
Annals of Regional Science	11
Applied Economics	12
Australian Economic Papers	10
Australian Journal of Agricultural Economics	10
Bell Journal of Economics	25
British Journal of Political Science	30
California Law Review	15
Canadian Journal of Economics	49
Canadian Journal of Political Science	17
Canadian Journal of Public Administration	17
Canadian Public Policy	15
Cato Journal	174
Columbia Law Review	25
Comparative Politics	15
Duke Law Journal	16
Economics and Society	13
Econometrica	23
Economic Inquiry	84
Economic Journal	35
Economic Letters	10
Economics and Social Review	22
Economica	53
Economist	22
Ekonomicko-Matematicky Obz	13
Environment and Planning A	16
Environment and Planning C	18
Ethics	27
European Economic Review	16
European Journal of Political Research	34
Explorations in Economic History	10
Growth and Change	17
Harvard Journal of Law	21
Harvard Law Review	25
History of Political Economy	38
Indiana Law Journal	13
International Journal of Social Economics	19
IMF Staff Papers	14
International Organization	26
Intercollegiate Review	13
Journal of the American Institute of Planners	10
Journal of Conflict Resolution	15
Journal of Economic Issues	91

Table 2. Continued

Journal Name	Citations
Journal of Economic Literature	61
Journal of Economic Theory	17
Journal of Environmental Economics and Management	38
Journal of Finance	11
Journal of Institutional and Theoretical Economics	16
Journal of Law and Economics	67
Journal of Legal Studies	34
Journal of Monetary Economics	22
Journal of Political Economy	106
Journal of Politics	26
Journal of Public Economics	95
Journal of Regional Science	10
Journal of Social Politics and Economic Studies	35
Journal of Urban Economics	23
Jahrbuch für Nationalökonomie und Statistik	11
Jahrbuch für Sozialwissenschaften	43
Kyklos	102
Land Economics	46
Management Decisions	11
Mathematical Social Science	12
Michigan Law Review	19
Nationloekonomisk Tidskrift	21
National Tax Journal	95
Natural Resources Journal	26
Northwestern University Law Review	13
Oxford Economic Papers	22
P S	11
Policy Sciences	10
Policy Studies Journal	33
Political Studies	14
Polity	18
Public Administration Review	30
Public Choice	405
Public Finance	156
Public Finance Quarterly	190
Public Policy	29
Publius, the Journal of Federalism	21
Quarterly Journal of Economics	35
Quarterly Review of Economics and Business	28
Quality and Quantity	10
Revue De Economie	21
Review of Economics and Statistics	10
Review of Social Economy	32
Rivista Internazionale Scienze Economiche	38
Scandinavian Journal of Economics	13
Scottish Journal of Political Economy	28
Social Philosophy and Policy	14
Social Science	19
Social Science Journal	14
Social Science Quarterly	24
South African Journal of Economics	14
Southern Economic Journal	129

Table 2. Continued

Journal Name	Citations
Stanford Law Review	20
Texas Law Review	26
Theory and Decision	12
University of Pennsylvania Law Review	21
UCLA Law Review	21
Urban Studies	11
Virginia Law Review	33
Weltwirtschaftliches Archiv	16
Western Economic Journal	16
Western Political Quarterly	22
Wisconsin Law Review	15
World Politics	10
Yale Law Journal	28
Zeitschrift für Nationalökonomie	22
Others (>375 Journals)	593
TOTAL	6115

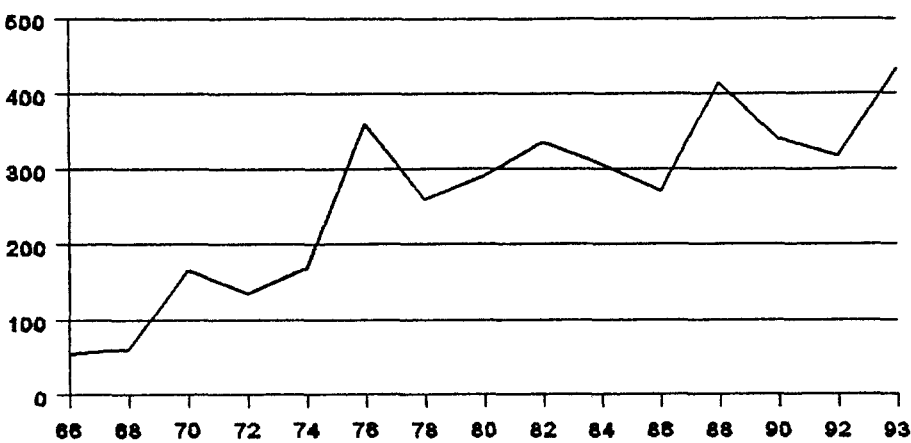


Figure 1. Citations per year.

Table 3. Total Citations in Selected Journals

Journal Name	Citations
American Economic Review	191
American Journal of Agricultural Economics	74
Bell Journal of Economics	25
Econometrica	23
Economic Inquiry (WEJ)	100
Economist	22
Economic Journal	35
Economica	53
Harvard Law Journal	21
Journal of Economic History	10
Journal of Economic Literature	72
Journal of Economic Theory	18
Journal of Finance	11
Journal of Law & Economics	73
Journal of Legal Studies	39
Journal of Monetary Economics	23
Journal of Political Economy	109
Quarterly Journal of Economics	37
Southern Economic Journal	139
Yale Law Journal	39
TOTAL	1122
% of Total Citations	18.3%

Table 4. Citations by Journal Discipline

Discipline	Citations
Anthropology	3
Architecture	3
Area Studies	29
Business/Management/Finance	138
Criminology	15
Economics	3701
Ecology/Environmental Studies	75
Education	53
Ethics	30
Geography	27
Health/Medicine	20
History	5
Information Science	4
International Relations	69
Law	543
Philosophy	65
Planning/Development	19
Political Science	228
Policy Analysis/Policy Studies	147
Politics	289
Population/Demography	5
Psychology	44

Table 4. Continued

Discipline	Citations
Public Administration	75
Natural Science	22
Social Science/Interdisciplinary Studies	296
Sociology	86
Urban Studies	29
Other	98
TOTAL	6115

Notes

1. Citation analysis has become an important part of research in the sociology of science. Citation counts for this study were gathered from the Social Sciences Citation Index, published by the Institute for Scientific Information, Philadelphia. For a recent survey, see David Colander (1989). Eugene Garfield (1987), founder and Chairman Emeritus of the ISI, provides the first analysis of Buchanan's work from the point of view of information science.
2. According to Durden and Ellis (1993), a 1966 work needs to average (for 20 years) 9.45 citations per year, a 1968 work needs 10.41 per year, and one from 1975 needs 14.66 per year to be called classic. A book produced in 1962, as was *The Calculus of Consent*, must average 9 cites per year to be classic, and 18 for "super"-classic status.
3. Needless to say, there are some problems with the use of citation analysis to quantify the impact of a scholar. Self-citations, lack of credit to second authors, citations which correctly call into question some aspect of an author's treatise, etc. (cf. Durden and Ellis 1993; Quandt 1976). In addition, it is clearly possible that a publication has far more impact than citations alone can measure. According to Reisman, this is e.g. true with respect to *LSE Essays on Cost*.
4. This quote and all others in section 3 are taken from Buchanan's 1986 paper, "Better Than Plowing".
5. This and all published works referenced appear either in Table 1 or in the list of references.
6. For a cogent discussion of Buchanan's contributions to public finance, see Romer (1988).
7. This provision is very fundamental to the philosophy of Buchanan, since it effectively limits the power of central authority.
8. All chroniclers seem to agree that this is a defining feature of Buchanan's philosophy. If the rules are fairly drawn, the end results will take care of themselves. Indeed, to pose end results is particularly distasteful to Buchanan, since to do so would presume omniscience.
9. Rawls' first principle of justice is that distributional inequities should advance the welfare of the least advantaged.
10. Buchanan certainly hopes that "his fellow citizens will not sell (or lend) their birthright for a mess of pottage" (Reisman 1990, p. 23).
11. Here we see the basic elements of Buchanan's theory of clubs.
12. This fundamental notion is fully developed in *The Calculus of Consent*.
13. As Atkinson notes, Buchanan arrived at Chicago as something of a liberal, a philosophical bent that was reversed in three weeks' exposure to the writings and teachings of Frank Knight.
14. Informatively and consistently, Buchanan has criticized the prevailing tendency to analyze the burden collectively, noting that sacrifices are made individually.
15. Atkinson focuses on Buchanan's and Tullock's strong disagreement with the majority voting rule and their contention that dismissal of the unanimity rule does not appropriately account for the importance of log-rolling and corresponding vote trading and side-payment activities.
16. For example, without inequalities, the incentives which make a capitalist system work would be absent.

17. Barry's criticism is itself subject to criticism, in that it is highly unlikely that a unanimously agreed contract would have any provision which would include selective denial of the kind which he envisions. If selective denial could occur in Buchanan's system, Barry provides no explanation and we cannot think of one.
18. With respect to these arguments, we would fault Halper on several fronts. First, when Buchanan's contract is originated, unanimity or nearly so is required, so that it is not likely that the status quo would be wholly transferred. Since neither a well-endowed minority nor a relatively poor majority could prevail, some compromise would be necessary to establish first principles with respect to the allocation of resources. One would expect, moreover, that the contract would be biased strongly towards both equality of opportunity and equal treatment under the law which, one could argue, currently do not exist. Second, while Halper is critical of Buchanan's (altered, in our view, through the catallactic process) status quo with respect to property rights, she provides no alternative which we would consider to be superior. For example, the leveling of incomes is not possible without considerable effort from a central authority, and as casual observation shows, the often-demonstrated fact that central authority leans toward the politically powerful would likely result in an inferior result, as compared to the contractarian approach.

References

- Atkinson, A. B. (1987) "James Buchanan's Contributions to Economics." *Scandinavian Journal of Economics* 89 (1): 5–15.
- Baird, C. W. (1989) "James Buchanan and the Austrians: The Common Ground." *Cato Journal* 9(1): 211–30.
- Barry, N. P. (1984) "Unanimity, Agreement and Liberalism: A Critique of James Buchanan's Social Philosophy." *Political Theory* 12(4): 579–96.
- Blaug, M., and Sturges, P. (1986) *Who's Who in Economics: A Biography of Major Economists, 1700–1981*. Second U.S. edition. Cambridge, Mass.: MIT Press.
- Buchanan, J. M. (1986) "Better Than Plowing." *Quarterly Review* (Banca Nazionale del Lavoro) 159: 359–75.
- Colander, D. (1989) "Research on the Economic Profession." *Journal of Economic Perspectives* 3(4) 137–48.
- Durden, G. C., and Ellis, L. V. (1993) "A Method for Identifying the Most Influential Articles in an Academic Discipline." *Atlantic Economic Journal* 21(4): 1–10.
- Durden, G. C., Ellis, L. V., and Millsaps, S. W. (1991) "Gordon Tullock: His Journal and His Scholarship." *Public Choice* 71: 171–96.
- Garfield, E. (1987) "Public-Choice Theory Brings James M. Buchanan the 1986 Nobel Prize in Economics; Nigerian Poet and Playwright Wole Soyinka Awarded the Literature Prize." *Current Contents* 10(24): 152–58.
- Halper, L. A. (1993) "Parables of Exchange: Foundations of Public Choice Theory and the Market Formalism of James Buchanan." *Cornell Journal of Law and Public Policy* 2: 229–71.
- Hirsch, B. T., Austin, R., Brooks, J., and Moore, J. B. (1984) "Economics Departmental Rankings: Comment." *American Economic Review* 74: 822–26.
- Khalil, E. K. (1987) "Sir James Steuart vs. Professor James Buchanan: Critical Notes on Modern Public Choice." *Review of Social Economy* 65(2): 113–32.
- Laband, D. N. (1986) "A Ranking of the Top U.S. Economics Departments by Research Productivity of Graduates." *Journal of Economic Education* 17: 70–76.
- Liebowitz, S. J., and Palmer, J. P. (1984) "Assessing the Relative Impacts of Economics Journals." *Journal of Economic Literature* 22: 77–88.
- Medoff, M. H. (1989) "The Ranking of Economists." *Journal of Economic Education* 20: 405–10.
- Quandt, R. E. (1976) "Some Quantitative Aspects of the Economics Journal Literature." *Journal of Political Economy* 84: 741–55.
- Rawls, J. (1971) *A Theory of Justice*. Cambridge, Mass.: Harvard University Press.
- Reisman, D. (1990) *The Political Economy of James Buchanan*. College Station, Tx.: Texas A&M Press.
- Romer, T. (1988) "Nobel Laureate: On James Buchanan's Contributions to Public Economics." *Journal of Economic Perspectives* 2: 165–79.
- Rowley, C. K. (1987) "The Economic Philosophy of James McGill Buchanan." *Economia Della Scelte Pubbliche* 3: 172–87.
- Sandmo, A. (1990) "Buchanan on Political Economy: A Review Article." *Journal of Economic Literature* 28 (1): 50–65.