Chapter 7 James M. Buchanan (1919-)¹

Robert D. Tollison

Introduction

James M. Buchanan was born on October 3, 1919, in Murfeesboro, Tennessee. He grew up on a farm in this area of the United States. His post-secondary school education consists of a B.A. degree from Middle Tennessee State University (1940), an M.A. degree in economics from the University of Tennessee (1941), and a Ph.D. degree in economics from the University of Chicago (1948). He served in the U.S. Navy in the Pacific during World War II, where he received a Bronze Star. He has taught at the following universities: Tennessee, Florida State, Virginia, University of California, Los Angeles, Virginia Polytechnic Institute (VPI), and George Mason University where he still works today. He also maintains an office at VPI. He has held endowed chairs in economics at Virginia, VPI, and George Mason University. He was Department Chair at Florida State. He was Department Chair and Director and cofounder of the Thomas Jefferson Center for Political Economy at Virginia. He was General Director of the Center for Study of Public Choice at both VPI and George Mason. He has also served as a visiting professor at the University of Miami, Brigham Young University, the London School of Economics, and Cambridge University. He spent a year in Italy as a Fulbright Research Scholar. He is a former President of the Mont Pelerin Society, the Western Economic Association, and the Southern Economic Association. He has been awarded many honorary doctorates, including those from the University of Catania and the New University of Lisbon. He is a Distinguished Fellow of the American Economic Association, He received the Alfred Nobel Memorial Prize in Economics in 1986, the last year the award was tax free in the United States.

My Plan

My approach to a Buchanan biography will be linear in nature. Basically, I shall follow him in a straight line, where divisions of time are marked by his university

¹ This chapter is a reprint of an essay that first appeared in *The Encyclopedia of Public Choice* edited by Charles K. Rowley and Friedrich Schneider and published in 2004 by Kluwer Academic Publishers, Volume I, pp. 139–145.

affiliations. In this way I can review his work and perhaps say a few words about his contemporaneous colleagues and doctoral students. My focus, however, will be on his intellectual work at each school, beginning with graduate school at the University of Chicago and proceeding to his present residence at George Mason University. So rather than discussing Buchanan's ideas by category, I am going to trace their evolution over time at different work stations.

I am only going to hit the high points of Buchanan's contributions in these various locales. That he is a prolific scholar is well known. The interested reader may refer to the 20 volumes of his collected works published by Liberty Fund.²

Graduate School

I am fortunate in that Buchanan has written an autobiographical memoir (Buchanan 1992) that provides invaluable guidance to his view of the various stages of his career. I begin with his graduate student years at the University of Chicago.

Two features of his graduate student experience stand out. One was his introduction to Frank Knight, and the other was his discovery of the work of Knut Wicksell. From what I can gather, his attraction to Knight was based on Knight's personality and his general approach to intellectual affairs and not especially on Knight's economics. Basically, he was impressed by Knight as a person. Knight came from a rural background outside the establishment. Buchanan had similar roots. To Buchanan, Knight was a truth-seeker (but there were no truths to be sought), who cared not one whit for anything else. This was what Buchanan wanted to be; this is what he took from Knight; Knight is his role model.

Buchanan (1992) also credits Knight with his conversion from socialism by teaching him how markets work. The conversion apparently came about six weeks into a price theory course taught by Knight. I am not so sure about this recounting, mostly because it is hard to conceive of Buchanan as a budding socialist. In any event, Buchanan was not much of a socialist, if at all, although residues remain, such as his antipathy towards inherited wealth.

Buchanan's second formative experience at Chicago was his happenstance discovery of Wicksell's dissertation (Wicksell 1896). This is the famous work (part of which was later translated and published by Buchanan) that emphasized the use of more qualified (stricter) voting rules in defining the efficiency of public spending proposals. Wicksell's ideas were to play a significant role in shaping Buchanan's approach to political economy as it evolved over the upcoming years. Not only had Buchanan found a calling at Chicago (economics and scholarship), but he had found some useful guides about how and where to go, in Knight and Wicksell.

² See Brennan et al. (1999–present). Note that these volumes do not include work that Buchanan has produced since 1999, work which continues unto this day.

Early Academics and Italy

Buchanan began his academic career at the University of Tennessee in 1948. He moved to Florida State University in 1951, where he was a Full Professor and Department Head from 1954 to 1956. He spent an eventful year in Italy as a Fulbright Research Scholar, after which he moved to the University of Virginia in 1956.

Over this period he wrote and published two pieces in the *Journal of Political Economy* which presaged his later work in public choice (Buchanan 1954a, b). Both papers were written in response to Arrow's famous work on social welfare (Arrow 1951). One paper (1954b) is the original and classic statement of the differences in terms of individual choice behavior between voting and the market. Voting, for example, is a more "bundled" choice than market choices. The other paper (1954a) is a fundamental critique of Arrow's analysis. Buchanan makes a variety of points here, with perhaps the most important being that there is nothing special about majority rule as opposed to a unanimity rule, where the latter will yield consistent collective choices analogous to the way that markets work. Basically, he argued that outcomes and rules were related and that Arrow ignored this linkage in his analysis.

I do not have the time and space to review these papers in detail. The point is that they clearly were important early precursors of public choice analysis. Buchanan, in this early period, was already thinking deeply about voting processes and the implications of voting processes for economic well-being. These papers were the seed corn of the public choice revolution, and clearly contained echoes of Wicksell.

The year that Buchanan spent in Italy was intellectually fruitful. He was introduced to the Italian tradition in public finance, in which an individual choice perspective was employed and spending and taxes were linked and not treated separately. This methodological insight was later to fuel many of Buchanan's contributions to the theory of public finance.

He also had an epiphany about public debt theory, which led to his major work in this area (Buchanan 1958). The latter involved the individual choice approach to fiscal analysis, in which Buchanan clearly exposited how the burden of the debt was shifted to future taxpayers. We clearly did not simplistically owe the debt to ourselves. Though the Keynesians howled in protest, time has been kind to Buchanan's analysis, as it now seems to have strong currency among present day analysts and observers of public debt policy. Paying down the debt so as not to leave a burden on our children has virtually become a political mantra in some quarters.

Charlottesville

It is hard to call one period of Buchanan's academic life more productive than another, but the amount and quality of the work he did at the University of Virginia is simply amazing. Most of this work is so well known that I need only mention it in passing.³

³ Note also that the previously discussed book on the public debt was published in 1958 while Buchanan was at Virginia.

It was over this period that Buchanan met Gordon Tullock, and Tullock joined the Economics Department in Charlottesville. An intellectual association was thus formed that would produce seminal work and carry forward for many years into the future. The seminal work was, of course, *The Calculus of Consent*, published in 1962. This is one of three or four major works in early public choice that are rightly considered classics. The book was a tour de force, covering methodological issues, constitutional economics, analyses of voting rules, and many other topics that continue to occupy public choice scholars today.

What is so amazing about this period of Buchanan's life is that he also made lasting and fundamental contributions to public expenditure theory and to the theory of taxation. He wrote his famous papers on externalities (Buchanan and Stubblebine 1962), tax earmarking (Buchanan 1963), and clubs (Buchanan 1965), each of which heavily influenced the subsequent literature of public economics. Indeed, the clubs paper by itself has created an industry of further applications to such topics as alliances and fiscal federalism.

He wrote and published a major treatise on public finance (Buchanan 1967), in which he introduced an individual choice approach to public finance theory, as well as rehabilitating and extending such concepts as fiscal illusion. This is my favorite work by Buchanan, and it still merits re-reading today. As Buchanan shows time and again in this work, understanding the efficiency of taxation and spending programs requires analyzing both sides of the fiscal account at the same time.

He wrote and published a major book on public goods theory (Buchanan 1968). This book is deceptively technical, and is still the most creative work on public goods theory in the literature. It also treats the "supply" as well as the "demand" for public goods, an aspect of analysis that makes this book unique in the area of public goods theory.

Buchanan published his little book on subjective cost (Buchanan 1969) during this time. Here, we have a prime example of Buchanan's dalliance with Austrian ideas, a link that he personally cares about, but which really is not all that important in the general context of his work. Buchanan cannot be claimed by the Austrians; his work is much bigger than their narrow methodological hiding place. And while costs may be subjective, this has not stopped Buchanan from forging ahead as a creative economic theorist.

Finally, he made major contributions to the discussion of methodology in the 1960s. For some of this work, see Buchanan (1962–1964).

On top of all this, there were numerous other papers, lectures, and academic duties. The Public Choice Society was co-founded by Buchanan in 1963, and as noted earlier, he served as President of the Southern Economic Association in 1963. This was at a time when being President of the Southern actually meant something.

Moreover, many of Buchanan's best doctoral students studied and wrote their dissertations under his direction at Virginia. These include (in no special order)

⁴ Other members of Virginia's Economics Department at this time were Warren Nutter, Leland Yeager, and Ronald Coase.

Matt Lindsay, Dick Wagner, Charlie Goetz, Charlie Plott, Mark Pauly, Toby Davis, and Craig Stubblebine, to mention a few.⁵

This is a good place to discuss Buchanan as a teacher. In the classroom he was at his remarkable best. He was a hard teacher, who set a good example for his students. His method was to assign short papers, due every two weeks, about whatever he was working on at the time. These papers and his classes made the students feel as if they were working on the frontiers of economics and participating in an exciting discussion of ideas. Grades were based on one's originality in approaching a topic, not on technique or the derivation of results. Creativity was the key to a good grade in Mr. Buchanan's class.

Oftentimes, these class papers led to later publications by students, which, of course, helped them immensely in their careers. The best example of this is Mark Pauly's paper on moral hazard (Pauly 1968). This was a very important contribution to economic theory, and it was written and published while Pauly was a graduate student at Virginia.

Buchanan's class was transforming for students. Typically, one entered the program at Virginia (as I did) to obtain a doctorate and return to a small liberal arts college to teach. The idea of being a research economist had never really occurred to many of these students.

Yet under the tutelage and encouragement of Buchanan, they got their degrees at Virginia and headed off to Harvard, Northwestern, Cornell, Iowa State, Purdue, Illinois, UCLA, Carnegie-Mellon, and other major universities to publish or perish. And almost to a person, these young economists have emerged in their own right as important scholars.

One significant aspect of these students is that they are all different, working in different areas and approaches to economics, some of which bear little resemblance to Buchanan's work. Buchanan did not produce homogeneous graduate students who all worked in his tradition. He produced a colorful array of creative people who found their own way in the world. They were able to do this because Buchanan did not beat them down as students and make them feel as if there was nothing they could do. He rather gave them encouragement and inspiration, showing them that they too could participate at a high level in the economics profession. This is the mark of a gifted teacher. Like a Zen Master, Buchanan gave visions and aspirations to his students that he did not possess himself.

In 1969, Buchanan left Virginia to take a position at the University of California, Los Angeles. After an uneventful intellectual year there, he joined Gordon Tullock and Charlie Goetz at VPI, where they had taken up residence previously. Tullock had left the University of Virginia earlier and gone to Rice University, but was lured to Blacksburg by Goetz, where, with Goetz, he helped to entice Buchanan back to the Commonwealth of Virginia. The story of why Buchanan and Tullock left Virginia revolved around that university's failure to promote Tullock to full professor. Virginia's loss was clearly VPI's gain.

⁵ I too wrote under Buchanan at Virginia, finishing in 1969.

Blacksburg

Buchanan's return to Blacksburg was a happy one. There, he joined Tullock and Goetz to form the Center for Study of Public Choice, where he was to work productively for the next 14 years. He was also joined in Blacksburg by Mrs Betty Tillman, who had been his Executive Assistant at Virginia and whose role in the public choice movement would grow tremendously in Blacksburg and later in Fairfax. The Center was housed in Blacksburg in the old president's house, a large mansion atop a hill overlooking the Duck Pond. Center offices were palatial by normal academic standards.

This idyllic setting attracted an array of talented scholars to the Center, both as permanent faculty and as visitors, and to my mind this period represents the high water mark of the Center in terms of the level of work and quality of faculty there. Over this period, the faculty included people such as (in no special order) Dick Wagner, Tom Borcherding, Charlie Goetz, Winston Bush, Geoff Brennan, Mel Hinich, Bob Mackay, Art Denzau, Mark Crain, Roger Faith, Dwight Lee, and Nic Tideman, and, of course, Buchanan and Tullock.⁶ Visitors to the Center were commonplace, and such notable scholars as Dennis Mueller, Charles Rowley, Fritz Schneider, Peter Bernholz, Dick McKenzie, Eddie West, and many others spent time in Blacksburg over this period. Numerous doctoral students completed their degrees at the Center at this time, and went on to careers as well-known scholars. These include (in no particular order) Randy Holcombe, Carolyn Weaver, Henry Butler, Dick McKenzie, Genia Toma, Mark Toma, David Laband, Roger Congleton, and Janet Landa. Laband, Congleton, and Landa wrote under Buchanan.

Buchanan was literally in charge. He generally opened the door in the morning, and closed it at night, putting in 10 to 12 hours a day in between, Saturdays and Sundays being only partial exceptions (6 hours). I would say also that most of the external financial support that came to the Center in Blacksburg (and later in Fairfax) was due to Buchanan and his presence in these locales. That Buchanan was unfailingly generous in supporting others' research efforts ought to be noted.

Buchanan's work over this period continued his earlier emphasis on issues of constitutional economics and public finance from a public choice perspective. In addition, there were side excursions to topics in which he was interested. Let me explain.

One of his major works over this period was *The Limits of Liberty* (Buchanan 1975a). The book is dedicated to Winston Bush, a colleague in Blacksburg, who died tragically in a local car accident. Bush had attracted Buchanan's interest to the issue of analyzing how individuals act in a setting of anarchy (no government) and how individuals make the leap to civil society with rules and laws. This, of course, is precisely the constitutional paradigm that Buchanan already knew so well, but Bush's approach opened up new vistas. In *Limits*, Buchanan offers the best

 $^{^6}$ I was Professor of Economics and Executive Director of the Center from 1976 to 1981 in Blacksburg.

statement of his intellectual position. The step to civil society contains risks (Leviathan), and it should not be approached without careful thought about how to do it. In particular, Buchanan stresses the criterion of agreement on rules as being the acid test of validation for the formation of governmental institutions. Hence, Buchanan emerges in this book not only as a major voice in constitutional economics, but in contractarian philosophy as well. Space does not permit me to do justice to this work; suffice it to say that it has had a major impact in both philosophy and economics.

On the public finance side of the street, Buchanan began a collaboration with Geoffrey Brennan in Blacksburg that proved to be fruitful and important. Indeed, Brennan would become Buchanan's most prolific collaborator, and a genuine colleague and friend in all ways. Building upon the foundation laid in *Limits*, these authors pioneered a new approach to public finance based on the idea that government could be expected to act like a Leviathan and to seek to maximize whatever advantage it was given when civil society emerged from anarchy. That is, the state would be a tax-revenue maximizer, a regulatory rent maximizer, and so on. Buchanan and Brennan (1980) traced out the novel implications of this approach for taxation, spending, and the size of government, and also explored how certain rules could be designed to constrain the tendencies of the Leviathan state. This work literally flipped the existing theory of public finance on its head. Instead of using economic analysis to show governments how to collect taxes more efficiently, Buchanan and Brennan used it to show how to guard against the potential for a bloated, tyrannical public sector.

Buchanan's other book over this period was written with Dick Wagner, and it represents what I have called "an excursion into an interesting side issue" (Buchanan and Wagner 1977). They use basic public choice analysis to explain why Keynesian economic principles are abused by self-interested politicians to run perennial budget deficits. This is not a technical book, but it is a very persuasive application of basic public choice theory. Buchanan's support for a balanced budget amendment to the U.S. Constitution grew out of this earlier critique of Keynesian economics.

I have, of course, only mentioned books so far. In addition, there are numerous major journal articles. This was the period in which Tullock's earlier work on rent seeking (Tullock 1967) was consolidated and extended (Buchanan et al., 1980). Buchanan played a major role in this effort. His paper (Buchanan 1980) "Rent Seeking and Profit Seeking" remains the clearest statement in the literature of the rent seeking idea. Other major papers over this period include the one on regulation (Buchanan and Tullock 1975), on the Samaritan's Dilemma (Buchanan 1975b), and on tax limits (Buchanan and Brennan 1977b), to name only three.

Buchanan also became very interested in the work of John Rawls during the Blacksburg era, and he wrote several papers (Buchanan 1972), in which he drew parallels between the Rawlsian approach to deriving a social contract (minimax) and his own approach to constitutional choice (expected utility maximization under uncertainty about future position). In my view, the interest of Buchanan in Rawls was another excursion into a side issue, where Buchanan was looking for individuals

who shared his general interest in the problems of constitutional choice at least in a broad sense. Today, I would say that Buchanan's position on constitutional economics is purely Buchanan's, and bears little or no resemblance to that of Rawls. Indeed, I see virtually no imprint of the Rawlsian interlude in Buchanan's work.

Alas, paradise was lost. An academic civil war erupted in Blacksburg, quite unexpectedly, and after all was said and done, Buchanan actually won the war. But fearing that too much capital had been burned up in the process, Buchanan and his Center colleagues accepted an offer to move *en masse* (at given pay and rank) to George Mason University in Fairfax, Virginia. George Mason's gain was VPI's loss.

Buchanan, however, only moved his professional address to Fairfax. In Blacksburg, he had returned to a rural lifestyle with relish, and set down his roots deep in the Appalachian Mountains, where he grew his own vegetables and chopped his own wood. This is still his main residence, as he commutes back and forth to Fairfax, and he shared this dominion with his wife, Ann, and a host of cats and dogs until her death in 2005.

A final note about Blacksburg is that it was a very social place. People worked hard, but they played hard too. Jim and Ann Buchanan were at the center of this society. To be asked over to dinner by Jim meant that there was good eating and good conversation in your future. In addition, there were poker games to be played, blackberries to be picked, Super Bowls to be watched, and foozball games after work. Needless to say, Buchanan did not play foozball, but otherwise he was the center of a unique and lively little universe. Before the war, Blacksburg was fun.

Fairfax

Buchanan did not move to Fairfax because he wanted to advise the government. He moved there because he found the academic environment there congenial. Moreover, this time, George Mason's gain really was VPI's loss. Barely over two years in residence at Mason, Buchanan was awarded the Nobel Prize in Economics (1986). The Prize changes most people, but I do not think that Buchanan changed very much at all after 1986. He still worked long hours, he was still interested primarily in ideas, he remained(s) productive, and he continued to stay on course. I mostly remember the incredible surge of pride that swept through the Center and through the hundreds of friends and colleagues of Buchanan and the Center on the day of the Nobel announcement. A ragtag band of public choicers basked in the reflected light.

As I said, the Mason environment was congenial. Mason is a former community college in a suburban setting. The Center was given facilities in an old Methodist church in a copse of woods on the edge of the campus. I forget who occupied the preacher's old office.

There has been a great deal of turnover of Center faculty at Mason, but over the last 19 years, the faculty has included (in no special order) Dick Wagner, Charles

Rowley, Gordon Tullock, Roger Congleton, Mark Crain, Tyler Cowen, David Levy, Ron Heiner, Geoff Brennan, Dwight Lee, Bill Shughart, Victor Vanberg, and, of course, Buchanan. The Center has also educated a slew of doctoral students over this era, far more than at any other locale. Among these students are (in no special order) Gary Anderson, Pam Brown, Brian Goff, Don Leavens, Joe McGarrity, and many, many others. Buchanan directed only two doctoral dissertations at George Mason (Frank Forman and Nimai Mehta).

After Buchanan's Nobel, the university allowed the Center to rehabilitate (at its own expense) an old house across the street from the main Center building. This is now the Buchanan House, which houses Buchanan, Mrs Tillman, and Mrs Jo Ann Burgess, the Librarian of the Buchanan House. Many Buchanan artifacts are displayed in the Buchanan House, including a replica of his Nobel medal.

Buchanan's work over the Fairfax period has continued unabated. In 1983, he and Brennan published a follow-on study to *The Power to Tax*, ingeniously called *The Reason of Rules* (Buchanan and Brennan 1985). This work is a treatise on constitutional economics that seeks to make the case for an "economics of rules" as opposed to an "economics of politics." The book stepped out of the normal box in which economics operates, and asked the question, how should we go about selecting the rules of play in the box? This is, of course, the life-long question that has held Buchanan's interest.

Buchanan published one other book over this period, a work with Roger Congleton, *Politics by Principle, not Interest* (Buchanan and Congleton 1998). This book expresses in modern analytical terms many of the ideas that Buchanan was writing about earlier. In particular, Buchanan and Congleton show how general rules of taxation, for example, increase the efficiency and productivity of government. Simply put, flat taxes may be better than progressive taxes because they reduce rent seeking and tax evasion in a post-constitutional society. This work has received several nice reviews.

Buchanan's other intellectual work at Mason has been extensive. He has issued several important collections of his papers (Buchanan 1991). He has consolidated and extended his intellectual position (Buchanan 1990). He has explored new areas of economic theory (Buchanan 1994). Moreover, he is still hard at work, pushing well beyond the 20 volumes of his *Collected Works*.

Mason was not as social as VPI had been. The urban setting raised the costs of socializing. Everyone seemed to go their own way. Buchanan instituted and funded a Virginia Political Economy Lecture Series, which served as a social occasion each March. Speakers have included many of the people mentioned in this paper.

This pretty much exhausts the Buchanan timeline. We are up to date. Buchanan is still in residence at George Mason, but he also keeps an office at VPI. They have also named a Center in his honor at George Mason, called the James M. Buchanan Center for Political Economy.

 $^{^7}$ I was Director of the Center at George Mason from 1984 to 1998; I also held the Duncan Black Chair in Economics over most of that period.

Essences

The science of essences concerns those things that define the elements of what makes something smell or taste so good. What is the essence, then, of Buchanan? I shall list these by way of closing this account of his life to date. My methodology is that of the pointillists (Georges Seurat), hoping to achieve a general impression from a series of interconnected dabs of paint.

- Buchanan changed the subject matter of modern economics by stressing agreement on the rules of the game as a separate and important inquiry in its own right.
- Buchanan exposed the vacuous nature of modern welfare economics by stressing agreement and not an arbitrary social welfare function as the key to the validity of institutional choices.
- Buchanan led the way in showing scholars how to analyze political processes using the methodology of economics.
- Buchanan pioneered in bringing individual choice analysis back into public finance theory.
- Buchanan refocused economics in methodological terms on those areas (individual choice behavior) where it has the greatest value.
- Buchanan has made many contributions to positive economic analysis.
- Buchanan is primarily a normative theorist.
- Buchanan is a great teacher, who trained many good students.
- Buchanan is a good colleague, reading and commenting on thousands of papers by colleagues.
- Buchanan created and largely financed an intellectual network at three universities in Virginia.
- Buchanan's contractarianism has had a major impact on philosophy.
- Buchanan is one of the most cited scholars of his generation.
- Buchanan does not suffer fools gladly.
- Buchanan is honest, and does not hesitate to state his mind, sometimes hotly.
- Buchanan has a loyal network of friends and colleagues in this country and abroad.
- Buchanan is a prolific lecturer, having given thousands of invited lectures, seminars, and talks, in a variety of venues, from Rotary Clubs to the great universities of the world (as well as the not-so-great ones).
- Buchanan is an incessant traveler, especially to Europe.
- Buchanan is an avid reader of both fiction and non-fiction.
- Buchanan grows his own food and chops his own wood.
- Buchanan is an active correspondent, having produced thousands of pages of accumulated correspondence.
- Buchanan does not like to talk on the telephone.
- Buchanan types his own work from handwritten notes, either on an old typewriter or, more recently, on a computer.
- · Buchanan's memos are on yellow onionskin paper.

- Buchanan is a regular attendee and participant in professional meetings and conferences (especially Liberty Fund conferences).
- Buchanan is one of the best writers in the economics profession.
- Buchanan is virtually a whole university by himself as well as an effective academic infighter.
- Buchanan is a hard coauthor to keep up with; he has a paper drafted and back to you before you have time to take a deep breath.
- Buchanan is a good friend to animals, especially dogs and cats.
- Buchanan is an armchair theorist with an aversion to econometrics.
- Buchanan is a social man, who loves a good joke and a good conversation.

If this reminds you of Buchanan just a little bit, my methodology has worked, and I can draw this essay to a close. They say that only poets and singers achieve immortality. But surely the work of great economists lasts long enough and reverberates across time in such a way that they are practically immortal. Anyway, what is the difference between a half-life of 250 years and immortality? Buchanan has reached this level. And it is a good guess that his ideas will grow in importance over time as young scholars reshape modern social science along the lines that he has laid out.

References

Arrow, K. J. (1951). Social Choice and Individual Values. New York: Wiley.

Brennan, G., Kliemt, H., and Tollison, R. (eds.) (1999–Present). *The Collected Works of James M. Buchanan*. Indianapolis: Liberty Fund.

Buchanan, J. M. (1954a). "Social choice, democracy, and free markets." *Journal of Political Economy*, 62, 114–123.

Buchanan, J. M. (1954b). "Individual choice in voting and the market." *Journal of Political Economy*, 62, 334–363.

Buchanan, J. M. (1958). Public Principle of Public Debt. Homewood: Irwin.

Buchanan, J. M. (1962). "The relevance of Pareto optimality." *Journal of Conflict Resolution*, 6, 341–354.

Buchanan, J. M. (1963). "Earmarking vs. general-fund financing." *Journal of Political Economy*, 71, 457–469.

Buchanan, J. M. (1964). "What should economists do?" Southern Economic Journal, 30, 213–222.

Buchanan, J. M. (1965). "An economic theory of clubs." Economica, 32, 1–14.

Buchanan, J. M. (1967). *Public Finance in Democratic Process*. Chapel Hill: North Carolina Press.

Buchanan, J. M. (1968). The Demand and Supply of Public Goods. Chicago: Rand McNally.

Buchanan, J. M. (1969). Cost and Choice. Chicago: Markham.

Buchanan, J. M. (1972). "Rawls on justice as fairness." Public Choice, 13(Fall), 123-128.

Buchanan, J. M. (1975a). The Limits of Liberty. Chicago: Chicago Press.

Buchanan, J. M. (1975b). "The Samaritan's dilemma," in Phelps, E. S. (ed.) *Altruism, Morality, and Economic Theory*. New York: Sage, pp. 71–85.

Buchanan, J. M. (1980). "Rent seeking and profit seeking," in Buchanan, J. M., Tollison, R. D., and Tullock, G. (eds.) *Toward a Theory of the Rent-Seeking Society*. College Station: Texas A&M Press, pp. 3–15.

- Buchanan, J. M. (1990). "The domain of constitutional economics." *Constitutional Political Economy*, 1, 1–18.
- Buchanan, J. M. (1991). The Economic and Ethics of Constitutional Order. Ann Arbor: Michigan Press.
- Buchanan, J. M. (1992). Better than Plowing. Chicago: University of Chicago Press.
- Buchanan, J. M. (1994). "The economic, and the ethics of idleness." *In Ethics and Economic Progress*. Norman: Oklahoma Press, pp. 112–128.
- Buchanan, J. M. and Brennan, H. G. (1977). "The logic of tax limits: Alternative constitutional constraints on the power to tax." *National Tax Journal*, 32, 11–22.
- Buchanan, J. M. and Brennan, H. G. (1980). The Power to Tax. Cambridge: Cambridge Press.
- Buchanan, J. M. and Brennan, H. G. (1985). The Reason of Rules. Cambridge: Cambridge Press.
- Buchanan, J. M. and Congleton, R. C. (1998). *Politics by Principle, Not Interest*. Cambridge: Cambridge Press.
- Buchanan, J. M. and Stubblebine, C. (1962). "Externality." Economica, 29, 371–384.
- Buchanan, J. M., Tollison, R. D., and Tullock, G. (eds.) (1980). *Toward a Theory of the Rent-Seeking Society*. College Station: Texas A&M Press.
- Buchanan, J. M. and Tullock, G. (1962). The Calculus of Consent. Ann Arbor: Michigan Press.
- Buchanan, J. M. and Tullock, G. (1975). "Polluters' profits and political response: direct controls vs. taxes." *American Economic Review*, 65, 139–147.
- Buchanan, J. M. and Wagner, R.E. (1977). Democracy in Deficit. New York: Academic Press.
- Pauly, M. (1968). "The economics of moral hazard." American Economic Review, 58, 531–537.
- Tullock, G. (1967). "The welfare costs of tariffs, monopolies, and theft." Western Economic Journal, 5, 224–232.
- Wicksell, K. (1896). Finanztheoretische Untersuchurgen. Jena: Gustav Fischer.