The Academic Entrepreneurship of James Buchanan at Virginia Tech

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Abstract

This article discusses James Buchanan's academic entrepreneurship in sometimes-hostile environments. It examines Buchanan's view of the appropriate role of mathematics in his 1964 address "What Should Economists Do?" as it was challenged within the Economics Department at Virginia Tech by Dan Orr. It traces the mathematical/philosophical tension between Buchanan and Orr through the experience of Dwight Lee and graduate students at Virginia Tech. It discusses the entrepreneurial role played by Wade Gilley in moving Buchanan from Virginia Tech to George Mason University to capture institutional externalities produced by Buchanan's eventual Nobel Prize and the lasting effects of Buchanan's academic entrepreneurship at George Mason University.

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I. Introduction

This paper builds upon a recent article by Boettke, Clark, and Kroencke (2022) analyzing the response of James Buchanan to the sometimes-hostile institutional environments he encountered. Specifically, we examine Buchanan's view of the appropriate role of mathematics in his philosophical contribution "What Should Economists Do?" (Buchanan 1964) as it was further developed and then challenged within the institutional confines of the Department of Economics at Virginia Tech under its chair, Dan Orr. Section 2 discusses the philosophical orientations of Buchanan and Orr, as they were shaped by their professional experiences at different universities. Section 3 traces the growing mathematical/philosophical

tension between Buchanan and Orr at Virginia Tech based on the experience of Dwight Lee. Section 4 discusses this conflict from the perspective of graduate students at Virginia Tech. Section 5 discusses the entrepreneurial role played by J. Wade Gilley in moving Buchanan to George Mason University to capture many of the institutional externalities produced by Buchanan's eventual Nobel Prize. Section 6 concludes with a brief summary of the lasting effects of Buchanan's academic entrepreneurship at George Mason University.

II. Buchanan and Orr; Philosophical Orientation Shaped by Experience

Boettke, Clark, and Kroencke (2022) suggest that a successful academic entrepreneur has a strong motive to move from one university to another when his academic setting turns hostile to his success. Dan Orr worked within the popular existing economic paradigm of extensive mathematical analysis, which allowed him to acquire five sequential ascending positions at good universities. And both Buchanan and Orr were willing to move from one university to another to pursue success. Buchanan moved five times and Orr four times. Buchanan's motives for his moves were more complicated and have been more chronicled than Orr's and are discussed first.¹

The University of Tennessee, Knoxville was Buchanan's first employer after receiving his PhD from the University of Chicago. His first move was to Florida State University, his second to the University of Virginia, his third to the University of California, Los Angeles, his fourth to Virginia Tech, and his fifth and last to George Mason University.

Buchanan's return to Knoxville, where he had done a year of graduate work prior to military service, was most likely motivated more by his desire to return near to his home than to settle into a productive intellectual environment. As he stated later, "I had not escaped from the delusion that my tenure as a student was finished. I failed to sense that only by remaining a genuine student is . . . life in the academy 'better than plowing'" (Buchanan 2007, p. 196). Because this delusion faded after three years in Knoxville, Buchanan was

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¹ We can be more confident of Buchanan's academic motives than Orr's because much has been written about Buchanan's motives in this regard, much of it by Buchanan himself. Also, the last three moves Buchanan made involved several academics, and all three of those moves involved hostile environments. We know of nothing comparable with respect to Orr's moves.

willing to accept an offer to join the economics faculty at Florida State University. The result, as Buchanan described it later, was a ""Tallahassee transfor-

mation'... somehow, in some way, I achieved an awareness of the excitement of ideas that I had not previously possessed, despite my earlier exposure to Frank Knight" (p. 197).

Buchanan's next job offer, received soon after his move to Tallahassee, was from the University of Chicago. He was "excited and flattered" and no doubt tempted, but he turned the opportunity down in order to develop public choice. In retrospect, Buchanan expressed confidence that his decision not to return to Chicago was the right one to make. He had no doubt that "public choice would have emerged, sooner or later, in Chicago or elsewhere" (Buchanan 2007, p. 200). But he did worry that his "role in the development of this program, as it did in fact emerge and grow, would have been totally different, and possibly nonexistent" (p. 200).

A "casual conversation" Buchanan had in 1948 with Warren Nutter, a fellow graduate student at the University of Chicago, would prove instrumental to the major scholarly contributions of Buchanan and an important factor in his decision to leave Tallahassee to take a position at the University of Virginia. That conversation with Nutter revealed a mutual concern that "economics had shifted, and was shifting, away from its classical foundations as a component element in a comprehensive moral philosophy. . . . We concurred [Buchanan recalled later in the view that some deliberately organized renewal of the classical emphasis was a project worthy of dreams" (p. 94). The opportunity for the two of them to pursue that project as colleagues came in 1957 when they simultaneously joined the University of Virginia faculty. Before that, however, Buchanan left Florida State University to spend September 1955 through August 1956 in Italy on a Fulbright scholarship, which he later said allowed him "to cross the threshold into what would much later come to be called the research program in 'public choice,' and, particularly, the more narrowly defined program in 'constitutional political economy'" (p. 82).

We have no indisputable information on whether Buchanan was offered the position at the University of Virginia before he knew Nutter was also going to join the University of Virginia economics faculty in the spring of 1957. Given the quality of that faculty at the time and the scholarly progress he had made during his time at Florida State University and during his Italian sabbatical, along with his intellectual ambitions, Buchanan would surely have accepted the

University of Virginia offer whether or not he knew that Nutter was going to join him.² Nutter did, however, join him, and the stature of the University of Virginia's Economics Department improved significantly, in large part because of the Thomas Jefferson Center of Political Economy, which arose from the academic entrepreneurship of Buchanan and Nutter springing directly from their 1948 conversation at the University of Chicago.

The Economics Department did not just get better; it got much better because the quality of the professors and graduate students attracted to it by the growing reputations of Buchanan and Nutter and the increased funding opportunities created by the Jefferson Center made it possible to bring in impressive visiting scholars, both domestic and foreign. These visiting scholars obviously included economists, but they also represented other social sciences, humanities, and political philosophy, which complemented Buchanan's increasing interest in political economy, which would in a few years become known as public choice. And there were also regular guest lectures by notable economists, including future Nobel Prize winners such as Ronald Coase (who was on the faculty), Maurice Allais, Bertil Ohlin, and F. A. Hayek (who were also visiting scholars).3 These accomplishments began in the early years of Buchanan's tenure and are discussed in more detail by Boettke, Clark, and Kroencke (2022, pp. 125-26). Such accomplishments as these not only improved the reputation of the University of Virginia Economics Department but also created intellectual benefits that spilled over into other academic departments and improved the reputation of the entire university.

What was not fully anticipated at the time was that these improved reputations would generate an academic environment hostile enough to motivate Buchanan's next academic move. Part of the problem was the jealousy, intensified by ideological differences, of faculty members in other disciplines at the success of the Thomas Jefferson Center. That would not have been a serious problem if

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² In an email from Peter Boettke, he said that "his memory is that Buchanan was recruited before Nutter, and it was Nutter who, after he was recruited, recruited Coase to also relocate to the University of Virginia."

³ They also included Michael Polanyi, a good friend of Buchanan's, who made important contributions to physical chemistry, economics, and philosophy but who did not receive a Nobel Prize. However, his son, John Polanyi, did receive the Nobel Prize in Chemistry in 1986, the same year Buchanan received his Nobel Prize.

those in university leadership roles had been subject to incentives connecting their personal benefit to the university's intellectual tolerance and academic excellence. As Buchanan and Devletoglou (1970, pp. 65-66) would emphasize later, there is no functioning market for university shares that would allow outsiders or insiders to benefit as residual claimants from a university's successes while avoiding losses from their failures by keeping those adding to the university's scholarly reputation and replacing those whose intellectual jealousy and intolerance are damaging that reputation. Without such market incentives, "in a genuine sense, modern university management does what it pleases." There were other factors leading to the end of the Thomas Jefferson Center and the departure from the University of Virginia of Buchanan and Nutter and almost all the faculty they had attracted.⁴ As Boettke, Clark, and Kroencke (2022, p. 127) point out, the result was that the University of Virginia's economics PhD program would never again rank as a top ten department.

Before considering Buchanan's third move, it is worth foreshadowing his last, and fifth, move by commenting on an interesting characteristic of most of the research that was done by the economics faculty and their graduate students at the University of Virginia during Buchanan's tenure. During that period, economic analysis was becoming increasingly mathematical, and it recognized that research papers were more likely to be accepted in the most prestigious scholarly journals if the economic results were explicitly developed mathematically. Some of the Virginia School economists and guest speakers during the Buchanan era made use of "powerful mathematical and statistical methods of analysis" according to Goetz (2020, p. 208), an economic graduate student at the time. Goetz (p. 208) continued, however, that "a focus on modeling for its own sake is uncharacteristic of our tradition ... models are merely means to ends. . . . If the economic common sense isn't there, the model is like a hamburger without the beef." The best-known faculty members in the University of Virginia Economics Department at the time were two future Nobel Prize winners, Buchanan and Coase, and a serious contender for the prize, Gordon Tullock. One can spend a long time looking for a mathematical model in the collected works of either Buchanan or Tullock without finding one. That is also true of

⁴ For a detailed study of the attack on the Thomas Jefferson Center, see Levy and Peart (2020).

Coase's work, including "The Problem of Social Cost," one of the most cited economic articles, which Coase wrote when at the University of Virginia. Furthermore, some of the graduate students of Buchanan and other Thomas Jefferson Center faculty contributed important theoretical insights to the economic literature that could be understood with little background in mathematics. This became less common after Nutter, Coase, Tullock, and finally, in 1968, Buchanan left the University of Virginia.

Buchanan was hired by the Economics Department at the University of California, Los Angeles in the fall of 1968, and he was delighted with his new colleagues. As Buchanan (2007, pp. 183–84) expressed it, "Academically, I was pleased to join the economics faculty at the University of California at Los Angeles. Who would not have been, with colleagues like Arman Alchian, Jack Hirsleifer [sid], Axel Leijonhufved [sii], and Earl Thompson?" But two serious problems surfaced soon after Buchanan's arrival. The first problem was the absence of incentives for university leadership to make the tough decisions needed to maintain intellectual tolerance when it is being threatened.⁶ This problem quickly became apparent after Buchanan arrived. Soon after he moved into his office, a bomb was planted at the entrance to the Economics Department offices by students who blamed William Allen, the department head, for not hiring enough minority faculty members. Not long after that, in January 1969, two male students were shot and killed on campus near Buchanan's office. He resigned from the University of California, Los Angeles immediately (see Boettke and Marciano 2020, p. 77). Buchanan and Devletoglou (1970, pp. 104-5) highlighted this problem when they wrote:

Our universities seem to be caught up in tragic acquiescence to the attitude that those who feel "sufficiently deep moral concern" about political (and, of course, nonacademic) issues have the right to protest, to demonstrate, to riot and even to to [sic] assault the freedom of others within or without the university walls. . . .

⁵ Buchanan is quoted by Boettke, Clark, and Kroencke (2022, p. 126) as saying that "one of my proudest moments was recorded when Jack Gurly, then editor of the American Economic Review, in 1963 or 1964, stated in a general meeting of the American Economic Association that Virginia's graduate students were submitting more interesting manuscripts than those of any other institution in the country."

⁶ This is the problem discussed by Buchanan and Devletoglou (1970, pp. 65–66) and discussed above.

Vulnerable and apparently spineless, university authorities seem powerless to act.

This takes us to Buchanan's fourth academic move—to Virginia Tech in Blacksburg, Virginia, in 1969, where he was professionally reunited with Gordon Tullock and where the Public Choice Center would be established. After Buchanan's experience at the University of California, Los Angeles, he later commented that "this academic location deep in the Virginia mountains seemed to offer some partial escape from the insanity that was going on all around us. It was indeed a relief to get away from the absurdities I had observed firsthand at the University of California at Los Angeles."

Jim Buchanan would spend fourteen highly productive years at Virginia Tech; however, the motives for his fifth, and last, academic move, to George Mason University in 1983, arose from the same perverse incentives facing university bureaucrats that Buchanan had experienced firsthand at the University of Virginia and the University of California, Los Angeles. Specifically, Daniel Orr, the chair of Virginia Tech's Economics Department in 1978, would play a significant role in motivating Buchanan's move to George Mason, along with the entire Public Choice Center.⁸

Most academics would consider Daniel Orr's career as successful but not necessarily comparable to Buchanan's. However, Orr's career path intersected with Buchanan's in a way that further highlighted Buchanan's dedication to an academic environment with colleagues who recognize that mathematical analysis can easily do more to conceal insights from economic analysis than reveal them.⁹

⁸ Orr knew that Buchanan was likely to receive the Nobel Prize in Economics and that it would tremendously boost the scholarly reputation of Virginia Tech if he was still there when he did. But Orr clearly put his own interest in hiring mathematical economists above the reputation of Virginia Tech, which would continue to be improved by Buchanan's presence even if he did not receive the Nobel Prize. Orr could have been overridden by the dean of the College of Business, William Mitchell, and no doubt he would have been if the incentives Mitchell faced connected his benefits to the reputation of Virginia Tech. But they did not, and he was another university authority that "seemed powerless to act." For Buchanan's comments on Orr and Mitchell, see Buchanan (2007, pp. 188–90). ⁹ This dedication is broader than just the role of mathematics in economics and is reflected in Buchanan's challenge, "Dare to Be Different." See Boettke (2016). If we were asked what Buchanan's favorite Frank Sinatra song was, we would not hesitate to answer, "My Way."

⁷ See Boettke, Clark, and Kroencke (2022, p. 128, fn 12).

Orr's early academic career began in 1960 with academic appointments at Amherst College, then the University of Chicago, and finally, in 1966, the University of California, San Diego, where he became chair of the Economics Department. Dwight Lee met Orr in 1967 serving as Orr's teaching assistant and eventually wrote his dissertation under Orr's direction. Orr published well over a dozen mostly mathematical articles in leading economic journals like the American Economic Review (in 1961). Two of his articles were coauthored with Merton H. Miller, who would go on to share the 1990 Nobel Prize with two other economists for their contributions to the economics of finance. Most of Orr's highly mathematical articles were written before he became the department chair at the University of California, San Diego and thus before he became the chair at Virginia Tech in the fall of 1978, where Orr had his most notable academic impact. Orr made his last academic move in 1989 to become the Economics Department's chair at the University of Illinois Urbana-Champaign. Unlike with Buchanan's motives for his academic moves, of which much has been written, we could find almost nothing about Orr's motives for his academic moves. There was a hint that he went to Urbana-Champaign to improve its economic faculty. This comes from a short comment on Orr's career that said he moved to become chair of the Economics Department at the University of Illinois Urbana-Champaign after "he successfully assembled a top-rated economics faculty at Virginia Tech in Blacksburg." ¹⁰ Most readers of this paper will understand the irony in this statement.

III. Lee, Buchanan, and Orr at Virginia Tech

In the fall of 1977 Orr invited Dwight R. Lee, who was teaching at the University of Colorado, to spend the 1978–79 academic year visiting Virginia Tech. Lee had met Buchanan a couple of years earlier when Buchanan visited Boulder to give a seminar on *Democracy in Deficit*, which he was writing with Richard Wagner. Lee had read Buchanan and Tullock's *The Calculus of Consent*, Tullock's article "The Charity of the Uncharitable," and other public choice works, none of which he had been exposed to as a graduate student at the University of California, San Diego. He had noticed not just that public choice publications were interesting but also that the best-known public choice works were less mathematical and more accessible than the

¹⁰ See Prabook (2023).

mathematical articles he had read as a graduate student and wrote to earn tenure at the University of Colorado. He also knew that Orr approved of the more mathematical articles. Yet, at the time, Lee was unaware of Buchanan's dim view of the use of math for the sake of using math. So Lee chose a fairly mathematical paper to present to the Virginia Tech economics faculty to show that he was worthy of a year's visit. Fortunately for Lee, David Friedman (the son of Milton and Rose), who held a PhD in theoretical physics from the University of Chicago and obviously knew far more math than Lee did, was also in the audience. When Lee finished his presentation, Friedman immediately asked Lee, "Why did you use mathematics to make your point since it is obvious?" Lee's modest response was "David, I don't doubt that you could have reached my conclusion without math, but I needed the math to help me get there because I am not as smart as you are. There is a tendency for people to think those who use math are smart, and no doubt that is often true. But it is also often the case that some people use math because they are not smart enough to get along without it." Lee later learned that Buchanan liked his response to Friedman.

Lee spent the academic year 1978–79 visiting the Public Choice Center, which was separate from the Economics Department, where most economists including Orr were housed. Lee then returned to the Public Choice Center in January 1980 in a full-time faculty position, and he remained at Virginia Tech until the summer of 1983, when he and the entire Public Choice Center relocated to George Mason University in Fairfax, Virginia. He was fortunately able to remain on good terms with both Buchanan and Orr during his time in Blacksburg and afterward, and he thoroughly enjoyed interacting with scholars who were generating a steady stream of interesting ideas and publications.

David Friedman came to the Public Choice Center in 1976 without a formal economics background. Previously he was a research associate in physics, from 1971 to 1973 at Columbia University, and a postdoctoral fellow in public and urban policy at the University of Pennsylvania from 1973 to 1976.

Other highly productive scholars associated with the Public Choice Center in that era included but were not limited to Robert Tollison, Charles Goetz, Richard Wagner, Winston Bush, Thomas Borcherding, Loren Lomasky, Joe Reid, Geoffrey Brennan, and Mark Crain.¹¹

IV. The Blacksburg Conflict

While J. R. Clark was a student at Virginia Tech (1970–74), virtually all graduate students were aware of Buchanan's concern that economics was drifting away from its classical analytical tools and toward excessive reliance on mathematical modeling. Students could not help but notice Buchanan's increasing criticism of the contemporary economics literature, resulting in his now-legendary bon mot, "We are squaring R's while Rome burns." That, coupled with Gordon Tullock's assertion that Buchanan had graduated magna cum laude in both mathematics and economics, added credence to his position and intrigue to its explanation.

Long before Lee's arrival in 1978, candidates interviewing for economics faculty positions at Virginia Tech presented papers to the entire department faculty. Graduate students were required to attend those presentations and participate in the discussions of those papers. In that context, the polar positions of Buchanan and Orr regarding candidates' use of mathematics to explain relatively simple economic arguments was on sufficient display to garner the attention of even the sleepiest graduate student. And Lee's 1978 interview experience would prove to be no exception. Indeed, Friedman's comment on Lee's 1978 paper presentation was obviously more an expression of the prevalent attitudes of the Public Choice Center faculty than that of the Economics Department as a whole, purportedly represented by its chair, Dan Orr. Thus, it is difficult to deny that the conflict was real, personal, institutional, and growing.

V. Enter J. Wade Gilley

Following graduation from Virginia Tech in 1974, Clark would go on to engage in significant friendly professional interactions with both Buchanan and Orr while organizing conferences. While copiously avoiding any direct involvement, Clark would remain privy to the

¹³ The rest of the center consisted of Buchanan, Tullock, Tollison, Crain, Brennan, Reid, and Lee. And not to be forgotten is Betty Tillman, who kept the center together with her contagious enthusiasm. It may be informative to list some of the students who did their graduate work at the Public Choice Center at Virginia Tech. They include but are not limited to Gary Anderson, Cecil Bohanon, Henry Butler, Pamela Brown, J. R. Clark, J. Patrick Gunning, Randy Holcombe, David Kreutzer, David Laband, Paul Lawrence, Richard McKenzie, and Laurence Moss.

continuing conflict surrounding mathematics and economics between Buchanan and Orr at Virginia Tech. In addition, Clark's career became intertwined with that of J. Wade Gilley, who completed a PhD in engineering at Virginia Tech and then became president of Wytheville Community College, where Clark had taught as a graduate student. Gilley would go on to become secretary of education for the state of Virginia, vice president of George Mason University, president of Marshall University, and finally president of the University of Tennessee system, where Clark then held the Probasco Distinguished Chair.

Most relevant to the theme of this paper is Wade Gilley's service as vice president of George Mason University. Gilley made academic history by luring James Buchanan, Gordon Tullock, and the rest of the Public Choice Center faculty to George Mason University shortly before Buchanan won the Nobel Prize, which led George Mason University to be showered with international academic recognition. In doing so, Gilley knowingly became a residual claimant upon the academic externalities of Buchanan's prize.

Gilley was an academic entrepreneur himself, encouraging that spirit in the faculty of institutions he served at. He knew of Buchanan and Tullock's huge academic reputation from his years at Virginia Tech. And when Karen I. Vaughn (2015), then chair of the Economics Department at George Mason University, informed Gilley and George Johnson (then president of George Mason University) that Buchanan and Tullock might be unhappy at Virginia Tech and that Buchanan was believed to be "on the short list" for the Nobel Prize, Gilley began immediately to assess the potential risks and rewards of recruiting them. Gilley and Johnson were keenly interested in developing entrepreneurial opportunities to grow the university. In later years Gilley himself spoke openly of his calling literally every one of the living recipients of the Nobel Prize in Economic Science (fifteen in 1983) and asking each if they believed Buchanan would actually win the prize. And he reported receiving literally the same answer from every recipient: that it was *not* a matter of whether Buchanan would win the Nobel but when he would win it.

With this impression of the potential rewards for George Mason University, Gilley set out to assess the risks by delving into the many prior movements of Buchanan and Tullock from institution to institution (all of which had significantly better academic reputations than the evolving George Mason University) and their reasons for making such moves. In his 1986 remarks to a gathering at George

Mason University celebrating Buchanan's prize, Gilley conveyed to the audience that his inquiries of colleagues at previous institutions may have *occasionally* yielded remarks about "big egos" but *always* included mention of some significant philosophical basis about which Buchanan and Tullock differed with the institutions' leadership sufficiently to motivate them to relocate and continue their academic development in what they believed to be a more accommodating academic environment. From this, Gilley identified a potential opportunity to acquire internationally recognized scholars simply by encouraging an academic entrepreneurial spirit, which he himself already held strongly.

Gilley's remaining due diligence would require him to assess the costs and commit to raising sufficient resources to induce the move to George Mason University. In 1982-83, faculty salaries at state institutions were a matter of public record. However, the transparency and ease of public access via the internet were still many years in the future. And the costs to move seven highly paid faculty from a higher-ranked academic institution were daunting. (For a further explanation of this process, see Vaughn 2015.) This hurdle would, however, prove to be significantly lowered by a conversation between Orr and Gilley as was recounted separately by both to Clark. In business negotiations with Orr regarding conferences at Virginia Tech, Clark had been reminded on several occasions of the rising tension between Orr, Buchanan, and the Public Choice Center faculty, with Orr always concluding confidently that "they are not going anywhere. They have been here too long, they are on the highest paid faculty scale in the University, and they are far too deeply vested in the Virginia State Retirement system to go somewhere else." In 1982, when Gilley called Orr to inquire about the motivation for Buchanan and Tullock's four previous institutional moves, Orr apparently offered the same response while placing evengreater emphasis on their vestments in the Virginia Retirement System. This was all Gilley needed to know. Orr had overlooked that George Mason University, as an emerging university in Virginia, would also be a participant institution in the Virginia Retirement System and that relocating faculty's vestments there would remain fully intact and continue by statute at the same contribution rate. This freed Gilley to concentrate on raising compensation enhancements related to research from outside funding and extend the necessary offers to ease Buchanan's exit from Virginia Tech (in 1983) due to Orr's methodological backlash against the work done at the Center

for Study of Public Choice. Buchanan would go on to receive the Nobel Prize in 1986, leading George Mason University to be showered with international accolades. And Gilley, among others, would bask in the glow of that recognition, being a residual claimant on the university's newfound excellence.

VI. The Rest Is History

The George Mason University Economics Department quickly became the highest ranked in Virginia and among the top ranked nationally, and it attracted another Nobel laureate in economics, Vernon Smith. Buchanan's academic entrepreneurial success would continue to promote a culture for the whole university, attracting other academic entrepreneurs to George Mason University such as Henry Manne in law and economics and Andrew Sage in computer science. Manne would go on to be dean of what is now the Antonin Scalia School of Law, and Sage would found the George Mason University School of Engineering and Information Technology, both helping to propel George Mason to its status as an internationally recognized university.

References

- Boettke, Peter J. 2016. "Daring to Be Different: A 30 Year Celebration of James M. Buchanan Winning the Nobel Prize in Economics." Paper presented at the Buchanan Speaker Series, Mercatus Center at George Mason University, October 6–7.
- Boettke, Peter J., and Alain Marciano, eds. 2020. "Introduction to Section 4." In *The Soul of Classical Political Economy: James M. Buchanan from the Archives*, 69–82. Fairfax, VA: Mercatus Center at George Mason University.
- Boettke, Peter J., J. R. Clark, and John Kroencke. 2022. "Academic Entrepreneurship in Sometimes Hostile Environments: James Buchanan and the Virginia School of Political Economy." *Independent Review* 27 (1): 121–40.
- Buchanan, James M. 1964. "What Should Economists Do?" Southern Economics Journal 30 (3): 213–22.
- Buchanan, James M., and Nicos E. Devletoglou. 1970. Academia in Anarchy: An Economic Diagnosis. New York: Basic Books.
- Buchanan, James M. 2007. Economics from the Outside In: Better than Plowing and Beyond. College Station: Texas A&M University Press.
- Goetz, Charles J. 2020. "Uncommon Common Sense vs. Conventional Wisdom: The Virginia School of Economics." In *The Soul of Classical Political Economy: James M. Buchanan from the Archives*, eds. Peter J. Boettke and Alain Marciano, 202–18. Fairfax, VA: Mercatus Center at George Mason University.
- Levy, David M., and Sandra J. Peart. 2020. Towards an Economics of Natural Equals: A Documentary History of the Early Virginia School. Cambridge, UK: Cambridge University Press.
- Prabook. 2023. "Daniel Orr." Prabook.com.

Vaughn, Karen I. 2015. "How James Buchanan Came to George Mason University." *Journal of Private Enterprise* 30 (2): 103–9.