

JAMES M. BUCHANAN, CHICAGO, AND POST-WAR PUBLIC FINANCE

BY
MARIANNE JOHNSON

This paper examines James Buchanan's earliest writings within the context of post-WWII public finance theory and his education at Chicago. Public choice scholars have long recognized their ties to Chicago, but few have examined Chicago's role in serving as the primordial soup for Buchanan's later work in public choice. Thus, we know very little about the subdiscipline of public finance at Chicago and its institutional and intellectual traditions in the immediate post-war period. As the influence of Frank Knight, price theory, and catallactics on Buchanan have been well explored, the focus here is on Buchanan's graduate training in public finance, the departmental emphasis on product differentiation of ideas, and the general acceptance in 'Old Chicago School' economics of the importance of institutions and institutional design. I find that while he maintained a high degree of intellectual affinity with Chicago economics generally, Buchanan broke decisively with orthodox public finance (including that taught at Chicago) on several substantive issues early in his career, including the importance of expenditure theory and the relevance of the benefit principle and voluntary exchange.

I. INTRODUCTION

Much has been written on James M. Buchanan and the origins of public choice (Backhaus and Wagner 2005; Meadowcroft 2011; Medema 2000 and 2011; Wagner 2004). These histories identify *The Calculus of Consent* (1962) and the early 1960s as the beginning of the public choice research program. But although public choice scholars and historians have long recognized ties to Chicago, few have examined Chicago's role in serving as the primordial soup for Buchanan's later work in public choice. As a result, we know

Marianne Johnson, Professor of Economics, University of Wisconsin Oshkosh. Email: johnsonm@uwosh.edu. I would like to thank David Levy, Michael Brooks, and Ross Emmett for helpful comments and suggestions.

ISSN 1053-8372 print; ISSN 1469-9656 online/14/04000479-497 © The History of Economics Society, 2014
doi:10.1017/S1053837214000571

very little about the subdiscipline of public finance at Chicago and its institutional and intellectual traditions in the immediate post-war period. Gordon Brady (2007) states that public finance was “not a major research interest at Chicago” in the 1940s, and the University of Chicago student newspaper described the department as “statisticians and the theorists at the top[,] labor economists and public financiers at the bottom” (in Burgin 2007, p. 3). However, what was happening there was an important piece of the bigger story of post-war public finance. The story of Chicago public finance also helps clarify some of the sources of Buchanan’s ideas and emphasizes his originality.

This paper examines Buchanan’s earliest writings within the context of public finance at the University of Chicago in the late 1940s. Training at Chicago meant something different from training elsewhere, as “those who go through graduate training at the University of Chicago ... take on the aura of the place” (Buchanan 2007, p. 204). Much of the difference has been attributed to the centrality of price theory, though others credit the workshop system or the philosophical orientation of the faculty (Emmett 2009; Hammond and Hammond 2006). Frank Knight’s influence on Buchanan has been extensively explored and the relationship between price theory, catallactics, and public choice is generally well understood (Buchanan 1987; Wagner 1988, 2008). Instead, I focus on Buchanan’s graduate training in public finance, the general acceptance by ‘Old Chicago School’ economists of the importance of institutions and institutional design, and a departmental emphasis on product differentiation of ideas from those produced by peers at other institutions. While Buchanan maintained a high degree of intellectual affinity with Chicago economics generally, his education provided him with the confidence to break decisively with orthodox public finance on several substantive issues early in his career. From the first, Buchanan attempted to reframe the discourse on public finance as a *quid pro quo* relationship, which included a model of government more sophisticated than a “monolithic and benevolent decision maker” and which accounted for expenditures as well as revenues. Ultimately, I argue that the roots of public choice are deeper than commonly observed and have both more and less to do with what is traditionally conceived of as the Chicago School than is usually recognized.

II. PUBLIC FINANCE PRIOR TO THE 1940S

Prior to the Great Depression, the American Institutional tradition in public finance dominated theory and practice in the United States. Drawing heavily from the German continental thinkers in the Cameralist tradition, early practitioners such as Richard T. Ely and Henry C. Adams emphasized historical development, institutions, statistical data collection, and social policy engineering (Mehrtrotra 2007; Ross 1991). Edwin R. A. Seligman, the patriarch of American public finance, cast a long shadow over the field. Trained in Germany and by far the best-recognized scholar internationally, Seligman supervised roughly one-third of all dissertations in public finance in the US between 1900 and 1930,¹ and “considerably influenced the American opinion” (Simons 1938, p. 16).

¹This is estimated from the numbers of PhDs, candidates, enrollments by field, and enrollments by university, as reported in Froman (1942).

Although Seligman was not a card-carrying Institutionalists, his pluralistic methodology was fundamentally at odds with the formal-mathematical British school, whom he “chide[d] ... for preferring formal proofs over practical reasoning, and ... [whose] hypothetical conclusions when ‘applied to the conditions of the market-place ... [were] likely to be unreal’” (Moss 2003, p. 219).² Seligman was known for his use of practical, numerical examples, much to the dismay of Francis Y. Edgeworth, who felt such contrived expositions lacked theoretical and mathematical rigor. In turn, Seligman denigrated “the mathematical theory of taxation” and “took some pleasure in characterizing the Cournot–Edgeworth passion as a ‘school of thought’ that would produce mostly arcane theorems and generally useless esoterica” (Moss 2003, p. 213). The Seligman–Edgeworth debate over tax incidence, which ran from 1892 to 1910, had lingering repercussions. Taking their tone from Seligman, American-Institutional economists emphasized applied methodologies, which included substantial historical-legal analyses, over mathematical modeling. Their viewpoint dominated public finance teaching at Columbia, California, Michigan, Wisconsin, and Yale, schools that produced more than half of the public finance PhDs prior to World War II (Johnson 2014). These same economists also actively engaged in social policy making at the federal and state levels and had an enormous influence on the design of the federal income tax and New Deal policies (Mehrotra 2014).

However, a fundamental shift in the field of economics occurred sometime between the late 1930s and the end of World War II. Departments stopped hiring Institutionalists; interwar pluralism was replaced by a growing neoclassical consensus, as evidenced by Tjalling Koopmans’s (1947) attack on Institutionalism as “measurement without theory” (Rutherford 2011). As throughout the field, formalism and mathematical modeling began to overtake Institutional methodologies in public finance. This trend was accelerated by the decline in continental public finance engendered by the rise of Nazi Germany and its subsequent disastrous impact on the continental universities and European intellectualism (Backhaus and Wagner 2005). By 1945, the British-neoclassical approach reigned supreme in most US graduate programs. Best characterized by the contributions of Edgeworth and Arthur Cecil Pigou, the focus was on debt financing, tax design, and tax incidence. A review of standard textbooks of this period illustrates the dominance of the British viewpoint; little attention was given to the continental scholars, particularly the German and Italian contributors, even in programs with strong institutional viewpoints such as Wisconsin (see, for example, Groves 1939).

By the time Buchanan enrolled at Chicago in the mid-1940s, a new vanguard of public finance economists had begun to emerge. Harold Groves published his textbook *Financing Government* (1939), which, though decidedly more Seligman than Edgeworth, represented a significant shift in the Institutional approach to economic modeling and public finance. It also laid out Wisconsin-Institutionalist thinking on the New Deal, tax reform, and war financing. At Columbia, Carl Shoup published his *Facing the Tax Problem* (1937). Richard Musgrave was nearly ten years into his notable career, actively working to transform public finance “from a descriptive and institutional subject

²Backhaus and Wagner (2005) refer to the “Anglo-Saxon school,” but, at this point in time, it is important to differentiate the work being done by American economists from that being done by the British. Methodology, historical background, and emphases differed substantially between the groups prior to the 1930s.

to one that used the tools of microeconomics and Keynesian macroeconomics to understand the effect of taxes” (Walsh 2007, online).

III. PUBLIC FINANCE AT CHICAGO

The confusion that arises periodically about Buchanan’s dissertation adviser provides a starting point to explore public finance at Chicago in the immediate post-war period. Buchanan’s dissertation in the University of Chicago library contains neither a signature page nor acknowledgments;³ this absence contributes to the mistaken idea that Knight served as his dissertation advisor (see, for example, Meadowcroft 2011, p. 15).⁴ Buchanan’s actual dissertation supervisor was Roy Blough, confirmed by the Department of Economics at the University of Chicago, which states the “Permanent Thesis Committee was announced in a memo to the faculty to be R. Blough as the chair with H. Perloff and F. H. Knight on his Thesis Committee. Also the faculty listed in attendance at his Thesis Defense were the following: Schultz, T. W.; Knight, F. H.; Mints, L. W.; Burns, R.; Lewis, H. G.; Cooper; Goode, R.” (Less 2012).⁵ However, Buchanan found Blough unhelpful during the writing of the dissertation and relied much more heavily on Knight, whose fingerprints are evident throughout. In fact, the Henry Simons–Knightian intellectual legacy that was to define aspects of Chicago economics was much in evidence at Buchanan’s defense, with Simons’s self-identified libertarian faction making up most of the committee and attendees.⁶

Buchanan enrolled at the University of Chicago in the winter quarter of 1946, chosen on the recommendation of a former professor, though he states that “had I known the ideological character of the Chicago faculty I might have chosen to go elsewhere” (1992, p. 4). What Buchanan never tells us is why he was drawn to public finance in the first place.⁷ Neither his description of his self-identified formative experiences at Chicago—Knight’s price theory course—nor his mention of his discovery of

³The lack of an acknowledgments page or explicit statement of the committee in the bound thesis was not an uncommon practice at the time, according to the university’s dissertation office (Mullarkey 2012).

⁴This perception is reinforced by Buchanan, who referred to Knight as “my teacher” who “correct[ed] my dissertation grammar in great detail” (1992, p. 77; see also 2007, p. 1).

⁵Departmental requirements specified six quarters of academic work for the dissertation, including three fields of specialization, one primary and two secondary. The thesis was to be written in the primary field under a specialist (*University of Chicago Annual Register* 1944–45, p. 114). See also Brady (2007). Given potential transfer of master’s credits and that Chicago offered graduate-level coursework in public finance during the summer term, it is entirely possible that Buchanan never had a course from Blough. Considering the topic chosen, Buchanan may have anticipated completing his dissertation under Leland and had likely committed to public finance prior to his departure.

⁶Simons regretted that this philosophical orientation was “almost unrepresented among great universities, save for Chicago.” Surveying the current landscape, Simons observed that the current Chicago libertarians would comprise Knight, Mints, Viner, H. Gregg Lewis, and himself (Van Horn and Mirowski 2009, pp. 145–146).

⁷Unlike other students who were drawn to economics as a vehicle to implement social change or influence policy, Buchanan explicitly denies this was his motivation (Buchanan 2007, p. 39). However, he does note that his experience working with Charles P. White at Tennessee while he was a master’s student at Tennessee was important (2007, p. 3). White’s primary research was on federal estate taxes (see, for example, White 1928).

Knut Wicksell's *Finanztheoretische Untersuchungen* (1896) shed any light on this. The latter, while topically relevant, is said to have occurred in the summer of 1948 (Buchanan 2007, p. 5), well after Buchanan had chosen his primary field and begun his dissertation.

What makes the choice of public finance more intriguing is that in 1946, Chicago public finance was in a state of upheaval. Simeon E. Leland, who had been teaching Government Finance (EC 360), State and Local Taxation (EC 362), and Public Debts (EC 367), left Chicago after the spring quarter to become the dean of the College of Liberal Arts at Northwestern University. Simons, who, for more than a decade, had taught Economics of Fiscal Policy (EC 361) and Government Finance (EC 360), died in June. Blough was hired for the fall quarter with a joint appointment in economics and political science; he took over the graduate teaching duties for public finance through 1950, with some assistance by Richard Goode, who joined Chicago in the fall of 1947 (*University of Chicago Annual Register* 1946–47, p. 219). Public finance was a microcosm of the department, which was itself in a state of foment with the departure of Jacob Viner and the arrival of Milton Friedman.

In his first quarter of studies, Buchanan enrolled in Knight's price theory course, State and Local Taxation with Leland, and a third course taught by Theodore William Schultz (Buchanan 2007, p. 70; *University of Chicago Annual Register* 1945–46, p. 224). Leland had completed his dissertation on "The Classified Property Tax in the United States" at Chicago in 1926, quite possibly under Jacob Viner, who was teaching graduate public finance at the time. Leland was a central member of the New Deal group at Chicago in the 1930s and had largely institutional leanings (Brady 2007; Van Overtveldt 2007). An expert in the problems of the coordination of fiscal units in a federalist system, Leland was deeply interested in institutional structures and advocated for the complete integration of federal, state, and local revenue systems, a proposal that would make states mere administrative areas (Leland 1930). Leland's view of government was distinctly at odds with that of Simons, who felt that the federal government should focus on "legislation ... [that] follows clear, announced rules of policy," whereas states should focus on the provision of social and governmental services (Simons 1948, p. 18). Buchanan chose to write in Leland's area of expertise and produced a dissertation on fostering fiscal equity in a federalist system. In his dissertation, Buchanan (1948) argued in favor of a system based on states' rights and revenue sharing. Though his own views on federalism were quite different, Buchanan found Leland a very competent scholar and felt that Leland's position of complete integration of the fiscal system "has a great deal to recommend it ... it contains many advantages over the numerous confused 'compromise' solutions" (1948, p. 144; see also Buchanan 1950, p. 585n7).

Leland's teaching was strictly in the British neoclassical tradition. Describing his coursework, Buchanan stated:

The public finance I learned included goodly doses of Edgeworth–Pigou normative utilitarianism, of Marshallian incidence theory (of taxes, not spending), of Keynesian inspired denial of debt burden. In this public finance, orthodoxy for the 1940s, government was implicitly postulated to be exogenous to the economy, or, when normative discourse commenced, was presumed to take the form of a monolithic and benevolent decision maker. (2007, p. 83)

In the spring quarter of 1946, Buchanan enrolled in Simons's Economics of Fiscal Policy, and it was thanks to "the instruction of Frank Knight and Henry Simons, my Chicago teachers, [that] I was forced to fully absorb the simple principles of market allocation" (Buchanan 2007, p. 216).⁸ Simons, too, adhered to the classical British tradition in public finance, finding it "intellectually respectable" (Samuels 2005, p. 255; see also 1937b), compared to Seligman's work, which consisted of a "procession of sophomore generalizations which corrupt the student's understanding of economic theory and plague the teacher" (Simons 1937a, p. 532).

During Buchanan's time at Chicago, public finance was not a major research interest, and coursework more often resembled a trade school for tax-policy writing than the intellectually stimulating environment that Buchanan sought when he matriculated. Although public finance held a strong position in terms of the number of teaching faculty, this can be primarily attributed to historical legacy rather than to an active research program.⁹ Public finance was one of the earliest economics subfields taught in the United States, and, hence, existed at Chicago from its establishment. The subfield gained early prominence in the department, thanks to an impressive series of scholars, including Adolph Miller, Henry C. Adams, and Harold Millis (Johnson 2014). However, by the 1940s, it was a different story; Chicago was turning out relatively few specialists in public finance, despite graduating the third-most PhDs in economics (Froman 1942, 1952). Leland had become decidedly less active in advising graduate students and publishing. Blough was a temporary fix, and public finance essentially disappeared after his departure until Arnold Harberger resurrected the field in the early to mid-1950s. During Buchanan's residence, public finance was further distanced from the center of departmental activity, as key professors held joint appointments in other areas—Leland and Blough both in political science and Simons in the law school.

The most active of the faculty in the 1940s, Simons made notable contributions to public finance theory, including what has come to be known as the Haig–Simons definition of income, which underlies our modern income tax.¹⁰ Simons stressed the importance of definitions of income and accounting, arguing that "every bit of measurement of income is a construction" and cautioning that "such rules of thumb are

⁸Though Buchanan makes few references to Simons as a professor, he did discuss him briefly in an interview with Manuela Mosca in Blacksburg, Virginia, on June 27, 2008 (Mosca 2011). The focus of the discussion was de Viti de Marco, and Buchanan was asked about Simons's highly critical review (Simons 1937b) of the English translation of *First Principles of Public Finance*. Buchanan thought Simons was "very sharp, very bright," but too locked into the English-language public finance viewpoint. Simons was, therefore, unable to appreciate the broader approach of de Viti de Marco.

⁹When considering the teaching complement of faculty at Chicago in the 1940s, it may seem that public finance had a place of prominence, being one of only six fields taught in addition to theory. This is more attributable to historical habit than departmental emphasis. In the mid-1940s, most of the undergraduate teaching at Chicago came out of the college, rather than the department, so the department actually had a relatively small group of teaching faculty. By the mid- to late 1940s, there were Knight and Friedman teaching theory courses, along with Lloyd Mints (money and banking), R. G. Lewis (labor economics), Earl J. Hamilton (history), Harbison (industrial relations), T. W. Schultz (agricultural economics), and Simons and Leland, followed by Blough (public finance).

¹⁰This measure argues that the income tax base is the sum of consumption and savings, including "the net accretion of one's economic power between two points in time" (Simons 1938, p. 206), meaning that all inflows and outflows are part of taxable income. Theoretically, this would include the implicit rental rate on owner-occupied housing, which has been a subject of much debate in public finance.

soon elevated into principles” (Samuels 2005, p. 252). His clear definitions and careful thinking about tax policy made his *Personal Income Taxation* (1938) a field standard that continues to have influence. Simons’s primary complaint of public finance was its purported scientism. Simons argued that practitioners ought to identify the social objectives of economic policy and design tax policy to achieve those ends (1938, p. 2). Sometimes characterized as not wholly in line with the Chicago tradition due to his views on patents, anti-trust, and progressive taxation, Simons recognized there was no free lunch. Public finance was, by construction, the study of intervention in the economic order; for Simons, practicing public finance meant designing better tools to achieve pre-agreed-upon social objectives. Simons did adhere to the standard Chicago storyline that taxes necessarily result in a less efficient use of resources (Samuels 2005; see also Buchanan 2010). It is telling that most of Simons’s analyses of taxes weighed efficiency concerns between competing taxes, replacing one tax with a revenue-neutral equivalent. Simons did not consider expenditures as a relevant part of the story.

Simons’s views remained manifest in Chicago public finance courses for many years following his death. Blough continued to assign *Personal Income Taxation* (1938) along with several additional writings by Simons in graduate public finance courses. This meant that the intellectual heritage that Simons (1938) identified in Viner, Knight, Leland, Shoup, and Director was reproduced for the following generation of students. Blough’s course notes also evidence significant discussion of Simons’s work—to the extent that one wonders if Blough inherited Simons’s lecture notes along with his teaching responsibilities (Course Notes from Blough’s Fiscal Policy and Taxation, EC 361, Norman Maurice Kaplan Papers, Box 1, Folder 5).

Blough joined the Chicago faculty as an undeniable expert in tax policy. His primary research interest, developed at the US Treasury, was the implementation of the federal income tax. A Wisconsin PhD (1929), Blough moved in and out of government and university positions prior to coming to Chicago.¹¹ At the treasury, Blough was agnostic to the great methodological debates going on in public finance; he regularly sought feedback from Simons in addition to Groves, Shoup, Musgrave, and Paul Samuelson. He also frequently hosted the same economists for workshops on applied tax questions (see the letters between Blough and Simons, Henry C. Simons Papers, Series I, Box 1, Folder 43). Blough was a technocrat, with a strong interest in tax design, rather than theory; Simons, however, generally held Blough’s work in high esteem (Simons 1937a).

¹¹Jacob Roy Blough (1901–2000) received his PhD from the University of Wisconsin in 1929 with a dissertation on the “Geographical Distribution of Wisconsin Tax Bases” under William Keikhofer, a long-time member of the Wisconsin economics department and one of the few who supervised a significant number of dissertations (Lampman 1993). Keikhofer also received his PhD from Wisconsin (1913), under Ely’s supervision; Keikhofer was best known for his flamboyant teaching of introductory economics and his accompanying textbook (for more, see Lampman 1993, p. 35), though being primarily orthodox in his economics (Rutherford 2011, p. 193). Blough began his career with the Wisconsin State Tax Commission and then spent six years at the University of Cincinnati (1932 to 1938), before moving to the US Treasury. He accepted a joint position in economics and political science from Chicago in 1946, and was officially on the faculty through to 1952, though he had actually left in 1950 for the Council of Economic Advisors. He also worked for the economic affairs department of the United Nations, before joining the Columbia University economics department in 1955, through to his retirement in 1970.

Blough (1944) laid out his views on the theoretical underpinnings and motivations for tax policy; it is here that Blough's Institutional background is most evident, particularly his conceptualization of taxation as conflict between competing political groups. "Taxation is no passive instrument.... The potency of taxation is so great that it may be and indeed is continually used as an instrument for making changes which the politically dominant groups believe should be made in the social structure" (Blough 1944, p. 22). Blough saw tax policy as part of a larger social science, and argued that one needed to view taxes as part distribution, part economic, part political, and part practical. To understand a tax system required a systematic analysis that recognized the "basic conflicts ... that make the problem of tax policy one of choice among competing and frequently antagonistic interests" (Blough 1937, p. 547).¹² The ideas of harmony and conflict play an important role in Blough's evaluation of tax policy. Conflict is the "situation where one person's gain is another person's loss, while harmony is a situation where one person's gain may also be another person's gain, with no one the loser" (1944, p. 23). This is not unlike Buchanan's later conceptualization of the equivalence between unanimity rule and Pareto optimality in public choice.

For Blough, the central conflicts of taxation have their roots in the disconnect between what one pays in taxes and what one receives in benefits, "because in taxation there is little or no relation between the amount of taxes a person pays and the amount of benefits he may derive from Government" (1944, p. 23). This disjoint was a legacy of the Progressive movement's advocacy for a national progressive income tax. The ultimate passage of the 16th Amendment authorizing a federal income tax had required a substantial shift in professional and public opinion, moving from a benefit's based approach to taxation to ability-to-pay. A by-product of this monumental shift in thinking was the severing of expenditures from revenues in economic analysis (Mehrotra 2014), something Buchanan recognized and lamented.

IV. WHAT BUCHANAN REALLY LEARNED AT CHICAGO

Institutions, Not Institutionalism

Chicago was no Columbia, and there was no Seligman to dominate the field of public finance, turning out multiple PhDs each year for nearly half a century (Froman 1942; Johnson 2014). Public finance teaching was highly orthodox, and instructors like Simons had little appreciation for the theoretical discussions about justice or benefit versus ability-to-pay taxation that dominated public finance at the time, most of which he found "exceedingly dull" and "not very illuminating" (Simons 1938). Locked in the British neoclassical mindset, Simons failed to find value in the alternative approach represented by the Continental public finance tradition. For example, in his scathing review of the English translation of Antonio de Viti de Marco's public finance treatise, Simons stated that if this was the best continental treatise in public finance, he hoped

¹²"Likewise, the study of tax policy should not be approached from only one side, such as economics. Adequate consideration of tax policy involves, in addition, ethics, law, political science, sociology—indeed every point of view from which the social structure may be studied" (Blough 1944, p. 22).

it would be the last (Simons 1937b, p. 713).¹³ It took the iconoclastic Knight to demonstrate for Buchanan that if you introduce property rights into an analysis of Pigouvian externalities, you can see things in an entirely different light (Buchanan 2007, p. 81; Knight 1924).

In considering the organization of government, Buchanan followed his mentor Knight, who did “not take the American Institutional economics very seriously,” but did “take economics from an institutional standpoint very seriously” (Rutherford 2011, p. 148).¹⁴ The primary complaint was that the American Institutional approach lacked an underlying theoretical model to serve as an organizing principle.¹⁵ Simons also had a particularly low opinion of the American Institutional approach to public finance. In his *Personal Income Taxation*, Institutional economists such as Carl Plehn are mentioned only with disparagement, though he saves most of his vitriol for Seligman, whose work he characterized as “unsound argument, careless assertions, and essentially irrelevant discussion” (1938, p. 175n5).

The fundamental issue resided in how the relationship between an individual and the government should be perceived. Whereas American Institutionalists like Thorstein Veblen and John R. Commons were interested in power and social control on a macro, societal scale, Knight sought to understand how “by consensus based upon rational discussion we can fashion [a] liberal society in which individual freedom is preserved and a satisfactory economic performance is achieved” (Stigler 1987, p. 58). Buchanan learned that individual exchange with government was influenced by political bargaining; public goods were a “collective political decision” (1948). How could a society make such collective decisions? According to Knight, “as difficult as they were to resolve [problems of externalities and public goods], the price system’s mechanisms could internalize these limitations in ways which regulated their effects as well (if not better) than any other mechanism could” (Knight 1924, in Emmett 2007, p. 5). Simons, too, emphasized this point convincingly, as “the most articulate expositor of the ‘old’ Chicago School” where “the efficacy of the market in allocating valued resource inputs, as exemplified in Simons’ rent problems, was taken for granted” (Buchanan 2010, p. 3).

Simons’s public finance legacy at Chicago can be understood on two levels: his contributions to taxation theory and policy design, and his more fundamental contribution of integrating public finance into the Chicago viewpoint (on the latter, see Peck 2011; van Horn and Mirowski 2009; Van Overtveldt 2007). Thanks to Simons, public finance was part of the broader Chicago research program, and research and teaching in this subfield comported fairly well with general methodological and political trends in the department. Simons was interested in public finance because it was enmeshed within the economy and society; in his work, Simons moved in and out of traditional

¹³To be fair, however, while Simons found much more to like in Edgeworth and Pigou than in Seligman, “more sensible and more important than the contributions of utility theorists is the so-called sociopolitical theory of Adolf Wagner” (Simons 1938, p. 15).

¹⁴Knight “treated their technical economics with derision, but he shared with them an interest in the structure of social and economic interaction” (Buchanan 2007, p. 73).

¹⁵American Institutional public finance tended to methodological collectivism, and, rather than developing a consistent theoretical position, the Institutionalists argued that the practice of public finance required deep historical–legal knowledge, since taxes and other policy prescriptions would differ depending on the time, location, historical development, and the institutional structures already in place. Groves probably represented the best of Institutional public finance in the 1930s and 1940s.

public finance topics examining intersections with monetary and fiscal policy, anti-trust, and price theory. He argued that taxation had to be understood as a part of society's broader economic policy, and that

[t]axation is only a small element in the structure of the rules and conventions which constitute the framework of our existing economic system; and problems of taxation can be clearly apprehended only as phases of the broad problem of modifying this framework (the rules of the game) in such a manner as to make the system more efficient and more secure. (Simons 1938, p. 2)

Simons's views on taxation "may properly be interpreted, and perhaps better understood, as part of a scheme of policy outlined in ... *A Positive Program for Laissez-Faire*" (1938, p. 2). Simons held a classically liberal position that government is based on the rule of law and ought to have a limited and well-defined scope; the policies enacted by government should focus on the general rather than the particular (Buchanan 1948, p. 18). Accepting this premise, Simons's unwavering support for the progressive income tax can be better understood when one considers the alternatives. Simons believed that the progressive income tax could effectively replace the hodgepodge of inefficient sales and excise taxes, customs duties, and payroll levies used at the federal level. The income tax would have significant advantages over "methods which involve restraint of trade," and "Such reform can be accomplished within the framework of a democratic, competitive, free-enterprise system" (Simons 1938, p. viii).¹⁶

The outcome of this educational experience was that Buchanan's instruction at Chicago freed him from becoming enmeshed in the theoretical debates of the subfield, and encouraged him to adopt a broader outlook in his practice of public finance, though it was left to Buchanan to figure out how this could be done from within the Chicago viewpoint.

Product Differentiation—Enter Wicksell

A combination of personalities, institutional history, departmental organization, and pedagogical choices meant that Chicago economists placed a high degree of emphasis on product differentiation; what was being done at Chicago was fundamentally different from the economics practiced elsewhere (Emmett 2011; Freedman 2010; Van Overtveldt 2007). For Buchanan, the Chicago viewpoint, exemplified by Knight and Simons, fit with his reading of Wicksell's *Finanztheoretische Untersuchungen* (1896) and "insured personal differentiation of 'my product' from that of most of my American peers" (1992, p. 91).

Much has been made by Buchanan and others of the story of his discovery of Wicksell's treatise on public finance in "the dusty stacks of Chicago's old Harper Library" (Buchanan 1987, p. 243). While bits of the story appear as early as the 1970s, it is fully birthed in Buchanan's Nobel lecture (Buchanan 1987). "Acknowledge[ing] that

¹⁶Aaron Director summarized Simons's message on the progressive income tax, arguing that he "was fully aware of the possible implications for incentive and enterprise" and sought to minimize such effects. In his course notes, Simons emphasized that "Equality of distribution does cost something. Ethics and justice (and progress) are all costly, enormously costly ... to say that progressive taxation should stop before it touches production and accumulation is to say that progressive taxation should stop before it becomes effective" (Samuels 2005, p. 246).

great Swede, Knut Wicksell” in his home country, Buchanan describes, in words dramatized for the occasion, “one of the most exciting intellectual moments of my career” being his “1948 discovery of Wicksell’s unknown and untranslated *Finanztheoretische Untersuchungen* (1896)” (1987, p. 243). Casting this as a serendipitous intellectual discovery in a period of post-dissertation leisure, Buchanan credits Wicksell for providing the confidence “to challenge the still-dominant orthodoxy in public finance and welfare economics” from the Chicago bulwark (1987, p. 243).¹⁷ For Buchanan, this meant adopting the central evaluative criterion of economics—allocative efficiency—and applying it to the political process as encouraged by Wicksell (Buchanan 1967, p. 295; 1987, p. 243).

Actually, Buchanan’s origins story is an amalgam of poetic license, revisionist history, and the vagaries of memory.¹⁸ That Buchanan bothered to craft and repeat the story—and the extent to which it has become a significant piece of public-choice lore (Johnson 2005)—emphasizes the importance placed on product differentiation. Buchanan’s literal discovery of Wicksell was less exciting than that dramatized in Buchanan (1987). *Finanztheoretische Untersuchungen* is cited several times in Buchanan’s dissertation (1948, pp. 33, 40–41, 45). The dissertation also includes an extensive discussion of Erik Lindahl’s *Die Gerechtigkeit der Besteuerung* (1919; see Buchanan 1948, pp. 17, 32ff, and 58), which Lindahl viewed as a direct extension of Wicksell’s work on public goods. That said, Wickell received only a cursory treatment in the literature review, as Buchanan wrote:

In the nineteenth century, the theory of taxation based upon the benefit principle all but disappeared from the literature. The overthrow of the underlying ideas has been attributed to several causes, all of which perhaps were of some influence in bringing about the shift in thinking. Wicksell attributed the overwhelming emphasis placed on taxation and the distribution of tax burdens rather than the distribution of public benefits to the fact that in finance theory considerations governments were assumed to be monarchical in nature and therefore little thought was given to expenditures returning to the people in the form of benefits. (Buchanan 1948, p. 33)

Buchanan argues that Wicksell understood that a rejection of the benefit principle in the general case meant that tax and expenditure decisions were separated, which led to theorists assuming that the total amount of expenditures was fixed in their models. Instead, “in the real world, it is entirely possible and probable that the level of

¹⁷“Wicksell’s new principle of just taxation gave me a tremendous surge of self-confidence. Wicksell, who was an established figure in the history of economic ideas, challenged the orthodoxy of public finance theory along lines that were congenial with my own developing stream of critical consciousness” (Buchanan 1987, p. 243). Meadowcroft retells the story: that “In the summer of 1948, soon after he had submitted his doctoral thesis Buchanan happened to pull a copy of a work in German by Wicksell from the shelves of Chicago’s Harper Library. It was titled *Finanztheoretische Untersuchungen*, had been published in 1896, and was, in Buchanan’s words, ‘a book that was untranslated and unknown’” (2011, pp. 11–12).

¹⁸A good example of the vagaries of memory is Buchanan’s thoughts on de Viti de Marco. In an interview with Manuela Mosca in 2008, Buchanan was asked about the influence on his work of de Viti de Marco and his year as a Fulbright scholar in Italy. Buchanan stated that he did not really remember reading him for the first time, but it must have been in 1947. While he couldn’t remember his initial reaction clearly, he thought that de Viti de Marco’s *First Principles of Public Finance* must have made an impact because he cited it in Buchanan (1949) and used it as the basis for his proposal to study in Italy (Mosca 2011).

government expenditure will be completely determined by political forces” (Buchanan 1948, p. 40). While prescient of Buchanan’s later research direction, this discussion gives us little indication of how important Wicksell would become.

Considering Wicksell’s position in the public finance literature of the period is useful for understanding how Wicksell became so central to Buchanan’s thinking. By the late 1940s, Wicksell was enjoying a small renaissance. Ursula K. Hicks (1934) discussed Wicksell’s approach to incidence theory. Musgrave provided the first detailed English-language exposition of Wicksell’s unanimity rule, in which he argued that Wicksell’s theory included the essentials of a “competitively determined revenue-expenditure process” as well as taxes as voluntary purchase payments for individual shares of a public good (Musgrave 1939, p. 218). Yet, Musgrave rejected voluntary exchange as favored by Wicksell in favor of a more planned, cost-benefit, methodologically collectivist approach. Musgrave argued that his planning approach did not require consideration of how individual wants are actually transformed into social wants for the decision-making process, though he assumed some sort of democratic process, coupled with some element of compulsion. This sort of hand-waving was anathema to Buchanan, who, even in his dissertation, preferred working out a more detailed theory of political participation.

Groves’s textbook *Financing Government* (1939) included a brief discussion of Wicksell’s benefit principle and unanimity rule (p. 754). Simons was also familiar with Wicksell’s contributions to public finance, once thanking Musgrave for reminding him “of a grave oversight, in my failure to mention Wicksell as a proponent of the position I was arguing” (in a letter to Richard Musgrave, August 18, 1943, in the Henry C. Simons Papers, Series II, Box 4, Folder 56). Carl Uhr (1951) published a centennial evaluation of Wicksell, which included a discussion of Wicksell’s contributions to public finance, prompting Buchanan’s (1952b) response. And Lionel Robbins did much for Wicksell’s reputation as a theorist by publishing his *Lectures on Political Economy* in English (1935).

Buchanan’s own telling of the story provides clues to why the discovery story is an important piece of public-choice lore. Wicksell was a radical outsider, challenging the professional orthodoxy, which is how Buchanan viewed himself (Buchanan 1952b, p. 600; 1999, p. 27).¹⁹ For Buchanan, the figurative discovery, which came when he had the leisure to really consider Wicksell, was much more important than the literal discovery. This consideration formed the basis of Buchanan’s first publication, which was an overt challenge to orthodox public finance (Buchanan 1949).²⁰ In retrospect, Buchanan remembers:

¹⁹This included making some rather doubtful claims, such as: “I have been unable to find any mention of Wicksell’s work in this field. It is extremely difficult to believe that a fundamental contribution by this prominent economist could have been so completely overlooked. In any event, his work seems sufficiently unknown to warrant preparation of this note” (Buchanan 1951a, p. 173n). Buchanan offers several reasons why he believes that Wicksell was overlooked in the public finance literature, beyond being published in German: (1) Wicksell was at odds with the English-language tradition of public finance (1951a, p. 73; 1952b, pp. 599–600); (2) the unanimity rule appears restrictive to the growth of government (1952b, pp. 601–602); and (3) Wicksell was against redistribution through the fiscal mechanism (1952b, p. 601).

²⁰“In one of my first papers, I challenged this presumption [of a government as a monolithic and benevolent decision maker]; in doing so, I had already been stimulated and supported by Wicksell’s seminal effort” (Buchanan 2007, p. 84).

Wicksell laid out before me a set of ideas that seems to correspond precisely with those that I had already in my head, ideas that I could not have expressed and would not have dared to express in the public-finance mindset of the time. Wicksell told us that if economists really want to apply the test of efficiency to the public sector, only the rule of unanimity for collective choice offers the procedural guarantee. If we seek to reform economic policy, we should change the rules under which political agents or representatives act. (Buchanan 1992, pp. 5–6)

In Wicksell, Buchanan found a number of ideas that were highly compatible with the economics he learned from Knight and Simons at Chicago. Perhaps the most important was the idea that a *quid pro quo* relationship could exist between individuals and government, much like that which operated between different individuals in the market: a rational individual would engage in a trade with government when he or she receives more in benefit than is paid in costs (Buchanan 1949). *Quid pro quo* ultimately forms the basis of Buchanan's view of politics-as-exchange, and provides the link between political decision making and market decision making, allowing Buchanan to borrow much of the price theory structure for thinking about government. Subsequent is the need to evaluate government outcomes. Starting from Wicksell's treatment of marginal cost pricing, Buchanan claims that unanimity "satisfies the welfare criteria of Pareto and the 'new' economics of welfare" (1951a, p. 173), as well as the allocative efficiency emphasis of Chicago. Buchanan thus adopted the language of voluntary exchange and benefit taxation, which was a good fit with Chicago price theory, as well as the emphasis on individual exchange, economic freedom, and allocative efficiency.

V. BREAKING NEW GROUND

Buchanan sought to integrate neoclassical public finance with the "distinctive features of Chicago economics" propagated by Knight and Viner, and identified by Simons to include "its traditional-liberal political philosophy—its emphasis on the virtues of dispersion of economic power (free markets) and of political decentralization" (in van Horn and Mirowski 2009). Following Leland's (1930) work on the integration of fiscal systems at different levels of government, Buchanan (1948, 1950, 1952a) addressed the fiscal problem of federalism. Buchanan wanted to counter the increasing centralization of tax policy goals and design, arguing that the same objectives could be achieved in a more federalist system. Buchanan's concern was that without strategies to equalize fiscal burdens across states, "the *laissez faire* result will be the ultimate centralization of a large share of effective political power" (1950, p. 599). Both papers generated sufficient response in the literature that Buchanan felt it necessary to clarify his positions (1951b and 1952c); in the latter, he defined himself as following the tradition of Knight (1952c, p. 538).

Despite success practicing orthodox public finance, Buchanan was dissatisfied with an approach that, following British neoclassical models, represented government as a monolithic, benevolent structure. Rather, he argued that institutions and rules matter, something appreciated by both Knight and Simons, and, for Buchanan, a defining feature of the "old" Chicago school (2010, p. 4). Taking as his starting point Simons (1938) and Knight (1924), Buchanan sought to shift the emphasis from a regulatory

role for government in resolving problems in public finance to one that separated the rules from the playing of the game, since “a major source of confusion ... stems from the failure to distinguish carefully between the selection of the power structure among individual choosers and the selection of the choice mechanism” (Buchanan 1954, p. 342). In his dissertation, Buchanan argued that you must accept one of two tenets. Either you believe that an economic problem can “best be solved by a competitive free enterprise system operating within the limits of defined ‘rules of the game,’” or you accept the basic tenet of the opposing school, “asserting that a freely competitive system is not the ultimate means and that instead greater political direction of economic life is required for the optimum solution of the economic problem” (1948, pp. 6–7). From these tenets followed two ways to think about government: models that represented government as “organistic,” where the government acted as a decision-making unit relying on a concept of social welfare; and “individualistic” models, where individuals form the basis of theories of government and are the appropriate decision-making units (Buchanan 1949).

Following Knight, Buchanan wanted a mechanism by which the features of exchange in the market could be applied to individuals’ exchanges with government, where freedom to choose to engage in such exchanges was a paramount feature. This ran counter to most models that viewed the individual–government relationship necessarily as one of coercion (e.g., Musgrave 1939) and that rejected voluntary exchange as “altogether unrealistic” (Musgrave 1941, p. 322). Buchanan argued that “vague and general terms, such as ‘social utility’ and ‘social welfare,’ are of little use in the discussion of policy problems” (1949, p. 498) and, instead, carefully distinguished between policies approved through the fiscal mechanism, which would be subject to the political caprices of the current government, and policies approved under the unanimity rule. Only the latter could ensure that all expenditures undertaken were “genuinely beneficial” when evaluated on a *quid pro quo* individual basis (1952b, p. 601; see also 1951a).

The logical extension of the *quid pro quo* was that economists needed to consider governmental expenditures, not only tax revenues. Simons, in particular, gave little purchase to expenditures, which were “not of much interest to the economist” (Samuels 2005, p. 245). Simons held that progressive income taxation would achieve the roughly 10% of national income required to fund the federal government, and would also “provide the necessary discipline by means of which the kind and amount of central government activity can be determined properly” (Simons 1950, p. vii). He had nothing to contribute to the allocation of funding between competing governmental activities.

Buchanan’s brilliant jump early in his career was to envision how to integrate a theory of expenditures into Chicago thinking. This foresight would become extremely important in shaping the development of public choice, where “both the level of tax burden and the range of publicly provided services must be included” (Buchanan 1950, p. 586). Buchanan argued:

In both the organismic and the individualistic approaches to fiscal theory, the paramount need is that the interdependence of the two sides of the fiscal process be clearly understood. Both approaches require parallel consideration to be given to the determination of the expenditure allocation and the apportionment of the tax burden. In neither theory can either side be analyzed in isolation. (Buchanan 1949, p. 505)

The “point seemed so simple, indeed obvious, yet so locked in was the utilitarian mindset of orthodox public finance that the article was widely cited as seminal” (Buchanan 2007, p. 6). Buchanan was particularly concerned by the centralization of government at the federal level that had occurred throughout the previous decades, and argued that “those who desire to see maintained a truly decentralized political structure in the power sense, must take some action” (Buchanan 1950, p. 599).

To incorporate expenditures into the decision making, Buchanan adopted Wicksell’s voluntary exchange model as his historical antecedent. Buchanan explained that Wicksell’s unanimity rule for public goods works because it makes explicit each individual’s costs and benefits from a particular expenditure-tax proposal. This is necessary since voluntary participation in the political system requires that the costs imposed be offset by the benefits received. A rational individual will engage in a trade with government when he receives more in benefit than is paid in costs—quid pro quo (Buchanan 1949). Orthodox neoclassical public finance, including that practiced at Chicago, adhered to the division that expenditures providing identifiable and special benefits should fall under the benefit principle of taxation, whereas expenditures that yield hard-to-quantify, general societal benefits, be funded by ability to pay (1952b). Most governmental expenditures fell into the latter category. Thus, Buchanan’s position ran counter to more than sixty years of conventional wisdom in public finance that had shifted the field from predominantly benefit to predominantly ability to pay (see, for example, Musgrave 1939; Groves 1939). This shift severed the direct link between the individual and the government, something Ajay Mehtrotra (2014) argued was necessary to secure the adoption of a progressive federal income tax. Combined with the massive institutional changes in the federal government due to New Deal policies and the financing of World War II, Buchanan was swimming against the tide, even at Chicago. Simons had rejected the benefit principle as “leading nowhere” (1938, pp. 190–198), and Blough claimed that “the benefits which the individual receives from government do not depend on the amount he pays. So far as he is concerned the two are unrelated” (1944, pp. 13–14). However, despite the numerous objections, Buchanan argued that it did not follow that the theory should be “categorically rejected ... the basis of the whole approach is theoretically sound and cannot be refuted” (1948, p. 39).

Buchanan was interested in policy beyond a criterion of efficiency in resource allocation—that society has other considerations, including inequality and issues of the “proper use of the ‘fisc’ which cannot and should not be summarily passed over” (1952a, p. 217). Much like Knight, who argued that appreciation of the democratic process and social values such as freedom, justice, and equality was necessary to make public policy in a democratic society (Emmett 2009), Buchanan, too, saw economics more broadly. In this sense, Buchanan’s early work can be understood in the context of his search for a market-analogous, competitive model for government behavior.

VI. CONCLUSIONS

In Buchanan’s obituary, the *New York Times* claimed that he “did not invent the theory of public choice, an idea whose origins are obscure but that arose in modern

economics literature in the late 1940s” (McFadden 2013, online).²¹ Jurgen Backhaus and Richard Wagner (2005) argue that public choice was not a new subfield or invention, but was instead a continuation of the Continental public finance tradition shaped by the German and Italian contributions from 1880 to 1940. Whatever the origins, early papers by Buchanan (1949 and 1954) contained important “elements of much that was later to be developed in my contributions to public choice” (Buchanan 2007, p. 7).

Some of these elements can be attributed to Buchanan’s graduate training, the general acceptance of the importance of institutions and institutional design by Simons and Knight, and the departmental emphasis on product differentiation. Buchanan’s Chicago education also provided him with the tools and confidence to break decisively with orthodox public finance. Although he was adept at neoclassical public finance, it is clear that Buchanan was looking to break with mainstream practice—including that at Chicago—in several substantive ways. “The Chicago atmosphere ... was ... supercharged with the assumption that the grand design had been set and that the task for underlings remained that of embroidery around the edges” (2007, p. 200). Not satisfied with that role, Buchanan made two important deviations early in his career. First, he insisted on integrating expenditure decision making into theories of public finance proper. Second, he resurrected the benefit principle and used it as the basis for an “exchange theory of public economy.” Both represented substantial departures from mainstream Chicago public finance, though comporting well with the Chicago tradition more generally.

By 1954, Buchanan had clarified his position, developing the philosophical underpinnings of voluntary exchange by drawing on works by Ludwig von Mises, Friedrich Hayek, and Knight, and in direct opposition to Kenneth Arrow’s work on social choice. It is clear where he identifies his intellectual tradition. Buchanan recognized the importance of institutional structure and design, but without going the route of Institutionalists, and in a way that was decidedly different from the treatment of government as a monolithic entity as adopted by the British, as well as by most American practitioners. Buchanan was interested in coercion, power, and how individual wants are transformed into social outcomes, but in the tradition of Knight (Buchanan 1954, p. 335) rather than Veblen or Commons. In all of this, it is apparent that Buchanan adopted a particular viewpoint from which to practice economics: that of a “methodological and normative individualist, whose underlying purpose has always been to further philosophical support for individual liberty” (Buchanan 2007, p. 80). Buchanan claimed that he “had always been antistate, antigovernment, antiestablishment,” and one who placed a “high residual value on individual liberty (2007, pp. 5 and 72); Simons and Knight converted him to an advocate of market order. Thus, his aversion to Institutional economics and attraction to Knightian price theory, combined with a strong dose of originality, started him on the path that would eventually become Public Choice and Constitutional Economics.

REFERENCES

- Backhaus, Jurgen G., and Richard E. Wagner. 2005. “Continental Public Finance: Mapping and Recovering a Tradition.” *Journal of Public Finance and Public Choice* 23 (1–2): 43–67.

²¹<http://www.nytimes.com/2013/01/10/business/economy/james-m-buchanan-economic-scholar-dies-at-93.html?pagewanted=all> (accessed July 29, 2014).

- Blough, Roy. 1937. "Review." *Journal of Political Economy* 45 (4): 546–548.
- Blough, Roy. 1944. "Conflict and Harmony in Taxation." *Proceedings of the American Philosophical Society* 88 (1): 22–28.
- Brady, Gordon L. 2007. "The Chicago Roots of the Virginia School." In R. Emmett, ed., *The Elgar Companion to the Chicago School of Economics*. New York: Edward Elgar, pp. 207–233.
- Brennan, Geoffrey. 2004. "Life in the Putty-Knife Factory." *American Journal of Economics and Sociology* 63 (1): 75–104.
- Buchanan, James M. 1948. "Fiscal Equity in a Federal State." PhD dissertation, University of Chicago.
- Buchanan, James M. 1949. "The Pure Theory of Government Finance, A Suggested Approach." *Journal of Political Economy* 57 (6): 496–505.
- Buchanan, James M. 1950. "Federalism and Fiscal Equity." *American Economic Review* 40 (4): 583–599.
- Buchanan, James M. 1951a. "Knut Wicksell on Marginal Cost Pricing." *Southern Economic Journal* 18 (2): 173–178.
- Buchanan, James M. 1951b. "Fiscal Equity and the Unequal Treatment of Unequals: A Rejoinder." *Journal of Political Economy* 59 (4): 358–359.
- Buchanan, James M. 1952a. "Federal Grants and Resource Allocation." *Journal of Political Economy* 60 (3): 208–217.
- Buchanan, James M. 1952b. "Wicksell on Fiscal Reform: Comment." *American Economic Review* 42 (4): 599–602.
- Buchanan, James M. 1952c. "Federal Grants and Resource Allocation: A Reply." *Journal of Political Economy* 60 (6): 536–538.
- Buchanan, James M. 1954. "Individual Choice in Voting and the Market." *Journal of Political Economy* 62 (4): 334–343.
- Buchanan, James M. 1967. *Public Finance in Democratic Process*. Chapel Hill, NC: University of North Carolina Press.
- Buchanan, James M. 1987. "The Constitution of Economic Policy." *American Economic Review* 77 (3): 243–250.
- Buchanan, James M. 1992. *Better than Plowing and Other Personal Essays*. Chicago: University of Chicago Press.
- Buchanan, James M. 1999. "Origins, Experience, and Ideas: A Retrospective Assessment." In J. Buchanan and R. Musgrave, *Public Finance and Public Choice: Two Contrasting Visions of the State*. Cambridge, MA: The MIT Press, pp. 11–28 and discussion 51–62.
- Buchanan, James M. 2007. *Economics from the Outside*. College Station, TX: Texas A&M University Press.
- Buchanan, James M. 2010. "Chicago School Thinking: Old and New." Preliminary Draft, Summer Institute for the Preservation of the History of Economic Thought, Richmond, Virginia, June 20, 2010.
- Buchanan, James M., and Gordon Tullock. 1962. *Calculus of Consent: Legal Foundations of Constitutional Democracy*. Ann Arbor, MI: University of Michigan Press.
- Burgin, Angus. 2007. "A Prehistory of the Chicago School." Rethinking the Chicago School Conference, University of Notre Dame (September).
- Emmett, Ross. 2007. "Oral History and the Historical Reconstruction of Chicago Economics." In E. Roy Weintraub and Evelyn Forget, eds., *Economists' Lives: Biography and Autobiography in the History of Economics. History of Political Economy* 39 (supplement): 172–192.
- Emmett, Ross. 2009. *Frank Knight and the Chicago School in American Economics*. New York: Routledge.
- Emmett, Ross. 2011. "Sharpening the Tools in the Workshop: The Workshop System and the Chicago School's Success." In R. Van Horn, P. Mirowski, and T. Stapleford, eds., *Building Chicago Economics: New Perspectives on the History of America's Most Powerful Economics Program*. New York: Cambridge University Press, pp. 95–115.
- Freedman, Craig. 2010. "South Side Blues: An Oral History of the Chicago School." *Journal of the History of Economic Thought* 32 (4): 495–530.

- Froman, Lewis A. 1942. "Graduate Students in Economics 1904–1940." *American Economic Review* 32 (4): 817–826.
- Froman, Lewis A. 1952. "Graduate Students in Economics." *American Economic Review* 42 (4): 602–608.
- Groves, Harold. 1939. *Financing Government*. New York: Henry Holt & Co.
- Hammond, Claire, and Daniel J. Hammond. 2006. *Making Chicago Price Theory: Friedman–Stigler Correspondence, 1945–1957*. London: Routledge.
- Hicks, Ursula K. 1934. "Taxation and Production: The Wicksell Analysis." *The Review of Economic Studies* 2 (1): 18–30.
- Johnson, Marianne. 2014. "American Academic Public Finance: The First Fifty Years." *History of Political Economy*, forthcoming.
- Johnson, Marianne. 2005. "Wicksell's Unanimity Rule for Public Goods: Buchanan's Dominance Considered." *American Journal of Economics and Sociology* 64 (4): 1049–1071.
- Kaplan, Norman Maurice. Papers, Box 1, Folder 5, Special Collections Research Center, University of Chicago Library.
- Knight, Frank. 1924. "Some Fallacies in the Interpretation of Social Cost." *Quarterly Journal of Economics* 38: 582–606.
- Koopmans, Tjalling. 1947. "Measurement Without Theory." *Review of Economics and Statistics* 29 (3): 161–172.
- Lampman, Robert. 1993. *Economists at Wisconsin: 1892–1992*. Madison, WI: The Board of Regents of the University of Wisconsin System.
- Leland, Simeon E. 1930. "The Relations of Federal, State, and Local Finance." *Proceedings, National Tax Association XXIII*: 94–106.
- Less, Julie. 2012. Graduate Student Affairs Administrator for Economics. Email to Marianne Johnson, March 6.
- Lindahl, Erik. 1919. *Die Gerechtigkeit der Besteuerung*. Lund.
- McFadden, Robert D. 2013. "James M. Buchanan, Economic Scholar and Nobel Laureate, Dies at 93." *New York Times* (January 9): online. <http://www.nytimes.com/2013/01/10/business/economy/james-m-buchanan-economic-scholar-dies-at-93.html?pagewanted=all>. Accessed July 29, 2104.
- Meadowcroft, John. 2011. *James M. Buchanan*. New York: Continuum International Publishing.
- Medema, Steven G. 2000. "Related Disciplines: The Professionalization of Public Choice Analysis." *The History of Applied Economics: History of Political Economy* 32 (Supplement): 289–323.
- Medema, Steven G. 2011. "Public Choice and the Notion of Creative Communities." *History of Political Economy* 43 (1): 225–246.
- Mehrotra, Ajay. 2007. "From Berlin to Baltimore: German Historicism and the American Income Tax, 1877–1913." In A. Nuetzenadel and C. Strupp, eds., *Taxation, State and Civil Society in Germany and the United States*. Baden-Baden: Nomos, pp. 167–184.
- Mehrotra, Ajay. 2014. *Sharing the Burden: Law, Politics, and the Making of the Modern American Fiscal State, 1877–1929*. New York: Cambridge University Press.
- Mosca, Manuela. 2011. *Una storia degna di memoria, Antonio de Viti de Marco*. Edited by Manuela Mosca. Milano: Bruno Mondadori.
- Moss, Laurence. 2003. "The Seligman–Edgeworth Debate about the Analysis of Tax Incidence." *History of Political Economy* 35 (3): 205–240.
- Mullarkey, Colleen. 2012. Dissertation Office, University of Chicago. Email to Marianne Johnson, March 6.
- Musgrave, Richard. 1939. "The Voluntary Exchange Theory of Public Economy." *Quarterly Journal of Economics* 53 (2): 213–237.
- Musgrave, Richard. 1941. "The Planning Approach in Public Economy: A Reply." *Quarterly Journal of Economics* 55 (2): 319–324.
- Peck, Jamie. 2011. "Orientation: In Search of the Chicago School." In R. Van Horn, P. Mirowski, and T. Stapleford, eds., *Building Chicago Economics*. New York: Cambridge University Press, pp. xxv–lii.

- Ross, Dorothy. 1991. *The Origins of American Social Science*. Cambridge: Cambridge University Press.
- Rutherford, Malcolm. 2011. *The Institutionalist Movement in American Economics, 1918–1947*. New York: Cambridge University Press.
- Samuels, Warren J. 2005. "F. Taylor Ostrander's Notes on Henry Simons's Course on Public Finance, Economics 360, University of Chicago, 1933–1934." *Research in the History of Economic Thought and Methodology* 23B: 241–301.
- Shoup, Carl. 1937. *Facing the Tax Problem: A Survey of Taxation in the United States and a Program for the Future*. New York: Twentieth Century Fund.
- Simons, Henry C. 1934. *A Positive Program for Laissez Faire*. Public Policy Pamphlet No. 15, ed. H. D. Gideonse. Chicago: University of Chicago Press.
- Simons, Henry C. 1937a. "Review of *Facing the Tax Problem: A Survey of Taxation in the United States and a Program for the Future* by Carl Shoup, Roy Blough, Mabel Newcomer." *Journal of Political Economy* 45 (4): 532–535.
- Simons, Henry C. 1937b. "Review of the First Principles of Public Finance, by Antonio de Viti de Marco." *American Economic Review* 45 (October): 712–717.
- Simons, Henry C. 1938. *Personal Income Taxation: The Definition of Income as a Problem of Fiscal Policy*. Chicago: University of Chicago Press.
- Simons, Henry C. 1948. *Economic Policy for a Free Society*. Chicago: University of Chicago Press.
- Simons, Henry C. 1950. *Federal Tax Reform*. Chicago: University of Chicago Press.
- Simons, Henry C. Papers, Box 1, Folder 43. Special Collections, Research Center, University of Chicago Library.
- Stigler, George. 1987. "Frank Hyneman Knight." In J. Eatwell, M. Milgate and P. Newman, eds., *New Palgrave Dictionary of Economics*. Vol. 3. New York: Stockton Press, pp. 55–59.
- Uhr, Carl. 1951. "Knut Wicksell—A Centennial Evaluation." *American Economic Review* 41 (5): 829–860.
- University of Chicago Annual Register*. 1940–1949. Chicago: University of Chicago.
- Van Horn, Robert, and Philip Mirowski. 2009. "The Rise of the Chicago School of Economics." In P. Mirowski and D. Plehwe, eds., *The Road from Mont Pelerin*. Cambridge, MA: Harvard University Press, pp. 139–180.
- Van Overveldt, Johan. 2007. *The Chicago School: How the University of Chicago Assembled the Thinkers Who Revolutionized Economics and Business*. Chicago: Agate.
- Wagner, Richard. 1988. "The Calculus of Consent: A Wicksellian Retrospective." *Public Choice* 56 (February): 153–166.
- Wagner, Richard. 2004. "Public Choice as an Academic Enterprise: Charlottesville, Blacksburg, and Fairfax Retrospectively Viewed." *American Journal of Economics and Sociology* 63 (January): 55–74.
- Wagner, Richard. 2008. "James M. Buchanan." In L. Blume and S. Durlauf, eds., *New Palgrave Dictionary of Economics*. Second edition. London: Palgrave Macmillian. <http://www.dictionaryofeconomics.com/article?id=pde2008_B000303> doi:10.1057/9780230226203.0170. Accessed 29 July 2014.
- Walsh, Mary Williams. 2007. "Richard A. Musgrave, 96, Theoretician of Public Finance Dies." *New York Times* (January 20), online. <http://www.nytimes.com/2007/01/20/business/20musgrave.html>. Accessed 29 July 2014.
- White, Charles P. 1928. "The Effect of the 80 Per Cent Credit Clause of the Federal Estate Tax Law on State Inheritance Tax Laws." *Journal of Political Economy* 36 (5): 625–633.
- Wicksell, Knut. 1896. *Finanztheoretische Untersuchungen*. Jena: Gustav Fisher.
- Wicksell, Knut. 1935. *Lectures on Political Economy*. London: Routledge and Kegan Paul, Ltd.