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Buchanan and public finance: The tennessee years

Alain Marciano[1]

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Abstract James Buchanan's views on public finance have already been analyzed and they are quite well known, as are their origins and roots. However, nothing has ever been said about why Buchanan chose public finance in the first place. The first goal of this paper is to show that Buchanan had made this choice before arriving at Chicago. We show how Carlton C. Sims and Charles P. White influenced him. We also show, by analyzing Buchanan's M.A. thesis, that he was not only interested in public finance but was also primarily concerned by ethical questions and defended a bureaucratic centralized solution to solve the problem he was discussing – how to share the benefits collected from a gasoline tax among Counties. This helps to understand that Buchanan did not choose to study public finance to learn how to fight government intervention. Quite the contrary: it was to legitimate it. Second, we also demonstrate that a lot of the ideas that will matter for Buchanan in his career – the importance of ethics and the principle of an equal treatment for equals, the need to link taxes to benefits, the importance to adapt the scale of provision of a public good to the type of public good – were already present in this first work.

Keywords Buchanan · Public finance · Tennessee · Equity · Taxation · Sims · White

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1 Introduction

James Buchanan's views on public finance have already been analyzed and they are quite well known (Johnson 2005, 2006, 2014, 2015; Medema 2005; Wagner 2017).

✉ Alain Marciano
alain.marciano@umontpellier.fr

[1] MRE, Université de Montpellier, Faculté d'Économie, avenue Raymond Dugrand, CS 79606, 34960 Montpellier Cedex 2, France

The study of his dissertation – "Fiscal Equity in a Federal State" (1948) – or one of his first articles – "The Pure Theory of Government Finance" – (1949) has shown how Buchanan was inspired and influenced by economists such as Knut Wicksell or the Italian masters of public finance, such as Antonio de Viti de Marco or Maffeo Pantaleoni as well as by some of his professors at the University of Chicago Henry Simons or Frank Knight (Wagner 2017; Buchanan 2007).

The latter are then not only viewed as those who "converted" (Buchanan, 2007, 68, 71, 216) Buchanan to free market economics, turning him into "zealotous free marketer" (Econlib 2002),[1] but also more or less implicitly as those who led him to specialize in public finance. This may easily lead to the conclusion that Buchanan chose public finance for ideological reasons, that is to learn arguments that would allow him in order to defend free markets and to criticize the intervention of the government. This is precisely what, to quote but one significant and recent author, Nancy MacLean does: "Buchanan chose an area of economics not surprising for a libertarian seeking a job in a southern public university: public finance, which focuses on the proper role of government in the economy." (2017, 41).

In this paper we depart from this conclusion. The claim we make is that Buchanan did not chose public finance at Chicago, under the influence of Knight or Simons. He had actually already chosen this area of research when he was a post-graduate student at the University of Tennessee, Knoxville in 1940–1941. That very year, but also those he spent in college in Tennessee, are very important to understand Buchanan's interest in public finance and, beyond, his intellectual trajectory. Yet, not much – to say the least – has been written about that year nor about the years. The object of this paper is to fill this gap, and shed light on a period of Buchanan's life and work that remains hazy and has given birth to unfounded conjectures. In other words, in this paper we focus on what Buchanan actually did, and discuss what did the persons he effectively interacted, before he arrived at Chicago.

Actually, the little we know about Buchanan's life in Tennessee was written by Buchanan himself in his autobiography, *Better Than Plowing* (2007). In particular, he gave the names of different persons and professors that he reminded of for having been important for him. He wrote a few general words about Anne Ordway, Eva May Burkett and William Mebane who were his professors when he was at Middle Tennessee State Teachers College (MTSTC) in Murfreesboro.[2] He was a bit more specific about Carlton C. Sims, also a professor at MTSTC and Charles P. White professor at the University of Tennessee in Knoxville, but the meagre details he gave clearly convey the impression that whatever role Sims and White had been seems to be

[1] "I was indeed converted by Frank Knight" (2007, 68) and, more precisely, "I attribute this conversion directly to Frank Knight's teachings" (2007, 71). Then, elsewhere in his autobiography, Buchanan added that he "was forced to fully absorb the simple principles of market allocation … [t]rough the instruction of Frank Knight and Henry Simons, my Chicago teachers. (2007, 216)

[2] With "Miss Ordway (to us)", Buchanan learned that he knew how to write and that his "relative strength was in expository writing not in fiction" (2007, 42–43). With Eva Burkett, he learned "poetry and drama" (2007, 43) in particular Thomas Hardy's and also "acquired … the philosophical stance" that allowed him to fully grasp "the ideas of the philosophers of the eighteenth-century Scottish Enlightenment, from which classical political economy emerged" (2007, 43). It was important since "[i]t became the basis of the intellectual bonding with Frank Knight" (2007, 43). For his part, Mebane taught Buchanan physics in his senior year. Buchanan noted that what he appreciated was "an analysis rooted in reality and taught by a man who conveyed something of the excitement of science" (2007, 44).

secondary and negligible at least from a scientific and academic perspective. Their ideas could safely be neglected, and they were. To our knowledge, commentators never paid attention to them. Thus, a first object of this paper is to shed more light on these scholars and their role by studying their work. We thus show that the question Sims and White were interested in and what they wrote revolved around the role of institutions in public finance. To them, matters in public finance were primarily institutional (Sims) or even constitutional (White). Or, put differently and more precisely, the type and amount of public goods provided, the level of taxes or who pay them were primarily a matter of wealth but wealth was somehow a relative value that depends on the institutional structure, the boundaries of political units and the allocation of responsibilities among different institutional levels. We also show that both Sims and White were rather favorable to a certain level of centralization of functions and government intervention.

This may have been the lessons that Sims and White taught Buchanan. It is impossible to know precisely. No archival evidence allows us to make such a conclusion and even to infer that Sims's and White's works did influence Buchanan and orient his work. It is nonetheless hard to imagine that no such influence existed. The themes they were interested in were exactly the themes Buchanan worked on during all his career. In addition, what Buchanan wrote in those years also reveals a proximity with their claims. Indeed, our analysis does not only consist in discussing Sims's and White's work but also Buchanan's in those years. Thus, and this is the second object of our paper, to bring to light and analyze "Gasoline Tax Sharing Among Local Units of Government in Tennessee" – the essay he wrote for his M.A. under White's supervision and that he defended in 1941 and that remains totally ignored among historians of thought and economists.

This leads us to the three arguments we make in this article. First, Buchanan can reasonably and plausibly be said to have been influenced by Sims and White: from the theme – a question of public finance and more precisely of relationship between different levels of government – to the nature of the problem – a matter of institutions – in passing by the solution envisaged – namely the creation of a central administrative agency to administer the sharing system of the gasoline tax among lower units of governments. This is thus our second claim: by tracing the origins of Buchanan's interest in public finance to these years he spent in Tennessee before coming to Chicago, our article gives credit to the view that he did chose public finance to understand the role of the government in the economy but it contradicts the claim that he was already a *libertarian* or it confirms what Buchanan had said about being a socialist but that had never been demonstrated.[3] Then, and this is our third and last claim, the analysis of Buchanan's MA thesis allows us to show that a lot of the ideas that will matter for him in his career – the importance of ethics and the principle of an equal treatment for equals, the need to link taxes to benefits, at least for certain goods, the importance to adapt the scale of provision of a public good to the type of public good – were already present in this first work. This what we try to do by identifying and making as explicit as possible the connections that can be made between the ideas Buchanan put forward in this work and his (and others) later work.

[3] In other words, this confirms another claim Buchanan had made but had never been demonstrated: that, before arriving at Chicago, he was a "socialist" – "[t]hose of us who entered graduate school in the immediate postwar years were all socialists, of one sort or another." (2007, 72)

2 Sims, county consolidation and the provision of public goods

Sims's influence on Buchanan and the role he played in his career is somehow puzzling. Buchanan wrote that "it was on his advice and counsel that I chose (and here the choice was my own) to enter the University of Chicago for my doctorate" (2007, 45). He followed the advice because, as he recounted, Sims "pass[ed] along to me his sense of the intellectual excitement of Chicago" (2007, 45), and "impressed on me the intellectual ferment of the university, the importance of ideas, the genuine life of the mind that was present at the institution" (2007, 70). It may not have been too difficult. Sims knew very well this University, where he had obtained his Ph. D.

Actually, Sims did more that convincing Buchanan to go to Chicago. When Buchanan had completed his four years in college in Murfreesboro – he graduated on April 17, 1936 –, he chose to go to the University of Tennessee at Knoxville to study economics. The reason was that Sims "was instrumental in getting me an offer for a (post-Murfreesboro graduate) fellowship in economics at the University of Tennessee", wrote Buchanan (2007, 40, 45). Thus, Sims did not only persuade Buchanan to go to Chicago but also to study economics. A letter dated from may 6, 1940, and sent by Theodore W. Glocker, the director of the School of Business Administration, informed him that the University of Tennessee "Committee on Graduate Fellowships have awarded [him] a fellowship in the school of Business Administration at the University of Tennessee for the academic year 1940-41 … this fellowship pays $400 in eight monthly installments of $50 each and remission of all fees". That may have been a lot but that was less than the salary that Buchanan could have earned in the different jobs that were available to him after four years of college – "school teaching at $65 par month; employment in a Nashville bank at $75 per month" (2007, 3). He nonetheless accepted it, even though it was barely a decade after the great depression and Buchanan's family was relatively poor.

But then, how did Sims manage to convince Buchanan to abandon job prospects that, at best, yielded as much and, at worst, more than what he would got at the university? More specifically, how could a *political scientist* convinced Buchanan to study *economics*, a discipline for which he had a priori no interest?

One reason could have been that Sims was himself an example of the rich intellectual life he was describing, in a "near-idyllic sketch" (Buchanan 2007, 70), to Buchanan. A political scientist, member of the Southern Political Science Association, of which he regularly attended the annual meetings and in the functioning of which he took an active part,[4] He was involved in different committees and sub-committees as well as in the

[4] He did not only participate in the annual meetings of the Association but was also elected "Recording Secretary" in 1939 and, in 1941, he was on the "Committee on Local Arrangements for the Annual Meeting"He regularly participated in the annual meetings of the Association. In 1934, he was in "a regional committee … appointed to encourage and coordinate a program of research growing out of the emerging problems of the Southern region" (Ogg 1934, p. 925). In 1939, he even chaired a session entitled "Quasi-Legislative and Quasi-Judicial Agencies in State Government" ("News and Notes." *The Journal of Politics* 1 (3): 345). A member of the association, he became "Recording Secretary" in 1939 (News and Notes, *The Journal of Politics*, 1 (1), Feb., 1939). In 1941, he sat on the Committee on Local Arrangements for the Annual Meeting (News and Notes, *The Journal of Politics*, 3 (1), Feb., 1941), 128).

journal of the Association—the *Journal of Politics*.[5] He was also involved in non-academic associations as well as in the institutional life of Tennessee. For instance, even if this took place later is is nonetheless significant of his importance: Sims participated in the revision of the constitution of Tennessee – the first since 1870 and only the third since the adoption of the constitution in 1796 – that took place in 1953.[6]

It makes sense to assume that Buchanan made this choice because of the type of life Sims had described and was living. It might also well be that there was something more profound. Now, Buchanan wrote that he "owe[d] [Sims] next to nothing for what he taught [him] in his courses … in political science, public administration, and related subjects" (2007 46); these were "not … exciting subjects for [him], now and then." (2007, 46) So it might be elsewhere. Maybe in Sims's writings. We suggest that Buchanan was convinced by Sims and became interested in economics, institutions and public finance because of Sims's ideas and research interests, which were the same as the ones Buchanan had at Chicago and during all his career: a concern for the south – and more particularly Tennessee[7] –, political institutions, public finance and taxation.

Sims's interest for these themes is particularly well illustrated in the Ph. D. he wrote in "State and Local Governments in the United States" at the Department of Political Science at the University of Chicago and that was entitled "County Government in Tennessee" (1932).

County governance had been a source of concern for politicians and academics in the 1910s and 1920s and was still in the 1930s. Counties were viewed as the "dark continent" of American politics (Gilbertson 1917). The problem was that there were too many counties in the US, especially in the south – where could be found "a third of the counties of the country" estimated Wager (1933, 333).[8] As a consequence, some counties were "too" small compared to what it should be to face the expenditures they were supposed to face. Their taxable wealth was insufficient to finance the public goods they were supposed to provide and to cover the particularly high costs their complex

[5] When Sims died in 1960, Professor Norman Parks of Middle Tennessee College presented a memorial resolution for him (see program of the 1960 annual meetings, Thirty-Second Annual Meeting Southern Political Science Association, *Journal of Politics*, 23 (1), pp. 191–196).

[6] The process started in 1949 when the legislature of Tennessee "passed an act calling for a vote on whether to have a limited convention" to revise the constitution by focusing on "9 topics–the governors's term, item veto on appropriations, legislative pay, apportionment, legislative quorum, the amendment process, the poll tax, classification of property for taxation, and municipal home rule and city-county consolidation." In October 1949, Sims participated in meetings organized by *The Southern Institute of Local Government* of the University of Tennessee to discuss the revision. But, in "Cummings v. Beeler, 189 Tenn. 151 (1949), the act was upheld. In the November 1949 election the convention was narrowly defeated." In 1951 another act was passed, but it left out the subjects of apportionment, taxation and the legislative quorum. The convention was "authorized to consider the amending clause, the compensation and expenses of legislators, the veto power, the right of suffrage, home rule, and local governmental consolidation." (Prendergast 1953, 279) It was approved by the people." (http://harryphillipsaic.com/wp-content/uploads/2013/02/1_TNConstitutionHistory.pdf) In November 1952, Sims was elected as delegate to Limited Constitutional Convention that met in April 1953 to revise the Constitution. At that time, the constitution of Tennessee "was the oldest unamended constitution in the country" and it was "apparently the longest period such a document has ever stood unamended anywhere in the world" and "[a]t that time it (http://harryphillipsaic.com/wp-content/uploads/2013/02/1_TNConstitutionHistory.pdf). Buchanan was born and raised in a State renowned for the stability of its institutions.

[7] He remains known for having edited a history of Rutherford County for Tennessee's 150th anniversary (1947).

[8] The reason that was given was that, "[i]n the south, counties are very small, because we did not have the township and the county was our primary unit." (Wager 1933, 333)

political and administrative organization implied. Or, more precisely, some counties were wealthy enough and could face the expenditures required to provide public goods and services. Others were poor and could not. In addition, county governance was also supposedly costly and, above all, much costlier than state government. Their size, as one would say nowadays in economic terms, was not always "optimal".

The costs of government were high and the efficiency of governance was problematic at each institutional level: federal, state, county and municipal. Cities may not have been the worst of all (George 1916, 80) but they also face similar challenge as counties. The dramatic and rapid increase in the population living in cities between the end of the nineteenth and the beginning of the twentieth century,[9] had induced a greater demand for public services.[10] This had also resulted in higher costs of governance.[11] At the same time, city governments were not only reputed for being inefficient but also corrupted. At the end of the nineteenth century, the situation seems to have been bad. In his *American City Government*, William Anderson wrote: "American city governments reached a very low ebb in both honesty and efficiency in the decades from 1820 to 1900." (1926, 180) It is not surprising that a movement then emerged with the objective to improve the efficiency in city government. It started in 1906 in New York city.

In the decades that followed the situation only slightly improved. Hence, the debates went on. In 1956, for instance, William Havard and Alfred Diamant noted again that "there is serious doubt about the efficiency of administration of many functions in cases where the population served is less than 30,000." (973).

This quotation is interesting because it reveals how important was the question of the optimal size of cities. Again, in the early 1960s, the same debates took place now involving scholars who became close to Buchanan, such as Vincent Ostrom (1969, 1973, also Ostrom, Tiebout and Warren 1961) and Elinor Ostrom (Ostrom and Ostrom 1971, 1991). One may even find a distant echo of these discussions in the notion of fiscal equivalence put forward by Mancur Olson (1969) and Gordon Tullock's problems of scale in federalism (1969). Thus, although it is impossible to know if Buchanan made a connection between debates and therefore impossible to know how and how much his future work was influenced, one may nonetheless note that it was exactly the same question that was raised in the 1920s/1930s and in the 1960s/1970s: at which level should a public good be provided?

In both cases, certainly, it was suggested that this problem in public finance should be treated as an institutional problem.[12] But the solution that was then proposed was

[9] For instance, the number of cities having a population of 30,000 or more inhabitants – for which the United States Bureau of the Census collected statistics – had dramatically evolved: in 1790, when the first census was made, only New York had a population of more than 30,000 inhabitants. The figure was of 19 in 1850 and it had raised to 227 in 1918. (see Goodell 1920, 265)

[10] As Anderson noted: "[g]overnments everywhere find themselves confronted daily with unprecedented demands for action. The expansion of public activities in the past fifty years has been nothing short of revolutionary" (1926, 3)

[11] Goodell noted: "[e]verybody knows that the cost of operating our cities has increased rapidly, but the actual facts are startling and little appreciated" (1920, 266).

[12] The problem was first treated in terms of fiscal policy. In other words, basically, what was suggested was a problem in public finance. Hence, it is not a surprise if "tax commissions" were appointed organized to deal with the issue. They came up with the suggestion that the taxes collected at the state level to proceed to inter-area transfer and to cross-subsidize counties but that was illegal in certain states – for instance, in Florida in 1930, the Supreme Court of the state "said that money paid into the state treasury by one county cannot be taken to help out a less fortunate count" (Field 1930, 678).

different compared to what it was proposed later. In those years, inefficiency in city governance was blamed on "overlapping and duplication of functions" (Anderson 1926, 83).[13] The same claim was made about counties (Wager 1940, 150). What should then be done was clear: to "eliminat[e] as fare as possible the overlapping layers of government, and by so simplifying the internal organization of local government" (Wager 1940, 150). That was exactly the opposite of the solution proposed by the Ostroms that was precisely based on the need to keep overlapping structures.

To reach this goal and simplify local governance, the solution that was then proposed consisted in proceeding to what was then called county or city-consolidation. In both cases – county and city-county consolidation – the process would similarly take the form of a reduction in the number of entities – be they counties or cities – by the merger or consolidation of functions. This meant, in the first place, that it was suggested that a problem of public finance should be solved by a modification of the institutions. It also quite clearly meant that this institutional change implied a form of centralization.

To restrict our attention to counties and county consolidation, that was what mattered to Sims and then to Buchanan, consolidation was certainly not unanimously admitted. There were scholars who defended counties, arguing that certain public services such as education and roads, for instance, could be provided more cheaply at a local level than at the state level. It was also suggested that smaller counties meant lower taxes which was a good thing for taxpayers (Askew 1933, 37). In addition, what mattered was more the amount of services produced compared to the taxes paid – "the ratio between taxes paid and services performed" (Askew 1933, 37) – than simply the level of taxes which, to a certain extent, is a form of "benefit theory". Finally, another point was made about the figures given to justify the inefficiency (cost) of counties compared to the efficiency of states. Certain states – Georgia, for instance (Askew 1933) – could appear to be rich and efficient because "their" ratio taxes paid/services performed was good but that was misleading: the state spent very little for public services, such as education, health, etc. because counties were "forced to bear the state's responsibilities" (Askew 1933, 37). This suggested, first, that the measure of efficiency of counties could be wrong or problematic. Second, as a corollary, it meant that a low ratio did not necessarily justify a change in governance and a centralization of functions.

In any case, it seems that county governance was a complex issue, that combined economic dimensions – taxation, public finance – and political or institutional – the relationships between different levels of governance – ones.

Sims did not choose this topic only because he was a political scientist or because he was interested in public administration. There were reasons that explain why a Tennessean like him studied "his" state for a dissertation on county government. First, Tennessee was a perfect example of the problem of county governance with its supposedly high number – 95 – of small and sparsely populated counties,[14] that did not have the "financial ability to perform the services imposed upon them" (Satterfield

[13] Havard and Diamant made the same claim: "the structure of local government in the United States is seriously inadequate… the units are too small, too numerous, and tend to overlap even to the point of multiple layers in some places." (1956, 983)

[14] Tennessee had "its share of small uneconomic counties" (Satterfield 1940, 26)

1940, 26), its quasi-bureaucratic structure,[15] its allegedly high costs of governance.[16] Second, it was also the perfect example of a solution to the problem: it had been the first to implement county consolidation when, in 1919, James County was added to Hamilton County, in which is the city of Chattanooga.

The case became emblematic. It was the illustration and the evidence that county governance could be improved by the fusion of two counties. Indeed, it was argued – also by Sims – that the fusion “has proved extremely beneficial to residents of James county” (Manning 1932, 510) in particular because of a reduction of the level of taxes.[17] This then implied that this mechanism should be generalized. For his part, even if there were almost no figures that could allow to evaluate the efficiency of the process and although the few available figures were problematic, Sims suggested reducing the number of counties in Tennessee from 95 to 13.

In the early 1930s, when Sims defended his dissertation, he was one of the first academics to analyze “county consolidation”. In 1932, William Bradshaw judged that the “idea” that was “given only incidental mention or entirely ignored in the principal books on county government from 1917” (1932, 321). For his part, Paul Wager noted “most of … the great deal of agitation for the elimination of the township and a consolidation of counties … is still in the academic realm; it has not been translated into action.” (1933, 333) Indeed, in “the field of practical politics, the governors in their messages to state legislatures have given little attention to the problem of consolidating rural counties” (Bradshaw 1932, 321). The 1919 James-Hamilton fusion remained an “unusual incident” (Bromage 1931, 139), “the first and only instance of the outright abolition of a county” (Bradshaw 1932, 322), for 13 years, that is until the second fusion occurred. It was in 1932, in Georgia and involved 3 counties – Campbell, Milton and Fulton.

This second fusion, added to the propositions and the plans adopted for more centralization, could have given the impression of a “movement” and be viewed by optimists and the defenders of the idea as the sign that it “seem[ed] to be growing” (Manning 1930, 181). The reality was that, in the early 1930s, county consolidation made no or “little progress” (Bromage 1931, 139). More broadly, reforms in local government had not progressed much either. In 1938, a disappointed James Pate listed all the *defeats* that “the captains of reform in local government have suffered” (419) since the early 1930s and concluded that there have been more defeats than victories (1938, 419). The few attempts at centralization within states, that is to transfer functions from counties to the state had failed – what Pate precisely viewed as “defeats”.[18]

[15] John Manning noted: “We are inclined to believe, however, that the county in Tennessee is tending, more and more, to become a purely administrative unit rather than a unit of local self-government; but, fortunately or unfortunately, that point has not yet been reach” (1930, 171).

[16] To Manning “county government in Tennessee costs nineteen times the amount spent for state government.” (1928, 733)

[17] One finds the claim that “the people of one-time James county now pay taxes at the rate of $1.40 on the hundred, as compared with $3.80 before the consolidation” (Manning 1930, 181).

[18] To him, “we should use our talent to get the older functions of local government transferred to the State, and bring the remainder under close State administrative supervision. In this direction lies greater economy and efficiency in performance of those governmental functions that have ceased to be local, or those that lie on the border line between the county and the State.” (1938, 427–426) Functional consolidation was more successful than geographical consolidation (Snider 1937, 899). And city-county consolidation was much more successful.

The situation started to change in the second half of the 1930s. Not that there more fusions of counties in Tennessee – the James-Hamilton merger remains the last one to this day – or elsewhere but county governance attracted more attention. It even became "as common a topic of conversation as the next European War and almost as exciting" (Pate 1938, 418). As a result – or cause – of these conversations, more plans were prepared. The idea of "functional consolidation" gained a certain popularity and the transfer of certain functions from counties to state seemed to become more frequent. Southern states such as North Carolina or Virginia were frequently cited as examples of such a trend (Satterfield 1948, 511). Schools, roads construction and maintenance and then, after the passage of the Social Security Act of 1935, public welfare were transferred from the local units to the state, and also to the federal, level.

The arguments were the same as the ones made in the early 1930s: it would increase the efficiency of local governance. Once again, references were made to the costs of government at the county level, the limited resources of local governments, compared to the goods and services they had to produce[19] as well as, and that is quite important, to "the disparity in the capacity of these units to support these services." (Wager 1940, 150) This seems all the more legitimate that the situation seemed to be worse than at the beginning of the decade. The transformation of a lot of states – once again especially in the South – from dominantly agricultural to industrial or semi-industrial economies, the improvement into transportation, the migration of population from rural to urban areas had increased the disequilibria between counties. The change in population had increased the financial difficulties of certain counties and therefore made the question of their efficiency even more crucial.

That was precisely the case in Tennessee. It was noted that the "governmental machinery [is] far more elaborate than is now needed" (Combs 1940, 217), especially in rural areas because of the move of workers from agriculture and rural areas, to industry and towns. It was emphasized that "the economic instability of the Tennessee counties with small taxable resources" has increased; these counties receive more resources from the State than ever. This was viewed as evidence that local units of government were no longer appropriate and as the indication that county consolidation should be promoted. This is what the 71st Assembly of Tennessee did, voting "a considerable amount of important legislation affecting counties… the most significant of such legislation consisted of certain county consolidation enabling acts (Wager 1939, 312).

Although these acts did not translate into effective consolidation, there are nonetheless important for our story. They form the institutional background in Tennessee in which Buchanan became an adult since they were adopted precisely when he left his village of Gum and went to college to the county seat, Murfreesboro—that is when he became or may have become aware of what was happening around him: that we was living in a state in which there were discussions about county consolidation, in which attempts were made to centralize the administration of states and to revise the relationships between the state and counties. This was all the easiest for him to understand the

[19] "County consolidation proposals have also been made as a result of studies in Alabama, Georgia, Mississippi, and North Carolina.27 From these various tudies and surveys, it has become apparent that at least half the counties in the South do not have sufficient area, wealth, or population for the most effective conduct of county services." (Satterfield 1948, 521)

situation that, one of his teachers at MTSTC had studied county governance, defended the need for a reform in county government in particular under the form of county consolidation and that the courses he taught at MTSTC bore on these issues.

No archival evidence allows to conclude that Sims's research interests and views on county consolidation and the institutional dimension of public finance questions did influence Buchanan and orient his work. It is nonetheless hard to imagine that no such connection existed. Centralization and decentralization, the optimal size of political units, the role of institutions, taxation and public finance were exactly the themes Buchanan worked on during all his career.

3 White: Taxation, the constitution and roads

Sims knew a professor of economics at the University of Tennessee at Knoxville – Charles P. White. They had met in 1936 when they both "guided" the works of an association – The Volunteers – located in Chattanooga that was organized "to study taxation problems" and more precisely "state and local tax problems." (Personnel Notes, Southern Economic Journal, 1936) It is to him that Sims directed Buchanan to do his M.A. with a major in economics.

Buchanan spent a year in Knoxville, "as both a graduate student and a research assistant" (2007, 70). In the description he made of that year, Buchanan mentioned almost exclusively the methodological and "ethical" benefits he got from working with White. The latter's "course in research methods [that] was the intellectual highpoint of [their] association" (2007, 70) and he "instilled in [him] the moral standards of the research process" (2007, 70). With White, Buchanan "did learn to appreciate the dedication of the research scholar" (2007, 70). But he did not really learn anything in economics – "I learned little or no "economics" in my preferred definition during that Knoxville year… I remained blissfully ignorant of the coordinating properties of decentralized market process" (Buchanan 2007, 69–70). It is not that he learned nothing. He "surveyed the workings and structures of the institutions of Roosevelt's New Deal; [he] came to understand central banking theory and policy: [he]learned something about taxing and budgeting processes; [he] learned a bit of elementary statistics" (2007, 69). But he also learned to appreciate even more than he did after Sims, the domain on which White was working: public finance, taxation and federalism.

During the 1920s and 1930s, White wrote a few book reviews and articles that bore on this domain of research (1924, 1927a and b, 1928, 1931a; b and c, 1934a and b). The book reviews are not particularly informative of what White thought of these topics. He limited himself to a summary of the book giving, in a one sentence conclusion, his opinion on whether or not the book was interesting – they all were. Much more enlightening, White also wrote two articles that are important for our analysis and deserved to be mentioned and discussed. The point was that White defended budget equilibrium – a principle that would be central in Buchanan's public finance. In "The Trend in Federal Expenditures" (1924), White demonstrated that, by contrast to what was believed, federal expenditures had increased by comparison to what they were in the pre-WWI period. That would not have been a problem, did he go on, if at the same time revenues had also increased. But that was not the case. As a consequence, there was a gap between revenues and expenditures and the federal budget was no longer in equilibrium. Now, as he explained in “The Problems of Taxation in Tennessee” (1931a), the problem affected states’ budgets. It was increasingly “complicated” (1931a, 238) for state governments to secure revenues to face “rapidly rising” (1931a, 238) expenditures.

The reason White gave to explain the situation cannot be ignored in a discussion of the intellectual trajectory of the founder of *Constitutional Political Economy*. He insisted on the importance of the Constitution of Tennessee for public finance and, more specifically, to increase sources of revenues and that matters of taxation. He stressed that the constitution was 60 years old. It had been revised in 1870 for the last time and necessarily “reflected and the prejudices of the Reconstruction era” (1931a, 241). Undoubtedly, it was adapted to a period in which financial needs were specific – reconstruction – and limited – the economy was agricultural and few public goods and services were produced. But it was no longer the case. Its rigidities and many exemptions prevented the State government to raise as many funds as necessary to face the increasing and broader needs of the present period, a period of adjustment from agriculture to an industry. The only new taxes that were authorized by the Constitution should bear on privileges – such as occupation or license taxes, a tobacco tax or a gasoline tax. These taxes were legitimate – for instance, wrote White, the gasoline tax guarantees that “automobile owners are bearing their proportionate share of the burden.” (1931a, 244) However, they were not sufficient. A lot of these taxes had to be used to significantly increase the revenues of the State, which would, at the same time, increase the complexity of the system. In addition, some of these taxes were necessarily “minor” (1931a, 242) and barely financed the goods they were supposed to finance.[20] And, finally, all were *earmarked*. Hence, they did not solve the “chief defect” of the system of taxation in Tennessee: “the scarcity of funds for *general* State activities” (1931a, 244). In other words, despite these taxes, a revision of the constitution remained necessary.

There remained another problem to solve: until the gasoline tax had been introduced, counties had incurred the expenditures for the construction and maintenance of roads and highways without receiving the funds coming from the different taxes collected by states. Counties eventually asked for reimbursement – they “clamored for relief.” (White 1931a, 240) Tennessee was the first state to adopt, in 1927, to be applied on January 1, 1929, a law that “directed … the state … to repay to the several counties the expenditures, with interest at five per cent, incurred by the counties under the direction of the state highway commission for sate and federal road building since 1915.” (Manning 1930, 181) The plan was to reimburse $30,000,000 to the counties over a period of twenty years *by using the gasoline tax*. But then, the question was: on which basis should counties be reimbursed? That is, how should the gasoline tax be shared among counties? That was an issue, especially since counties were not identically wealthy. Should *all* counties be reimbursed on the basis of their expenditures?

White had not discussed these questions in his article. These were those Buchanan chose to work on in his M.A. thesis. The choice Buchanan made to discuss these specific questions may not have been led only by the scientific challenge they represented and desire to answers some questions left pending by one of his professors. We

[20] White noted that “[t]he tobacco tax is earmarked for schools, but provides only a fraction of the amount required” (1931, 244)

suggest that Buchanan may also have been interested in the question because it bore on what Sims had studied and certainly taught him – which institutional level should finance the construction of roads and even construct and maintain them. Another explanation, that we would like to add and emphasize, might be that Buchanan had a personal interest in questions about roads.

Indeed, it is crucial to remind that Buchanan lived in the “country village of Gum” (2007, 35) and went to college in Murfreesboro “on a day-student basis” (2007, 35) – “I rode into town at eight and rode out of town at four, usually with a Methodist preacher who was trying to finish college while riding the circuit.” (2007, 40) Murfreesboro was only a few miles away from Gum but, in those years, traveling only a short distance could have been quite an enterprise and required some efforts. Roads had improved in the second half of the 1920s and in the 1930s – precisely when Buchanan started to go to college – but it was recent and that mobility had been problematic for decades. The situation, that was bad in the South in general, was worse in Tennessee: in 1923, “Tennessee had only 244 miles of paved roads” (Pierce 2010) and only “over 4,000 miles of paved roads” (Pierce 2010) had been completed at the end of the decade. It was a dramatic increase indeed but the situation remained problematic. In cities and in the country as well. For farmers, the construction and maintenance of roads was of the utmost importance. Not only because unimproved roads were a sign of backwardness but also an obstacle to economic development and a cause of an exodus of young people from rural areas to the cities (Pierce 2010).[21] Better roads would improve the delivery of their products to markets, would contribute to “break the railroad’s monopoly on the shipment of farm products” (Pierce 2010) and would also “end [their] social isolation.” (Weingroff 2017, 7).

Himself a country boy, as he insisted in his biography and as recalled above, it is likely that Buchanan faced such an “isolation” as a youngster and as a teenager. As the grandson of a president of an important farmers association,[22] he may not have ignored the problems farmers had because of railroads and railroad rates. He may also have been – directly or indirectly – aware of the attempts also made by different movements and organizations to lead decision makers to build and maintain roads. The so-called “good roads” movement and the “good roads” associations were particularly active in Tennessee and were mainly led by farmers.[23] Buchanan may have been was less aware of the more urban “highway

[21] In his essay *Dirt Roads to Dixie* (1991), Howard L. Preston quoted a passage from William Faulkner’s novel *The Reivers* (1963), to illustrate the problem roads were in the South, explaining that “[u]nimproved roads were one of Faulkner’s metaphor for a backward, underdeveloped South” (1991, 13). Preston added that “by 1904, only a fraction over 4%, or 31,780, of the 790,284 the miles of public roadways in the South were classified as “improved. And, when one considers that most of this so-called improved road mileage was within urban rather than rural countries and consisted of stretches of roads that were macadamized or graded and covered with a thin layer of gravel or topsoil rather than hard-surfaced, it is not difficult to understand how backward the South really was” (1991, 13)

[22] John P. Buchanan was the first president of the Tennessee chapter of the Farmer’s Alliance, a Texas based organization, just after it had opened a branch in Tennessee in 1888. The next year, partly as a consequence of his efforts, the Farmer’s Alliance merged with the rival Agricultural Wheel – a farm organization founded in Arkansas in 1882 that had opened a branch in Tennessee in 1884. The Farmers’ and Laborers’ Union (FLU) – known as the Alliance – was born. It was a political organization aimed at helping the “laboring masses” (Morgan 1891, 260) – farmers, mechanics and all people working in rural activities.

[23] The first association was the East Tennessee Good Roads Association and it was created in 1901. In 1912, the American Highway Association listed thirteen affiliated good roads organizations in Tennessee.

progressives" who took over in the 1910s, even if they were also very active in Tennessee, or the Federal-Aid Road Act, adopted in April 1916.[24] But one can hardly imagine that he ignored that none these movements had changed the situation and contributed to improve roads and that the main reason was that funds were lacking. He could not ignore that point precisely because it has also to do with the attitude of farmers.

In Tennessee, until the early 1920s, roads and highways, construction and maintenance of roads and highways was financed by a "special property tax" – in use since 1917 – that was mainly paid by farmers and a motor-vehicle fee – that did not generate much revenue (White 1931a, 239). Farmers had not particularly been willing to pay that property tax to maintain roads. They preferred, as was the habit, to "pay their local taxes by spending a day or so each year actually working … on the improvement of their communities' public roads" (Preston 1991, 20). That "statute labor system" in fact did not work very well: "[m]ost citizens never spent a day doing road work, preferring either to pay the small annual fine or to enlist the assistance of a local politician who had the power to grant a permanent exemption from the requirement." (Preston 1991, 22) Today, one would immediately talk of a problem of free riding. The free-riders were the farmers, even though it seems that paying this labor tax was to the benefit of the farmers themselves and that there not external effect or public good dimension.

To solve the problem and raise enough money to finance and maintain roads and highways, states started to issue bonds – that counties were obliged to buy. The more or less implicit justification of this system was that roads were a public good and should be financed by *all* taxpayers – "roads had come to be regarded as a *general benefit*, for which the general public should pay the larger part, if not all, of the cost" (Martin 1923, 73; emphasis added). This did not only meant that no difference was made between state and local roads; all roads were treated as if they were the same type of public good, consumed by the same public. But, also, that no difference was made between users and non users. The first aspect was apparently not perceived but the second was. The increase in the road network and in expenditures, and the insufficient amount of money generated by bonds, gave birth to the idea that motorists should pay for the surfaced or paved roads they were almost the only ones to use started to spread – "the building and maintenance of roads is in very large part a special service to the users of motor cars, and that, therefore, the motorists should be called on to pay most of the cost" (Martin 1923, 73). License fees were added to complement the resources provided by bonds, but they had two flaws: they were costly to implement and did not provide enough resources either. That was how was eventually introduced an earmarked tax for highways, the gasoline tax, first in Oregon in 1919 and in 1923 in Tennessee. Then, the road system really started to improve. That is, roads started to improve when a specific, earmarked, tax was adopted to finance them.

[24] According to this act, federal funds were provided to the states to finance their roads and highways. The federal share was 50% of the amount spent by the state, which means that the latter would have to spend the other half of the amount.

4 Buchanan's M.A. Essay: Benefits, taxation and ethics

4.1 The choice of an original angle

Buchanan thus chose to study a question that corresponded to one of his supervisor's research interest. He was one of those who had studied how important the gasoline tax had been for Tennessee and who had also discussed the question of how it was shared between counties and the state. Besides White, very few economists had seriously paid attention to this question. Buchanan put it forward unequivocally at the beginning of his essay: "no thorough analysis of the system [adopted in Tennessee] has yet been made." (1941, 4) The few studies and reports written about the distribution of the gasoline tax were descriptive, incomplete or biased,[25] reached no definite conclusions and did not make suggestions as to how improve the system. It might well be that Buchanan's choice for a very original subject relates to the personal factors mentioned above. And one cannot ignore that Buchanan has always been interested in roads (e.g. 1952, 1956; see Marciano 2013).

Buchanan added another layer of originality. Although writing an essay in public finance, for an M.A. in economics, he did not discuss the system of sharing that gasoline tax between different levels of government in terms of efficiency but in terms of equity. That was the question he was really and primarily interested in, and the central point of his essay: How should an *equitable* base be set up to share the benefits generated by the gasoline and motor fuel (as well as registration and license fees)?

There were already economists interested in justice and taxation – Simons, to start with, but also Pigou of course and others. Buchanan did not refer to them in his essay. There is no evidence that may explain why Buchanan chose this angle. The question he was asking was completely original, compared to what White had written but also compared to most of the literature on the sharing of taxes. He wrote that there was "*only one* comprehensive survey" (1941, 6; emphasis added) of interest. It was a report written by Tibor Snavely, D. C. Hyde and A. B. Biscoe. It could have been interesting since it reached "[d]efinite conclusions" (1941, 6) and in particular recognized the "inequities" (1941, 6) of the system and making "recommendations … as to possible changes" (1941, 7). Unfortunately, it was applied to the case of Virginia. Nothing existed about an equitable sharing of the gasoline tax in Tennessee. Buchanan's purpose was to fill this gap and "to supply a well-planned coherent analysis of gasoline tax distribution in Tennessee" (1941, 7) "to determine whether the distribution of the gasoline tax is equitable" (1941, 11). This required a broader analysis of equity. Hence, he had also the objective "to show what can best be considered a just and equitable distribution." (1941, 9).

On the whole, Buchanan's essay was partly theoretical – he analyzed the views of public finance theorists – but also largely empirical. It reflects the type of teaching he recalled having had (see above) and the empirical approach White had adopted in his 1931 article. He used and relied on tables, computed percentages and compared figures to explain how the collected tax was shared among the 95 counties that composed

[25] Buchanan mentioned studies conducted by the Tennessee Municipal League that concluded "that municipalities are entitled to a share of the gasoline tax fund." (1941, 5) The focus on "municipalities" implied that these studies could not be "entirely complete" (1941, 5) and the very fact that they were sponsored by a league of municipalities meant that they were "necessarily biased in one direction." (1941, 5)

Tennessee (more specifically in chapter IV, 1941, 41–66, and V, 1941, 67–85). Then, again as White had done and as he will also do in the term papers written at Chicago (1946, 1947), Buchanan also used "an historical analysis". This is in particular the case in the second chapter of his work (12–24), in which he reviewed the different systems that had been used to finance the construction and maintenance of roads since the nineteenth century.

4.2 Beyond the description: Intuitions about important concepts

The description conveys a sense of relativism and of pragmatism as if, over the years, a process of trial-and-error had been at work. Buchanan focused on the institutions, rather than on the men behind them. In addition, the way Buchanan recounts the history of the different systems that had been used in Tennessee to finance roads reveals some particularly important and interesting theoretical insights, that we detail in our discussion and that can be viewed as preliminary views, intuitions of ideas he will fully develop in his future work.

Thus, Buchanan started by explaining that, before the advent of the automobile, when communities were "scattered" and "isolated" (1941, 12), there was no need to travel between communities, or even beyond the limits of counties. Needs were local as were roads, and no need was felt for non-local roads and even less for an integrated system. In those years, "road construction was considered as a purely local function and was financed as such." (1941, 12) Then, Buchanan reminded his reader, the specific system via which roads were financed consisted in a "road labor tax" (1941, 13). No doubt that Buchanan, for the reasons mentioned above, knew very well this system, how it functioned or, maybe, how and why it malfunctioned. This might explain why he did not give much details to substantiate his claim that the system "was very inefficient and unsatisfactory" (1941, 13). He simply noted that the system was purely local but even the main and primary users of local roads did not feel like working "a few days per year spent in clearing of rights-of-way, grading, etc." (1941, 13). Indeed, the cold, matter-of-factly description Buchanan made of the problem gives the impression that he was not particularly surprised that farmers could refuse to pay the labor tax, as if he doubted that people could willingly pay for a good they needed and used. This will be different when, in his 1961 article, "Simple Majority Voting, Game Theory, and Resource Use", he tried to explain the conditions in which coalition of farmers could successfully repair local roads. It is impossible to say how much he then reminded of his past. One may simply note that his article bore on exactly the problem he had described in 1941.

Then, Buchanan went on, as economic activities developed and people started to travel more frequently "between county seats" (1941, 12), an additional problem arose: "the need began to be felt for some well linked system of contiguous routes." (1941, 12) A "turnpike system" (1941, 13) was then introduced at the end of the nineteenth century. Roads "were constructed and operated as private utilities, empowered to assess the road users in the form of tolls." (1941, 13) These private companies may have "adequately" deal with "extra-local" roads – it was "efficient for a time" (1941, 13), Buchanan wrote quite vaguely – but not necessarily with local roads. It thus seems that Buchanan was not convinced by the possibility to rely on private companies to construct and maintain local roads. He noted that what was then needed was a "better and more *integrated* system of financing this type of roads" (1941, 13; emphasis added), that is a system that could deal with extra-local and local roads at the same time.

To deal with the problem centralized and bureaucratic solutions were devised. The first step consisted in the creation of a "county commission highway", that decided which roads and how many miles should be constructed. These roads were then financed out of a property tax, levied at the county level. Soon, other steps were taken because more non-local roads were needed and the automobile developed. The property tax was increasingly relied on, but also grants and subventions were *given* by the state to counties. More commissions were created. Finally, the last steps were completed with the addition of motor vehicle registration fees and a gasoline tax – that eventually replaced the property tax.

Again, Buchanan's literal description does not betray any criticism against the process of centralization that had taken place – which was consistent with the solution that he proposed at the end of his essay and that we discuss below. He even insisted on the importance and benefit that the centralization of certain tasks could bring – "[i]t has been proven that taxes such as the gasoline tax can be more efficiently ministered if *collected* centrally" (1941, 22; emphasis). What would be problematic was centralization of the provision of certain types of roads. To Buchanan local roads had to remain built and maintained locally. This meant that a problem could arise if and when the fees and taxes that were collected and managed centrally were used to finance *all* types of roads – local and non-local. Now, the state had taken over the control, supervision and construction of state roads only – because, noted Buchanan, "[l]ocal administration was found to have important, technical and administrative handicaps" (1941, 15). Thus, in the case of state roads, resources were collected at the level at which they were spent. But it was a different story with secondary roads – that is the major part of the road network – that remained managed locally. Resources were collected at the state level but expenditures were made at the local level.

Here, one we may pause a little longer to notice that Buchanan seems to have had the intuition of a claim that will be made later, namely that "[n]ot all public goods are of the same scale… Thus, for each public good there corresponds some "public"" (Ostrom et al. 1961, 833) or that "that different scales of organization may be appropriate to different levels of operation in providing a particular type of public service" (Ostrom and Ostrom 1971, 212). That Buchanan had such an intuition is confirmed by the statement he then made that one should refuse to remove the problem by "shift[ing] … all roads, including those purely local, to state jurisdiction" and to give "full state control of all rural roads." (1941, 21–22) As the Ostroms, Olson (1969) or Tullock (1969) would later claim, a centralized provision of roads is not the solution. Apparently, that was also the view that a lot of decision makers then shared. In most states, local roads were left in the hands of local units of government. Buchanan did agree.

He justified his claim with different arguments. First, there were the costs of a centralized administration of local roads and the interference of political decision makers – a "[c]entral administration of the many miles of rural roads … could entail either very complicated planning devices or expenditure determined by political influence" (1941, 22). Second, there were "local traditions" (1941, 22) not only in terms of roads – "the construction and maintenance of these rural roads has grown up as a traditional function of the local units" (1941, 22) – but also in terms of local sovereignty – the "self determination and self sufficiency among the local units" (1941, 22).

Thus, if one combines Buchanan's two claims – that resources must be gathered at the state level but that counties should continue to spend money to build and maintain local roads – one must conclude that resources should be distributed to counties to face these expenditures that are necessarily local. It was then viewed as legitimate to give them a part of the resources collected via the gasoline tax and the registration fees. This was the solution that was adopted in most states: to "distribut[e] state highway revenues to local units" (1941, 24), that is to share taxes with local units, or to provide grants-in-aid – Buchanan viewed these two mechanisms as serving the same "worthy purpose" (1941, 23).

This seemingly corresponded to what White (1931) or Martin (1923) had written about the legitimacy of making users pay for the goods they consume. So Buchanan was apparently endorsing their views. Yet, there is one major difference that should not be underestimated. Indeed, whereas both White or Martin viewed taxes as paid to cover costs only, Buchanan viewed them as paid in exchange of something: "[s]haring serves as a device to assure all auto owners some *return* from the tax paid in" (1941, 3; emphasis added). Refusing to share the taxes collected on drivers with local units of government would imply that they were "spent exclusively upon the primary system of state roads" (1941, 3) – that is on the roads that most individuals did not use. Hence, the consequence was that "many taxpayers (auto users) would receive little benefit from the taxes they paid" (1941, 3). Obviously, Buchanan disapproved of that. He seemingly agreed with the use made in highway finance of a benefit theory of taxation, that is of a theory according to which "centrally collected revenues can be returned to the place of origin." (1941, 25) He added that, even if it was

> "expedient that [the gasoline or motor fuel t aw and the license or registration fee] be collected and administered by a central administrative agency, notably the state… in order that the benefit theory apply in full … a means had to be found whereby certain portions of these centrally collected and controlled revenues could be returned to those jurisdictions supervising expenditure on those roads not under state supervision" (1941, 26)

Thus, again, it is really important to stress that, by introducing a reference to benefits, Buchanan made an additional step that now brought him from the Ostroms to Olson, so to speak, and to the so-called principle of fiscal equivalence, that says "that there is a need for a separate governmental institution for every collective good with a unique bound so that there can be a match between those who receive the benefits of a collective good and those who pay for it." (Olson 1969, 483)[26] This is undoubtedly important. Yet, one must nonetheless note that Buchanan discussed only the case of roads. He was not interested in various collective goods. Hence, the question of the boundaries between different governmental institutions or the need to adopt a polycentric system, for instance, was completely out of his subject. So, even if Buchanan claimed that taxpayers should get the benefits of their taxes and that that explained why the provision of roads should be made at different institutional levels but he did not go much farther than that.

[26] Vlad Tarko (2017) argues that Buchanan and Tullock had already put forward this idea in *The Calculus of Consent* (1962, 292–293). We thus show that Buchanan had the idea even earlier.

Similarly, one must insist that nothing allows us to think that he was on the track to a benefit theory of taxation, that is a theory that would entirely base taxes on benefits. He would make this step later (1948, 1949). That was not an easy step to make. Despite what Buchanan wrote, there is a difference between the application of a benefit theory to one type of taxes and its generalization as a theory of taxation. This is perfectly illustrated by Simons's work on that matter. Simons believed that the gasoline tax was one of "good *ad rem* levies" (1938, 30; 40), because it was one of the rare levies for which one could determine easily the benefits individuals receive from using goods financed by government. Thus, for this specific case, one could apply the "doctrine of taxation according to benefit" (1938, 3), according to which taxes are "the prices against which people set the utilities of these [public] goods." (1937b, 714). But he refused to generalize the principle and to base "the allocation of the whole tax burden" (1938, 3) on benefits. Indeed, Simons was opposed to the benefit theory of taxation.[27] To him, ad rem taxes such as the gasoline tax could play an "important" (1938, 205) but only "subordinate" (1928, 205) role in a theory of taxation.[28] In other words, there was a long way to go before a theory of taxation. But, what can at least be noticed, was that his perspective nonetheless differed from White's. He was not simply following his supervisor but pushing his analyses further.

4.3 Ethics: A criterion and a criticism of the existing system

After having insisted on the legitimacy of sharing the product of these taxes, of redistributing them to local units of government, that is to counties, Buchanan could move to the question of the equity.

He did not really define equity but only and simply wrote that a distribution is equitable if

> "the actual returning of the funds most adequately meets the objective for which the funds are supposedly allocated. If not definite purpose or objective of the distribution is known, the equity of the distribution can best be determined by application to the possible objectives, (e.g. need of the local units, tax paid in, relief of local taxation, etc.)." (1941, 10)

Although sketchy, this definition is nonetheless interesting. It reveals a form of consequentialism and relativism. Indeed, one has, first, to identify which were those "objectives" for which the gasoline tax funds or highway revenues should be distributed and, second, to compare them to what the different methods used allowed to reach these objectives. Again, one could draw connections to some of Buchanan's future works, in particular those in a norm of welfare cannot be imposed from the outside – by an omniscient observer – to the individuals but has to be chosen by the individuals

[27] For instance, he explained that "[w]here expenditure is made for purposes of general welfare (national defense, internal security), the benefit principle leads nowhere at all; and, where the government undertakes deliberately to subsidize certain classes (the economically unfit) or certain kinds of consumption (education, recreation),taxation according to benefit is sheer contradiction" (1938, 4).

[28] Simons added: "Probably no convincing case can be made for substantial extension of the place of the good ad rem levies in the whole system." (1938, 40)

themselves (see, in particular, 1959, 1962). In conceptual terms, that may not be an exaggeration. The ideas seem similar. Yet, before being able to ascertain that what Buchanan will write in the 1960s and later is rooted in what he wrote in 1941 requires a detailed analysis that cannot be done in this article. We were only in 1941 and Buchanan's ideas were still in limbo.

To decide if a system was equitable, or not, Buchanan compared the objectives and means used to reach them. He identified three objectives that had guided sharing systems since World War I. First, the distribution was made in application of, wrote Buchanan quoting Henry J. Bitterman, "the benefit theory of taxation to the highway problem" (1941, 15). In that case, sharing taxes with local units is "a means whereby centrally collected revenues can be returned to the place of origin" (1941, 25) or "to the place of taxation incidence" (1941, 34). A second one – the "main objective of many tax sharing schemes at the present time" (1941 26) – was to equalize the "costs and opportunities of highway facilities among the local units" (1941, 26), that is "to equalize opportunities between the richer and the poorer districts, supplementing the deficiencies of the poorer ones" (1941, 26–27). So far, he did not criticize these two sets of objectives. He was more critical on the third one – the "relief of local taxation" (1941, 27), an expression White had used – that consists in helping local units that were unable to face the expenditures they had now to face because of the transformation of the economy. To him, that was acceptable as long as it did not mean maintaining artificially alive the "weak and inefficient" (1941, 27) units.

Then, he reviewed the different "bases" – the means – that could possibly be used to distribute highway revenues among local units. There were three of them. First, taxes could be shared equally among counties. This was "not the most common basis for returning monies" (1941, 29) and the least justifiable. To Buchanan, it was a form of arbitrary charity – a "gift by the central government to the local units, for the money is shared on no measure justifying any purpose or objective" (1941, 29). Second, taxes could be shared according to the "source" or "origin" of collection. In that case, the aim is "to return the money to the community of origin" (1941, 30) or "to the points of tax incidence" (1941, 36). In other words, this base of distribution consists in an application of the benefit theory. But, the different criteria that could be used to reach this goal – "population, or value of property, or number of vehicles registered" (1941, 30) – were not satisfying.

Reviewing them, Buchanan insisted on their limits and the problems they pose in terms of equity: when they are used, the funds rarely returned to the place of incidence of the tax. In other words, they do not guarantee that benefits go to taxpayers. Barely less problematic and almost as frequent as the previous bases, were those included in the third category: when the distribution of the revenues, the collected taxes, is made "according to the relative needs of the units." (1941, 31) The criteria that could then be used to measure those needs were "the ratio [of] mileage of local roads in each locality … to the total rural highway mileage in the state" (1941, 37), or the ratio of "the area of the local units … to the total area of the state" (1941, 37). They were not satisfying either. More precisely, none of these bases of distribution taken alone was "fully satisfactory" (1941, 38). A combination of different bases "make[s] for a far more equitable distribution than any single base" (1941, 38).

4.4 Bureaucratic centralization to remedy political biases

Now, as evidenced by the few cases Buchanan used to illustrate his analysis, that was precisely how states proceeded, by using distribution systems that combine different bases. However, this did not imply that those systems were "financially sound" (1941, 40), that they had been set up scientifically, that is "to return tax shares equitably to the local units of governments" (1941, 40). On the contrary, to Buchanan, "[m]any of them have been set up on a purely arbitrary basis" (1941, 40), as a "response to a stimulated local demand" (1941, 40), that is "to please the greatest number of voters" (1941, 40). Indeed, the main problem was that all the process was guided and biased by political objectives. Of course, this matters when one knows that Buchanan came to argue that one should abandon "the romantic image of the benevolent despot" (1979, 1986), and accept that politicians and bureaucrats do not try to satisfy the public interest. He was already confronted with the problem in the 1940s.

These problems affected all states. They were also at work in Tennessee, affecting both the choice of a base of distribution and the administration of the collected taxes. This is what he then tried to demonstrate by describing the different steps made in the sharing of the resources collected via the gasoline tax. The first sharing system was introduced in 1929: one cent per gallon out of the gasoline tax was repaid to the counties on the basis of population and area. Now, as said above, these were not the most equitable bases of distribution since they do not contribute to return the funds to the place of incidence. The situation did not improve when, in 1931, the shared gasoline tax was increased from one to two cents per gallon and "[t]he funds thus added were … divided equally among the ninety-five counties." (1941, 68).

To Buchanan, this new system was problematic – it "was not at all logical" (1941, 68), did he write, by which he meant that it was not introduced as a "scientific attempt … to distribute the funds either to the respective places of tax incidence or to the counties in relation to their needs" (1941, 86) but "as a political truce". (1941, 86) In that case, he was convinced that the new sharing system improved the situation of smaller and less populated counties and degraded the situation of the larger and more populated ones – it "served to increase the percentages of the total shared tax returned to counties of small area and population, and to decrease the percentages of those counties that have the greater areas and population" (1941, 70). That is, to state it in different terms, in the smaller and less populated counties, "the return funds are adequate to support all local roads" (1941, 87); no additional tax was needed. But that was not the case in larger counties: a property "road tax is necessary to supplement the returned funds" (1941, 87). This situation resulted from the political power that small counties had and that allowed them to orient political decisions, public policies, in their favor: "[t]he only explanation … lies in the fact that the balance of power in in the Tennessee state legislature has been, and is held by the smaller counties." (1941, 68).

Similar political biases affected the administration of the two cent gasoline tax fund. After having given a few instances, Buchanan concluded that, "[e]ven at its best, it can only be inefficiently administered by local authorities" (1941, 62). The reason was that the funds were administered by local boards that were "politically appointed" (1941, 62) "whose aim is not provision of a more integrated road system, but satisfaction of the greatest number of voting constituents" (1941, 62). In addition, there were also purely administrative problems in the way the amounts were computed. Thus, it was not the actual number of inhabitants that was used – "the funds in March 1941 were being distributed on the basis of the 1930 Federal Census" (1941, 57). Sometimes, the area that was used to divide the gasoline tax funds was no longer the correct one – "the area basis of certain counties whose areas have been considerably reduced by the flooding of certain territories has remained the same" (1941, 57). That the administration was inadequate could thus not be disputed. Buchanan did not say if the problem lied at the local level – counties did not transmit the correct information – or at the state level.

Buchanan then could conclude in rather unambiguous and particularly interesting terms, that "[t]he distribution [of the revenues coming from the gasoline tax] is definitely an *arbitrary* one, set up primarily from a *political* viewpoint rather than a scientific one." (1941, 84–85; emphases added) And the corollary was that this change "toward a more equal sharing of the total funds returned" (1941, 128) did not imply a more equitable sharing:

> "the gasoline tax distribution system in Tennessee meets none of the tests as to equity of distribution. The monies are not shared according to any measure of tax paid in by the various localities or roads utilized in those units. They are not distributed in relation to the needs of the different units." (1941, 84–85)

More precisely, since the new system favored small counties, one could say that taxpayers are not treated equally depending whether they live in a small or a large county: "[a]s far as road taxation is concerned, the taxpayer in the larger communities is at a disadvantage in comparison to the taxpayers of the poorer units" (1941, 87; one cannot but note that Buchanan used "poorer" instead of "smaller" in his comparison to "larger" counties) or "[t]his shows that the property tax payer in the smaller units of the state is forced to bear a much greater tax burden than the taxpayer in the larger counties" (1941, 87–88). The latter point – the difference in treatment of individuals because of their place of residence is crucial from the perspective of Buchanan's next steps.

It might be suggested that this objective was a preliminary, again an intuition, of a criterion of horizontal equity upon which he will insist later: "the basic equity principle of equal treatment for equals" (1947, 20) or for "similarly situated individuals" (1947, 35; see also Buchanan 1950). Actually, he was not the first to use this criterion. Henry Sidgwick was the first to mention this principle in his *Lecture on Ethics*: "I cannot see any validity in the conception of ' equalness,' as governing the relations of ideal citizens, except so far as it means merely that similar persons will be treated similarly" (1902, 204–205). Then, Arthur Cecil Pigou referred to it, citing and quoting Sidgwick (1960 [1924], 5). And, also of importance, Roy Blough, Buchanan's Ph.D. supervisor, explained that one way to establish just taxes was "by the like treatment of likes" (1944, 6): "[i]f John Brown and John Smith both are in the same economic situation, tax justice requires that they be treated alike. If they are in exactly the same economic situation, their failure to be treated alike will be due to lack of uniformity in tax administration." (1944a, 6) Where it appears that Blough was envisaging the question of an equal treatment from the perspective of taxes only. Now, it was the same perspective Buchanan adopted in those years. In his 1941 essay, despite having insisted on benefits, Buchanan seems to have also viewed the problem of an equal treatment of equals in terms of taxes. What worried him was that "the taxpayer in the smaller units of the state is forced to bear a greater tax burden than the taxpayer in the larger counties." (1941, 87–88) It is not certain at all that he was including the possible benefits received by the taxpayer. This is an aspect of his work that will change and be refined over the years. In his later works, Buchanan argued that an equal treatment for equals could be guaranteed only if what he called the "fiscal residuum" was the same.[29] It is not clear that he had already made this step in 1941.

What is clear is the only solution Buchanan proposed to remedy such an inequitable situation. First, to change the base of distribution – that is to proceed to the "elimination of the equal sharing of half the revenue and the sharing of all the returned monies according to relative populations and areas" (1941, 89) and to share gasoline tax funds according to the needs of counties.[30] Second, to severe any connection with political – elected – bodies that should no longer be in charge of the definition of the basis of distribution. That was a necessary condition – "complete equity of distribution is not to be expected as long as the power to set up the basis of allocation is in the hands of a political body." (1941, 93) Buchanan insisted, that very power should be put in the hands of a central technical-administrative agency, "in a central body equipped with a thorough knowledge of the whole highway problem." (1941, 94) Or, even more eloquently,

> "[i]f the gasoline tax monies are returned to finance an integrated system of comparable local roads throughout the state, then one of the best ways in which the funds could be administered would be by *a central planning agency* which would pay no attention whatsoever to county boundaries." (1941, 90, emphasis added)

Now, the central agency should not distribute these funds "on any *rigid* basis." (1941, 92, emphasis added) On the contrary, since economic conditions change "from year to year" (1941, 92), "yearly changes of the sharing base [are] necessary for complete equity in distribution" (92). The base should change every year or every two years – "plans should be set up on one or two year bases and should be subject to change within that time." (1941, 94).

Thus, the main points Buchanan made in this essay can be summarized as follows. First, equity was crucial to him, a starting point or an objective that should

[29] The fiscal residuum is the difference "between the economic value of the burden imposed by "government" on the one hand, and the economic value of the services rendered to the individual on the other." (1947, 21)
[30] From this perspective, "[t]he best measure of need probably is the mileage of those roads upon which the monies are to be expended, and the relative traffic densities upon these roads." (1941, 89)

be associated with taxation and public finance – he did state that equity was the only or the primary goal of taxation. Second, decentralization in the provision of *local* roads – local public goods, if one may dare anachronism – should be preserved but combined with financial centralization – because of the different fiscal capacities of counties. As a consequence, and this is a third point, states should distribute part of the taxes collected to the local units of government – either to return the funds to their place of origin, or to equalize opportunities or to relieve local units of the too heavy burden of taxation; goals that lead Buchanan to defend a broader objective – that remained a bit hidden – namely to avoid treating differently taxpayers who live in different counties. Fourth, the bases of distribution should not be defined by a political body – that Buchanan clearly mistrusted – but by an administrative entity.

On July 29, 1941, White "recommend[ed] that [Buchanan's thesis] be accepted for nine quarter hours credit in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Economics."[31] He had already validated the other courses with no Cs, only one B – in Economics 422 "Employer-Employee Relations". The oral defense took place on August 1, 1941 and the graduation ceremony on August 22. Buchanan had obtained his M.A. in economics. A few days later, just "before [his] twenty-second birthday" (Buchanan 2007, 48) and a few months before Pearl Harbor and before the U.S.A. engaged in World War II, he "commenced active duty" (2007, 48). The next steps in his academic life would have to wait.

5 Conclusion

The purpose of this paper was to recount a story that has never, to our knowledge, been told, the story of Buchanan's Tennessee years. By doing this, we wanted to flesh out the claims Buchanan made about Sims and White and why they had been important for him. It appears that both Sims and White were interested in public finance but also in institutions. Both of them were also relatively favorable to government intervention and to centralization. For his part, Buchanan, in the first academic work he wrote – "Gasoline Tax Sharing among Local Units of Government in Tennessee" (1941) – put forward similar ideas. He was favorable to deal with this issue of public finance – how to share the benefits of the tax among counties – in a centralized in a bureaucratic way. Hence, when he arrived in Chicago to study economics, in December 1945, Buchanan already knew what he wanted to study. He did not discover public finance at Chicago. What was new to him was the way Chicago economists envisaged these issues. Thus, there is a continuity and a discontinuity with the Tennessee years. Thematically, Buchanan did not change much, remaining linked to his past – a connection to the past that also links him to the future: these objects of study remained central to Buchanan for all his career. The change bears on the means that he could use to analyze those themes.

[31] The other members of the committee were Theodor W. Glocker and V. Donald Goetz.

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