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James Buchanan's public debt theory: a rational reconstruction

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Abstract James Buchanan's *Public Principles of Public Debt* is universally associated with the claim that debt allows the cost of public activity to be shifted onto future generations. This claim treats a generation as a unitary and acting entity. Such treatment is standard fare for those macro theorists who work with representative agents and societal averages in place of the actual individuals who constitute a society. This treatment, however, conflicts with the central tenor of Buchanan's scholarly oeuvre. This essay undertakes a rational reconstruction to render reasonable his claim about debt shifting, while also rendering it consistent with his oft-repeated claim that cost can be experienced only by individuals and never by such aggregates as generations. This reconstruction reveals a cleavage between approaching public debt through macro theory and approaching it through public finance.

Keywords *Public Principles of Public Debt* · Burden of public debt · Morality of public debt · Debt default · Representative agent macro · Coalition-based macro

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James Buchanan's *Public Principles of Public Debt* attracted considerable attention upon its publication in 1958. It was reviewed or commented on by such luminaries

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of the time as Alvin Hansen, Abba Lerner, Ezra Mishan, Richard Musgrave, A. R. Prest, Earl Rolph, and James Tobin, among others. While the tenor of these reviews and commentaries was generally respectful, they pretty much rejected Buchanan's claim that public debt, in contrast to tax finance, transferred the cost of collective activity onto future generations. The critics claimed that public debt was identical to taxation, in that the cost of collective activity was always borne in the present, as illustrated by the aphorism: "we owe it to ourselves." The only point of contact between Buchanan and his critics was that some of the critics thought that public debt might reduce the capital stock and thus lower real income in the future, as in several of the essays collected in Ferguson (1964) illustrate. Buchanan, however, vigorously asserted that his claim about cost shifting was independent of any possible effect of public debt on capital stocks or future income.

While I think *Public Principles* is generally correct, I also think Buchanan's argument is misrepresented by treating it as a contribution to macro theory and fiscal policy. While Buchanan's treatment of the transfer of the debt burden between generations was a macro formulation of a representative agent type, this was not Buchanan's central contribution in *Public Principles*. A generation is an aggregate construction and not an acting entity. Only people can act, as Buchanan set forth crisply in *Cost and Cost*, which though it was not published until 1969 was available as a draft manuscript in the micro theory class he taught in fall 1964.[1] Buchanan's public debt theory is not accurately presented by the typical reading of *Public Principles*, as I shall explain momentarily. Hence I undertake this act of rational reconstruction to set forth Buchanan's public debt theory in a manner consistent with his full body of work, including his later ruminations about the morality of debt and default (Buchanan 1985, 1987).

Locating *Public Principles* as a contribution to macro theory and fiscal policy obscures the underlying conceptual framework within which *Public Principles* was created. *Public Principles* is really a contribution to constitutional political economy and the relationship between state and market and between public and private ordering. The various macro-like references in *Public Principles* misdirect attention to the Keynesian controversies of the time. Public Principles is really a book on public economics that affirms pre-Keynesian formulations against the surging Keynesian tide. In doing so, however, *Public Principles* spoke the Keynesian dialect in referring to generations as acting entities and to transfers of cost among generations. To clarify Buchanan's theory of public debt requires rational reconstruction that would replace these alien Keynesian impurities with the genuine ingredients that were central to his thought.

1 *Public Principles of Public Debt*: a quick summary

Public Principles opens by contrasting two orientations toward public debt and deficit financing. Buchanan described one orientation as "vulgar opinion," which

[1] This class was actually Warren Nutter's class. During the first 6 weeks of the semester, Nutter was working with Barry Goldwater's Presidential campaign and Buchanan taught that part of the class.

was an ordinary person type of attitude where prudent conduct was the same for both individuals and governments. Adam Smith expressed this opinion when he asserted in *The Wealth of Nations* that "what is prudence in the conduct of every private family can scarce be folly in that of a great kingdom (1937, p. 424)." Buchanan supported this classical orientation toward public debt against what he described as the "new orthodoxy" of Keynesian debt theory. While the text of *Public Principles* was 212 pages, the argument of the book can be stated in just a couple of pages, for the rest of the book was devoted to elaboration and defense of the book's simple claims.

Buchanan (1958: 4) summarizes the Keynesian new orthodoxy as resting on three propositions:

1. The creation of public debt does not involve any transfer of the primary real burden to future generation.
2. The analogy between individual or private debt and public debt is fallacious in all essential respects.
3. There is a sharp and important distinction between an internal and an external public debt.

The first point was the pivotal point in Buchanan's formulation, with the second and third points being proverbial nails in the coffin. Without the ability of public debt to distribute the cost of public activity differently from taxation, public debt would have no purpose within a Keynesian program of fiscal stabilization. In Chapter 2, Buchanan gives a faithful presentation of these three propositions.

After examining some methodological matters in Chapter 3, Buchanan sets forth his alternative public debt theory in Chapter 4. He does that by stating three propositions that contrast sharply with the central Keynesian propositions (1958: 31):

1. The primary real burden of a public debt is shifted to future generations.
2. The analogy between public debt and private debt is fundamentally correct.
3. The external debt and the internal debt are fundamentally equivalent.

A sharper and more clearly expressed opposition of orientations would be hard to find anywhere in the economics literature. There should be no surprise that proponents of Keynes-inspired claims on behalf of macro management rejected the claims Buchanan advanced in *Public Principles* and, furthermore, interpreted *Public Principles* as a book about macro theory and fiscal policy.

It's easy to understand why someone who supported a pre-Keynesian orientation against the Keynesian new orthodoxy would seek to draw such a stark contrast. The pre-Keynesian orientation held that market economies were inherently stable, with deviations from full employment being temporary and subject to correction through adjustments in prices. Within the pre-Keynesian orientation, unemployment was a result of improper prices that created disequilibrium in markets. By contrast, the Keynesian new orthodoxy held that market economies were inherently unstable, with unemployment being generated not so much by improper pricing as by autonomous changes in aggregate demand. Within the income-expenditure framework widely used at the time, $Y = C + I + G$. A decline in C or I within the market economy can, within this framework, be offset by an increase in G. Hence,

fiscal policy can serve as an instrument exogenous to the market economy to promote stability within the aggregate economy. Within the Keynesian framework, the effects of public debt were confined to the present: in the face of current unemployment, government could either do nothing, in which case the unemployment would continue, or it could increase spending and put people back to work. Public debt was about which of two alternative states of the world would exist in the present. For Buchanan, by contrast, public debt created a connection between present and future, with public debt shifting wealth from future to present.

Before turning to rational reconstruction, I would advance two claims regarding Buchanan's contrast between the vulgar opinion and the new orthodoxy: (1) it is an accurate encapsulation of the contrasting frameworks for economic theory that were in play at the time and (2) it skips over some significant issues of subtlety and nuance that if those would have been explored would have revealed that Buchanan's prime interest in *Public Principles* was political economy and not macro theory. In this respect, we should perhaps remember that *Public Principles* was published just 12 years after the Employment Act of 1946 was enacted. This Act embodied the presumption that governments could and should stabilize aggregate spending through fiscal policy. The Employment Act established a Council of Economic Advisors to provide guidance for macro management, and in doing so embraced what became known as the neoclassical synthesis: the micro economy was reliably self-regulating, provided that the federal government kept the macro economy sitting upright. *Public Principles* looked as though it stood athwart the Keynesian tide by claiming that public debt was about wealth redistribution through time and not about stabilization at some moment in time.

The central Keynesian claim was that public debt was something that we owed to ourselves, which in turn effectively neutered debt. There was no principled reason to oppose debt if it is nothing but an IOU that we owe to ourselves. Debt should thus be pursued if it could produce good results through stabilizing what would otherwise have been a volatile market economy. The Keynesian theory held that debt had no future consequences because cost was always born in the present when debt was incurred and the resources obtained through borrowing were put to use, save for the modest possibility that the accumulation of debt might reduce the capital stock and thereby lower future aggregate income.

In contrast to the Keynesian analytics, Buchanan sought to explain that debt allowed the cost of public activities to be shifted forward in time, from taxpayers in the present to taxpayers in the future. This proposition about shifting cost from present to future resonated with ethical objections to placing cost on people who were unable to participate in any decision to bear those costs. This generation-shifting claim was the lynchpin of Buchanan's theory of public debt, though that claim was supported by several complementary lines of argument. One of those lines was that it did not matter whether debt was held within a nation or by foreigners. Another was that his claim was independent of any possible effect of debt in reducing the capital stock in future years.

A battleship built in 1943 was built from resources that could have been employed differently in 1943. Public debt created financial claims that would not have been created had the battleship been financed by taxation. With taxation,

construction of the battleship would involve no future financial claims. With debt, such claims are created. Buchanan pointed out that current taxpayers had their taxes lowered through debt finance, and that lowering of taxes was offset by higher taxes paid by taxpayers in the future to amortize the debt. Yet the resources used to build the battleship were used in 1943 regardless of the financial instruments that accompanied the battleship. Buchanan split debt financing into two transactions, one where lenders financed the battleship in exchange for amortization payments and one where current taxpayers shifted their burdens onto future taxpayers. Both types of transaction, however, can be cancelled through aggregation, as summarized by the aphorism that we owe it to ourselves. Buchanan placed his analysis on the same macro footing as did the Keynesian proponents of fiscal policy. Yet the Keynesian presumption that people could act directly on macro variables was something Buchanan denied often and which ran contrary to the body of his life's work. Surely Buchanan did this to engage the opposition on their playing field. The effect, however, was to deflect his public debt theory onto a macro playing field and away from the playing field of political economy where it really belonged.

2 *Public Principles of Public Debt*: providing missing context

Public Principles was written after Buchanan returned from spending 1955–1956 in Italy. This Italian interlude had great significance for his future work including *Public Principles* but extending far beyond *Public Principles*. Buchanan's approach to public finance stood outside the Anglo-Saxon orientation from the start of his career, as Marianne Johnson (2014) explains in her illuminating treatment of the relationship among Buchanan, Chicago's economics program, and post-war public finance. There, Johnson explains that Buchanan sought to take a different approach to public finance than was practiced even at Chicago, and found inspiration for that different approach from Knut Wicksell originally and later such Italians as Antonio de Viti de Marco and Maffeo Pantaleoni. One major distinction between Anglo-Saxon and Italian orientations was that Anglo-Saxon work in public finance was strongly hortatory in seeking to develop prescriptions for statecraft. In contrast, the Italians, as well as Buchanan, were more interested in developing explanatory theories of fiscal activity. From this analytical point of departure, Buchanan would surely have been offended by and not attracted to macro style reasoning which reduces a society either to a representative agent or, equivalently, to a statistical average. Buchanan clearly engaged in discussion about public debt, but he came at that discussion as a political economist and not as a macro theorist who embraced the neoclassical synthesis.

Buchanan's interest in public debt stemmed from his desire to pursue public finance in more of an explanatory than hortatory motif, and with highway finance (Buchanan 1952, 1956) providing his point of entry into the comparative analysis of debt and taxes. At that time there was substantial discussion as to whether highways should be financed currently through taxation or should be financed by debt and amortized over some duration of time. In this respect, the *National Tax Journal* published several papers on highway finance in the 1950s, which was also the period

when the American interstate highway system was getting underway. A central point of controversy over the interstate highway system was whether it should be financed by borrowing or by taxes on gasoline as a form of pay-as-we-go finance. In the Preface to *Public Principles*, Buchanan explained that he maintained that earlier interest in loans versus taxes in the financing of highways, and explained that his more general interest in public debt arose out of his interest in highway finance. Yet irony continually arises in social reality, and in Buchanan's case it arose when *Public Principles* was misidentified as a contribution to macro theory and fiscal policy when it was really an application to public debt of his contractarian approach to public finance.

His year in Italy intensified Buchanan's interest in public debt through his immersion in the Italian tradition of public finance. The Italian tradition contrasted sharply with the Anglo-Saxon tradition that treated public finance as pertaining to applied statecraft, and which located fiscal scholars as advising rulers. In contrast, scholars within the Italian tradition sought mainly to establish public finance on the same theoretical footing as the economic theory of markets. The Italian scholars saw a universal economizing logic as operating within different institutional settings, but sought to develop explanatory rather than hortatory formulations all the same.

If economic theory is treated as the effort to reduce the practice of commerce and industry to theoretical coherence, public finance in the Italian style could reasonably be treated as the effort to reduce the practice of politics to theoretical coherence. By this standard of theoretical construction, a practical person should be able to recognize the general contours of his or her activities within the theorist's framework, even though a theory is an abstraction from practice and not a recipe for practice. It is worth noting in this respect that Antonio De Viti de Marco was also a long-standing member of the Italian parliament as a member of the liberal party as well as being a professor of public finance at the University of Rome (Eusepi and Wagner 2013). It is surely reasonable to think that the concepts and categories with which De Viti wrestled in his theoretical work were also recognizable to him in his practical work as a member of parliament, even if de Viti was in no danger of confusing his theoretical and his practical work. There is a theory of public finance and there is a practice of public finance; these spheres are distinct but yet related within this Italian tradition that Buchanan was exploring deeply.

A key feature of the Italianate orientation was recognition that different institutional arrangements can influence the course of fiscal activity. The participants within the Italian tradition worked with various models of fiscal and political processes. One class of models stressed the cooperative aspects of collective activity. In this respect, De Viti de Marco (1936) defined public wants not in terms of the familiar technological conditions of production and consumption but in terms of wants that arise in consequence of people living together in close proximity. Another class of models treated collective activity as instruments for domination and subordination, as illustrated by Pareto's (1935) treatment of the domination of masses by elites through the use of ideology. Buchanan went to Italy with an interest in highway finance, extended that interest to public debt generally, as this had been a topic of significant analytical interest in the comparison between

ordinary and extra-ordinary finance, and wrote *Public Principles* as part of his effort to push public finance an explanatory and contractarian direction.

This, anyway, is what I believe to be the appropriate context for *Public Principles* and its claim that debt finance shifts cost from present onto future. When that claim is placed in a macro context, it becomes incoherent or nearly so. When it is placed within its proper analytical framework, however, it becomes coherent. To appreciate this coherence, however, requires erasure of some literary compromises Buchanan made with macro theory so as to appear to speak the Keynesian language when what was called for was really a different theoretical language, a good bit of which Buchanan (1969) set forth later, but which was already present in Buchanan's first published paper (Buchanan 1949). In the rest of this paper I shall explore some of the problematic features that confront an effort to combine macro theory with intertemporal transfers of burdens when society is conceptualized in terms of generations, whether or not those generations are treated as overlapping.

3 The incoherence of burden transfer between generations

Buchanan claims that public debt transfers cost from present to future when compared against tax finance. This claim is put in terms of a transfer between generations, which means in turn that all members of a generation are identical or that, equivalently, the generation is reduced to a representative agent. While this or a similar formulation is often invoked in macro theory, it is a peculiar formulation all the same. Most significantly, it must be asked how debt is possible in the first place. There can be no lending within the members of a generation because the generation itself is the action-carrying entity that somehow shifts cost forward through borrowing.

But how can such transfer of burden be brought about? What we have in front of us is a strangely abstract world where all members of a generation are tied together to act in unison, and with at least one more generation also being in the picture to allow some kind of action between generations. It will be convenient to label these generations as old and new. Each generation lasts two periods, serving one generation each, first as new and then as old. It will also be convenient to treat the old generation as paying taxes and making collective decisions while the new generation stands on the sideline waiting for its turn to come when it replaces the departing old generation.

Within this stylized framework, Buchanan claims that debt allows the old generation to increase current consumption by forcing a wealth transfer from the new generation by replacing taxes with debt. For this process to work as Buchanan describes, the new generation would have to buy the debt that would allow the old generation to increase their consumption because battleships would be paid for by the new generation rather than the old generation. This, anyway, is what must be involved in claiming that debt allows cost to be shifted from the present to a future generation. If that new generation is presently on the sidelines, we might wonder how such inter-temporal shifting can occur. Presumably they have no means to buy bonds. Moreover, they are not part of the labor force, so cannot expand production

beyond the capacity of the old generation. In short, Buchanan's claim of intergenerational transfer of cost seems incoherent within this framework of distinct generations because there is simply no scope for intergenerational trade.

How could an existing generation hand off debt to a forthcoming generation? To emphasize a transfer between generations is to say that all members of the present generation hand off in relay-like fashion a debt baton to the next generation. But what is the type of transaction, and why would the new generation accept the baton? In short, there isn't any reason within this framework where a generation is conveyed by a representative agent. After all, a representative agent is not a transacting entity. To the contrary, it is a device for summarizing the results of transactions and enclosing them in some form of black box, as it were. This is a piece of macro theory that some macro theorists find useful while others don't. It is not in any case a formulation that is of any use for pursuing an explanatory orientation toward fiscal phenomena. Any such explanatory orientation requires a multiplicity of people to supply both sides of debt transactions, and also to provide scope for faction-grounded outcomes where winners impose cost on losers.

To follow this analytical path, however, requires setting aside the effort to treat public debt as a means of shifting forward in time the cost of collective activity because generations are not acting entities. We can recognize well enough the presence of generations in our personal lives. This personal notion of a generation, however, has little to nothing to do with the formalized notion of a generation in macro theory. A family that comprises three generations is easy enough to understand, and those generations would have ages that typically are bunched in three clusters. This clustering breaks down as family sizes become larger, and loses all recognition in societies where births and deaths are continuous and not intermittent. To refer to a generation might have some value for such particular uses as describing a generation that experienced a severe and prolonged depression or a generation where half the male population between 20 and 40 died at war. It does not, however, generate insight into issues of explanatory public finance so long as a generation is treated as an acting entity, in contrast to treating individuals as acting entities who, moreover, may find themselves on different sides of a transaction despite being of the same generation.

4 Debt shifting once generations are fragmented

There is no scope for public debt to be shifted from present to future when generations are reduced to acting entities. The Keynesians were right to reject such claims of debt shifting, as illustrated by claims that the cost of battleships produced in 1943 were borne in 1943 through reductions in such other possible items of expenditure as yachts. This recognition does not mean that Buchanan was wrong; however, but it means only that he was incomplete in that he failed to carry forward fully his insights from highway finance in particular to public debt more generally. The replacement of tax finance with loan finance sets in motion various types of burden shifting that simply are ignored by the macro-theoretic formulations that effectively bent Buchanan's alternative line of analysis in the Keynesian direction.

In a later work, Buchanan and Roback (1987) explored such burden shifting within a generation by distinguishing the Ricardian equivalence theorem from the Barro neutrality theorem.

Compared with taxation, public debt puts debt instruments into circulation. These instruments represent in the first place a transfer among the members of a generation and not between generations, though that transfer can also set in motion transfers that play out through time. Public debt creates a distinct class of citizens that do not exist with tax finance, namely bondholders. The question for explanatory public finance is whether the creation of this distinct class of citizens modifies the operation of fiscal and political processes in any significant manner. For instance, tax payments among the citizenry are concentrated among the subset of citizens who buy bonds in contrast to being dispersed among the citizenry through taxation. Taxpayers form part of the wallpaper of public finance, as it were: they are just there, supplying revenues to support governmental activity. Bondholders occupy a different category from taxpayers, and bonds can be transferred forward from parents to children. Debt finance creates a natural political faction that is not present with uniform taxation, though taxation can also become a source of faction once rates become progressive and the base is riddled with exclusions, exemptions, and preferences. To be sure, other financial assets can also be transferred forward, but the question is whether the presence of bondholders modifies collective activity from the course it would take when government was financed wholly by taxation.

In this respect, De Viti de Marco (1936) recognized that public debt is a substitute for a set of private loans. An increase in public spending can be financed by taxing or by borrowing. If borrowing is chosen, the creditors cannot be the people who otherwise would have paid taxes. A generation must be fragmented into the individuals who comprise the generation. With respect to internal debt, public debt means that some people within the nation are lending to other people. If taxation were adopted over borrowing, some of the people who faced higher tax bills almost surely would borrow on the credit market rather than draw down their money balances. This borrowing would take place at the market rate of interest. In contrast, public debt allows them to borrow at the government's rate of interest. De Viti treated the lower rate of interest as a genuine cost advantage. While this treatment makes sense within the confines of De Viti's model of the cooperative state, it does not within the confines of his model of the monopolistic state. In this latter case, the lower rate of interest reflects not a genuine gain from collective action but a shifting of risk from bondholders to taxpayers. A public project that turns out badly is unlikely to lead to default. Far more likely is that taxes will be increased to supply an added infusion of funds to cover over the otherwise failed character of the debt-financed project.

There is one significant difference between private and public debt. With private debt, the borrower is indebted to a particular lender. This is not the case with public debt, for it is not the case that the entity called government is indebted to particular individuals designated as bondholders. In public debt transactions, government is an intermediary between the bondholders who provide the financing for the debt-financed activities and the taxpayers who are postponing their payment of taxes. In this respect, a government is in the same position as a bank which intermediates

between borrowers and depositors. To be sure, the bank as intermediary operates through voluntary agreement among the participants as represented by the operation of contractual principles. Governments might operate in a contractual manner toward bondholders, but they don't with respect to taxpayers.

There is no good reason to suppose that all taxpayers would agree to accept public debt rather than choosing between paying cash or through securing a market loan. Some may prefer the loan, but others would surely choose to pay cash rather than borrow. The public loan thus creates a category of *forced borrowers*. A further matter of significance is what Buchanan (1967) describes as the contingent character of public debt. By contingent, Buchanan meant that no explicit liability was assigned at the time debt was created. Bonds were sold now to raise revenue, but the imposition of tax liabilities to amortize that debt would be determined in future years. This situation contrasts with market-based debt where liability for debt amortization is a reciprocal quality of the creation of debt, and with that debt residing with a decedent's estate in the event of death.

As an explanatory matter, it is surely reasonable to expect less desire for public debt when liability is assigned explicitly than when that liability is left unaddressed until some future period. For one thing, there will be taxpayers who would prefer to pay cash rather than take on debts. Moreover, people would seem less willing to buy government bonds when liabilities are assigned at the time debt is incurred because there will be no ability to roll over debt, which can be done easily when liability is contingent. This explicit institutional arrangement, moreover, would seem to bring taxes and debt closer together with respect to fiscal perceptions.

The intergenerational language obscures rather than clarifies the work that public debt might seem to do. I think Buchanan is right to think that the work that public debt does is often not generally beneficial, but this line of thought requires a coalitional structure that recognizes that a generation is not an acting entity but rather contains a set of entities with conflicting interests, somewhat similar to what Wagner (2012) argues in carrying forward Buchanan and Wagner (1977). Debt brings transfers, yes, but among the members of a society distributed among generations and not between generations as unified entities.

5 Subjective legitimacy, coalitional change, and debt repudiation

In two of his later papers, Buchanan (1985, 1987) inquired into the morality of public debt and the ethics of debt default. If these inquiries are viewed from within an analytical framework grounded in representative agents and similar macro constructions, they might be seen as reflections of the increasing crotchetiness that sometimes comes with aging. But when viewed from within the perspective of a contractarian orientation toward public finance, they can be reflections of a dawning recognition that actual political outcomes have become far removed from any contractual mooring. Political systems based on majority rule will have a coalitional structure that divides the world between winners and losers. In William Riker's (1962) seminal formulation, moreover, the winning coalition will be of the minimal

necessary size so as to maximize the gains acquired through imposing costs on the losers.

Within a coalition-based framework, two particularly significant issues are the length of time any particular coalition stays in power and the degree of turnover in the identities of members of a winning coalition. It is possible to visualize coalitions that turnover on a daily basis. If this were the case, practically everyone in a society would face approximately a zero expected value from coalition membership in this quickly rotating world. But the world doesn't rotate this quickly. Coalitions formed today will have durability. How much durability is subject to variation, but the effect of durability is significant in any case. With a discount rate of 10 %, for instance, a coalition that endures for 7 years is about half as valuable to its members as one that would endure forever. Not all coalitions are equally likely, moreover, as Niskanen (1978) explores, and this situation will tend to divide the world into relatively permanent winners and losers. Furthermore, minority factions can establish relatively permanent coalition even within a larger environment of highly unstable coalitions, as Robert Rogowski (1974: 77–142) illustrates for a model that contains 1,000 citizens who are indifferent between two candidates. Each citizens votes by flipping a coin, as it were, save for small factions who vote as a bloc. In Rogowski's binomial experiment, a bloc of 50 people will be able to elect their candidate in 80 % of the cases. Should that block have 75 members, its preferred candidate will win in 99 % of the cases.

These considerations of coalition formation suggest that democratic processes might work in the direction of creating substantial durability in the identities of winners and losers through political action. This situation raises some questions regarding the subjective quality of notions about legitimacy. One path to legitimacy resides in recognition that while majority rule divides the world into winners and losers, the winnings and losings roughly cancel over a sequence of issues because all possible coalitions are equally likely. Democratic outcomes might enjoy widespread support under such circumstances. The situation is different if coalitions are relatively permanent, or even of just long duration relative to subjective rates of discount.

A long-standing member of a losing coalition might suddenly be a member of a winning coalition. For a long time people in this position will have been forced borrowers who are now being forced to make amortization payments for projects they did not support in the first place. Such people face one of those proverbial forks in the road. One branch of that fork would be the "business as usual" fork, where inherited obligations would be honored. The morality behind such honoring is surely of dubious quality once the gulf between the pro-democratic ideology of equal participation and the political reality of ruling elites and dominating coalitions (Pareto 1935) is recognized. It is easy to see how skepticism about the morality of continual deficit financing and interest in the possibility of debt repudiation could be signs not of an aging economist's growing crotchetiness but rather of that economist's growing recognition of how far democratic processes have moved away from some idealized contractual beginnings.

6 Final remarks

With respect to James Buchanan's public debt theory, it is possible to distinguish between narrow and broad treatments. The narrow treatment would treat public debt as transferring wealth among generations. The broader treatment that arises through rational reconstruction would allow for transfers within a generation and with those transfers extending across generations as well. Buchanan's base claim that public debt shifts cost from present to future is not literally correct because generations are not acting entities. Yet his formulation points in the correct direction which is missed by proponents of fiscal policy. That correct direction, moreover, is consistent with his full body of work in political economy and public finance, and which, furthermore, was set in motion by Buchanan from the very start of his career as Mariane Johnson (2014) explains.

References

Buchanan, J. M. (1949). The pure theory of government finance: A suggested approach. *Journal of Political Economy, 57*, 496–505.

Buchanan, J. M. (1952). The pricing of highway services. *National Tax Journal, 5*, 97–106.

Buchanan, J. M. (1956). Private ownership and common usage: The road case re-examined. *Southern Economic Journal, 22*, 974–977.

Buchanan, J. M. (1958). *Public principles of public debt*. Homewood, IL: Richard D. Irwin.

Buchanan, J. M. (1967). *Public finance in democratic process*. Chapel Hill: University of North Carolina Press.

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

Buchanan, J. M. (1985). The moral dimension of debt financing. *Economic Inquiry, 23*, 1–6.

Buchanan, J. M. (1987). The ethics of debt default. In J. M. Buchanan, C. Rowley, & R. D. Tollison (Eds.), *Deficits* (pp. 519–533). New York: Blackwell.

Buchanan, J. M., & Roback, J. (1987). The incidence and effects of public debt in the absence of fiscal illusion. *Public Finance Quarterly, 15*, 5–25.

Buchanan, J. M., & Wagner, R. E. (1977). *Democracy in deficit*. New York: Academic Press.

De Marco, A. D. V. (1936). *First principles of public finance*. London: Jonathan Cape.

Eusepi, G., & Wagner, R. E. (2013). Tax prices in a democratic polity: The continuing relevance of Antonio De Viti de Marco. *History of Political Economy, 45*(2013), 99–121.

Ferguson, J. M. (Ed.). (1964). *Public debt and future generations*. Chapel Hill: University of North Carolina Press.

Johnson, M. (2014). James M. Buchanan, Chicago, and post war public finance. *Journal of the History of Economic Thought, 36*(4).

Niskanen, W. A. (1978). The prospect for liberal democracy. In J. M. Buchanan & R. E. Wagner (Eds.), *Fiscal responsibility in constitutional democracy* (pp. 157–174). Leiden: Martinus Nijhoff.

Pareto, V. (1935). *The mind and society: A treatise on general sociology*. New York: Harcourt Brace.

Riker, W. H. (1962). *The theory of political coalitions*. New Haven: Yale University Press.

Rogowski, R. (1974). *Rational legitimacy: A theory of political support*. Princeton, NJ: Princeton University Press.

Smith, A. 1776 [1937]. *An Inquiry into the Nature and Causes of the Wealth of Nations*. New York: Random House.

Wagner, R. E. (2012). *Deficits, debt, and democracy: Wrestling with tragedy on the fiscal commons*. Cheltenham: Edward Elgar.