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. While such treatment is standard fare for macro theorists who work with representative agents and societal averages in place of the individuals who constitute a society, such treatment conflicts with Buchanan's *Cost and Choice* and, indeed, his entire oeuvre. This essay undertakes an act of rational reconstruction that renders his 1958 claim both reasonable and consistent with his 1969 formulation where cost can be experienced only by individuals and never by generations. This rational reconstruction reveals a cleavage between public debt approached through macro theory and public debt approached through public finance. *Public Principles* was generally treated by economists as macro theory when it really originated in public finance and political economy.

Keywords: *Public Principles of Public Debt*; burden of public debt; Ricardian equivalence; *Cost and Choice*; Atillio Da Empoli and oblique incidence; morality of public debt; debt default

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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 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. Buchanan, however, vigorously denied that his claim about cost shifting had anything to do with capital stocks and 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*. 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 late 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 political economy and the relationship between state and market and between public and private ordering. The various macro-like references in *Public Principles* pointed, as it were, to a subtext inside the book's primary text, and this subtext led to misidentification by critics and author alike. When the surface of *Public Principles* is peeled away, what stands is 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 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 Principles* would have no purpose. 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*.

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. With respect to economic-theoretic orientations, Buchanan resided within what Boettke (2012) calls the mainline of economic theory which is comprised of theorists who seek to understand and explain the self-organizing qualities of a market economy. Standing in opposition to the mainline theorists is what Boettke describes as mainstream theorists who for roughly a century have embraced the Progressivist vision of a politically controlled economy. Buchanan's sharp contrast was perhaps a good rhetorical strategy for trying to offset the surging Keynesian tide, but that tide kept coming all the same.

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 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 a market economy was inherently unstable, in sharp contrast to the mainline of economic theory. The path to stability ran through the federal government's use of fiscal and monetary powers to manage and control what was conceptualized as the macro economy, which was not a conceptualization that arose within mainline theory. This Act established a Counsel 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* sought to stand athwart the Keynesian tide that by then had overwhelmed most of the opposition to the Keynesian management of what was presumed otherwise to be a volatile market economy.

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 supporting lines of argument. One of those lines of argument 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 1955-56 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 (forthcoming) 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 interstate highway system got 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 vs. 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 when it was nothing of the sort.

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 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. In this respect, 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 want that are unique to 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* which tried to reorient toward explanatory public finance and away from macro theory.

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. 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 yet. 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. Fragmenting Generations through Oblique Shifting

Public debt cannot be shifted from present to future when generations are acting entities. The Keynesians were right that this cannot be done and that the cost of the battleships produced in 1943 were borne in 1943. But this recognition does not mean that Buchanan was wrong, but only that he was incomplete in that he failed to carry forward fully his insights from highway finance 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.

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. In this respect, Attilio Da Empoli's (1926, 1941) theory of oblique incidence brings insight to the analysis of public debt. Typically, tax shifting is thought in forward and backward terms, as in forward shifting to consumers and backward shifting to producers. Most taxes are levied on some transaction, and the distinction between forward and backward refers to some location within the pattern of linkages within which that transaction is embedded. An excise tax on athletic shoes would thus either be transferred forward to people who buy those shoes or backward to people who participate in the production of those shoes. Da Empoli's notion of oblique incidence, which Ryan (2001) and Backhaus (2012) elaborate, allows for various patterns of sideways shifting which can in some cases carry forward into the future. For instance, a tax on athletic shoes might shift the pattern of athletic participation away from activities where shoes are worn to such activities that are performed barefooted as swimming and gymnastics.

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. 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. When faced with a tax bill, people can pay taxes either by drawing down money balances or by borrowing at the market rate of interest. In place of the market rate of interest, public debt allows people effectively to borrow at the government's rate of interest. De Viti treated the lower rate of interest as a genuine cost advantage, though this treatment is disputable. The lower rate of interest surely reflects a shifting of risk from bondholders to taxpayers when compared against commercial loans. A public project that turns out badly and requires an added infusion of funds to complete will be completed by imposing higher burdens on taxpayers and not by demanding further funds from the sponsors of the project.

Also, 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 significant 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 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

William Niskanen (1978: 157-74) develops a coalition-based model of the constitutional arrangement of liberal democracy. His model has five coalitions, arranged by income quintile. Within a coalition model, a significant question concerns the durability of winning coalitions. That durability is bounded by the two limiting cases. One limit is transitory coalitions where a winning position this year is a losing position next year. The pattern is not precisely possible, of course, for majority coalitions because there must be at least one person who is in the winning coalition two consecutive years.

What is most significant, though, is that there is great volatility in coalitions over short intervals of time. To the extent coalitions are treated in a zero sum framework, this situation would entail that everyone have expected values from coalition membership of approximately zero. This outcome would, in turn, mirror the efficiency that everyone find expected marginal cost of fiscal activity to be roughly equal to expected marginal benefit.

The other limit is durable or even permanent coalitions, where a losing position in one year continues for a long period. In this case, some people will have positive net benefits from expected collective activity while others have expected net losses, and of a quasi-permanent sort. The transitory setting would seem to reflect a case where there is widespread support for the system of government along with a preference for different governing coalitions distributed through the population. In contrast, the situation with permanent coalitions would seem to verge on revolutionary conditions in that it would reflect a pattern of domination and subordination.

So long as there is general support for a system of government, that system is likely to be widely regarded as legitimate. But legitimacy refers to a state of mind and not to some objective condition independent of mind. Within the US, for instance, official public debt is but a small part of total public indebtedness once the magnitude of inconsistent political promises is taken into account. Much of this goes by the label unfunded liabilities, and represent in any case the contingent liability nature of many political promises, all of which have the feature that what is promised to beneficiaries is inconsistent with what is promised to taxpayers. How such inconsistencies are worked out through time remains to be seen, but it is easy to see how debt repudiation could be rendered sensible from within an explanatory orientation toward fiscal phenomena.

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, and yet his formulation points in the correct direction which is missed by proponents of fiscal policy and which is also consistent with his body of work in political economy and public finance.

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