DID SMITH ADDRESS RICARDIAN EQUIVALENCE BEFORE RICARDO?

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The modern articulation of what has been termed “Ricardian equivalence” was put forth by Robert Barro (1974) in his seminal paper, “Are Government Bonds Net Wealth?” Although Barro does not refer to Ricardo as the originator of the inquiry into whether public debt is equivalent to taxation, both Buchanan [1976] and O’Driscoll [1977] credit Ricardo with being the first to address the equivalence issue. Later, in his reply to Buchanan’s comment, Barro also “acknowledges an intellectual debt to David Ricardo” [1976, 346].

More recently, in his comprehensive survey article titled “Ricardian Equivalence,” Saez states, “Over the last fifteen years, (traditional Keynesian theory…) has been cast into doubt through revival of a theory, first explored by Ricardo, suggesting that debt policy has none of the effects accorded to it by traditional analysis. ‘Ricardian equivalence,’ as the revived theory has come to be called, attributes no effects at all to an increase in the deficit” [1995, 142, emphasis added]. Clearly, the economics profession accepts David Ricardo as the first to inquire about debt neutrality, an issue which is one of the most researched in modern macroeconomics.

Although Ricardo may be the first to have given a numerical demonstration of debt neutrality, we argue that he is not the first to have explored the concept. In particular, we contend that Adam Smith presents many of the same arguments as Ricardo. Moreover, Smith frames the equivalence issue in the same manner as do modern scholars. That is, Smith asks whether government bonds are net wealth, or, alternatively, whether tax rebates are saved — that is, does the public save the lump-sum tax reduction occasioned by deficit finance.

Since our objective is to demonstrate that Smith anticipated Ricardo in this area, we juxtapose the descriptive components of each author’s presentation of the equivalence theorem. We pay particular attention to their views on the impact of government bonds on net wealth and the impact of tax rebates on saving. In addition, since Ricardo and Smith express similar concerns about the practical application of the equivalence theorem, we also present their views on potential shortcomings of the theorem.


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Consistent with the equivalence theorem, Smith argues that government bonds are not net wealth. The public funds of the different indebted nations of Europe, particularly those of England, have by one author been represented as the accumulation of a great capital superadded to the other capital of the country... He does not consider that the capital which the first creditors of the publick advanced to government, was, from the moment in which they advanced it, a certain portion of the annual produce turned away from serving in the function of a capital, to serve in that of a revenue, to be spent and wasted... In return for the capital which they advanced they obtained, indeed, an annuity in the publick funds in most cases of more than equal value. This annuity, no doubt, replaced to them their capital, and enabled them to carry on their trade and business to the same or perhaps to a greater extent than before; that is, they were enabled either to borrow of other people a new capital upon the credit of the annuity, or by selling it to get from other people a new capital of their own... This new capital, however, which they in this manner either bought or borrowed of other people, must have existed in the country before... Though it replaced to them what they had advanced to the government, it did not replace it to the country. (1881, 924-925, emphasis added)

In his *Principles*, Ricardo writes:

> The capital of the stockholder (government bondholder) can never be made productive — it is in fact no capital. If he were to sell his stock, and employ the capital he obtained for it, productively, he could only do so by detaching the capital of the buyer of his stock from a productive employment. (1851, 1:249n)

Their arguments are somewhat clouded by the fact that they address simultaneously both the government’s method of finances and the government’s use of the funds. Both Ricardo and Smith argue that the government wastes the capital that it receives, regardless of the source, and hence reduces the nation’s capital stock. This loss is not replaced by the issuance of government bonds, because the owner of the bonds can only exchange them for existing capital, the net stock of which has been reduced. Issuing paper bonds cannot replace the lost capital.

With regard to the impact of taxes and debt on private saving, Smith is more direct. He says:

> When the publick expence is defrayed by funding (borrowing), it is defrayed by the annual destruction of some capital which had before existed in the country.... As in this case, however, the taxes are lighter than they would have been, had a revenue [tax] sufficient for defraying the same expence been raised within the year, the private revenue of individuals is necessarily less burdened, and consequently their ability to save and accumulate some part of that revenue into capital is a good deal less impaired. If the method of funding destroys more old capital, it at the same time hinders less the accumulation or acquisition of new capital, than that of defraying the publick expence by a revenue raised within the year. Under the system of funding, the frugality and industry of private people can more easily repair the breaches which the waste and extravagance of government may occasionally make in the general capital of the society. (1881, 925)

Smith argues that when the government chooses to pay for its expenditures by issuing debt instead of collecting current tax revenue, the public’s disposable income is greater; thus, it will save more than it would otherwise. That is, private saving will compensate for government dissaving. This is the essence of the modern Ricardian equivalence argument.

Similarly, in his notes on William Blake’s “Observations on the Effects Produced by the Expenditure of Government,” Ricardo says, “Who denies that savings actually accumulates simultaneously with the expenditure of Government? It is the only theory by which the actual phenomena of the last 25 years can be explained” (1851, 4:341). Thus, Ricardo argues that saving must have increased in the face of wartime deficits, or the war simply could not have been financed. In addition, in his *Principles*, Ricardo presents his now famous illustration of how the present value of the stream of taxes needed to pay the interest on the debt is the same as the present lump-sum tax which would have been required to avoid the debt altogether (1851, 1:244-6). Hence Ricardo provides precise numerical examples illustrating why debt and taxes are analytically equivalent.

Although Smith and Ricardo describe the potential for debt neutrality, each expresses concerns about its application. Indeed, O’Driscoll (1977) argues that the Ricardian equivalence theorem should be called the Ricardian nonequivalence theorem because Ricardo thinks that, in practice, the method of government finance does make a difference. This is because people may not feel the burden of debt financing as immediately as they do taxes. Hence, government spending is greater with debt financing than it is with taxes. Ricardo’s reasoning and examples are strikingly similar to Smith’s. Smith writes that if wars were financed with taxes rather than debt, the taxes from which that extraordinary revenue was drawn would last no longer than the war. Wars would in general be more speedily concluded, and less wantonly undertaken. The people feeling, during the continuance of the war, the complete burden of it, would soon grow weary of it... (1881, 926)
Compare this to Ricardo, who writes that if wars are financed with taxes instead of debt:

The burdens of the war are undoubtedly great during its continuance, but at its termination they cease altogether. When the pressure of the war is felt at once, without mitigation, we shall be less disposed warrantly to engage in an expensive contest, and if engaged in it, we shall be sooner disposed to get out of it. In point of economy, there is no real difference between debt and taxes...but the people who pay the taxes never so estimate them, and therefore do not manage their private affairs accordingly. [1851, 1:124]

Their belief in "fiscal illusion" leads both Smith and Ricardo to prefer taxes to debt primarily because they believe that debt financing leads to excessive government spending. The resulting additional borrowing, moreover, not only reduces the capital stock directly, but it also leads to ever-increasing taxes to pay the raising interest on the debt. This leads to a further diminution of the nation's capital stock because the owners of capital will remove it from the country in order to escape these taxes (Smith, 1811, 927; Ricardo, 1851, 1:247-8 and 1851, 1:187). Consequently, Smith contends that "the practice of funding has gradually enveloped every state which has adopted it" [1851, 923], and Ricardo advises that "a country which has involved itself in the difficulties attending this artificial system, would act wisely by ransoming itself from them" [1851, 1:245].

The purpose of this short paper is to demonstrate that Smith was aware both of the potential for debt neutrality and of possible shortcomings of the neutrality argument. To be sure, Smith's presentation lacks Ricardo's mathematical precision. However, Smith approaches the issue in the same fashion as does Ricardo and reaches qualitatively similar conclusions. Thus, Smith deserves at least a footnote in the history of the Ricardian equivalence theorem.

NOTES

The order of the authors was determined alphabetically. We wish to thank Fred Abramson and Jean Voyer for helpful comments. Ken McCormick acknowledges the support of the National Endowment for the Humanities for grants FY-20886-88, FY-31500-92 and FY-21947-93 on "The Works of Adam Smith."

1. For an introduction to Ricardian equivalence and debt neutrality, see Ross and Hakes [1995, 58-69].
3. This is evidenced by Senter's [1988] survey article, which has 49 pages long and cites 207 papers. Moreover, the issue has captured the interest of no less than a half-dozen Nobel laureates.
4. Smith is responding to J. F. M'Ness's assertion that government bonds are not wealth [M'Ness, Essai politique sur la Consommation, 1774, translated by D. Ritten (Dublin, 1776), cited in Smith [1838, 924]].
5. In his Pamphlet on the "Feudal System," Ricardo rejects the argument, and adds the case of the costs of a 45 year sinking fund to refit the debt [1851, 1:186].
6. Non-Ricardian behavior is one source of fiscal illusion. Fiscal illusion exists whenever taxpayers underestimate the burden of taxes or overestimate the value of government expenditures [Buchanan, 1987, 126-134].