Escape from Locke:

British Political Economists on Tax Incidence

Takuo Dome*

Abstract (*JEL* classification numbers: B12 and H22)

The development of political economy in Britain in the second half of the eighteenth and the early nineteenth centuries was characterized by an attempt to escape from Locke's theorem that all taxes would finally fall on the rent of land and his proposal of a single tax on rent. Although Hume and Steuart rejected Locke's theorem and proposal, they failed to create a system of political economy which adequately accounted for capitalistic reproduction. Smith did produce such a system, but his conclusion respecting tax incidence did not differ much from Locke's theorem. Malthus, in turn, was caught in the contradiction between the Smithian theory of tax incidence and the Ricardian theory of differential rent. Ricardo, however, established a system of political economy which produced a consistent theory of tax incidence which escaped Locke's theorem: he succeeded in showing that most taxes would ultimately fall on profits, not rent. Yet as a very result of his success, Ricardian political economy prepared a route back to Locke's proposal, that is a single tax on rent.

1. Introduction

In his pamphlet *Some Consideration of the Consequences of the Lowering of Interest, and Raising the Value of Money* (1691), John Locke argued as follows with respect to the incidence of taxation:

> It is in vain in a Country whose great Fund is Land, to hope to lay the publick charge of the Government on any thing else; there at last it will terminate. The Merchant (do what you can) will not bear it, the Labourer cannot, and therefore the Landholder must: And whether he were best do it, by laying it directly, where it will at last settle, or by letting it come to him by the sinking of his Rents, which when they are once fallen every one knows are not easily raised again, let him consider (Locke [1691] 1991, 278).

Locke assumed that, because laborers worked at the subsistence level of wages, they could not bear any taxes, whether direct or indirect. He also thought that, because merchants earned profits at the minimum level, they would always pass on any taxes to consumers by raising the price of their commodities. Consequently, according to Locke, taxation would be born by landlords and by them alone. As all taxes would finally fall on the rent of land, the taxation system, if it was to be efficient, had to consist in a single tax on rent.

According to Seligman ([1927] 1969, 101–22), Locke's theorem that all taxes would finally fall on rent, as well as his proposal of a single tax, influenced British writers on taxation in the first half of the eighteenth century, although his theorem was regarded as implausible and the proposal as impracticable.[1] Following Seligman, historians of economic

* Correspondence may be addressed to Professor Takuo Dome, School of Economics,

thought as well as fiscal economists have discussed British political economists' theories of tax incidence: however, these theories have not always been examined in terms of Locke's theorem and proposal.[2] Consequently, whereas Locke's influence on British political economists with respect to theories of value, money and international trade – as well as moral philosophy and political thought – has been energetically discussed,[3] the doctrinal relationship between Locke and British political economists with respect to tax incidence has hitherto not been clarified.

The purpose of this paper is to show how the development of British political economy in the second half of the eighteenth and the early nineteenth centuries was an attempt to escape from Locke's theorem and proposal. The following sections will discuss Hume's, Steuart's, Smith's, Malthus's and Ricardo's theories of tax incidence, and their recommendations for a system of taxation. The Ricardian system, which succeeded in escaping Locke's theorem, was the culmination of this

---

Osaka University, Toyonaka, Japan.

[1] Petty ([1662] 1997, 40) put forward the antithesis of Locke's theorem: a land tax would be shifted on to the price of agricultural produce and ultimately fall on consumers. On the basis of this theorem, Petty preferred the excise to the land tax (94–95). According to Seligman ([1927] 1969, 112), Petty's theorem was not taken seriously by writers on taxation in the seventeenth and eighteenth centuries. See also Kennedy [1913] 1970, 80.

[2] For works which comprehensively examine British political economists' theories of tax incidence see, for example, Musgrave 1959 and 1985; Shoup 1960; and O'Brien 1975.

[3] For Locke's contribution to British political economy – particularly with respect to the quantity theory of money – see, for example, Leigh 1974; Vaughn 1980, 31–45; and Eltis 1995. For the philosophical break between Locke and the Scottish Enlightenment see, for example, Winch 1978; Dunn 1983; Mitchell 1986; and Coleman 1995.

movement in British political economy. However, contrary to Ricardo's intention, his political economy was used to support a single-tax scheme. Thus the development of British political economy will be characterized as a successful movement to escape from Locke's theorem, yet, at the same time, destined to return his proposal. This conclusion will throw new light not only on the history of taxation theory, but also on the intellectual relationship between Locke and the British political economists.

2. David Hume

In *Political Discourses* (1752), Hume attacked the view that all taxes would ultimately fall on the rent of land, criticizing Locke as the founder of this view. He stated:

> There is a prevailing opinion, that all taxes, however levied, fall upon the land at last. Such an opinion may be useful in *Britain*, by checking the landed gentlemen, in whose hands our legislature is chiefly lodged, and making them preserve great regard for trade and industry. But I must confess, that this principle, tho' first advanced by a celebrated writer, has so little appearance of reason, that, were it not for his authority, it had never been received by anybody (Hume [1752] 1955, 86n).[4]

[4] Locke was, of course, the "celebrated writer". In the 1770 edition, this passage was altered as follows: "It is an opinion, zealously promoted by some political writers, that, since all taxes, as they pretend, fall ultimately upon land, it were better to lay them originally there, and abolish every duty upon consumptions. But it is denied, that all taxes fall ultimately upon land" (Hume [1752] 1955, 86–87). Thus, in the 1770 edition, Hume more openly criticized both Locke's proposal and his theorem.

Hume thought that, if a tax was imposed on a commodity, merchants could not easily raise the price of the commodity taxed because the domestic price would be limited by the price in the foreign market. Hume implicitly assumed either that the merchants earned a greater profit than the minimum level, or that they had other sources of revenue. Suppose that the merchants were able to raise the price. If the commodity taxed was a luxury good, the consumers would have to pay the tax. If the commodity was a necessary good consumed by laborers, they would either consume less or work harder, or do both, as long as the rise in the price was moderate. This assumed either that laborers received a wage above the subsistence level, or that they had leisure hours; wages would not rise in these circumstances. Consequently, a tax on a commodity would not fall on landlords alone: it would fall on merchants, rich consumers or laborers, depending on whether the price and wages could rise. Thus Hume refuted Locke's theorem, which was the logical foundation of his single-tax proposal.

Hume preferred indirect taxes to direct taxes. Whereas direct taxes were compulsory and apt to be arbitrary, indirect taxes were voluntary and checked by markets. He concluded:

> The best taxes are those which are levied upon consumptions, especially those of luxury; because such taxes are less felt by the people. They seem to be, in some measure, voluntary; since a man may chuse how far he will use the commodity which is taxed: They naturally produce sobriety and frugality, if judiciously imposed: And being confounded with the natural price of the commodity, they are scarcely perceived by the consumers. Their only disadvantage is, that they are expensive in the levying.

> Taxes upon possessions are levied without expence; but have every other disadvantage. Most states, however, are obliged to have recourse to them, in order to supply the deficiencies of the other (85).

To Hume, taxes on luxuries were desirable, not only because they were voluntary taxes, but also because they would fall equally on rich consumers, who were composed of landlords and the moneyed interest. Although the moneyed interest earned profits from their business activities, their "revenues in the funds are a sure resource for themselves and their families" (94).[5] In September 1766, Hume quarreled with Turgot about a single tax on rent. Turgot supported Locke's theorem and proposal on the basis of the Physiocratic assumption that land alone furnished the net product. Hume argued that taxes had to be born not only by landlords but also by the moneyed interest:

> I beg you also to consider, that, besides the Proprietors of Land and the labouring Poor, there is in every civilised Community a very large and a very opulent Body who employ their Stocks in Commerce and who enjoy a great Revenue from their giving Labour to the poorer sort. … Now it is very just, that these should pay for the Support of the Community, which can only be where Taxes are lay'd on Consumptions (209).

5 Hume's notion of the moneyed interest may best be described as "merchants-cum-stockholders". However, Winch argues that "[t]he conflict foreseen by Hume was more dramatic, but it seems important to stress that he was speaking of conflict between the landed and *moneyed* interests, rather than between the landed and *merchant* interests", and that "there are no grounds for equating the merchant and moneyed interests" (1978, 128).

Whereas landlords could not hide their land from inspectors, the moneyed interest could hide their property more easily: they could also export it to foreign countries in order to escape direct taxes. Thus taxes on property would produce inequality between the two classes. For this reason, Hume concluded that "[d]uties upon consumption are more equal and easy than those upon possessions" (97).

Having refuted Locke's theorem and proposal, Hume recommended taxes on luxuries because they were equal in that they would fall on both landlords and the moneyed interest. However, his theory of tax incidence was not derived from a consistent system of political economy: he simply followed the then prevailing view that whereas the land tax would fall on landlords, customs and excise would fall on consumers.[6] The development of a theory of tax incidence consistently derived from a system of political economy was left to two Scottish political economists, Steuart and Smith.

3. Sir James Steuart

In the final substantive chapter of *An Inquiry into the Principles of Political Oeconomy* (1767), Steuart proposed to replace the land tax with a general sales tax:

> I shall propose a tax, which would fill up the place of every other; and could it be levied, would be the best perhaps ever thought of. It is a tax, at so much per cent. upon the sale of every commodity (Steuart [1767] 1998, 4:247).

[6] For this prevailing view at the end of the seventeenth and in the first half of the eighteenth centuries see Kennedy [1913] 1970, 80–81 and Seligman [1927] 1969, 110–22.

The idea for Steuart's general sales tax should be credited partly to Charles Davenant, who, although accepting Locke's theorem, rejected a single tax on rent. Davenant proposed to finance the War of the Spanish Succession by extending the excise (Davenant 1695, 159 and [1698] 1967, 1:143).[7] The general sales tax might also be seen as a revival of Walpole's Excise Bill of 1733.[8] Thus, although Steuart did not directly refer to Locke on the question of taxation, his proposal of a general sales tax might be located in the anti-Lockean tradition.[9] However, in contrast to his predecessors, Steuart attempted to derive his conclusion consistently from a systematic account of political economy.[10]

---

[7] Steuart often referred to Davenant's works on public debt and taxation, stating, for instance, that "[i]n his treatise of ways and means, article *excises*, where he is searching for expedients to provide money for the war, he plainly shews a thorough knowledge of this imposition" ([1767] 1998, 4:20). However, Steuart thought that difficulties with the excise "engaged Davenant to propose having recourse to the land-property and poll-taxes, for raising, within the year, the sums required for carrying on the war" (4:20).

[8] In the following statement, Steuart was probably referring to the failure of Walpole's Excise Bill: "The scheme of a general excise was pushed with too much vivacity, was made a matter of party, was ill-timed, and the people nowise prepared for it; hence it will be the more difficult to bring about at another time, without the greatest precautions" ([1767] 1998, 1:30). For his praise of Walpole see 1:85.

[9] Steuart's references to Locke were confined to the subject of money. See Steuart [1767] 1998, 2:77, 242, 281 and 289.

[10] Seligman states that the "fullest discussion of the incidence of taxation before Adam Smith is to be found in the works of Sir James Steuart" ([1927] 1969, 117–18). Seligman, however, does not discuss how Steuart's theory of tax incidence was used in his macroeconomic theory of taxation. Yang (1994, 226–73) attempts to integrate Steuart's microeconomic theory of tax incidence and his macroeconomic theory of taxation and public debt: he shows that the macroeconomic effects of a tax on output, the price level

The actors involved in Steuart's system were landlords, the moneyed interest, the industrious classes and a statesman (government). The industrious classes were composed of farmers, manufacturers and merchants. Landlords rented their land to farmers, receiving rent.[11] The moneyed interest – composed of bankers, usurers, stockholders and stockbrokers – lent money to landlords, the industrious classes and the government, receiving interest.[12] Government was assumed to participate in the economy through its policies relating to trade, money and finance. It must be stressed that, in Steuart's system, money was not only a means to facilitate exchange: it also created an effectual demand for commodities, consequently creating demand for the work of the industrious classes (Steuart [1767] 1998, 1:51–52).[13]

The farmers produced food and raw materials. Manufacturers produced necessities of life as well as luxuries. In producing manufactures, they used

---

and the rate of interest all depend on whether the tax shifts onto the price.

[11] Brewer states that, in Steuart's system, "the theory of rent is not discussed at all, while farmer's incomes are not divided into wages and profits" (1997, 7), and that Steuart, as well as Hume, was thinking of a system of agriculture mainly dominated by independent farmers.

[12] Akhtar argues that, in Steuart's system, "the rate of interest is determined by the demand for loanable funds and the quantity of money available for lending" (1979, 292). According to Brewer (1997, 13), Steuart and Hume assumed that merchants borrowed money, whereas farmers and manufacturers did not.

[13] Steuart used the term "effectual demand" as follows: "Now because it is the *effectual* demand, as I may call it, which makes the husbandman labour for the sake of the equivalent, and because this demand increases, by the multiplication of those who have an equivalent to give, therefore I say that multiplication is the cause, and agriculture the effect" ([1767] 1998, 1:134). Thus Steuart defined effectual demand as a person's demand when supported by purchasing power – in another word, money.

agricultural products as raw materials (4:146–48). It is unclear whether agricultural production used manufactured products, such as tools and machines. Farmers, manufacturers and merchants were self-employed or employed by others. Wages of labor were "regulated by the demand for the work, and the competition among the workmen to be employed in producing it" (4:161). The price of necessities influenced the money-wage rate. Although Steuart referred to the labor market, this did not mean that he understood, as a typical phenomenon in modern commercial society, the emergence and accumulation of capital which regularly gained surplus value through employing wage-labor. As Meek (1958, 294) points out, capitalistic reproduction is not clearly explained in Steuart's system.[14]

Consumers were divided into two classes: idle consumers and industrious consumers. People who could not draw back indirect taxes on consumption by raising the price of their commodities or services were defined as idle consumers (Steuart [1767] 1998, 4:204–205). Landlords belonged to this category. Although Steuart did not state this explicitly, the

[14] Many Steuart scholars support Meek's view in this respect: Eltis thinks that, in Steuart, "Smith's perception that 'stock' influences the demand for labour is lacking" (1986, 68); Skinner (1988, 136) argues that the distinction between rent, profits and wages, as well as between land, labor and capital, was less obvious in Steuart's system than in Smith's; Doujon argues that Steuart's system "lacked a conception of man which gave major impetus to the ideology of economic development" (1994, 506); Brewer points out that "neither Hume nor Steuart had a notion of classes based on different types of income, when neither had a developed theory of wages, profits or rent" (1997, 7). In contrast, Perelman argues that the "connection between the creation of a wide-spread wage labour relationship and the social division of labor was essential to the work of Steuart" (1983, 469). Nevertheless Perelman acknowledges that Steuart "did not sense the full potential of capital" (482). Here I accept the standard interpretation that Steuart's understanding of the capital-labor relationship was incomplete.

moneyed interest must also be classified as idle consumers, because they did not have the power to alter the rate of interest in line with the taxes they had to pay. People who could draw back consumption taxes – people who consumed only for the purpose of maintaining their subsistence and business – were defined as industrious consumers.

On the basis of this system, Steuart demonstrated a difference in the incidence of direct taxes and indirect taxes, which he called them "cumulative taxes" and "proportional taxes" respectively. A proportional tax would always raise the price of the commodity taxed (4:155). Hence, the burden of the tax would be carried by the consumers, not by the producers of the commodity. If the commodity taxed was a luxury good, the consumers could not shift the burden on to others. If the commodity taxed was a production good, producers who used the commodity taxed would raise the price of the commodity they produced: consequently, the proportional tax would ultimately fall on the people who consumed the final product (4:144–49). If a tax was imposed on a necessary good, idle consumers would have to carry the burden of the tax by spending more money on necessities. By contrast, the industrious classes could draw back a proportional tax by raising the price of their work.[15] Thus the idle consumers ultimately carried the burden of a proportional tax (4:148).

In contrast to proportional taxes, cumulative taxes were assumed to "affect the possessions, income, and profits of every individual, without putting it in their power to draw them back in any way whatever;

[15] Although Steuart did not think that the price of work was directly determined by the price of necessities, he acknowledged that "the price of the market [for work] may in a great measure be influenced by the price of subsistence" ([1767] 1998, 4:163), and that "the industrious man, who enjoys neither superfluity or idleness, may and can augment the price of his work in proportion" (4:176).

consequently, such taxes tend very little towards enhancing the price of commodities" (4:150). Because people could not shift the burden of cumulative taxes onto others, lower-class people would be harmed most severely by such taxes.

A land tax was the least objectionable tax in the category of cumulative taxes. Although it was an unequal tax (4:215), landlords usually had enough income and property to pay such a tax. The English land tax at this time was imposed on the fixed value of land at a rate of between one shilling and four shillings per pound. Because Steuart thought that a land tax levied in proportion to rent or the value of land would discourage the improvement of land, he proposed that the then current valuation should be fixed for at least a hundred years (4:232–33).[16]

If a land tax was an unobjectionable tax because paid by idle consumers, so was a tax levied on the interest of money. However, Steuart did not think it possible to obtain a revenue through a tax on the interest of money (4:194). In contrast to landlords, moneyed men could avoid a direct tax by sending money to foreign countries. An outflow of money from the common domestic market would constitute a fatal blow to the development of the economy. Cumulative taxes should not be imposed on the profits of the industrious classes, because the greater part of such profits would be invested (4:196).

Thus cumulative taxes would distress the lower classes; impede the improvement of land; lead to the export of money to foreign countries; and reduce capital in the hands of the industrious classes. Consequently,

[16] To Steuart, the tithe proposed by the Marechal de Voauban for France was the worst of all taxes which might be imposed on the income of land. He thought that a tithe imposed in proportion to the total product of land – not to rent – would place an excessive burden on landlords (4:222).

cumulative taxes would check the growth of national wealth. For these reasons, Steuart recommended taxes on consumption in preference to taxes on property (4:182).[17]

Public money obtained through taxes would be spent not only on the salaries of public servants and the interest due to public creditors, but also on giving employment to the industrious classes – particularly manufacturers. It might also be used for bounties on the exportation of manufactures, and to relieve manufacturers should the price of their work fall below the level of subsistence (1:285–86). An increase in demand for manufacturers' work would increase demand for agricultural products and commercial services. At the same time demand for land would increase, and improvement of land be promoted: consequently, the income produced from the rent of land would rise. Demand for money would increase because of the increase in taxes and the expansion of markets: the revenue of the moneyed interest would increase. Thus taxation had a demand-creating effect, which would advance national prosperity.

However, for Steuart, such a result held true only with respect to proportional taxes. He did not think that cumulative taxes would maintain the consumption of those who would have to pay the taxes.[18] Cumulative taxes would fall on every class of society, and in particular distress the

[17] Steuart thought that proportional taxes would form the basis of the taxation system under a limited monarchy, whereas cumulative taxes would form the basis of the system under an absolute monarchy (2:33). In general he preferred proportional taxes, considering them more suitable to the development of a liberal and commercial society.

[18] Steuart argued: "I cannot discover the shadow of a reason, to conclude that taking arbitrarily away from some individuals, a part of their gains by cumulative taxes … must in any respect imply an incitement in the consumers to demand more" (4:211). However, he did not explain clearly why proportional taxes alone would maintain consumption.

industrious classes, who would not be able to afford to maintain their level of consumption. In contrast, proportional taxes would fall on idle consumers alone, who would be able to afford to maintain their level of consumption after paying the taxes – they could pay taxes by using hoarded money, by reducing consumption of imported luxuries, or by converting fixed property into money (4:212). In these cases, government expenditure financed by taxation could create new a demand for the work of manufacturers.

Why did Steuart propose to abolish the land tax and establish a general sales tax? He recognized that "the landlord, *cæteris paribus*, who pays a land tax, as well as his proportion upon his consumption, is more hardly dealt with than the proprietor of the other branch of solid property, the funds, who pays his proportion only of the last" (4:100). A cumulative tax on the income of the moneyed interest would fail to balance the land tax, because moneyed men could avoid such a direct tax by sending their money to foreign countries. The inequality of the land tax violated Steuart's principle that "the load of all impositions may be equally distributed upon every class of a people who enjoys superfluity" (4:100). Thus, although Steuart considered the land tax as the least objectionable of cumulative taxes, he proposed to abolish it in order to maintain the balance between the landlords and the moneyed interest, who together constituted the class of idle consumers. In compensation, he proposed to extend proportional taxes as far as possible, hence his recommendation of a general sales tax.

Thus, following Hume, Steuart rejected Locke's theorem that all taxes would fall on landlords alone: whereas direct taxes would fall on every class of society, indirect taxes would fall on the moneyed interest as well as landlords. He also rejected Locke's proposal for a single tax on rent, recommending its antithesis, namely, a general sales tax. Steuart's theory of tax incidence was founded on a more systematic account of political economy than Hume's. However, his view that indirect taxes would always raise the price of the commodity taxed, whereas direct taxes would never be shifted on to the price, seems arbitrary. It was also arbitrary to assume that idle consumers would maintain their level of consumption when taxes were imposed on their consumption, whereas they would not do so in the case of taxes on property or income. In Steuart's system, because the capital-labor relationship was not the central feature, the incidence of taxation was not considered within the framework of capitalistic reproduction. The attempt to establish a more general theory of tax incidence on the basis of capitalistic reproduction was taken up by Smith.[19]

4. Adam Smith

Before publishing *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776; hereafter *Wealth of Nations*), Smith had discussed the subject of taxation in *Lectures on Jurisprudence*. In contrast to Steuart, Smith thought that taxation was "in reality one of the causes that the progress of opulence has been so slow" (Smith [1962–63 and 1766] 1978, 529).[20] Thus he investigated which taxes might result in "the least loss or

[19] Skinner states that "Steuart's desire to produce a conceptual system whose parts are linked by common principles shows a certain similarity, as to motive, with that later articulated by Adam Smith" (1981, 22). This is also true with respect to their theories of tax incidence.

[20] Note also Smith's complaint about taxation: "That the money prices of commodities have in general been sinking in England for near a century past, and would have sunk much more had they not been artificially kept by improper taxes and excises, and by some unjust monopolies" ([1762–63 and 1766] 1978, 576). Smith did not accept

hindrance to the industry of the people" (6), stating that "[i]n general whatever revenue can be raised most insensibly from the people ought to be preferr'd" (398).

In *Lectures on Jurisprudence*, Smith compared taxes on property and taxes on consumption, stating that "[t]axes upon pos[s]essions are natural[l]y equal, but those upon consumptions natural[l]y unequal, as they are sometimes paid by the merchant, sometimes by the consumer, and sometimes by the importer, who must be repaid it by the consumer" (532). Taxes on property were equal in that they would be proportional to the taxpayer's ability to pay: this meant that taxes on property would not be passed on to other people.[21] Although Smith acknowledged that to tax land alone was unjust, he argued that it would be a breach of liberty to inspect people's stock and money for the purpose of taxation (533–34).

Taxes on consumption – which would be shifted on to the price – were unequal, because they were proportional to people's liberality, not their ability to pay. Nevertheless, taxes on consumption were rarely felt by people who paid them. To Smith, this was advantage in that it constituted the least infringement on liberty. He concluded that "[t]axes upon consumptions are therefore more eligible than taxes upon possessions, as they have not so great a tendency to ruin the circumstances of individuals" (533).[22]

Steuart's assumption that government expenditure financed by taxes and public debt would create an effectual demand.

[21] It must be noted that Smith's notion of equality in taxation was different from that of Hume. In Hume's view a tax was equal when it fell on both landlords and the moneyed interest.

[22] Smith was generally satisfied with the English system of taxation, composed mainly of taxes on consumption. He stated that, "the English are the best financ[i]ers in Europe,

Although, in *Lectures on Jurisprudence*, Smith stated his position with regard to taxes on consumption and taxes on property, it was not until *Wealth of Nations* that he put forward a full theory of tax incidence that was consistent with his political economy. In Chapter 2, Book 5, he assessed various taxes on the basis of the natural-price system.[23] One of his purposes was to examine the Physiocrats' – and Locke's – theorem that all taxes would fall on rent.

> A tax upon the rent of land which varies with every variation of the rent, or which rises and falls according to the improvement or neglect of cultivation, is recommended by that sect of men of letters in France, who call themselves the œconomists, as the most equitable of all taxes. All taxes, they pretend, fall ultimately upon the rent of land, and ought therefore to be imposed equally upon the fund which must finally pay them. That all taxes ought to fall as equally as possible upon the fund which must finally pay them, is certainly true. But without entering into the disagreeable discussion of the metaphysical arguments by which they support their very ingenious theory, it will sufficiently appear from the following review, what are the taxes which fall finally upon the rent of the land, and what are those which fall finally upon some other fund (Smith [1776] 1976, 830).

Smith's natural-price system was composed of three kinds of commodities – raw produce, necessities and luxuries. The actors in his

---

and their taxes are levied with more propriety than those of any country whatever" (534).

[23] Whereas Shoup (1960, 14), Peacock (1975, 565), Lynn ([1976] 1984, 442) and Musgrave (1976, 309) argue that Smith's theory of tax incidence is internally inconsistent, Dome (1998) put forward an interpretation which renders it consistent. The following part of the section follows this interpretation.

system were landlords, capitalists and wage-laborers, who earned rent, profits and wages respectively.[24] Whereas necessities and luxuries were produced by labor alone, the production of raw produce used labor and land. A laborer consumed fixed quantities of raw produce and necessities: let the quantities be called the "wage basket". Consequently, money wages depended on the price of raw produce and of necessities.[25] Thus the natural-price system might be understood to be a system of capitalistic reproduction.[26]

In his system, Smith gave exogenously the rate of profit as well as the wage basket.[27] Meanwhile, rent was assumed to be determined

---

[24] In contrast to Steuart's system, the moneyed interest did not play an important role in Smith's system.

[25] The level of the wage basket depended on the dynamic demand for labor, and the "demand for labour, according as it happens to be either increasing, stationary, or declining; or to require an increasing, stationary, or declining population, regulates the subsistence of the labourer, and determines in what degree it shall be, either liberal, moderate, or scanty" (Smith [1776] 1976, 864). Thus, if the growth rate of the demand for labor was constant, the level of the wage basket would be static.

[26] "The natural-price system" corresponds to what O'Brien calls "the profit-equalization mechanism". He states that the mechanism "is to be found in Classical economists from Smith onwards and for the Classical economists it constituted a major tool in the analysis of tax incidence" (1975, 249). Seligman calls Smith's and Ricardo's theory of tax incidence the "absolute theory", because they assumed the perfect transferability of capital and labour ([1927] 1969, 151).

[27] Regarding the natural rate of profit, Smith thought that it was "every where regulated by the quantity of stock to be employed in proportion to the quantity of the employment, or of the business which must be done by it" ([1776] 1976, 848). This implied that, if the proportion between the aggregate quantity of capital and the aggregate demand for capital was not affected by the price of individual commodities, the natural rate of profit could be treated as a constant.

endogenously: rent was defined as the residual of the price of raw produce after profits and wages at the natural rates were subtracted (160).[28] If the price of raw produce was chosen as the *numéraire*, cost-price equations of raw produce, necessities and luxuries would determine rent, the price of necessities, and the price of luxuries respectively.[29] This natural-price system was consistent with Smith's conclusions with respect to the

[28] Smith also stated: "Rent, it is to be observed, therefore, enters into the composition of the price of commodities in a different way from wages and profit. High or low wages and profit, are the causes of high or low price; high or low rent is the effect of it" (162).

[29] These equations can be presented as follows:

$$1 = (1+t_1)[\{1+(1+t_p)r\}(1+t_w)(b_1+b_2 p_2)l_1+(1+t_R)R], \quad (1)$$

$$p_2 = (1+t_2)\{1+(1+t_p)r\}(1+t_w)(b_1+b_2 p_2)l_2 , \quad (2)$$

$$p_3 = (1+t_3)\{1+(1+t_p)r\}(1+t_w)(b_1+b_2 p_2)l_3 . \quad (3)$$

Equations (1), (2) and (3) are cost-price equations with reference to the sectors of raw produce, necessities, and luxuries respectively. The price of raw produce is chosen as the *numéraire*: p_2 and p_3 show the natural price of necessities and of luxuries respectively. The input coefficient of labor into sector i (i=1,2,3) is denoted by l_i. The natural rate of profit and money wages per unit of labor are shown by r and $b_1+b_2p_2$ respectively: b_1 and b_2 show the wage basket – the quantities of raw produce and necessities consumed by a unit of labor respectively. R denotes the natural rate of rent per unit of raw produce. The rates of tax levied on raw produce, necessities, and luxuries are shown by t_1, t_2, and t_3 respectively: t_p, t_w and t_R denote tax rates imposed on profits, wages and rent respectively. It must be stressed that r – as well as b_1 and b_2 – is given, whereas R is endogenously determined. Whereas p_2 is determined exclusively in equation (2), equations (1) and (3) determine R and p_3 respectively, where p_2 is known. The comparative statics will show how a change in tax rates – t_1, t_2, t_3, t_w, t_p, and t_R – influences endogenous variables – R, p_1, and p_2: the results coincide with Smith's conclusions. For a more precise analysis see Dome 1998.

incidence of various taxes: taxes on raw produce; necessities; luxuries; wages; profits; and rent.[30]

Taxes levied on raw produce "are in reality taxes upon rent; and though they may be originally advanced by the farmer, are finally paid by the landlord" (836–7). In fact, Smith's natural-price system signified that a tax on raw produce would decrease rent, keeping the prices of necessities and luxuries unaltered.

Taxes imposed on the consumption of necessities would raise the wages of labor, and consequently raise the price of all manufactures: rent would decrease. Landlords would have to bear the burden of the tax in the form of a reduction of nominal rent and of a decrease in the real purchasing power of rent. Capitalists would also have to carry the burden of the tax, although the rate of profit would not change: they would be able to buy fewer luxuries because of the rise in the price. Labourers, in contrast, were not influenced by taxes on necessities: for their wages would be raised in proportion to any increase in the price of necessities. Thus, stated Smith, "[t]he middling and superior ranks of people, if they understood their own interest, ought always to oppose all taxes upon the necessities of life, as well as all direct taxes upon the wages of labour" (873). Meanwhile,

[30] In order to concentrate on the effects of taxation on prices and rent, I will not consider the argument that taxation may change the quantity of production of each commodity. It must be noted, however, that Smith admitted the following possibilities: that a tax on luxuries might discourage their production ([1776] 1976, 897); that a tax levied on owners of land and capital might retard improvement of the land and remove capital to foreign countries (927–8); and that a tax on wages might reduce the demand for labour (865). The implication is that taxation might alter the production level of an individual commodity, as well as the aggregate level of production in the long run.

“[t]axes upon luxuries had no tendency to raise the price of any other commodities except that of the commodities taxed” (873).[31]

In contrast to Steuart, Smith showed that some taxes on property and income – as well as all taxes on consumption – would be shifted on to the price. For example, a tax imposed directly on wages had the same effect as a tax on necessities. Smith did not think that a tax on wages would be born by laborers: it would be paid initially by their employers. The employers of laborers, if they were manufacturers, would raise the price of manufactures. If they were farmers, however, they would not raise the price of raw produce; they would pay less rent to the landlords (864–65). Thus the burden of a tax on wages would be incurred by consumers and landlords. Landlords had to pay the tax on wages and the resulting increase in the price of necessities in the production of raw produce: they also had to pay the tax as consumers of necessities and luxuries: capitalists would incur the tax only as consumers of luxuries.

Smith thought that profits were composed of two elements: the interest of the owners of capital; and the compensation of the users of capital for the risk and inconvenience of employing capital. The users of capital could not shift a tax levied on profits to the interest, because the owners of capital would export their capital to foreign countries. Consequently, the users of capital would pass on the tax to the price of manufactures and to rent (847–48). Thus a tax on profits had the same effect as taxes on wages and on necessities: rent would decrease, and the price of necessities and of luxuries would increase.

---

[31] Smith believed that laborers consumed some luxuries as well as raw produce and necessities (871). However, he did not think that a change in the price of luxuries would increase the money wages of labor.

Smith took it for granted that a tax on the rent of land would be paid by landlords alone (828–36). By his definition of rent – the residual of the price of raw produce after subtracting sufficient means to maintain the stock together with the ordinary profits – the landlords could not pass on a tax to the farmers. The tax would decrease rent, and would not change the price of necessities and of luxuries.

Smith's theory of tax incidence can be summarized as follows: (1) a tax on raw produce would decrease rent, keeping the price of necessities and of luxuries unaltered; (2) taxes on necessities, on wages, and on profits would reduce rent, raising the price of necessities and of luxuries; (3) a tax on luxuries would increase their price, keeping nominal rent and the price of necessities unchanged; (4) a tax levied on rent would reduce rent, maintaining the price of necessities and of luxuries. Thus all taxes, except a tax on luxuries, would reduce rent. Landlords had to pay taxes on luxuries as the main consumers of them. As the consumers of luxuries, capitalists also had to carry the burden not only of taxes on luxuries but also of taxes on necessities, wages and profits. However, their consumption of luxuries would be much less than that of landlords. Thus Smith's theory of tax incidence identified landlords as the major taxpayers in a state.

In order to judge the desirability of a tax, Smith put forward four criteria: equality; certainty; convenience; and economy. However, with respect to equality, Smith stated:

> Every tax, it must be observed once for all, which falls finally upon one only of the three sorts of revenue above-mentioned, is necessarily unequal, in so far as it does not affect the other two. In the following examination of different taxes I shall seldom take much futher notice of this sort of inequality, but shall, in most cases, confine my observations

> to that inequality which is occasioned by a particular tax falling unequally even upon that particular sort of private revenue which is affected by it (825).

Smith did not therefore consider equality between classes, but confined his examination as to whether a tax would be levied in proportion to the ability to pay within the context of a specific class.[32]

The English land tax – although meeting the tests certainty, convenience and economy – was unequal, because it was fixed in value per acre. In order for the tax to be equal, it had to be proportionate to rent. However, a proportional land tax would impinge the improvement of land. This problem would be solved if the land tax exempted any cost incurred in improving the land. Thus, following the Physiocrats, Smith suggested a variable land tax, which was "much more proper to be established as a perpetual and unalterable regulation, or as what is called a fundamental law of commonwealth" (834).

With respect to taxes on consumption, a tax on luxuries was more convenient than taxes on necessities and raw produce, because a tax on luxuries would be paid only by the consumers of the commodity taxed (826).[33] Thus, although

---

[32] Winch notes that Smith's disregard of equality between classes "not only sets him apart from the later interest in class distribution associated with the name of David Ricardo, but distances him from much of the earlier oppositional literature concentrating on conflicts between landowning and moneyed interests" (1978, 137).

[33] In a letter to Sir John Sinclair of January 1786, Smith stated: "I dislike all taxes that may affect the necessary expenses of the poor. They, according to circumstances, either oppress the people immediately subject to them, or are repaid with great interest by the rich, *i.e.* by their employers in the advanced wages of labour. Taxes on the *luxuries* of the poor, upon their beer and other spirituous liquors, for example, as long as they are so moderate as not to give much temptation to smuggling, I am so far from disapproving,

Smith was in general satisfied with the existing system of taxation in Britain (899), he suggested to make the land tax proportional to rent and to reduce the base of indirect taxes to luxuries alone.[34]

In *Wealth of Nations*, Smith demonstrated that all taxes would finally fall on rent, except taxes on luxuries which would be paid mainly by landlords. Despite his criticism of the Physiocrats' assumption that agriculture alone was the source of the net prodct, this conclusion did not differ much from their – and Locke's – theorem that all taxes would ultimately fall on the rent of land.[35] Smith's conclusion was drawn from his assumption that in the natural-price system the rate of profit and the wage basket were fixed: this assumption resembled Locke's that merchants and laborers earned revenue at the minimum level.[36] In contrast to his favorable attitude towards consumption taxes found in *Lectures on Jurisprudence*, Smith, in *Wealth of Nations*, suggested a variable land tax in order to equalize the tax. Thus, although Smith produced a consistent system of political economy, his theory of tax incidence might be viewed

---

that I [l]ook upon them as the best of sumptuary laws" (1977, 327). See also Smith [1776] 1976, 888.

[34] This supports Winch's view regarding central elements of Smith's taxation policy: "It was reasonable to ask the rich to pay more than proportionately towards the expenses of the sovereign; and it was equally reasonable for those rents which owed their existence to the security provided by good government to bear a special tax" (1978, 137).

[35] McCulloch thought that Smith's theory of tax incidence was influenced by the Physiocrats' assumption: "Quesnay, and even Adam Smith, regarded the rent of land as a peculiar product, originating in and depending upon the special bounty of nature to the agriculturists. But in this they were entirely wrong" ([1845] 1995, 53).

[36] Rashid (1998, 106) argues that Smith's assumption of a fixed real wage can be attributed to Locke and Decker.

as a step back from Hume and Steuart towards Locke.[37] This resulted from his theory of distribution, and in particular his theory of rent, which would be attacked by Ricardo.

5. Thomas Robert Malthus

Malthus's early references to the incidence of taxation are found in a footnote to the second edition of *An Essay on the Principle of Population* (1803; hereafter *Essay*), Book III, Chapter IX, "Of the Definition of Wealth. Agricultural and Commercial Systems".[38] Here Malthus criticized the Physiocrats' theory of taxation and their proposal for a single tax on rent. He did not think that all taxation would fall upon the landlords, even if the surplus produce of the land was assumed to be the sole fund for taxation. According to Malthus, every man who owned capital in money and received interest "has virtually a mortgage on the land for a certain portion of the surplus produce" (Malthus [1803] 1989, 1:398). Thus Malthus thought that taxes would fall not only on landlords but also on the moneyed interest.[39]

---

[37] Smith did not refer directly to Locke's theory of tax incidence. His references to Locke in *Wealth of Nations* were in the context of a discussion of the theory of money: see Smith [1776] 1976, 60, 353 and 430. In *Lectures on Jurisprudence*, Smith referred to Locke's theory of government: for example, he stated that "Mr. Locke says that when a sovereign raises taxes against the will of the people resistance is lawful, but there is no country besides England where the people have any vote in the matter" ([1762–63 and 1766] 1978, 435); see also 323.

[38] Malthus's theory of taxation has been neglected. The subject is only occasionally mentioned in, for example, James 1979, Petersen 1979 and Hollander 1997. The only detailed study is Dome (1997), on which the current section draws.

[39] In this regard Hollander states: "Malthus maintained the physiocratic notion that *taxation incidence falls solely on the agricultural surplus*, thereby supplementing the

Malthus also thought that in practice "it cannot be doubted that even the profits of stock and the wages of labour, particularly of professional labour, pay some taxes on necessaries, and many on luxuries, for a very considerable time" (1:398). Thus in 1803, in opposition to the Physiocrats' doctrine, Malthus thought that a considerable portion of taxes were in fact paid from non-rent income. Subsequently this footnote was altered twice, and finally eliminated when Malthus rewrote Chapters VII–X of Book III for the fifth edition of the *Essay* (1817).

In the third edition of the *Essay* (1806), Chapter X of Book III, Malthus added a footnote which stated that "[t]axes which affect capitals in trade are almost immediately shifted off on the consumer; but taxes which affect agricultural capital fall, during the current leases, wholly on the farmer" (1:405). Nevertheless, he noted that "the high price of labour or taxes on agricultural capital ultimately fall on the rent" (1:405). This footnote was also removed from the 1817 edition.

In *An Inquiry into the Nature and Progress of Rent* (1815), Malthus demonstrated that taxes on agricultural capital could be shifted to consumers by increasing the price of the product: "every tax, which falls on agricultural capital, either prevents a proposed improvement, or causes it to be purchased at a higher price" (Malthus [1815] 1986, 7:141). However, these effects were only temporary:

> When new leases are let, these taxes are generally thrown off upon the landlord. The farmer so makes his bargain, or ought to make it, as to leave himself, after every expense has been paid, the average profits of agricultural stock in the actual circumstances of the country, whatever

---

notion of surplus as net income *disposable for capital accumulation* …, but insisted on the empirical fact that surplus cannot be identified with land rent" (1997, 361).

> they may be, and in whatever manner they may have been affected by taxes, particularly by so general a one as the property tax. The farmer, therefore, by paying less rent to his landlord on the renewal of his lease, is relieved from any peculiar pressure, and may go on in the common routine of cultivation with the common profits (7:141).

Malthus's opinion with respect to the incidence of taxes levied on agricultural activities might be summarized as follows: in the short run, they would be paid from profits and wages; in the long run, however, they would fall on rent. The last paragraph in this pamphlet clearly reveals Malthus's fundamental position in relation to tax incidence:

> Though it is by no means true, as stated by the Economists, that all taxes fall on the net rents of the landlords, yet it is certainly true that they are more frequently taxed both indirectly as well as directly, and have less power of relieving themselves, than any other order of the state. And as they pay, as they certainly do, many of the taxes which fall on the capital of the farmer and the wages of the labourer, as well as those directly imposed on themselves; they must necessarily feel it in the diminution of that portion of the whole produce, which under other circumstances would have fallen to their share. But the degree in which the different classes of society are affected by taxes, is in itself a copious subject, belonging to general principles of taxation, and deserves a separate inquiry (7:145).

Malthus's theory of tax incidence basically followed that of Smith: most taxes – at least taxes relating to agriculture – would ultimately fall on rent.[40] However, because Malthus attempted to establish the theory of differential rent – demonstrating the concept of marginal land – he had to admit that the landlord of marginal land had no capacity to pay any tax.[41] Ricardo, recognizing this problem, wrote to Malthus in February 1815:

> I differ too, as you know, as to the effects of taxation on the growth of produce. You appear to me not quite consistent in admitting as you unequivocally do that the last portion of land cultivated, yields nothing more than the profits of stock, – no rent, and yet to maintain that taxes on necessaries or on raw produce fall on the landlord and not on the consumer (Ricardo 1951–55, 6:173).

Malthus replied:

---

[40] Malthus taught Political Economy at East India College 1805–34 using Smith's *Wealth of Nations* as a text. Hashimoto has reproduced Malthus's examination papers on Political Economy and on Modern History distributed in 1808, and the Inverarity Manuscript – a transcript of an 1830 lecture taken by Jonathan Duncan Inverarity (one of Malthus's students). The examination papers and Inverarity Manuscript contain several references to Smith's theory of tax incidence, and show that Malthus taught Smith's theory of tax incidence as orthodoxy. See Hashimoto 1988, 25–6 and 84–6.

[41] The following statement shows that Malthus accepted the theory of differential rent: "From the preceding account of the progress of rent, it follows, ... that the price of produce, in every progressive country, must be just about equal to the cost of production on land of the poorest quality actually in use; or to the cost of raising additional produce on old land, which yields only the usual returns of agricultural stock with little or no rent" ([1815] 1986, 7:132). This statement was copied in the first edition of *Principles*. Ricardo complained that Malthus did not definitely say that no rent would be paid for additional capital employed on marginal land (1951–55, 2:167).

> With regard to the tax *being thrown off on* the Landlord I did not certainly express myself as I meant. I intended to alter it before I left Town but forgot it. It is now corrected. I think however there are often cases where taxes are thrown off on the landlord, and I meant to say that those which had not already been thrown off on the consumer would then be thrown off on the landlord (6:176).

Malthus's reply presumably did not satisfy Ricardo, because it did not clearly demonstrate on whom taxes on raw produce and necessities would finally fall – consumers, capitalists, or landlords.

In what way did Malthus alter his opinion concerning tax incidence after receiving the letter from Ricardo? Firstly, as was shown above, in the 1817 edition of the *Essay* he eliminated two footnotes which had appeared in previous editions. Secondly, when he included the 1815 pamphlet on rent as Chapter 3 of *Principles of Political Economy* (1820; hereafter *Principles*), he eliminated the passages discussing taxes on agricultural capital. However the final paragraph (except for the concluding sentence) of the pamphlet – quoted above – was copied as the final paragraph of Section VII, Chapter III of the *Principles*. Thus, by 1820, Malthus had removed most of his early criticism of the Physiocrats' theorem, thereby supporting the position demonstrated in 1815 – i.e. that most taxes would ultimately fall on rent.[42] If Malthus wished to maintain the Smithian theory of tax incidence, he had to render it compatible with his theory of

[42] Malthus's references to Locke are in the first edition of *An Essay on the Principle of Population* ([1798] 1986, 125–26) and in *Definitions in Political Economy* ([1827] 1986, 96): however they are not on the subject of taxation.

rent. At the least, he had to put forward a theory of rent which accommodated the possibility of positive rent on marginal land.[43]

The first edition of Malthus's *Principles* did not contain an independent chapter on taxation. He planned to attach a new chapter on taxation to the second edition: however, this plan was not realized.[44] It is possible that one of the reasons why Malthus did not write a separate chapter on taxation was because he felt trapped by the contradiction between the Smithian theory of tax incidence and the Ricardian theory of rent.[45]

6. David Ricardo

Ricardo devoted almost one-third of the chapters in his *Principles of Political Economy and Taxation* (1817) to the subject of taxation.[46]

---

[43] Malthus might have done so. In his 1815 pamphlet, he argued that whenever "the instruments of production become cheaper, and the difference between the price of produce and expenses of cultivation increases, rents naturally rise" ([1815] 1986, 7:129): this might render the rent of marginal land positive. Hollander notes that "the explicit allowance for diminishing returns in 1814/15 does not undermine the physiocratic bias, since even marginal land is said to yield rent" (1997, 407).

[44] Pullen points out the alterations between the first edition, Manuscript Revision, and second edition with respect to taxation and national debt. He shows that Malthus intended to write an independent chapter on taxation for the second edition of *Principles*. See Malthus [1820] 1989, 2:430–31.

[45] There was another problem: following Steuart, Malthus thought government expenditure financed by taxation and public debt would create an effectual demand; meanwhile, he criticized the poor rate because it was unfavorable to the balance between population and food production. For a comprehensive discussion of why Malthus did not write an independent chapter on taxation see Dome 1997.

[46] Ricardo's theory of tax incidence has, for example, been examined by Seligman [1927] 1969, Shoup 1960, and Eagly 1983. This section is based on the model put forward in Dome 1992.

Following Smith, Ricardo discussed the incidence of taxes on the basis of the natural-price system with respect to three kinds of commodities: raw produce; necessities; and luxuries. However, he thought that Smith's theory of tax incidence was undermined by a misleading theory of rent. He stated:

> In 1815, Mr. Malthus, in his "Inquiry into the Nature and Progress of Rent", and a Fellow of University College, Oxford, in his "Essay on the Application of Capital to Land", presented to the world, nearly at the same moment, the true doctrine of rent; without a knowledge of which, it is impossible to understand the effect of the progress of wealth on profits and wages, or to trace satisfactorily the influence of taxation on different classes of the community; particularly when the commodities taxed are the productions immediately derived from the surface of the earth. Adam Smith, and the other able writers to whom I have alluded, not having viewed correctly the principles of rent, have, it appears to me, overlooked many important truths, which can only be discovered after the subject of rent is thoroughly understood (Ricardo [1817] 1951–55, 5–6).

Ricardo's new theory of rent stated that the price of raw produce was determined by the conditions of production in marginal land in which no rent was paid to the landlord. On the basis of this differential-rent theory, Ricardo banished rent from the cost-price equation of raw produce. He was also able to make the natural rate of profit an endogenous variable: in Smith's system it was given exogenously. In the chapters on taxation, Ricardo was subject to the Malthusian principle of population, assuming the wage basket fixed at the subsistence level.[47] Thus, if either the price of

[47] With respect to the fixed-wages assumption, Hollander states that although "Ricardo's

raw produce, necessities or luxuries was chosen as the *numéraire*, the system would determine the rate of profit and the other prices in terms of the *numéraire*. This system consistently produced Ricardo's main conclusions concerning the incidence of different taxes.[48]

Ricardo thought that a tax on raw produce, as well as a tax on necessities, would raise the price of the commodity taxed by the amount of the tax (159–60 and 243). Such a tax would also increase money wages, and consequently reduce the rate of profit in all industries. This happened because raw produce and necessities were consumed by laborers and used for production, and because the wage basket was fixed. In order for Ricardo's conclusion to be true, however, it had to be assumed that the

---

wage taxation theorems … can be interpreted as applying to the case where the subsistence wage rules" (1997, 383), "the constancy of the wage rate is nothing more than a first approximation, for purposes of analytical simplicity, to be relaxed when appropriate" (310). Thus, the "theorems on taxation, in short, do not depend on the assumption that the 'natural' or subsistence wage applies" (310). He shows that Ricardo's theory of wages fundamentally followed Smith's (387).

[48] Ricardo's natural-price system may be presented as follows:

$$1 = (1+t_1)\{1+(1+t_p)r\}\{a_{11}+a_{21}p_2+(1+t_w)(b_1+b_2p_2)l_1\}, \tag{4}$$

$$p_2 = (1+t_2)\{1+(1+t_p)r\}\{a_{12}+a_{22}p_2+(1+t_w)(b_1+b_2p_2)l_2\}, \tag{5}$$

$$p_3 = (1+t_3)\{1+(1+t_p)r\}\{a_{13}+a_{23}p_2+(1+t_w)(b_1+b_2p_2)l_3\}. \tag{6}$$

Equations (4), (5) and (6) are cost-price equations for the sectors of raw produce, necessities, and luxuries respectively. The notation follows that in equations (1) – (3). In contrast to Smith's system, Ricardo's system contains a_{ij} – input coefficients of commodity i (i = 1, 2, 3) into sector j (j =1, 2, 3): this reveals that Ricardo considered the input-output relationship more explicitly than Smith. The system determines r, p_2 and p_3, the other variables being given exogenously. The results derived from this system will – except for some minor points – coincide with Ricardo's own conclusions concerning tax incidence. For more precise analyses of Ricardo's theory of tax incidence see Dome 1992 and Erreygers 1995.

ratio of the input of the commodity taxed to the total production cost was equal between all sectors: in this case the price of luxuries would not be affected by a tax on raw produce or necessities. Meanwhile, a tax on luxuries would not reduce the profit rate: it would simply increase the price of the commodity taxed by the amount of the tax (243–4). This result depended on the assumptions that luxuries were not consumed by laborers, and were not used in the production of any commodity.

A tax imposed on profits in all industries would not alter the price of commodities, although each capitalist would attempt to shift the burden of the tax by raising the price of his commodity. The ultimate incidence of such a tax would be carried by all capitalists in the economy (205–206). A tax levied on profits in a specific sector would have the same effect as a tax on the commodity produced by that sector (205).

Because Ricardo accepted the Malthusian principle of population, he did not think that a tax on wages would be paid by laborers. Were a tax imposed on wages, the laboring population would decrease and the price of labor would rise. An increase in money wages would bring about a reduction in the rate of profit through the trade-off between wages and profits. As a result, capitalists, and not laborers, would have to pay the tax on wages (205). Ricardo concluded that a tax on wages would have the same effect as a tax on the profits of all sectors. In order for this conclusion to be true, the capital-labor ratio had to be equal between industries. Ricardo assumed that this would be the case, though he recognized that it did not always hold good (240).

A tax imposed in proportion to the rent of land would fall on landlords. Ricardo derived this conclusion from his theory of differential rent. Landlords could not pass on the tax to capitalists by raising their rent, because they could charge to capitalists only the difference in productivity between their lands and the marginal land where no rent was paid (173). However, if a land tax was fixed per acre, it would be in reality a tax imposed on profits in the sector of raw produce. Consequently, it would produce the same effect as a tax on raw produce:[49] the price of raw produce would become relatively high, and the rate of profit in all industries would fall.[50]

Ricardo's conclusion with respect to the incidence of taxes can summarized as follows: (1) a tax on raw produce (necessities) would decrease the rate of profit, raising the price of raw produce (necessities); (2) taxes on profits and on wages would reduce the rate of profit, keeping all prices unchanged; (3) a tax on luxuries would increase their price, keeping nominal rent and the prices of raw produce and necessities unchanged; (4) a land tax levied in proportion to rent would reduce rent, maintaining the prices of necessities and luxuries; (5) a land tax fixed in value per acre would produce the same effect as a tax on raw produce. Consequently, taxes on raw produce, necessities, profits, wages and a fixed land tax would fall on profits, not rent. This conclusion was attributable to the price system in which any change which increased the production cost of raw produce or necessities would reduce the uniform rate of profit. Landlords would pay a land tax only if it was imposed in proportion to rent; otherwise they would only incur taxes on luxuries as consumers.

---

[49] This conclusion was a revival of Petty's theorem that a land tax would be shifted on to the price of agricultural produce.

[50] Ricardo argued that a land tax proportionate to the productivity of land, tithes and a tax on raw produce would not change the money rent but instead reduce the corn rent, and that a fixed land tax and a tax on profits in the raw produce sector would increase the money rent, leaving the corn rent intact ([1817] 1951–55, 1:157–58, 177–78 and 211–212).

Consequently, in Ricardo's view, the main taxpayers were capitalists. Thus, in contrast to Smith, Ricardo succeeded in devising a system of political economy which produced a consistent theory of tax incidence that escaped Locke's theorem.

What kind of taxation system did Ricardo aim at? When discussing an income tax in a pamphlet entitled *Reply to Mr. Bosanquet's Practical Observation on the Report of the Bullion Committee* (1811), he argued:

> To me, however, it appears convincingly certain, that neither the income tax, the assessed taxes, nor many others, do in the least affect the prices of commodities.
>
> Unfortunate indeed would be the situation of the consumer, if he had to pay additional prices for those commodities which were necessary to his comfort, after his means of purchasing them had been by the tax considerably abridged.
>
> The income tax, were it fairly imposed, would leave every member of the community in the same relative situation in which it found him. Each man's expences must be diminished to the amount of his tax (Ricardo [1811] 1951–55, 3:241).

Ricardo thought that a tax had (1) to keep prices unchanged; (2) be paid from consumption; and (3) leave the distribution of income unchanged.[51] The first criterion represented the "principle of price-neutrality". The second criterion might be called the "minimization principle", which reflected Ricardo's strong concern to minimize impediments to capital accumulation. The third criterion, which might be called the "principle of

[51] Shoup (1960, 249) shows that Ricardo's concern lay in the economic consequences of taxes with respect to distribution of income, capital accumulation, and price level.

distribution-neutrality", reflected Ricardo's definition of equality in taxation.

In *Principles of Political Economy and Taxation*, Ricardo examined various taxes in relation to the principles of price-neutrality, minimization and distribution-neutrality. Taxes on raw produce, necessities and luxuries violated the principle of price-neutrality, because they would increase the price of the commodity taxed. By contrast, direct taxes did not violate the principle of price-neutrality. No tax on rent or profits – and conditionally, wages – would change the natural price.

From the viewpoint of the minimization principle, taxes on raw produce, necessities, wages and profits, as well as a fixed land tax, were undesirable. They would fall on profits, checking capital accumulation.[52] In contrast, a tax on luxuries would not check capital accumulation, because it would be paid from unproductive consumption. Ricardo discerned, however, the defect of such a tax; "there is no certainty as to the amount of the tax" (Ricardo [1817] 1951–55, 241), because "from taxes on expenditure a miser may escape" (167). With respect to certainty – Smith's second maxim of taxation – Ricardo acknowledged the advantage of direct taxes.

A tax levied in proportion to the rent of land would also damage capital accumulation less than other direct taxes, because it would fall on rent, not profits. However, Ricardo strongly opposed a special tax on rent, because it violated the security of property to which Ricardo gave the first priority:

---

[52] Ricardo attached importance to this defect of taxation: "There are no taxes which have not a tendency to impede accumulation, because there are none which may not be considered as checking production, and as causing the same effects as a bad soil or climate, a diminution of skill or industry, a worse distribution of labour, or the loss of some useful machinery" ([1817] 1951–55, 1:152n).

> [I]t would surely be very unjust, to tax exclusively the revenue of any particular class of a community. The burdens of the State should be borne by all in proportion to their means ... Rent often belongs to those who, after many years of toil, have realised their gains, and expended their fortunes in the purchase of land or houses; and it certainly would be an infringement of that principle which should ever be held sacred, the security of property, to subject it to unequal taxation (204).

Ricardo's system implied that no tax would realize the principle of distribution-neutrality, because all taxes, except taxes on luxuries and a proportional tax on rent, would fall on profits. Ricardo thought that taxes on rents of land and dividends of stock, combined with a tax on raw produce, necessities, wages or profits, might be a substitute for a general income tax (161). However, even such a combination of taxes would fail to collect money from laborers. Following Smith, Ricardo acknowledged that "the labouring classes cannot materially contribute to the burdens of the State" (235).

Thus Ricardo's theory of taxation led to the conclusion that no system of taxation could satisfy simultaneously the principles of price-neutrality, minimization and distribution-neutrality. In fact, Ricardo put forward no positive suggestions with respect to a new taxation system for introduction into Britain.[53] His attitude towards all taxes was simply negative: he

[53] In an article for the *Encyclopædia Britannica* entitled "Funding System" (1820), Ricardo proposed a capital levy in order to redeem the existing national debt. However, he proposed it only as a one-off tax, preferring it to the refunding of the national debt or to the reservation of the sinking fund. Thus, Ricardo's advocacy of the capital levy did not contradict his fundamental position that no tax could be recommended as the permanent basis for a system of revenue.

objected to the revival of an income tax after the Napoleonic Wars, at the same time as approving a reduction in the existing taxes. In Parliamentary session of 1822, he voted for every proposal of tax reduction, sweeping away the misapprehension that he was an advocate for taxation (Ricardo, 1951–55, 5:154). To Ricardo, "[t]axation under every form presents but a choice of evils" ([1817] 1951–55, 167). Despite the fact that Ricardo succeeded in escaping from Locke's theorem, he did not propose a system of taxation which would replace Locke's single-tax scheme.[54]

7. Conclusion: After Ricardo

Ricardo's system of political economy demonstrated that the rent of land would continue to increase with economic growth, whereas the rate of profit would continuously fall: consequently, economic growth would slow down and finally stop. Thus the pecuniary interests of landlords appeared to be at odds with social welfare.[55] His theory of tax incidence demonstrated that taxes, except for a proportional tax on rent and taxes on luxuries, would finally fall on profits – the main resource for economic growth. Ricardo also showed that taxes on luxuries were uncertain because they were easily evaded by non-consumption. Thus, although Ricardo himself never accepted this, his political economy and theory of tax incidence implied that a special tax might be imposed on rent in order to

[54] Ricardo did not refer to Locke except on the subject of money. See, for example, Ricardo [1810] 1951–55, 65 and 81; [1811] 1951–55, 202; and [1817] 1951–55, 369.

[55] Blaug states that "Ricardo's system suggested a "natural" divergence of interests between the classes of society: the prospects of capitalists and laborers depended upon the demise of the landed classes. (That this was an erroneous interpretation of Ricardo's doctrine is beside the point.) A theory so fraught with disharmonious implications, Ricardo's critics asserted, could no longer be sanctioned" (1958, 149).

reconcile the interests of landlords with social welfare, as well as to prevent the slowdown of economic growth.

John Ramsey McCulloch – looked upon as the most faithful disciple of Ricardo – recognized the danger which Ricardian political economy held. He "did his best to minimize any suggestion of a natural or even an artificial conflict of interests" (Blaug 1958, 223).[56] McCulloch strongly objected to a tax levied in proportion to rent. He thought that it would be impossible to distinguish a natural increase in rent from an increase resulting from improvement of the land. Consequently, a proportional land tax would hinder the growth of productivity in agriculture. For this reason, he insisted on maintaining the existing system of a fixed land tax per acre, despite the fact that, according to Ricardo's theory of tax incidence, such a tax would fall on profits, thereby checking capital accumulation. To McCulloch, a special tax on land – whether it was proportional to rent or fixed per acre – violated his maxim of equality: a direct tax had to be proportioned to the means of all classes.[57] He concluded that, "[i]t is obvious, therefore, that all projects for laying peculiar burdens on the land, however varnished or disguised, should no longer be looked upon as projects for the imposition of equitable taxes, but for the confiscation of a portion of the property of the landlords!" (McCulloch [1845] 1995, 60). McCulloch preferred a system of indirect taxes which was light but widely based.[58]

---

[56] For a comprehensive examination of McCulloch's theory of public finance see O'Brien 1970, 229–70.

[57] McCulloch also criticized the Physiocrats' proposal of a single tax on rent, showing that the total value of annual rent would not suffice for annual government expenditure ([1845] 1995, 53–54).

[58] McCulloch made several amendments to Ricardo's theory of tax incidence. For

Despite McCulloch's warning, James Mill – another supporter of Ricardian political economy – took the opposite view. In *Elements of Political Economy* (1821), he stated that there was "a peculiar advantage in reserving the rent of land as a fund for supplying the exigencies of the state" (Mill [1844] 1992, 249).[59] He thought that, because land had been converted into private property without a specific contract to make the rent contribute to public expense, it would be unjust to impose a special tax on the present rent. However, Ricardo's theory of differential rent indicated that rent would continue to increase as long as the economy grew. Mill did not think it unjust to regard the natural increase in rent as a new fund for meeting public expense. Thus he proposed to impose a special tax on any future increase in the rent of land.[60]

---

example, he showed that an indirect tax would raise the price of the commodities taxed by the amount of the tax only if demand for the commodity was inelastic and the import of the commodity was prohibited (80). Taxes on wages or necessities would not raise wages if laborers worked at piece rates: they would work harder to pay the tax (98). O'Brien (1970, 229) argues that McCulloch's framework for the analysis of taxation was fundamentally Smithian, and that he came in time to abandon most of Ricardo's conclusions concerning taxation.

[59][59] James Mill criticized McCulloch for identifying rents of land with profits of capital as a subject for taxation: "I utterly disallow the parallelism of the case of capital, which Mr. M'Culloch has adduced; as if because increased profits of stock ought not to be exclusively taxed, therefore the rent, which accrues in the manner above supposed, could not be justly appropriated to the service of the state. Nobody is more aware of the fundamental differences between profits of stock and rent of land than Mr. M'Culloch: it is, therefore, the more surprising that he should have founded his argument on an agreement between them, which does not exist" ([1844] 1992, 254).

[60] Ricardo did not agree with Mill's proposal for a special tax on rent. In his notes on Mill's *Elements of Political Economy*, Ricardo commented: "An objection may be made against this tax that it would tend to arrest improvement or would finally in some cases

James Mill's proposal for a special tax on rent was adopted and extended by his son, John Stuart Mill.[61] Because it would be difficult and complicated in practice to assess the natural increase in an individual rent as distinguished from an increase ascribed to the landlord's improvement of the land, the younger Mill resorted to a general measure. His plan was to modify the land tax per acre, subject to the average market price of land, which would be re-estimated periodically. The land tax would increase as the value of land increased: because the average price of land included the capitalized value of future rent, the land tax would increase in proportion to the expected increase in rent. Thus Mill revived Smith's idea of a variable land tax. The variable land tax – together with a prohibition against the conversion of public or corporate lands into private property – was one of Mill's main proposals to the Land Tenure Association which he chaired in the 1870s.[62] Landlords who objected to this plan could sell their land at the current price when the new tax was introduced. Thus Mill proposed a new land tax in order to increase the amount of land held by the state.[63]

Once a special tax on the rent of land had been justified, it would be arbitrary to tax only the future increase in rent: past increase might also be

---

fall on the consumer of raw produce; I mean the case of a landlord expending a great deal of capital on his land for which he receives a return not under the name of profit, but under the name of rent. … On the whole I should greatly prefer the present system of taxation" (1951–55, 9:132)

[61] For a comprehensive analysis of Mill's tax-reform plan see, for example, Hollander 1985, 858–79 and Ekelund and Walker 1996.

[62] For Mill's reports on the land tax to the Land Tenure Reform Association see, for example, Mill 1963–91, 5:687–95; 25:1235–43; and 29:416–31.

[63] Blaug states that "James Mill and John Stuart Mill … made the most of the image of the parasitical landlord as a justification for land reform proposals" (1958, 224).

a subject for taxation. Consequently, a special tax might be imposed on all rents past, present and future. In fact, Henry George – the founder of the single-tax movement in the United States – moved in this direction, finally advocating the confiscation of all pure rents by a single tax. In *Progress and Poverty* (1879), he criticized British writers for not pushing Ricardian political economy to its logical conclusion.

> In fact, that rent should, both on grounds of expediency and justice, be the peculiar subject of taxation, is involved in the accepted doctrine of rent, and may be found in embryo in the works of all economists who have accepted the law of Ricardo. That these principles have not been pushed to their necessary conclusions, as I have pushed them, evidently arises from the indisposition to endanger or offend the enormous interest involved in private ownership in land, and from the false theories in regard to wages and the cause of poverty which have dominated economic thought (George [1906] 1973, 421).

Thus the story has returned to its starting point, namely, Locke's single-tax scheme.[64] Locke proposed a single tax on rent based on the theorem that all taxes would ultimately fall on rent. Hume attacked Locke's theorem and proposal. Although Hume recommended taxes on luxuries because they were equal taxes, he failed to develop a system of political economy which would justify his recommendation. Steuart put forward a

---

[64] Petrella credits the philosophical foundation of George's single-tax scheme to Locke: "Just as his concept of *private good* was grounded in Locke's "labor effort" theory of property, George's concept of land as *public good* was a 19th century extension of Locke's conditions governing the use of land prior to the origin of money and the emergence of exchange economies" (1988, 246). For the similarities and differences between George's and the Physiocrats' single-tax scheme see Buurman 1991.

general sales tax based on his system of political economy. However, his theory of tax incidence contained a number of *ad hoc* assumptions, in particular with respect to the incidence of direct taxes. His political economy was also incomplete in that it did not clearly explain the capitalistic reproduction. Smith developed a more complete version of political economy in *Wealth of Nations*. However, his theory of tax incidence led to a conclusion – that all taxes except taxes on luxuries would fall on rent – which did not differ much from Locke's theorem: his suggestion of a variable land tax was a step back towards Locke's proposal. Malthus was unable clearly to expound his own theory of tax incidence, because he was trapped by a contradiction between the Smithian theory of tax incidence and the Ricardian theory of rent.

By establishing a system of political economy on the basis of the differential-rent theory, Ricardo succeeded in escaping from Locke's theorem. He demonstrated that all taxes – except a tax imposed in proportion to rent and taxes on luxuries – would fall on profits, not rent. However, he did not recommend any system of taxation because no tax could satisfy simultaneously the principles of price-neutrality, minimization and distribution-neutrality. Contrary to Ricardo's intention, his theory of tax incidence suggested the legitimacy of a special tax on the rent of land. Whereas McCulloch did his best to reject a special tax, the Mills proposed to tax the natural increase in rent. Henry George argued that the logical conclusion of Ricardian political economy was a single tax.

Locke's theorem was successfully overturned by the establishment of Ricardian political economy. However, because of its success, Ricardian political economy opened the route back to Locke's proposal, that is a single tax on the rent of land. Thus the history of the doctrine of tax incidence shows that the development of British political economy in the second half of the eighteenth and the early nineteenth centuries was characterized by an attempt to escape from Locke, an attempt which was destined to meet with failure. Although, in relation to the subject of tax incidence, British political economists – with the exception of Hume – did not explicitly refer to him, they were unknowingly connected together in an attempt to resolve a problem posited by Locke.

References

Akhtar, M. A. 1979. An Analytical Outline of Sir James Steuart's Macroeconomic Model. *Oxford Economic Papers* 31:283–302.

Blaug, M. 1958. *Ricardian Economics*. New Haven: Yale University Press.

Brewer, A. 1997. An Eighteenth-century View of Economic Development: Hume and Steuart. *European Journal of the History of Economic Thought* 4:1–22.

Buurman, G. B. 1991. A Comparison of the Single Tax Proposals of Henry George and the Physiocrats. *History of Political Economy* 23:481–96.

Coleman, W. O. 1995. *Rationalism and Anti-rationalism in the Origins of Economics: The Philosophical Roots of 18th Century Economic Thought*. Aldershot: Edward Elgar.

Davenant, C. 1695. *An Essay upon Ways and Means of Supplying the War*. London.

Davenant, C. [1698] 1967. *Discourses on the Public Revenues, and on Trade, Part I.* Reprinted in Horsefield ed., *The Political and Commercial Works of that Celebrated Writer Charles Davenant*. 5 vols. Farnborough: Gregg Press, 1:127–49.

Dome, T. 1992. Ricardo's Theory of Tax Incidence: A Sraffian Re-interpretation. *Cambridge Journal of Economics* 16:43–53.

Dome, T. 1997. Malthus on Taxation and National Debt. *History of Political Economy* 29:275–94.

Dome, T. 1998. Adam Smith's Theory of Tax Incidence: An Interpretation of His Natural-price System. *Cambridge Journal of Economics* 22:79–89.

Doujon, R. 1994. Steuart's Position on Economic Progress. *European Journal of the History of Economic Thought* 1:495–518.

Dunn, J. 1983. From Applied Theology to Social Analysis: The Break between John Locke and the Scottish Enlightenment. In *Wealth and Virtue*, edited by I. Hont and M. Ignatieff, Cambridge: Cambridge University Press, 119–35.

Eagly, R. V. 1983. Tax Incidence in Ricardian Analysis. *Public Finance* 38: 217–31.

Ekelund, R. B. and W. M. Walker. 1996. J. S. Mill on the Income Tax Exemption and Inheritance Taxes: The Evidence Reconsidered. *History of Political Economy* 28:559–81.

Eltis, W. 1986. Sir James Steuart's Corporate State. In *Ideas in Economics*, edited by R. D. C. Black, London: Macmillan, 43–73.

Eltis, W. 1995. John Locke, the Quantity Theory of Money and the Establishment of a Sound Currency. In *Quantity Theory of Money from Locke to Keynes and Friedman*, edited by M. Blaug et al., Cheltenham: Edward Elgar, 4–26.

Erreygers, G. 1995. Ricardo's Theory of Tax Incidence: A Comment. *Cambridge Journal of Economics* 19:819–25.

George, H. [1906] 1973. *Progress and Poverty*. New York: AMS Press.

Hashimoto, H. 1988. Malthus and the Wealth of Nations: His Examination Papers & Inverarity Manuscript. *KSU Economics and Business Review* 15:19–95.

Hollander, S. 1979. *The Economics of David Ricardo*. Toronto: University of Toronto Press.

Hollander, S. 1985. *The Economics of John Stuart Mill*. 2 vols. Oxford: Basil Blackwell.

Hollander, S. 1997. *The Economics of Thomas Robert Malthus*. Toronto: University of Toronto Press.

Hume, D. [1752] 1955. *Political Discourses*. Reprinted in E. Rotwein ed., *David Hume: Writings on Economics*. London: Thomas Nelson, 1–184.

James. P. 1979. *Population Malthus: His Life and Times*. London, Boston and Henley: Routledge & Kegan Paul.

Kennedy, W. [1913] 1970. *English Taxation 1640-1799*. New York: Kelley.

Leigh, A. H. 1974. John Locke and the Quantity Theory of Money. *History of Political Economy* 6:200–19.

Locke, J. [1691] 1991. *Some Consideration of the Consequences of the Lowering of Interest, and Raising the Value of Money*. Reprinted in P. H. Kelly ed., *Locke on Money*. 2 vols. Oxford: Clarendon Press, 1:203–342.

Lynn, A. D. [1976] 1984. Adam Smith's Fiscal Ideas: An Eclectic Revisited. *National Tax Journal* 29:369–78. Reprinted in J. C. Wood ed., *Adam Smith: Critical Assessments*, Beckenham: Croom Helm, 3:436–49.

McCulloch, J. R. [1845] 1995. *A Treatise on the Principles and Practical Influence of Taxation*, edited by D. P. O'Brien. London: Routledge/Thoemmes Press.

Malthus, T. R. [1798] 1986. *An Essay on the Principle of Population*, 1st ed. In vol.1 of Malthus 1986.

Malthus, T. R. [1803] 1989. *An Essay on the Principle of Population*, 2nd ed., edited by P. James. 2 vols. Cambridge: Cambridge University Press.

Malthus T. R. [1815] 1986. *An Inquiry into the Nature and Progress of Rent*. In Malthus 1986, 7:115–145.

Malthus T. R. [1820] 1989. *Principles of Political Economy*, edited by J. Pullen. 2 vols. Cambridge: Cambridge University Press.

Malthus, T. R. [1827] 1986. *Definitions in Political Economy*. In vol.8 of Malthus 1986.

Malthus, T. R. 1986. *The Works of Thomas Robert Malthus*. edited by E. Wrigley and D. Souden. 8 vols. London: William Pickering.

Meek, R. L. 1958. The Economics of Control Prefigured by Sir James Steuart. *Science and Society* 22:289–305.

Mill, J. [1844] 1992. *Elements of Political Economy*, 3rd ed. London: Routledge and Tokyo: Kinokuniya.

Mill, J. S. 1963–91. *Collected Works of John Stuart Mill*, edited by J. Robson et al. 33 vols. Toronto: University of Toronto Press.

Mitchell, N. J. 1986. John Locke and the Rise of Capitalism. *History of Political Economy* 18:291–305.

Musgrave, R. A. 1959. *The Theory of Public Finance*. New York: McGraw-Hill.

Musgrave, R. A. 1976. Adam Smith on Public Finance and Distribution. In *The Market and the State: Essays in Honour of Adam Smith*, edited by T. Wilson and A. S. Skinner. Oxford: Clarendon Press, 296–329.

Musgrave, R. A. 1985. A Brief History of Fiscal Doctrine. In *Handbook of Public Economics*, edited by A. J. Auerbach and M. Feldstein, 2 vol. Amsterdam: North-Holland.

O'Brien, D. P. 1970. *J. R. McCulloch*. London: George Allen & Unwin.

O'Brien, D. P. 1975. *The Classical Economists*. Oxford: Oxford University Press.

Peacock, A. 1975. The Treatment of the Principles of Public Finance in *The Wealth of Nations*. In *Essays on Adam Smith*, edited by A. S. Skinner and T. Wilson. Oxford: Clarendon Press, 552–67.

Perelman, M. 1983. Classical Political Economy and Primitive Accumulation: the Case of Smith and Steuart. *History of Political Economy* 15:451–94.

Petersen, W. 1979. *Malthus*. Cambridge: Harvard University Press.

Petrella, F. 1988. Henry George and the Classical Scientific Research Program: The Economics of Republican Millennialism. *American Journal of Economics and Sociology* 47:239–56.

Petty, W. [1662] 1997. *A Treatise of Taxes and Contributions*. Reprinted in C. H. Hull ed., *The Economic Writings of Sir William Petty*. 8 vols. London: Routledge/Thoemmes Press, 1:1–97.

Rashid, S. 1998. *The Myth of Adam Smith*. Cheltenham: Edward Elgar.

Ricardo, D. [1810] 1951–55. *The High Price of Bullion*. In Ricardo 1951–55, 3:47–127.

Ricardo, D. [1811] 1951–55. *Reply to Mr. Bosanquet's Practical Observation on the Report of the Bullion Committee*. In Ricardo 1951–55, 3:155–256.

Ricardo, D. [1817] 1951–55. *Principles of Political Economy and Taxation*. In vol.1 of Ricardo 1951–55.

Ricardo, D. [1820] 1951–55. Funding System. In Ricardo 1951–55, 4:143–200.

Ricardo, D. 1951–55. *The Works and Correspondence of David Ricardo*, edited by P. Sraffa. 10 vols. Cambridge: Cambridge University Press.

Seligman, E. R. A. [1927] 1969. *The Shifting and Incidence of Taxation*, 5th ed. New York: Columbia University Press.

Shoup, C. S. 1960. *Ricardo on Taxation*. New York: Columbia University Press.

Skinner, A. S. 1981. Sir James Steuart: Author of a System. *Scottish Journal of Political Economy* 28:20–42.

Skinner, A. S. 1988. Sir James Steuart: Theory and Policy. In *Philosophy and Science in the Scottish Enlightenment*, edited by P. Jones, Edinburgh: John Donald Publishers, 117–44.

Smith, A. [1762–3 and 1766] 1978. *Lectures on Jurisprudence*, edited by R. L. Meek, D. D. Raphael, and P. G. Stein. Oxford: Oxford University Press.

Smith, A. [1776] 1976. *An Inquiry into the Nature and Causes of the Wealth of Nations*, edited by H. A. Campbell, A. S. Skinner and B. Todd. 2 vols. Oxford: Oxford University Press.

Smith, A. 1977. *The Correspondence of Adam Smith*, edited by E. C. Mossner and I. S. Ross. Oxford: Oxford University Press.

Steuart, J. [1767] 1998. *An Inquiry into the Principles of Political Oeconomy*, edited by A. S. Skinner, N. Kobayashi and H. Mizuta, 4 vols. London: Pickering & Chatto.

Vaughn, K. I. 1980. *John Locke: Economist and Social Scientist*. Chicago: University of Chicago Press.

Winch, D. 1978. *Adam Smith's Politics*. Cambridge: Cambridge University Press.

Yang, H. S. 1994. The Political Economy of Trade and Growth: An Analytical Interpretation of Sir James Steuart's Inquiry. Aldershot: Edward Elgar.

Tax economists, as exemplified by the Mirrlees review, emphasize that the tax and benefits system must be analysed as a whole. It is quite possible to say that corporation taxes have some incidence on workers, but that they come out ahead if the pattern of spending is sufficiently in their favour. It is also possible that despite corporation taxes having some incidence on workers, other ways of raising the required revenues would be worse for workers. David is right to think that tax incidence is only part of the story, wrong to think that economistâ€™s concern with real people is misguided, and Locke proposed a radical conception of political philosophy deduced from the principle of self-ownership and the corollary right to own property, which in turn is based on his famous claim that a man earns ownership over a resource when he mixes his labour with it.Â After his death, his mature political philosophy leant support to the British Whig party and its principles, to the Age of Enlightenment, and to the development of the separation of the State and Church in the American Constitution as well as to the rise of human rights theories in the Twentieth Century. 65 Although inheritance taxes were taxes on capital, Mill cleared this problem for the following three reasons: (1) Smith's maxim that every tax is paid from income not from capital is not true; (2) since the tax revenue will be partly used to redeem national debt, taxation on inheritances is merely a transfer of capital from taxpayers to creditors; (3) the reduction.Â However, between chapters and sections which explained the Ricardian theory of tax incidence, he inserted his own original ideas concerning general income tax, inheritance taxes, and the land tax. Tax incidence, the distribution of a particular taxâ€™s economic burden among the affected parties. It measures the true cost of a tax levied by the government in terms of lost utility or welfare. The initial incidence (also called statutory incidence) of a tax is the initial distribution among.Â The initial incidence (also called statutory incidence) of a tax is the initial distribution among taxpayers of a legal obligation to remit tax receipts to the government. The final incidence (also called economic incidence) of a tax is the final burden of that particular tax on the distribution of economic welfare in society. The difference between the initial incidence and the final incidence is called tax shifting. Read More on This Topic. taxation: Shifting and incidence.