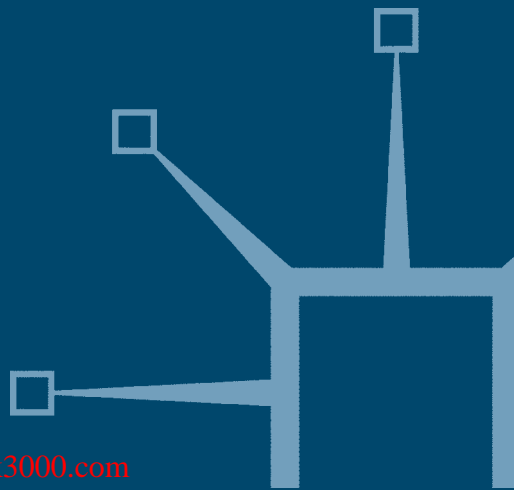


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David Ricardo on Public Debt

Nancy Churchman



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Nancy Churchman

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*for my parents
Anne and Ken Churchman
with love*

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Contents

<i>List of Tables</i>	xi
<i>Acknowledgements</i>	xiii
1 Introduction	1
1.1 Introduction	1
1.2 Ricardo's allocation theory	2
1.3 Ricardo's growth theory	7
1.4 Ricardo's method	10
1.5 The source of differing interpretations	12
1.6 Plan of work	17
2 Public Debt and the Economics of David Ricardo	21
2.1 Introduction	21
2.2 Public debt and resource allocation	22
2.3 Public debt and economic growth	32
2.4 Optimal taxation	43
2.5 Conclusion	46
3 Public Debt Policy and Public Extravagance: the Ricardo–Malthus Debate	49
3.1 Introduction	49
3.2 Ricardo, politics and government	51
3.3 The debate over the effects of public debt	59
3.4 Ricardo's policy position: an hypothesis	64
3.5 Conclusion	69

4	The Capital Levy Proposal: Implications for Ricardian Method	71
4.1	Introduction	71
4.2	Equity	74
4.3	The pattern of investment	81
4.4	The rate of the levy	83
4.5	The payment schedule	84
4.6	Other considerations	86
4.7	Conclusion	88
5	Ricardo on Public Debt: the Question of Motive	91
5.1	Introduction	91
5.2	Ricardo's personal financial interests	93
5.3	Interested parties	99
5.4	Ricardo's criticism of the Sinking Fund	106
5.5	Conclusion	108
6	Ricardo and Modern Public Debt Theory	111
6.1	Introduction	111
6.2	Fiscal stimulation of aggregate demand	112
6.3	Ricardian Equivalence	115
6.4	Issues of taxation	119
6.5	Conclusion	120
7	Summary and Conclusion	123
Appendixes		
A.	British taxation, expenditure and public debt statistics	129
B.	British public finance experience 1688–1823	133

C. Public debt theory before Ricardo	137
D. Capital levy proposals after World War I	139
E. Ricardo's parliamentary voting record	143
F. Public debt issue in Britain	149
G. Ricardo's colleagues and correspondents	151
<i>Notes</i>	157
<i>Bibliography of Works Cited</i>	173
<i>Index</i>	181

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List of Tables

A.1	British public revenue, 1700–1929	129
A.2	Net British public expenditure, 1700–1929	130
A.3	British public debt outstanding, 1709–1929	131
F.1	Prices and yields of British government 3 per cent consols, 1810–24	150
F.2	Principal new issues of British government 3 per cent consols, 1800–13	150

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1

Introduction

[S]ome means should be resorted to for liquidating the public debt, and in this he agreed . . . that a great sacrifice should be made. . . . [T]he sacrifice would be a temporary one, and with that view he would be willing to give up as large a share of his property as any other individual. By such means ought the evil of the national debt to be met. It was an evil which almost any sacrifice would not be too great to get rid of. It destroyed the equilibrium of prices, occasioned many persons to emigrate to other countries, in order to avoid the burthen of taxation which it entailed, and hung like a mill-stone round the exertion and industry of the country.

David Ricardo, Parliamentary Speech (9 June 1819),
1951, V, pp. 20–1

1.1 Introduction

David Ricardo is universally acknowledged as one of the seminal figures in the development of economic theory and policy. Modest, honest and principled – rare adjectives to apply to a businessman or a politician, and he was both – he welcomed disagreement and controversy, taking pleasure in defending his position against reasoned opposition. He was prepared to change his mind in the face of convincing arguments contrary to his own, for his aim was patently to advance knowledge. His contribution to economics has been and continues to be the subject of lively debate. This study is offered as a modest addition to the vast body of Ricardian scholarship. While there is no aspect of Ricardo's work that has not been subject to

scrutiny, his views on the public debt have received little attention of a comprehensive nature. This neglect is surprising. As I shall show, his writings and speeches on the subject of public debt are wide ranging and provide an interesting exploration of public debt issues still very much relevant today. In addition, they furnish us with a rich source of evidence regarding topics of relevance to all Ricardian scholars, including his theories of resource allocation and economic growth, the quality of his applications of analysis to practical questions, and the motives behind both his abstract reasoning and policy recommendations.

This introductory chapter sets the stage for the chapters that follow by providing the information needed to assess the nature and significance of Ricardo's contributions to public debt theory and policy. In Section 1.2, I summarize aspects of the scholarly debate regarding Ricardo's analysis of allocation and assess the implications of the contrasting view points for the notion of a 'dual development' of economic thought. Section 1.3 outlines differing interpretations of Ricardo's growth analysis and their ramifications for the related questions of whether Ricardo intended his analysis to be largely predictive or descriptive, and whether he was optimistic or pessimistic about England's growth prospects. In Section 1.4, I discuss the contentious controversy over Ricardo's methodological practices, addressing the question of whether he was guilty of applying the conclusions of highly restrictive models directly to the complex real world. Section 1.5 presents a number of explanations for the differing interpretations of Ricardo's economic analysis and his method. These include differences with respect to his style of writing and method of reasoning, debate over the importance to be attached to various sources of his views, and the problem of attribution of the arguments of so-called 'Ricardians' to Ricardo himself. Finally, Section 1.6 furnishes a plan of work, an outline and a synopsis of the main arguments of the chapters to follow.

1.2 Ricardo's allocation theory

Ricardo's analysis of allocation is subject to ongoing debate. At least three distinct view points have emerged. The first is that held by a number of noted neoclassical economists, including Walras ([1874] 1954), Jevons (1879), Wicksell ([1911], 1934–35), Schumpeter (1954b)

and Knight (1956), who have all maintained that Ricardo's price theory is fundamentally flawed. Schumpeter's view can be taken as representative. He describes Ricardo's model as one in which output is distributed into three aggregate class shares, the returns to the three factors of production: land, labour and capital. Ricardo, in this view, attempted to use a single equation (net output equal to land rent plus the wages of labour plus the profits of capital, all measured in terms of labour values) to determine the values of four variables. If this is true, his system is indeterminate. According to Schumpeter (1954b, p. 569), the only way Ricardo was able to achieve results was to arbitrarily reduce the number of variables. By treating the value of net output as constant, rent as zero at the margin, and wages as given by subsistence requirements, profits are left to be determined as a residual, which equals the marginal product of labour less the subsistence wage rate. Schumpeter attributes this approach to an inability to deal with systems of simultaneous equations, a failure to appreciate factor and product substitution, and the absence of demand–supply analysis (*ibid*, pp. 600–1).

The so-called 'neo-Ricardian' or 'Italo-Cambridge' school, including Sraffa (1951, 1960), Robinson (1965), Dobb (1973), Eatwell (1977) and Bharadwaj (1978), interprets Ricardo's allocative analysis in much the same way as do the neoclassical scholars. Ricardo is represented as holding an incompletely developed version of the anti-demand-and-supply view of the 'corn model', outlined by Sraffa in his introduction to Volume I of *The Works and Correspondence of David Ricardo* (1951, pp. xxxi–xxxii). Sraffa and his followers argue that such a model formed the basis for Ricardo's allocation analysis, despite their admission that Ricardo never explicitly stated it in extant material. If agricultural output and capital (including wages) consist of the same commodity, corn, the profit rate emerges independent of any question of valuation as the ratio between quantities of corn, provided the wage and the method of production are given. Due to the requirement of a uniform profit rate, profit rates in other sectors adjust to that in agriculture by means of changes in their terms of trade with corn. In generalizing the case, Sraffa claims, Ricardo in his *Principles of Political Economy and Taxation* (1817) used the labour theory of value, with labour entering into both sides of the equation in place of corn. Garegnani (1984, p. 296) has summarized the implications of the neo-Ricardian view thus:

this *separate* determination of real wage and social product entails a structuring of the analysis which is radically different from that of the theories which were to become dominant later. The surplus theories have, so to speak, a *core* which is isolated from the rest of the analysis because the wage, the social product and the technical conditions of production appear there as already determined. It is in this 'core' that we find the determination of the shares other than wages as a residual: a determination which . . . will also entail the determination of the relative prices of commodities.

(Emphasis in the original.)

There is in fact a parallel between the neoclassical and neo-Ricardian approaches. Both emphasize the divorce of distribution and exchange; distribution is not envisaged as a problem in factor pricing. And both stress an exogenously determined wage rate. However, where the neoclassicists find fault, the neo-Ricardians find merit. The former assert that Ricardo failed to appreciate the true nature of economic analysis, while the latter argue that he made a conscious choice to construct a 'surplus' model.

An alternative interpretation of Ricardo's allocation analysis, associated with Marshall (1920), Viner (1958), Hollander (1979, 1995) and Morishima (1989) among others, takes issue with both the neoclassical and the Italo-Cambridge approaches. Marshall takes a position in contrast to many of his neoclassical colleagues when in Appendix I of his *Principles of Economics* (1920, p. xxxiii) he addresses Jevons' criticisms of Ricardo's allocative analysis. In Marshall's view, Ricardo's value theory 'anticipated more of the modern doctrine of the relations between cost, utility and value, than has been recognized by Jevons and some other critics.' More specifically, Ricardo did not hold value to be governed solely by costs of production, but instead recognized that prices were proportional to labour input only under the two restrictive assumptions of uniform factor proportions and uniform profit rates. Furthermore, according to Marshall, Ricardo appreciated the importance of demand in the determination of price, despite the fact that he lacked the mathematical tools to formally distinguish marginal from total utility. It is Marshall's position that the incremental dimension of utility developed by the 'Marginalist' school in the late 1800s could have been absorbed into Ricardo's allocation framework.

Hollander (1995, p. 4) has carried Marshall's argument further. He maintains that Ricardo's economics constitutes

the economics of allocation involving the information conveying and signalling role of prices, the notion of alternative costs, the principle of maximizing net returns and the market interaction of goods and services – in brief, the theory of the coordination of decentralized economic activities.

In this interpretation, prices are determined in a demand and supply framework in which resources flow between uses in response to differences in rates of return. The natural or cost price of a commodity is determined by its cost of production, which includes profits as well as wages, both at an average or ordinary rate. The market price of a commodity is determined by the interaction of demand and supply. Resources will be attracted by higher-than-average rates of return to the production of commodities for which the market price exceeds the natural price; they will desert employments where the opposite is true. Only when market price is equal to natural price in all markets will there be no incentive for inputs to seek alternative employments, and will the economy thus be in 'equilibrium'.

In Hollander's view, if factor proportions are assumed to be uniform, then cost prices are proportional to labour input, while in circumstances of differential factor proportions, cost prices will diverge from labour inputs due to the assumption of factor mobility. As it is through profit rate inequality that capital flows between employments, disturbances that affect all commodities equally will have results quite different from those that are specific to one market or a subset of markets. As Hollander (1995 [1977], p. 310) observes,

it is helpful to envisage Ricardo as engaged in an effort to distinguish between a disturbance (such as a tax) affecting a *single* industry which will leave the general profit rate unaffected . . . and a disturbance (such as a general wage increase) affecting *all* industries which will reduce the general profit rate.

Furthermore, in this view, the average wage is not a datum, but is instead determined in the labour market by the forces of demand

and supply. Thus, a change in the pattern of final demand such as one which transfers purchasing power between classes (which Ricardo assumed to have different expenditure patterns; see 1951, VIII, pp. 272–3) can be expected to bring about wage variation by affecting the average capital–labour ratio. Conversely, changes in the wage rate will then ‘play back’ on the price structure and affect resource allocation.¹ This framework clearly involves the interrelationship of factor and product markets within the economy, and in that sense it may be characterized as one of ‘general equilibrium’.

Adherents of the neoclassical and neo-Ricardian view points share the notion of a ‘dual development’ of nineteenth-century economic analysis. The ‘non-Ricardian’ line is said to have originated with Adam Smith. It is characterized by analysis in which competitive forces of demand and supply assure that market prices gravitate toward natural prices that allow the factor inputs of labour, capital and land to be paid their average rates of return. These average rates of return are determined in factor markets by the interaction of demand and supply. The history of this embryonic neoclassical analysis derived from Smith can be traced through the work of theorists including Say, Malthus, the school of ‘Dissenters’ from Ricardianism who include Longfield and Senior, J.S. Mill,² and the Marginalists, including Jevons, Walras and Marshall (Schumpeter 1954b, pp. 465, 474, and 568; Dobb 1973, pp. 44f and 112f). Thus, in Schumpeter’s interpretation, Ricardo’s allocative analysis constitutes a ‘detour’ in the development of economic thought toward the ideal of a Walrasian system in which distribution results from the allocation of resources between different uses and with each use by means of price competition (pp. 465, 918). The Ricardian line, in this view, died out in the 1830s and was only revived by Marx.

Those who accept the Marshall–Hollander interpretation reject the notion of a dual development, and classify Ricardo as a precursor of neoclassical economics. If this is so, the work of the Marginalists cannot be regarded as ‘revolutionary’. Instead, ‘the neoclassical developments of the 1870s involved pre-eminently an altered weighting in the selection of axioms, and in that sense a changed “focus of attention” as well as a sharpening of analytical tools, but not a paradigmatic displacement’ (Hollander, 1995 [1982], p. 159). This echoes views expressed by Marshall (1920, pp. 101n and 503)

and Viner (1958, p. 358). More recently, Morishima (1989, pp. 3–4) has presented a mathematical formulation of Ricardo's economics which

can easily be translated into mathematical language and one may find . . . a general equilibrium system (that is very similar to Walras') concealed within. In comparison to this similarity, the dissimilarity usually emphasized by historians of economic thought . . . is of minor and secondary importance.³

As I will show in Chapter 2, Ricardo's analysis of public debt in an allocation context helps to bolster the Marshall–Hollander interpretation.

1.3 Ricardo's growth theory

As in the case of Ricardo's allocation theory, ongoing debate surrounds his growth theory. Many scholars, including Sraffa (1951), Baumol (1959), Kaldor (1960), Pasinetti ([1960] 1974) and Stigler (1981), have argued that Ricardo adhered to a 'subsistence wage' growth analysis. This has been termed the 'traditional' model, and I will consider here Baumol's framework as representative of its main features. In his formulation, production involves the application of a variable input, comprised of capital and labour combined in fixed proportions, to a fixed amount of land. Land rent is zero on marginal land, and is determined on land of superior quality as the difference between average and marginal product. The supply price of labour is constant, as the wage is determined by subsistence requirements. Given rent and the wage, profits are determined residually. If the profit rate exceeds that which persuades capitalists to abstain from consumption, they compete for labour and thus bid the 'market' wage above its subsistence (or 'natural') level. A Malthusian population response ensues, and as numbers grow, the wage is returned to its subsistence level. The growth process continues, with resort to poorer and poorer qualities of land, until marginal production falls so far that capital accumulation ceases. At this point, a 'stationary state' is reached, in which both population size and the capital stock are unchanging. For the purposes of debate over Ricardo's growth analysis, the most significant feature of this 'tradi-

tional' formulation are the facts that the wage experiences only temporary deviations from its subsistence level, and population growth is simply a by-product of the growth process. As O'Brien (1975, p. 41) has observed, 'economic growth is viewed as if all demographic adjustments to long run equilibrium had already taken place, while the process of capital accumulation was not yet completed.'

Opposing this so-called 'traditional' view of Ricardo's growth theory are the views of a group of scholars including Tucker (1960), Hollander (1979, 1987), Casarosa (1985) and Morishima (1989). To understand this alternative interpretation, known as the 'New View', consider the 'canonical classical growth model' outlined by Samuelson (1978).⁴ In this formulation, the production of agricultural output involves the application of 'doses' of a labour-cum-capital input to land. In the growth process, the wage rate and the profit rate are both above their respective minima, encouraging net capital accumulation and population growth, and both will ultimately decline from their present values to their respective minima in consequence of land scarcity. Thus, for a given state of technology, the law of diminishing returns reduces the combined return to the dose until the economy reaches a long run 'stationary state' equilibrium. In the stationary state, wage and profit rates are such as to ensure the maintenance of the working population and the capital stock respectively. As diminishing returns result from land scarcity, this implies that land rent rises throughout the growth process, reaching its maximal level in the stationary state. Given this framework, if capital and labour begin in balanced proportions, each at a level short of its long run equilibrium value, so that rent is below its maximum, the breakdown of the aggregate return to the dose will ensure that both grow at the same decelerating rate. Along the secular path, the nominal wage rises due to the increased cost of producing wage goods, and this general increase in the nominal wage causes the profit rate to decline. The real wage also declines secularly, as the fall in marginal productivity is shared between labour and capital.⁵

The picture painted by the traditional interpretation of Ricardo's growth analysis, involving only temporary deviations from subsistence, is one of pessimism. This is partly responsible for the characterization of nineteenth-century political economy as the 'dismal science'. By contrast, the New View framework, in which the actual real wage lies above the subsistence wage during the growth process,

permits a more optimistic view of the prospects of the working class. Not only is the wage assumed to be above subsistence during the growth process, if there is a productivity increase resulting from technological improvement, the wage can remain high for a substantial period of time.⁶ However, if the New View interpretation is correct, the question arises as to why Ricardo would have adopted a 'pessimistic' framework which turns on diminishing returns and which has a stationary state as its final outcome. O'Brien (1981, pp. 375–6) maintains that if this interpretation were correct, then Ricardo's 'theoretical work . . . would have been pointless'. Hollander (1979) offers a number of explanations for the distinction between Ricardo's 'pessimistic' model of growth and his 'optimistic' view of growth prospects. One is that the nature of the model was dictated by Ricardo's wish to counter two existing theories: Smith's theory of profit rate determination turning on a 'competition of capitals' explanation, and Malthus' related theory, which implied the inapplicability of the law of markets and the possibility of over investment. In terms of his growth framework, Ricardo was able to demonstrate that there can be no secular decline in the profit rate unless wages rise permanently, the so-called 'fundamental theorem of distribution'. Another possible explanation is that the secular implications of the model were not paramount for Ricardo. Instead, he used it largely for a comparative statics analysis of the consequences of agricultural protection and of the impact of taxation, which proceeded on the assumption of unchanged technology (Hollander, 1979, p. 642). For his part, Kolb (1972) suggests that the notion of a (theoretical) bound to growth is simply intrinsically appealing. As economic analysis by its nature is necessitated by the existence of scarcity, it is hard to imagine limitless growth, and thus a complete model of growth should provide some mechanism for dampening the rate of growth to zero.

Some commentators, including Mitchell (1949), St Clair (1957), Knight (1956) and O'Brien (1981), hold that Ricardo intended his growth sequence to be a prediction, which was disproved by subsequent events. Schumpeter (1954b, p. 571), for example, writes that the classical economists

saw nothing but cramped economies, struggling with ever-decreasing success for their daily bread. They were convinced that

technological improvement and increase in capital would in the end fail to counteract the fateful law of decreasing returns. . . . [T]hey all expected, for the future, the advent of a stationary state, which here no longer means an analytic tool but a future reality.

Others, including proponents of the New View, take the approach that while Ricardo did indeed employ the concept of a stationary state in building his abstract growth model, he made ‘the distinction between an actual real-life stationary state and the use of the stationary state as a theoretical tool to identify the termination point of a theoretical growth model’ (Kolb, 1972, p. 17). In this view, Ricardo’s outlook for British growth prospects was in fact optimistic as he held that the advent of the stationary state would be forestalled indefinitely by some combination of repeal of the Corn Laws, removal of the burden of public debt and technological innovation. As I will discuss in Chapter 2, Ricardo’s public debt analysis provides compelling support for the case that he was ‘optimistic’.

1.4 Ricardo’s method

Ricardo is celebrated by many as a brilliant abstract thinker and system-builder, but controversy surrounds the question of whether he was guilty of ignoring the effect of ‘disturbing causes’ in applying the conclusions from highly restrictive models directly to the complex real world. Ricardo’s method has come to be synonymous with the ‘Ricardian Vice’, a term coined by Schumpeter (1954a, p. 1171) to describe ‘the habit of piling a heavy load of practical conclusions upon a tenuous groundwork.’ According to Schumpeter (1954b, pp. 472–3), Ricardo’s

interest was in the clear-cut result of direct, practical significance. In order to get this he cut that general system to pieces, bundled up as large parts of it as possible, and put them in cold storage – so that as many things as possible should be frozen and ‘given’. He then piled one simplifying assumption upon another until, having really settled everything by these assumptions, he was left with only a few aggregative variables between which, given these assumptions, he set up simple one-way relations so that, in the end, the desired results emerged mostly as tautologies. . . . The

habit of applying results of this character to the solution of practical problems we shall call the Ricardian Vice.

Similarly, Halévy (1955, p. 325) asserts that Ricardo ‘constantly tends to minimize the influence of disturbing factors [but he] was aware himself that he used [a] method of systematic abstraction, of elimination of the accidental.’ Sowell (1974, p. 113) assesses the influence of Ricardo on economic method thus

With Ricardo economics took a major step toward abstract models, rigid and artificial definitions, syllogistic reasoning – and the direct application of the results to policy. The historical, the institutional and the empirical faded into the background, and explicit social philosophy shrank to a few passing remarks.

For O’Brien (1981, p. 367), Ricardo’s ‘vice’ was evidenced in his ‘habitual practice of telescoping the long run and the short run.’ Blaug (1994, 26n) has echoed this view in an autobiographical sketch:

When I published my thesis as *Ricardian Economics* (1958), I thought that Ricardo, the rigorous theorist, was an admirable figure, so much that I named my eldest son after him. But over the years I came to identify Ricardo’s ‘telescopic’ tendency to collapse the long run into the short run as if there was no transition period as the abiding vice of orthodox economics.

Others have viewed matters quite differently. Individual writers have made general reference to what they see as Ricardo’s sense of methodological responsibility (Dunbar, 1886–87; Robbins, 1952). Others, having examined his views on specific issues, conclude that he was very much aware of and concerned with real world considerations (Hollander, 1910; O’Driscoll, 1977, Ahiakpor, 1985). However, the most comprehensive ‘defence’ of Ricardo against accusations of the ‘Ricardian Vice’ has been made by Hollander (1979, 1995). He argues that Ricardo’s self-acknowledged emphasis on long run considerations in certain circumstances has been distorted into the tradition that he entirely divorced himself from short run considerations, so much so that his policy recommenda-

tions lost much of their relevance. Hollander (1979, pp. 657–8) counters that this reputation is wholly unearned. He shows that Ricardo did in fact reject oversimplified models on empirical grounds, and concerned himself with short run issues in connection with a number of policy issues, including poor law reform, corn law repeal and the resumption of cash payments. As will be demonstrated in Chapter 4 below, I maintain that Ricardo's work on public debt can be added to this list.

1.5 The source of differing interpretations

A number of explanations have been offered for the disagreements described above over the correct interpretation of Ricardo's economic analysis and method. One turns on Ricardo's style of reasoning. His use of 'strong cases' and restrictive examples has created confusion over the nature of his assumptions and the circumstances in which he employed them. Ricardo's terse writing style, and the fact that he does not always detail the contents of his '*ceteris paribus*' condition, exacerbates this problem. As Viner (1937, p. 140) observes, Ricardo's omission of 'explicit mention of qualifications whose validity he was prepared to acknowledge [allowed critics] to expose him to rebuttal often more damaging in appearance than in fact.' An example of the scholarly difference of opinion over this issue is found in debate over his growth model. Proponents of the 'New View' suggest that textual evidence that seems to point to the traditional interpretation arises from his method of reasoning. Although he often assumed the speedy adjustment of population to disturbances for expository exercises involving static comparisons, this does not mean that he subscribed to a subsistence wage growth model. Instead, in his full-fledged growth model, he treated the real wage as an endogenous and competitively determined variable subject to a secular decline (Hollander, 1995, pp. 250–1). Similarly, Ricardo made use of simplifications for pedagogic purposes, as, for example, in his analysis of the impact of taxation. His wage taxation theorems do not stand or fall with the subsistence assumption, for he qualified his analysis with the warning that the 'rate of progression' of the economy is throughout taken as given (Hollander, 1995, p. 109).

Confusion has also arisen over Ricardo's terminology. Casarosa (1985, p. 143) suggests that he did not use the terms 'subsistence

wage' and 'natural wage' interchangeably, but by the use of the latter in a growth context he intended to refer to the level of the wage 'with which the rates of growth of population and capital coincide.' Peach (1993, p. 110) attempts to counter the New View by explaining textual evidence cited by its proponents as evidence that Ricardo partially adopted this view, suggested by Malthus, without appraising its incompatibility with his subsistence wage analysis. He argues that Ricardo's *Principles* (1817) contains evidence supporting both the New View account, and a version of the traditional view which depicts the wage as an active 'centre of gravity' without a stationary state limitation. Another explanation for differing interpretations of Ricardo turns on the attribution to Ricardo of the views and practices of his followers. Mitchell (1949, p. 355) expresses the opinion that while Ricardo's abstract reasoning 'is a method of speculation which, in the hands of a man who has sagacity in choosing the suppositious cases to be argued about, has great advantages', it is 'unfortunately vulgarized by . . . people who took conclusions reasoned out on the basis of certain assumptions and then applied them incautiously to the world as it exists' (ibid, 324). Halévy (1955, p. 343) blames the reputation of Ricardo's economics at least partly on 'James Mill and [J.R.] McCulloch⁷ . . . two intransigent disciples who brought to bear on their economic propaganda the zeal of the . . . religious enthusiast. . . . Mill and McCulloch systematically neglected all these restrictions, and became, so to speak, more Ricardian than Ricardo himself.' A more recent instance of the identification of Mill with Ricardo is made by Stigler (1990) who in a discussion of Ricardian method points out that Mill denied the possibility that real wages might remain above subsistence for any significant length of time. Hollander's dismissal of this observation as irrelevant is succinct; he asks 'Why saddle Ricardo with James Mill's extremism?' (Hollander, 1995, p. 266). In this study, I will attempt to avoid this problem by explicitly focusing on Ricardo's own views.

Debate has also surrounded the appropriate emphasis to be placed on the various Ricardo texts, the weight to be assigned to each reflecting a difference of opinion regarding textual exegesis. Aksoy (1991) describes two significantly different exegetical approaches. One involves the use of an objective rule and an objective standard of evaluation, while another aims to provide an interpretation reflect-

ing the intentions of the author under scrutiny. Stigler's so-called principle of 'scientific exegesis' exemplifies the first approach. In this view,

the man's central theoretical position is isolated and stated in a strong form capable of contradictions by the facts. The net scientific contribution, if any, of the man's work is thus identified, amended if necessary, and rendered capable of evaluation and possible acceptance.

(Stigler, 1965, p. 448)

Thus, formal sources are paramount. The alternative approach, which Stigler terms 'personal exegesis', emphasizes intentions, and allows a significant role for informal sources, among them speeches and private correspondence. Hollander (1995, p. 9) observes that any reading of Ricardo will leave evidence conflicting with that interpretation, and the choice between readings must 'turn in part on how convincingly these residuals are treated.' The approach that I take below keeps this observation in mind. Ricardo's views on issues of public finance were expressed in a wide variety of contexts, both formal and informal. Thus, *all* sources will be considered in an attempt to understand his reasoning and gain an appreciation for the true nature of his work as regards both abstract theorizing and practical policy recommendations.

No aspect of Ricardo on public finance requires such an eclectic approach more than his proposal for a capital levy, a one-time tax on the property of the nation to redeem the public debt. References to various aspects of the proposal can be found in a variety of sources, namely his major published work, *The Principles of Political Economy and Taxation* (1817), an article entitled 'The Funding System' written for *The Supplement to the Fourth, Fifth and Sixth Editions of the Encyclopaedia Britannica* published in 1820, transcripts of his speeches as a member of parliament from 1819–23, extant correspondence of the same period, and a recently discovered manuscript which is estimated to have been written in 1819. The last two sources were unavailable to contemporary critics, a fact that must be considered in examining and assessing their comments on the proposal. Ricardo's correspondence was only made accessible to scholars in a comprehensive form with the publication of the Sraffa and Dobb-

edited *Works and Correspondence of David Ricardo* over the period 1951–73, and the manuscript has only been available to scholars since its publication by Asso and Barucci in 1988. Thus modern scholars now have a unique opportunity to gain a fuller understanding of Ricardo's views on this subject. Much of the material related to practical implementation of Ricardo's capital levy proposal is to be found in the less formal sources.

McCulloch (1853, p. 479) observed of Ricardo's *Principles* that it was

not a practical work . . . , not even a systematic treatise, but . . . principally an inquiry respecting certain fundamental principles. . . . There are so many land-marks to which to refer, and can never be lost sight of even in matters most essentially practical.

Ricardo's aim was not to produce an exhaustive work covering every aspect of political economy, but instead to concentrate on 'those parts of the science which have particularly engaged my attention' (Letter to McCulloch [20 December 1816], 1951, VII, p. 112). He later felt it necessary to point out to T.R. Malthus that 'Our differences may in some respects . . . be ascribed to your considering [the *Principles*] as more practical than I intended it to be. My object was to elucidate principles' ([4 May 1820], 1951, VIII, p. 184). For example, the *Principles* contains much of Ricardo's analysis of the impact of the taxes required to service the public debt, utilizing the tools of allocative and growth theory, which led him to recommend debt redemption and tax remission. However, he made only passing reference in this work to the practical issue of the means by which public debt might be redeemed. Fearing the prospect of capital flight to avoid onerous taxation, he suggested that a country 'would act wisely by ransoming itself from [heavy taxation] at the sacrifice of any portion of its property which might be necessary to redeem its debt' ([1817], 1951, I, p. 248). This sacrifice, in the form of a capital levy, had been 'oft-recommended'⁸ but there had been

neither wisdom enough, nor virtue enough, to adopt it. It must, however, be admitted, that during peace, our unceasing efforts should be directed towards paying off that part of the debt which has been contracted during war; and that no temptation of relief,

no desire of escape from present, and I hope temporary, distresses should induce us to relax in our attention to that great object.

(ibid)

Thus the *Principles*, while significant as the place in which Ricardo first introduced his proposal, did not provide readers with explicit details, for the simple reason that such details were beyond its intended scope.

The other source published in Ricardo's lifetime which contains a reference to the capital levy proposal is 'The Funding System' (1820). Ricardo was initially persuaded by James Mill to write an *Encyclopaedia* entry on the topic of the Sinking Fund at the request of Macvey Napier, the volume's editor. He was reluctant to accept the task at first, but proceeded to complete the article promptly in September 1819. McCulloch observed of the completed article that it was more appropriately characterized as a work on the 'Funding System', or the system of British public finance, in general (Letter from McCulloch [5 December 1819], 1951, VIII, pp. 137–8), and suggested some minor revisions. Ricardo, displeased with the final product, apparently unhappy with his writing skills, replied that McCulloch was welcome to revise it but that he himself wished to have no more to do with it.⁹ He had expressed the opinion to Hutches Trower that the only original contribution he could make in the article was his proposal to redeem the debt by means of a capital levy ([25 September 1819], 1951, VIII, pp. 78–9). However, explicit reference to the proposal in 'The Funding System' is actually quite brief and comes toward the end of the article ([1820], 1951, IV, pp. 196–7). Yet the material which leads up to the reference provides support for such a proposal, by outlining the failure of the past and present mechanisms to redeem public debt and by making a strong case against loan financed government expenditure. Thus this article is the most important formal source of information about the capital levy proposal.

The *Principles* contains the theoretical analysis necessary to understand Ricardo's view of public debt in both an allocative and a growth framework, and 'The Funding System' contains both economic and historical considerations pointing out the need for public debt redemption. However, they do not tell the whole story of his case for a capital levy to do so. One must look to other sources – speeches, correspondence and the newly discovered manuscript – for

the bulk of the references to the practical aspects of the plan. Many scholars have recognized the need for an eclectic approach in attempting to understand Ricardo. Dunbar (1886–87, p. 476) cites Ricardo himself in observing that the role of the *Principles* (1817) was narrow – to elucidate principles, as its title indicates – and that in his pamphlets and speeches he showed:

that behind the abstract discussions of his book lay a great reserve of facts and observations, ready to be drawn upon whenever the task in hand seemed to require it. . . . So far is he [in his parliamentary speeches] in neglecting fact for theory, that it would be easy to cite important cases in which he went beyond the opinion of the House, by sacrificing the close application of theory in deference to the unusual conditions then affecting important questions.

And as J.H. Hollander (1910, p. 58) recognized, an examination of Ricardo's practical work 'is essential to a proper understanding of [his] body of theory, and it is in itself an impressive exhibit of economic service.' It is his view that 'Ricardo knew perfectly well that the complexity of practical affairs qualified and even counteracted the normal tendencies, and upon more than one occasion gave evidence of this' (ibid, pp. 98–9). Likewise, Samuels (1966, p. 62) warns that 'despite the theoretical character of the *Principles* . . . Ricardo gives ample evidence in his [other] written works to support the claim that he was a master realist, whatever the structure and the compass of his theory.' In writing this study, I have necessarily taken into account all possible sources of Ricardo's views on the capital levy proposal and on other issues related to public debt.

1.6 Plan of work

In Chapter 2, I investigate the relationship between Ricardo's views on the public debt and his economic analysis, showing how each serves to illuminate the other. His opposition to public borrowing is shown to depend directly on his economic reasoning, specifically the use of economic analysis to establish the harmful allocative effects of the vast majority of taxes levied to service public debt. My demonstration points to the validity of that interpretation of Ricardo's allo-

cation framework that emphasizes common features with the neo-classical model and disagrees with the notion of a dual development of economic theory.

I also establish in Chapter 2 that Ricardo was led to advocate debt redemption by his concerns for capital growth and ongoing economic prosperity; in fact, his formal analysis of growth is shown to provide an important source of his views on public borrowing and public debt. In examining his case for tax financing of government expenditure in preference to public loans, I devote attention to the role played by fiscal illusion and wealth illusion, showing that Ricardo rejected the practical applicability of 'Ricardian Equivalence'. This chapter considers what Ricardo's views on public debt can tell us of how he meant his growth analysis to be applied – whether he envisioned the British economy as experiencing ongoing growth with wages above subsistence, or instead, whether he held it to be characterized by temporary deviations from a subsistence wage growth path. I also briefly address the question of whether he ever attempted to construct an optimal tax system.

In Chapter 3, I consider Ricardo's participation in the theoretical and policy debate over public finance, and the perceptions by contemporaries and scholars of his views on this question. A small minority of writers and policymakers questioned the wisdom of debt redemption on theoretical and practical grounds. Notable among them was Malthus, whose analysis of public debt was a corollary of his analysis of the postwar economic distress. Both the dispute between Ricardo and Malthus on this question, and the use of their arguments by policymakers, turned on a fundamental disagreement about the practical applicability of the law of markets. The alternative economic theories of Ricardo and Malthus led them to distinctly different conclusions as to what action should be taken to deal with the public debt. This chapter also suggests a supplementary explanation for Ricardo's stance on this issue, related to the nature of the contemporary debate over public finance. It is possible that Ricardo believed that to concede the short run inapplicability of the law of markets might open the floodgates of theoretical support for public extravagance. Given Ricardo's political philosophy, which formed the basis for his opposition to a wide economic role for government, and given his evaluation of the existing political environment, both of which I detail in this chapter, the last thing

which he wanted to be seen to do was to provide was justification for government spending.

Chapter 4, examines Ricardo's celebrated advocacy of the rapid redemption of existing public debt by means of a 'capital levy', a one-time tax on the nation's property. Its potential contribution to our understanding of Ricardian method has not yet been fully explored, and in this chapter I assess the implications of the proposal to that end, using all available textual evidence. The attention that Ricardo paid to specific elements of the proposal is shown to demonstrate that he did not suggest it on a whim, as is sometimes supposed, but devoted considerable thought to its practical implementation. I also consider the accuracy of evaluations of the capital levy proposals by Ricardo's contemporaries and by later scholars, evaluations that have fostered the reputation of the proposal as inadequately formulated and highly impractical.

In Chapter 5, I counter the arguments of Anderson and Tollison (1986, p. 56). They presented a provocative explanation for Ricardo's advocacy of a capital levy, surmising that 'Ricardo may have taken into account his personal financial interests while formulating [his] debt reform plan.' I assess the merit of this explanation for Ricardo's espousal of a capital levy against the alternative that he made such a proposal out of concern for the national interest. Examination of the evidence regarding his conduct with respect to policy debate in general makes clear that accusations of personal interest along the lines of that suggested by Anderson and Tollison are unjustified. Rather, the debt redemption to be carried out by his plan arises not out of personal motives, but out of his concern that the burden of debt redemption should be shared among different classes of society in as fair a manner as possible. I then outline Ricardo's assessment of the 'Sinking Fund', which he showed to be useless in achieving its purported aim of redeeming the public debt, prompting him to suggest an alternative in a capital levy. Contrary to the case presented by Anderson and Tollison, Ricardo was motivated in his actions with respect to the public debt as he was in his actions with respect to other policy questions, by concern for the interests of the nation as a whole.

In Chapter 6, I briefly discuss current thinking on public debt, to illuminate some of the major developments since Ricardo. I concentrate on several issues important to modern public debt theory. These

include the role of public expenditure in stimulating aggregate demand and stabilizing the economy, the debate over the validity of Ricardian Equivalence, the role of public debt in correcting capital market imperfections, and tax efficiency and the allocative effects of servicing public debt.

In conclusion, Chapter 7 provides a summary of the major arguments presented in the body of the study, reiterating their significance for Ricardian scholarship.

Supplementary reference information is provided in seven appendices. Appendix A contains statistics on British tax revenue, public spending and public debt for the period 1700–1929. Appendix B provides a brief description of British public finance experience prior to Ricardo, while Appendix C examines public debt theory before Ricardo. In Appendix D, I outline capital levy proposals, similar to that of Ricardo, which were made following World War I. Appendix E provides a summary of Ricardo's voting record as a Member of Parliament. Appendix F explains the nature of public debt issue in Britain in Ricardo's day. And finally, Appendix G provides brief biographical sketches of those of Ricardo's contemporary colleagues and correspondents to whom I have referred in this work.

2

Public Debt and the Economics of David Ricardo

Political Economy, when the simple principles of it are once understood, is only useful, as it directs Governments to right measures in taxation. We very soon arrive at the knowledge that Agriculture, Commerce, and Manufactures flourish best when left without interference on the part of Government, but the necessity which the state has for money to defray the expences of its functions, imposes on it the obligation to raise taxes, and thus interference becomes absolutely necessary. It is here then that the most perfect knowledge of the science is required.

David Ricardo (12 November 1819), 1951, VIII, p. 133

2.1 Introduction

Ricardo's analyses of resource allocation and economic growth have been subject to much scholarly debate, which has been outlined in the introductory chapter of this study. And his work on the public debt, neglected relative to other topics he addressed, has not been used to its full advantage to resolve this debate. This chapter examines the relationship between Ricardo's views on public debt and his economic analysis, to show that each serves to illuminate the other. One cannot fully comprehend Ricardo on public debt unless one recognizes that his position is derived from his analyses of allocation and growth. Likewise, to dismiss his writings and speeches on the public debt as peripheral to the main body of his work is to neglect a rich source of material whereby we can expand our understanding of the nature of his economic analysis.

With respect to public debt, Ricardo made two related policy recommendations: that under no circumstances should government expenditure be financed by means of borrowing, and that effective action should be taken immediately to redeem existing public debt. In Section 2.2, I demonstrate that his opposition to taxation to service the debt, turning on the harmful effects on resource allocation of the vast majority of taxes, is founded directly upon his economic reasoning. I present evidence to the validity of that interpretation of his allocation analysis as sharing many features with neoclassical price theory. In Section 2.3, I address Ricardo's concerns regarding public debt in a growth context. Ricardo shared the worry of many of his predecessors and contemporaries that onerous debt service taxation might drive capital abroad, a consideration that led him to advocate debt redemption. The social benefits of capital growth also legitimized his preference for tax financed government expenditure over public loans. Ricardo's analysis of growth issues thus provides another important source of his views on public borrowing and public debt. It emerges that this analysis makes sense only in the context of a New View-style growth framework, in which the economy was envisioned as experiencing ongoing growth of both capital and population. In Section 2.4, I raise the question of whether Ricardo ever enumerated the features of what he would consider as constituting an optimal tax system.

2.2 Public debt and resource allocation

Ricardo's great concern over the harmful consequences of taxation for resource allocation, arising out of his theoretical analysis of tax incidence, served to reinforce his opposition to public debt in a practical context, for fully half of the tax revenue in his day was devoted to debt service. Others, Adam Smith included, expressed fears of capital flight in response to excessive taxation to service the debt; but an emphasis in this context on the allocative consequences of debt service taxation was unique to Ricardo.¹ It was his position that, in levying taxes, 'The aim of the legislature should . . . be to press on all equally, so as to interfere as little as possible with the natural equilibrium which would have prevailed if no disturbance whatever had been given' (Letter to Brown [13 October 1819], 1951, VIII, p. 101). The English economy in its existing circumstances was, in Ricardo's

view, far from its 'natural' equilibrium; instead, he characterized it as an 'artificial' system with one significant cause being 'our enormous debt' (Letter to Trower [22 March 1818], 1951, VII, pp. 259–60). He unequivocally opposed debt financing of government expenditure, even in circumstances of war, when it was generally deemed by his contemporaries to be necessary and acceptable, out of worry that wartime public borrowing would have serious repercussions on the postwar economy in the form of taxes imposed to service the debt. The alternative – taxes to fully finance the war throughout its duration – would also have consequences for the allocation of resources, but such effects would be less serious due to their timing:

the greatest advantage that would attend war-taxes would be the little permanent derangement that they would cause to the industry of the country. The prices of our commodities [would only be disturbed] during a period when every thing is disturbed by other causes, during war. At the commencement of peace, every thing would be at its natural price again, and no inducement would be afforded to us . . . to desert employments in which we have particular skill and facilities, and engage in others in which the same skill and facilities are wanting.

([1820], 1951, IV, p. 189)

Ricardo also took notice of the distortionary impact of public debt on the international allocation of resources. Parliamentary transcripts indicate that he considered the public debt

a very serious evil; and he thought so from the heart-burnings that were occasioned by the taxes levied to pay it, which in one year affected one interest, and the next year another interest. [Elimination of the public debt] would confer great benefits on our commerce, by putting it in a natural state. At present, from the duties and restrictions of customs and excise, it was in a most unnatural state.

(Speech [6 March 1823], 1951, V, p. 268)

In sum, he contended that 'if this evil [the national debt] were removed, the course of trade and the prices of articles would become natural and right' (Speech [30 May 1820], 1951, V, p. 55), as taxes

required to service the debt could then be removed. Thus, to understand fully Ricardo's position on the public debt, his economic analysis of tax incidence in a distributional context must be examined, for this analysis was used to establish his opposition to debt financed government expenditure and to support his recommendation for the redemption of outstanding debt. As a corollary, an examination of his work on public debt helps to give us a clearer appreciation of his economic analysis of allocation.

A simple idea formed the basis for Ricardo's analysis of tax incidence. He wrote that

A tax affecting equally all productions . . . leaves them, after the tax, of the same relative value to each other as before it was imposed. . . . A tax, however, which falls exclusively on the producers of a particular commodity tends to raise the price of that commodity [and thus] the value of this commodity is altered as compared with other commodities.

([1822], 1951, IV, pp. 216–17)

If a tax were imposed on one specific commodity while all others remained untaxed, the producer of the taxed commodity 'would be under a disadvantage as compared with all other producers; he would no longer gain the general and ordinary profits by his trade' (ibid, p. 217). A 'supply side' analysis suggested that the lower-than-average profit would act as a signal to resources to flow from the production of taxed to untaxed commodities. This would result in a rise in the price of the former and a fall in that of the latter until a new uniform profit rate was established. This is evident in Ricardo's discussion in the *Principles* ([1817], 1951, I, p. 207) of the effect of a tax on the profits earned in a particular industry:

A partial tax on profits will raise the price of the commodity on which it falls: a tax, for example, on the profits of the hatter, would raise the price of hats; for if his profits were taxed, and not those of any other trade, his profits, unless he raised the price of his hats, would be below the general rate of profits, and he would quit his employment for another. In the same manner, a tax on the profits of the farmer would raise the price of corn; a tax on the profits of the clothier, the price of cloth.

The impact of partial or specific taxes, those levied either on the profits or on the final prices of one commodity or a subset of commodities, would be to alter the structure of outputs and, therefore, of relative prices in the economy.

In real world circumstances, he argued that even taxes generally applied might distort relative prices, for 'Taxation can never be so equally applied, as to operate in the same proportion on the value of all commodities, and still to preserve them at the same relative value. It frequently operates very differently from the intentions of the legislature, by its indirect effects' (ibid, p. 239). For example, taxation of a productive factor, such as labour, capital or raw materials, could be expected to have a significant impact on resource allocation. Although Ricardo frequently assumed uniform factor proportions across all industries of an economy for expository purposes – to establish matters of principle – he recognized that, in reality, factor proportions can and do differ across industries or sectors. Thus, given the assumption of factor mobility, a rise in the price of one input would cause the exchange rates of commodities produced with relatively more of that input to rise in terms of commodities produced with a lesser intensity of that input. Consider his analysis of the effect of a tax imposed on raw materials:

[A]s the value of commodities is very differently made up of raw material and labour; as some commodities, for instance, all those made from the metals, would be unaffected by the rise of raw produce . . . , it is evident that there would be the greatest variety in the effects produced on the value of commodities by a tax on raw produce. As far as this effect was produced [it] would undoubtedly be attended with the same inconvenience that attends the taxing of commodities; it would destroy the natural relation between the value of each.

(ibid, p. 171)

Thus the effect of a tax on raw materials would be 'to raise the price of all commodities, in proportion as raw produce enters into their composition, and thereby to destroy the natural relation which previously existed between them' (ibid, p. 239).

While a tax on factors of production could thus alter relative prices, it might be expected that a general commodity or profit tax would

affect all commodities equally, and thus would have no distortionary impact on prices. However, as Carr and Ahiakpor (1982) have argued convincingly, Ricardo recognized that such a tax could indeed have allocative impacts in an economy experiencing changes in the overall price level. Their argument turns on the requirement that commodity taxes be denominated nominally (rather than in real terms), as they were in Ricardo's England. That Ricardo considered commodity taxes to be levied in this way is beyond doubt, evidenced by his discussion of the impact of changes in the value of the currency on the weight of taxation. In parliament, he gave a clear example, having in mind the postwar deflation:

If, for instance, a tax was imposed of two shillings per yard on cloth worth twenty-two shillings, the country calculated on paying one-eleventh of the value [in tax]; but when the cloth was reduced to 20s. a yard, the tax continuing the same, the country paid 1–10th of the value.

(Speech [30 May 1820], 1951, V, p. 54)

On being asked before a Parliamentary Committee on the Resumption of Cash Payments if deflation of the currency might be expected to produce an equal reduction in the prices of all commodities, he responded that 'I think not, in consequence of the inequality of taxation' (Speech [4 March 1819], 1951, V, p. 385). In the *Principles*, he had applied this same analysis to the period of wartime inflation, pointing out that 'this principle [would] account for the different effects, which it was remarked were produced on the prices of commodities, from the altered value of money during the Bank-restriction' ([1817], 1951, I, 209).

Thus on the 'supply side', most taxes could be expected to distort the pattern of production. On the 'demand side', the imposition of a tax could be expected to result in changes in spending patterns. Taxation involves the transfer of purchasing power from private to public hands, and it is reasonable to assume that this would involve a change to the overall pattern of demand and thus to the employment of factors. While a tax 'does not diminish demand, it . . . alters the nature of it. It enables Government to consume as much of the produce of the land and labour of the country, as was

before consumed by the individuals who contribute to the tax' (ibid, p. 237). It is obvious that private spending patterns differ from those of the government. For example, the military expenditures of government have no identical private counterpart. Ricardo dwelt at some length on the distinction between 'productive' and 'unproductive' expenditure. The former involved what would today be termed investment spending, resulting in capital accumulation and economic growth. The latter involved spending on consumption of final goods and services that did not contribute to future growth. While private expenditure was divided between the two categories, most types of government expenditure were considered to be unproductive or 'wastefully expended, always obtained at the expense of the people's comforts and enjoyments' (ibid, p. 222). This had implications for the overall level of investment in the economy, a subject to which we shall turn in discussing Ricardian growth analysis. However, it also had allocative implications since the purchases made by government with tax proceeds necessarily differed from the purchases that would be made were the funds left at the taxpayers' disposal. In the *Principles*, Ricardo wrote of the changing pattern of demand at the end of war when purchasing power is returned from the government to private consumers:

when part of my revenue reverts to me, and is employed as before in the purchase of wine, furniture, or other luxuries, the population which it before supported [military employment], and which the war called into existence, will become redundant, and by its effect on the rest of the population, and its competition with it for employment, will sink the value of wages, and very materially deteriorate the condition of the labouring classes.

([1817], 1951, I, pp. 393–4)²

The income effect component of demand elasticity played a key role in Ricardo's explanation of changes in private spending patterns in response to the imposition of a tax. In the case of taxes imposed on commodities characterized by zero demand elasticity, the amount of such commodities purchased would remain unchanged. However, given unchanged income, it would then be necessary for consumers

to reduce their purchases of other commodities to meet the increased price for the taxed commodity, and thus the overall pattern of demand would be altered. Consider the example of a tax imposed on corn, which Ricardo assumed in this example to have zero demand elasticity:

it is not necessary that my demand for corn should diminish, as I may prefer to pay 100. l per annum more for my corn, and to the same amount abate my demand for wine, furniture, or any other luxury. Less capital will consequently be employed in manufacturing those commodities, on which the taxes levied by Government will be expended.

(*ibid*, p. 237)³

In the case of goods for which demand was less than perfectly inelastic, the rise in the price of a taxed good would reduce the quantity demanded in the aggregate, if not by every individual consumer. With respect to luxuries, Ricardo wrote that:

Whatever habit has rendered delightful, will be relinquished with reluctance, and will continue to be consumed notwithstanding a very heavy tax; but this reluctance has its limits, and experience every day demonstrates that an increase in the nominal amount of taxation, often diminishes the produce. One man will continue to drink the same quantity of wine, though the price of every bottle should be raised three shillings, who would yet relinquish the use of wine rather than pay four. Another will be content to pay four, yet refuse to pay five shillings. The same may be said of other taxes on luxuries. . . . Every man has some standard in his own mind by which he estimates the value of his enjoyments, but that standard is as various as the human character.

(*ibid*, p. 241)

In parliament, he made a similar point:

If the charges for growing or producing any thing were great, the price demanded for the article would correspond. If his hat or any thing else were taxed, he had, as the consumer, to pay an

additional price for it; and where taxation went too far, it would diminish the consumption of the commodity so taxed. In other words, taxation tended to reduce the demand for the taxed commodity.

(Speech [7 March 1821], 1951, V, p. 84)

By so doing, the pattern of production would necessarily be altered.

Ricardo thus demonstrated that taxation had the effect of distorting the patterns of both domestic production and consumption. He also made a convincing argument that taxation would give 'rather a different direction . . . to foreign trade' ([1817], 1951, I, pp. 171–2). An increase in the price of a domestic commodity in consequence of a tax might render its price uncompetitive relative to that of imports of the same commodity, causing an outflow of resources from the domestic industry. That is, 'an injudicious tax may induce us to import what we should otherwise have produced at home' ([1820], 1951, IV, p. 189). To remedy the problem, he recommended a 'countervailing duty'. Despite his staunch opposition to unnecessary taxation and his reluctance to be associated with government profligacy, which is discussed further in Chapter 3, efficiency of resource allocation justified a duty on corn to compensate for 'the peculiar burthens to which the grower of corn is subject' ([1822], 1951, IV, p. 246). These burdens included the 'tithes, a portion of the poors' rate, and, perhaps, one or two other taxes' (*ibid*, p. 217). For

whenever any peculiar tax falls on the produce of any one commodity, from the effects of which all other producers are exempted, a countervailing duty to that amount, but no more, should on every just principle be imposed on the importation of such commodity; and further, that a drawback should be allowed, to the same amount also on the exportation of the like commodity.

(*ibid*, p. 243)

He stated clearly that the aim of such a proposal was 'to restore things to their natural relation' (Letter to McCulloch [29 March 1820], 1951, VIII, p. 173).⁴ The proposed duty was fully justified by the concern with efficiency of resource allocation, for it

neither offers inducements to capital to quit a trade, in which . . . it is the most beneficially employed, nor holds out any temptations to employ an undue proportion of capital in a trade to which it would not otherwise have been destined. The course of trade would be left precisely on the same footing as if we were wholly an untaxed country, and every person was at liberty to employ his capital and skill in the way he should think most beneficial to himself. . . . [T]o make our industry as productive to us as possible, we should offer no temptations to capitalists, to employ their funds and their skill in any other way than they would have employed them, if we had the good fortune to be untaxed, and had been permitted to give the greatest development to our talents and industry.

([1822], 1951, IV, p. 244)

Ricardo's proposed countervailing duty, which had the express aim of restoring an efficient allocation of resources, would clearly be extraordinary; existing taxes had a definite distortionary effect. In the absence of distortionary taxes, 'in a state of freedom every man naturally engages himself in that employment for which he is best fitted, and the greatest abundance of products is the result' ([1820], 1951, IV, p. 189). The artificial allocation of resources caused by the imposition of taxes depressed the level of current production, resulting in 'a less return for a given quantity of our [resources], than what [they] would, if unfettered, have produced' (*ibid*, 189). Ricardo thus recognized the 'deadweight loss' incurred by the nation's economy due to the presence of distortionary taxes. His opposition to the taxation of imports and exports likewise reflects a concern for deadweight loss on a world-wide scale, such taxes preventing 'the very best distribution of the capital of the whole world' ([1817], 1951, I, 171–2). Similarly:

The sole effect of high duties on the importation, either of manufactures of corn, or of a bounty on their exportation, is to divert a portion of capital to an employment which it would not naturally seek. It causes a pernicious distribution of the general funds of the society – it bribes a manufacturer to commence or continue in a comparatively less profitable employment. It is the worst species of taxation, for it does not give to the foreign

country all that it takes away from the home country, the balance of loss being made up by the less advantageous distribution of the general capital.

(*ibid*, p. 314)

Ricardo argued that were the Corn Laws repealed and free import of corn allowed, domestic corn output would fall as resources would be transferred to the production of manufactured goods to be exchanged for those corn imports. In addition, there would necessarily be an increase in the output of manufactured goods available for domestic consumption, 'as on any other supposition no advantage would be gained by importation, and low prices' (*ibid*, p. 418).

Ricardo's countervailing duty sought to restore the natural relationship between agriculture and manufacturing, and demonstrates his comprehension of the distinction between 'partial equilibrium' and 'general equilibrium' issues. His economic analysis was characterized by recognition of the importance of differentiating between policies that affect all sectors equally and those that change the relationship between sectors. Ricardo was prompted to write his *Principles* out of a desire to 'correct' the reasoning of Smith on this issue. In the case of a corn export bounty, Ricardo argued, a profit rate differential would be created in favour of corn production due to the increase in its market price, and thus, resources would be attracted to corn production and away from manufacturing. This analysis stood in direct contrast to that of Smith ([1776], 1937), who contended that the agricultural rate of profit would not rise relative to that of manufacturing due to the introduction of such a bounty. According to Smith, the initial increase in the price of corn would generate a corresponding rise in manufacturing prices by way of an increase in the money wage rate.

In conclusion, it is notable that of all contemporary taxes, Ricardo singled out the stamp duties for particular criticism. These duties were paid on the transfer of property, and thus were a type of tax that directly promoted inefficient resource allocation. Although their produce comprised but a small percentage of government revenues, the stamp duties were highly distortionary. Ricardo wrote of these taxes in the *Principles* that they 'prevent[ed] the national capital from

being distributed in the way most beneficial to the community. For the general prosperity there cannot be too much facility given to the conveyance and exchange of all kinds of property, as it is by such means that capital of every species is likely to find its way into the hands of those who will best employ it in increasing the productions of the country' (ibid, pp. 154–5). He reiterated his opposition in a later chapter: 'It is to be lamented, that the duty by stamps, with which the transfer of landed property is loaded, materially impedes the conveyance of it into those hands, where it would probably be made most productive' (ibid, p. 204). His intense dislike for the stamp duties grew directly out of his concern for efficient resource allocation.

2.3 Public debt and economic growth

As shown above, Ricardo examined the allocative effects of the tax burden resulting from public borrowing. He also addressed the issue of public debt from the perspective of its impact on the English capital stock and its rate of growth, and thus on the future prosperity of the nation and the 'happiness' of its people. He shared the widespread anxiety that capital might be driven abroad by a tax burden made increasingly onerous due to the need to service the public debt. He thus recommended public debt redemption in order to deter capital flight. Concern with capital accumulation also justified tax financing of government expenditure in preference to public loans. Public borrowing harmed capital by misleading the population as to the extent of government profligacy and as to the extent of their own personal wealth; debt redemption at present and tax financing of modest government expenditure in future would brighten England's economic prospects considerably. The nature of Ricardo's growth theory itself is made clearer when we consider his views on public borrowing and public debt. More specifically, these views point to an economy experiencing ongoing growth rather than temporary deviations from a stationary state equilibrium.

Ricardo warned throughout his career that Britain would become increasingly unattractive to investors as the burden of taxes to service the public debt increased. In the *Principles*, he wrote that an investor might face the

temptation to remove himself and his capital to another country, where he will be exempted from such burthens [overcoming] the natural reluctance which every man feels to quit the place of his birth and the scene of his early associations. . . . [A]ssuredly there are limits to the price, which in the form of perpetual taxation, individuals will submit to pay for the privilege merely of living in their native country.

([1817], 1951, I, p. 249)

In correspondence with Trower the following year, he commented on recent emigrants that 'there is some reason to fear that the artificial state of things in England in consequence of our enormous debt will cooperate with the natural advantages of a new and fertile country [the United States] to attract capital to a place where profits are so high that with moderate industry a certain provision may be made for a family' ([22 March 1818], 1951, VII, p. 260). 'The Funding System' (1820), published two years later, contained the observation that 'citizens might be expected to withdraw [their capital] from a country heavily taxed' (1951, IV, p. 187). He had also brought up the concern upon entering parliament in 1819, commenting of excessive public debt that it 'occasioned many persons to emigrate to other countries, in order to avoid the burthen of taxation which it entailed, and hung like a mill-stone round the exertion and industry of the country' (Speech [9 June 1819], 1951, V, p. 21). Later, he observed that:

Instead of paying our expences from year to year, Great Britain had constantly pursued a system of borrowing, and taxes were accumulated not only to pay the simple interest, but sometimes even the compound interest of the debt; and the amount was now so enormous, that it became a matter of calculation, whether it was worth a capitalist's while to continue in a country . . . where he was subjected to a great additional burden. Every pecuniary motive impelled him rather to quit than to remain.

(Speech [16 December 1819], 1951, V, p. 33)

In 1822, again in parliament, he warned that there were limits to the price individuals would pay 'for the privilege merely of living in their native country' (Speech [7 May 1822], 1951, V, p. 164).

Shoup (1960, pp. 157–8) has pointed out that at times it is unclear whether Ricardo considered capital flight to be a current problem or simply a potential concern. The preponderance of references to the subject seem to imply a potential problem, one which could be headed off by action to redeem public debt and thus reduce the taxes levied to service it. Ricardo made this case in parliament in 1819,⁵ citing the danger of capital flight in support of his call for a capital levy:

This country was one of large capital, but of increasing population and of an extent of soil necessarily limited; of course profits would be lower in it than in countries which had not the same limitation: still, though the profits were smaller [in England], the capital continued in this kingdom, not only because persons felt a solicitude to keep their property under their own eye, but because the same confidence was not reposed in the security of others: the moment, however, other kingdoms, by their laws and institutions, inspired greater confidence, the capitalist would be induced to remove his property from Great Britain to a situation where his profits would be more considerable. . . . [H]ad we taken the proper steps to prevent the profits upon capital from being lower here than in other countries? On the contrary had we not done everything to augment and aggravate the evil?

(Speech [16 December 1819], 1951, V, pp. 32–3)

The danger of capital flight and the resulting harm to the economy furnished one of Ricardo's major arguments in favour of rapid debt redemption:

To guard against this evil which was productive at once of individual injustice and national injury, the whole capital of the country ought to be assessed for the discharge of the public debt, so that no more capital should be allowed to go out of the country without paying its fair proportion of the debt.

(Speech [24 December 1819], 1951, V, pp. 38–9)

The sentiment was also expressed in correspondence. In 1820, he wrote to McCulloch that while

the desire to stay in our own country is a great obstacle to be overcome, . . . I acknowledge that our immense taxation has a tendency to [drive capital abroad] and I believe . . . that no measures could so much contribute towards our wealth and prosperity, as repealing the corn laws, and paying off our debt.

(Letter to McCulloch [28 February 1820], 1951, VIII, pp. 357–8; see [1820], 1951, II, pp. 451–2 for a similar observation)

Redemption of existing debt would thus stem the flow of capital abroad. However, Ricardo was also concerned that additional debt not be contracted in future, and thus used a combination of economic analysis and practical considerations to make the case against financing government expenditure by means of loans. His argument turned on the nature of the expenditure of the proceeds of taxation. As discussed above, private individuals allocated their expenditure between consumption and investment, but most government expenditure was considered to be unproductive, a fact which had significant implications for the overall level of investment in the economy. In Ricardo's words,

If the consumption of the government, when increased by the levy of additional taxes, be met either by an increased production, or by a diminished consumption on the part of the people, the taxes will fall upon revenue, and the national capital will remain unimpaired; but if there be no increased production or diminished unproductive consumption on the part of the people, the taxes will necessarily fall on capital, that is to say, they will impair the fund allotted to productive consumption.

([1817], 1951, I, pp. 150–1)

Thus, in the interest of encouraging maximal capital growth, it was desirable to keep government expenditure to a minimum.

In Ricardo's view, tax financing of public spending was preferable to loan financing because the former would tend to curb government profligacy and waste. Borrowing postponed the tax burden and thus allowed the government to hide the true volume of its spending from taxpayers. Public loans thus tended to encourage excessive government spending, which was, by its nature, unproductive and harmful

to capital growth: 'the produce of taxes is generally wastefully expended [and] always obtained at the expense of the people's comforts and enjoyments' (ibid, p. 222). The public only began to wake up to the real financial cost of the Napoleonic Wars, when they began to feel the effects of that cost in the form of postwar taxation to service the debt. Ricardo asserted that were wars financed by contemporaneous taxation, the public would be 'less disposed to engage wantonly in an expensive contest, and if engaged in it, we shall be sooner disposed to get out of it, unless it be a contest for some great national interest' ([1820], 1951, IV, p. 186). Public borrowing thus misled taxpayers as to the real volume of public spending. Furthermore, it deceived them as to the extent of their own personal wealth. Ricardo's views on this question have been resurrected in modern public finance literature. The concept of 'Ricardian Equivalence' and its relationship to the true views of Ricardo have been the source of much confusion and scholarly disagreement over the years. The discussion that follows will summarize this debate and point to its correct resolution, while explaining its significance for Ricardo's case against public borrowing.

The 'Ricardian Equivalence' argument suggests that tax financing and debt financing of government spending have equivalent effects on the behaviour of economic agents with perfect foresight. Barro outlined this reasoning in his 1974 article, 'Are Government Bonds Net Wealth?',⁶ and Buchanan (1976) later attributed the origin of this idea to Ricardo. However, this appellation is misleading, for as Roberts (1942, p. 258) had observed,

Ricardo was well aware of the fact that taxpayers did not estimate the real cost involved under [tax, loan and loan-cum-sinking fund] alternatives as being the same [and he] may well have chosen the concept of an objective market equality between borrowing and taxing merely as an accounting relationship which provided common ground for debate between the proponents of the different alternatives.

O'Driscoll (1977, p. 208) entered the modern debate by noting that 'Ricardo's own argument was more complex and not at all fairly characterized by Buchanan.' O'Driscoll recognized, echoing Roberts, that Ricardo distinguished between 'what a hypothetical transactor

with perfect foresight would do, and what transactors actually do' (ibid, p. 208n). While Ricardo anticipated Barro's reasoning, he came to an opposite conclusion as far as concerns its application. Specifically, he maintained that taxation, even in wartime, was preferable to public borrowing. When expenditures must be paid for immediately, he argued, taxpayers will make an effort to save to the full amount of the public expenditure, while otherwise an effort will be made only to save to the amount of the interest on the borrowed funds. Some taxpayers are short sighted, and do not take into account the full amount of the future tax burden in comparing tax financing to loan financing. Ricardo's rejection of equivalence between debt and tax financing is crucial to his analysis of the public debt, and it was used to bolster his case that public borrowing could not be justified in any circumstances.

Robert Eagly (1983, p. 230) discussed O'Driscoll's argument 'that the evidence points to a Ricardian belief in non-equivalence. . . . From a doctrinal point-of-view – taking Ricardo at his word – O'Driscoll's labelling seems correct. The absence of direct textual evidence makes a definitive judgment in this debate somewhat elusive.' This raises the question of what evidence Eagly would consider to be adequate, for Ricardo's views on the subject are unambiguous in their support of O'Driscoll's interpretation. For example, in 'The Funding System', he wrote that:

In point of economy, there is no real difference [between tax financing and loan financing] but the people who pay the taxes never so estimate them, and therefore do not manage their private affairs accordingly. . . . It would be difficult to convince a man . . . that a perpetual payment of 50l. per annum was equally burdensome with a single tax of 1000l. [Taxes], then, are more economical; for when they are paid, an effort is made to save to the amount of the whole expenditure . . . , leaving the national capital undiminished. In the other case, an effort is only made to save to the amount of the interest of such expenditure, and therefore the national capital is diminished in amount.

([1920], 1951, IV, pp. 186–8)

In this same passage, he made direct reference to a requirement which has been recognized by modern scholars as necessary for

Ricardian Equivalence to hold – a bequest motive that has the effect of making the agent infinitely-lived – but rejects this assumption based once again on the presence of irrationality. He held that the typical taxpayer ‘might have some vague notion that the 50 l. per annum would be paid by posterity, and would not be paid by him; but if he leaves his fortune to his son, and leaves it charged with this perpetual tax, where is the difference whether he leaves him 20000 l., with the tax, or 19000 l. without it?. (ibid)⁷ He even alluded to the issue of real world non-equivalence in the theory-oriented *Principles*, in writing that

it must not be inferred that I consider the system of borrowing as the best calculated to defray the extraordinary expenses of the state. It is a system that tends to make us less thrifty – to blind us to our real situation. . . . [A taxpayer could] delude himself with the belief that he is as rich as before.

([1817], 1951, I, p. 247)

In correspondence, Ricardo lamented the problem of money illusion to McCulloch, complaining of land owners that ‘It is difficult to make these men understand that the payment of £1000 per annum, is a heavier burden than the payment of £200000 once and for all’ ([15 September 1820], 1951, VIII, p. 238).⁸

If, as Ricardo held, tax and loan financing of government expenditure were not equivalent in a practical context, the choice of which of them to employ would have different implications for the level of investment and thus the growth rate of capital. If a taxpayer does not properly estimate the future tax burden implied by public borrowing, he will not recognize the necessity to invest at the time the borrowing takes place in order to ensure a future return to meet his future tax liability. Thus the overall level of investment is lower than it would be were he required to pay the tax immediately. To McCulloch, Ricardo explained this reasoning:

If an individual is called upon to pay an annual tax of £100 per Annum instead of a sum of £2000 for once only, he will not make so great an effort to save, because he is seldom sensible that a tax of 100 per annum is equivalent in value to £2000, – and therefore

a system of loans is more destructive to the national capital than a system of heavy taxation to an equal amount.

([29 March 1820], 1951, VIII, p. 170)

Thus from a growth perspective, 'Ricardian *non-equivalence*' provides a compelling reason to employ tax financing of government expenditure in preference to loans.

* * *

As shown above, Ricardo's analysis of the harmful consequences of public debt in a growth context turned on its depressing effect on the capital stock. This occurred via three different avenues: the unproductive nature of public expenditure and the possibility for extravagance in using loan financing; the decrease in private investment arising from wealth illusion at the time debt is contracted; and the incentive to export capital to escape onerous debt service taxation. Capital growth was seen as vital to economic growth in the classical growth model, as outlined in the introductory chapter, and thus public debt is harmful to economic prosperity. If, as the traditional interpretation suggests, Ricardo held the economy to be experiencing growth with a wage at subsistence level rather than above it, then debt redemption and the resulting decrease in taxes would create an immediate improvement in the situation of the working class, as it would boost capital accumulation and thus labour demand. There would occur a rapid Malthusian population response, until wages once again returned to subsistence, albeit at a higher money wage due to the need to resort to poorer quality land to extend cultivation. The alternative interpretation, the 'New View', suggests that the benefit of debt redemption would be of a more long standing nature. The resulting reduction in the tax burden in Britain would leave more funds in the hands of capitalists, thus improving the ability to accumulate, and it would also make investment in Britain relatively more attractive, thus reducing the motive for capital to flow abroad. Thus public debt redemption would promote capital accumulation over a longer period, effectively forestalling the onset of the stationary state. An increase of capital would thus have beneficial effects given either interpretation. The evidence cited thus far does not help to resolve the debate over which interpretation is correct. However, as will be

shown, additional ideas expressed by Ricardo in discussing issues of public finance are found to support the New View.

Ricardo observed in correspondence with McCulloch that it was 'important to my theory of providing for a heavy expenditure when it arises, by taxes within the year in preference to loans, that I should shew that it is more favourable to the accumulation of capital, to the demand for labour, and to the general happiness' (Letter to McCulloch [29 March 1820], 1951, VIII, p. 172). We must thus consider what Ricardo meant by 'happiness'. One possibility is that he considered population size as a measure of 'happiness'. But this can be dismissed. To Ricardo, the 'general happiness' clearly involved improved living standards for the labouring classes. He made this plain in the context of a discussion of the important distinction between the gross revenue of a country – the sum of wages and profits and rent, the incomes of all classes of the country – and the net revenue – the sum of profits and rent, the incomes of capitalists and land owners but not of labour.⁹ It is from net revenue that funds for investment and for taxes must be derived, wages 'if moderate, constituting always the necessary expenses of production' ([1817], 1951, I, pp. 347–8). Ricardo's specific purpose in this discussion was to correct an erroneous view of Adam Smith, who, on Ricardo's reading, held the size of a country's population to be a direct measure of its power. Ricardo countered that the proper measure should be the ability that a country has to pay taxes, which is in proportion to its net and not its gross revenue.

Say misunderstood Ricardo's argument on this point, somehow attributing to him the idea that there is 'une plus grande masse de bonheur' in a population of seven million as versus five million. Ricardo responded that 'M. Say has totally misunderstood me' (ibid, p. 349n). To Ricardo, the life of a labourer at subsistence was not to be considered a 'happy' situation, as he expressed it to McCulloch:

Suppose a nation to increase its capital annually at the rate of 2 per cent but that at the same time its population increased at the rate of 2 1/2 per cent. . . . [I]s it not clear that there will be annually new demands on its charitable funds? Its annual net revenue, and with it the means of expenditure and enjoyment to the higher classes of society would increase but would be accompanied with

a diminution of happiness, if not positive misery to the great mass of the people.

([29 March 1820], 1951, VIII, p. 171)

Elsewhere, Ricardo observed that for the labouring class, 'happiness or misery depends mainly on their number compared with the demand for labour' (Letter to Malthus [10 September 1821], 1951, IX, p. 62). That is, he believed that 'men are happy in proportion as they have an abundance of the commodities they want' ([1820], 1951, II, p. 21).

If, then, a stationary state economy is not a 'happy' situation, and if one accepts that the traditional theory correctly represents Ricardo's analysis, 'happiness' must be confined to the period of adjustment from one subsistence wage period to the next. If instead one accepts the New View, according to which Ricardo envisioned a growth process entailing both capital accumulation and population growth, it is the relation of the growth rate of labour to that of capital which governs the 'general happiness'. Taxation is harmful because it affects not the absolute amount of capital in existence, but its ongoing growth rate. This view is further supported by the following quotation, in which Ricardo emphasized the harmful impact of taxation on the condition of the labouring classes:

The labouring classes in all countries have the very greatest interest in keeping the supply of labour rather under the demand, but they are most happy when the funds for the support of labour, and consequently the demand for it *increase with the greatest rapidity*, and their means for supporting their families and contracting of marriages is at the highest level to which it can be raised. It is only because taxation interferes with the accumulation of capital, and diminishes the demand for labour, that it is injurious to the working classes.

(Letter to McCulloch [29 March 1820], 1951, VIII, pp. 168–9, emphasis added)¹⁰

Ricardo's analysis of the public debt question suggests a clear distinction between the stationary state as a theoretical tool and its practical relevance. This distinction is also brought out clearly by a discussion of the economic distress experienced in the postwar years. Were Ricardo 'pessimistic', one might expect him to lament that this

experience reflected the imminent onset of the stationary state. In fact, he held a more temperate view. Policymakers and pamphleteers blamed the distress on a variety of causes, but two of the more popular scapegoats were the Corn Laws and the onerous public debt. Surprising though it might appear given his opposition to both public debt and agricultural protection, Ricardo did not entertain the possibility that either might be responsible for the economic distress experienced by England. The distress, he argued, was the result of a temporary misallocation of resources as the economy made the transition from war to peace, proceeding from friction and miscalculation by producers, an explanation consistent with the law of markets.¹¹

Likewise, in his discussion of public debt, it is clear that Ricardo did not draw from his model the implication of an imminent end to growth.¹² In recommending debt redemption in parliament, 'Ricardo was one of those who thought that it could be paid off, and that the country was at this moment perfectly competent to pay it off. . . . He was persuaded that the difficulty . . . was not so great as was generally imagined; and he was also convinced that the country had not yet nearly reached the limits of its prosperity and greatness' (Speech [16 December 1819], 1951, V, pp. 34–5). This view was spelled out in detail in his response to those critics who felt that rapid debt redemption would create an excess of capital that would be harmful to the economy. He appealed to the law of markets in responding to this concern, denying that there could ever be 'too much capital'.¹³ In 'The Funding System', he went further, considering what would occur were the growth of capital to bring 'the land of a country to the highest state of cultivation, – when more labour employed upon it will not yield in return more food than what is necessary to support the labourer so employed, that country is come to the limit of its increase both of capital and population' – that is, the stationary state. His subsequent comments were hardly those of a pessimist; as to its applicability to the existing situation, he notes that 'The richest country in Europe is yet far distant from that degree of improvement.' ([1820], 1951, IV, p. 179) However, even if a nation were to reach this point, 'even such a country could go on for an indefinite time increasing in wealth and population, for the only obstacle to this increase would be the scarcity, and consequent high value, of food and other raw produce. Let these be supplied from abroad in exchange for

manufactured goods, and it is difficult to say where the limit is at which you would cease to accumulate wealth and to derive profit from its employment' (ibid). This is an optimistic assessment indeed.

2.4 Optimal taxation

In making his case against public debt, Ricardo thus alerted policy-makers and the public to the harm which taxation causes in both allocation and growth contexts. And yet he acknowledged the inevitability of at least a minimal amount of taxation, writing to Trower that 'the necessity which the state has for money to defray the expences of its functions, imposes on it the obligation to raise taxes, and thus interference [in the economy] becomes absolutely necessary.' (Letter to Trower [12 November 1820], 1951, VIII, p. 133) The question thus arises as to how he would have recommended the state meet its revenue needs. It is generally held that an explicit statement by Ricardo of the features of an optimal tax system is lacking. Eagly (1983, p. 228), for example, argued that Ricardo was 'not a special pleader for a particular tax program, but rather the reader of the *Principles* is ostensibly left to deduce his own policy conclusions from the analysis that is set forth.' Shoup (1960, p. 250) made a similar point, commenting that 'the policy implication of Ricardo's distributive findings appears to be that any amateur can construct an optimum tax system. The total amount of taxation is what matters, not the structure.'

It is true that in certain circumstances Ricardo appeared to dismiss or downplay the difficulties involved in devising and implementing an optimal tax system. The more pressing policy concern was how to achieve a reduction in the volume of taxation, and it appeared at times that he assumed that once that goal was met, the decision of which taxes to retain and which to abolish would be easily made. In a recently discovered manuscript detailing his proposal of a capital levy to redeem the public debt, he was content to state that 'the legislature [might] settle in what order the taxes should be withdrawn and which should be retained as the least oppressive and burdensome for the discharge of the ordinary expenses of Government' (Asso and Barucci, 1988).

And yet Ricardo did acknowledge the desirability of a comprehensive examination of the subject of tax policy. Trower encouraged him

to write a practical treatise on taxation, 'a more enlarged and comprehensive view of a subject you have already treated; applied to, and illustrated by, the actual circumstances and situation of the country.' ([19 September 1819], 1951, VIII, p. 71) While recognizing the potential value of such a work, Ricardo, engaged in other pursuits, put off the suggestion ([12 November 1819], 1951, VIII, p. 132; [4 October 1821], 1951, IX, pp. 87–8). He did recommend that it would be useful if someone else, perhaps Malthus, would undertake it in his stead ([12 November 1819], 1951, VIII, pp. 130–1). In the absence of a treatise on taxation, one must look to the full body of his work to glean details as to Ricardo's view of an ideal tax system. As has been shown, it was his view that all taxes were indirectly harmful to growth due to the unproductive nature of the public expenditure which they funded, and thus 'the great evil of taxation is to be found, not so much in any selection of its objects, as in the general amount of its effects taken collectively' ([1817], 1951, I, p. 152). Such harm to growth was inevitable, but was to be minimized by restricting the role of government. However, taxes which had the direct effect of impeding growth should be avoided at all costs; the government should 'never . . . lay such taxes as will inevitably fall on capital; since by so doing, they impair the funds for the maintenance of labour, and thereby diminish the future production of the country' (*ibid.*, p. 153; see also p. 222).

It was thus Ricardo's position that 'Taxation under every form presents but a choice of evils; if it do not act on profit, or other sources of income, it must act on expenditures; and provided the burden be equally borne, and do not repress reproduction, it is indifferent on which it is laid' (*ibid.*, p. 167). Later, he once again observed that the 'evil' lies not in particular taxes, but in the 'annihilation' of capital to which they give rise (Letter to McCulloch [8 April 1820], 1951, VIII, p. 177). He also considered the implications of taxation for resource allocation. He argued that in levying taxes, 'The aim of the legislature should . . . be to press on all equally, so as to interfere as little as possible with the natural equilibrium which would have prevailed if no disturbance whatever had been given.' (Letter to Brown [13 October 1819], 1951, VIII, p. 101) That is, he recommended that the government strive to lay taxes neutral in their effects on resource allocation. The allocative effects of taxation

could only be understood by means of economic analysis: 'Political Economy, when the simple principles of it are once understood, is only useful, as it directs Governments to right measures in taxation' (Letter to Trower [12 November 1819], 1951, VIII, pp. 132–3). The necessary first step was education, making 'the first principles of Political Economy known' (Letter to Trower [25 September 1819], 1951, VIII, p. 79).

Ricardo's analysis of tax incidence suggested to Eagly (1983) that he would have recommended rent and luxury goods as optimal bases for taxation. Taxation of rent would not directly affect resource allocation, but as shown above, it would have an indirect effect to the extent that the proceeds would be spent by the government on a mix of commodities different than would have been purchased by landlords. It would also have only an indirect effect on growth, to the extent that any productive spending by landlords would be translated into unproductive public expenditure. As for luxury goods, Eagly argued that they would be a logical basis for taxation as having a minimal negative impact on growth. And yet Ricardo expressed concern with such taxes, for the revenue generated from them would by its nature be uncertain. Since consumers of luxury goods could be expected to choose to adjust their consumption of taxed commodities, 'there is no certainty as to the amount of the tax [for a] man intent on saving, will exempt himself from a tax on wine, by giving up the use of it' ([1817], 1951, I, p. 241).

One criterion that Ricardo suggested should be used in constructing a tax system was equity. Consider his opinion of a tax on rent. In the *Principles* ([1817], 1951, I, p. 204), he observed that while Smith had suggested rent as an ideal tax base, 'it would surely be very unjust to tax exclusively the revenue of any particular class of a community.' An income tax, in his day accepted to be proportional and not progressive, would satisfy the need for fairness, but was opposed by Ricardo, as it was by most of his contemporaries, on the grounds of invasion of privacy.¹⁴ Ricardo also shared the general concern that an income tax might prove too convenient a source of funds for a government disposed to extravagance: 'the machinery [of the income tax] is too easily worked to allow it to be at the disposal of our extravagant ministers during a time of peace' (Letter to Trower [9 March 1816], 1951, VII, p. 27; see also exchange

of correspondence with McCulloch [May–June 1820], 1951, VIII, pp. 190, 196). He argued, however, that an alternative could be constructed:

If the operation of [a tax on produce] be unequal it is for the legislature to make it equal, by taxing directly the rent of land and the dividends from stock. By so doing, all the objects of an income tax would be obtained without the inconvenience of having recourse to the obnoxious measure of prying into every man's concerns, and arming commissioners with powers repugnant to the habits and feelings of a free country.

([1817], 1951, I, pp. 160–1)

He reiterated this view in correspondence, observing that:

I never contemplate as a good and practical measure, a tax on profits, without also taxing all other sources of income. Profits can never be known without a minute scrutiny into the affairs of those concerned in trade [while] other sources of income are well known and may be easily come at. The landlord cannot well conceal the amount of his rent, nor the stockholder the amount of his dividend, and therefore it might become a question whether you should not tax the profits of trade indirectly, by taxing wages, or necessaries; and other incomes directly as rent, dividends, annuities, etc. etc.

(Letter to Trower [28 January 1820], 1951, VIII, p. 154)

To summarize, taxation would have inevitable negative consequences on both resource allocation and economic growth. The aim should be to minimize harm, which could be facilitated by a better understanding of the principles of political economy. An optimal tax system, in Ricardo's view, would involve limiting the necessary revenue to as small a level as possible, and then taking care not to impose the tax burden in such a way as to unduly harm capital. Finally, equity was to be a crucial consideration.

2.5 Conclusion

This chapter has described how Ricardo employed economic analysis to enumerate the benefits resulting from redemption of existing

public debt, and to warn of the dangers of contracting additional public debt in future. He used his analysis of tax incidence to establish the harmful effects of debt service taxation on resource allocation, while he illustrated the deleterious impact of excessive government expenditure, public borrowing and the weight of debt service taxation in terms of the impact on growth. His policy recommendations, rapid debt repayment and a strong preference for tax financing of government expenditure over loan financing, can only be properly understood in the context of his analyses of resource allocation and economic growth. It is also necessary to understand both types of analysis in order to determine what would constitute an optimal tax system in the Ricardian economy.

We have seen too that Ricardo's views on public debt cast light on the substance of his economic reasoning. His warning of the distortions caused by taxation indicates an allocative analysis conducted in a framework of interconnected markets characterized by demand and supply. In addition, his concern for the impact of public borrowing and public debt on economic growth make most sense in the context of an economy experiencing ongoing population growth rather than temporary deviations of the wage from subsistence.

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3

Public Debt Policy and Public Extravagance: the Ricardo–Malthus Debate

Since we have known each other, [Malthus and I] have always freely discussed each other's opinions, and it is a subject of wonder to our friends that after the innumerable contests we have had together, there should still be such serious difference between us.

David Ricardo in a letter to J.R. McCulloch (8 April 1820),
1951, VIII, p. 178

3.1 Introduction

Much of David Ricardo's participation in political debate was related, directly or indirectly, to an attempt to curb what appeared to be an expanding economic role for government.¹ Both his economic analysis and his theory of politics led him to conclude that government involvement in the economy should be confined to a narrow range of activities. He pursued two related policy aims in this regard: the reduction of public expenditure and the redemption of the public debt, both of which would lead to a lessening of the tax burden. At times, the views that he expressed regarding these issues appeared intransigent, but he was driven by a sense of public duty to state his views clearly and unequivocally. The purpose of this chapter is to provide a possible explanation for his extreme stance in the theoretical debate over public debt redemption. I shall argue that his position turns on his perception of the wider policy issue of the economic role of government.

It is more appropriate to speak of a consensus in Ricardo's day on the question of public debt than about nearly any other policy issue.

There was broad agreement that the debt had reached a dangerously high level, and that action of some sort should be taken to address it. However, a small minority of writers and policymakers questioned the wisdom of debt redemption by any means, on both theoretical and practical grounds. Notable among them was Malthus, whose analysis of public debt was a corollary of his analysis of postwar economic distress. The analytical dispute between Ricardo and Malthus on these issues was based on a fundamental disagreement about Say's Law, or the Law of Markets. Their respective economic theories led to distinctly different conclusions over what action should be taken to deal with the public debt. Ricardo called for its immediate redemption by means of a levy on capital, in order to relieve the country from the harmful effects of excessive taxation required to service it. Malthus, by contrast, was concerned about the effects of even gradual redemption on the level of aggregate demand, and thus advised caution.

Hollander (1979, p. 537) has suggested that although there were circumstances in which Ricardo admitted the possibility of deficient aggregate demand in the short run, he downplayed its likelihood from fear that such a position could be construed as acceptance of the prospect of secular stagnation. This chapter will propose a further explanation for Ricardo's stance on this issue, which is related to the state of the contemporary debate over public finance. I contend that were he to concede the short run inapplicability of the Law of Markets, this might be interpreted as opening the floodgates of theoretical support for public extravagance, which, given his opinion of the existing political environment, was the last thing he wished to do.

In Chapter 2, I outlined the basis for Ricardo's opposition to taxation and public borrowing from the standpoint of his economic analysis. Here, in Section 3.2, I examine the broader issue of his opposition to government interference in the economy based on practical political concerns. I establish his strong antipathy toward 'public extravagance' and his belief that government interference in the economy should be restricted to a minimal number of well defined circumstances. In this section, I also consider Ricardo's comments on the work of Ravenstone [Puller], a contemporary pamphleteer, and how they enhance our understanding of his political views.

In Section 3.3, I outline the case made by Malthus against redemption of the public debt and Ricardo's contrasting case in favour of

immediate repayment, showing that their positions were founded on differing views as to the Law of Markets. More specifically, while Malthus worried about the depressing effect of debt redemption on the overall level of aggregate demand given current economic circumstances, Ricardo was vehement in denying this possibility.

I then proceed in Section 3.4 to present an hypothesis to explain Ricardo's seemingly obdurate position in the debate summarized in Section 3.3. I propose that Ricardo was concerned that any theoretical concession that he might make to Malthus' line of reasoning might be construed as support for government profligacy, which he abhorred, as shown in Section 3.2. I suggest that he recognized the potential for confusion in the application of subtle abstract details to policy debate. He was well aware of the political use to which Malthus' ideas on this subject were being put, and did not wish to make any theoretical concessions that might add fuel to the fire.

3.2 Ricardo, politics and government

Ricardo's analysis of politics was complex and carefully reasoned. As a group, politicians, he argued, should not be relied upon to behave in a 'virtuous' fashion, to act in the national interest when such interest conflicted with their own.² He repeatedly acknowledged the difficulty of the battle against entrenched interests that was being waged by economic, social and political reformers. He observed that in parliament, 'on every point where an abuse is to be got rid of there are such powerful interests to oppose' (Letter to Trower [21 July 1820], 1951, VIII, p. 207).³ He advocated political reform, seeking widely expanded suffrage in conjunction with education of the electorate. The ultimate solution to current economic problems, including that of public debt, lay in 'the general dissemination of good doctrines, for if a minister was not restrained by an honest legislature, he would receive no inconsiderable check from an enlightened public' (Letter to Trower [4 October 1821], 1951, IX, p. 88). Ideally, reform should produce a parliament where 'no particular interest [is] predominant, or rather that no man could better serve himself, or better promote his own happiness than by serving the public.' In reality,

Whether this be attainable I have great doubts yet I am convinced if any thing will tend to produce so desirable an end, it is

general information. Where all men are enlightened as to what their own happiness and welfare consists in they will be more likely to enter into a judicious compromise by which each in giving up a little will best secure to himself the greatest attainable sum of good.

(Letter to Mill [30 August 1815], 1951, VI, p. 264)⁴

The failure of the existing system of representation was exemplified, in Ricardo's view, by the failure of successive governments to take concrete action to address the public debt problem, while attempting to appear to be doing so by means of subterfuge and manipulation. While this may have fooled the uninformed public, 'The delusion of it had been seen long ago by all those who were acquainted with the subject' (Speech [9 June 1819], 1951, V, p. 21). Indeed, Ricardo made a contribution to the effort to expose the sordid history British public finance in 'The Funding System' (1820), following similar efforts of others, most notably Hamilton (1818), a professor of mathematics at Aberdeen, whose work he quoted at length.⁵ As it was, the Sinking Fund,⁶ in existence ostensibly to gradually redeem the public debt, instead provided a ready source of financing for a government 'responsible to a House of Commons constituted like ours' (Speech [18 June 1819], 1951, V, p. 25). Ministers of all political stripes, Ricardo argued, were often 'anxious, on cases of what they conceived emergency, to appropriate it to the public use' (Speech [9 June 1819], 1951, V, p. 21).

Misuse of the Sinking Fund was a recurring theme in Ricardo's parliamentary speeches:

Ministers were accustomed to tell the House that they must have a sinking fund to meet exigencies, to second the efforts of our armies and generals, and to inspire the enemy with a salutary respect for us. But the legal and the original intention of the Sinking Fund was, to pay off the national debt.

(Speech [1 June 1821], 1951, V, pp. 119–20)

It was in his view especially dangerous to have such a fund available to a government disposed to belligerence, as voters were much less likely to support a costly war than were their leaders. To Trower he observed that 'While ministers have this fund virtually at their

disposal they will on the slightest occasion be disposed for war. To keep them peaceable you must keep them poor.’ ([25 March 1822], 1951, IX, p. 180)⁷ As it was, ‘The existence of this fund would serve only to encourage ministers to engage in new wars, by facilitating the contraction of new loans’ (Speech [18 February 1822], 1951, V, p. 130).

Encouragements to public extravagance were anathema to Ricardo. In parliament, he reacted to the reduction and remission of several taxes with uncharacteristic sarcasm, observing that the public ‘owed no gratitude to ministers for giving the people what was, in fact, their own money. If, indeed, the ministers had framed any plan for giving the people any portion of money which did not really belong to them, then would be the time to offer them fervent gratitude’ (Speech [24 May 1822], 1951, V, p. 191).⁸ In existing circumstances, the extension of taxation was an ever present threat. While Ricardo assented to the reduction of the tax on salt, he lamented that ‘any portion of the salt tax was continued, he did not wish that any nucleus should remain, because they well knew with what vigour, under the management of the exchequer, it would spread’ (ibid, p. 192).⁹

Although Ricardo feared entrusting ministers with the public purse given the current state of parliamentary representation, he did concede a limited need for government expenditure, acknowledging that while ‘Agriculture, Commerce and Manufactures flourish best when left without interference on the part of Government, . . . the necessity which the state has for money to defray the expences of its functions, imposes on it the obligation to raise taxes, and thus interference becomes absolutely necessary’ (Letter to Trower [12 November 1819], 1951, VIII, p. 133). Ricardo did not often engage in explicit and detailed discussion of the legitimate role of government, but when he did so, as in his ‘Proposals for an Economical and Secure Currency’ (1816), he emphasized the informational advantages which it possessed. In the cases of the certification of medical practitioners, the stamping of plate and money, and the examination of purity of drugs, all examples provided by Say, ‘the purchasers are not supposed to have, or to be able to acquire sufficient knowledge to guard themselves against deception; and government interferes to do that for them which they could not do for themselves. . . .’ (1951, IV, pp. 72–3).

Ricardo's public admissions of the appropriate economic role for government were generally of this nature. One example is found in his comments on a newly emerging service for the poor, savings banks. Such a service would prove beneficial to society, for it would 'tend to introduce economy and forethought amongst the poor, which may in time check the propensity to a too abundant population, the great source from whence all the miseries of the poor flow in so profuse a stream' (Letter to Trower [9 March 1816], 1951, VII, p. 26). Ricardo recommended that the government take appropriate action to regulate such enterprises on grounds of informational asymmetry, for:

as they spread, they will at last be undertaken by speculative tradesmen, as a business from which to derive profit. The poor should have some check on the employment of the funds. . . . This check should be afforded by the legislature or there will be no security against the failure of the undertakers. The poor will have no means of discovering the wealth and respectability of the parties who open these Banks.

(Letter to Trower [4 February 1816], 1951, VII, p. 16)

A second example is found in Ricardo's comments on the ideas of Robert Owen, a 'visionary' who in 1800 purchased on behalf of himself and his partners the mills at New Lanark. His aim was to run the operation to show that it actually paid an employer to treat his workers well. A number of social welfare programmes were provided – public health, education, social security – while an adequate profit was made for the owners. He continued to seek the establishment of additional experimental agricultural and manufacturing communities to ameliorate the conditions of the working classes. Ricardo reluctantly agreed to membership of a committee to examine Owen's plans at a meeting on 26 June 1819, emphasizing to Trower that he was not a member of a 'Committee to *further* Mr. Owen's plans . . . for I was not bound to approve, only to examine' ([8 July 1819], 1951, VIII, p. 45). While generously describing Owen's efforts at a subsequent meeting as 'an example of zeal for the public good, and of benevolent intention, worthy of the highest praise' (Speech [26 June 1819], 1951, V, p. 467), Ricardo did not share his faith in the success of such an enterprise. He argued that it was 'built upon a

theory inconsistent with the principles of political economy' (Speech [16 December 1819], 1951, V, p. 30). Owen sought a public grant to implement further aspects of his plan, one of which was to dispense with the use of agricultural machinery as a means to boost the demand for labour. Ricardo's response to this request was typical of his reasoning. He observed that the question to be asked was not whether machinery was labour displacing but instead whether production without machinery was more efficient than with its use. He admitted insufficient knowledge of agricultural production to judge whether spade husbandry was more efficient than production assisted by ploughs and horses (*ibid.*).

Ricardo supported the formation of a committee to investigate the efficiency of machinery. However, he opposed a grant to Owen to conduct such an experiment: 'government or the legislature would not be wisely employed in engaging in any commercial experiment [but] it would be advantageous that it should, under present circumstances, circulate useful information and correct prejudices' (*ibid.*, p. 31). It was entirely appropriate for the government to educate the public in order that individuals might make informed production decisions. However, it was inappropriate for the government to engage in production itself. As was reported in a newspaper account of his speech on Owen's plan, Ricardo 'was for ascertaining the fact; and as soon as the farmer knew that it was his interest to pursue a different system, he would adopt it as a matter of course' (*ibid.*, p. 31n). While the government might educate, decisions themselves were to be left in private hands.¹⁰

Some comments made in correspondence regarding a pamphlet published in 1821 under the pseudonym of 'Piercy Ravenstone' help to clarify Ricardo's views of the economic role of government.¹¹ Here 'Ravenstone' argued that the ownership of property would be justifiable only where it originated in labour, but that by his day it had developed into an institution by which the 'unproductive' classes of society extracted revenue generated by the 'productive' agricultural class in the form of rent, profit and taxes. Such unproductive classes, which increased consumption without contributing to production, were acknowledged as important to the smooth functioning of the economy in a well regulated state, but had of late, in his opinion, become too numerous. In a letter to James Mill dated 28 August 1821, Ricardo observed of Ravenstone's work that 'though full of the great-

est errors [it] has some good things in it' (1951, IX, p. 45). It appears that he must have also discussed the work with Malthus, who commented to Ricardo in his letter of 13 September 1821 that the work 'is certainly as you say full of errors, but I believe he is a well meaning man and I shall look at it again' (1951, IX, p. 64).

It is not known which details of Ravenstone's argument earned Ricardo's praise. Hollander (1979, pp. 587–8) has conjectured that 'Ricardo commended Ravenstone's propositions that low real wages might be accounted for by the effects of indirect taxation', but adds that 'It is more likely that he felt sympathy for Ravenstone's condemnation of excessive government intervention.' He further noted that Ricardo and Ravenstone also took similar positions with respect to excessive profits of capital and their depressing effect on wages. However, I propose a further explanation, namely that Ricardo's approbation was at least in part directed at Ravenstone's discussion of the state of parliamentary representation. In his letter to Mill, Ricardo characterized Ravenstone as 'a strenuous and an able advocate for Reform' ([28 August 1821], 1951, IX, p. 45). He continued with the observation that 'The only prospect we have of putting aside the struggle which [the Whigs] say has commenced between the rich and the other classes is for the rich to yield what is justly due to the other classes' (ibid, p. 45). It is thus likely that he had some sympathy with Ravenstone's position that entrusting the power to tax all classes of the community in the hands of the House of Commons, dominated by members of one class of the community, was dangerous.¹²

According to Ravenstone, the existing system of representation had been appropriate in an earlier time, when the wealthy classes represented in parliament were made to pay the nation's taxes. 'The introduction, however, of taxes on consumption, by making a divorce between representation and taxation, has virtually destroyed all the benefits of the English Constitution. . . . The representative has come to have an interest, not only different from, but opposed to, that of his constituents. . . .' (Ravenstone [Puller], 1821, pp. 438–9). This encouraged government profligacy and, in particular, it accounted for the public debt problem, for representatives were no longer spending their own money: *'It is to this disorder in our representation we owe the enormous growth of the national debt.* A watchfulness to prevent the increase of the public expenditure could not be hoped

for from those who had an interest to augment it. It would be madness to expect the wolves would prove the best guardians of the fold' (ibid, p. 440, emphasis added). He subsequently observed, in much the same way as did Ricardo, that 'By imposing taxes on property, the debt would be made to discharge itself' (ibid, p. 442). Ravenstone's view of the state of parliamentary representation was much like that of Ricardo, who frequently stated that 'it was quite necessary the House of Commons should truly represent the people' (Speech [18 April 1821], 1951, V, p. 112; see also [24 April 1823], 1951, V, p. 283; [30 December 1820], 151, V, p. 470). Furthermore, Ravenstone's fears of excessive government expenditure as expressed in 1821 complemented Ricardo's own, and both held out similar remedies for the public debt. These are positions that are likely to have won Ricardo's praise.¹³

Ricardo's views on the economic role for government appear at times to be impossibly narrow. Consider for example his opposition to public borrowing to finance infrastructure projects. Smith ([1776], 1937, p. 681) had acknowledged the provision of public institutions – defence, justice, education, and projects such as roads, bridges, canals and harbours to facilitate commerce – as a duty of the sovereign.¹⁴ Such an argument seems eminently reasonable to a modern reader. And yet such a reasonable argument is not found in the work of Ricardo, with one notable exception. In correspondence, Ricardo admitted that 'Taxes for the benefit of trade itself such as for Docks, canals, Roads, etc. etc. are on a different footing from all other taxes, and produce very different effects, they may and generally do promote production instead of discouraging it' (Letter to Trower [28 January 1820], 1951, VIII, p. 155). Despite this lone private concession, Ricardo insisted in public and in correspondence with Malthus on the inefficient and unproductive nature of government spending.

In the context of Ricardo's economic analysis, the effect of public expenditure is unambiguous: the revenue expended by government is assumed to be unproductive. The transfer of purchasing power from private hands to public coffers is undesirable insofar as taxpayers would have employed at least a part of the funds in a productive manner, while 'Every new tax becomes a new charge on production, and raises natural price. A portion of the labour that was before at the disposal of the contributor of the tax, is placed at the

disposal of the State, and *cannot* therefore be employed productively' ([1817], 1951, I, p. 185, emphasis added). One way to reconcile this definitive statement in opposition to public expenditure with the concession cited above is to suggest that Ricardo distinguished between beneficial spending on infrastructure and harmful spending on make-work projects. In correspondence with Malthus, he expressed clear opposition to relief works carried on with funds raised by public subscription. He commented 'That part of the capital which employs the poor on the roads for example cannot fail to employ men somewhere and I believe every interference is prejudicial' ([3 January 1817], 1951, VII, p. 116).¹⁵ While Malthus' reply is wanting, it appears likely that he suggested that certain types of government expenditure might be considered as expenditure on capital. Ricardo's subsequent response is revealing:

by turning revenue into Capital we shall obtain both an increased supply and an increased demand, – but if the same capital be so created I do not approve of its present application, – taking it out of the hands of those who know best how to employ it, to encourage industry of a different kind and under the superintendence of those who know nothing of the wants and demands of mankind and blindly produce cloth or stockings of which we already have too much, or improve roads which nobody wishes to travel.

([24 January 1817] 1951, VII, p. 121)

However, he also expressed opposition to public infrastructure expenditure in parliament, observing that 'when he heard honourable members talk of employing capital in the formation of roads and canals, they appeared to overlook the fact, that the capital thus employed must be withdrawn from some other quarter' (Speech [16 December 1819], 1951, V, p. 32). Thus the explanation of his concession to Trower in terms of the infrastructure–employment project distinction is not particularly satisfying. His refusal to consider seriously Malthus' position on this issue appears obdurate and in contradiction to the more reasonable position expressed in correspondence to Trower.¹⁶ After examining the contrasting analyses of Ricardo and Malthus of public debt redemption, in Section 3.4 I will suggest a possible motive for the extreme position which Ricardo took in correspondence with Malthus and in public debate.

3.3 The debate over the effects of public debt

Malthus' position

Malthus argued that redemption of the public debt would be unwise given England's economic circumstances, characterized by an excess of capital relative to aggregate demand and consequently a low rate of profit. The postwar depression, he argued, had begun with a substantial reduction in the price of corn. As a result, the demand for agricultural labour fell, as money wages were initially unchanged, and severe agricultural unemployment followed. Purchases of manufactured goods fell in turn. The situation was aggravated by a contraction of the money supply, which further reduced domestic demand, and by natural population increase and postwar demobilization. Thus,

for the four or five years since the war, on account of the change in the distribution of the national produce, and the want of consumption and demand occasioned by it, a decided check has been given to production. . . . [T]his produce, though decidedly deficient, compared with the population . . . , is redundant, compared with the effectual demand for it and the revenue which is to purchase it. Though labour is cheap, there is neither the power nor the will to employ it all; because not only has the capital of the country diminished, compared with the number of labourers, but, owing to the diminished revenues of the country, the commodities which those labourers would produce are not in such request as to ensure tolerable profits to the reduced capital.

([1820], 1951, II, pp. 439–40)¹⁷

Renewed capital accumulation and sustainable growth required a preliminary increase in national revenue to pave the way for increased (sustainable) savings. One factor affecting the national revenue was the division of property, and its effect on the employment of unproductive labourers. It was his position that with:

a rapid accumulation of capital, or, more properly speaking, a rapid conversion of unproductive into productive labour, the demand, compared with the supply of material products, would prematurely fail, and the motive to further accumulation be

checked. . . . It follows that, without supposing the productive classes to consume much more than they are found to do by experience, particularly when they are rapidly saving from a revenue to add to their capitals, it is absolutely necessary that a country with great powers of production should possess a body of unproductive consumers.

(*ibid.*, p. 421)

The determination of the ideal proportion of productive to unproductive labourers in an economy would, in his view, depend on a number of factors, including the consumption behaviour of the productive parts of society, which determine the need for the extra demand stimulus which unproductive labour would provide. While the spending of the landlord class on menial servants and luxury goods aided in boosting demand, it was Malthus' position that 'in the ordinary state of society, the master producers and capitalists, though they may have the power, have not the will, to consume to the necessary extent' (*ibid.*, p. 429). And as for the labouring classes themselves, although increased consumption spending would be desirable, Malthus did not hold it to be a likely occurrence. He argued that '[o]wing to the principle of population . . . there is much . . . reason to fear that the working classes will consume too little for their own happiness' (*ibid.*, p. 430). Taken together, the spending of landlords, capitalists and labourers could be expected to fall short of that required to consume the total product of the economy. Other sources of demand were needed to remedy the situation, 'to maintain such a balance between produce and consumption as to give the greatest exchangeable value to the results of the national industry' (*ibid.*, p. 436).

In Malthus' view, redemption of the public debt would have harmful distributional effects that would exacerbate the existing economic distress. In particular, he viewed the class of public creditors as a substantial group of unproductive consumers. 'Under the actual division of landed property which now takes place in this country, I feel no sort of doubt that the incomes which are received and spent by the national creditors are more favourable to the demand for the great mass of manufactured products, and tend much more to increase the happiness and intelligence of the whole society, than if they were returned to the landlords.' ([1820], 1951, pp. 483–4) As a result of debt redemption, the society:

instead of being enriched, would be impoverished. It is the greatest mistake to suppose that the landlords and capitalists would either at once, or in a short time, be prepared for so great an additional consumption as such a change would require; and if they adopted the alternative suggested by Mr. Ricardo in a former instance, of saving, and lending their increased incomes, the evil would be aggravated tenfold. The new distribution of produce would diminish the demand for the results of productive labour; and if, in addition to this, more revenue were converted into capital, profits would fall to nothing, and a much greater quantity of capital would emigrate, or be destroyed at home, and a much greater number of persons would be starving for want of employment, than before the extinction of the debt.

(*ibid.*, p. 435)¹⁸

Ricardo's position

Two implications drawn from the Law of Markets played a crucial role in Ricardo's case for debt redemption, by either gradual or by rapid means. First, he held that the process of saving entails the direct conversion of saved funds into investment spending, with no leakages, and thus an increase in saving results in growth of the capital stock. Second, he held that an increased flow of output generated by a larger stock of capital is necessarily accompanied by an increase in overall purchasing power, in the form of factor payments, sufficient to purchase the additional output, and thus there can be no deficiency of aggregate demand.¹⁹ To Ricardo, logic dictated that 'no man would willingly lock up his money, he would endeavour to make it as productive as he could. . . . [H]e would be glad to lend his money at interest' (Evidence on Resumption of Cash Payments [4 March 1819], 1951, V, p. 399). Ricardo used the Law of Markets to explain the postwar depression in terms of a mismatch of commodities produced to those in demand: 'Men err in their productions, there is no deficiency of demand' (Letter to Malthus [9 October 1820], 1951, VIII, p. 277). If the market were allowed to operate without interference, resources would soon be reallocated and the economy would once again thrive. Another implication of his adherence to the Law of Markets was the proposition that growth is sustainable. Thus according to Ricardo, there could be no such thing as 'too much

capital.' Any additions to the capital stock would promote economic growth and prosperity, that is, 'by turning revenue into Capital we shall obtain both an increased supply and an increased demand' (Letter to Malthus [24 January 1817], 1951, VII, p. 121).²⁰

According to Ricardo, the process of redeeming public debt would have only transitory effects on the economy, as the ownership of assets would be transferred from taxpayers to public creditors, but it would leave the overall level of aggregate demand unchanged. The economic adjustment to debt redemption would be smooth, facilitated by private financing arrangements. In his explanation of the theoretical operation of a sinking fund in the redemption of debt, Ricardo pointed out that the mechanism involved nothing more complicated than a transfer of funds between different members of the community. 'The commissioners have no capital. They receive quarterly, or daily, certain sums arising from the taxes, which they employ in the redemption of debt. One portion of the people [the taxpayers] pay what another portion [the government bond holders] receive.' ([1820], 1951, IV, p. 177) Ricardo argued that the holders of government securities, as recipients of funds from the commissioners, would no doubt employ those funds as capital, in order that they might continue to receive a steady return as investment income. He wrote 'all the money received by the stockholder, in return for his stock, must be employed as capital, for if it were not so employed, he would be deprived of his revenue on which he had habitually depended' (*ibid*, p. 183). He was careful to emphasize that 'there would be no necessity for stockholders to become farmers or manufacturers.' Instead, their income could be derived from their investments as 'interest for borrowed money' (*ibid*, p. 180).

This argument was similarly relevant in the analysis of the effects of a capital levy to redeem debt. Of the critics who suggested that payment strains would occur, he asked 'what should hinder [taxpayers] from selling a part of their property for money, or of borrowing it at interest? That there are persons disposed to lend, is evident from the facility with which government raises its loans. Withdraw this great borrower from the market and private borrowers would be readily accommodated.' (*ibid*, p. 188) Taxpayers and stockholders 'would not fail to make an arrangement with each other, by which one party would employ their money, and the other raise it. They might do it by loan, or by sale and purchase, as they

might think it most conducive to their respective interests; with this the state would have nothing to do.’ (ibid, p. 197) Thus these private arrangements would not harm the nation’s capital stock. In fact, Ricardo argued that they might even augment it: ‘Taxes raised in order to pay off debt, ought to be looked upon in a very different light, from those that were raised for the immediate services of the state. The one, we might be considered as paying to ourselves; the other was for ever lost to us’ (Speech [21 February 1823], 1951, V, p. 250). If the funds paid in tax had been otherwise earmarked for investment purposes, then aggregate capital would be unaffected from the transfer of these funds from taxpayers to stockholders. Ricardo argued that ‘there might or might not be a transfer of employments, but the annual produce, the real wealth of the country, would undergo no deterioration, and the actual amount of capital employed would neither be increased or diminished’ ([1820], 1951, IV, p. 178). He went further in observing that if even a part of those tax funds had been destined for consumption expenditure, this portion of these funds, ‘when received by the stockholder, would be by him employed as capital, there would be, in consequence of [debt redemption], a great increase of capital.’ (ibid, p. 178)²¹

Ricardo vehemently opposed the ‘underconsumptionist’ arguments. Of Malthus’ discussion of the necessity for the existence of a body of unproductive consumers to ensure adequate aggregate demand, Ricardo commented in his *Notes on Malthus* ([1820], 1951, II, p. 423) that ‘I cannot express in language so strong as I feel it my astonishment at the various propositions advanced in this section.’ He stated forcefully that

In all cases a good distribution of the produce, and an adaptation of it to the wants and tastes of society are of the utmost importance to the briskness of trade and the accumulation of capital. The want of this is in my opinion the only cause of the stagnation which commerce at different times experiences. It may be all traced to miscalculation, and to the production of a commodity which is not wanted instead of one which is wanted.

(ibid, p. 415)

He likened the effect on the economy of support of a body of unproductive labourers to that of an ‘earthquake’ (ibid, p. 436) or another

natural disaster. 'A body of unproductive labourers are just as necessary and as useful with a view to future production, as a fire, which should consume in the manufacturers warehouse the goods which those unproductive labourers would otherwise consume' (ibid, p. 421).²² Such comments indicate an extreme unwillingness to countenance the possibility of a general demand deficiency.

3.4 Ricardo's policy position: an hypothesis

Ricardo's refusal to consider seriously Malthus' point of view on the impact of public debt redemption seems intransigent. I suggest that at least in part his position arose out of fear that any concession might be construed as support for increased government spending. Were he to have conceded the possibility of even a short term 'general glut', this might have been seen as supporting the postponement of debt redemption. Even worse, this may have encouraged exacerbating the debt problem by increasing government intervention in an attempt to boost aggregate demand. Big government was viewed by most political economists of the eighteenth and early nineteenth century as profligate, partisan, corrupt, inefficient and intrusive. While Ricardo's economic analysis provided strong support for a limited role for government in the economy – taxation distorted the allocation of resources and diverted funds which might otherwise be invested and stimulate growth – so too did his political philosophy.

Ricardo was fully aware that Malthus' ideas appealed to policy-makers. A direct corollary of Malthus' argument of the harm that might follow redemption of public debt was the concept that 'national wealth [has been] greatly stimulated by the consumption of those who have been supported by taxes' ([1820], 1951, II, p. 433). Ricardo commented on this observation that 'This argument in favour of taxation is quite consistent with Mr. Malthus' opinion of the advantages resulting from unproductive consumption. Mr. Malthus is a most powerful ally of the Chancellor of the Exchequer' (ibid, p. 433) who was generally believed to glory in increasing public spending. Later Malthus made reference to the savings out of increased disposable incomes due to the lifting of wartime taxes, a fact 'which contributes to explain the cause of the diminished demand for commodities, compared with their supply since the war'

(*ibid.*, p. 443). Ricardo commented that ‘If Mr. Malthus’s reasoning be correct it forms an irresistible argument against the removal of the tax’ (*ibid.*, p. 443). He clearly had great concerns over the implied support for taxation that might be drawn from Malthus’ reasoning. The most striking expression of Ricardo’s dismay with the implications of Malthus’ reasoning is to be found in comments made in a letter to McCulloch of 2 May 1820 (1951, VIII, p. 181):

The most objectionable chapter in [Malthus’ *Principles* (1820)] is that . . . on the bad effects from too great accumulation of capital, and the consequent want of demand for the goods produced. This doctrine naturally leads to the conclusion which Mr. Malthus draws from it. I could not have believed it possible, if I had not read it, that so enlightened a man . . . should recommend taxation as a remedy to our present distresses. . . . According to him you produce too much and consume too little, and as you are obstinate that you will not consume yourself he recommends that taxes should be imposed, and that government should expend for you.

Malthus was very cautious in his recommendation to maintain the existing public debt situation. He clearly stated that he was addressing the policy question of what should be done with reference to the existing economic context. This did not mean that he advocated a policy of government financing by means of loans; as Hollander (1997, p. 622) has put it, ‘Malthus . . . was not positively championing the Debt as an ideal.’ Like Ricardo, Malthus expressed concern with the dangers of excessive taxation required to service the public debt. He admitted that

it must be acknowledged that injudicious taxation might stop the increase of wealth at almost any period of its progress, early or late; and that the most judicious taxation might ultimately be so heavy as to clog all the channels of foreign and domestic trade, and almost prevent the possibility of accumulation.

([1820], 1951, II, p. 432)

He also worried that a nation with a large group of public creditors receiving a fixed income would experience a redistribution of purchasing power in the event of alterations in the value of the currency.

When the currency falls in value, the annuitants, as owners of fixed incomes, are most unjustly deprived of their proper share of the national produce; when the currency rises in value, the pressure of the taxation necessary to pay the interest of the debt, may become suddenly so heavy as greatly to distress the productive classes; and this kind of sudden pressure must very much enhance the insecurity of property vested in public funds.'

(*ibid*, p. 434)

Yet despite his care to rule out further debt financed government spending, Malthus' arguments were liable to be construed as an advocacy of extravagant debt financed government spending. There were examples of such reasoning in Ricardo's day. Of one Ricardo was clearly aware. In correspondence with Trower, he refers to

A writer in the *Times* of this morning [identified by Sraffa as Abraham Tudela, who] appears to have adopted some of Malthus' principles, and the conclusions he draws from them are so wild and extravagant, that if we had no other reason for suspecting their fallacy, these would afford them. This writer recommends that we should raise loans now instead of the taxes with which we are burthened, and for this sagacious reason, because it will promote expenditure and take off the superfluity of our productions.

([2 March 1821], 1951, VIII, p. 349)

A second example was a pamphlet entitled 'An Inquiry into those Principles advocated by Mr. Malthus relative to the nature of Demand, and the necessity of consumption' to which Ricardo made passing reference in correspondence (he asked Malthus if he was aware of the pamphlet, as 'you are often mentioned [in it] as well as myself' (Letter to Malthus [21 July 1821], 1951, IX, p. 27). Sraffa identifies the contents as involving a critique of Malthus for advocating taxation and unproductive consumption, penned by an anonymous writer in 1821 (*ibid*, p. 27n). Among other contemporary pamphleteers, William Blake (1823, p. 58) opined that adherence to the Law of Markets 'has been pushed a little too far. . . . It takes for granted, that new tastes, new wants, and a new population, increase simultaneously with the new capital; a supposition which is not consonant with the fact'; that is 'The difficulty of

finding employment for new capital is acknowledged by all practical men' (ibid, p. 60). He thus argued that contracting public debt was beneficial to the economy, for 'loan contractors become the channel through which all the accumulations of capital that are feebly employed, or that are without employment, find their way into the hands of government' (ibid, p. 63). Blake's conclusion was that 'the expenditure and consumption occasioned by the war have been the chief causes of the increased production during its continuance, and of the distress that has prevailed since its termination' (ibid, p. 120). There is no direct evidence that Ricardo read this work by Blake, but as correspondence with McCulloch reveals, he did read a review of it published in the *Scotsman*. He commented that Blake's 'arguments respecting the effects of a war expenditure are . . . objectionable, I cannot say one word in defence of this theory' ([3 May 1823], 1951, IX, p. 287). Once again, Ricardo denied that wartime public expenditure boosted aggregate production and that the postwar fall in spending had harmed it.

* * *

One possible argument against my hypothesis relates to Ricardo's involvement in the debate over the causes of agricultural distress. He found himself embroiled in a controversy over his theoretical position that taxation could not be a cause of the distress. While many of his contemporaries blamed taxation for the distress, Ricardo held that this view was incorrect. Instead, he argued that it was due to 'the abundance of produce now in hand, arising from the late abundant harvest, the quantity of land recently brought into cultivation, the importation of corn from Ireland, and various other causes' (Speech [11 February 1822], 1951, V, p. 125). The distress was due to high output, artificially encouraged by agricultural protection (Ricardo argued his case in print in 'On Protection to Agriculture' ([1822], 1951, IV, pp. 241–2, 258–61 and p. 263), in parliament (1951, V, pp. 73–4, 79, 108, 125, 151 and 170), and in correspondence (1951, VIII, pp. 345, 357 and 371; 1951, IX, pp. 157–8).) It was not due to the burden of taxes; as he wrote in 1822:

Although I am at all times a friend to the most rigid economy in the public expenditure, yet I am also convinced, that there are

causes of distress, to the producers of a particular commodity, arising from abundant quantity, from which no practicable repeal of taxes could materially relieve.

(1951, IV, p. 258; see also *Speeches*, 1951, V, pp. 84, 89, 91, 124, 131–2)

On 5 February 1822, he voted against a proposed amendment to the Speech from the Throne that called for a reduction of public expenditure on the grounds that taxation was a principal cause of the distressed state of agriculture. He stated that while he agreed with the mover – Joseph Hume, noted crusader against government profligacy – as to his call for ‘economy and retrenchment, [he] could not vote in favour of his amendment, as he differed widely from his hon. friend as to the causes of the existing agricultural distress’ (1951, V, p. 123).

The political reaction to Ricardo’s position is documented by Sraffa, who cites a letter from John Whishaw to Thomas Smith dated 26 February 1822: ‘Much blame is cast on Ricardo, who, though he voted with the Opposition, is considered as having spoken in favour of Ministers, by countenancing their principles and opinions’ (1951, V, p. 128n). As Mallet observed, ‘The Ministers immediately perceived the great advantage they were likely to derive from Ricardo’s support, and from his opinions as to the influence of taxation; they cheered him throughout [while the] opposition were annoyed and angry in the same proportion’ ([diary entry 20 February 1822], 1951, V, p. 127n). His arguments were later cited by the government in supporting its policy to maintain existing taxes ([3 April 1822], 1951, V, p. 154; [29 April 1822], 1951, V, p. 155), much to Ricardo’s dismay.

To some extent, the misrepresentation of Ricardo’s views on taxation and agricultural distress parallels the use to which some policy-makers put Malthus’ views on public debt. It may be argued that if Ricardo was so pure minded as to insist that taxation was not to blame for agricultural distress, he is not likely to have taken an intransigent position on the subject of public expenditure. However, I maintain that there is a qualitative difference between the two situations. With respect to agricultural distress, Ricardo presented strong theoretical and practical reasons for arguing that its cause was other than taxation. In the debate over public debt and public expen-

diture, however, conceding the short run inapplicability of the Law of Markets might have had severe repercussions were this concession misconstrued or misrepresented as lending tacit support to public extravagance.

3.5 Conclusion

Ricardo held that it was in the national interest that public expenditure be minimized and the role of government be confined to specific economic functions. It was his belief that the political system as constituted tended instead to promote extravagant and wasteful public spending and harmful government interference in the economy. Malthus' opposition to rapid redemption of public debt was based on the depressing effect that he argued it would have on aggregate demand. Ricardo, in contrast, rejected Malthus' arguments out of hand in favour of a policy of redemption. His refusal to discuss seriously the merits of Malthus' viewpoint appears obdurate and unreasonable, but I suggest that his extreme reaction was based at least in part on a desire to combat public extravagance.

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4

The Capital Levy Proposal: Implications for Ricardian Method

Few more drastic 'democratic' financial proposals have ever been made than this one of laying an immediate tax of six or seven hundred millions upon property in order to get rid of about thirty millions of annual taxes on consumable articles. That Ricardo could propose it seriously may perhaps be looked upon as confirming the common view that he was an unpractical theorist. But will any one venture to say positively now that the increase in the material welfare of the nation . . . would not have been more rapid than it was if the national debt had been redeemed by one heroic effort in 1823?

Edwin Cannan, 1894, p. 423

4.1 Introduction

As shown in Chapter 2, Ricardo applied his theoretical analyses relating to resource allocation and economic growth to demonstrate the harmful economic effects of public debt and the taxes levied to service it. The British public debt had grown to unprecedented levels during the course of the Napoleonic Wars, and the debt service burden, aggravated by postwar deflation, was reaching alarming heights, absorbing over half of all tax revenue. Ricardo was prompted by economic analysis and existing circumstances to advocate the rapid redemption of existing public debt by means of a 'capital levy', a one-time tax on the nation's property. He recommended that 'by one great effort, we should get rid of one of the most terrible scourges which was ever invented to afflict a nation' ([1820], 1951, IV, p. 197).

He suggested such a scheme repeatedly in parliament, arguing that while 'The execution of this plan might be attended with difficulty, the importance of the object was worthy of an experiment to overcome every possible difficulty.' (ibid, p. 38)

His proposal was subject to much criticism by his contemporaries, often derisive. Consider the reaction typical of his parliamentary colleagues, which was expressed by Alexander Baring. Adverting to Ricardo's plan for 'adjustment of property', he asserted that 'however specious in theory, or valid in abstract calculation [it was] totally inapplicable to any practical object' (Speech [28 February 1823], 1951, V, p. 266). Baring directly challenged its feasibility, characterizing it as 'the plan of a man who might calculate well and study deeply, but who had not studied mankind. It was ingenious in theory, and obvious enough; but not very sound for practice. He did not pretend to any thing like the reach of intellect possessed by his honourable friend, but he thought his honourable friend sometimes over-reached himself and lost sight of man, and of all practical conclusions' (Speech [6 March 1823], 1951, V, p. 270). Pascoe Grenfell, often a parliamentary ally of Ricardo, observed that 'Many plans had been devised to pay off, by one great effort, the national debt, and the crotchet of his hon. friend for accomplishing that great object by a general contribution from all the property of the country, was the wildest of them all' (Speech [11 March 1823], 1951, V, p. 270). Mallet (1921, 208), the keen observer of contemporary politics, described the levy as the 'byproduct of a visionary' and seemed to hold it up as representative of Ricardian method: 'It is this very quality of the man's mind; his entire disregard of experience and practice, which makes me doubtful of his opinions on political economy. His speech on paying off the national debt has very much damaged him in the House of Commons, which cannot but be regretted' ([14 January 1820], 1951, VIII, p. 152n). However, further comments suggest that Mallet's concern extended beyond the matter of impracticality to that of inexpediency. He wrote of the proposal that it 'would have been attended with almost insuperable difficulties, and perhaps upon the whole it would not have been altogether expedient even if practicable' (1921, p. 208). Furthermore, he observed that 'Ricardo's notion of repaying the National Debt by a tax on real property seems at best a wild sort of notion; and it was not very discreet to let it out in an *accidental* manner, in a speech upon the employment of the

poor. It is after all something of a radical notion, and is not unlikely to be taken up by the Reformers as a happy scheme to get rid of taxation' (ibid).

Few contemporaries actually challenged the practical applicability of the plan in specific detail. And there is no evidence that those who did so acknowledged Ricardo's answers to their criticism. In parliament, Grenfell asked 'How was it possible to arrange such a plan with equity and impartiality? How was the contribution from each species of property . . . to be arranged? [H]ow would it be practicable to get each man's share, so as to liquidate in the mass the trifling sum of 800 millions?' (*Parliamentary Debates*, Geo. IV, Vol. VIII). As I shall show, Ricardo *did* provide answers to these questions, but Grenfell did not pursue the matter further. Years after Ricardo's death, Lord Brougham (1839, p. 189) outlined his views on Ricardo's capital levy in more detail:

When he [Ricardo] propounded, as the best way of extricating us from our financial embarrassments, that the capital of the country should be taxed 700 or 800 millions, and the debt at once paid off, and defended the scheme upon the twofold ground, that what a debtor owes is always to be deducted from his property and regarded as belonging to his creditors, and that the expense of managing the debt and raising the revenue to pay the interest would be a large saving to the nation, he assumed as true two undeniable facts, but he drew a practical inference not more startling at its first statement than inadmissible when closely examined upon the clearest grounds of both expediency and justice.

It was not the feasibility of the plan that Brougham emphasized, but rather its 'expediency'.

Blaug (1985b) expresses the prevailing view among scholars that Ricardo's policy proposals were 'vaguely formulated. . . [T]hey lacked precision, they lacked any judgment of quantitative magnitudes, they conflated the distinction between clock-time and analytical time, and they failed to confront the problems of implementation.' As the capital levy proposal is generally viewed in this light, its potential contribution to our understanding of Ricardo's method has not been fully explored. Scholars have failed to explain

the fact that Ricardo did address a number of practical obstacles to be overcome in implementing the proposal. Furthermore, dismissing the proposal as patently absurd does not explain why it 'aroused parliamentary discussion and was endorsed by independent writers who presented detailed proposals to the end indicated by Ricardo' (Gottlieb, 1953, p. 38).¹

This chapter will assess the implications of the proposal for our understanding of Ricardian method. To comprehend fully the nature of Ricardo's capital levy proposal, and make a fair appraisal of Ricardo's method, all available information must be considered. While contemporary critics' understanding of the proposal was confined to what was discussed in Ricardo's published work and public pronouncements, modern scholars have the advantage of access to his correspondence and to other material unpublished during his lifetime. Taken together, these references reflect a well formulated proposal which took into consideration a number of practical issues related to its implementation, a view which stands in contrast to the general impression held by scholars. Sections 4.2 through to 4.6 will consider in more detail the attention that Ricardo paid to specific elements of the proposal, illustrating that he did not merely suggest it on a whim, but that he put considerable thought into issues related to its practical implementation. The care that he took to defend the equity of the plan is detailed in Section 4.2. Section 4.3 considers how he addressed concerns over the impact of rapid debt redemption on the existing social order. Ricardo's estimate of the required rate of tax is discussed in Section 4.4, while his proposal for instalment payments is outlined in Section 4.5. Section 4.6 summarizes his consideration of other practical issues associated with a capital levy, including a plan to exempt existing inventories of goods from the tax, the problem of assessment of property values, and the question of how to prevent evasion. Section 4.7 presents some concluding remarks.

4.2 Equity

Contemporary opponents of a capital levy were quick to point out its inequity, especially when they considered it to threaten their own interests. As is discussed in Chapter 5, both the landed interest and government bond holders were vehement in their opposition to the

proposal. Given the features of the policy debate over public finance in this period, this particular line of opposition by the land owning class should not have been particularly surprising. P.K. O'Brien (1988, p. 18) has described the experience of the eighteenth century 'as a holding operation against the introduction of an income tax – or, what was in effect the same thing, a reform of the land tax.' The upper classes had throughout the century been subjected to both direct taxes based on rather dubious estimates of their wealth and indirect taxes levied on the goods that they consumed. It was 'Only the armies of Revolutionary France and the probable collapse of public credit' which allowed for the imposition of a temporary income tax (*ibid*, p. 22). 'Not until they confronted Napoleon did the upper classes once again undertake the kind of sacrifices for the defence of property that they had made under William III. But with the repeal of [the wartime] income tax in 1816 the situation reverted to the *status quo ante bellum*' (*ibid*, p. 16). Members of the landed class were staunchly opposed to a peacetime income tax at even a moderate rate. Thus, their reaction to the rate of a capital levy should not have been surprising.

Ricardo repeatedly defended the equity of his proposal against accusations that it would be disproportionately burdensome on the land owning class:

it would be a measure of wisdom to submit once for all to a great sacrifice in order to remove it, and for that purpose recommended a general and fair contribution of a portion of every man's property; not, as had been said, of the property of the landowner only, but of that of the merchant, the manufacturer, and the fundholder. He should have been ashamed of himself if any thing so unfair could ever enter his mind as that of exonerating the fundholder from the payment of his quota of so equitable a tax.

(Speech [7 December 1821], 1951, V, p. 472)

He was prompted on a number of occasions to clarify this issue in parliament, pointing out that included in the tax base would be government bond holdings themselves:

He had been represented . . . as to having said, that the land was mortgaged for the whole of the public debt. . . . [H]e only meant

to say that . . . the land-owners were, as well as the other classes of the people, responsible to the fund-holders for the payment of their share of the debt. From the responsibility the fund-holder himself was not wholly exempted: towards the payment of his own debt he must himself be a large contributor.

(Speech [18 February 1822], 1951, V, p. 132)

He reiterated this sentiment later that year, arguing that the 'great debt might be reduced by a fair contribution of all sorts of property – he meant, that, by the united contribution of the mercantile, the landed, and he would add, the funded interest, the national debt might be certainly got rid of' (Speech [16 May 1822], 1951, V, p. 187). That the bond holdings of the public, the 'funded interest', should themselves be included as property to be subject to the tax was by no means obvious, and their proposed inclusion was controversial. Archibald Hutcheson, the first to propose such a scheme to redeem public debt, had dodged this question in 1721. As Hargreaves (1930, p. 33) observed, 'The position of the holders of public securities depended almost entirely on the question whether the exemption of the funds from all forms of taxation, which had hitherto been treated as an inviolable principle, would be observed without any qualification.' Hutcheson was content to 'leave that Point to the Wisdom and Justice of the Parliament' (*ibid*). Ricardo did not mince his words on this subject, but emphasized that the inclusion of government bond holdings themselves in the base of the levy would ensure that all types of property share the burden of the tax as evenly as possible.

A significant aspect of Ricardo's capital levy proposal was his recommendation that the public debt be redeemed at par, or current market value, rather than at face value (Speech [16 December 1819], 1951, V, p. 34). Needless to say, just as did his recommendation that their holdings be taxed, this created opposition among contemporary bond holders. Ricardo acknowledged that 'By some stockholders I am accused of not doing justice to them, by suggesting that they are not fairly entitled, in ready money, to £100 [par value], but to the market price of £100 stock, or £70' (Letter to Trower [28 December 1819], 1951, VIII, p. 147). It has since been pointed out that such a recommendation amounted to a partial repudiation of the debt. 'The word "redeemed" scarcely covers Ricardo's proposal to

pay off the fund-holders compulsorily at the market price; the fund-holder certainly had a right to demand either the continuance of his annuity or £100' (Cannan, 1894, p. 423n).² And yet Ricardo expressed great concern with issues of justice and fairness. In the *Principles*, he was adamant that 'Justice and good faith demand that the interest of the national debt should continue to be paid, and that those who have advanced their capitals for the general benefit should not be required to forego their equitable claims on the plea of expediency' ([1817], 1951, I, pp. 245–6). And in parliament, this sentiment was reiterated: 'When he spoke of getting rid of the national debt, he did not mean by wiping it away with a sponge, but by honestly discharging it' (Speech [30 May 1820], 1951, V, p. 55). His opinion of public debt repudiation was clearly stated in parliament:

the landed interest, the agricultural interest, the trading and every other public interest, were pledged to the public debt. What could be more dishonourable than for a state to carry on the expenses of war by the money advanced upon her good credit by her own subjects, and then to turn round upon those from whom she had borrowed it, and say – 'We are insolvent, and we will not pay you.' It was totally unworthy of an enlightened and honourable assembly to entertain a proposition so monstrous.

(Speech [7 March 1821], 1951, V, p. 90)

Sir John Sinclair supported inflation as a means of reducing the real burden of the public debt, but to this suggestion Ricardo was vehemently opposed on grounds of equity, arguing in correspondence that such a plan 'would be unjust to all creditors, and proportionally advantageous to debtors. If the payment of the interest of the national debt is a greater burden than we can bear, which I think it is not, and cannot well be, the fair way would be, to compound with the public creditor, and not make him only a pretended payment' ([11 May 1820], 1951, VIII, pp. 186–7). He likewise had much earlier opposed McCulloch's suggestion that the interest on the public debt be reduced, considering the postwar deflation. He wrote that although 'such a measure might be beneficial to one class at the expence of another, it would afford very little relief to the country, and would be a precedent of a most alarming and dangerous nature. . . . [I]f it would be wise to legislate for every

alteration in the value of the currency we ought to have begun long ago, when the stockholders were suffering from a fall in the value of money' ([9 June 1816], 1951, VII, p. 37). This concern for justice and fairness emerged again in a letter of 4 December 1816, in which Ricardo argued that distinguishing between different bond holders would be impossible. 'You say that you do not propose to reduce the interest of any part of the debt created anterior to the depreciation of paper, but how is this part to be distinguished from the other, how are you to distinguish the stockholder of 1790 from the stockholder of 1800 or of 1810 or of 1816? It is evidently impossible, the stock is all amalgamated together, has passed through a thousand hands and can in no way be distinguished' (1951, VII, pp. 103–4). Even if it were practicable, McCulloch's scheme would be unjust to other classes of the community: 'If the stockholder is enriched by the fall of wheat so is the mortgagee, the discounter of bills, the manufacturer of cloth and of every other commodity. Why not use your adjusting rule to all these persons transactions?' (*ibid.*, p. 105). Ricardo concluded by representing the Sinking Fund as 'a positive bargain between the nation and the stockholder, which cannot be infringed by one of the contracting parties' (*ibid.*, p. 106).

In the manuscript of 1820, Ricardo, who was so clearly concerned with justice and fairness, made his calculations of an estimated rate of the levy. He based his estimate upon redemption at market price: 'The Nat. Debt if valued at the present price of the funds would probably amount in money value to 650 millions' (Asso and Barucci, 1988, p. 28). The concern with justice on the one hand and the recommendation of redemption below par value on the other appear to be contradictory. Examining Ricardo's explanation for his support of redemption at market price solves the seeming paradox. He contrasted this detail of his capital levy proposal with that of Heathfield: 'You would pay the stockholder at 100. I think he will receive a full measure of justice, if he is paid at the present market-price, or about 70, for his three per cents. As we are now proceeding in the payment, or rather, non-payment of debt, he can never reasonably expect to receive 100, but may more justly expect to be eventually a loser of the whole of his capital' ([19 December 1819], 1951, VIII, pp. 144–5). To McCulloch, who suggested redemption well below market price, he made a similar argument:

The Stockholders are a very unreasonable class, and in all their remarks on my proposal, complain bitterly of my thinking they should not receive more than 70 [market price] for their 3 pcts. I do not know what they would say to you, who propose to pay them only at 40. A Reformed House of Commons, if ever we should possess so great a good, and if we should not the debt I believe may as well remain as it is, should on this question of price; do strict justice between the payers and receivers of taxes, and not heed the clamour which the selfish on either side should raise. From what I observe I am confident that this will not be the mode in which we shall get rid of the debt. Our burthens may, and will probably, continue to weigh us down for many years to come, but finally they will be forcibly thrown from our shoulders, and the stockholders instead of complaining, with injustice, as I think, that they were not to be paid at 100 [par value] for their 3 pcts., will have justly to complain of losing both their principal and interest.

([28 February 1820], 1951, VIII, pp. 157–8; see letter to Trower [24 December 1819], 1951, VIII, p. 147, for a similar observation)

He did not accept that redemption below face value would constitute a breach of public faith. In parliament, he averred that while the country was well able to repay the public debt, 'He did not mean that it should be redeemed at par; the public creditor possessed no such claim – were he paid at the market price, the public faith would be fulfilled' (Speech [16 December 1819], 1951, V, p. 34). He had, he argued, bond holders' best interests at heart in recommending redemption at market price, for were the public debt problem not addressed, bankruptcy would be the ultimate result.³

There is one puzzling item in Ricardo's correspondence that requires attention. On 5 March 1822, he wrote to a certain Peter Le Neve Foster: 'I am of opinion that without a breach of national faith, the Government could not, if it had the means, pay off the 3 pcts. Stock at a less rate than one hundred pounds of money for every one hundred pounds capital stock. In other words the par of the 3 pcts. as well as of the 4 and 5 pcts. is 100' (1951, IX, pp. 173–4). The context of this note is unknown; there are no other known extant letters between the two men. This note may suggest that Ricardo had a change of mind on the

subject of redemption at par over the course of February 1820 to March 1822. However, there is no other evidence that this in fact occurred. An alternative explanation may hinge on the clause 'if it had the means'. Perhaps Ricardo considered that redemption of the entire debt could only be accomplished by payment at market price. In the absence of the discovery of further evidence, one can only speculate as to the importance of this note.

A further problem relates to an apparent exemption from the proposed capital levy. 'Those who are in professions, as well as those who live from salaries and wages, and who now contribute annually to the taxes, could not make a large ready money payment; and they would, therefore, be benefitted at the expence of the capitalist and landholder' ([1820], 1951, IV, p. 188). Ricardo did not accept this as a valid concern, arguing that 'The reward that is paid to professors, etc. is regulated, like everything else, by demand and supply. . . . If you diminished, by additional taxes, the incomes of landlords and capitalists, leaving the pay of professions the same, the relative position of professions would be raised; an additional number of persons would, therefore, be enticed into those lines, and the competition would reduce the pay' (ibid, 189). This appears an irresponsible dismissal, assuming a much quicker adjustment period than could reasonably be expected. D.P. O'Brien (1975, pp. 262–3) characterized this argument by Ricardo thus: 'He recognized that, since property would bear a larger proportion of the tax burden than income, the professions would benefit, but argued that this did not matter – by a startling telescoping of the long and short run he asserted that exit or entry into the professions would restore the relative position of their post-tax income in relation to the post-tax income of the property owner.'

Ricardo was not entirely satisfied with his own analysis of this issue. In correspondence with McCulloch, he observed that an objection to the capital levy 'which I have heard, *and which I think is the most plausible*, is that it would relieve from taxation all those who are in professions, and whose incomes are derived from wages or salaries. This I have endeavored to answer in my article ['The Funding System', cited above], but it requires your talents to give it weight' (Letter to McCulloch [15 September 1820], 1951, VIII, p. 238; emphasis added). McCulloch's reasoning on this issue was subtler than that of Ricardo, making use of the concept of a risk premium.

In the *Edinburgh Review* in 1823 (pp. 14–15), he considered the question of whether professionals should be subjected to an income tax, be it ongoing or of an extraordinary nature as with a wartime income tax or a postwar capital levy. He recognized that in the latter case, ‘sufficient time would not be afforded to permit the natural principles of adjustment . . . to operate to their full effect. . . .’ However, he continued that the risk of being subject to a special tax would be taken into account in the determination of salaries and professional fees and ‘the chances of being subjected to this tax would most certainly enter into the calculations of all professional men, and the rate of their natural or necessary wages would be regulated accordingly.’¹⁴

4.3 The pattern of investment

A criticism that has periodically arisen in connection with rapid debt redemption is that it would be highly disruptive to the existing social order. Gottlieb (1950, p. 43) has observed that redemption of debt ‘involves the transfer of innumerable properties each of which is worked into a unique business and social environment’ and that ‘societies geared to a slower tempo of change and mobility would experience considerable difficulty in carrying through the property adjustments required by a capital levy’ (ibid, p. 44). Ricardo was aware of the role which habit or obstinacy could play in the investment decisions of individuals, writing for example that ‘The difficulty of finding employment for Capital . . . proceeds from the prejudices and obstinacy with which men persevere in their old employments, – they expect daily a change for the better, and therefore continue to produce commodities for which there is no adequate demand’ (Letter to Malthus [9 October 1820], 1951, VIII, pp. 277–8). He acknowledged that the duration of the transition period from a wartime to a peacetime economy ‘will be longer or shorter according to the strength of that disinclination which most men feel to abandon that employment of their capital to which they have long been accustomed’ ([1817], 1951, I, p. 265). He singled out public creditors as particularly reluctant to change their investment patterns, referring to the ‘unwillingness which a particular class of persons feel to divert their funds to any other employment than that to which they have been accustomed, which they think secure, and

in which their dividends are paid with the utmost regularity. [This unwillingness] elevates the price of stock, and consequently depresses the rate of interest on those securities below the general market rate' (ibid, p. 298). And in correspondence with Grenfell, he reiterated that 'allowance must be made for the timid and the indolent who attach themselves for life almost to particular dispositions of their capitals. . . . This consideration alone will always insure a respectable circulation of Government Paper' ([27 August 1817], 1978, p. 522). Ricardo found such an attachment to be odd from a personal point of view. An anecdote from Mallet regarding an episode of September 1817 is enlightening: 'I remember [Ricardo] then saying that he did not conceive how any man who could get his 3 1/2 per cent; by land could leave his money in the funds; which shows the distrust great dealers in public stocks entertain of that sort of property' (1921, pp. 210–11).⁵

Apart from the issue of investor habits, Ricardo did not describe the transfer of property necessitated by debt redemption as unduly disruptive. On the payment of high taxes in wartime in preference to borrowing, he observed that:

The usual objection made to the payment of the larger tax is, that it could not be conveniently paid by manufacturers and landholders, for they have not large sums of money at their command. . . . [W]hat should hinder them from selling a part of their property for money, or of borrowing it at interest? That there are persons disposed to lend, is evident from the facility with which government raises its loans. Withdraw this great borrower from the market, and private borrowers would be readily accommodated. By wise regulations, and good laws, the greatest facilities and security might be afforded to individuals in such transactions ([1820], 1951, IV, p. 188).

Later, he made clear that the same logic could be used to justify a capital levy to redeem existing debt:

The stockholders being paid off, would have a large mass of property, for which they would be eagerly seeking employment. Manufacturers and landholders would want large sums for their payments into the Exchequer. These two parties would not fail to

make an arrangement with each other, by which one party would employ their money, and the other raise it.

(*ibid*, 197)⁶

Former bond holders would continue to receive a steady stream of income, either in the form of the return to real assets purchased with their investment funds, or in the form of interest payments on funds borrowed by owners of those real assets to meet their tax burden.

4.4 The rate of the levy

Until Asso and Barucci's discovery of an unpublished manuscript in 1988, there was no record that Ricardo had specified the rate of the tax on property that would be required to redeem the public debt. Much was made of this apparent omission. It was Shoup's (1960, pp. 160–1) opinion that:

The rate at which the capital levy would have to be imposed if the debt were to be redeemed at par would no doubt have been a significant factor in determining whether to adopt [redemption below par], but Ricardo never troubled himself to attempt even a rough estimate of the tax rate necessary, under either mode of payment. This gap in his presentation doubtless reflected, not an attempt to slur over a fact that might have stiffened opposition to his proposal, for Ricardo never lacked forthrightness, but rather a conviction on his part that if the course of action was correct in principle, it was correct whatever the quantities.

Shoup's assessment has been proved unduly harsh by the recent discovery of the 1820 manuscript, in which Ricardo did attempt a calculation of the rate of tax required to redeem the debt at market price. According to this manuscript, Ricardo estimated the value of the outstanding debt at its present market price to be £650 million. If a 25 per cent tax were imposed on capital, the bond holders themselves would pay £162 million, leaving £488 million to be paid by the capital of the country, 'consisting of Land, Farmers Capital, Manufacturers and Merchants Capitals, Homes, Ships etc [amounting to £1952 million]. . . . 25% on that sum would pay off the debt of [£]488 million' (Asso and Barucci, 1988, p. 28).⁷

4.5 The payment schedule

Ricardo was uncertain regarding the period of time over which the capital levy should be carried out. In 'The Funding System' ([1820], 1951, IV, 197), he referred to a period of 'two to three years'. In parliament the following year, he suggested 'four to five years' (Speech [24 December 1819], 1951, V, p. 39). Nine months later, in a letter to McCulloch, he merely referred to 'a moderate time' ([15 September 1820], 1951, VIII, p. 239). By 1823, he had had a puzzling change of mind and greatly shortened his estimate of the appropriate period of time. In parliament, he remarked that 'the operation [of a capital levy] might be extended by numerous instalments over a period of two, three, six or twelve months' (Speech [11 March 1823], 1951, V, p. 271). It is in the unpublished manuscript that one finds the most detailed consideration of the payment schedule and the process by which payments might be made. His reference there to a five-year payment period seems to confirm the estimate by Asso and Barucci (1988, p. 28) that the manuscript was written in late 1819 or early 1820. According to this source, each individual should be required 'to pay his proportion of the tax in 5 years by monthly payments which might be made weekly by fixing different periods of the month for receiving the contribution of the different classes.'

Ricardo considers in the newly discovered manuscript not only the question of instalments, but also the practical problem of the strain that such an operation would place on the currency. He wrote:

Suffer the whole or any part of each main payment to be made in Stock valued at the prices at which it is to be paid off. Allow a contributor to the tax to pay the whole of his contribution at once, without waiting for the fixed days of payment if he pay them in stock – making an allowance to him for the dividends which would have been due on such stock if he had deferred his payment. By giving a little and a very little advantage to persons paying in this manner half the debt would probably be paid without the employment of money, and consequently the weekly money payments would be greatly reduced.

(*ibid*, p. 28)

By allowing payment to be made in government bond holdings themselves, half the debt could be paid without the need for cur-

rency. As to that portion of the levy that could not be paid by bond holdings, Ricardo developed a plan to mitigate payment strains. He had much earlier recognized the very practical problem associated with payment of public creditors, and had 'recommended a simple plan to obviate the scarcity of money, which, to the distress of the mercantile world, always takes place before the payment of the national dividends' (Letter to Mill [24 October 1815], 1951, VI, pp. 312–13).⁸ He allowed that a similar problem might arise in the event of rapid debt redemption, and in parliament suggested how such a problem might be obviated. He proposed that the government should issue a system of 'checks' to 'be kept distinct from the ordinary circulating medium of the country . . . received by the government in payment of taxes. Thus the debt might be gradually liquidated while the government continued gradually receiving the assessments upon capital to provide for that liquidation' (Speech [24 December 1819], 1951, V, p. 39). He later elaborated on this scheme in the unpublished manuscript:

In order to facilitate [payment] arrangements, debentures [or 'checks'] for such sums as might be required might on application be issued in lieu of stock numbered in the order of priority of payment – such debentures to be received at the Exchequer in payment of contributions on capital in the same way as stock – those which were not paid for this purpose should be payable in money on the day that they became respectively due. An arrangement of this kind would be very useful in saving the use of the circulating medium for this particular purpose as these debentures would in fact for this purpose become a circulating medium. If a stockholder wished to lend his money to a landholder on mortgage – to buy his land or to accommodate a manufacturer or a merchant with a permanent loan – these debentures would answer the purpose of all parties as well as money. To those who paid them away they would afford all the facilities of money. By those who received them they would only be required for the purpose of paying into the exchequer, where they would be receivable at fixed money value.

(Asso and Barucci, 1988, p. 28)

Ricardo once again had occasion to outline this plan in correspondence with McCulloch: 'Suppose Government were to commence the

business by issuing exchequer bills to [stockholders] receivable in payment of the contributions of capitalists, and if not used for that purpose, then payable in money on a day to be fixed; [this amount] might by these means be paid off without any considerable demand of the circulating medium of the country, and by immediately re-issuing the bills, and renewing the operation from time to time, the whole payment might be effected in a moderate time' ([15 September 1820], 1951, VIII, p. 239).

4.6 Other considerations

Ricardo considered several other highly practical details in developing his capital levy proposal. In 'The Funding System' ([1820], 1951, IV, p. 180), he cited a concern that 'should the national debt be discharged, and such a weight of taxation taken off at once, all the goods remaining on hand would be, comparatively speaking, of no value to the holders, because having been purchased or manufactured while such taxation prevailed, they must be undersold by all those who might manufacture the same kind of goods after such taxation had ceased.' Ricardo provided a simple solution based on existing practice: 'In laying on a new tax, the stock in hand of the article taxed is commonly ascertained, and, as a measure of justice, the dealer in such article is required to pay the imposed tax on his stock. Why may not the reverse of this be done? Why may not the tax be returned to each individual on his stock in hand, whenever it shall be thought expedient to take off the tax from the article which he manufactures, or in which he deals?' (*ibid*, p. 182). He repeated this explanation in the unpublished manuscript, observing that 'a due allowance should be made to those who had a stock of the commodity taxed on hand in order that one trader might have no advantage over another. Commissioners should be appointed for the purpose of deciding on the claims of parties and such Commissioners should be armed with all the requisite powers for the equitable discharge of their duties' (Asso and Barucci, 1988, p. 28).

Another practical issue associated with a capital levy was that of the assessment of property to be taxed. Ricardo did not address the question explicitly, but it is likely that in his opinion property values assigned for the purpose of levying earlier taxes were reliable, for at one point, he argued that the capital levy would 'merely carry further

the principle of the income tax' (Speech [11 March 1823], 1951, V, p. 271). However, these were not without problems.⁹ Lord Brougham, a parliamentary colleague and critic of Ricardo's proposal, warned that 'The effect of such a measure would be to place the [nation's] property for five years at the mercy of all the solicitors, conveyancers, and moneyhunters, in the country (Speech [24 December 1819], 1951, V, pp. 40–1). Ricardo acknowledged this criticism and provided a response in parliament: 'The hon. and learned member for Winchelsea [Brougham] had opposed his plan; and had said, that it would throw the whole land of the country into the hands of pettifogging attorneys; but of this there was no danger. Parliament might interfere, and give secure titles to the land which was disposed of, without the interference of pettifogging attorneys' (Speech [6 March 1823], 1951, V, pp. 268–9). He elaborated on this response in a letter to McCulloch, arguing that 'By act of Parliament the title of all land sold for the purpose of raising money necessary for the landholders contribution should be held to be a perfect title, whatever might be its insufficiency for any other sale. . . . No landed property in the country would have a better title, and it would therefore be preferred above all other by a purchaser – it could never require the interference or advice of low attorneys ([15 September 1820], 1951, VIII, p. 239). This explanation indeed made perfect sense in the event that an individual in possession of a parcel of land intended to sell a portion of that land to pay the levy on that same land – in effect, the tax is being levied on the parcel of land, and not on the individual who owns it. However, it is evident that problems would be created should an individual possess a variety of types of property, and wish to sell a larger portion of that land to obtain the funds to pay the tax levied on other property holdings. It does not appear that Brougham, or anyone else, pursued the issue. And as late as 1827, one finds McCulloch reiterating Ricardo's argument in defence of a capital levy that 'The title of all land sold for the purpose of raising money to defray the assessment on capital, should be declared, by an act of the legislature, to be a perfect and unquestionable title' (*ibid.*, p. 412).

Another obvious criticism of a capital levy concerns the danger of evasion. Ricardo recognized this possibility and the need for action to deal with it, writing to McCulloch that 'Some precautions would be necessary to prevent people from concealing their property, or

sending it abroad, to withdraw it from a share of the burden' ([15 September 1820], 1951, VIII, p. 239). He here offered no concrete suggestions as to how this objective might be achieved, but in parliament he clarified that the best way to prevent evasion was to pre-empt it. The capital levy, he argued, should:

commence its operation as soon as possible. For as this debt was chargeable upon all the capital of the country, it was obvious that any capital which went out of the country was exonerated from that charge, while the capital which remained was of course compelled to pay a greater proportion of debt and taxes. To guard against this evil, which was productive at once of individual injustice and national injury, the whole capital of the country ought to be assessed for the discharge of the public debt, so that no more capital should be allowed to go out of the country without paying its fair proportion of that debt.

(Speech [24 December 1819], 1951, V, p. 39)

4.7 Conclusion

Ricardo expressed surprise at the vehemence of the negative reaction to his capital levy proposal, referring to it at one point as 'this chimerical project, as he understood it was considered by every one except himself' (*ibid.*, p. 39). Yet, despite opposition, he maintained that the scheme was feasible: 'With respect to the national debt, he felt that he entertained opinions . . . which by many would be considered extravagant. He was one of those who thought that it could be paid off, and that the country was at this moment perfectly competent to pay it off. . . . He was persuaded that the difficulty of paying off the national debt was not so great as was generally imagined' (16 December 1819, V, pp. 34–5). The advantages of such a scheme outweighed the costs, a view that he continued to hold to the end of his life. In a parliamentary speech in 1823, he averred that 'when the immense benefits which would result from its adoption were considered, he could not think it so Utopian a scheme as his hon. friend [Pascoe Grenfell] seemed to imagine it to be' ([11 March 1823], 1951, V, p. 271).

Ricardo's doubts as to the plan's adoption did not turn on its purported impracticality, but instead reflected his low opinion of

the political will of those in power. In correspondence, he was frank:

I fear that no plan for paying off the debt will receive any countenance from Parliament. Men do not like to make an immediate sacrifice for a future good; and they please themselves with imaginary riches, from which they really derive no advantage. Are not those imaginary riches, from the possession of which we only derive a revenue, which we are immediately obliged to pay to the tax-gatherer?

(Letter to Sinclair [11 May 1820]; 1951, VIII, p. 187)

Furthermore, he had misgivings about its ultimate success were the plan adopted: 'The most serious obstacle which I see against the adoption of the plan is the state of the representation of the House of Commons, which is such as to afford us no security that if we got rid of the present debt, we should not be plunged into another' (Letter to Trower [28 December 1819], 1951, VIII, p. 148). These doubts, combined with the self-serving nature of the reaction to the proposal, led him to postpone, if not abandon, addressing the capital levy proposal in a comprehensive way. Indeed it seems he lowered his sights somewhat after absorbing the vehement reaction against it, for in parliament on 21 February 1823, he observed 'If this proposition should be thought extravagant, or if it should be supposed that the contribution he should suggest was excessive, why not ask for a contribution of capital for the same object?' (1951, V, pp. 249–50).

Ricardo's colleagues were quick to dismiss the capital levy proposal without the need for a serious examination of its practical applicability, and thus while he wished to raise public awareness of the dangers of public debt, he did not mount an effective campaign to promote the proposal. He gave it the most serious attention in 1819–20, then turned his efforts elsewhere, with any intentions he may have had to resurrect the plan ended by his untimely death in 1823. The scattered nature of references to the proposal may have combined with the impression created by contemporary reaction to establish and maintain its reputation as vaguely formulated and impractical. In fact, I have shown that Ricardo took great care in addressing various detailed aspects of a capital levy, contradicting

accusations that he ignored the effect of 'disturbing causes' in applying the conclusions from highly restrictive models directly to the complex real world. Had Ricardo provided a more comprehensive presentation of the details of the capital levy to the public, scholars may have been led to take a more balanced view of Ricardian method.

5

Ricardo on Public Debt: the Question of Motive

His speaking was of an admirable description; clear, simple, correct in diction, copious in argument, pregnant with information, but never thrown away. He reserved the share which he took in [parliamentary] debate for questions to which his attention had been particularly directed, with which he was familiar, and to which he attached great importance. . . . [H]e appeared not to court the opportunity of delivering them, but as if compelled by a sense of duty to declare his mind. . . . Few men have, accordingly, had more weight in Parliament; certainly none who, finding but a very small body of his fellow-members to agree with his leading opinions, might be said generally to speak against the sense of his audience, ever commanded a more patient or even favourable hearing; and, as this was effected without any of the more ordinary powers of oratory or of entertainment possessed by others, it might be regarded as the triumph of reason, intelligence, and integrity over untoward circumstances and alien natures.

Henry Lord Brougham on David Ricardo, 1839, p. 190

5.1 Introduction

Among the most controversial of David Ricardo's contributions to policy debate was his scheme for the redemption of the public debt by means of a 'capital levy'; a one-time tax on the property of the nation. Public debt policy had been the subject of sporadic debate throughout the eighteenth century, but faced increased scrutiny by the time Ricardo came to address the subject. While government rev-

venues were suffering from the repeal of the temporary income tax which had been imposed during the Napoleonic Wars, revenue requirements remained high, as the savings in terms of military expenditures were being offset by the need to make interest payments on a debt which had grown during the latter years of the war. Ricardo's analysis of public debt was not novel; nor was the proposal for a capital levy to achieve its redemption.¹ Where Ricardo's proposal differed from its predecessors was in its provision that the burden of debt redemption was to be shared between owners of capital, owners of land, and holders of government bonds themselves.

Anderson and Tollison (1986) have presented a provocative explanation for Ricardo's advocacy of a capital levy. Their argument turns on the circumstance that in 1819, Ricardo retired from the government loan business, in which he had earned a fortune, and added to his already sizeable investments in land. They are troubled by the fact that Ricardo, recently 'acting as a major creditor for the debt-prone government . . . , then enter[ed] Parliament to advocate radical anti-debt measures' (p. 52). They thus compare the timing of his entry into parliament with his changing pattern of investments, and ask, 'was Ricardo's seemingly odd behavioural shift in relation to the public debt consistent with simple wealth maximization on his part?' (ibid, p. 53). They argue that since a significant proportion of the burden of debt service fell on land, eradication of the public debt and with it a large number of taxes would have significantly raised the present discounted value of land. In the presence of efficient capital markets, an increase in taxation to redeem debt would be equivalent to the existing debt situation from the perspective of taxpayers in general. Crucial to their argument are two details of Ricardo's proposal: first, that government bond holdings themselves were to be subject to the levy, and second, that redemption of bonds was to occur not at face value, but at current market value. They surmise that such provisions amount to a partial repudiation of the debt, and 'Under these circumstances, Ricardo might well have expected to be a net beneficiary of debt retirement by means of the increased capital value of his large land holdings' (ibid, p. 55). Thus they conclude that 'Ricardo may have taken into account his personal financial interests while formulating [his] debt reform plan' (ibid, p. 56).

Anderson and Tollison (*ibid*) are careful to state that ‘We do not claim that . . . personal interest directly determined [Ricardo’s] decision to promote [a capital levy]. We do argue that . . . the plan was *consistent* with wealth maximization on Ricardo’s part.’ They assert that ‘It is not our intention to suggest here otherwise than that Ricardo was an honourable man and an objective, dispassionate theorist’ (*ibid*, p. 55). And yet that is precisely the conclusion one draws from the argument that they present. This chapter considers the merit of Anderson and Tollison’s explanation for Ricardo’s espousal of a capital levy against the alternative explanation that he made such a proposal out of concern for the national interest. Examination of the evidence as to his conduct with respect to policy debate in general makes clear that accusations of personal interest along the lines of that suggested by Anderson and Tollison are unjustifiable. Section 5.2 below presents a refutation of such accusations, reiterating a defence of Ricardo’s motives previously made by a number of eminent scholars. Attention then turns to a more specific charge found in Anderson and Tollison’s paper. In their view, land owners, Ricardo among them, could expect to gain by a capital levy of the sort proposed, a gain that would occur at the expense of government bond holders. Section 5.3 addresses Ricardo’s views of the two classes of interest: the land owners and the government bond holders. A careful examination of these views suggests that the debt repudiation implied by his plan arises not out of personal motives, but rather out of his concern that the burden of debt redemption should be shared among different classes of society in as fair a manner as possible. Section 5.4 then considers Ricardo’s assessment of the ‘Sinking Fund’, which he showed to be useless in achieving its purported aim of redeeming the public debt. This failure of existing policy prompted him to present the alternative of a capital levy. The evidence presented in this study shows that contrary to the case presented by Anderson and Tollison, Ricardo was motivated in his actions with respect to the public debt as he was in his actions with respect to other policy questions, by concern not for any one particular interest, but rather for the interests of the nation as a whole.

5.2 Ricardo’s personal financial interests

Ricardo’s personal financial interests are well documented. He made a significant profit on the stock market as a contractor for govern-

ment loans,² but at the end of the war, he began to make financial plans for his retirement from business to life as a country gentleman. This process was gradual. He bought his first estates in 1814, writing to Sinclair of the purchase that 'I have not quite given up the Stock Exchange; but for a few months in the year, I mean to enjoy the calm repose of a country life' ([31 October 1814], 1951, VI, p. 150). He added to his investments in land during 1816 and 1817, further describing the changes being made to his portfolio and the motives behind it in a letter to Say:

I have been gradually withdrawing myself from business, and as our debt is so enormously large, and the price of our funds [British government bonds] appeared to me high, I have from time to time withdrawn my money from the funds, and have invested a large portion of it in landed property. . . . I have been tempted by the low relative price of the French Funds to invest another portion of my money in the French five pcts. and Bank Actions. . . . My life has been one of success, but of anxiety, and I am endeavouring so to arrange my affairs, that I shall have no cares for the future, respecting pecuniary matters.

([18 December 1817], 1951, VII, p. 230)

At his death in 1823, his fortune, as enumerated in his will, comprised landed estates valued at £275 000, mortgage loans valued at £200 000, and holdings of French government bonds valued at £140 000. The distribution of these investments had been virtually unchanged since 1819, and over that period, they had brought him an annual income of approximately £28 000.³

The appeal which Anderson and Tollison have made to personal motives to explain Ricardo's capital levy proposal is not original. Accusations of bias were made by Ricardo's contemporaries with respect to his positions on various issues, and Ricardo's responses provide us with his own defence against such charges. Ricardo's political adversaries made both subtle innuendoes and more blatant charges in connection with his advocacy of the resumption of cash payments, the return of the British pound to gold convertibility following the war. In 1822, C.C. Western, Member of Parliament for Essex and a noted spokesman for the landed interest, expressed his belief that 'the measure certainly owes its origin, in chief, to men

who were gainers or expected gainers by it [among them] some great monied proprietors . . . who were supposed to be specially qualified to advise upon such a subject. . . . [It] requires the fullest effort of charity to believe they did not intend it' (Speech, 1951, V, pp. 526–7). In parliament, Ricardo made it quite clear that he understood he was an accused party, for Western had 'alluded to [Ricardo] and his opinion [on resumption] in a way that no one could mistake the person meant' (Speech [11 June 1823], 1951, V, pp. 318–19). Similar types of accusations were made with respect to his advocacy of the capital levy. As Ricardo was aware, it was 'more than hinted [by the landed interest] that I have an interested view in making the proposal' (Letter to Trower [28 December 1819], 1951, VIII, p. 147). In defending himself against accusations of interest, Ricardo was very open about his personal finances. In his correspondence with Trower, he was blunt in addressing such accusations in connection with the capital levy. 'I may be ignorant or prejudiced, but I am not conscious of being influenced by any motives of interest, and it would really be very difficult for me to determine how my particular interest would be affected by adoption of [a capital levy]' ([28 December 1819], 1951, VIII, pp. 147–8).

It was curious to Ricardo that those levelling accusations of interest often disagreed as to the nature of those interests, especially given that Ricardo himself was not secretive on the subject. In parliament, he had occasion to enlighten his critics in the course of a debate over agricultural protection, noting that he 'had been represented as a mercantile man, having a particular interest that he consulted. He denied that he was interested either as a mercantile man or as a fund holder. He was a landed proprietor, and his interests were bound up with that of the House' (Speech [7 March 1821], 1951, V, pp. 81–2). He made a similar statement two years later in response to Western's accusations in relation to resumption, to the effect that he 'did not pretend to be more exempted from the weaknesses and errors of human nature than other men, but he could assure the House and the honourable member for Essex, that it would puzzle a good accountant to make out on which side his interest predominated. He would find it difficult himself, from the different kinds of property which he possessed (no part funded property), to determine the question' (Speech [11 June 1823], 1951, V, pp. 318–19).

References to Ricardo's personal financial interests can be found in modern literature prior to Anderson and Tollison's 1986 article. N.J. Silberling (1924, pp. 437–8) echoed Ricardo's contemporary critics in arguing that financial self-interest motivated Ricardo's position in the debate over the resumption of cash payments.⁴ This argument has been ably refuted by J. Viner (1958, pp. 273–4) and S. Hollander (1979, p. 499). In general, accusations that Ricardo acted out of motives of personal gain have been dismissed. James Bonar, in his preface to a volume of correspondence between Ricardo and Malthus published in 1887, observed that 'It is sometimes said that . . . Ricardo had flaws . . . which were due to a certain strong bias of self-interest. [However] his selfish interest as a member of the "propertied" classes was not clear enough to be a snare to him' (1887, p. xv). As we have seen, Anderson and Tollison find suspicious the timing of a change in the nature of Ricardo's investments, which coincided with the outset of his parliamentary career and which they attribute to personal interest. J.H. Hollander ([1910], (1968), p. 50) provided an explanation echoing that provided by Ricardo himself, one that is considerably less sinister. 'Ricardo, like his friend Hutches Trower, would probably in any event have embraced the opportunity offered by the sharp rise in public credit to convert his fortune from funded into landed property; but this impulse was doubtless hastened by increasing interest in economic study and by the hope of devoting undisturbed thought to such speculations.' Weatherall (1976, p. 134) made a similar point: 'David Ricardo made, and kept, and left, a . . . fortune. But if he had been asked the value of his fortune, he would probably have answered freedom. Freedom was what he wanted, and freedom was what he got. The first freedom was for the economist. The second freedom was for Parliament.'

There is much to suggest that Ricardo, as a participant in policy debate, had no concern to forward his own material well being. In a number of circumstances, Ricardo put the nation's interests ahead of his own. A summary of several of these situations was provided by his brother, Moses Ricardo, in a memoir of David's life, who wrote of:

a disinterestedness which made him always regardless of his own personal benefit, in the maintenance of general principles. When a Bank [of England] proprietor, he argued strenuously and warmly

against the inordinate gains of that body; he defended the cause of the fund-holders when he had ceased to be one; he was accused of an attempt to ruin the landed interest after he became a large landed proprietor;⁵ and while a member of parliament, he advocated the cause of [parliamentary] reform, which, if adopted, would have deprived him of his seat.

(1951, X, p. 13)⁶

To this list provided by Moses Ricardo, one more notable case may be added, in relation to Ricardo's career in business. Anderson and Tollison (1986, p. 53) find Ricardo's career as a loan contractor troublesome to reconcile with his concerns over the ill effects of government borrowing. They describe one possible explanation, namely, that Ricardo 'felt that his active participation in and personal profit from the accumulation of the public debt prior to 1815 was justifiable as a pragmatic necessity in spite of his theoretical misgivings.' However, they go on to conclude that 'this superficially plausible explanation of his behaviour is inadequate', and that the explanation must lie in his concern for his personal financial interests. This perspective is wholly unconvincing.

Ricardo recognized that personal and national interests might conflict with respect to his role as a loan contractor, but he expressed no moral qualms about his involvement in this practice. Ricardo made his fortune as a loan contractor by legal means; as Mill wrote to him, 'you have gained nothing from the public, but under fair laws of an open market, exposed to all the force of unrestrained competition' ([3 January 1816], 1951, VII, p. 5). With respect to Ricardo's career in finance, as J.H. Hollander ([1910], (1968), p. 39) remarks, his 'financial activities were distinguished not only by the integrity and fidelity requisite to successful conduct of such operations, but by a certain larger spirit which even at the time attracted attention.' Thus in 1819, Ricardo competed for a government loan for the final time. He did so at the same time that he, as a new member of parliament, was pressing the government to apply a budget surplus in diminution of the loan. As a result, the government was able to get good terms on an unexpectedly small loan, the contract for which Ricardo submitted what proved to be a losing bid. In his speech of 13 May 1819, Pascoe Grenfell, also a member of parliament, noted that Ricardo expressed opinions opposed to those of his fellow loan con-

tractors in support of the use of the Sinking Fund to finance current expenditure rather than contracting new debt. Ricardo 'greatly to his credit, observed to the Chancellor of the Exchequer that if he considered his own interest merely he must agree with his brother contractors, but if he were to consult the advantage of the country, he should advise the application of the Sinking Fund, and a loan of [a lesser amount] only.' (Speech, 1951, V, p. 4). And Mallet (1823, p. 205), in eulogy of Ricardo, wrote of his career as a loan contractor that 'I have invariably heard him spoken of in terms of the greatest esteem. . . . [A]n eminent stockbroker . . . told a friend of mine that he had never known a man in business so punctual to his word as Ricardo.' Ricardo was content to be a party to a perfectly legal and accepted practice, that of contracting for government loans. His activities within that framework were of the most scrupulous nature. And his participation in the system did not prevent him from speaking out against its drawbacks from the point of view of the national interest.

Ricardo's view of such matters is further reflected in his discussions in parliament of the operations of the Bank of England. 'Mr. Ricardo did not complain of the Bank directors for making the concern as profitable as possible; but he complained of ministers for having made such improvident bargains with the Bank, as to enable that establishment to make those enormous profits' (Speech [31 May 1822], 1951, V, p. 193). He fully expected the Bank directors to use all legal means available to attempt to increase their profits, for 'it was the duty of the directors to do the best for the proprietors' (Speech [9 June 1819], 1951, V, p. 22). His problem in this case lay with a faulty system and not with those who took (legal) advantage of it. 'He could not approve of the [government] making presents to the [Bank of England], though he could not blame those to whom they were given, for making the most of their contracts with them' (*ibid.*).

Ricardo expressed concern throughout his career over the very real danger of personal bias among policymakers. He found the need on occasion to dispel any doubts that might arise as to the nature of his motives. For example, in supporting a motion to equalize duties on sugar imported from both the East and the West Indies, 'Mr. Ricardo, in explanation, observed, that he had never possessed a shilling more than 1000*l.* East-India stock, and never given a vote in favour of monopoly in his life' (Speech [22 May 1823], 1951, V, p. 301). And

in a response to a suggestion that tithes be reimposed on land for which the owners had earlier made a one time payment in return for exemption, Ricardo, in opposing the suggestion, noted that 'I speak without any consideration of my interest as a landholder, and I assure you that I am not possessed of any tithe-free land' (Letter to McCulloch [15 September 1820], 1951, VIII, p. 238). Clearly, Ricardo was conscious of the danger that legislators might be tempted to put their own interests ahead of those of the nation. His honour is perhaps most clearly reflected in a plea that he made to his fellow parliamentarians who were in the process of debating agricultural legislation. '[L]et him caution [members of parliament] not to be led away – not to be improperly biased – by any views of their own personal advantage. Let him implore them to recollect that they were legislating for the happiness of millions, and that there was no evil so intolerable as the high price of human food' (Speech [9 May 1822], 1951, V, p. 184).

5.3 Interested parties

Land owners versus bond holders

As we have seen, Ricardo was aware that some of his contemporaries interpreted his recommendations with respect to public debt as a reflection of support for a particular interest. What is surprising is that there was no consensus as to whose interests he might have been seeking to forward. One set of criticisms of the capital levy proposal was put forth by land owners, who accused Ricardo of favouring the cause of bond holders and aiming to depress the price of land for speculative purposes. This was in keeping with land owners' long-standing mistrust of political economists, whose support of free trade was anathema to the landed interest. Thomas Gooch, Member of Parliament for Suffolk, landowner, and staunch supporter of the status quo, expressed prevailing sentiment among this group in vivid and amusing terms when he suggested that 'every vessel laden with foreign corn destined for this country should take back, instead of ballast, a cargo of political economists' (Gordon 1979, p. 59).

Land owners, however, were not the sole critics of the capital levy plan. Bond holders were also opposed, their protests directed at what

they saw as the injustice of compulsory reimbursement of their bond holdings at depressed prices. Ricardo observed that

as it usually happens I am attacked by the most opposite parties. By some stockholders I am accused of not doing justice to them, by suggesting that they are not fairly entitled [to the face value] but to the market price [of government bonds]. By another party – the landholders, I am accused of wishing to give the lands of the country to the stockholders.

(Letter to Trower [28 December 1819], 1951, VIII, p. 147)

Land owners

Ricardo was resigned to the nature and extent of the reaction of land owners to his scheme. While it was difficult for bond holders to organize and defend their interests, land owners formed a powerful political bloc. Ricardo clearly believed that most did not have the country's best interests at heart, regretting that 'I should not have much reliance on their virtue' (Letter to Trower [15 July 1816], 1951, VII, 49). Ricardo defended the benefits which land owners thought would be conferred on bond holders as a result of debt redemption. He averred that 'He was not demanding for the stock-holder more than he was entitled to receive; he was merely demanding that in a compact such as [that between the government and the public creditor], the terms should be fairly and honourably fulfilled' (Speech [11 February 1822], 1951, V, p. 127). In the same speech, Ricardo observed that his position had been characterized as wanting to transfer the whole landed property of the country into the hands of the public creditor. He responded that the land owner might receive adequate rent without any breach of faith toward the bond holders, but 'it would be most advisable . . . that the [land owner] should surrender to the [bond holder] a part of his property, in liquidation of the debt that had been contracted' (Speech [11 February 1822], 1951, V, p. 126). He justified this argument by pointing out that had no debt been contracted but instead had government spending been financed solely by the levying of taxes, land owners would have found it necessary to surrender a part of their property to the government in the payment of such taxes.

It has been argued that Ricardo's economic analysis, in particular his theory of rent, fostered a bias against the landed interest, an argument in contrast to that presented by Anderson and Tollison. Ricardo addressed this criticism in a letter to Trower, himself a country gentleman. He wrote that he was represented as holding the landlords up to reproach as their interests were opposed to those of the rest of the community, and responded: 'I have said that the community would not benefit if the landlords gave up all their rent – such a sacrifice would not make corn cheaper, but would only benefit the farmers – does this not shew that I do not consider landlords as enemies to the public good' (Letter to Trower [21 July 1820], 1951, VIII, pp. 207–8). Recent studies of Ricardo have shown quite clearly that he had no bias against the landed interest. Hollander (1979, p. 590) analyzed Ricardo's position and concluded that 'rent was accepted as a fact of life; there is not the slightest hint that he countenanced confiscatory measures in any form.' This view was reiterated by Milgate and Stimson (1991, p. 111), who wrote that whatever lesson Ricardo drew from rent theory, 'it is quite apparent that it involved him neither in a programme for the euthanasia of the land-owning classes . . . , nor one of land nationalization.' Ricardo defended those whose incomes were derived from land, a defence tied to his views of the 'sacredness' of property,⁷ in observing that 'Rent often belongs to those who, after many years of toil, have realized 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' ([1817], 1951, I, p. 204).

Although Ricardo was not opposed in principle to the land-owning class or the source of its wealth, he deplored the tactics of its political leaders. To McCulloch he wrote that Malthus 'has not acted quite fairly by me in his remarks on that passage in my book which says that the interest of the landlord is opposed to that of the rest of the community. I meant no invidious reflection on landlords – their rent is the effect of circumstances over which they have no control, *excepting indeed as they are the lawmakers, and lay restrictions on the importation of corn*' (emphasis added, [2 May 1820], 1951, VIII, p. 182). To Trower he complained of one of the most notorious spokesmen for the landed interest: 'Cobbett as usual asserted falsehoods respecting

my opinions; and the landed gentlemen being strongly inclined to confiscate a part of the property of the fundholder sought to cover their projects with a shew of justice – they of course will magnify the effects of [the resumption of cash payments], and will admit no other cause for their distress but the augmented value of the currency’ ([30 January 1823], 1951, IX, pp. 266–7). This echoed his earlier observations that many landed gentlemen ‘believe that there would be no injustice in [currency depreciation], and here I am at issue with them’ (Letter to Trower [14 December 1822], 1951, IX, p. 246), and, also to Trower, ‘you speak of the landholder most justly – he is an interested being seeking unjustly to load the other classes of the community with his share of the public burthens’ ([2 March 1821], 1951, VIII, p. 350).

Bond holders

However sanguine he was with respect to the criticisms of the landed interest, Ricardo found the opposition of bond holders to his capital levy proposal particularly difficult to understand, for he considered himself to be advocating a policy whose result would be in their best interests. In response to a suggestion by McCulloch that the debt be repudiated, Ricardo observed that ‘I cannot agree with you in thinking so lightly of the extinction of our national debt. I should agree to no other means of getting rid of it, but by paying it. . . . We agree as to the evil, but not as to the remedy’ ([3 January 1819], 1951, VIII, p. 4). He held this view despite the fact that he conceded that default might not cause economic harm. As he wrote in his ‘Notes on Malthus’, ‘annihilation of the national debt either by paying it from the capital of the country, or by refusing to pay the stockholder either principal or interest, would not have the effects generally attributed to them’ ([1820], 1951, II, p. 451). Neither debt redemption nor repudiation would affect the aggregate amount of funds available for investment in the economy. Shoup (1960, p. 165n) interpreted this passage to mean that Ricardo thought that even McCulloch’s remedy would be better for England’s growth prospects than would inaction. From the standpoint of economic analysis, Ricardo would have agreed. However, the evidence suggests that he would have considered complete repudiation to be morally unacceptable.

As mentioned above, Anderson and Tollison (1986, pp. 51–2) observe that:

two elements of Ricardo's plan – a . . . tax on government bonds [in addition to other forms of property] and repayment of bondholders at a price lower than that stipulated by contract at the time the bonds were issued – amounted to a large scale repudiation of a significant proportion of the public debt. . . . Ricardo clearly intended that the terms of this contract be redefined coercively in the government's favour.

As to the first element, it is evident that Ricardo did not consider it unjust to levy the tax on government bonds themselves, and his defence of bond holders against criticism from other groups included the fact that they would be required to repay a part of the debt. The capital levy, he emphasized, was to be 'a general and fair contribution of a portion of every man's property; not, as had been said, of the property of the land owner only, but that of the merchant, the manufacturer, and the fundholder' (Speech [7 December 1821], 1951, V, p. 472). He made a similar point in parliament: 'The land-owners were, as well as the other classes of the people, responsible to the fundholders for the payment of their share of the debt. From the responsibility the fund-holder himself was not wholly exempted: towards the payment of his own debt he must himself be a large contributor' (Speech [18 February 1822], 1951, V, p. 132). As to the second element, Anderson and Tollison echo Cannan (1894, p. 423n), who observes that 'the word "redeemed" scarcely covers Ricardo's proposal to pay off the fund-holders compulsorily at the market price; the fundholder certainly had a right to demand either the continuance of his annuity or £100.' In addressing this concern, Ricardo emphasized that debt redemption, even below par, would be in bond holders' long run interests. This reflected the unpleasant nature of the alternatives.

Alternative schemes for easing the debt burden would have treated bond holders more harshly. In response to a suggestion that redemption occur at a price well below current market value, Ricardo wrote that as stockholders complain of his proposal to pay off stock with a face value of £100 at a price of £70 [the current market price],⁸ 'I do not know what they would say to [a proposal] to pay them only at [£]40' (Letter to McCulloch [28 February 1820], 1951, VIII, pp. 157–8). And he continued further that in the absence of redemption, 'Our burthens may, and will probably, continue to

weigh us down for many years to come, but finally they will be forcibly thrown from our shoulders, and the stockholders instead of complaining, with injustice, as I think, that they were not to be paid at [face value], will have justly to complain of losing both their principal and interest.' This echoes his earlier comments to Heathfield, who had proposed a scheme similar to that of Ricardo, except that he would redeem the stock at face value. To Heathfield, Ricardo wrote that the stockholder could 'never reasonably expect to receive [face value], but [could] more justly expect to be eventually a loser of the whole of his capital' ([19 December 1819], 1951, VIII, pp. 144–5). Redemption would allow holders of government securities to receive tangible assets in return for those securities; the alternative, as he saw it, might well be repudiation of the entire debt.

Evidence of Ricardo's lack of bias against bond holders can also be found in his views on compensation for alterations in the value of the currency. Ricardo opposed schemes proposed by the landed interest to compensate for the losses they incurred as a result of price deflation that occurred on the resumption of cash payments in 1819. He did recognize that such alterations in the value of the currency had implications for the allocation of resources, and acknowledged that the public creditor benefited from depreciation preceding the return to gold. However, computations led Ricardo to believe that the effect was not substantial.

The whole amount of taxes paid to the public creditor and sinking fund, is 36 millions; suppose the other fixed charges to be four millions, then the whole taxation on which the altered value of money has operated is 40 millions. I estimate the increase 10 per cent, or four millions, which fall on all classes, – landlords, merchants, manufacturers, labourers, and, though, last not least, – stockholders.

([1822], 1951, IV, p. 262n)

He took great pains to counter accusations that bond holders were reaping substantial benefits from resumption. He wrote

That the situation of the stockholder is improved, by his dividends being paid in a currency increased in value, there can be no doubt;

but what evidence is there to shew that his situation is so much improved, that he has now at his disposal, in addition to his former means of enjoyment, all those which were before at the disposal of the whole of the tenantry, and of the landlords of the country?

(*ibid.*, p. 229)

This defence of bond holders was repeated in a number of contexts. In parliament, he observed that 'he was at a loss to see what advantage the fundholder had gained' (Speech [26 February 1823], 1951, V, p. 252). He reiterated at a later date that 'the stock-holders, taking them as a class, receive no more than what is justly due to them' (Speech [11 June 1823], 1951, V, p. 314; see also 1951, V, pp. 236–9 and 320). To Trower, he went further, averring that 'the Stockholders as a body, if they had received uniformly what was really due to them, might now have been entitled to . . . more than they actually receive, in money of the standard value' ([22 August 1821], 1951, IX, p. 39). This argument was reiterated in correspondence with McCulloch:

if it would be wise to legislate for every alteration in the value of the currency, we ought to have begun long ago, when the stockholders were suffering from a fall in the value of money; and such has been their situation ever since the commencement of the National Debt. No relief is ever afforded to those who suffer from a fall in the value of money, but every heart sympathizes with those who are losers by its rise.

([9 June 1816], 1951, VII, p. 38)

In his comments on the policies advocated by the landed interest to benefit themselves at the expense of bond holders, we find evidence of Ricardo's strong sense of morality. In his discussion of such issues, he made repeated reference to the concepts of justice and fairness. On currency depreciation, Ricardo observed that:

The evils of depreciation . . . actually consist in defrauding creditors of their just demand. Bankruptcy may be said to commence with depreciation; it may be so gradual as to prevent all convulsion, – its ultimate effects is to enrich one class of the society at the expence of another. . . . Is it not an immoral act to take advan-

tage of a law the consequences of which the legislature had not in contemplation to enrich yourself at the expense of your fellow citizens?

(([1810–11], 1951, III, p. 271)

The so-called ‘equitable adjustment of contracts’, proposed by land owners to correct for changes in the value of the currency, was unnecessary from both a moral and a practical point of view, for it:

would be found that the stockholder had had nothing more than was just; and that if the interest which he had been paid in depreciated currency, upon capital which when lent had not been depreciated, were to be set against the interest which he was receiving in undepreciated currency now, upon capital which when lent had been depreciated, then, not only would the loss in the one case compensate all that had been hitherto paid in the other, but would actually be equal to a perpetual annuity to that annual amount, which he was at present receiving.

(Speech [26 February 1823], 1951, V, p. 252)

It would also be inequitable in the form proposed by the landed interest, for ‘If the stockholder is enriched by the fall of wheat so is the mortgagee, the discounter of bills, the manufacturer of cloth and of every other commodity. Why not use your adjusting rule to all these persons transactions?’ (Letter to Trower [8 March 1814], 1951, VI, p. 105)

5.4 Ricardo’s criticism of the Sinking Fund

Ricardo’s examination of the history of public debt in England strongly confirmed his belief that Britain’s political leaders were more concerned with forwarding their own interests than those of the nation. In his article ‘The Funding System’ (1820), Ricardo provided an extensive description of the contemporary system of government finance. In theory, at the time a public loan was contracted, there was to be established a schedule for its periodic redemption such that the government and the public would be aware of the resulting pattern of future tax obligations and the date at which the debt would be eradicated. In practice, this procedure was not followed.

Instead, the complicated machinery of the Sinking Fund scheme as it existed in Ricardo's day, involved vesting control of funds earmarked for debt redemption and arising from tax revenue in the hands of special commissioners who were to use it to purchase government securities, or 'stock'. This stock was then registered in the names of the commissioners, who proceeded to use the dividends received to purchase additional stock. The complicated nature of the Sinking Fund mechanism invited its use by opportunistic politicians as an instrument of 'mischief and delusion' ([1820], 1951, IV, p. 157), used with increasing frequency to provide funding for current services and for interest on newly created debt. This abstraction of monies from the Sinking Fund was done without the full awareness of the public. It was often achieved by means of 'pitiful shifts and evasions' (ibid, p. 195), as the government was not open about its actions and the electorate was not adequately educated as to the principles underlying the operation of the system. If faithfully administered by the Commissioners and respected by politicians, a sinking fund could serve as a means of ensuring that provision would be made in the budget for a regular application of funds to reduce the debt. But Ricardo and others exposed the practical operation of this scheme as a disaster, due to an inability to credibly commit to the systematic application of the fund in the redemption of public debt.⁹

Ricardo took a pessimistic view of the likelihood that British political leaders would carry out a programme of effective and gradual debt reduction. Duty compelled him to warn of the dangers of excessive public debt, but he did not have great hope that his efforts would soon bear fruit: 'I fear that no plan for paying off the debt will receive any countenance from Parliament. Men do not like to make an immediate sacrifice for a future good; and they please themselves with imaginary riches, from which they really derive no advantage' (Letter to Sinclair [11 May 1820], 1951, VIII, p. 187). His argument in support of a capital levy to achieve debt redemption was dependent on his contention that the Sinking Fund scheme, while viable in theory, was a shambles in practice, precisely because selflessness was a quality in which contemporary politicians were lacking. Given the theoretical details of its operation, Ricardo could be 'quite easy in recommending the measure of a sinking fund, if they had a different kind of parliament – one that moved in more direct sympa-

thy with the people' (Speech [6 March 1823], 1951, V, p. 269). The true problem with the Sinking Fund lay in the fact that 'no securities can be given by ministers that the Sinking Fund shall be faithfully devoted to the payment of debt, and without such securities we should be much better without such a fund' ([1820], 1951, IV, p. 196). Political expedience would inevitably lead to the abstraction of funds to meet current expenditure requirements¹⁰ or to finance further debt. His entire case against the Sinking Fund is political and not economic: 'Why the [Sinking Fund scheme] is impossible except from the bad faith of ministers or parliament I can not see.' (Letter to Place [1 November 1819], 1951, VIII, p. 122) – that is, it was a failure 'in the present constitution of parliament' ([1820], 1951, IV, p. 199). There was no theoretical reason why it could not be effective if employed properly, but as Ricardo did not anticipate reform of the existing institutional structure as likely to occur in the near future, he made his alternative proposal based on the existing system. Admittedly, a capital levy would be drastic, but it had the potential to be effective in achieving debt redemption where more gradual attempts would surely continue to fail.¹¹

5.5 Conclusion

Ricardo wrote to George Grote of his motives for supporting freedom of the press and reform of parliament: 'The approbation of such as you is the only reward which I expect for doing my duty, and amply recompenses me for my poor exertions for the public good' ([May 1823], 1951, IX, p. 288). And the evidence presented above shows him to have been motivated in his participation in policy debate in general, both as a private individual and a member of parliament, by his concern for the good of the nation. Ricardo was convinced of the uselessness of the Sinking Fund in achieving debt redemption. Thus he was compelled by his sense of duty to argue that the remedy lay in more drastic action, and formulated his capital levy proposal. Out of his concern for fairness, he sought to make his capital levy proposal as equitable as possible. '[D]ebt might be reduced by a fair contribution of all sorts of property – he meant, that, by the united contribution of the mercantile, the landed, and he would add, the funded interest, the national debt might be certainly got rid of' (Speech [16 May 1822], 1951, V, p. 187).¹² He did not seek to exempt

the public creditor from his share: 'He should have been ashamed of himself if any thing so unfair could ever enter his mind as that of exonerating the fundholder from the payment of his quota of so equitable a tax' (Speech [7 December 1821], 1951, V, p. 472). He likewise did not seek payment at face value, arguing that payment at market price would be just. 'He did not mean that it should be redeemed at par; the public creditor possessed no such claim – were he paid at the market price, the public faith would be fulfilled' (Speech [16 December 1819], 1951, V, p. 34).

It is notable that Ricardo was forthright about the details of his capital levy proposal, in contrast to those who would seek to alleviate the burden of the debt through reductions in interest payments. This candour reflected his conviction that debt redemption by the means proposed was fair and just. 'It gave him pain . . . to hear any allusions made to the subject of not paying the public creditor. . . . If, indeed, the dividend was to be reduced, he trusted that it would be done openly, and that no stratagem or delusion would be practised' (Speech [8 February 1821], 1951, V, p. 75). He denounced depreciation to reduce the burden of the public debt as equally deceptive.

It would be unjust to all creditors, and proportionally advantageous to debtors. If the payment of the interest of the national debt is a greater burden than we can bear, which I think it is not, and cannot well be, the fair way would be, to compound with the public creditor, and not make him only a pretended payment.

(Letter to Sinclair [11 May 1820, VIII], 1951, pp. 186–7)

Pablo Pebrer (1833, p. 501), a decade after Ricardo's death, made a similar proposal to redeem the public debt by a one time tax. He lamented that the subject of the public debt 'has never been treated in a manner commensurate with its magnitude [and] a writer could not treat the most important of all national questions, without the risk of being considered almost insane.' This is not an overstatement; Ricardo had faced opposition to his plan that was often vitriolic, and at times bordered on ridicule. He was well aware of contemporary criticism, initially expressing mild surprise at the vehemence of the reaction. Shortly after his first mention of the plan in parliament, Ricardo wrote to Trower that 'a great deal more has been said than I

intended there should be of an incidental observation of mine respecting the payment of the debt' ([28 December 1819], 1951, VIII, p. 147). However, he soon grew to expect a furore whenever he reiterated his arguments, and yet despite this, he continued to make reference to the proposal both in and out of parliament. He did so not out of motives of personal gain. Rather, it was his sense of duty that compelled him to present a means of debt redemption, which he was convinced, was fair, just, and in the best interests of the nation.

6

Ricardo and Modern Public Debt Theory

... the parliamentary debate on the power of the purse was never-ending: how much money should be extracted from the public, and of that how much should be borrowed and how much taken by taxation; what type of taxes should be used; for what purposes should the government spend money. Such issues have been at the heart of government since the beginning of organized society.

Fetter, 1980, p. 111

6.1 Introduction

The subject of public debt is very much in the news today. In almost every industrialized economy, governments are seeking to rein in budget deficits that have ballooned in recent years, and those that have met with success must decide whether to apply budget surpluses to the reduction of the public debt. There is still no clear consensus among politicians or economists on fundamental questions of public finance such as those outlined by Fetter above. Supporters of large scale government spending and the need for deficit spending in certain situations point to their substantial economic benefits. Their opponents warn of the danger to the economy that can arise as a result of such policies. Both positive and normative arguments made in the current policy debate bear strong resemblance to those made in Ricardo's day. However, the evolution of economic analysis since Ricardo's day has contributed to complicate the discussion of the effects of public borrowing and public debt. What follows is a brief evaluation of the reasoning of current thinkers regarding such issues

as the impact of public borrowing on economic growth, the unproductive nature of government expenditure, and the harmful impact of debt-service taxation on resource allocation. The aim is to emphasize some of the major developments in public debt theory since Ricardo, showing that his work on public debt was an important step in the evolution of modern public finance theory and is still highly relevant today.¹

6.2 Fiscal stimulation of aggregate demand

A significant modern argument in support of deficit spending by government is the argument that high levels of public spending act as an automatic stabilizer to an otherwise cyclically fluctuating economy. While private spending is procyclical, public spending typically rises during periods of recession due to unemployment insurance outlays and other income support programmes put in place to ease the burden of falling private incomes. In addition, falling private incomes are required to pay less tax. Thus deficits in recessionary periods, which occur due to increased public spending and falling tax revenues, are generally countercyclical, mitigating the downturn of the business cycle. Government is able to perform this stabilizing role precisely because it is able to maintain its level of spending by means of borrowing to meet the shortfall of revenue and by running a deficit.

A second argument in support of deficit spending involves the multiplier concept. One person's spending becomes another's income, and so as spending increases, it causes income to increase, which causes a portion of the income to get respent, forming another round of spending and repeating the cycle of spending. This respending behaviour results in what is known as the multiplier effect, which recognizes that any spending acting as a stimulus to income will have a final impact greater than the size of the initial stimulus. According to this theory, deficit financed spending has a much greater final impact on the economy than spending financed by taxes. Taxes reduce disposable income, which is an important source of private spending, so tax financed public spending tends to reduce private spending, substantially reducing the stimulating effect. Supporters of the multiplier concept argue, on the other hand, that the stimulating effect of deficit financed public spending ultimately reduces the

negative impact of the deficit, as it promotes GDP growth, resulting in growth in the tax base.

The above arguments arise from Keynesian analysis, the most significant development in macroeconomics since the Classical period. In Ricardo's economic analysis, the law of markets assures an economy operating at full employment. Thus there is no need for public expenditure to stimulate aggregate demand, for a loan financed increase in government spending is accompanied by an equal reduction in private spending. Funds that would have been spent privately are instead taxed away and spent by the government. This has a depressing effect on savings, investment and growth, due to the assumption that while some private spending is productive (in more modern terms, it is investment spending rather than consumption spending), all (or nearly all) public spending is unproductive. If borrowing occurs for long term productive investment in equipment, materials or skills, then future production will reap the benefit in the form of additional income, which can then be used to repay the principal and interest of the loan. However, borrowing for consumption purposes increases current consumption spending, and reduces future consumption spending by a larger amount. Thus, according to Ricardo, larger future sacrifices are required to finance current consumption spending beyond a nation's means.

Keynesian economics brings a new perspective, challenging the received doctrine that the growth of a country's wealth depends upon accumulating savings and investing in capital. Keynesians suggest instead that fostering employment and economic activity creates wealth. In Keynesian macroeconomic analysis, aggregate demand determines the level of real national income. Business cycles occur as variations in aggregate demand lead to variations in income. Expansionary fiscal policy, increasing public expenditure and/or decreasing taxes during a recession, offsets decreases in private spending. Contractionary fiscal policy has the opposite effect in times of expansion. Thus, according to this model, fiscal policy can and should be used to stabilize the economy, reducing business cycle fluctuations. According to the Keynesian school,² in a time of recession, a continuing tendency toward oversaving and stagnation is predicted to prevail, and sustained expansionary fiscal policy is advocated as the solution. In this model, government spending has a multiplier effect on employment and income, and loan financing has no off-

setting multiplier effect in the opposite direction, and therefore consumption and government spending move in the same direction. Government borrowing thus activates unemployed funds but does not reduce private investment, and as a result there is no negative impact on capital growth.

Several criticisms of the Keynesian model have emerged. The first concerns difficulties which policymakers face in the practical management of countercyclical policy. If fiscal policy is implemented based on imprecise or incorrect macroeconomic forecasts, attempts to 'fine tune' the economy might amplify, rather than dampen, business cycle fluctuations. In addition, variable or uncertain lags in the choice, implementation and effect of fiscal policy can add to policymakers' difficulties. Rational Expectations theory has described similar complications along these lines. Governments' models of the economy are based on the past behaviour of households and firms. But past economic behaviour depended upon the policy regime in place at the time. When governments change their policies, expectations change, and governments must take this into account in predicting the responses of economic agents to a policy change. Measurement difficulties, lags and uncertain public reaction to policy changes all make 'fine tuning' the economy a difficult task.

A second criticism of Keynesian macroeconomic analysis involves 'crowding out'. This term refers to a number of different means by which expansionary fiscal policy may in the end have little or no effect on national income. One avenue for crowding out may be Ricardian Equivalence. As described in more detail below, Barro (1974) argued for complete crowding out from this perspective, in which increased private savings in anticipation of future taxes reduce private consumption. Alternatively, in a Keynesian world with output below its full employment level, crowding out may occur in an IS-LM framework. In this context, the fiscal multiplier is smaller the lower the elasticity of money demand with respect to the interest rate, or the higher the elasticity of private spending with respect to interest rates. Current large deficits and the expectation of large future deficits result in higher interest rates, and crowd out of the credit market other borrowers for mortgages, corporate investment, and consumption spending. Moreover, large deficits and high interest rates make domestic government bonds more attractive to foreign

investors, pushing interest rates higher as the demand from abroad for domestic currency to purchase these bonds rises. In this framework, fiscal expansion crowds out the interest sensitive components of private spending, but the multiplier effect on output is still positive. One may also get complete crowding out in more sophisticated macroeconomic models. For example, the Mundell–Fleming model suggests that in a small open economy with perfect capital mobility and flexible exchange rates, fiscal policy leads to appreciation of the exchange rate of the currency, and exchange rate sensitive components of aggregate demand are crowded out.

6.3 Ricardian Equivalence

Ricardo's case against public borrowing is based in part on consideration of its depressing effect on capital accumulation and economic growth. This case is founded on the assumption that the unfortunately named 'Ricardian Equivalence' is invalid, since individuals are prone to 'wealth illusion'.³ Ricardian Equivalence owes its prominence in the modern debate over public debt to its restatement by Barro (1974).⁴ For it to hold, it is necessary that economic agents base their consumption decisions not merely on their current income but on some notion of wealth. That this is so has come to be widely acknowledged with the development of the permanent income and life cycle hypotheses as frameworks for the analysis of consumption decisions. Ricardian Equivalence also requires that economic agents are fully informed and make their consumption decisions rationally. Ricardo himself was, it seems, the first to recognize that taxpayers might suffer from 'fiscal illusion'. He argued that myopic taxpayers do not recognize the full weight of future taxation implied by a substitution of debt for tax finance, and thus improperly perceive such a substitution as an increase in their net worth, and increase their current consumption accordingly, at the expense of savings and investment. Among the modern writers who considered this problem was Patinkin (1965), who suggested that in modelling this issue, some fraction 'k' of the stock of outstanding government bonds should be treated as wealth. The less the degree of fiscal illusion, the lower the value of k. Ricardian Equivalence would be represented by $k = 0$. The possibility that $k = 0$ is reflected in the theory of rational expectations.

The argument has been made that a purely self-interested agent might consider public debt issue as an increase in real wealth if it is anticipated that full debt retirement will not occur prior to his death. However, Barro (1974) showed that Ricardian Equivalence holds in a finite horizon model if altruistic agents regard their heirs as extensions of themselves and thus include the consumption of their descendants in their own utility function. In a model involving intergenerational bequests, parents would use the increase in their disposable incomes resulting from the substitution of debt for current taxes to augment their children's inheritances by an amount large enough to allow them to pay the resulting future taxes. One interesting issue which arises in consideration of a model such as this is the possibility that the issuance of public debt may increase intertemporal efficiency by allowing for the possibility of negative bequests (Drazen, 1978).

Uncertainty may also lead to the violation of Ricardian Equivalence. If an agent faces uncertainty regarding future income (this may result from uncertain income or from an uncertain life span), he is unable to determine with certainty the amount of the bequest for which to provide. Thus the agent will not be indifferent between a dollar of income today, its value known with certainty, and an uncertain future payment to his heir which can only be estimated to have the present value of a dollar. Uncertainty experienced by an agent as to future tax liabilities implies similar problems. Two opposing effects have been described. The first is that confused cost signals may lead to an underestimation of future tax payments, raising net wealth and leading to increased consumption (Buchanan and Wagner, 1977). The second is that risk-averse agents facing uncertainty may overestimate their future tax liabilities, leading to precautionary saving, and reducing consumption (Barro, 1974).

The Ricardian Equivalence argument is also predicated on the assumption that the future tax burden to service a given issue of debt is borne by those who benefit from the initial tax cut. If this is not the case, a transfer of income will result, and if consumption patterns differ across economic agents, aggregate consumption may be altered. For example, if the marginal propensity to consume of the recipients is high relative to that of the taxpayers, then aggregate consumption would increase and Ricardian Equivalence would be violated. The situation is further complicated if the assump-

tion of lump sum taxes is lifted. In an economy in which the tax structure is known and unchanging, equivalence would obtain, but if changes in the tax structure that would shift the tax burden between different groups are anticipated, the issuance of debt may have real effects.

Capital market imperfections may also lead to violation of Ricardian Equivalence. If an economic agent is unable in the existing credit environment to borrow against future income, the possibility provided by the existence of public debt for a reduction of current in favour of future taxes may prove to be attractive. Likewise, benefits may result if the government faces a lower borrowing rate than some or all economic agents. The existence of public debt means that liquidity constrained agents or agents facing higher interest rates can effectively receive loans from other agents with the government acting as an intermediary, effectively guaranteeing loan repayment by means of its powers of tax collection. Debt issue will thus increase net wealth if the government is more efficient than the private market in carrying out the loan process (Barro, 1974).

Feldstein (1976) has suggested that under certain circumstances a public debt may never be redeemed. He took issue with Barro's simplifying assumptions of constant population and zero economic growth, pointing out that the growth rate plays a crucial role in determining whether a current tax cut necessarily implies a future tax increase. If the growth rate exceeds the rate of interest, the government can roll over the principal and interest on the debt forever, a situation of dynamic inefficiency known as a 'Ponzi game'.⁵ In such a case, the issuance of debt would *raise* net wealth. Barro (1976) responded to this argument by questioning the likelihood of a situation where the growth rate would exceed the interest rate.

Despite the many questions that have been raised as to its realism, Ricardian Equivalence has attracted a great deal of attention in recent years. The theorem has many testable implications, and these have been explored in an attempt to determine whether it is an adequate approximation to reality. The results and methodology of empirical studies are comprehensively surveyed and assessed by Seater (1993), who concludes that Ricardian Equivalence or approximate Ricardian Equivalence is strongly supported by the data. The debate is ongoing, but if Seater's conclusion is correct, it undermines the case that public

debt is harmful to capital accumulation. By rejecting the applicability of 'Ricardian Equivalence', Ricardo argued that public borrowing harmed the national capital stock. He contended that public borrowing masked the true level of public expenditure and thus encouraged government expenditure, largely harmful to the country's economic well being as wasteful and unproductive. Today, it is generally accepted that some portion of public expenditure is in fact productive⁶ and analogous to private investment,⁷ generating a return that pays for the initial expenditure. Public investment, for example in infrastructure, often cited as essential for an advanced industrial economy to function effectively, yields a direct and often measurable return, which may in some cases be higher than that of private investment.

In addition, the concept of 'investment' has been broadened over time, and is now considered by some to include various expenses – national defence, education and health care – which generate an implicit return in the form of improved labour productivity (*Economist*, 1996, p. 69). With this in mind, Heilbroner and Bernstein (1989), in their attempt to counter what they view as 'false alarms' about the public debt situation in the United States, have argued that published debt statistics are misleading. They advocate the adoption of a 'rational' budget, which places government investment expenditure – including 'additions to federally-owned plant and equipment, most federally-financed education projects, all federally-sponsored research, and perhaps some expenditures whose purpose was to maintain the health and effectiveness of the work force' (ibid, p. 96) – in a separate capital account, allowing public borrowing to be matched against capital expenditures. Such a distinction would lead to a reevaluation of the concept of the public debt as a burden on future generations.

In some ways, indeed, it is the present generation that should be thought of as bearing burdens: by investing in productive capital, it is [providing] a generous bequest to its successors. Think of the Victorian navvies, half-starved by today's standards, who built many of the bridges and railways we use today. Can we fairly accuse that generation of 'burdening' ours by bequeathing the 19th century's national debt?

(*Economist*, 1996, p. 69)

6.4 Issues of taxation

One aspect of public borrowing with which Ricardo did not deal was its potential role in correcting capital market imperfections.⁸ This occurs when households who would like to borrow against their future earnings to support current consumption expenditures are prevented from doing so due to credit rationing in capital markets, such that they cannot freely borrow at near market interest rates. In such a case, the government may improve economic efficiency by cutting taxes, thus increasing the disposable income of consumers, and financing public expenditures by means of public borrowing. According to this argument, for credit constrained households, low current taxes are desirable, even though government borrowing implies higher future taxes. Low current taxes give households the option of increasing current consumption at the expense of future consumption. A taxpaying household that does not prefer higher consumption now and lower consumption in the future can choose both values exactly, by increasing current savings. In the simplest case, the household can use its increased current savings to buy public debt, using the resulting interest income to pay higher future taxes. Thus public debt policy allows the government to facilitate borrowing that would otherwise be unfeasible privately, by relieving the binding liquidity constraint. Increased government borrowing might in fact reduce overall savings, if households do not choose to save in anticipation of future taxes, but modern economists recognize that in some circumstances this can in fact be welfare enhancing (Hubbard and Judd, 1987) as an increase in consumption may be desirable. If this argument is taken to extremes, it suggests that the public sector has considerable advantages over the private sector in this regard. It has the ability to levy taxes and/or monetize the debt (in effect, use an inflation tax) in order to service and repay its debt. Thus one might argue that the greater power of the public sector to carry debt should lead to a gradual reallocation of society's resources from the private to the public sector.

Ricardo based his case against public borrowing partly on the argument that taxation required to service existing public debt distorted resource allocation and encouraged capital flight. Today, economists recognize that since public borrowing changes relative tax burdens at different periods of time (reducing the burden at the time

borrowing takes place but implying an increased burden in the future), the analysis of the effects of debt policy on resource allocation often turns on questions of tax efficiency. The inefficiencies associated with most types of taxes create adverse incentives for certain types of economic activity, from the efficient allocation of resources between industries to the labour/leisure choice. These inefficiencies increase rapidly as the rate of taxation increases – approximately with the square of the tax rate – it is desirable to avoid very high tax rates on some types of activity while taxing other activity at a low rate (Boadway and Wildasin, 1993, p. 59).⁹ In an intertemporal model, public borrowing decreases taxes on today's economic activity at the expense of tomorrow's. Ricardo argued, it is recalled, that wartime taxation is preferable to public borrowing, as then relative prices would only be distorted 'during a period when every thing is disturbed by other causes, during war. At the commencement of peace, every thing would be at its natural price again, and no inducement would be afforded to us . . . to desert employments in which we have particular skill and facilities, and engage in others in which the same skill and facilities are wanting ([1820], 1951, IV, p. 189). This appears to be based on the assumption that each taxpaying household can use private saving and borrowing to smooth its own consumption path over time. In practice, people can only borrow limited amounts against the security of their future income. Modern economists have recognized that public borrowing allows intertemporal smoothing of tax rates, as the government can borrow at times when expenditure requirements are relatively high and repay debt at times when they are relatively low, with efficiency gains the result. For example, Barro (1979) suggested that wartime expenditures are likely to be partially debt financed because this smooths out the tax distortions that would otherwise be heavily concentrated in the war years, a conclusion in contrast to that of Ricardo.

6.5 Conclusion

Given the above discussion, it may appear that Ricardo's analysis of public debt has been superseded by more sophisticated arguments rooted in a more complex and subtle framework of economic reasoning. Yet I would argue that his views are still deserving of study by those concerned about today's public debt situation.¹⁰ 'What are

the growth implications of public borrowing?', 'what is the true nature of government expenditure?', 'what are the effects of debt service taxation on resource allocation?' – the economic questions which Ricardo addressed have not changed. His work presents us with a 'base-case' analysis of the impact of public borrowing and public debt in a framework characterized by full employment, price and wage flexibility, and a long-term perspective. In addition, consideration of the differences between Ricardo's reasoning and our own increases our awareness of and leads us to scrutinize the assumptions which we often take for granted, from the concept of Ricardian Equivalence (which Ricardo himself rejected) to the distinction between productive and unproductive government expenditure.

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7

Summary and Conclusion

Every now and then a man's mind is stretched by a new idea and never shrinks back to its original proportion.

Oliver Wendell Holmes

D.P. O'Brien (1975, p. 265) has observed that 'For some reason texts in the history of economic thought usually omit discussions of the public finance writings of the Classicists.' In reading the work of various scholars of Classical economics, I soon made the same observation as did O'Brien, and I was led to question why this was so. More detailed study of the literature provided no answers as to why the writings of the Classical economists on public finance received relatively little attention, for the questions of taxation, public debt, and the economic role of government were of great concern to them from both theoretical and policy perspectives. In writing this study, it has been my hope to help to redress this surprising omission, with a specific focus on David Ricardo and the public debt issue. Examination of Ricardo's work on public debt sheds light on a series of interesting questions, relating to his analyses of resource allocation and economic growth, his methodological procedure, his involvement in theoretical and policy debates with his contemporaries, his purposes in participating in those debates, and his contribution to the development of public debt theory.

In the introductory chapter, I provide an overview of the state of scholarly opinion as to Ricardo's economic analyses of allocation and growth and his methodological practice. My aim is to furnish the reader with the necessary contextual information to assess the

significance of the arguments made in subsequent chapters. To this end, I first detail the scholarly debate over Ricardo's analysis of resource allocation, assessing the implications of contrasting viewpoints for the notion of a 'dual development' of economic thought. I then outline differing interpretations of Ricardo's growth model. I consider their ramifications for two questions: did Ricardo intend for his analysis to be largely predictive or descriptive, and was he optimistic or pessimistic about England's growth prospects? In addition, I discuss the contentious controversy over Ricardo's methodological practices, outlining two distinctly different scholarly viewpoints. Finally, I present a number of possible explanations for the differing interpretations of Ricardo's economic analysis and his method. These include differences with respect to his style of writing and method of reasoning, debate over the importance to be attached to various sources of his views, and the problem of attribution of the arguments of so-called 'Ricardians' to Ricardo himself. In this context, I also alert the reader to the exegetical approach I take in the following chapters.

In Chapter 2, I delineate the relationship between Ricardo's views on public debt and his economic analyses of allocation and growth. His opposition to public borrowing is shown to derive directly from his theoretical framework, which he uses to establish the harmful impact which debt service taxation has on the efficient allocation of resources. In my examination of this question, I show that his framework shares many common features with the neoclassical model of an economy made up of interconnected product and factor markets characterized by demand and supply. Thus his work in this area is shown to support the 'Marshall–Hollander' interpretation of Ricardo's analysis of resource allocation, and to point away from the notion of a 'dual development' of economic theory, with a 'Ricardian' line distinct from a lineage based upon demand-supply analysis.

I also establish in Chapter 2 that Ricardo advocated debt redemption out of a concern that not to do so would threaten ongoing capital accumulation. Furthermore, the major tenets of his public finance analysis – abhorrence of excessive government spending, opposition to public borrowing as a means of financing, and concern about the negative impact of taxation on investment – are shown to be derived from his formal growth analysis. His work on public debt

indicates that he was optimistic about growth prospects, envisioning the British economy as experiencing ongoing growth with wages above subsistence. This is shown to support the 'New View' interpretation of his growth framework, rather than an economy characterized by temporary deviations of the wage from subsistence, as the 'traditional view' holds. This chapter also briefly examines the question of whether Ricardo ever attempted to construct an optimal tax system. It is demonstrated that although he never did so in an extensive and comprehensive manner, a careful reading of the entire body of his work reveals discussion of a number of features of such a system.

I then turn, in Chapter 3, from Ricardo's economic rationale for restricting the role of government to other sources of his opposition to public spending. I begin by examining the basis in practical political concerns of his opposition to government interference in the economy. I establish his strong antipathy toward 'public extravagance' and his belief that government interference in the economy should be restricted to a minimal number of well-defined circumstances. I also consider Ricardo's comments on the work of Ravenstone [Puller], a contemporary pamphleteer, and show how they can enhance our understanding of his political views. I then outline both Malthus' case against redemption of the public debt and Ricardo's contrasting case in favour of immediate repayment, showing that their positions were founded on differing views of the applicability of the Law of Markets. More specifically, while Malthus worried about the depressing effect of debt redemption on the overall level of aggregate demand given current economic circumstances, Ricardo was vehement in denying this possibility. In Chapter 3, I present an hypothesis to explain Ricardo's seemingly obdurate position in his debate with Malthus. I propose that Ricardo was concerned that any theoretical concession to Malthus' line of reasoning might be construed as support for the government profligacy that he opposed. I suggest that he recognized the potential for confusion in the application of subtle abstract details to policy debate. I argue that he was well aware of the political use to which Malthus' ideas on this subject were being put, and did not wish to make any theoretical concessions that might add fuel to the fire.

In Chapter 4, I examine Ricardo's proposal for a 'capital levy', a one time tax on British property to redeem its public debt, assessing

its implications for our understanding of Ricardian method. Contemporary critics derided the plan as impractical, and scholars since have pointed to the scheme as an example of the 'Ricardian Vice'. I demonstrate that its potential contribution to our understanding of Ricardo's method has not been fully explored. As I show, Ricardo did address a number of practical obstacles to be overcome in implementing the proposal. I present ample evidence that he devoted considerable thought to matters arising in connection with its practical implementation, including the equity of the proposal, its impact on the pattern of property ownership, an estimate of the necessary rate of the tax and a plan for payment in instalments. I suggest that Ricardo chose not to expend the effort to mount an effective campaign to promote the proposal due not to its impracticality but to its political inexpediency. The evidence presented is shown to mitigate criticisms of the proposal by Ricardo's contemporaries and by later scholars who have viewed the plan as wildly impractical. It is reputation and not reality that has fostered the prevailing impression of the proposal as poorly formulated with inadequate attention paid to practical details.

Chapter 5 seeks to counter the argument that Ricardo may have taken into account his personal financial interests in formulating his capital levy proposal. Here I point out the lack of evidence in support of this explanation and detail the mountain of evidence that shows that he made such a proposal out of concern for the national interest. In doing so, I reiterate a defence of Ricardo's motives previously made by a number of eminent scholars. I argue that the plan arose from a conviction that the burden of debt redemption should be shared among different classes of society as equitably as possible. I also outline Ricardo's assessment of the 'Sinking Fund' scheme, which he established as useless in achieving debt repayment and whose failure prompted him to suggest a capital levy as an alternative. I show that Ricardo was motivated to make policy recommendations with respect to debt redemption precisely as with respect to other policy questions, out of an abiding concern for fairness, justice and the national interest.

In Chapter 6, I discuss modern thinking on public debt theory, with the aim of highlighting similarities and differences between the views of more modern thinkers and those of Ricardo. The evolution of economic analysis since Ricardo's day has contributed to compli-

cate the discussion of the effects of public borrowing and public debt. A brief evaluation of the reasoning of current thinkers regarding the impact of public borrowing on economic growth, the unproductive nature of government expenditure, and the harm of debt service taxation for resource allocation brings out some of the major developments in public debt theory since Ricardo.

Public debt was a subject of great importance to Ricardo. He explored its theoretical implications, considered its practical relevance, and sought to alert policymakers and the public about its dangers. As I hope I have demonstrated, an examination of his work on this subject can teach us so much. In my research, I have learned a great deal about Ricardo the economist, analyzing the impact of public debt on resource allocation and ongoing growth. I have also gained a better understanding of Ricardo the politician, advocating debt reduction in parliament in the face of critics. Most significantly for me, I became acquainted in my studies with Ricardo the human being. I respect and admire his search for the truth, concern for the good of his nation, and openness to the views of others.

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Appendix A

British taxation, expenditure and public debt statistics

Table A.1: British public revenue 1700–1929

Decade starting	Customs and excise tax revenue		Land and assessed tax revenue		Property and income tax revenue		Other revenue		Total £m
	£m	%	£m	%	£m	%	£m	%	
1700	2.9	57	1.8	35	–	–	0.4	8	5.0
1710	3.5	61	1.7	30	–	–	0.5	9	5.7
1720	4.3	70	1.4	23	–	–	0.4	7	6.1
1730	4.4	76	1.1	19	–	–	0.3	5	5.8
1740	4.3	65	2.0	30	–	–	0.3	5	6.6
1750	5.3	72	1.8	24	–	–	0.3	4	7.4
1760	7.1	70	2.2	22	–	–	0.8	8	10.1
1770	7.8	70	2.0	18	–	–	1.3	12	11.1
1780	9.9	68	2.7	18	–	–	2.0	14	14.6
1790	13.7	66	3.5	17	0.2	1	3.4	16	21.0
1800	29.6	59	4.9	10	5.6	11	10.2	20	50.3
1810	40.8	58	8.0	11	11.0	16	10.4	15	70.2
1820	41.2	71	6.5	11	–	–	10.5	18	58.2
1830	37.2	72	4.7	9	–	–	9.7	19	51.6
1840	37.3	68	4.4	8	3.3	6	10.1	18	55.1
1850	39.3	63	3.6	4	6.7	9	19.5	26	75.0
1880	45.8	53	2.9	3	12.3	14	25.1	30	86.1
1890	51.5	49	2.5	2	15.2	15	35.1	34	104.3
1900	68.0	45	2.6	2	31.1	21	48.9	32	150.6
1910	95.2	26	2.6	1	102.8	28	163.5	45	364.1
1920	270.6	28	1.7	0	283.3	29	418.2	43	973.8

Source: Mitchell and Deane (1962) 1700–1801 pp. 386–8; 1802–1929 pp. 392–5.

Notes

- Prior to 1808, the customs and excise revenue of Ireland is not separated from that of Great Britain.
- From 1871, all assessed taxes except the land tax and the house duty were replaced by excise licenses, with the resulting revenue transferred from Land and Assessed taxes to Customs & Excise taxes.
- The Income Tax was introduced in 1798, abolished in 1816, and reintroduced in 1843. Figures are for Great Britain from 1700–1800, and the United Kingdom from 1801–1929.
- Figures are for the central government only.
- Figures are calculated as the annual average per decade.
- Years ended: 29 September to 1751; 10 October to 1799; 5th January to 1854; 31 March to 1929.

Table A.2: Net British public expenditure 1700–1929

Decade starting	Total debt charges		Military expenditure		Other expenditure		Total £m
	£m	%	£m	%	£m	%	
1700	1.3	21	4.0	66	0.8	13	6.1
1710	2.7	35	4.2	55	0.8	10	7.7
1720	2.8	47	2.1	36	1.0	17	5.9
1730	2.1	39	2.3	43	1.0	18	5.4
1740	2.4	25	6.2	65	0.9	10	9.5
1750	2.9	33	4.9	55	1.1	12	8.9
1760	4.5	33	8.1	59	1.2	8	13.8
1770	4.8	38	6.4	50	1.6	12	12.8
1780	8.4	39	11.3	52	1.9	9	21.6
1790	11.6	35	19.4	58	2.4	7	33.4
1800	20.0	33	35.3	59	5.3	8	60.6
1810	28.5	35	47.0	58	5.8	7	81.3
1820	30.4	59	15.7	30	5.7	11	51.8
1830	28.9	58	13.1	26	7.7	16	49.7
1840	29.2	57	15.1	30	6.7	13	51.0
1850	28.4	48	21.9	37	9.3	15	59.6
1860	26.6	41	26.8	41	11.2	18	64.6
1870	27.2	41	24.2	37	14.7	22	66.1
1880	27.6	36	28.0	37	21.1	27	76.7
1890	23.6	26	36.4	41	29.2	33	89.2
1900	23.2	16	79.1	55	41.3	29	143.6
1910	77.0	8	876.1	87	65.4	5	1018.0
1920	319.3	37	170.0	20	378.1	43	867.4

Source: Mitchell and Deane (1962) 1700–1801 pp. 389–91; 1802–1929 pp. 396–9.

Notes

- Figures are for Great Britain from 1700–1800, and for the United Kingdom from 1801–1929.
- Figures are for the central government only.
- Figures are calculated as the annual average per decade.
- Years ended: 29 September to 1751; 10 October to 1799; 5th January to 1854; 31 March to 1929.

Table A.3: British public debt outstanding
1709–1929

Year	Public debt £m
1709	19
1719	42
1729	52
1739	47
1749	78
1759	91
1769	130
1779	153
1789	244
1799	427
1809	599
1819	844
1829	801
1839	788
1849	794
1859	809
1869	751
1879	736
1889	624
1899	599
1909	716
1919	7460
1929	7608

Source: Mitchell and Deane (1962), pp. 401–3.

Note: Figures represent total gross outstanding debt liabilities for the central government.

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Appendix B

British public finance experience 1688–1823¹

The Glorious Revolution of 1688 appears as a useful starting point in outlining the history of modern British public finance, for it marked the point at which Parliament took effective control of the nation's finances. It was at this time that the practice of borrowing upon the security of particular taxes pledged by Parliament became systematized. This was a practice of 'funding' public debt that gave rise to the term 'Funding System' to describe British public finance arrangements. This system facilitated public borrowing on a large scale. This year also marked the entry of Great Britain in a significant way into the ongoing struggles of continental Europe. Between 1688 and 1815, Britain was at war over half the time, and this fact would shape her public finance experience, for throughout this period, from 75 to 85 per cent of annual expenditure was devoted either to military expenditure or to the service of war debt. With each conflict, the capital of the public debt and the burden of debt service grew to unprecedented heights. Hargreaves (1930, p. 5) has pointed out that the effect of funded debt was to attach as many persons as possible to the new regime. He describes the grounds for this view as 'seen clearly in Addison's essay (1710) in which he depicts the Pretender arriving with a sword in one hand and a sponge in the other.' Prior to 1720, British public debt was almost entirely held by large chartered companies. However, the famed 'South Sea Bubble', arising from a crisis of confidence in public credit, precipitated the decline of the companies' virtual monopoly of debt holdings. The change in the structure of debt holdings led to the emergence of broker services, which turned the buying and selling of stock into a routine. This service became formally institutionalized as the Stock Exchange in 1773.

The government's ability to accumulate debt rested on its reputation for effective tax gathering. Each successive issue of funded stock depended upon either the introduction of a new tax or the rescheduling of an existing one. A land tax was first granted by Parliament in 1692, marking the first instance of high yield, permanent direct taxation. Over the following century, its significance as a source of revenue waned, as reform of the tax was successfully resisted by the politically powerful landed interest. Government came to have a heavy dependence on indirect taxes as a source of revenue, whose expansion was facilitated by commercial expansion. Among various indirect taxes, excises were favoured over customs for reasons of efficiency of collection; the customs service was far less professional than that in charge of excise and more prone to corruption and bribery. While there was reluctance to tax absolute necessities, Mathias and O'Brien (1975, p. 616) have concluded that

the main incidence of British taxation was on the level of effective demand, while the social groups most likely to save and invest bore a relatively light burden. Intentionally or not, the financial system developed in a way capable of mobilizing substantial investment funds to meet the needs of a growing economy. As a result, economic growth was strong enough to allow the per capita tax yield to rise with the expanding population.

In the century following 1688, various half-hearted attempts were made to reduce the capital of the national debt. In 1714, policymakers introduced the largely fictitious Sinking Fund scheme, purported to involve the application of budget surpluses to a complicated system of debt redemption (see Chapter 5 for a more detailed discussion). On the whole, the attempts bearing this name were ineffective, as the schemes suffered from the inability to commit to the use of funds exclusively for the reduction of debt. For most of the eighteenth century, control of the cost of servicing the debt took priority over reduction of the principal. Although national expenditure doubled between 1775 and 1783, due to the costs of the American Revolutionary War, there was little increase in taxation or in inflation during this period; instead, the conflict was financed largely by public credit. Subsequently, the focus of public debt policy changed, and redemption of the principal of the debt became a more serious concern. To achieve public debt redemption, the Prime Minister, William Pitt, known as a great innovator of British public finance, introduced a reformulated Sinking Fund in 1786. But moderate initial success in redeeming debt was soon negated by the prolonged and expensive Napoleonic War. Despite the fact that this conflict was financed by taxation to a considerably greater extent than previous wars, the expense of waging war was so great that massive public borrowing was inevitable. At the end of the war, the capital value of the debt was almost three times the value of estimates of national output, while public debt charges accounted for just over one half of government expenditure. Postwar political pressure upset the government's financial plans. It was forced to accept the substitution of a policy of tax remission, including abolition of the wartime income tax first imposed in 1798, for one of debt reduction.

Complicating the public debate over debt in the postwar period was the matter of the resumption of cash payments. In 1797, the Bank of England, following several severe banking crises, suspended the convertibility of its notes into gold. In the course of time, the market price of gold began to exceed its mint price, a sign of inflation. This discrepancy was taken by critics of the Bank of England as a clear sign of excessive note issue, which could only be corrected by monetary contraction. It was widely agreed that a gold standard should be readopted once hostilities had ceased. Specie payments were thus resumed at the prewar par under terms of the Resumption Act of 1819. This action served to aggravate the postwar recession, which involved a fall of prices and structural adjustment from a wartime to a peacetime economy, and which was broken by a brief period of recovery. Furthermore, the harmful deflationary effects of the return to gold were exacerbated by problems with its implementation. The postwar deflation, like the wartime

inflation, had redistributive effects on the national wealth. An unsuccessful campaign for the 'equitable adjustment of contracts,' in 1822–23 saw a plan for compensation reflecting the growing realization that the holders of public securities had gained by the deflation of recent years, while the agricultural interest had suffered.

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Appendix C

Public debt theory before Ricardo

The traditional 'mercantilist' view, which prevailed prior to the mid-1700s, held that public debt had no harmful economic consequences as it simply involved funds owed 'from the left hand to the right' – from one part of the community to another. Although writers as early as Davenant (c. 1700) and Hutcheson (1714) warned of the potential harm which public debt might cause, the popular change of mind over its effects owed much to the gloomy admonitions of David Hume (1752), who argued that 'either the nation must destroy public credit or public credit will destroy the nation' (Hume in McCulloch, 1857, p. 287). He expressed grave concerns about the social and political consequences of public debt. He was also concerned about the power that he believed its existence vested in public creditors and the potential for abuse of such power. He disagreed with the view still held in some quarters that public debt was equivalent to wealth, or that it served to promote commerce and riches. Instead, he warned of the danger that debt service taxation might rise to harmful levels, exhausting all sources of tax revenue and choking off economic activity. Typical of his view was his comment that 'the endless increase of national debts is the direct road to national ruin' (ibid).

Adam Smith was likewise concerned with the harmful effects of public debt. In *The Wealth of Nations* ([1776], 1937, pp. 450–1), he argued that public borrowing encouraged government profligacy, for 'To relieve the present exigency is always the object which principally interests those immediately concerned in the administration of public affairs. The future liberation of the public revenue they leave to the care of posterity.' Were deficits financed by public borrowing from industry, the government would deprive society of revenue that would otherwise have been productively invested, while at the same time, taxes would act as a constraint on consumption spending. He was also concerned with the effect of debt service taxation, which at high levels would impair the capital accumulation needed to promote growth and would encourage the flight of capital abroad (ibid, p. 463). After an extensive examination of the historical record, he concluded that public borrowing 'has gradually enfeebled every state which has adopted it' (ibid, p. 465). To redeem its public debt, the government of Great Britain would require either a considerable increase of tax revenue or a significant diminution of expenditure. Smith considered the extension of taxation to Ireland and the colonies, in conjunction with the extension of parliamentary representation, as one possible solution. He concluded that if this were not possible, the only means of dealing with the debt problem would be for Britain to rid herself of her colonies and their attendant costs.

An increasing number of writers, Smith included, argued that the Sinking Fund – the existing scheme to retire public debt – was ineffective, deceptive, and in fact encouraged public extravagance by facilitating the contracting of additional debt. Historically, raiding the Sinking Fund was the easiest and most expedient of all financial schemes. Archibald Hutcheson (1714–16) proposed an alternative solution, first in parliament and later in the form of a pamphlet. He argued for the redemption of the entire debt by a one time tax on the nation's property. Among the benefits that he believed would accrue from such an action would be tax remission, the improvement of trade which would thus allow labourers to live more cheaply, and an increase in the ability of the nation to meet future contingencies. Various tax schemes to redeem public debt were suggested by other writers throughout the course of the eighteenth century; in addition, conversion of perpetual into terminable annuities was suggested as an alternative.

The work of Richard Hamilton (1818), praised by Ricardo (see Chapter 3 for more details), deserves particular attention. Hamilton rejected the Sinking Fund as a viable means of redeeming public debt based on its historical record. He then proceeded to make a series of points so evident that they appear today as truisms. He recognized that public borrowing was necessitated by the high cost of modern warfare, and thus recommended that in peace, there should be an excess of revenue above expenditure, to finance past or future conflicts. As public debt increases with an increase in the length and expense of war, while it decreases with the length of peace and the amount of the annual surplus, there were a limited number of remedies for the debt problem: extending the lengths of periods of peace relative to those of war, reducing peacetime public expenditure, lessening the expenses of war, or increasing tax revenues, either during war, peace or permanently. Hamilton's work sounded the death knell for the argument that the Sinking Fund had any kind of magical powers to redeem debt and pointed to the need for straightforward and effective action to redeem public debt.

Appendix D

Capital levy proposals after World War I

After Ricardo's death, the English economy experienced unprecedented growth as a consequence of the Industrial Revolution, while the public debt fell gradually, becoming less and less significant as a proportion of national income. In effect, growth took care of England's debt problem. It was only with the enormous expense of World War I that public debt as a percentage of England's GDP approached the post-Napoleonic War proportions.¹ Prior to the end of the World War I, growth of the public debt prompted proposals for large-scale debt repayment by means of a postwar capital levy (not to be confused with related proposals for a levy on war wealth). This idea generated a number of different proposals and gained broad support among policymakers. In the aftermath of the war, as the economy slowly returned to normal with demobilization, economic restructuring and a return to the gold standard, fears of insolvency were eased and the ruling Liberal-Conservative coalition, which had toyed with the idea of a capital levy, ultimately rejected its adoption. The Labour Party retained the idea, however, as part of its platform in the general elections of 1922 and 1923.

As an example of the proposals of this period, consider that which was put forth in *The Capital Levy Explained* (1923) by Hugh Dalton, an economist at the University of London and a Labour Party supporter. In 1922–23, the interest charge on the public debt was £335 million out of a total public revenue of £911 million, and was growing. In his view, the sums paid to bond holders were partly reinvested, but were largely spent on consumption by the recipients, who were then less inclined to work and save. Taxes, on the other hand, fell on those who were less well off, hindered the revival of trade and checked new savings. Debt service thus transferred wealth from poor to rich and from young to old, while attempts to balance the budget strangled social expenditure. He argued that existing schemes to redeem the debt were inadequate and on too small a scale, and that one suggested alternative, a forcible reduction of interest on the debt, was impractical, inequitable and a breach of faith with creditors. He also warned of the dangers of the other alternatives that might one day prove inevitable: inflation or complete debt repudiation.

His proposal involved a 'special emergency payment' by all individuals who owned more than a certain amount of wealth, with the amount graduated according to ability to pay. He suggested a system of instalment payments in certain cases, with a discount for prompt payment. The assessment could be paid in cash, government securities or other reputable securities, with all payments to resolve themselves into cancellations of public debt. This action, he

felt, would allow for a subsequent reduction in the standard rate of income tax. In making his case, Dalton (1923, p. 25) made a historical comparison to the post-Napoleonic War period. He argued that the rejection of Ricardo's capital levy proposal 'would have been very serious but for a surprising run of luck, which could not have been foreseen at the time when the decision was taken' – revolutions in industry, transport and banking, population growth, and gold discoveries. He warned that there was no ground for anticipation of such developments once again. Many of the criticisms cited by Dalton in opposition to his plan are reminiscent of those of Ricardo's critics. These include the impossibility for taxpayers to raise required funds for payment of the levy, the danger of forced sales of assets to do so, the destruction of capital, and the problem of capital flight abroad. And Dalton's responses are along the lines of those made by Ricardo.

Pigou, in *A Capital Levy and a Levy on War Wealth* (1920), raised some additional analytical considerations. He addressed the question of whether to pay off the public debt gradually or to repay a large fraction of the capital of the debt by means of a special levy. In support of the latter concept he cited its minimal allocative impact on economic efficiency and work effort due to its 'lump sum' nature. However, he recommended that before adopting such a scheme, policymakers must consider likely future prospects with respect to interest rates (and the possibility of reborrowing and conversion of existing debt), growth in productive power, and inflation or deflation. He also warned of the danger of additional levies or of increased government spending instead of promised tax remission. He concluded that although the technical problems of assessment and collection might be solved, the solutions would be *ad hoc*, rough and would involve a certain amount of inequity. He also warned of the possibility that vehement business opposition to such a tax might mean that the belief it would harm industry could prove a self-fulfilling prophecy.

Hargreaves (1930, pp. 269–70) outlined the major sources of opposition to a capital levy in this period and the standard answers to these objections. The first criticism of such a scheme was its inherent inequity, as it would fall exclusively on property while exempting income earners. Supporters argued that it was no more inequitable than the existing income tax, to which the latter, but not the former, was subject. They suggested further that inequities could be remedied by an increase in the rate of income tax on large earned incomes. The second concern was the danger that the experiment might be repeated and that anticipation of this possibility might depress private saving and enterprise. In response, it was argued that so long as levy proposals were discussed as a possibility, these effects would be felt, so that the imposition of one such levy could not worsen matters. Third, there was debate over the net saving which would be yielded by the levy. Allowance would have to be made for the costs of administration and collection, and for the decreased yields of the income tax and death duties owing to the subsequent reduction in the amount of private wealth available to be taxed. This argument was countered with the observation that the same reasoning must be applied to considering the net saving of other, more gradual means of debt redemption.

Gottlieb (1952, p. 373) has suggested that the ultimate rejection of a capital levy in England resulted from political motives. He wrote '[i]t was plain that a capital levy in scale would increase the threat of socialization and greatly increase the role of state economic regulation.' The majority report of the Colwyn Committee on National Debt and Taxation, which was appointed in March 1924, expressed dissatisfaction with existing efforts to redeem public debt. However, it rejected a capital levy in favour of a sinking fund arrangement and conversion operations to take advantage of a falling rate of interest. The report vindicated the existing system of public finance and effectively spelled the end of serious interest in the capital levy proposal.

Several countries in continental Europe – Greece, Italy and the successor states to the German and Austro-Hungarian empires – did adopt limited capital levy schemes. However, no where were they imposed in a form that would involve substantial wealth transfers. Instead, rates were low and payment was made for the most part in cash or government bond holdings, usually on an instalment basis. In France, the support for such a scheme paralleled that in Britain, while the fiscal situation was much more grave. Ultimately, France rejected a capital levy in favour of policies of devaluation of the currency, gradual restriction of public expenditure, and strengthening of the tax system as a means of correcting its system of public finance (Gottlieb, 1952, 365–7). Keynes (1971 [1924], p. 59) predicted this outcome, noting that 'the French public . . . will consider . . . depreciation – attributing it to the "bad will" of Germany or to financial Macchiavellism in London and New York – as far more conservative, orthodox, and in the interest of small savers, than a justly constructed capital levy, the odium of which could be less easily escaped by the French Ministry of Finance.'

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Appendix E

Ricardo's parliamentary voting record

Ricardo served as the Member of Parliament for Portarlington, a constituency in Ireland, from 26 February 1819 to the end of the 1823 session. Sraffa (1951, p. xxi) tells us that the record of Ricardo's votes in the House of Commons is incomplete, for in his day, only the numbers of 'yeas' and 'nays' were officially recorded, while a record of names was not kept. On issues of special interest to the public, it was common practice for members of the opposition to secure publication of their votes in the newspapers and in Hansard. During Ricardo's tenure as a member of parliament, 224 opposition lists are recorded in Hansard, 167 of which include Ricardo's name. A comprehensive assessment of Ricardo's parliamentary voting patterns requires a detailed examination of these lists¹ and is left for a future study. However, some indication of his views is found in Volume V of Ricardo's *Works and Correspondence*, where Sraffa records Ricardo's votes at the end of debates in which he participated, when known. Below is a list of these debates.

The list is comprised of (a) the date of the vote; (b) a brief description of the subject of the vote; (c) Ricardo's vote (an asterisk is used to indicate situations in which, although his vote was not recorded in Hansard, he explicitly stated his intention to vote either for or against the motion during the course of the debate); and (d) the final result of the vote.

Parliamentary Session 1819

5 April 1819 – A motion to adopt a bill on the Resumption of Cash Payments as recommended by the first report of the Bank of England committee; Ricardo for*; motion passed.

4 May 1819 – A motion to abolish state lotteries; Ricardo for; motion defeated.

13 May 1819 – A motion for a committee on the Sinking Fund; Ricardo for; motion defeated.

26 May 1819 – A resolution embodying recommendations of the Committee on the Resumption of Cash Payments; Ricardo against*; resolution passed.

11 June 1819 – A bill to alter the application of poor rates; Ricardo against*; bill passed.

25 June 1819 – A bill to prohibit Bank of England advances to the government unless authorized by parliament; Ricardo against*; bill passed.

28 June 1819 – A bill to raise new excise duties, with the revenue to be applied to the Sinking Fund; Ricardo against*; bill passed.

Session closed 13 July 1819

Parliamentary Session 1819–20

13 December 1819 – A bill to prevent seditious meetings ('Six Acts'); Ricardo against; bill passed.

16 December 1819 – A motion for a committee to enquire into Robert Owen's plan for the establishment of a model community; Ricardo for; motion defeated.

22 December 1819 – A motion for information to be provided with respect to the repayment of advances to the Bank of England; Ricardo for*; motion defeated.

Session dissolved 28 February 1820

Parliamentary Session 1820

30 May 1820 – A motion for a select committee to enquire into agricultural distress; Ricardo against*; motion passed.

8 June 1820 – A motion for phasing out certain Irish protecting duties; Ricardo for*; motion passed.

13 June 1820 – A motion for the publication of Bank of England accounts; Ricardo's vote unknown; motion passed.

Session closed 23 November 1820

Parliamentary Session 1821

26 February 1821 – A resolution to simplify the methods by which the average prices of corn are ascertained for the purposes of the Corn Law; Ricardo against; resolution passed.

6 March 1821 – A series of resolutions for the retrenchment of public expenditure and the reduction of house and window duties; Ricardo for; resolutions passed.

7 March 1821 – A motion for the appointment of a committee to investigate the causes of agricultural distress (note: Ricardo was subsequently added as a member of the committee); Ricardo for; motion passed.

5 April 1821 – A resolution to reduce the duty on timber from the Baltic states and to increase it on timber from the British colonies in North America; Ricardo for; resolution passed.

9 April 1821 – A motion for the appointment of a select committee to re-examine the Resumption of Cash Payments; Ricardo's vote unknown; motion defeated.

13 April 1821 – A bill to resume cash payments; Ricardo's vote unknown; bill passed.

16 April 1821 – A motion for the repeal of a drawback allowed on Russian timber imports; Ricardo's vote unknown; motion defeated.

18 April 1821 – A motion for the appointment of a committee to consider the state of parliamentary representation; Ricardo for; motion defeated.

Session closed 11 July 1821

Parliamentary Session 1822

5 February 1822 – A motion for an amendment to the throne speech calling for the reduction of public expenditure; Ricardo either abstained or against;² motion defeated.

11 February 1822 – A motion for the reduction of taxation to relieve economic distress; Ricardo for;³ motion defeated.

18 February 1822 – A motion to refer the 1821 report of the Committee on Agricultural Distress (of which Ricardo had been a member) to a select committee; Ricardo for*; motion passed.

25 February 1822 – A motion to commute Navy five per cent securities into a new four per cent stock; Ricardo for*; motion passed.

20 March 1822 – A motion for the appointment of a committee to consider augmenting the duty on tallow and repealing that on candles; Ricardo against; motion defeated.

1 May 1822 – A series of resolutions recommending a plan to spread the burden of naval and military pensions; Ricardo against; motion passed.

3 May 1822 – A motion for an amendment to previous resolutions that a plan be carried out by the Commissioners for Reduction of the National Debt (see 1 May 1822 above); Ricardo for; motion defeated.

9 May 1822 – A motion for an amendment to the Agricultural Report to fix a permanent duty on wheat; Ricardo against*; motion defeated.

9 May 1822 – A motion on Ricardo's proposals for a gradual reduction of the duty on wheat; Ricardo for; motion defeated.

9 May 1822 – A series of resolutions on agriculture pursuant to the Report of the Committee on Agricultural Distress; Ricardo either abstained or for; resolutions passed.

24 May 1822 – An amendment that the sums needed to carry out the proposed plan to spread the burden of naval pensions be taken from the Sinking Fund (see 1 May 1822 above); Ricardo's vote unknown; amendment defeated.

24 May 1822 – A motion to modify the proposed plan to spread the burden of naval and military pensions (see 1 May 1822 above); Ricardo's vote unknown; motion passed.

3 June 1822 – A series of motions to raise the permanent price at which wheat was imported; Ricardo against*; motions defeated.

4 June 1822 – A bill to amend the Navigation Acts; Ricardo for*; bill passed.

10 June 1822 – A motion to add a clause to the corn import bill to allow the taking of foreign corn out of warehouses to be ground into flour for export; Ricardo for; motion passed.

12 June 1822 – A motion for the appointment of a committee to investigate the impact of the resumption of cash payments on agriculture; Ricardo's vote unknown; motion defeated.

12 June 1822 – An amendment to a previous motion stating that the House would not alter the gold standard; Ricardo's vote unknown; amendment passed.

20 June 1822 – A motion to increase the duty on butter; Ricardo against*; motion defeated.

10 July 1822 – A series of resolutions on the state of the currency; Ricardo against*; resolutions defeated.

Session closed 6 August 1822

Parliamentary Session 1823

26 February 1823 – A motion to lower the price at which corn importation was permitted; Ricardo for; motion defeated.

28 February 1823 – A motion to adopt a plan to redeem the land tax and reduce taxation; Ricardo's vote unknown; motion defeated.

14 March 1823 – An amendment to the National Debt Reduction Bill to postpone the adoption of the plan by six months; Ricardo for*; amendment defeated.

14 March 1823 – An amendment to the National Debt Reduction Bill to limit the amount of the Sinking Fund; Ricardo for; amendment passed.

24 March 1823 – Ricardo's amendment to the Merchant Vessels Apprenticeship Bill to remove a compulsory condition requiring a certain number of apprentices; Ricardo for; amendment defeated.

2 April 1823 – A bill to permit foreign manufactures and produce to be deposited in British warehouses and taken out for export without the payment of duty; Ricardo for*; bill passed.

18 April 1823 – A bill to amend the administration of naval and military pensions; Ricardo's vote unknown; bill passed.

18 April 1823 – A bill requiring every merchant vessel to have a number of apprentices in proportion to tonnage; Ricardo against*; bill passed.

24 April 1823 – A motion for reform of parliament; Ricardo for; motion defeated.

22 May 1823 – A motion for the appointment of a select committee to equalize duties on sugar from the East and West Indies; Ricardo for; motion defeated.

28 May 1823 – A motion for the appointment of a select committee to enquire into the beer and malt tax; Ricardo for; motion defeated.

6 June 1823 – A series of resolutions to ensure that the import and export of merchandise in foreign vessels and British vessels was subject to equal duties; Ricardo's vote unknown; resolutions passed.

9 June 1823 – A motion to refer the bill for repeal of the Spitalfields Acts to a select committee; Ricardo's vote unknown; motion defeated.

11 June 1823 – A bill to repeal the Spitalfields Acts; Ricardo for*; bill passed.

11 June 1823 – A motion for the appointment of a committee to examine the effects of the resumption of cash payments; Ricardo against*; motion defeated.

17 June 1823 – A bill to alter beer duties; Ricardo against*; motion passed.

17 June 1823 – A bill to repeal the usury laws; Ricardo's vote unknown; bill passed.

1 July 1823 – A motion for the free discussion of religious opinions; Ricardo for; motion defeated.

Session closed 19 July 1823

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Appendix F

Public debt issue in Britain¹

Most of the outstanding British public debt in Ricardo's day was 'funded'. Funded debt obligations, called 'consols', did not mature in the modern sense of the term; instead, they were theoretically redeemable at a future date but entirely at the option of the government. Thus in practice they were perpetual annuities. During the war years up to 1815, the government financed its deficits by selling '3 per cent consols' at large discounts. If an investor were offered a security with a face value of £147 at 3 per cent interest for each £100 in cash that he invested, he would in fact receive a 4.41 per cent annuity on his investment, with his income supplemented by a large profit if the consol were ever redeemed. This practice was a means of contravening the usury laws that capped legal interest rates at 5 per cent. In addition, such issues were popular with investors in comparison to 4 per cent and 5 per cent consols, for it was thought that with peace, the government would choose to refund these higher yield securities, while the 3 per cent securities would be left to appreciate. Because of the volume of financing that occurred at discounts, the face value of the war debt increased by much more than the sums the government actually raised. This practice resulted in 3 per cent consols trading in secondary markets at much lower values than the nominal 'par value' of £100. Some statistics are provided in Tables F.1 and F.2.

Table F.1: Prices and yields of British government 3 per cent consols 1810–24

Year	Annual average price	Annual average yield (%)
1810	67 1/8	4.47
1811	64 1/4	4.67
1812	59	5.08
1813	61	4.92
1814	61	4.92
1815	67	4.48
1816	59 3/4	5.02
1817	73 3/16	4.10
1818	77 1/2	3.87
1819	71 15/16	4.17
1820	67 7/8	4.42
1821	79 1/8	4.07
1822	79 1/8	3.79
1823	78 15/16	3.80
1824	90 15/16	3.30

Source: Homer (1963), p. 195.

Table F.2: Principal new issues of British government 3 per cent consols 1800–13

Year	Security issues	Estimated yield (%)
1800	£147 face amt. for £100 cash	4.41
1801	£175 3/4 for £100	5.26
1804	£182 for £100	5.45
1805	£172 for £100	5.15
1806	£166 for £100	4.97
1810	£140 3/8 for £100	4.22
1812	£176 for £100	5.29
1813	£177 for £100	5.33

Source: Homer (1963), p. 191.

Note: This table excludes sales that offered combinations of 3 per cent consols and other securities.

Appendix G

Ricardo's colleagues and correspondents¹

Alexander Baring (1774–1848) created 1st Baron Ashburton (1835)

Baring was the second son of Sir Francis Baring. He was a member of the banking house Baring Brothers and Co., of which he became head in 1810. He was a member of parliament from 1806–35, and sat in the House of Lords from 1835 to his death in 1848. He authored *The Financial and Commercial Crises Considered* (1847). Although they agreed on some issues, such as repeal of the usury laws and full repayment of public creditors, Ricardo and Baring were opponents on most other matters of economic policy, notably monetary policy.

Henry Brougham (1778–1868) created 1st Baron Brougham and Vaux (1830)

Brougham was a lawyer by profession, who served as a member of parliament for the periods 1810–12 and 1815–30, and sat in the House of Lords from 1830 to his death in 1868. He served as Lord Chancellor from 1830–34. He was known as a fierce opponent of the slave trade and an advocate of free trade. He attended Dugald Stewart's Edinburgh lectures on political economy, and was a promoter of education and educational institutions. While he was a prolific writer in many fields, his major economic writings were articles in the early issues of the *Edinburgh Review*.

William Cobbett (1762–1835)

In his early life, Cobbett was a farm labourer, law clerk and soldier. In 1792, he settled in Philadelphia and began his career as a journalist. He returned to England in 1800 and served as the editor of *Cobbett's Political Register*, which was issued weekly for over 30 years (1803–35). He was a radical, opposed to corruption and to the waste of public money. He sat in the House of Commons from 1833–57. He wrote on a wide number of topics, including political economy. His writing on taxation is described as having been 'treated simply with the sturdy common-sense of one whose views are limited, but whose powers of expression are boundless' (Higgs, I, p. 315).

Maria Edgeworth (1767–1849)

Edgeworth was a novelist and a popularizer of political economy. Her writings for children, including *Moral Tales* (1801) and *Popular Tales* (1804), illus-

trated the application of principles of political economy to everyday life. She was also praised for her writings on landlord–tenant relations in Ireland, including *Castle Rackrent* (1801) and *EmmUI* (1809). She was a close friend of both Malthus and the Ricardo family.

Pascoe Grenfell (1761–1838)

Grenfell was a metal merchant and governor of the Royal Exchange Insurance Company. He sat in parliament as an independent from 1802–26, where he was one of the leading speakers on financial matters, on which he was often an ally of Ricardo. It was at his urging that Ricardo wrote *Proposals for an Economical and Secure Currency* (1813), in which he attacked the Bank of England. Grenfell was the author of several publications, including *On the Application of the Sinking Fund* (1817).

George Grote (1794–1871)

Grote was a banker by profession, a supporter of the University of London, and an historian of Greece. He served as a member of parliament for London from 1833–41. He produced unpublished manuscripts on the subjects of foreign trade and political economy. He met Ricardo in 1817, and was often invited to Ricardo's home to converse on economic subjects.

Richard Heathfield (c. 1775–1859)

Heathfield was an accountant, who proposed a tax of 15 per cent on all property to pay off the national debt, a plan that was lauded by Ricardo. He wrote several tracts embodying such proposals, including *Elements of a Plan for the Liquidation of the Public Debt of the United Kingdom* (1819) and *Further Observations on the Practicability and Expediency of Liquidating the Public Debt of the United Kingdom, including some Considerations on Population and the Poor* (1820).

Joseph Hume (1777–1855)

Hume was a surgeon and an official of the East India Company. His financial success allowed him to retire at age 30, and he devoted the rest of his years to study of the history and resources of Great Britain. He visited all the agricultural and manufacturing centres of the United Kingdom, and spent some time on the continent. Radical in his views, he served as a member of parliament from 1812 to his death. He authored several publications on business and finance, and has been described as 'the sleepless watchdog of finance', who procured the abolition of the Sinking Fund (Higgs, II, p. 344).

James Maitland (1759–1839), 8th Earl of Lauderdale (1790) and 1st Baron Lauderdale (1806)

As Viscount Maitland, he entered the House of Commons in 1780. In 1790, he acceded to the peerage and spent the next six years in the House of Lords as an elected representative Scottish peer. He gained fame for his harassment

of Pitt's administration. Following his defeat for reelection in 1796, he maintained a residence in London during parliamentary sessions, devoting his energies to publishing pamphlets as a substitute for his parliamentary speeches. He continued to be a thorn in Pitt's side. He published four pamphlets on public finance between 1796–99 (described in Thomson, 1970), and an analytic work, *An Inquiry into the Nature and Origin of Public Wealth*, in 1804. He was popularly viewed as a pessimist, and 'was disposed to doubt the sincerity of government officials who demanded more extensive powers for the professed purpose of promoting the public welfare' (ibid, p. 379).

Thomas Robert Malthus (1766–1834)

He was born the second son of Daniel Malthus, a landed gentleman of modest means but radical intellectual interests, on a small estate south of London. Despite suffering from a stammer his entire life, Thomas was an excellent student. After graduating in mathematics from Cambridge University, he took holy orders and was appointed to a country parish in Surrey. In 1798, he published *An Essay on the Principle of Population*, which gained him notoriety for its description of the evils of overpopulation. He was appointed Professor of History and Political Economy in 1805 at the newly founded East India College, Haileybury, and soon became recognized as England's leading political economist. Ricardo, then a man of property, had gained fame as a critic of the Bank of England. The *Edinburgh Review* published an exchange of letters by the two men on the causes of inflation, which preceded their first meeting in June of 1811. From that first meeting until Ricardo's death in 1823, they met and corresponded frequently, and became good friends. Malthus published his *Principles of Political Economy* in 1820. It has been described as a 'point-by-point response to Ricardo's *Principles*' (Dorfman, 1989, p. 160).

John Ramsay McCulloch (1789–1864)

McCulloch is one of the most famous popularizers of economics in its history. He studied in Edinburgh with a view to a legal career, but abandoned the law in favour of the study of political economy. Between 1817 and 1827, he contributed economic articles to the *Scotsman*, acting as editor in 1818–19. In 1818, he wrote an article for the *Edinburgh Review* on Ricardo's *Principles*, and for the following twenty years, he contributed nearly all the economic articles for that publication. He formed classes for the study of political economy in London beginning in 1820. He published an extended treatise, *The Principles of Political Economy; with a sketch of the Rise and Progress of the Science*, in 1825. From 1828 to 1832, he held the chair in political economy at University College, London. In 1838, he was appointed to a civil service post, which he held until his death. Throughout his entire adult life, he was a prolific speaker and writer on issues of political economy, publishing a number of books, editing collections and anthologies, and writing numerous tracts, articles and pamphlets.

James Mill (1773–1836)

Mill's family was of modest means, but was able to send him to the University of Edinburgh. After graduation, he became licensed as a preacher, but soon abandoned this pursuit. In 1802, Mill went to London, and supported himself with his writing. He married in 1806, and fathered nine children, including John Stuart Mill, his oldest son. The publication of his most notable work, *The History of India*, in 1818 resulted in a civil service appointment in the India office, which he retained until his death. He published many articles and books on political economy. An early publication, *Commerce Defended: An Answer to the Arguments by which Mr. Spence, Mr. Cobbett, and Others, Have Attempted to Prove that Commerce is not a Source of National Wealth* (1807), led to his first meeting with Ricardo. He was a good friend and supporter of Ricardo, and is often credited as having instigated Ricardo to write his *Principles* and to enter Parliament. Mill's views on economic subjects are summarized in his *Elements of Political Economy* (1819).

Sir Henry Brooke Parnell (1776–1842) created 1st Baron Congleton (1841)

Parnell was an Irish country gentleman, who served in the House of Commons in 1802 and from 1806–41. He entered the House of Lords in 1841, and died the following year. He published several works on issues of political economy, including *The Principles of Currency and Exchange* (1805) and *Financial Reform* (1830).

Francis Place (1771–1854)

Place was a radical reformer, who corresponded with Ricardo on two topics of mutual interest: the Sinking Fund and population growth. Place's most famous publication is *Illustrations and Proofs of the Principle of Population* (1822), in which he defended Malthus' views and the science of political economy against the arguments of Godwin and other critics. He also published *The Mystery of the Sinking Fund Explained* (1821).

Jean-Baptiste Say (1767–1832)

Say's *Traité d'Économie Politique*, published in 1803, was the first popular treatise on political economy published in France, and has led Say to be ranked along with Smith and Ricardo as a founder of economic science. The *Traité* was not well received upon publication by those in political power due to its liberal views. Say kept a low profile as a businessman until the fall of the empire in 1815, at which time in Paris he established a free series of lectures in political economy. Between 1819 and his death, he occupied chairs at the Conservatoire des Arts et Métiers and at the Collège de France.

Sir John Sinclair (1754–1835)

Sinclair was a country gentleman, an agricultural innovator and the first president of the Board of Agriculture. He served in the House of Commons from

1780–1811. He wrote extensively on many subjects, with over 360 publications. His publications on political economy included *History of the Public Revenue of the British Empire* (1784) and *An Answer to a Tract Recently Published by David Ricardo, on Protection to Agriculture* (1822).

Thomas Smith (?–1822)

Smith was a barrister. He did not practice law due to a speech impediment, but led a country gentleman's life at Easton Grey, his residence near Malmesbury. He and his wife were Unitarians and became intimate friends of the Ricardos.

Hutches Trower (1777–1833)

From modest beginnings, Trower became a member of the Stock Exchange in 1802 and retired in 1812. Shortly thereafter, he married and purchased a country estate in Surrey. He and Ricardo met as stockbrokers, both admirers of Adam Smith and the new science of political economy. From 1813, they corresponded regularly on a wide range of economic topics.

John Wishaw (1764–1840)

Wishaw, of Lincoln's Inn, was a Commissioner of Audit and a prominent figure in Whig society. He was a contemporary of Malthus at Cambridge University, and a friend and correspondent of Thomas Smith (see above), who was himself a close friend of Ricardo.

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Notes

1 Introduction

1. Hollander (1987, p. 97) is careful to state that 'Ricardo failed to spell out the playback on distribution, but there is nothing in the logic of his system to preclude it' and 'there is no reason why [Ricardo] would have objected to this *mutual* interdependence of pricing and distribution' (ibid, p. 439).
2. Controversy surrounds the lineage to which J.S. Mill should be assigned. Schumpeter, Dobb and Marx would exclude him from the Ricardian line. However, Mill himself stated quite clearly his debt to Ricardo. The evidence is presented by Hollander in 'On the Substantive Identity of the Ricardian and Neo-Classical Conceptions of Economic Organizations' (1995 [1982], pp. 135–66).
3. Rutherford (1986, p. 220) is among those who have examined aspects of the debate over interpretations of Ricardo. He has observed that "“Lineages” are important in the history of ideas. If the traditional picture is wrong we must rethink the development of economics in the nineteenth century, the impact of these ideas on events and the setting of the agenda for further analysis.'
4. Samuelson argued that the basic features captured by this formulation were characteristic of the growth analyses of Smith, Ricardo, Malthus and J.S. Mill. Hollander (1995) has presented textual evidence which shows that this canonical model can only be said to be present in Smith's *The Wealth of Nations* (1776) on the basis of a selective choice of texts. He argues that the origin of this model as a clear and consistent analytical construct is properly attributed to Ricardo.
5. The various 'New View' formulations share this general framework, but they do differ in details. For example, one point of contention concerns the question of whether the wage follows a dynamic equilibrium path, or whether secular variations in real wages are the outcome of differences in the growth rates of capital and labour. See Hollander (1995, pp. 221–2) for a discussion.
6. Furthermore, a 'New View'-type analysis implies long-term benefits resulting from 'prudential' population control. Of Malthus' statement that 'It is quite obvious . . . that the knowledge and prudence of the poor themselves, are absolutely the *only* means by which any general improvement in their condition can be effected. They are really the arbiters of their own destiny; and what others can do for them, is like the dust of the balance compared with what they can do for themselves' ([1820] 1951,

II, p. 262), Ricardo expressed approval. He commented that 'The whole of this is excellent and cannot be too often and too clearly inculcated on the minds of the labouring classes' (ibid). See letters to Malthus, 4 May 1820, 1951, VIII, pp. 183–4, and 10 September 1821, 1951, IX, p. 62, for similar observations.

7. For brief biographical descriptions of Ricardo's colleague and correspondents, including McCulloch and Mill, see Appendix G.
8. Upon Ricardo's mention of the proposal in parliament, his critics were quick to point out that his suggestion was by no means original. Lord Brougham observed that 'The proposition was not a new one – it had years ago been suggested by Mr. Hutcheson, indeed, he believed every chancellor of the exchequer had a similar proposition made to him every year. It had in more recent times been brought before the public by Dr. Watson, bishop of Landaff. . . .' ([24 December 1819], 1951, V, pp. 40–1). He was correct, but Ricardo had never represented it to be otherwise. In reference to a comment similar to that of Brougham made by another parliamentary colleague, Ricardo noted that he 'was aware that many persons before his time had taken a similar view of the subject, and he hoped that whatever might be the merit of the application which he had made of principles known to others, he had stated his opinions with becoming modesty.' ([24 December 1819], 1951, V, pp. 37–8)
9. The sequence of correspondence pertaining to the writing of *The Funding System* is summarized by Sraffa in 1951, IV, pp. 145–8.

2 Economics of David Ricardo

1. While Smith did write extensively of the consequences of taxation for resource allocation ([1776], 1937, p. 848), he did not do so in the context of taxation to service public debt.
2. Samuelson (1988, p. 164n) has described Ricardo in this passage as having 'momentarily lapsed into good sense'. Hollander addresses this issue in depth in 'On Composition of Demand and Income Distribution in Classical Economics' (1995 [1989], pp. 195–201).
3. It is often assumed that Ricardo invariably held the demand for agricultural products to be perfectly inelastic. While it is true that he did often make this assumption for expository purposes, there were circumstances in which this assumption was relaxed. For example, in the *Principles*, Ricardo referred to a situation in which the price of corn rises in consequence of a bad harvest. 'If all the purchasers of corn were rich, the price might rise to any degree [but] the price would at last be so high, that the least rich would be obliged to forego the use of a part of the quantity which they usually consumed' ([1817], 1951, I, p. 162). And in his pamphlet 'On Protection to Agriculture' ([1822], 1951, IV, pp. 219–20), he again observed that in the event of an abundant harvest, 'The demand for corn, with a given population, must necessarily be limited.'

4. McCulloch, J.S. Mill, and Malthus all subsequently championed the proposal. Ricardo's analysis of this issue demonstrated an understanding of resource allocation issues more sophisticated than that of Smith. Smith ([1776], 1937, pp. 431–2) wrote that 'it will generally be advantageous to lay some burden upon foreign for the encouragement of domestic industry . . . when some tax is imposed at home upon the produce of the latter.' Ricardo rightly recognized that what was important for allocation purposes was not the overall level of domestic taxation as compared to that of trading partners but the differential taxation imposed on British farmers relative to British manufacturers.
5. This argument would have been familiar to his audience. Others had expressed concerns about the impact of excessive taxation on capital export before Ricardo. Smith ([1776], 1937, p. 880) wrote that when 'the employers of great capitals, come to be continually exposed to the mortifying and vexatious visits of the tax-gatherers, this disposition to remove [capital] will soon be changed into an actual removal.' In parliament, purveyors of this argument included Brougham, who in a speech of 13 March 1817 on the Trade and Manufacture of the Country spoke of capital being driven abroad by French loan and American stock operations. He argued that 'Up till this time, the only complaint of this nature had been that want of employment and heavy taxation were driving, or were likely to drive, our artisans and their skill to other countries; and that in some instances, as in cotton yarn, we were sending raw material abroad to be worked up and compete with our finished manufactures. But now we hear definite statements about the emigration of capital. The part played by British capitalists in negotiating the French loan – to pay the indemnity – was severely commented upon in parliament' (Smart, 1964, I, p. 598).
6. The concept of 'Ricardian Equivalence,' as found in modern public finance literature, asserts that the behaviour of rational economic agents is unaffected by the choice of funding a given amount of government spending by lump sum taxes or by government borrowing. See Chapter 6 for a more detailed discussion.
7. Ricardo also exhibited similar reasoning in another circumstance. After giving Trower investment advice based on a 50-year time horizon, Ricardo responded to Trower's sceptical reaction to his reasoning by arguing that 'Although we shall not be alive then, our children or our children's children will, and in investments of money we never fail to estimate a future and contingent benefit at its just value, accordingly as it may be near or distant' ([4 October 1821], 1951, IX, p. 88).
8. Ricardo typically assumed an interest rate of 5 per cent in devising numerical examples such as this (see, for example, 'The Funding System,' [1820], 1951, IV, p. 186).
9. Ricardo did allow that net revenue might also be expected to include a part of wages. To the third edition of the *Principles* (1821), Ricardo added an important observation. '[M]ore is generally allotted to the labourer under the name of wages, than the absolutely necessary expenses of pro-

duction. In that case a part of the net produce of the country is received by the labourer, and may be saved or expended by him; or it may enable him to contribute to the defence of the country [i.e. to pay taxes]' (1951, I, p. 348n). A similar observation is found in I, pp. 421–2. In the traditional interpretation, this would involve a wage above subsistence. In the 'New View', it would involve a wage above the level required to keep population growth consistent with that of capital.

10. Smith also wrote that the labouring classes were better off during periods of growth: 'It is not the actual greatness of national wealth, but its continual increase, which occasions a rise in the wages of labour. It is not, accordingly, in the richest countries, but in the most thriving, or in those which are growing rich the fastest, that the wages of labour are the highest' ([1776], 1935, p. 69). He was of the opinion that 'it is in the progressive state, while the society is advancing . . . that the condition of the labouring poor, of the great body of the people, seems to be the happiest and the most comfortable' (ibid, p. 81). However, Smith did not make reference to the notion that taxation harms labourers as it has a depressing effect on capital accumulation.
11. Ricardo explained his position in correspondence to Trower in 1816 (1951, VII, p. 345; VIII, p. 49 and pp. 66–7) and in the *Principles* ([1817], 1951, I, p. 265). For a period in late 1819 and early 1820, he changed his position, arguing instead that the distress was due to an inadequacy of capital which was being exported ([16 December 1819], 1951, V, pp. 32–3). However, he soon reverted to his original explanation (letter to Malthus [9 October 1820], VIII, p. 277).
12. Two major differences between the views of Ricardo and J.S. Mill on the applicability of the classical growth model are illustrated by their respective views on public borrowing. Mill ([1848], 1965, pp. 748–9) agreed with Ricardo that public loans, as distinct from taxes, reduced investment, but he observed that this fact did not seem to have impoverished Britain. Mill, in contrast to Ricardo, saw the British economy as characterized by an overabundance of capital, and a strong motive to invest. It faced a potential problem in excessive capital accumulation, forcing down the return on capital and hastening the stationary state, which, unlike Ricardo, Mill viewed as fast approaching. He held that in such an economy, it was unlikely that government borrowing did harm. Rather, he argued, it simply drew on funds which otherwise would have flowed abroad or been wasted in speculative enterprises. To Mill, the test of whether public borrowing was harmful to the economy was the rate of interest: if it rose, the government was impinging on private investment, while if it did not, the borrowed funds would likely have flowed abroad.
13. See Chapter 3 for a discussion of this issue.
14. An income tax, originally termed the 'property tax', was imposed in Britain in 1798. At war's end, it was proposed in some quarters that it be extended at half the wartime rate for two additional years, but political opposition proved too great, and it was abolished in 1816. As Grenfell observed, 'the property-tax was so odious in its nature that under no

modifications whatever ought it to be resorted to at a period of peace: it was objectionable not merely on account of its burdensome nature but because its operation was so repugnant to every principle of civil liberty [and] its inquisitorial power . . . had been exercised in a way most oppressive and injurious to the public' (quoted in Acworth, 1925, p. 28; Acworth provides a detailed examination of opposition to the tax).

3 Ricardo–Malthus debate

1. Public expenditure as a percentage of British GDP doubled from approximately 14 per cent in 1790, prior to the outbreak of the Napoleonic Wars in 1793, to approximately 28 per cent in 1802. By 1820, five years into the postwar period, it had fallen to 20 per cent, still above the earlier peacetime value (Mathias, 1983, p. 39). See Appendix A for more detailed statistics on the changes in public revenue and expenditure in Britain over the period 1700–1929, and Appendix B for background on early British public finance experience.
2. Although Ricardo worried about the harm that could be caused by politicians acting in their own self-interest given the existing system of political representation, he did not deny that individual political figures could be motivated by the public good. Of James Mill's *History of British India*, Ricardo commented that readers 'may think that you give too much weight to some of the motives to human action, and too little to others' (Letter to Mill [30 December 1817], 1951, VII, p. 236). Mill had taken the extreme position that men sought public office solely for the power and money it could provide, while Ricardo allowed a role for motivation based on 'public opinion and public sympathy'.
3. E.G. West has written an interesting article about Adam Smith on unilateral free trade versus reciprocity, in which he addresses Smith's attitude towards politicians and statesmen. Smith expressed concern with the motives of 'crafty' and 'insidious' politicians, many of whom were seen as 'short-term maximizers of their personal incomes who were willing to play the game of trading [a policy of] reciprocity at the expense of their countrymen' (West, 2000, p. 32). Smith distinguished between such men and those whom he termed 'scientific legislators', who were more long-term in their outlook and could be trusted to pursue policies in the national interest. As Winch (1983, p. 503) has observed, 'since Smith was nothing if not a realist, the legislator takes on the character of an ideal type in a world in which affairs are chiefly conducted by politicians. In such a world, however, it remained the duty of the philosopher to encourage the development of the public spirited attitudes of the legislator at the expense of those of the politician by enunciating general principles.' This view foreshadows Ricardo's own political views, and his roles as both an educator on principles of political economy and a legislator. I examine these roles further in Chapter 5.

4. As Hollander (1979, pp. 594–8) observes, Ricardo emphasized that parliamentary reform should be carried out with great caution. This comes out most clearly in his correspondence with James Mill, who characteristically insisted on the ease with which such reform could be accomplished. Ricardo replied that ‘the difficulty of such a question is to decide, first, whether the change be itself desirable, and secondly, whether the time be come. These are the points that would puzzle me, and would make me determined to advance very cautiously’ ([9 November 1817], 1951, VII, p. 205).
5. Among those who pointed out the true nature of governments’ schemes to redeem public debt was Adam Smith. He argued that ‘To relieve the present exigency is always the object that principally interests those immediately concerned in the administration of public affairs. The future liberation of the public revenue, they leave to the care of posterity’ ([1776], 1937, pp. 867–8).
6. See Chapter 5 for a detailed discussion of the operation of the Sinking Fund.
7. This argument echoes that made by Smith. He argued that while deficit financing has certain practical advantages in wartime, were the economic expense of war felt at once, ‘Wars would in general be more speedily concluded, and less wantonly undertaken.’ ([1776], 1937, p. 873) Tax financing of public expenditure puts the costs of such spending up front, and thus with tax financed expenditures, governments are much less likely to fight unnecessary wars.
8. Ricardo’s opposition to the existence of the Sinking Fund led him to assert in parliament that ‘he should be willing to vote for a reduction of taxes to the amount of [the] sinking fund; but he could not consent to vote any larger reduction than was equivalent to its absolute amount’ (Speech [28 February 1823], 1951, V, p. 261). More specifically, he had stated in parliament that since the Sinking Fund was consistently appropriated for uses other than debt redemption, ‘whenever a motion should be made for the repeal of any tax that was within the actual amount of the sinking fund, he, for one, would support such repeal’ (Speech [1 June 1821], 1951, V, p. 120). Out of consideration of the dangers of excessive public spending and misuse of the Sinking Fund, he was led to vote for all motions to reduce taxation (within the amount of the existing Fund), to signal his true position. This practice has been misunderstood by some as indicating a simplistic and ‘pathological’ opposition to taxation (Musgrave, 1959, p. 68; Shoup, 1960, pp. 248–9).
9. See Appendix E for a detailed list of Ricardo’s parliamentary voting record.
10. Attempts to raise funds to establish a second Owenite community failed, and the Committee resigned on 1 December 1819 (1951, V, p. 468). In 1823, Ricardo was appointed a member of a parliamentary committee examining the state of Irish labourers, which also had occasion to address an Owenite plan. While admitting that it might be suitable for private experimentation, the committee concluded that it was not a fit subject for legislative assistance (1951, V, p. xxvii).

11. The pamphlet was entitled 'A Few Doubts as to the Correctness of Some Opinions Generally Entertained on the Subjects of Population and Political Economy'. 'Piercy Ravenstone' has been identified by Sraffa (1951, XI, p. xxviii) as Richard Puller, of whom little is known.
12. As a preeminent example, the protection of agriculture from foreign competition by means of the Corn Laws was one way in which the landed interest benefited at the expense of the rest of the community.
13. It would have been interesting, then, had Ricardo lived to read and comment on Ravenstone's second publication, *Thoughts on the Funding System and its Effects* (1824). By this point, Ravenstone had changed his mind about public debt policy and adopted a Malthusian tone, arguing that once public debt was contracted, redemption would cause great harm, as the process of the transfer of property from taxpayers to creditors would result in hoarding and diminished aggregate demand.
14. This concept did not originate with Smith. For example, in 1758, R. Wallace, in a publication entitled *Characteristics of the Present Political State of Great Britain*, wrote that public and private borrowing might be considered as comparable in certain circumstances, namely 'If the Government has some grand or useful scheme in view, either to drain marshes, to render rivers navigable, to encourage some branch of industry or to maintain their liberty or trade against a powerful and ambitious enemy.' Such enterprises would likely generate resources sufficient to repay both the principal and interest of the loan required to finance them, and thus public borrowing might be justified in these cases (Hargreaves, 1830, p. 77).
15. Ricardo's position prevailed throughout the nineteenth century, and survived into the twentieth as the so-called 'Treasury View', the doctrine that public works cannot increase aggregate employment. Instead, they simply divert employment from the private to the public sector. In the 1930s, the view was championed by R.G. Hawtrey and challenged by the work of Pigou and Keynes (Hutchison, 1953, p. 416). As Hicks (1959, p. 273) observed, 'The idea that public expenditure should be used in depression as a palliative to unemployment was of course not new; relief works have been used from time immemorial, but on humanitarian and moral rather than on economic grounds. The Victorian attitude to such works, enshrined in what was known as the "Treasury View", was that public works could have no beneficial economic effect. Either the works produced would be economically useless or they would merely represent an anticipation of what would have been done later in any case.'
16. One other aspect of this issue deserves mention. We take it for granted today that only governments have the wherewithal to carry out large public infrastructure projects. However, there were privately owned and operated roads and canals in Ricardo's day. Of investment in canals, 'The cost was considerable – by 1815 perhaps as much as £20 000 000 had been invested. . . . With few exceptions the capital was privately raised, the users had to pay tolls, and the Government confined its assistance to

facilitating the necessary private Acts and according the canal companies the benefits of incorporation.' (Owen, 1975, p. 315) Of roads, 'improvements . . . were brought about in the eighteenth century by the development of the Turnpike Trusts financed by private individuals. These companies took over stretches of main road, improved them and charged a toll.' (Peacock, 1976, p. 104) This fact might help us to understand Ricardo's opposition to a public role in what many in his day considered to be a private activity.

17. I refer here and throughout this chapter to the first edition of Malthus' *Principles of Political Economy*, published in 1820. Changes were made to passages dealing with the topics of public debt and effectual demand in the second edition, published posthumously in 1836. As the scope of this chapter is limited to the Ricardo–Malthus debate, which ended with Ricardo's death in 1823, I do not detail these changes here. They are documented in Malthus [1820], 1989, p. 2.
18. While the possibility of 'overproduction' or 'underconsumption' frequently arose in parliamentary debate, it was not often connected with discussions of public debt policy. It was most conspicuous in discussions of economic distress (for examples, see Gordon, 1976, pp. 69, 96, 153, 182). In the application of his line of reasoning to the question of debt redemption, Malthus appears to have had only one formidable parliamentary ally in James Maitland, Earl of Lauderdale, who was critical of the applicability of the law of markets, at least over short periods of time (Lauderdale, 1804, p. 229). Lauderdale, like Ricardo, held that taxing income which would otherwise have been spent in whole or in part on consumption expenditure in order to redeem debt would involve the conversion of consumption to investment (*ibid.*, p. 232). However, unlike Ricardo, he believed that this 'forced accumulation' might be harmful to the economy.

Lauderdale made this argument in parliament in connection with the government's plans to continue with the Sinking Fund scheme to achieve debt redemption in the face of economic distress. The fund, he stated 'was nothing more nor less than a forcible assumption of five millions of taxes to be converted into capital. Now, if this sum were not so forcibly applied, it might be employed by all who paid it in the purchase of manufactures, and at the present moment such an addition would be of incalculable advantage.' (Speech of 1820, cited in Gordon, 1976, p. 78) He reiterated his views on public spending and public debt in his 1829 publication, *Three Letters to the Duke of Wellington*. It was his position that 'though an individual always must be impoverished by contracting debt, the extra expenditure that takes place during warfare and occasions what is called a public debt, has been, and always must be, the most active means of encouraging the increase of production.' (p. 44)

19. See Hollander (1979, chap. 9, pp. 500f) for a detailed discussion of this issue.
20. Late in his career, Ricardo changed his mind over the possible effects of mechanization on the interests of the working class. McCulloch initially

viewed this change as indicating a concession as to the inapplicability of the law of markets in certain circumstances. In the third edition of the *Principles* ([1821], 1951), Ricardo included a consideration of the possibility of exogenous technological change, a one time substitution of machinery for labour which is not triggered by the secular rise in money wages. Did the revision have any implications for Ricardo's position in opposition to government spending to stimulate demand? It appears that it did not. Ricardo drew no such conclusion and more generally he did not believe that his theoretical concession on this issue had any important practical implications. 'To elucidate the principle, I have been supposing, that improved machinery is *suddenly* discovered, and extensively used; but the truth is, that these discoveries are gradual, and rather operate in determining the employment of the capital which is saved and accumulated, than in diverting capital from its actual employment' ([1821], 1951, I, p. 395). Even in the latter case, the long-term effects on employment would likely be beneficial, for the additional profits generated by the adoption of machinery would provide a source of additional funds for investment.' Even if machinery had been shown to be harmful to the labouring classes, Ricardo would have opposed any intervention to prevent its use in an open economy, out of concern for international competitiveness. He asked rhetorically 'if [domestic industry] gave up a system which enabled them to undersell in the foreign market, would other nations refrain from pursuing it? Certainly not. They were bound, for their own interest, to continue it.' (Speech [30 May 1823], 1951, V, p. 303)

21. It is of interest to note that Shoup refers to 'Ricardo's argument that all is well even if these amounts [received by public creditors] are now spent on . . . consumption' (1960, p. 51). He apparently bases his claim on a passage from 'The Funding System' (1820) which he finds difficult to follow. The passage reads 'if the payers of taxes . . . paid them from revenue, then they would retain the same capital as before in active employment, and as this revenue, when received by the stockholder, would be by him employed as capital, there would be, in consequence of this operation, a great increase of capital, – *every year an additional portion of revenue would be turned into capital, which could be employed only in furnishing new commodities into the market*' (1951, IV, p. 178, emphasis added). This passage does not in fact say that public creditors would spend the income received from debt redemption on consumption goods. Instead it says that they would invest the funds 'as capital', which would be used in the production of additional commodities to be consumed in the future.
22. In this position, Ricardo received support from Say (1821, p. 53n) who wrote that: 'Mr. Malthus, convinced that certain classes are serviceable to society on account of what they consume alone, without producing any thing, would look upon the payment of the whole, or a great part of the English national debt, as a misfortune. On the contrary, this operation would, in my opinion, be very desirable for England; for the consequence

would be, that the public creditors, being paid off, would find means to derive an income from their capitals, that the payers of taxes would themselves spend [the funds] which they now pay to the public creditors. . . . I own I see nothing in these results to alarm the friends of the public weal.'

4 Ricardian method

1. The concept of a capital levy to redeem public debt was resurrected in England following World War I. A brief discussion is provided in Appendix D.
2. Some have suggested that Ricardo had partisan motives in making this suggestion. See Chapter 5 for a refutation of this argument.
3. This argument echoed earlier justifications for the common practice of conversion operations, which involved exchanging existing holdings of government bonds for newly issued bonds yielding reduced interest rates. In 1717, one creditor is purported to have accepted the reduction of interest on the grounds that 'though his interest was diminished he should think his principal more secure than ever' (Hargreaves, 1930, p. 24).
4. In 1827, McCulloch (p. 409) considered more specifically the equity of a capital levy scheme. He conceded that the considerable benefits of such a levy could only be achieved at the cost of perfect equity. It was concern over inter-sectoral justice that ultimately led McCulloch to change his position and oppose a capital levy to redeem public debt (O'Brien, 1975, p. 268).
5. This assessment is supported by Ricardo's obvious love for his private life as a 'country gentleman', as evidenced in his correspondence, and in references to his private investments. However, there was also an element of investment acumen involved in his decisions, related to his concerns over the public debt. In 1817, before his entry into parliament might have prompted him to sell his bond holdings out of concerns about conflict of interest, he wrote to Say that 'as our debt is so enormously large, and the price of our funds appeared to me high, I have from time to time withdrawn my money from the funds, and have invested a large portion of it in landed property. When I was in France, and since I left it, I have been tempted by the low relative price of the French Funds to invest another portion of my money in the French 5 pcts. and Bank Actions' ([18 December 1817], 1951, VII, p. 230). In 1822, he wrote to Maria Edgeworth that 'I am a holder of French Stock, and at present have no thought of parting with it. If it rose to 100 – I might probably be tempted to bring the money to this country, and employ it in the purchase of land or on mortgage' ([20 June 1822], 1951, IX, p. 204). Notably, he would not have chosen to purchase English bonds due to his concerns over their security.
6. An interesting modern parallel exists. As Gianaris (1989, p. 211) pointed out, 'there are proposals that if the [US] federal government sells its \$280

billion loan portfolio to private investors, it can break the deficit without ripping the economy apart and igniting social unrest.' Proponents of such a proposal suggest that the privatization of such loans, sold below their face values, might generate more than \$150 billion to be applied to future deficits. In addition, they suggest that similar future loans might also be sold to the private sector in a gradual manner to avoid flooding the market and disposing of them at amounts far below their face value.

7. The sources of his calculations can be guessed at and the accuracy of his assessment considered by a comparison with similar calculations made five years later by McCulloch. In 1827, he wrote that an assessment of 12 per cent on the capital of the country would be sufficient to cancel half the public debt. To arrive at that figure, he extrapolated from estimates of the value of the nation's property that were made for Pitt's income tax in 1798. These estimates were exclusive of the interest of public funds, of the income from professions, and of foreign 'possessions'.
8. This scarcity of money arose due to the means by which the payments were carried out. Ricardo explained the procedure in his 'Proposals for an Economical and Secure Currency' ([1816], 1951, pp. 74–5). 'The national debt has become so large, and the interest which is paid quarterly upon it is so great a sum, that the mere collecting the money from the receivers general of the taxes, and the consequent reduction of the quantity in circulation, just previously to its being paid to the public creditor, in January, April, July, and October, occasions, for a week or more, the most distressing want of circulating medium.' As a remedy, he proposed that the Bank of England 'be authorized by government to deliver the dividend warrants to the proprietors of stock a few days before the receivers-general are required to pay their balances into the Exchequer' and that these warrants be accepted by the Exchequer as if they were currency.
9. O'Brien (1988, p. 19) discussed the chaotic nature of the assessed property values. He pointed out that regular revaluations of the current values of property subject to direct taxes proved to be impractical, and thus 'Over time, individual, local and regional liability for the direct tax levied on property became stereotyped at historical and often anachronistic values.' Furthermore, 'Although strong and telling criticism both inside and outside of Parliament of the land tax occurred . . . the tax was never reformed into a more efficient and equitable instrument for raising revenue [due to widespread] political support and sagacious arguments for the status quo' (ibid).

5 Ricardo on public debt

1. Ricardo himself acknowledged that he did not make the first reference to such a scheme. The history of such proposals is traced by Hargreaves (1930, p. 31) to that put forward by Archibald Hutcheson, Member of Parliament for Hastings, in 1720. See Chapter 4 for a more detailed discussion.

2. See 1951, X, pp. 81–94. The annual government loan was raised by private loan contractors, who relied on the Stock Exchange as a channel through which they could place government bonds, or ‘stock’, among a wide range of investors. The usual method was for the Chancellor of the Exchequer to invite competitive bids from prospective loan contractors. The contractor submitting the winning bid normally obtained stock from the government on more favourable terms than those on which they would in turn be made available on the market. The difference was a ‘bonus’ to the contractor, and was usually on the order of 4 per cent of the principal value of the loan.
3. See 1951, X, p. 102. In 1819, Ricardo acted for the last time as a loan contractor, submitting a losing bid for a new government loan. It was in that year that he also sold all of his holdings of stock in the Bank of England. He wrote to Trower that ‘I have thought it right to sell [some or all of my Bank stock], not much indeed (£2500) being firmly persuaded that it is much too high, and that after a little sober examination the price will fall’ ([1 June 1819], 1951, VIII, p. 35). He discussed his reasons for choosing to invest in French funds in correspondence with Maria Edgeworth ([20 June 1822], 1951, IX, p. 204; [13 December 1822], 1951, IX, p. 237).
4. A more modern restatement of this argument can be found in Gootzeit 1975, pp. 23–4.
5. As Mitchell (1967, p. 296) observed, ‘after he had become a great landowner [Ricardo] continued to be just as uncompromising an opponent [of agricultural protection] as he had been before.’
6. Smart (1964, p. 164) likewise observed that ‘despite the fact that Ricardo had bought his way into parliament, he called for parliamentary reform: secret ballots and more frequent elections.’ Ricardo called himself ‘a reformer on principle [who advocated] a reform of the house of commons, because . . . it would very materially contribute to good government and to the happiness of the people’ (Letter to Trower [30 January 1823], 1951, IX, p. 267).
7. In the context of a parliamentary debate on economic distress, Ricardo ([29 June 1820], 1951, V, p. 69) had occasion to refer to ‘the sacredness of property, which constituted the great security of society.’ This view about property underlies his political views; the franchise, he argued, should be extended only to those who did not have an interest in seeking to infringe on the property rights of others.
8. For an explanation of the seemingly low market price of government securities and of the intricacies of British public debt issue, see Appendix F.
9. The question arises as to whether a debt financed by bonds with fixed maturity dates to be redeemed with tax proceeds would not be more effective. Those government securities known as Exchequer bills were in fact of this nature. Such securities were no more effective in committing the government to repay its debt, however, as governments could simply choose to issue new debt to pay off old. A plan to convert perpetual annuities (known as ‘consols’) to terminable annuities was suggested by

Ricardo's parliamentary colleague, Parnell (see letter to Trower [5 March 1822], 1951, IX, p. 175, for Ricardo's explanation of the scheme). Ricardo thought it had its merits, for 'From the adoption of such a plan, ministers, in the event of any occurrence requiring an increased expenditure, would not, as heretofore, be enabled to despoil a fund which ought to be sacredly appropriated to another purpose; but must come down to parliament, and otherwise provide for the public exigencies' (Speech [11 March 1823], 1951, V, p. 271).

10. Ricardo was especially critical of arguments by politicians that the existence of a large sinking fund served notice to enemy nations of Great Britain's preparedness for war. He cited Chancellor of the Exchequer Nicholas Vansittart's statement that 'it will make foreign countries respect us; they will be afraid to insult or provoke us, when they know that we are possessed of so powerful a resource' ([1820], 1951, IV, pp. 197–8). Ricardo's view on this matter was expressed succinctly: the Sinking Fund 'cannot, at one and the same time, be employed in the annoyance of an enemy, and in the payment of debt' (*ibid.*, p. 198).
11. In 'The Paradox of the Sinking Fund', David Levy examines Keynes' revival of the sinking fund concept. He notes that Keynes did not explicitly acknowledge classical opposition to such schemes, observing that Keynes had a much different opinion from that of the classics as to the wisdom of government financial flexibility (Buchanan *et al.*, 1987, pp. 108–10).
12. The fact that wage earners and professionals would be exempt from a capital levy was never adequately addressed by Ricardo, who, in correspondence with McCulloch, did concede that this particular objection to the capital levy was 'the most plausible' ([15 September 1820], 1951, VIII, p. 238). As modern economists would observe, a one time tax of this type would necessarily sacrifice equity concerns in favour of efficiency in the form of a minimal distortionary impact on resource allocation.

6 Ricardo and modern public debt theory

1. Mundell (1993) presents an interesting examination of the development of public debt theory from David Hume to the modern day.
2. Despite the fact that the Keynesian Revolution ushered in the era of deficit finance, Kregel (1985, p. 32) has shown that Keynes himself 'did not ever directly recommend government deficits as a tool of stabilization policy.' However, Lerner (1943), considered the founder of Keynesian public finance theory, described the theory of deficit financing as first put forward in complete form by Keynes. Perhaps Keynes was aware of political reasons why it would be inappropriate to declare publicly the full implications of his theory for public finance, much as was Ricardo in discussing government expenditure. See Chapter 3 for an explanation.
3. See Chapter 2 for additional discussion of Ricardian Equivalence.

4. Buchanan (1976) subsequently criticized Barro for ignoring the existing literature on the subject, and generously paid tribute to Ricardo as the originator of the concept by coining its present appellation. However, as has been shown by O'Driscoll (1977), the label 'Ricardian Equivalence' is misleading, for although Ricardo did indeed anticipate Barro's theoretical reasoning, he reached the opposite conclusion as to its applicability to the real world. For further discussion, see Visaggio (1989).
5. Starrett (1988) attempted to answer the question of whether the government can maintain an appropriately growing debt forever. He showed that it is possible to do so in the case where prevailing interest rates are lower than growth rates, for then the debt becomes smaller relative to the size of the economy as time passes, and thus the same government spending can be obtained with a lower net tax obligation. This is a situation of 'dynamic inefficiency' involving overinvestment which generates a 'free lunch' where a country can eat some of its capital and still produce at least as much per person in perpetuity. However, he argued that as the government was to borrow more, there would be upward pressure on interest rates and this 'Ponzi game' would not be viable. The opposite case is also true; as long as real interest rates exceed the real rate of economic growth, a country's debt burden is growing faster than its ability to pay it. In Canada, for example, recent tight monetary policy has been blamed by some for aggravating the deficit by raising real interest rates (Stokes, 1992).
6. As discussed in Chapter 3, Smith recognized the need for public expenditure on infrastructure, although he did not explicitly discuss its productivity, while Ricardo too acknowledged the productive nature of certain types of public infrastructure expenditure.
7. A private enterprise that reports a profit may still be in debt if it has borrowed funds to finance new capital projects, investment that it anticipates will result in future growth. By accounting practice, these investments are treated differently from current operating expenses; since they are expected to provide an ongoing return over time, borrowing costs are spread out over a number of years.
8. While this is of concern today, I can find no instance in his published work on public debt where Ricardo made any reference to a distinction between private and public interest rates or to the credit constraints faced by low income households.
9. 'Supply-side' economics of the 1970s and 1980s focussed specifically on the efficiency incentive considerations related to taxation, including the rising deadweight burden as the tax share of GDP rises and the changing elasticity of government revenue with respect to tax rates, which gave rise to the 'Laffer curve' (Wanniski, 1975). Supply-side economists argue that tax cuts are in effect self-financing, as they have positive incentive effects on work, saving and investment, innovation and risk, and as they reduce tax avoidance. Evidence to support such claims is mixed.

10. It is striking to see how *political* concerns with respect to public debt in our day parallel those of Ricardo and his contemporaries. Ricardo could not ignore the influence of particular interest groups on public debt policy, and questioned the resolve of political leaders to deal effectively with public extravagance and debt redemption.

Appendix B

1. The material presented in this Appendix is derived from Buxton (1888), Acworth (1925); Hargreaves (1930); Mathias (1983); and P.K. O'Brien (1988). Statistical details are given in Appendix A.

Appendix D

1. See Appendix A for statistics on debt, taxation and expenditure for both periods.

Appendix E

1. The catalogue of the Sraffa papers at Cambridge University indicates that they contain a compilation of all of Ricardo's officially recorded parliamentary votes.
2. Joseph Hume suggested the motion, on the grounds that excessive taxation was a principal cause of agricultural distress. Ricardo, 'though he agreed with everything that had fallen from his hon. friend . . . in favour of economy and retrenchment, could not vote in favour of his amendment, as he differed widely from his hon. friend as to the causes of the existing agricultural distress' (1951 [5 February 1822], V, 123).
3. Although Ricardo voted in favour of the motion, he opposed the reasoning used by Brougham to support it, denying 'that taxation was the cause of the present agricultural distress' (1951 [11 February 1822], V, 124).

Appendix F

1. The information contained in this appendix is derived from Homer (1963), Chapter XIII.

Appendix G

1. The material in this appendix is derived from Dorfman (1989), Fetter (1980), Gordon (1976), Higgs (1925), Sraffa (1951–73) and Thomson (1970).

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Bibliography of Works Cited

- Acworth, A.C. *Financial Reconstruction in England* (London: P.S. King and Son Limited, 1925).
- Addison, J. 'Essay,' *The Spectator* (3 March 1710).
- Ahiakpor, J. 'Ricardo on Money: The Operational Significance of the Non-Neutrality of Money in the Short Run,' *History of Political Economy* 17 (1985), 17–30.
- Aksoy, E.G. *The Problem of the Multiple Interpretation of Ricardo* (Greenwich, Connecticut: JAI Press Inc, 1991).
- Anderson, G.M. and R.D. Tollison. 'Ricardo on the Public Debt: Principle versus Practice,' *The History of Economics Society Bulletin* 8 (1986), 49–58.
- Asso, P.F. and E. Barucci. 'Ricardo on the National Debt and Its Redemption: Some Notes on an Unpublished Manuscript,' *Economic Notes* 2 (1988), 5–36.
- Baumol, W.J. *Economic Dynamics*, 2nd edn (New York: Macmillan, 1959).
- Barro, R.J. 'Are Government Bonds Net Wealth?,' *Journal of Political Economy* 82 (1974), 1095–1117.
- . 'Reply to Feldstein and Buchanan,' *Journal of Political Economy* 84 (1976), 343–9.
- . 'On the Determination of the Public Debt,' *Journal of Political Economy* 87 (1979), 940–71.
- Bharadwaj, K. 'Maurice Dobb's Critique of Theories of Value and Distribution,' *Cambridge Journal of Economics* 2 (1978), 153–74.
- Blake, W. *Observations on the Principles Which Regulate the Course of Exchange; and on the Present Depreciated State of the Currency [1810] and Observations on the Effects Produced by the Expenditure of Government During the Restriction of Cash Payments [1823]* (New York: Burt Franklin, 1969).
- Blaug, M. *Economic Theory in Retrospect*, 4th edn (Cambridge: Cambridge University Press, 1985b).
- . 'Not Only an Economist – Autobiographical Reflections of a Historian of Economic Thought,' *The American Economist* 38 (1994), 12–27.
- . *Ricardian Economics* (New Haven: Yale University Press, 1958).
- . 'Ricardo and the Problems of Economic Policy,' in *Gli Economisti e la Politica Economica*, edited by P. Roggi (Naples: Edizioni Scientifiche Italiane, 1985a).
- Boadway, R. and D. Wildasin. 'Long Term Debt Strategy: A Survey,' in *The Political Economy of Government Debt*, edited by H. Verbon and F. Van Winden (Amsterdam: Elsevier Science Publishers, 1993).
- Bonar, J. 'Preface,' in *Letters of David Ricardo to Thomas R. Malthus*, edited by J. Bonar (Oxford: Clarendon Press, 1887).

- Bronfenbrenner, M. 'A Rehabilitation of Classical Economics,' *Aoyama Kokusai Seikei Ronshu (Aoyama University Journal of International Political Economy)* 13 (1989), 35-41.
- Brougham, Lord. *Historical Sketches of Statesmen who Flourished in the Time of George III* (London: Charles Knight and Company, 1839).
- Buchanan, J.M. *Public Principles of Public Debt* (Homewood, Illinois: Irwin, 1958).
- . 'Barro on the Ricardian Equivalence Theorem,' *Journal of Political Economy* 84 (1976), 337-42.
- Buchanan, J.M., C.K. Rowley and R.D. Tollison, eds. *Deficits* (Oxford: Basil Blackwell, 1987).
- Buchanan, J.M. and R.E. Wagner. *Democracy in Deficit: The Political Legacy of Lord Keynes* (New York: Academic Press, 1977).
- Buxton, S.C. *Finance and Politics: an historical study 1783-1885* (London: J. Murray, 1888).
- Cannan, E. 'David Ricardo in Parliament I and II,' *Economic Journal* 4 (1894), 249-61 and 409-23.
- Carr, J.L. and J. Ahiakpor. 'Ricardo on the Non-neutrality of Money in a World with Taxes,' *History of Political Economy* 14 (1982), 147-65.
- Casarosa, C. 'A New Formulation of the Ricardian System,' *Oxford Economic Papers* 30 (1978), 38-63.
- . 'The "New View" of the Ricardian Theory of Distribution,' in *The Legacy of Ricardo*, edited by G.A. Caravale (Oxford: Basil Blackwell, 1985).
- Dalton, H. *The Capital Levy Explained* (London: The Labour Publishing Company, 1923).
- Dobb, M. *Theories of Value and Distribution since Adam Smith* (Cambridge: Cambridge University Press, 1973).
- Dorfman, R. 'Thomas Robert Malthus and David Ricardo,' *Journal of Economic Perspectives* 3 (1989), 153-64.
- Dowell, S. *A History of Taxation and Taxes in England*, Vol. 2 (New York: Augustus M. Kelley, 1888).
- Drazen, A. 'Government Debt, Human Capital and Bequests in a Lifecycle Model,' *Journal of Political Economy* 86 (1978), 505-16.
- Dunbar, C.F. 'Ricardo's Use of Facts,' *Quarterly Journal of Economics* I (1886-7), 474-6.
- Eagly, R.V. 'Tax Incidence in Ricardian Analysis,' *Public Finance* 38 (1983), 217-31.
- Eatwell, J. 'The Irrelevance of Returns to Scale in Sraffa's Analysis' *Journal of Economic Literature* 15 (1977), 61-7.
- Eltis, W. *The Classical Theory of Economic Growth* (London: Macmillan, 1984).
- Feldstein, M. 'Perceived Wealth in Bonds and Social Security: A Comment,' *Journal of Political Economy* 84 (1976), 331-6.
- Fetter, F.W. 'The Rise and Decline of Ricardian Economics,' *History of Political Economy* 1 (1969), 67-84.
- . *The Economist in Parliament, 1780-1868* (Durham, North Carolina: Duke University Press, 1980).

- Francis, J. *Chronicles and Characters of the Stock Exchange* (Boston: Wm. Crosby and H.P. Nichols, 1850).
- Garegnani, P. 'Value and Distribution in the Classical Economists and Marx,' *Oxford Economic Papers* 36 (1984), 291–325.
- Gianaris, N.V. *Contemporary Public Finance* (New York: Praeger, 1989).
- Gootzeit, M.J. *David Ricardo* (New York: Columbia University Press, 1975).
- Gordon, B. *Political Economy in Parliament, 1819–1823*. (London: Macmillan, 1976).
- . *Economic Doctrine and Tory Liberalism, 1824–1830* (London: Macmillan, 1979).
- Gottlieb, M. 'The Capital Levy After World War I,' *Public Finance* 4 (1952), 356–84.
- . 'The Capital Levy and Deadweight Debt in England, 1815–1840,' *Journal of Finance* 8 (1953), 34–46.
- Grenville, Lord. *Essay on the Supposed Advantages of a Sinking Fund* (London: John Murray, 1828).
- Halévy, E. *The Growth of Philosophic Radicalism*. (Boston: The Beacon Press, 1955).
- Hamilton, R. *An Inquiry Concerning the Rise and Progress, The Redemption, and the Present State of the National Debt*, 3rd edn (Edinburgh: Oliphant, Waugh and Innes, 1818).
- Hargreaves, E.L. *The National Debt [1930]* (New York: Augustus M. Kelley, 1966).
- Harris, C.A. 'The Sinking Fund,' in *Palgrave's Dictionary of Political Economy*, edited by H. Higgs (New York: Augustus M. Kelley, 1963).
- Heathfield, R. *Elements of a Plan for the Liquidation of the Public Debt of the United Kingdom*, 4th edn (London: Longman, 1819).
- Heilbroner, R. and P. Bernstein. *The Debt and the Deficit: False Alarms/Real Possibilities*. (New York: W.W. Norton and Company, 1989).
- Hicks, U.K. *Public Finance*, 2nd edn (Cambridge: Cambridge University Press, 1959).
- Higgs, H. (editor). *Palgrave's Dictionary of Political Economy*, 3 vols (London: Macmillan, 1925).
- Hobson, C.K. *The Export of Capital [1914]* (London: Constable, 1963).
- Hollander, J.H. *David Ricardo: A Centenary Estimate [1910]* (New York: A.M. Kelley, 1968).
- Hollander, S. *Classical Economics* (Oxford: Basil Blackwell, 1987).
- . 'The Development of Ricardo's Position on Machinery,' *History of Political Economy* 3 (1971), 105–35.
- . *The Economics of David Ricardo* (London: Heinemann Educational Books Limited, 1979).
- . *The Economics of Thomas Robert Malthus* (Toronto: University of Toronto Press, 1997).
- . 'Malthus and the Post-Napoleonic Depression,' *History of Political Economy* 1 (1969), 306–35.
- . *Ricardo – The 'New View': Collected Essays I* (New York: Routledge, 1995).
- Homer, S. *A History of Interest Rates*. (New Brunswick, New Jersey: Rutgers University Press, 1963).

- Hubbard, R.G. and K.L. Judd. 'Social Security and Individual Welfare: Precautionary Saving, Liquidity Constraints, and the Payroll Tax,' *American Economic Review* 77 (1987), 630–46.
- Hume, D. *The History of England from the Invasion of Julius Caesar to the Revolution in 1688 [1754–61]*, abridged by R.W. Kilcup. (Chicago: University of Chicago Press, 1975).
- . *Further Observations on the Practicability and Expediency of Liquidating the Public Debt of the United Kingdom* (London: Longman, 1820).
- Hutchison, T.W. *A Review of Economic Doctrines 1870–1929* (Oxford: Clarendon Press, 1953).
- Jevons, W.S. *Theory of Political Economy*, 2nd edn (London: Macmillan, 1879).
- Kaldor, N. 'Alternative Theories of Distribution,' in *Essays on Value and Distribution* (Glencoe, Illinois: Free Press, 1960).
- Keynes, J.M. 'Tract on Monetary Reform' [1924] in *The Collected Writings of John Maynard Keynes*, Vol. IV, edited by E. Johnson and D. Moggridge (London: Macmillan, 1971).
- Knight, F.H. *Risk, Uncertainty and Profit* (New York: Harper and Row, 1956).
- Kolb, F.R. 'The Stationary State of Ricardo and Malthus: Neither Pessimistic Nor Prophetic,' *Intermountain Economic Review* 3 (1972), 17–30.
- Kregel, J. 'Budget Deficits, Stabilization Policy and Liquidity Preference: Keynes' Post-War Proposals,' in *Keynes' Relevance Today*, edited by F. Vicarelli (London: Macmillan, 1985).
- Lauderdale, 8th Earl. *An Inquiry into the Nature and Origin of Public Wealth [1804]* (New York: Augustus M. Kelley, 1962).
- Lerner, A. 'Functional Finance and the Federal Debt,' *Social Research* 10 (1943), 38–51.
- Mallet, J.L. Diary entries, *Political Economy Club: Minutes of Proceedings 1899–1920, Roll of Members, and Questions Discussed, 1821–1920, with Documents Bearing on the History of the Club*, Vol. VI (London: Macmillan, 1921).
- Malthus, T.R. *Principles of Political Economy [1820]*, 1st edn in *The Works and Correspondence of David Ricardo*, Vol. II, edited by P. Sraffa (Cambridge: Cambridge University Press, 1951).
- . *Principles of Political Economy [1820]*, Var. edn, 2 vols, edited by J. Pullen (Cambridge: Cambridge University Press, 1989).
- Marshall, A. *Principles of Economics*, 8th edn (London: Macmillan, 1920).
- Mathias, P. *The First Industrial Nation: An Economic History of Britain 1700–1914*, 2nd edn (London: Methuen, 1983).
- Mathias, P. and P.K. O'Brien. 'Taxation in Britain and France 1715–1810: A Comparison of the Social and Economic Incidence of Taxes Collected for the Central Government,' *Journal of European Economic History* 5 (1975), 601–50.
- McCulloch, J.R. 'Taxation and the Corn Laws,' *Edinburgh Review* (January 1820).
- . 'Finance Accounts of the United Kingdom for the Year ended 5th January 1823,' *Edinburgh Review* 34 (October 1823), 1–43.

- . 'Remarks on the Financial Situation of Great Britain,' *Edinburgh Review* (October 1827), 390–414.
- McCulloch, J.R. (ed.). *A Select Collection of Scarce and Valuable Tracts and Other Publications on the National Debt and the Sinking Fund* (London, 1857).
- . *Treatises and Essays on Subjects Connected with Economic Policy [1853]* (New York: A.M. Kelley, 1967).
- Milgate, M. and S. Stimson. *Ricardian Politics* (Princeton: Princeton University Press, 1991).
- Mill, J.S. *Principles of Political Economy [1848]* in *The Collected Works of John Stuart Mill*, Vols II and III, edited by J.M. Robson (Toronto: University of Toronto Press, 1965).
- Mitchell, W.C. *Lecture Notes on Types of Economic Theory* (New York: Augustus M. Kelley, 1949).
- . *Types of Economic Theory*, Vol. I (New York: Augustus M. Kelley, 1967).
- Mitchell, B.R. and P. Deane. *Abstract of British Historical Statistics* (Cambridge: Cambridge University Press, 1962).
- Morishima, M. *Ricardo's Economics: A General Equilibrium Theory of Distribution and Growth* (Cambridge: Cambridge University Press, 1989).
- Mundell, R.A. 'Debts and Deficits in Alternative Macroeconomic Models,' in *Debt, Deficit and Economic Performance*, edited by M. Baldassari, R. Mundell and J. McCallum (New York: St. Martin's Press, 1993).
- Musgrave, R. *Theory of Public Finance: A Study in Public Economics* (New York: McGraw-Hill, 1959).
- O'Brien, D.P. *The Classical Economists* (Oxford: Clarendon Press, 1975).
- . 'Ricardian Economics and the Economics of David Ricardo,' *Oxford Economic Papers* 33 (1981), 352–86.
- . 'Ricardian Economics: A Rejoinder,' *Oxford Economic Papers* 34 (1982), 247–52.
- O'Brien, P.K. 'The Political Economy of British Taxation, 1660–1815,' *Economic History Review*, 2nd ser., 41 (1988), 1–32.
- O'Driscoll, G.P. 'The Ricardian Nonequivalence Theorem,' *Journal of Political Economy* 85 (1977), 207–10.
- Owen, J.B. *The Eighteenth Century 1714–1815* (Totowa, New Jersey: Rowman and Littlefield, 1975).
- Pasinetti, L.L. 'A Mathematical Formulation of the Ricardian System' [1960], in *Growth and Income Distribution: Essays in Economic Theory* (Cambridge: Cambridge University Press, 1974).
- Patinkin, D. *Money, Interest and Prices*, 2nd edn (New York: Harper and Row, 1965).
- Peach, T. *Interpreting Ricardo* (Cambridge: Cambridge University Press, 1993).
- Peacock, H.L. *British History: 1714–Present Day*, Rev. Edn (London: Heinemann Educational Books, 1976).
- Pebrer, P. *A Practical Plan [for the] Liquidation of the National Debt*. (London, 1833).
- Pigou, A.C. *A Capital Levy and a Levy on War Wealth* (London: Oxford University Press, 1920).

- . *A Study in Public Finance* (London: Macmillan, 1928).
- Rankin, S.C. 'Supply and Demand in Ricardian Price Theory: A Re-Interpretation,' *Oxford Economic Papers* 32 (1980), 241–62.
- Ravenstone, P. [R. Puller]. *A Few Doubts . . . on the Subjects of Population and Political Economy [1821]* (New York: Augustus M. Kelley, 1966).
- . *Thoughts on the Funding System and its Effects*. (London: Andrews, 1824).
- Ricardo, D. *Works and Correspondence of David Ricardo*, 11 volumes, edited by P. Sraffa and M. Dobb (Cambridge: Cambridge University Press, 1951–73).
- . 'An Unpublished Letter of David Ricardo: To Thomas Smith of Easton Grey, 27 April 1819,' edited by A. Heertje and D. Weatherall, *Economic Journal* 88 (1978) 569–71.
- . 'An Unpublished Letter of David Ricardo to Francis Finch, 24 February 1823,' edited by A. Heertje, D. Weatherall and R.W. Polak, *Economic Journal* 95 (1985) 1091–2.
- . 'Three Unpublished Letters by David Ricardo,' edited by A. Heertje, *History of Political Economy* 23:3 (1991) 519–26.
- Robbins, L. *The Theory of Economic Policy in English Classical Political Economy* (London: Macmillan, 1952).
- Roberts, R.O. 'Ricardo's Theory of Public Debts,' *Economica* 9 (1942), 257–66.
- Robinson, J. 'Piero Sraffa and the Rate of Exploitation,' *New Left Review* 31 (1965), 28–34.
- Rule, J. *The Vital Century: England's Developing Economy, 1714–1815* (London: Longman Group UK Ltd., 1992).
- Rutherford, R.P. 'Ricardo's Mantle,' *Australian Economic Papers* 25 (1986), 206–21.
- St. Clair, O. *A Key to Ricardo* (New York: Kelley and Millman, 1957).
- Samuels, W.J. *The Classical Theory of Economic Policy* (Cleveland: World Publishing Company, 1966).
- Samuelson, P. 'The Canonical Classical Model of Political Economy,' *Journal of Economic Literature* 16 (1978), 1415–34.
- . 'Keeping Whig History Honest,' *History of Economics Society Bulletin* 10 (1988), 161–7.
- Say, J.B. *Letters to Mr. Malthus on Several Subjects of Political Economy, and on the Cause of the Stagnation of Commerce*, translated by J. Richter (London: Sherwood, Neely and Jones, 1821).
- 'Schools Brief: The Burdensome National Debt,' in *The Economist*, 10 February 1996, 68–9.
- Schumpeter, J. *Economic Doctrine and Method* (New York: Oxford University Press, 1954a).
- . *History of Economic Analysis* (New York: Oxford University Press, 1954b).
- Seater, J.J. 'Ricardian Equivalence,' *Journal of Economic Literature* 31 (1993), 142–90.
- Shoup, C. *Ricardo on Taxation* (New York: Columbia University Press, 1960).
- Silberling, N.J. 'Financial and Monetary Policy of Great Britain During the Napoleonic Wars II,' *Quarterly Journal of Economics* 38 (1924), 397–439.

- Smart, W. *Economic Annals of the Nineteenth Century*, 2 vols (New York: Augustus M. Kelley, 1964).
- Smith, A. *An Inquiry into the Nature and Causes of the Wealth of Nations* [1776], edited by E. Cannan (New York: The Modern Library, 1937).
- Sowell, T. *Classical Economics Reconsidered* (Princeton: Princeton University Press, 1974).
- Sraffa, P. 'Introduction to *The Principles of Political Economy*,' in *The Works and Correspondence of David Ricardo*, Vol. I (Cambridge: Cambridge University Press, 1951).
- . *Production of Commodities by Means of Commodities* (Cambridge: Cambridge University Press, 1960).
- Starrett, D.A. *Foundations of Public Economics* (Cambridge: Cambridge University Press, 1988).
- Stigler, G.J. 'Ricardo or Hollander?,' *Oxford Economic Papers* 42 (1990), 765–8.
- . 'Textual Exegesis as a Scientific Problem,' *Economica* 32 (1965), 447–50.
- . 'Review of [S. Hollander's] *The Economics of David Ricardo*,' *Journal of Economic Literature* 19 (1981), 100–2.
- Stokes, E. 'Has Monetary Policy Been Too Tight?,' *Canadian Business Economics* 1 (1992).
- Thomson, H.F. 'Lauderdale's Early Pamphlets on Public Finance (1796–1799),' *History of Political Economy* 2 (1970), 344–80.
- Tucker, G.S.L. *Progress and Profits in British Economic Thought* (Cambridge: Cambridge University Press, 1960).
- United Kingdom. *Parliamentary Debates*. Geo. IV, vol. 8, 11 March 1823, 535.
- Viner, J. 'Schumpeter's *History of Economic Analysis*: A Review Article,' *American Economic Review* 44 (1954), 894–910.
- . *Studies in the Theory of International Trade* (New York: Harper and Brothers, 1937).
- . *The Long View and the Short* (Glencoe, Illinois: Free Press, 1958).
- Visaggio, M. 'On Ricardo's Public Debt Theory,' *Economic Notes* 0 (1989), 149–66.
- Walras, L. *Elements of Pure Economics* [1874], translated by W. Jaffe (London: George Allen and Unwin, 1954).
- Wanniski, J. 'The Mundell-Laffer Hypothesis,' *The Public Interest* 39 (1975), 31–52.
- Weatherall, D. *David Ricardo: A Biography* (The Hague: Martinus Nijhoff, 1976).
- West, E.G. 'Unilateral Free Trade Versus Reciprocity in *The Wealth of Nations*,' *Journal of the History of Economic Thought* 22 (2000), 29–42.
- Wicksell, K. *Lectures on Political Economy* [1911], Vol. II (London: Routledge, 1934–35).
- Wilks, J. *A Practical Scheme for the Reduction of the Public Debt and Taxation, Without Individual Sacrifice* (London: Hurst, 1822).
- Winch, D. 'Science and the Legislator: Adam Smith and After,' *Economic Journal* 93 (1983), 501–20.

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Index

- agricultural distress, 18, 41–2, 59,
61, 67–8, 134–5, 144, 171
- agricultural protection, 10, 12, 31,
42, 101, 145, 146, 163
- allocation analysis, 2–7, 22–32, 157,
159
- Anderson, G. and R. Tollison, 19,
92–3, 94, 96, 97, 101, 102–3
- Bank of England, 96–8, 134, 143,
144, 152, 167
- Baring, Alexander, 72, 151
- Barro, Robert, 36–7, 114, 115, 116,
117, 120, 170
- Blake, William, 66–7
- Blaug, Mark, 11, 73–4
- bond holders, 62–3, 74–9, 81–3, 97,
99–100, 102–6
- Brougham, Lord, 73, 87, 91, 151,
158, 159, 171
- Cannan, Edwin, 71, 76–7, 103
- canonical classical growth model, 8,
157
- capital flight, 1, 15, 22, 32–3, 39,
159
- capital levy, 1, 14–17, 19, 34, 50,
57, 62, 71–90, 91–3, 103,
107–8
- assessment of property values,
86–7, 167
- criticism, 72–4, 88, 99–100,
109–10
- disruption of social order, 81–3,
166–7
- equity, 74–81, 108–9, 140, 166,
169
- exemption of professional
remuneration, 80–1
- evasion, 87–8
- government bonds included in
tax base, 75–6, 92
- inventories, effect of levy on,
86
- partial imposition, 89
- payment schedule, 84–6
- private financing arrangements,
61, 62–3, 81–3
- proposals after World War I,
139
- rate, 83
- Cobbett, William, 101–2, 151
- consols, 149, 168
- Corn laws, 10, 12, 31, 42, 101, 145,
146, 163
- corn model, 3
- correspondence, *see* Ricardo,
correspondence
- countervailing duty, 29–31
- crowding out, 114–15
- deadweight loss, 30–1
- debt, *see* public debt
- demand, 4, 5, 158
- Dobb, Maurice, 3, 6, 14, 157
- dual development, 6–7, 157
- Dunbar, Charles, 11, 17
- Eagly, Robert, 37, 43, 45
- Edgeworth, Maria, 151–2
see also Ricardo, correspondence
- Edinburgh Review*, 81, 151, 153
- equilibrium, 5, 6, 7, 31
- equitable adjustment of contracts,
106, 135
- exchequer bills, 168
- exegesis
personal versus scientific, 14
of Ricardo's work, 12–17
- expenditure patterns, 26–7, 45, 57

- expenditure, productive versus
 unproductive, 27, 35, 39, 44,
 45, 55, 57–8, 59–60, 113, 118,
 137, 163
- Foster, Peter Le Neve, 79–80
- fundamental theorem of
 distribution, 9
- funded debt, 149
- 'The Funding System' (1820), *see*
 Ricardo, publications
- Garegnani, Pierangelo, 3–4
- 'general glut', 59–64
- Gooch, Thomas, 99
- Gordon, Barry, 99, 164
- Gottlieb, Manuel, 74, 81, 141
- government bond holders, *see* bond
 holders
- government expenditure
 'extravagance', 18–19, 29, 35, 45,
 50, 52, 56–7, 64, 68, 69
 fiscal stimulation of aggregate
 demand, 112–15
 military, 27, 52–3, 133
- government, informational
 advantages of, 53, 54, 55
- Grenfell, Pascoe, 72, 73, 82, 88,
 97–8, 152, 160–1
 see also Ricardo, correspondence
- Grote, George, 152
 see also Ricardo, correspondence
- growth analysis, 7–10, 12, 18,
 32–43, 61–2, 112–13, 157, 160
 see also stationary state
- Halévy, Elie, 11, 13
- Hamilton, Robert, 52, 138
- 'happiness' of labouring classes, 32,
 40–1, 99, 160
- Hargreaves, E.L., 76, 133, 166,
 167
- Heathfield, Richard, 78, 104,
 152
 see also Ricardo, correspondence
- Hollander, J.H., 11, 17, 96, 97
- Hollander, Samuel, 4, 5, 8, 9, 11–12,
 13, 14, 50, 56, 65, 95, 101, 157,
 158, 162, 164
- Hume, David, 137
- Hume, Joseph, 68, 152, 171
 meeting in Hereford in honour
 of, 75, 109
- Hutcheson, Archibald, 76, 137, 138,
 158, 167
- illusion, fiscal and wealth, 18, 32,
 36, 37, 38, 39, 115
- infrastructure
 canals, 163–4
 public expenditure on, 57, 163
 roads, 163–4
- interest rate, 159, 170
 usury laws, 147, 149, 151
- interpretations of Ricardo, 12–17
- Italo-Cambridge School, 3–4, 6
- Jevons, William S., 2, 4, 6
- Keynes, John Maynard, 141, 163,
 169
- Keynesian economics, 112–15,
 169
- Knight, Frank, 3, 9
- Kolb, Fredric R., 9, 10
- labouring classes
 'happiness' of, 32, 40–1, 99,
 160
 living standards, 27, 32, 40,
 160
- land owners, 74–6, 97, 99–102, 133,
 163
- Lauderdale, Earl of, 152–3, 164
- law of markets, 50–1, 61, 66, 69,
 113, 164–5
 'general glut', 59–64
 Malthus on inapplicability of, 9,
 18, 51, 59–61
- loan contracting, 168
- loan contractor, Ricardo's career as,
 92–3, 97–8, 168

- loan financing versus tax financing, 18, 22, 23, 32, 35, 37, 40, 82, 120
- luxury goods, 28, 45
- machinery, 55, 164–5
- Mallet, J.L., 68, 72–3, 82, 98
- Malthus, Thomas R., 6, 13, 18, 44, 49–69, 101, 152, 153, 155, 159, 164
- on the law of markets, 9, 18, 51, 59–61
- on public debt, 59–61, 165–6
- Principles of Political Economy*, 59–61, 64, 65, 66, 153, 157–8, 164
- see also Ricardo, correspondence
- Malthusian population response, 7–8, 157–8
- Marginalist school, 4, 6
- Marshall, Alfred, 4, 6
- Marshall–Hollander interpretation of Ricardo's allocative model, 4–7
- Marx, Karl, 6, 157
- McCulloch, John Ramsay, 13, 15, 16, 77–8, 80–1, 87, 153, 159, 164–5, 166, 167
- see also Ricardo, correspondence
- Mercantilists, 137
- method, Ricardo's, 10, 11, 71–90, 162
- see also Ricardian Vice
- see also 'telescoping' of long run and short run
- military expenditure by government, 27, 52–3, 133
- Mill, James, 13, 16, 154
- see also Ricardo, correspondence
- Mill, John Stuart, 6, 154, 157, 159, 160
- Morishima, Michio, 4, 7, 8
- national debt, see public debt
- Neoclassical School, 2–3, 4, 6
- Neo-Ricardian School, see Italo-Cambridge School
- 'New View', 8–10, 13, 22, 39–41, 157, 160
- 'Notes on Bentham's *Sur Les Prix*' (1810–11), 105–6
- 'Notes on Malthus' *Principles of Political Economy*' (1820), 35, 41, 63–4, 65, 102
- O'Brien, Denis P., 8, 9, 11, 80, 123, 166
- O'Driscoll, Gerald P., 11, 36–7, 170
- optimal taxation, 18, 22, 43–6
- optimism, 8–10, 41–3
- Owen, Robert, 54–5, 144, 162
- parliamentary reform, 51, 56–7, 97, 108, 144, 146, 162, 168
- parliamentary speeches, see Ricardo, speeches
- Parnell, Henry, 154, 169
- payment strains, 62–3, 84–6, 167
- Pebrer, Pablo, 109
- perpetual annuities, 149, 168
- personal financial interests, Ricardo's, 1, 19, 91–110, 166, 168
- pessimism, 8–10, 41–3
- Pigou, Arthur C., 140, 163
- Place, Francis, 154
- see also Ricardo, correspondence
- political economy, 45, 55
- political philosophy, Ricardo's, 19, 49, 56–8, 64, 88–9, 161, 168, 171
- postwar economic distress, 18, 41–2, 59, 61, 67–8, 134–5, 144, 171
- price, 5, 57–8
- Principles of Political Economy and Taxation* (1817), see Ricardo, publications
- 'Proposals for an Economical and Secure Currency', (1816), 53, 152, 167

- productive versus unproductive expenditure, 27, 35, 39, 44, 45, 55, 57–8, 59–60, 113, 118, 137, 163
- ‘On Protection to Agriculture’ (1822), 24, 29–30, 67–8, 104–5, 155, 158
- public debt
- inflation to reduce real value, 77–8
 - redemption at par versus market price, 76–80, 92, 100, 103–4, 109
 - reduction of interest on, 77–8
 - repudiation, 102–4, 109
- public expenditure, *see* government expenditure
- public finance experience, British, 133–5
- rational expectations, 114, 115
- Ravenstone, Percy, 50, 55–7, 163
- resumption of cash payments, 12, 26, 94–5, 96, 102, 104–5, 134–5, 143, 144, 145
- Ricardian Equivalence, 18, 36–9, 114, 115–18, 159, 170
- Ricardian Vice, 10–11
- see also* method, Ricardo’s
 - see also* ‘telescoping’ of short run and long run by Ricardo
- Ricardo, David
- allocation analysis, 2–7, 22–32, 157, 159
 - correspondence Exchange with McCulloch (May–June 1820), 46; Letter to Brown (13 Oct. 1819), 22, 44; Letters to Edgeworth: (20 June 1822), 166, 168, (13 Dec. 1822), 168; Letter to Grenfell (27 Aug. 1817), 82; Letter to Grote (May 1823), 108; Letter to Heathfield (19 Dec. 1819), 78, 104; Letters to Malthus: (3 Jan. 1817), 58, (24 Jan. 1817), 58, 61–2, (4 May 1820), 15, 158, (9 Oct. 1820), 61, 81, 160, (21 July 1821), 66, (10 Sept. 1821), 41, 158, (13 Sept. 1821), 56; Letter from McCulloch (5 Dec. 1819), 16; Letters to McCulloch: (9 June 1816), 78, 105, (4 Dec. 1816), 78, (20 Dec. 1816), 15, (3 Jan. 1819), 102, (28 Feb. 1820), 35, 79, 103–4, (29 March 1820), 29, 38–9, 40–1, (8 April 1820), 44, 49, (2 May 1820), 65, 101, (15 Sept. 1820), 38, 80, 84, 85–6, 87–8, 99, 169, (3 May 1823), 67; Letter from Mill (3 Jan. 1816), 97; Letters to Mill (30 Aug. 1815), 51–2, (24 Oct. 1815), 85, (9 Nov. 1817), 162, (30 Dec. 1817), 161, (28 Aug. 1821), 55–6; Letter to Place (1 Nov. 1819), 108; Letter to Say (18 Dec. 1817), 94, 166; Letters to Sinclair: (31 Oct. 1814), 94, (11 May 1820), 89, 107, 109; Letter from Trower (19 Sept. 1819), 44; Letters to Trower: (8 March 1814), 106, (4 Feb. 1816), 54, (9 March 1816), 54, (15 July 1816), 100, (9 March 1816), 45, (22 March 1818), 23, 33, (1 June 1819), 168, (8 July 1819), 54, (25 Sept. 1819), 16, 45, (28 Dec. 1819), 76, 79, 89, 95, 100, 110, (28 Jan. 1820), 46, 57, (21 July 1820), 51, 101, (12 Nov. 1820), 43, 45, 53, (2 March 1821), 66, 102, (22 Aug. 1821), 105, (4 Oct. 1821), 51, 159, (5 March 1822), 169, (25 March 1822), 53, (14 Dec. 1822), 102, (30 Jan. 1823), 101–2, 168
 - evidence (4 March 1819), 26, 61

- growth analysis, 7–10, 12, 18,
 32–43, 61–2, 112–13, 157,
 160; *see also* stationary
 state
- loan contractor, career as, 92–3,
 97–8, 168
- method, 10, 11, 71–90, 162;
 ‘Ricardian Vice,’ 10–11;
 ‘telescoping’ of short run and
 long run, 11, 80
- parliamentary voting record,
 143–7
- personal financial interests, 1, 19,
 91–110, 166, 168
- political philosophy, 19, 49, 56–8,
 64, 88–9, 161, 168, 171
- publications ‘The Funding
 System’ (1820), 14, 16, 23,
 29, 30, 33, 36, 37, 42–3, 52,
 62–3, 71, 80, 82–3, 84, 86,
 106–8, 120, 158, 159, 165,
 169; ‘Notes on Bentham’s *Sur
 Les Prix*’ (1810–11), 105–6;
 ‘Notes on Malthus’ *Principles
 of Political Economy*’ (1820),
 35, 41, 63–4, 65, 102; ‘On
 Protection to Agriculture’
 (1822), 24, 29–30, 67–8,
 104–5, 155, 158 *Works and
 Correspondence*, 15; ‘Proposals
 for an Economical and Secure
 Currency’ (1816), 53, 152,
 167; *Principles of Political
 Economy and Taxation* (1817),
 3, 13, 14, 15–16, 24, 25,
 26–7, 28, 29, 30, 31–2, 32–3,
 35, 36, 38, 40, 44, 45, 46,
 57–8, 77, 81–2, 101, 153, 154,
 159–60, 165
- speeches at Gloucester county
 meeting (30 Dec. 1820), 57;
 at meeting at Hereford in
 honour of Joseph Hume
 (7 Dec. 1821), 75, 109; at
 meeting on Mr Owen’s plan
 (26 June 1819), 54; in
- parliament: (9 June 1819) 1,
 33, 52, 98, (18 June 1819),
 52, (16 Dec. 1819), 33, 34,
 42, 54–5, 58, 76, 78, 88, 109,
 160, (24 Dec. 1819), 34, 84,
 85, 88, 158, (30 May 1820),
 23, 26, 77, (29 June 1820),
 168, (8 Feb. 1821), 109,
 (7 March 1821), 28–9, 77, 95,
 (18 April 1821), 57, (1 June
 1821), 52, 162, (5 Feb. 1822),
 68, (11 Feb. 1822), 67, 100,
 (18 Feb. 1822), 53, 75–6, 103,
 (7 May 1822), 33, (9 May
 1822), 99, (16 May 1822),
 76, 108, (24 May 1822), 53,
 (31 May 1822), 98, (21 Feb.
 1823), 63, 89, (26 Feb. 1823),
 105, 106, (28 Feb. 1823), 162,
 (6 March 1823), 23, 87,
 107–8, (11 March 1823), 84,
 86–7, 88, 169, (24 April
 1823), 57, (22 May 1823), 98,
 (11 June 1823), 95, 105
 unpublished manuscript, 15, 43,
 78, 83, 84, 85, 86
- Ricardo, Moses, 96–7
- risk premium, 80–1
- Samuelson, Paul, 8, 157, 158
- Say, Jean-Baptiste, 6, 40, 53, 154,
 165–6
see also Ricardo, correspondence
- Say’s law, *see* law of markets
- Schumpeter, Joseph, 2–3, 6, 9,
 10–11, 157
- Scotsman, 67, 153
- Senior, Nassau, 6
- Shoup, Carl S., 34, 43, 83, 102, 162,
 165
- Sinclair, John, 77, 154–5
see also Ricardo, correspondence
- Sinking Fund, 16, 19, 36, 52, 62,
 78, 98, 106–8, 134, 138, 141,
 143, 145, 146, 152, 154, 164,
 169

- Smith, Adam, 6, 9, 22, 31, 40, 45,
137–8, 154, 155, 157, 158, 159,
160, 161, 162, 163, 170
- Smith, Thomas, 68, 155
- Sraffa, Piero, 3, 7, 14, 66, 68, 143,
158, 163
- stationary state, 7, 8, 10, 39, 40, 42,
160
- statistics
public debt issue, 150
public debt outstanding, 131
public expenditure, 130, 161
tax revenue, 129
- Stigler, George, 7, 13, 14
- stockholders, 62–3, 74–9, 81–3, 97,
99–100, 102–6
- supply side economics, 170
- tax financing versus loan financing,
18, 22, 23, 32, 35, 37, 40, 82,
120
- tax, income, 45, 46, 75, 81, 87, 92,
134, 140, 160–1
- taxation
analysis, 12, 17, 24–32, 41,
119–20
and capital flight, 1, 15, 22, 32–3,
39, 159
countervailing duty, 29–31
deadweight loss, 30–1
distortionary effects, 23–32
equity, 45
necessity for, 43, 53
optimal, 18, 22, 43–6
wartime, 23, 162
- technological improvements, 9,
10
- ‘telescoping’ of short run and long
run by Ricardo, 11, 80
see also method, Ricardo’s
see also Ricardian Vice
- textual exegesis, *see* exegesis
- Tollison, R., *see* Anderson, G. and
R. Tollison
- Trower, Hutches, 16, 96, 155
see also Ricardo, correspondence
- unproductive expenditure, 27, 35,
39, 44, 45, 55, 57–8, 59–60,
113, 118, 137, 163
- unpublished manuscript, 15, 43, 78,
83, 84, 85, 86
- usury laws, 147, 149, 151
- value theory
factor proportions, 4, 5, 25
profit rate, 3, 4, 24
- Viner, Jacob, 4, 7, 12, 96
- wage
determination of, 5–6
market, 7
natural, 7, 12–13
- Walras, Leon, 2, 6
- Western, C.C., 94–5
- Whishaw, John, 68, 155