



Munich Personal RePEc Archive

On Ricardo's Multilayered Method: Wage Taxation and Foreign Subsidies Considered

Wakamatsu, Naoyuki

14 October 2020

Online at <https://mpra.ub.uni-muenchen.de/103531/>
MPRA Paper No. 103531, posted 16 Oct 2020 04:23 UTC

On Ricardo's Multilayered Method: Wage Taxation and Foreign Subsidies Considered

Naoyuki Wakamatsu

ABSTRACT:

This paper uses Ricardo's work on taxation to exemplify his methodological approach of proceeding from abstract theory to practical theory and its correspondence with various facts. Ricardo's method has been often considered abstract, based on his use of "strong cases." However, Depoortère (2008) showed that Ricardo emphasized the relationship between theory and experience, and suggested that Ricardo's method involved an approach leading from abstract theory to particular fact. This paper aims to further Depoortère's conclusions, and to emphasize the multilayered nature of Ricardo's method. While Ricardo's method was based on "strong cases," he made his arguments by incorporating disturbing factors into his strong cases appropriately according to circumstance.

KEYWORDS: David Ricardo; methodology; foreign subsidy; wage taxation

JEL CODES: B12, B31

1 Introduction

The methodology of economics has been an important theme from the establishment of the field, and was the subject of great debate at the start of the 19th century. For example, economists discussed whether abstract or empirical analysis should receive greater emphasis in universities. Against this background, statistics has developed remarkably since the 19th century and its application to economics has continually been promoted. Consequently, universities have tended to concentrate recently on empirical research such as econometrics. Considering recent advances in artificial intelligence, the impetus toward data analysis in economics persists. Against the growing dominance of empirical analysis, how should abstract approaches, such as theoretical research, be positioned?

Thus, the method of economic analysis is an important issue not only historically but also in the present. Considering the circumstances of modern economics, we strongly feel the need to reevaluate attitudes to abstract analysis. Accordingly, we call attention to David Ricardo (1772–1823), whose work is representative of classical economics. Ricardo's economics has generally been considered abstract both by his contemporaries and by later researchers. For example, on Ricardo's *Principles of Political Economy and Taxation* (hereinafter, *Principles*), his brother Moses commented that "[t]he

train of argument is derived from a few luminous principles” and “its conclusions are demonstrated with almost mathematical precision” (*Works* X, 10; [] is added).¹ Henry Brougham, one of Ricardo’s friends, states that the ideas presented by Ricardo, who “had dropped from another planet,” “were often, indeed, abundantly theoretical, sometimes too refined for his audience, occasionally extravagant” (*Works* V, 56).² Shoup, in *Ricardo on Taxation*, comments that Ricardo’s theory of taxation is abstract because of his discussions of unrealistic tax regimes and his limited treatment of the existing tax situation (Shoup 1960, 80-81, 93, 102, 207).

While these characteristics of Ricardo’s economics have been praised as facilitating understanding of economic mechanisms, they have also attracted criticism for not necessarily corresponding to actual economic conditions. Ricardo’s economics has received a great deal of historical attention when considering the merits and demerits of abstract economic analysis, and is thus suitable for reevaluating such analytical approaches. By focusing on Ricardo’s theory, we can reconsider the significance of abstract analysis in economics more generally.

Ricardo’s method—the method of deductive reasoning from certain premises—is represented by the idea of “strong cases,” and is related to his perception of political economy.³ Addressing this point in a letter to his friend, Thomas Robert Malthus (1766–1834), he wrote “If I am too theoretical which I really believe is the case, —you I think are too practical. There are so many combinations, —so many operating causes in Political Economy, that there is great danger in appealing to experience in favor of a particular doctrine, unless we are sure that all the causes of variation are seen and their effects duly estimated” (*Works* VI, 295). As described by Mawatari (1990, 28), “According to Ricardo, it is necessary to “assume the strong cases” in order to remove disturbing factors, because there are too many operating causes in economic phenomena.” However, this implies a need “to assume the premises of deductive reasoning in such a way as to fit or be convenient to the deductive reasoning,” thus building “a kind of hypothetico-deductive method” (Mawatari 1990, 29).⁴ Ricardo “was clearly a convinced advocate” of this method, “vigorously denying that facts can ever speak for themselves”

¹ *On the Principles of Political Economy and Taxation* is included in vol. 1 of *The Works and Correspondence of David Ricardo* (Ricardo 1951-73). In this paper, *The Works and Correspondence of David Ricardo* is abbreviated as *Works* and the volume number is expressed in Roman numerals.

² Mallet, also a contemporary of Ricardo, defines Ricardo’s *Principles* as “almost a sealed book to all but men capable of pursuing abstract reasoning by a strict and mathematical analysis” (Mallet 1980 [1921] IV, 224).

³ Ricardo tried to offer an abstract argument using “strong cases” in his *Principles*. In a letter to Malthus dated May 4, 1820, he argued: “I am not convinced by your arguments on those subjects on which we have long differed. Our differences may in some respects, I think, be ascribed to your considering my book as more practical than I intended it to be. My object was to elucidate principles, and to do this I imagined *strong cases* that I might shew the operation of those principles” (*Works* VIII: 184; [] is added).

⁴ Sasaki also considers “strong cases” as “a method of thought experiment to explore causal relations between economic phenomenon” (Sasaki 2001).

(Blaug 1992, 53).⁵ Ricardo's reliance on "strong cases" has been cited as evidence of his abstract method.⁶ Moreover, because of this methodological character, he was considered "responsible for transporting economics back to a 'pre-Newtonian' age by adopting a purely rationalistic method—that of deducing effects from assumed causes *without reference to empirical evidence at any stage of the investigation*" (Hollander 1979, 653; italics added).⁷

According to Depoortère, however, Ricardo was influenced by Dugald Stewart (1753-1828) and, "[l]ike Stewart and his pupils, Ricardo advocated an empirical approach for political economy" (Depoortère 2008, 96; italics and [] added).⁸ Regarding Ricardo's *Reply to Bosanquet*,⁹ he also notes that "Ricardo's analysis of the exchanges between London, Hamburg, and Paris pointed out the complexity of phenomena and the difficulty of stating accurately all the circumstances involved in a particular fact." Therefore, "a particular fact should not be advanced to refute a theoretical principle before all the circumstances that have been abstracted during the analysis, but are at work in the phenomenon, have been ascertained and their effects properly stated" (Depoortère 2008, 103).¹⁰ Ricardo pointed out the danger of appeals to a particular fact, raising *the empirical examples* of exchange. Therefore, he put forth not "a theory based on experience unassisted by the power of abstraction," but a mainly abstract theory (Depoortère 2008, 106).¹¹ However, Ricardo referred to

⁵ On the other hand, Morgan thought "that Ricardo's model-building was a mixture of inductive and deductive work, and not a process of abstraction" (Morgan 2012, 45).

⁶ About the reason why Ricardo's argument is abstract, it is also said that it was mainly concerned with long-term situations (Cremaschi and Dascal 1996).

⁷ O'Brien also considered Ricardo's method as unrealistic. "Ricardo's deductive system gave rise to a number of testable propositions ... But the whole tenor of Ricardo's approach was opposed to verification. The message which his successors took from his procedure was that is conclusion was reached logically from plausible premises it was correct even if the available data contradicted it" (O'Brien 1975, 69).

⁸ Stewart's method was passed on to his disciple, Francis Horner (1778–1817), and his idea was passed on from Horner to Ricardo during the bullion controversy (Depoortère 2008, 91, 93-96).

⁹ Ricardo's *Reply to Mr. Bosanquet's Practical Observations on the Report of the Bullion Committee* (1811).

¹⁰ This idea is consistent with Ricardo's concept of nature similar to Thomas Reid (1710–1796)'s and Stewart's concept of nature. "According to Ricardo, nature is complex: experience generally supplies facts that are the result of a combination of causes, whose effects concur to produce a single phenomenon. As a consequence, before advancing a particular fact in vindication of a theory or as a proof of its falseness, all the circumstances involved in this fact must be established in an exhaustive way" (Depoortère 2008, 98).

¹¹ Ricardo dealt with the abstract theory mainly because of the difficulty dealing with a fact directly. We can confirm about it by a letter from Ricardo to Trower dated October 4, 1821. In a letter dated September 13, 1821, Trower asked Ricardo to write a practical work suitable for the practice of taxation. In this reply, Ricardo answered as follows. "I, as well as you, would like to see an application of the Principles of Political Economy, as now understood, to the practical operation of taxation, and I hope it will not be long before such a work appears ... You make a great mistake in supposing me capable of producing so important a work" (*Works IX*, 87-8). In this letter, Ricardo acknowledges that he himself do not have the ability to deal with the practical work of taxation. In other words, it means that Ricardo has not written such a work, and that his past works were dealt with abstract.

empirical evidence in the process of pursuing an abstract method. In this sense, Ricardo “endorses an empirical view of political economy” (105-106).¹²

Depoortère showed that Ricardo emphasized the relationship between theory and experience. On the other hand, however, he suggests that Ricardo’s method involved approaches from abstract theory to particular fact. In this regard, Stewart’s method was the “first to state general principles by way of analysis and then, with the assistance of those principles, to deal synthetically with particular facts and current questions.” This method was taken up by Horner, who subsequently influenced Ricardo. As a result of this succession, Ricardo positioned his theory as a “standard of reference” in order to consider particular facts and real problems (Depoortère 2008 91, 96).¹³ Depoortère (2008), however, does not seem to go far enough in explaining the process of approaching particular facts from abstract theory. This paper thus shows Ricardo’s methodological process in operation, proceeding from abstract to practical theory and its correspondence with various facts, using the example of his work on taxation. The multilayered nature of Ricardo’s method can thus be demonstrated. While Ricardo’s method was based on “strong cases,” he made his arguments by incorporating disturbing factors into his strong cases appropriately according to circumstance.

To support this argument, the paper refers to the discussions in Chapter 16 of the *Principles* and in the 1820 letter from Ricardo to John Ramsay McCulloch (1789–1864). Chapter 16 of the *Principles*, “Taxes on Wages,” discusses the effect of tax on wages from a comparative static perspective, and addresses how wages change depending on the use of tax revenue. Moreover, the chapter raises the case of tax revenue sent to foreign countries as subsidies (the foreign subsidy problem) as a possible use of tax revenue. Conversely, while the foreign subsidy problem is discussed in a letter from Ricardo to McCulloch in 1820, a different conclusion is reached from that in *Principles*. Specifically, the version of the foreign subsidy problem described in the 1820 letter attaches a new theoretical condition to that found in *Principles*.

¹² Depoortère’s argument seems to answer Mawatari’s question on Ricardo’s method. According to Mawatari, Ricardo was “negative to reason from a fact, but positive to check a theory with a fact.” However, Ricardo does not “think that the verification and the falsification of theory always go well,” it seems that he “does not necessarily adopt a simple verificationism or falsificationism.” Because “for example, regarding the decline of profit rate, even if it was confronted with the fact that the profit rate increased, he dismissed this saying that it was due to special circumstances during the Napoleon War, and he also noted there was the case that the empirical date itself was dubious” (Mawatari 1990, 30-31). On the other hand, Blaug refers to Ricardo’s verification, but it seems to be a simple image of verificationism. “Much as Ricardo was addicted to “the abstract method,” he had never objected, in principle, to the procedure of submitting “speculations” to “the test of fact”” (Blaug 1958, 182).

¹³ For the “standard of reference,” Ricardo argues as follows. “For any man to compare the account of Hamburgh exchange, and of the Parisian, and not to see that the accounts were incorrect, that the facts could not be as so stated, is very like a man who is all for fact and nothing for theory. Such men can hardly ever sift their facts. They are credulous, and necessarily so, because *they have no standard of reference*” (*Works* III, 181; italics added).

In Section 2, the effect of tax on raw produce outlined in Chapter 9 of the *Principles* will be discussed first, after which the effect of tax on wages provided in Chapter 16 will be explained in light of theoretical considerations. The foreign subsidy problem will be discussed in the context of the latter. Section 3 will then describe the foreign subsidy problem in the 1820 letter and its differences with the account in Chapter 16. Finally, this study will be summarized in Section 4.

2 Ricardo's Wage Taxation Theory and the Foreign Subsidy Problem in Chapter 16 of the *Principles*

The focus of this paper's analysis is on a comparison of the foreign subsidy problem in Chapter 16 of *Principles* with that in the 1820 letter from Ricardo to McCulloch. While the former assumes a tax on wages, the latter assumes a tax on wage goods. Therefore, in this section we first confirm the effects of tax on raw produce (tax on wage goods) set forth in Chapter 9, before confirming the effects of tax on wages as in Chapter 16.¹⁴ In the latter explanation, particular attention is given to the method employed by Ricardo to discuss tax on wages. Finally, in considering the method of Chapter 16, the foreign subsidy problem is also addressed.

2.1 Tax on Raw Produce

Ricardo argues that corn or raw produce is the first and most important consumption good in the wage-good bundle (*Works* I, 243), which means that consideration of a tax on corn can help to improve understanding of a tax on labourers' consumption goods.

"A tax on corn," according to Ricardo, "would fall on the consumers of corn, and would raise its value as compared with all other commodities, in a degree proportioned to the tax" (*RW* I, 159). In Chapter 9 of the *Principles*, "Taxes on Raw Produce", Ricardo demonstrates that the price would increase by a sum equal to the tax, as follows.

If the price of raw produce did not rise so as to compensate the cultivator [agricultural capitalist] for the tax, he would naturally quit a trade where his profits were reduced below the general level of profits; this would occasion a diminution of supply, until the unabated demand should have produced such a rise in the price of raw produce, as to make the cultivation of it equally profitable with the investment of capital in any other trade. / A rise of price is the only means by which he

¹⁴ Ricardo's wage taxation theorem (tax on wage goods and tax on wages) is interpreted based on the assumption of subsistence wages by, for example, St. Clair (1957), Blaug (1958), Musgrave (1959), Mitchell (1967), and Dome (2004). On the other hand, Hollander (1979) argues that Ricardo's wage taxation theorem is not necessarily based on the assumption of subsistence wages. This paper adopts the standpoint of subsistence wages.

could pay the tax, and continue to derive the usual and general profits from this employment of his capital. He could not deduct the tax from his rent, and oblige his landlord to pay it, for he pays no rent.

(*Works I*, 156-57; [] added)

An agricultural capitalist would raise his capital because, if the price of raw produce did not rise sufficiently in proportion to taxes, his average profit rate would diminish relative to other sectors. In this case, however, Ricardo assumes a constant demand for raw produce. In order to meet this unchanged demand, the price of raw produce must rise in response to a rise in taxation.

Ricardo also stated the following: “A tax, however, on raw produce, and on the necessaries of the labourer, would have another effect.” Specifically, the tax would raise money wages per capita while lowering the profit rate (*Works I*, 159). Adopting the Malthusian principle of population and the permanently fixed wage assumption, Ricardo demonstrated the second effect to be as follows. “From the effect of the principle of population on the increase of mankind, wages of the lowest kind [i.e., those of the labouring class] never continue much above that rate which nature and habit demand for the support of the labourers.” As the labourers are “never able to bear any considerable proportion of taxation,” if they were compelled to pay a tax in addition the cost of raw produce or any other good consumed by them, “they would not be able to subsist on the same wages as before, and to keep up the race of labourers.” Therefore, the money wage rate “would inevitably and necessarily rise.” Following Ricardo’s principle on the relationship between the rate of wages and profit, the latter “would fall” in proportion to the increase in wages (*Works I*, 159).

2.2 Tax on Wages and Foreign Subsidy Problem

At the beginning of Chapter 16, “Taxes on Wages,” Ricardo explains the basic relationship between a tax on wages and a tax on necessaries (tax on raw produce).

Taxes on wages will raise wages, and therefore will diminish the rate of the profits of stock. We have already seen that a tax on necessaries [raw produces] will raise their prices, and will be followed by a rise of wages. The only difference between a tax on necessaries [raw produces] and a tax on wages is, that the former will necessarily be accompanied by a rise in the price of necessaries [raw produces], but the latter will not...A tax on wages is wholly a tax on profits; a tax on necessaries [raw produces] is partly a tax on profits and partly a tax on rich consumers. The ultimate effects which will result from such taxes, then, are precisely the same as those which result from a direct tax on profits.

(*Works I*, 215; [] added)

As in the case of a tax on raw produce, a tax on wages causes money wages to rise in proportion to the tax with a corresponding decline in profit rate. According to Ricardo, the only difference between a tax on necessaries (raw produce) and one on wages lies in whether the commodity price will rise as a result of taxation; the two taxes are equal in terms of elevating money wages and lowering profit rate.

At this initial stage of Chapter 16, Ricardo merely explains that the tax on wages causes a rise in money wages and a decrease in the profit rate, without concretely elaborating on how this economic phenomenon occurs. He goes on, however, to criticize David Buchanan (1779–1848)’s argument on tax on wages, providing a detailed description of the conditions under which a tax on wages will have the aforementioned effects. These conditions are rooted in two concepts: (1) the Malthusian principle of population and (2) comparative statistics on wage changes in response to various uses of tax revenue.

In introducing Buchanan’s standpoint, Ricardo claims that “he denies that a tax on the wages of labour would raise the price of labour” (*Works* I, 216). Thus, Ricardo first criticizes Buchanan on the basis of Malthusian principle.

Mr. Buchanan has quoted, with great approbation, the following able passage from Mr. Malthus’s work on population, which appears to me completely to answer his objection. “The price of labour, when left to find its natural level, is a most important political barometer, expressing the relation between the supply of provisions and the demand for them, between the quantity to be consumed and the number of consumers; and, taken on the average, independently of accidental circumstances, it further express, clearly, the wants of the society respecting population...” / “The price of labour will express clearly the wants of the society respecting population;” it will be just sufficient to support the population, which at that time the state of the funds for the maintenance of labourers requires. If the labourer’s wages were before only adequate to supply the requisite population, they will, after the tax, be inadequate to that supply, for he will not have the same funds to expend on his family. Labour will therefore rise, because the demand continues, and it is only by raising the price that the supply is not checked.

(*Works* I, 218-19)

The adjustment of money wages based on Malthusian principle is a long-term phenomenon, and there is no implication that money wages will rise *immediately* by an amount equal to the tax. Ricardo therefore responds to this by adding the condition of “government demand for labour.”

As Ricardo explains, when government demand for labour rises:

Mr. Buchanan forgets that the fund raised by the tax is employed by government in maintaining

labourers, unproductive indeed, but still labourers. If labour were not to rise when wages are taxed, there would be a great increase in the competition for labour, because the owners of capital, who would have the same funds for employing labour; whilst the Government who received the tax would have an additional fund for the same purpose. Government and the people thus become competitors, and the consequence of their competition is a rise in the price of labour. The same number of men only will be employed, but they will be employed at additional wages.

(*Works I*, 220-21; [] added)

The government obtains tax revenues from taxes on wages. If it then uses tax revenues to employ unproductive labourers, such as soldiers and sailors, the labour market must add government demand for labour to private demand. Money wages rise accordingly due to competition for labourers in the private and government sectors. If the funds available to employ labourers in the private sector remains constant, some of those employed in the private sector transition to government employment as a result of the rise in money wages. Thus, by positing the condition of “government demand for labour,” Ricardo explains that tax on wages *immediately* increases money wages by an amount equal to the tax.

If, however, there is no “government demand for labour,” does a tax on wages still have this effect? To address this issue, in Chapter 16 Ricardo deals with the case of wage changes in response to the government sending tax revenues as subsidies to a foreign country (the foreign subsidy problem). According to Ricardo, when government demand for labour rises in a country, the government usually spends tax revenues on the employment of unproductive workers, such as “soldiers” or “sailors.” Conversely, if the government disburses the tax revenue as a foreign subsidy, it will ultimately be used to hire foreign labourers.

If when the tax were levied Government at once exported the produce of it as a subsidy to a foreign State, and if therefore these funds were devoted to the maintenance of foreign and not of English labourers, such as soldiers, sailors, &c. &c.; then, indeed, there would be a diminished demand for labour, and wages might not increase although they were taxed; but the same thing would happen if the tax had been laid on consumable commodities, on the profits of stock, or if in any other manner the same sum had been raised to supply this subsidy: less labour could be employed at home. In one case wages are prevented from rising, in the other they must absolutely fall.

(*Works I*, 221)

In the case of foreign subsidies, Ricardo argues here that the tax on wages does not raise money wages, and the situation of labourers deteriorates domestically. If the government sends tax revenues overseas through foreign subsidies, there will be no government demand for labour at home and no increase in money wages from competition between the government and private sectors. If money

wages do not rise in response to taxation, the necessaries purchasable by labourers domestically will be less than before taxation. If real wages before taxation are at a subsistence level, workers will be unable to survive on real wages reduced by taxation, leading to a decline in labour supply based on the principle of population.

In Chapter 16, Ricardo explains the concrete mechanism of tax on wages in accordance with conditions derived from the “Malthusian principle of population,” “government demand for labour,” and “foreign subsidy.” Although Ricardo essentially criticized Buchanan’s view of tax on wages, his treatment of the foreign subsidy problem was an exception as it closely followed Buchanan’s argument. However, in the 1820 letter from Ricardo to McCulloch, an alternate version of the foreign subsidy is presented. The next section explains the foreign subsidy problem as described in the 1820 letter, contrasting with that in Chapter 16.

3 The Foreign Subsidy Problem in the 1820 Letter

The 1820 letter dealing with the foreign subsidy problem was part of the correspondence between Ricardo and McCulloch in which they debated whether wage taxation had a deleterious effect on the conditions of labourers. Their discussion of the subject began in a letter dated March 19, 1820. McCulloch had published his “Taxation and the Corn Laws” in the January 1820 issue of the British quarterly *Edinburgh Review*, and the dispute that began in the letter of March 19 originated in a discussion of that paper.

McCulloch mentioned the deterioration in workers’ conditions as a result of wage taxation in “Taxation and the Corn Laws,” which became a point of contention in the correspondence with Ricardo. McCulloch argued that wage taxation was detrimental to workers, whereas Ricardo argued that it did not fundamentally have such an effect (*Works* VIII, 165, 169-70, 174-75). Their dispute over the wellbeing of workers subject to wage taxation quickly focused on the issue of “government demand for labour.”

Ricardo argued that wage taxation would necessarily result in private sector workers being shifted to the government sector, because the government demand for labour was caused by the taxes (*Works* VIII, 176-77).¹⁵ McCulloch, however, was not fully satisfied with Ricardo’s response.¹⁶ Thus, in the letter of May 15, he hypothesized that in the case of a subsidy from Ireland to Russia, i.e., a foreign subsidy, the position of workers would deteriorate due to the required wage taxation.

Suppose Ireland is obliged to remit a subsidy of 10 millions to Russia and that there are two methods

¹⁵ However, Ricardo recognizes the case that there are some workers that cannot get a job in government sector.

¹⁶ In response to Ricardo’s claim, McCulloch maintained an opposing stance, saying, “I cannot help differing with you on the subject of taxation” (*Works* VIII, 189).

of raising it—a duty on potatoes [a tax on necessities] and a duty on claret and coaches [a tax on luxuries]—If the first method be adopted it is plain wages will not rise in proportion to the duty; for as the subsidy is to be remitted to a foreign country it cannot enable the Government to employ more labour, and as the number of labourers will remain the same, and the demand for their labour is not increased, they must continue to suffer the extreme of misery until the pressure of famine or the slackened operation of the principle of population shall have equalized the supply and demand...

(*Works* VIII, 189-90; [] is added)

According to McCulloch, a foreign subsidy from Ireland to Russia would reduce the labour supply in Ireland. The government in Ireland generates no demand for labour in Ireland because the revenue from taxes on wage goods is sent to Russia. There is no competition between the government and private sectors to acquire labourers, thus money wages do not rise. If the wages of Irish workers before taxation are at subsistence level, after taxation they will be unable to support themselves due the decline in real wages. The workers would find themselves oppressed by famine and, under Malthusian principles, the labour supply in Ireland would decline.

McCulloch's reference to the foreign subsidy problem might reflect an awareness of Ricardo's argument in Chapter 16 of the *Principles*. However, Ricardo's reply must have surprised him. In a letter to McCulloch dated June 13, Ricardo argued that not even a temporary reduction in labour supply in Ireland would occur as a result of foreign subsidies.

The case you put to support your opinion that it is of great importance to the labourers whether taxes be imposed on the luxuries of the rich or on their own necessities, is well chosen. You suppose a subsidy to be (*annually*, I believe) remitted from Ireland to Russia, and you ask whether it will be of no consequence whether the taxes to raise that subsidy be imposed on potatoes [necessaries], or on claret and coaches [luxuries]? As no more labourers will be employed by Government, and consequently there can be no increased competition for them, you conclude that notwithstanding the taxes on the necessities of the poor, their wages will not be raised till after they are reduced to the extreme of misery, and famine, or the slackened operation of the principle of population have equalized the supply to the demand. According to your own view of the case, when the demand has to operate on the diminished supply, wages will rise very high, not only so high as to compensate the labourer for the tax imposed on him, but much higher, for on no other conditions can he replace the void which misery had made in the number of labourers. Before the tax, his wages were only sufficient to keep up the supply equal to the demand. If you add the tax to his wages, he can do no more; and therefore if famine and misery have occasioned depopulation, there must be an extraordinary stimulus to place things on their former footing. I should say then that according to your admission the labourer would on an average have his wages increased equal to the amount of

the tax, but he would first suffer from their being extraordinarily low, and then benefit from their rising extraordinarily high. *In truth, however, I think that they will neither be very low or high, but that they will undergo such a moderate increase as will compensate the labourer for the tax laid on his necessaries.* It is the interest of all parties that they should so rise. I consider that the quantity of necessaries which the wages of a labourer will enable him to purchase, is really the efficient regulator of the population. The circumstances of the country require that the population should continue to increase at the same rate after the subsidy is granted to Russia as before, for there is no diminished demand for labour, and the question between us comes to this. Will the population be in the first instance very much depressed, and then afterwards violently stimulated, or will it continue in that course which the circumstances of the capital and the demand for labour originally required it to be? *The value of things I believe to be influenced, not by immediate supply and demand, but also by contingent supply and demand.*

(Works VIII, 195-96; italics and [] added)

In this letter, Ricardo repeats McCulloch's argument in the letter of May 15 before advancing his own view. According to Ricardo, even if tax revenues were sent to foreign countries as a subsidy, the labour supply would not decrease. This is because money wages in Ireland "will undergo such a moderate increase as will compensate the labourer for the tax laid on his necessaries" immediately due to the "contingent supply and demand," though there is no government demand for labour.

It is challenging to understand what Ricardo means by "contingent supply and demand." In this regard, Hollander argues that Ricardo explains the rise in money wages based on "a *forecast* by employers" for the future (Hollander 1979, 393; italics added).¹⁷ So, if capitalists need the same labour supply after taxation as before, and if they anticipate that money wages will increase by the same amount as the tax on that labour supply (as a result of adjustments to the labour supply after taxation based on the population principle), they will raise money wages immediately after taxation without waiting for an adjustment of labour supply. The original effect of the foreign subsidy is thus disturbed by the existence of a "*forecast* by employers."¹⁸ Consequently, Ricardo claimed in the 1820 letter to McCulloch that in the case of the foreign subsidy problem the position of workers need not deteriorate after wage taxation under certain conditions.

The two foreign subsidy problems may be summarized as follows. Why do Ricardo's arguments on the subject differ between Chapter 16 and the 1820 letter? It is a consequence of a theoretical

¹⁷ "The precise mechanism he envisaged in the market remains difficult to grasp, but it would appear that Ricardo allowed for a *forecast* by employers of the consequences of permitting real wages to decline—namely a reduced growth rate of labour supply—and their consequential decision to pay higher money wages unilaterally and thus short-circuit the otherwise lengthy process of adjustment" (Hollander 1979, 393; italic is original).

¹⁸ Here, the effect of foreign subsidy means the restraint of increasing money wages in wage taxation.

condition, the “*forecast by employers*,” newly added to the foreign subsidy problem as described in the 1820 letter. In the case of Chapter 16, because tax revenue is sent abroad, government demand for labour is not generated, and money wages do not rise. By contrast, in the 1820 letter, although tax revenue is sent abroad and there is no government demand for labour, money wages rise immediately due to the “*forecast by employers*.” Despite both texts addressing the same subject of foreign subsidy, the results differ because of an altered assumption.¹⁹ Chapter 16 emphasizes the effect of foreign subsidy, while the 1820 letter stresses the impact of a disturbing factor on the subsidy.

What methodological significance can be derived from these two foreign subsidy problems? Ricardo’s method has been regarded primarily as “abstract,” based on his use of “strong cases.” From the two foreign subsidy problems, however, it is apparent that Ricardo’s method is multilayered. Based on our analysis, the foreign subsidy problem in Chapter 16 may be regarded as “a strong case,” which concentrates on the effect of a foreign subsidy. The version presented in the 1820 letter, meanwhile, constitutes a disturbing factor to the strong case. If our interpretation is correct, Ricardo not only dealt with “strong cases” of operating causes, but also offered a theory corresponding to variant facts through the addition of disturbing factors to the “strong cases.” Ricardo’s method was not just abstract, but was a multilayered process able to gradually approach particular phenomena and facts from the perspective of abstract theory. At the conclusion of the 1820 letter, Ricardo argues “The value of things I believe to be influenced, not by immediate supply and demand, but also by contingent supply and demand.” This seems to express Ricardo’s multilayered method that results change according to conditions.

4 Conclusion

The purpose of this paper was to demonstrate how Ricardo’s methodology advances from abstract theory to practical theory and correspondence with various facts, relying on an example from his approach to taxation. In particular, Ricardo offered different perspectives on the foreign subsidy problem in Chapter 16 of the *Principles* and his 1820 letter to McCulloch. Ricardo presented the abstract theory as “a strong case” in Chapter 16, but adopted a different attitude to theory in the 1820 letter through the adoption of a disturbing factor. We think such a methodological process means that

¹⁹ Ricardo’s *Principles* was revised to the third edition, but the argument of foreign subsidy problem in Chapter 16 was consistent through each edition. After the 1820 letter to McCulloch, Ricardo published the third edition of the *Principles* in 1821, but the new condition, “*forecast by employers*” was not added at the foreign subsidy problem in Chapter 16. Ricardo distinguished the foreign subsidy problems according to situations between Chapter 16 and the 1820 letter. Among two foreign subsidy problems, Hollander emphasizes Ricardo’s argument in the 1820 letter and deal with as if it is Ricardo’s main view (Hollander 1979, 393). However, we think such an interpretation by Hollander is inadequate.

Ricardo's method is amenable to encompassing a variety of facts based on abstract theory.²⁰ Based on a close reading not only of the *Principles* but also of Ricardo's correspondence, we argue that his method, which is often considered to be purely abstract, was in fact multilayered.²¹

We also argue that Ricardo's theory can be considered "realistic." With respect to the short-term effect of wage taxation, Chapter 16 first shows that taxes on wages raise money wages due to the government demand for labour. If, however, this revenue is directed to foreign subsidies, then taxes on wages do not raise money wages because the government demand for labour is absent. As the 1820 letter shows, however, given the presence of a foreign subsidy, taxes on wage goods raise money wages through the influence of a "forecast by employers." This line of reasoning shows that Ricardo's theory on the short-term effects of wage taxation is capable of incorporating a variety of facts. Contemporary "empirical" scholars drew conclusions that could only be reached under a particular set of conditions. By contrast, in Ricardo's theory construction, an economic problem that is initially addressed in one way, "A," may under alternate conditions become "B," or even "C" under yet other conditions. Ricardo thus constructs his theory in ways that make it adaptable to a variety of circumstances. In this sense, Ricardo's theory is indeed "abstract," but it is also more "realistic." Ricardo's method is often considered to be abstract (in comparison with an empiricist opponent such as Malthus),²² but this is not necessarily the case. It may be said that Ricardo was rather a cautious man in that he thought "various quantitative conditions must be considered" when investigating reality.²³

In this paper, we confirmed Ricardo's multilayered method on the basis of his approaches to the foreign subsidy problem. This is not to deny the possibility of numerous other comparable examples of his method. We therefore need to seek additional examples to deepen our argument, engaging in

²⁰ Sasaki (2001) raised an example of "strong cases" in *Principles* that "the rate of profit would decline progressing the capital accumulation remaining the restriction of corn imports." In this regard, he also referred to Ricardo's "practical policy" that was possible to reduce the decline of profit rate, removing the restriction of corn imports (Sasaki 2001, 58-59). Sasaki's argument tries to derive the gradual discussion into Ricardo's theory, it supports our argument that Ricardo's method is multilayered. But, the essence by Sasaki (2001) was that Ricardo's "principles of economics were used to prevent the consequence introduced there from happening in reality" (Sasaki 2001, 60). It is not necessarily to aim to show Ricardo's methodological process like this paper.

²¹ We can confirm that Ricardo's method is multilayered from what we call "Ricardian equivalence theorem." Ricardo compared the effect of taxation and public debt in Chapter 17 "Taxes on other Commodities than Raw Produce" of the *Principles* to reveal the best way of imposing fiscal revenue. According to it, the economic burdens between taxation and public debt are equivalence in theory, but taxation is desirable than public debt as the way of imposing fiscal revenue considering the debt illusion that is a practical factor. This means that there is prepared for abstract discussion firstly, and next, that it gradually approaches to practical discussion by introducing the practical factor. For such an interpretation of "Ricardian equivalence theorem," see Sturn (2015, 449).

²² For example, Schumpeter believes Ricardo's abstract conclusions are applied directly to the complex real world and calls that "Ricardian Vice" (Schumpeter 1954, 472-473).

²³ Depoortère considered Ricardo as "very cautious with respect to particular facts being considered as proofs of the inadequacy of a theory" (Depoortère 2008, 97).

close reading of the *Principles*, correspondence involving Ricardo's contemporaries, Hansard, etc. Moreover, if Ricardo's method is multilayered, how did it affect Ricardians such as James Mill and John Stuart Mill? These are questions to be addressed in future research.

Acknowledgments

This work was supported by Japan Society for the Promotion of Science under Grant-in-Aid for Research Activity start-up: 19K23238. I am also grateful to Kensuke Sasaki, Koki Hirose, Shin Kubo for the very helpful comments and suggestions. Responsibility for this paper's contents, however, must remain with me.

Disclosure statement

No potential conflict of interest was reported by the author.

Funding

Japan Society for the Promotion of Science under Grant-in-Aid for Research Activity start-up: 19K23238.

References

- Blaug, M. 1958. *Ricardian Economics*. New Haven: Yale University Press.
- . 1992. *The Methodology of Economics*, 2nd edition. Cambridge, USA: Cambridge University Press.
- Cremschi, S and Dascal, M. 1996. Malthus and Ricardo on Economic Methodology. *Journal of the History of Political Economy* 28 (3): 475-511.
- Depoortère, C. 2008. On Ricardo's Method: The Scottish Connection Considered. *Journal of the History of Political Economy* 40 (1): 73-110.
- Dome, T. 1992. Ricardo's Theory of Tax Incidence: A Sraffian Re-interpretation, *Cambridge Journal of Economics*. 16 (1): 43-53.
- . 2004. *The political economy of public finance in Britain 1767-1873*. London: Routledge.
- Hollander, S. 1979. *The Economics of David Ricardo*. Toronto: University of Toronto Press.
- Mallet, J. L. 1980 [1921]. "Diaries—J. L. Mallet." In *Political Economy Club founded in London 1821, Vol. 6, Minutes of Proceedings, 1899-1920; Roll of Members and Questions Discussed, 1821-1920: with Documents Bearing on the History of the Club*. London: Macmillan.
- Mawatari, S. 1990. *The Methodology of economics: from Smith to Friedman*. Nippon Hyoron Sha. (In Japanese)
- Mitchell, W. C. 1967. *Types of Economic Theory from Mercantilism to Institutionalism*, I, ed. J. Dorfman. New York: Augustus M. Kelley.

- Morgan, M. S. 2012. *The World in the Model: How Economists Work and Think*. Cambridge, UK: Cambridge University Press.
- Musgrave, R. A. 1959. *The Theory of Public Finance: A study of public economy*. New York: McGraw-Hill.
- O'Brien, D. P. 1975. *The Classical Economists*. Oxford: Clarendon Press.
- Ricardo, D. 1951-73. *The Works and Correspondence of David Ricardo*, edited by P. Sraffa with the collaboration of M. H. Dobb. 11 vols. Cambridge, UK: Cambridge University Press.
- Sasaki, K. 2001. *The Formation of Economic Methodology: The Conflict between Theory and Reality 1776-1875*. Hokkaido University Press. (In Japanese)
- Schumpeter, J. A. 1954. *History of Economic Analysis*. London: G. Allen & Unwin.
- Shoup, C. S. 1960. *Ricardo on Taxation*. New York: Columbia University Press.
- St. Clair, O. 1957. *A Key to Ricardo*. London: Routledge & Kegan Paul.
- Sturn, R. 2015. Ricardian Equivalence. In *The Elgar Companion to David Ricardo*, edited by H. D. Kurz and N. Salvadori. Cheltenham and Northampton: Edward Elgar: 449-455.