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**THE SMITHIAN ORIGIN  
OF RICARDO'S CORN-RATIO  
THEORY OF PROFITS:  
A SUGGESTED INTERPRETATION**

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### *Abstract of the paper*

*The money price of labour, Smith maintains, 'must always be such as to enable the labourer to purchase a quantity of corn sufficient to maintain him and his family either in the liberal, moderate, or scanty manner in which the advancing, stationary or declining circumstances of the society oblige his employers to maintain him'. On this basis, he argues that a rise in the money price of corn consequent upon the establishment of a bounty on its exportation leaves the surplus produce obtained in corn-growing (the difference between the quantity of corn produced and the quantity of corn the money wage must enable the workers to purchase) unaffected, so that the overall money revenue received by farmers and landlords together rises in the same proportion as the price of corn. When, therefore, Ricardo put forward the thesis that the profits of the farmer (and thus the general rate of profits) fall as more capital is employed on the land, to treat the wage as consisting in a given quantity of corn must have appeared to him (as it appeared to many other followers of Smith, including Ricardo's close friend and mentor, James Mill) as a legitimate simplification, and one able to supply an effective argument to use in discussion. Malthus, however, dismissed it as both unrealistic and misleading. Compelled to desist from arguing his position on the basis of the above assumption, Ricardo conceded that the rise in the money price of corn causes the corn price of labour to fall. The consideration of the above fall, he did however contend, makes no substantial difference to his conclusions. This is why the corn-ratio theory of profits, as Sraffa warns us, 'is never stated by Ricardo in any of his extant letters or papers', while, at the same time, Malthus continues to see it as the logical basis of Ricardo's position.*

# The Smithian origin of Ricardo's corn-ratio theory of profits: a suggested interpretation

Fernando Vianello\*

## 1. Introduction

As is well known, P. Sraffa's interpretation of Ricardo's early theory of profits has it that the latter's contention that 'it is the profits of the farmer which regulate the profits of all other trades' (Ricardo to Trower, 8 March 1814; VI, p. 104;<sup>1</sup> quoted more fully in Section 3 below) finds its rational foundation in a 'corn-ratio theory of profits' (Sraffa, 1951a, pp. xxxiii and xlix), based on the simplifying assumption that

in agriculture the same commodity, namely corn, forms both the capital (conceived as composed of the subsistence necessary for workers) and the product; so that the determination of profit by the difference between total product and capital advanced, and also the determination of the ratio of this profit to the capital, is done directly between quantities of corn without any question of valuation (Sraffa, 1951a, p. xxxi).

The circumstance that corn is employed as capital both in corn-growing and in all other trades, while no product of other trades is employed as capital in corn-growing, entails that

if there is to be a uniform rate of profits in all trades it is the exchangeable values of the products of *other* trades relatively to their own capitals (i.e.

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<sup>1</sup> VI stands for Ricardo (1951-73), vol. VI. All references to Ricardo's *Works and Correspondence* will be given in this form.

relatively to corn) that must be adjusted so as to yield the same rate of profits as has been established in the growing of corn; since in the latter no value change can alter the ratio of product to capital, both consisting of the same commodity (Sraffa, 1951a, p. xxxi).

‘Although this argument is never stated by Ricardo in any of his extant letters or papers’, Sraffa submits, ‘he must have formulated it either in his lost “papers on the profits of Capital” of March [actually February]<sup>2</sup> 1814 or in conversation’; the ground for this conjecture being that Malthus in his letter of 5 August 1814 (extensively quoted in Section 4 below)

opposes him in the following terms which are no doubt an echo of Ricardo’s own formulation: ‘In no case of production, is the produce exactly of the same nature as the capital advanced. Consequently we can never properly refer to a material rate of produce... It is not the particular profits or rate of produce upon the land which determines the general profits of stock and the interest of money’ (Sraffa, 1951a, pp. xxxi-xxxii; Malthus to Ricardo, 5 August 1814; VI, p. 117).

It is worth emphasizing that in 1814 the assumption that the wage consists in (a quantity of money equivalent to) a given quantity of corn was by no means regarded as a new and extravagant one. For it had been made by Adam Smith in his still highly influential treatment of the consequences of a rise in the money price of corn. The money price of corn, we find it asserted in book IV, chapter v (‘Of Bounties’) in the *Wealth of Nations*,

regulates the money price of labour, which must always be such as to enable the labourer to purchase *a quantity of corn sufficient to maintain him and his family* either in the liberal, moderate, or scanty manner in which the advancing, stationary or declining circumstances of the society oblige his employers to maintain him (WN, IV.v.a.12; italics added).<sup>3</sup>

On this basis, Smith argues that a rise in the money price of corn consequent upon the establishment of a bounty on its exportation leaves

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<sup>2</sup> The expression ‘papers on the profits of Capital’ is taken from H. Trower’s letter to Ricardo of 2 March 1814 (VI, p. 102). At that date Trower had already read the papers and was sending them back to Ricardo together with his comments — which, like Ricardo’s papers, have not come down to us.

<sup>3</sup> WN, IV.v.a.12 stands for Smith (1976), bk. IV, ch. v, section a, para. 12. All references to the *Wealth of Nations* will be given in this form.

the surplus produce obtained in corn-growing (the difference between the quantity of corn produced and the quantity of corn the money wage must enable the workers to purchase) unaffected, so that the overall money revenue received by farmers and landlords together rises in the same proportion as the price of corn.

In the spring of 1814, shortly after the writing of Ricardo's papers, Smith's position was criticized by Malthus in his *Observations on the Effects of the Corn Laws, and of a Rise or Fall in the Price of Corn on the Agriculture and General Wealth of a Country*. One of the points made in this pamphlet is that the workers do not consume corn alone — the same point Malthus was to make against Ricardo in the letter quoted by Sraffa, of 5 August 1814. Both in the pamphlet and in the letter Malthus contends that once the unrealistic assumption that the wage consists in a given quantity of corn is dropped, it becomes apparent that the money wage rises *in a lesser proportion* than the price of corn.

In what follows I shall first illustrate Smith's reasoning and the arguments urged against it by Malthus (Section 2). I shall then consider the Malthus-Ricardo discussion in the summer of 1814 on effective demand and the agricultural rate of profits (Section 3) and, in particular, the perception of Ricardo's position in Malthus's letter of 5 August 1814 (Section 4). Next, I shall offer a tentative reconstruction of how Ricardo, taking Smith's reasoning as his point of departure, reached the conclusion that the profits of the farmer (and thus the general rate of profits) 'must necessarily decrease with every augmentation of Capital employed on the land' (Ricardo to Trower, 8 March 1814; VI, p. 104; quoted more fully in Section 3 below) (Section 5). Lastly, I shall turn to the problem of how Ricardo argued his position before and after his reliance on the assumption that the wage consists in a given quantity of corn was shaken by Malthus's criticism (Section 6).

Like E. A. Poe's 'purloined letter', Smith's contention that a rise in the money price of corn causes the money wage to rise in the same proportion *because the latter must enable the worker to purchase a given quantity of corn*, was there for all to see, but it was not really seen — insofar, at least, as its bearing on the debate over Ricardo's early theory of profits is concerned. And the same is true of Malthus's rejection of the

above contention (as also of its being accepted by other influential authors).<sup>4</sup> What, as a result, does not seem to have been suspected is that it was in the *Wealth of Nations* that Ricardo found, here as in so many other instances, the building blocks with which to construct his theory.

2. *Adam Smith's contention that a rise in the money price of corn leaves its 'real price' unaffected. The arguments urged by Malthus against it*

'Corn', Smith observes, 'or whatever else is the common and favourite vegetable food of the people',

constitutes, in every civilized country, the principal part of the subsistence of the labourer... Butcher's-meat, except in the most thriving countries, or where the labour is most highly rewarded, makes but an insignificant part of his subsistence; poultry makes a still smaller part of it, and game no part at all... The money price of labour, therefore, depends much more upon the average money price of corn, the subsistence of the labourer,<sup>5</sup> than upon that of butcher's-meat, or of any other part of the rude produce of land (WN, I.xi.e.29).

A second reason behind the simplifying assumption that the wage consists in a given quantity of corn may, however, be tentatively put forward. The money price of corn, Smith maintains,

regulates the money price of all the other parts of the rude produce of land, which, in every period of improvement, must bear a certain proportion to that of corn,<sup>6</sup> though this proportion is different in different periods<sup>7</sup> (WN, IV.v.a.13).

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<sup>4</sup> See Section 2 below.

<sup>5</sup> Smith refers to corn as 'the subsistence of the labourer' also in the following passage: 'Equal quantities of labour will at distant times be purchased more nearly with equal quantities of corn, the subsistence of the labourer, than with equal quantities of gold and silver, or perhaps of any other commodity' (WN, I.v.15).

<sup>6</sup> The value of grass, Smith maintains, bears 'what can be called [a] natural proportion to that of corn' (WN, I.xi.b.10) — the reason for this being the necessary 'equality... between the rent and profit of grass and those of corn; of the land of which the immediate produce is food for cattle, and of that of which the immediate produce is food for men' (WN, I.xi.b.9). 'Corn', he explains, 'is an annual crop. Butcher's-meat, a crop which requires four or five years to grow. As an acre of land, therefore, will produce a much smaller quantity of the one species of food than of the other, the inferiority of the quantity



The aggregate of (corn and non-corn) farm products consumed by the worker and his family is thus made equivalent, in every 'period of improvement', to a given quantity of corn, so that the latter can be taken as representative of the former. As a ground for his opinion that the money wage must enable the worker to purchase a given quantity of corn, Smith may well have relied not only on the great importance of corn in the workers' consumption, but also on the above equivalence. (It should, however, be noted that no textual evidence can be offered in favour of this conjecture.)

Through its influence on the money wage and on the money price of farm products, the money price of corn regulates the money price of manufactures:

By regulating the money prices of all the other parts of the raw produce of land, it regulates that of the materials of almost all manufactures. By regulating the money price of labour, it regulates that of manufacturing art and industry. And by regulating both, it regulates that of the complete manufacture. The money price of labour and of every thing that is the produce either of land or of labour, must necessarily either rise or fall in proportion to the money price of corn' (WN, IV.v.a.14).<sup>8</sup>

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must be compensated by the superiority of the price. If it was more than compensated, more corn land would be turned into pasture; and if it was not compensated, part of what was in pasture would be brought back into corn (WN, I.xi.b.8). Thus, 'the rent and profit of corn must necessarily regulate, upon the land which is fit for producing it, the rent and profit of pasture' (WN, I.xi.b.8). On much the same grounds, Smith holds that the rent and profit obtained on the lands 'employed in producing either food for men or food for cattle... regulate the rent and profit of all other cultivated land. If any particular produce afforded less, the land would soon be turned into corn or pasture; and if any afforded more, some parts of the lands in corn or pasture would soon be turned to that produce' (WN, I.xi.b.19).

<sup>7</sup> On how the relative value of corn and of other farm products changes from one 'period of improvement' to another, see WN, I.xi.b.6, 7 and WN, I.xi.i-n.

<sup>8</sup> Elsewhere in the *Wealth of Nations* Smith states that 'the variations in the price of labour, not only do not always correspond with those in the price of provisions, but are frequently quite opposed' (WN, I.viii.52). The reason for this is that the price of provisions is only *one of the two circumstances* which regulate the money wage: 'The money price of labour is necessarily regulated by two circumstances: the demand for labour, and the price of the necessities and conveniences of life. The demand for labour, according as it happens to be increasing, stationary or declining, or to require an increasing, stationary, or declining population, determines the quantity of the necessities and conveniences of life which must be given to the labourer; and the money price of labour is determined by what is requisite for purchasing this quantity' (WN, I.viii.52).

To say that the money wage rises or falls in the same proportion as the money price of corn is tantamount to saying that the 'real price' of corn (measured by the quantity of labour it can command)<sup>9</sup> remains unchanged. In Smith's own words, 'The nature of things has stamped upon corn a real value which cannot be altered by merely altering its money price' (WN, IV.v.a.23). Since, moreover, the money prices of all non-corn commodities rise or fall in the same proportion as the money price of corn and of labour, their real prices, too, remain constant, while the real value of money falls:

The real effect of the bounty is not so much to rise the real value of corn, as to degrade the real value of silver; or to make an equal quantity of it exchange for a smaller quantity, not only of corn, but of all other home-made commodities: for the money price of corn regulates that of all other home-made commodities (WN, IV.v.a.11).

The constancy of the corn price of labour (the reciprocal of the 'real price' of corn) entails that the surplus produce obtained from the employment of a given quantity of labour in corn-growing is not affected by a rise in the money price of corn. The constancy of the corn prices of all other home-made products entails that the purchasing power of the surplus produce in terms of any such product, or bundle of products, is not affected either. The same is true, in Smith's opinion, of the sharing of the surplus produce between farmer and landlord — for, he contends, the money rent rises in the same proportion as the money price of corn and the money wage:

Though in consequence of the bounty, therefore, the farmer should be enabled to sell his corn for four shillings the bushel instead of three and sixpence, *and to pay his landlord a money rent proportionable to this rise in the money price of his produce*; yet if, in consequence of this rise in the price of corn, four shillings will purchase no more home-made goods of any other kind than three and sixpence would have done before, neither the circumstances of the farmer, nor those of the landlord, will be much mended by this change (WN, IV.v.a.15; italics added).

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When claiming that the money wage rises or falls in proportion to the money price of corn, Smith is taking as given the 'advancing, stationary or declining circumstances of society' which determine the 'liberal, moderate, or scanty manner' in which the workers must be maintained (see WN, IV.v.a.12; quoted more fully in Section 1 above).

<sup>9</sup> On the 'real price' of commodities as their 'price in labour', see WN, I.v.

(It is only 'In the purchase of foreign commodities [that] this enhancement in the price of corn may give them some little advantage'; WN, IV.v.14.)

A consequence Smith draws from the above analysis is that it is not true, as 'has been thought by many people', that 'by securing to him [the farmer] a better price than he could otherwise expect in the actual state of tillage, it [the bounty] tends... to encourage tillage' (WN, IV.v.a.7). For, he argues,

this might be the case if the effect of the bounty was to raise the real price of corn, or to enable the farmer, with an equal quantity of it, to maintain a greater quantity of labourers in the same manner, whether liberal, moderate or scanty, that other labourers are commonly maintained in his neighbourhood. But neither the bounty, it is evident, nor any other human institution, can have any such effect (WN, IV.v.a.10).

Nor, Smith contends, does the bounty encourage tillage by raising the effective demand for corn, for 'whatever extension of the foreign market can be occasioned by the bounty, must, in every particular year, be altogether at the expence of the home market' (WN, IV.v.a.8).<sup>10</sup>

In the *Observations* Malthus opposes Smith with two arguments. The first is that 'the expenditure of the labouring classes of society... by no means consists wholly in food, and still less, of course, in mere bread or grain'. In this connection, Malthus refers the reader to 'that mine of information... Sir Frederick Morton Eden's work on the poor' (Eden, 1797). Eden's work shows, he points out, that

in a labourer's family of about an average size, the articles of house rent, fuel, soap, candles, tea, sugar, and clothing, are generally equal to the articles of bread or meal. On a very rough estimate, the whole may be divided into five parts, of which two consist of meal or bread, two of the articles above mentioned, and one of meat, milk, butter, cheese, and potatoes (Malthus, 1814, p. 89).

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<sup>10</sup> The rise in the price of corn, Smith argues, 'must either reduce the subsistence of the labouring poor' (a possibility he allows for only in this connection), 'or it must occasion some augmentation in their pecuniary wages, proportionable to that in the pecuniary price of their subsistence. So far as it operates in the one way, it must reduce the ability of the labouring poor to educate and bring up their children, and must, so far, tend to restrain the population of the country. So far as it operates in the other, 'it must reduce the ability of the employers of the poor, to employ so great a number as they otherwise might do, and must, so far, tend to restrain the industry of the country' (WN, IV.v.a.8).

This being so, Malthus goes on,

a rise in the price of corn must be both slow and partial in its effects upon labour. Meat, milk, butter, cheese, and potatoes are slowly affected by the price of corn; house rent, bricks, stone, timber, fuel, soap, candles, and clothing, still more slowly; and, as far as some of them depend, in part or in the whole, upon foreign materials (as is the case with leather, linen, cottons, soap, and candles), they may be considered as independent of it; like the two remaining articles of tea and sugar, which are by no means unimportant in their amount (Malthus, 1814, p. 89).

The second argument is that the workers' standard of living is susceptible of reduction. If the natural price of any commodity rises, Malthus argues, and its market price does not promptly adjust, it will be driven up by the fall in supply. As regards labour, however,

the operation of withdrawing the commodity is much slower and more painful. Although the purchaser will refuse to pay the advanced price, the same supply will necessarily remain in the market, not only the next year, but for some years to come. Consequently, if no increase takes place in the demand, and the advanced price of provisions be not so great, as to make it obvious that the labourer cannot support his family, it is probable, that he will continue to pay this advance, till a relaxation in the rate of the increase of population causes the market to be under-supplied with labour (Malthus, 1814, p. 90).

The above considerations, placed at the beginning of the pamphlet, have the aim of dispensing at the outset with the opinion that restrictions on the importation of corn do not have the effect of encouraging the cultivation of the land. In Malthus's opinion, import restrictions cause the effective demand for, and the market price of, corn to rise. If, however, the money wage and the market prices of all commodities rose in the same proportion as the market price of corn (all prices being taken here as expressed in terms of money), then, he argues, both the rate of profits received in corn-growing and the rate of profits received elsewhere in the economy would remain unchanged, and the rise in the effective demand for corn would be prevented from encouraging the cultivation of the land. One would therefore be forced to conclude that

agriculture is at once excluded from the operation of that principle, so

beautifully explained and illustrated by Dr. Smith, by which capital flows from one employment to another, according to the various and necessarily fluctuating wants of society... [so that] if a country happened to be either overstocked or understocked with corn, no motive of interest could exist for withdrawing capital from agriculture, in the one case, or adding to it in the other, and thus restoring the equilibrium between its different kinds of produce (Malthus, 1814, p. 91).<sup>11</sup>

According to Malthus, the two arguments set out in the *Observations* enable this conclusion to be ruled out. For they show that 'corn and labour rarely keep an even pace together; but must often be separated at a sufficient distance and for a sufficient time, to change the direction of capital' (Malthus, 1814, p. 90).<sup>12</sup>

The bearing Smith's treatment of the consequences of a rise in the price of corn was having on the corn law debate emerges evidently from the *Observations*. If 'the effects of the corn laws, and of a rise or fall in the price of corn... have not yet been fully laid down before the public', we are said in the pamphlet, this depends to some degree on the circumstance that 'the very peculiar argument brought forward by Dr Smith, in his discussion of the bounty upon the exportation of corn' has attracted 'the attention of the advocates of each side of the question', diverting it from the remaining aspects of the problem:

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<sup>11</sup> See also Malthus's letter to Horner of 16 June 1813: 'I cannot, without violating what appear to me to be some of the most fundamental principles of Political Economy, believe, that an increase in the relative demand for home corn will not produce an increase in the relative supply'. Malthus to Horner, 16 June 1813; published as an Appendix to Tucker (1954).

<sup>12</sup> Malthus's reasoning appears to be based on a confusion between natural and market prices. Smith has it that if the *natural price* of corn (expressed in terms of money) rises — as he holds to be the case when a bounty on the exportation of corn is established — the *natural prices* of all other commodities (these also expressed in terms of money) rise in the same proportion. If the effective demand for corn (and for all other commodities) remains unchanged — as, again, Smith holds to be the case under the circumstances considered — then the market price of corn has no special reason to move away from its natural price. If, instead, the effective demand for corn rises (as according to Malthus it does when importation is restricted), the market price of corn rises above its natural price. It follows that, if the money wage rises in the same proportion as the market price of corn (expressed in terms of money), then the rate of profits received in corn-growing remains unchanged, while the rate of profits received in all other trades falls. No fall in the money wage relative to the money price of corn is, therefore, required in order to attract capitals into corn-growing.

Those who have maintained the same cause with Dr Smith, have treated it nearly in the same way; and though they may have alluded to the other more general and legitimate arguments against bounties and restrictions, have almost universally seemed to place their chief reliance on the appropriate and particular argument relating to the nature of corn. On the other hand, those who have taken the opposite side of the question, if they have imagined that they had combated this particular argument with success, have been too apt to consider the point as determined, without much reference to the more weighty and important arguments, which remained behind. Among the latter description of persons I must rank myself. I have always thought, and still think, that this peculiar argument of Dr Smith, is fundamentally erroneous (Malthus, 1814, pp. 87-8).<sup>13</sup>

Among 'those who have maintained the same cause with Dr Smith' we find Francis Horner<sup>14</sup> (the 'writer in the fifth vol. of the *Edinburgh Review*' referred to in this connection in Ricardo's *Principles*; see I, pp. 302 and 307; see also Section 5 below) and James Mill. 'No proposition', the latter writes in his *Essay on the Impolicy of a Bounty on the Exportation of Grain* (1804),

is established more thoroughly to the conviction of those who have studied the scientific principles of political economy than this; that the money price

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<sup>13</sup> In stating that he has 'always thought' that Smith's argument is wrong, Malthus has no doubt in mind book III, chapter x ('Of bounties on the exportation of corn') in the second edition of his *Essay on the Principle of Population* (Malthus, 1803), where he argues as follows: 'When great and numerous taxes on consumption exist in any country, those who live by the wages of labour must always receive wherewithal to pay them, at least those upon necessities, such as soap, candels, leather, salt, etc. A fall in the price of corn, therefore, though it would decrease that part of the wages of labour which resolves itself into food, evidently would not decrease the whole in the same proportion' (Malthus, 1803, p. 683; on 'taxes upon the necessities of life, such as in Great Britain upon soap, salt, leather, candles, &c.' see WN, IV.ii.33 and WN, V.ii.k.10-13). The 'difficulty of lowering the price of labour' should also be taken into account (Malthus, 1803, p. 684; see also p. 683). In the case of a rise in the price of corn, the constancy of the taxes on non-corn wage goods allows the rate of profits obtained in corn-growing to rise. This result is reinforced by the (short period) constancy of money rents — taxes and rent being 'two principal ingredients' in the price of corn (Malthus, 1803, p. 684).

<sup>14</sup> The proposition that 'the real price of corn will be maintained the same, notwithstanding a nominal variation' is described by Horner as a 'fundamental truth', without a 'just apprehension [of which], it is impossible to reason with accuracy on the subject' (Horner, 1804, p. 106).

of corn, regulates the money price of every thing else.<sup>15</sup> The wages of the common labourer may in general be reckoned his maintenance. *He must earn a sufficient quantity of corn to feed himself*, otherwise he cannot exist. If he is paid in money, the sum of money he daily receives must always be equivalent to the quantity of corn he must use. If the price of corn is high he must receive the greater sum of money, as his day's wages, to buy it with. This is so obviously necessary, that we need spend no more time in proving it. *The money price of labour therefore is entirely regulated by the money price of corn* (Mill, 1804, p. 63; italics added).

Mill continues on strictly Smithian lines, stating that the money price of corn 'must regulate that of all other products of the earth', and that the price of manufactures

may be resolved into three parts; 1st, The price of the raw material; 2d, The wages of labour; 3d, The profit of stock... we have seen that the price both of the raw material, and the wages of the labourer in all manufactures, are raised in exact proportion to the price of corn. More circulating capital, therefore, is wanted in that proportion to carry on every manufacture, and the reasonable profit upon this additional capital must be added to the price of the manufactured commodity. Every one of the three constituent parts of the price of all manufactured commodities receives then an increase by every increase in the price of corn (Mill, 1804, p. 4).<sup>16</sup>

### 3. *Malthus and Ricardo on effective demand and the agricultural rate of profits*

'When the stocks of many rich merchants are turned into the same trade', we read in the *Wealth of Nations*,

their mutual competition naturally tends to lower its profits; and when there is a like increase of stock in all the different trades carried on in the same society, the same competition must produce the same effect in them all (WN, I.ix.2).

The reason why competition grows more intense as capital accumulation proceeds is set forth later in the work:

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<sup>15</sup> Compare Malthus, 1814, p. 94: 'Nothing then can be more evident both from theory and experience, than that the price of corn does not immediately and generally regulate the prices of labour and all other commodities'.

<sup>16</sup> Mill surprising conclusion is that 'the price of all manufactured commodities must rise in a *much greater* proportion than the price of corn' (Mill, 1804, p. 64; italics added).

As capitals increase in any country... [it] becomes gradually more and more difficult to find within the country a profitable method of employing any new capital. There arises in consequence a competition between different capitals, the owner of one endeavouring to get possession of that employment which is occupied by another (WN, II.iv.8).

However, fresh opportunities for investment may arise, that, by shifting capital from its previous employments, reduce the intensity of the competition, thus causing the rate of profits to rise:

The acquisition of new territory, or of new branches of trade, may sometimes raise the profits of stock, and with them the interest of money, even in a country which is fast advancing in the acquisition of riches. The stock of the country not being sufficient for the whole accession of business, which such acquisition presents to the different people among whom it is divided, is applied to those particular branches only which afford the greatest profits. Part of what had before been employed in other trades, is necessarily withdrawn from them, and turned into some of the new and more profitable ones. In all those old trades, therefore, the competition comes to be less than before. The market comes to be less fully supplied with many different sorts of goods. Their price necessarily rises more or less, and yields a greater profit to those who deal in them, who can, therefore, afford to borrow at a higher interest (WN, I.ix.12).

This is the basis of Malthus's position as can be inferred from Ricardo's letter of 10 August 1813 (all Malthus's letters to Ricardo of 1813 and of the first half of 1814 are missing), where it is denied that 'the effect of opening new markets or extending the old' is to cause 'a general increase of profits' (Ricardo to Malthus, 10 August 1813; VI, p. 93).

The contrast between Ricardo and Malthus is described more fully in Ricardo's letter to Trower of 8 March 1814, already referred to, where the former tries to make clear to the latter the conclusions reached in his 'papers on the profits of Capital'.<sup>17</sup> Owing to the diminishing returns from the extension of cultivation to inferior qualities of land,<sup>18</sup> Ricardo

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<sup>17</sup> The reading of Trower's comments (see above, note 2) convinced Ricardo that 'what I feared... has happened. To one not aware of the whole difference between Mr. Malthus and me, the papers you read were not clear, and I think you have not entirely made out the subject in dispute' (Ricardo to Trower, 8 March 1814; VI, p. 103).

<sup>18</sup> Reference to the diminishing returns from the employment of additional portions of capital on the same land is omitted throughout the paper for the sake of simplicity.



contends, the profits of the farmer fall with the rise in the capital employed on the land — implying that the profits of all other trades must fall, too. According to Malthus, on the contrary, no special role is to be accorded to the profits of the farmer, which would rise along with all other profits whenever the discovery of new markets reduces the intensity of the competition — regardless of whether more capital is employed on the land:

... in short it is the profits of the farmer which regulate the profits of all other trades, — and as the profits of the farmer must necessarily decrease with every augmentation of Capital employed on the land, provided no improvements be at the same time made in husbandry, all other profits must diminish and therefore the rate of interest must fall.<sup>19</sup> To this proposition Mr. Malthus does not agree. He thinks... that the profits of the farmer no more regulate the profits of other trades, than the profits of other trades regulate the profits of the farmer, and consequently if new markets are discovered, in which we can obtain a greater quantity of foreign commodities in exchange for our commodities, than before the discovery of such markets, profits will increase and interest will rise.

In such a state of things the rate of interest would rise as well as the profits of the farmer, he thinks even if more Capital were employed on the land (Ricardo to Trower, 8 March 1814; VI, p. 104).

No further letters from Ricardo are extant until the one to Malthus of 26 June 1814, where 'the rate of profits and of interest' is said to 'depend on the proportion of production to the consumption necessary to such production' (VI, p. 108).<sup>20</sup> Malthus's reply, of 6 July 1814, is the first

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<sup>19</sup> Between the letter to Malthus of 10 August 1813 and the letter to Trower of 8 March 1814 we have only one letter from Ricardo, relevant to the present issue, namely his letter of 17 August 1813, where we read: 'I have little doubt... that for a long period, during the interval you mention, there has been an increased rate of profits, but it has been accompanied with such decided improvements of agriculture... that is perfectly reconcileable to my theory. My conclusion is that there has been a rapid increase of Capital which has been prevented from shewing itself in a low rate of interest by new facilities in the production of food (Ricardo to Malthus, 17 August 1813; VI, pp. 94-5). This passage might be easily interpolated into the passage from the letter to Trower quoted in the text (at the point where the present note is inserted).

<sup>20</sup> According to Sraffa (1951a, p. xxxii), 'The nearest that Ricardo comes to an explicit statement on these [corn-ratio] lines is in a striking passage in a letter of June 1814: "The rate of profits and of interest must depend on the proportion of production to the consumption necessary to such production"'. These words are sometimes interpreted as implying that by 'production' and 'consumption' Ricardo must have meant *agricultural* production and *agricultural* consumption. According to Peach (1993, p. 58) 'it is

of his letters of 1814 to have come down to us. The 'rate of production', he contends,

or more definitely speaking, the proportion of production to the consumption necessary to such production seems to be determined by the quantity of accumulated capital compared with the demand for the products of capital, and not by the mere difficulty and expence of procuring corn (Malthus to Ricardo, 6 July 1814; VI, p. 111).

In this letter Malthus employs the competition-of-capitals theory in discussing the consequences of an increase in the number of working days required to produce a given quantity of corn (under the most unfavourable circumstances). The resulting rise in the money price of corn, he contends, causes a 'diminution of capital' in the economy as a whole, as 'every money accumulation would command less labour and less produce' (VI, p. 110).<sup>21</sup> This, in turn, reduces the intensity of the competition, thus causing the general rate of profits to rise, or, at least, preventing the rise in the labour requirements from forcing it down — which is what Malthus appears to confine himself to claiming in the following passage:

If it is necessary to employ a hundred days labour instead of fifty, in order to produce a certain quantity of corn, there seems to be no reason whatever that the person who possesses an accumulation sufficient to make the necessary advances should have a less remuneration for his capital. The effects of a greater difficulty in procuring corn would in my opinion be, a

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contextually obvious that Ricardo's expression did not refer specifically to events in the agricultural sector' — which, he thinks, goes against Sraffa's reading of the passage. Hollander makes a very similar point in his book on Ricardo (Hollander, 1979, p. 125), but he appears to have afterwards changed his mind, coming to accept the (allegedly Sraffian) straightforwardly corn-ratio reading of the passage (see Hollander, 1986, p. 1093). As for Sraffa's own view of the matter, I cannot see any reason for disregarding the circumstance that the words under scrutiny come only a few lines below an unambiguous warning to the effect that the corn-ratio argument 'is never stated by Ricardo in any of his extant letters or papers' (Sraffa, 1951a, p. xxxi; see also Section 1 above). In the preceding paragraph we read: 'The rational foundation of the principle of the determining role of the profits of agriculture, *which is never explicitly stated by Ricardo*, is that...' (Sraffa, 1951a, p. xxxi; italics added); these words introduce the first passage quoted in Section 1 above. Thus, Sraffa makes the point twice on the same page. What more could he have done to put the readers on their guard?

<sup>21</sup> Malthus may be echoing Smith's statement, quoted in note 10 above, that a rise in the money wage 'must reduce the ability of the employers of the poor, to employ so great a number as they otherwise might do' (WN, IV.v.a.8).

diminution of capital, a diminution of produce, and a diminution in the *real* wages of labour, or their price in corn; but not a diminution of profits... In short all will in my opinion depend upon the state of capital compared with the demand for it. This will be the prime mover, and it is this which will determine the profits which a capital employed in agriculture shall yield, whether the land be naturally rich or naturally poor, much worked or little worked (Malthus to Ricardo, 6 July 1814; VI, p. 111).

In the complex argument conducted in this passage the following steps can be singled out:

- (1) the capital employed on the land and the capital employed in the economy as a whole vary in opposite directions; as the capital employed on the land increases, so does the 'difficulty of procuring corn'; the resulting rise in the price of corn brings about a 'diminution of capital' in the economy as a whole;
- (2) the diminution of capital — not accompanied by a proportional diminution in the demand for (the products of) capital<sup>22</sup> — causes a reduction in the intensity of the competition, which, in turn, exerts a favourable influence on the general rate of profits; in Malthus's opinion this influence offsets (or more than offsets) the unfavourable influence exerted by the greater difficulty of procuring corn, so that the general (and thus also the agricultural) rate of profits does not fall (and may, indeed, rise);
- (3) what prevents the agricultural (and thus the general) rate of profits from falling (or causes it to rise) in spite of 'a hundred days labour instead of fifty' being now required to produce a certain quantity of corn, is *the rise in the price of corn relative to the money wage* ('a diminution in the *real* wages of labour, or their price in corn').

Step (3) provides a stronger version of the point made in the *Observations*, that the money wage rises *in a lesser proportion* than the money price of

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<sup>22</sup> As we have seen, the rate of profits is said to be determined 'by the quantity of capital compared with the demand for the products of capital' and, in a different point of the letter, 'by the state of capital compared with the demand for it'. A few lines below the latter statement, Malthus makes the point that 'The demand for capital depends... upon the demand for the future products of capital' (Malthus to Ricardo, 6 July 1814; VI, pp. 111-2).

corn. The corn price of labour, it is now contended, falls to an extent sufficient to cause the overall corn value of the wages paid to the workers employed for a hundred days to equal (or to fall short of) the overall corn value of the wages the workers employed for fifty days were paid before the increase in the capital employed on the land.

On import restrictions and the diminution of capital Ricardo objects on 25 July that he cannot see any 'necessary connection between these two operating causes' (VI, p. 114). On 11 August, however, he softens his position, still denying that restrictions would necessarily be followed by a diminution of capital, but conceding that the latter is 'a probable effect' of the former (VI, p. 119). In this letter, as in that of 25 July, he also declares himself in agreement with Malthus that the outcome of a diminution of capital is a rise in the rate of profits ('We agree as to the consequences which will attend a diminution of capital'; VI, p. 119; see also VI, p. 114). What he does not appear willing to concede, however, is that the key to this outcome can be found in a diminution of capital *relative to effective demand*. Though 'for a short period', he contends,

capital and produce may diminish faster than demand, — yet in the long run effective demand cannot augment or continue stationary with a diminishing capital (Ricardo to Malthus, 11 August 1814; VI, p. 120).<sup>23</sup>

It is by an entirely different route that, according to Ricardo, a diminution of capital causes a permanent rise in the rate of profits — namely, through the discouragement given to the cultivation of the land by the fall in 'the work to be done', and therefore in the overall wages advanced and the demand for food:

I should say that a real diminution of capital will diminish the work to be done, and consequently will affect the wages of labour, and the demand for food. In the case supposed, restrictions on importation of corn, encouragement is given to the further cultivation of our own land, — but *if* accompanied by a diminution of capital a discouragement is also given to the cultivation of the land, and whether profits rise or fall must in my

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<sup>23</sup> See Ricardo's references to the Law of Markets ('the theory of Mr. Mill') in his letter to Malthus of 23 October 1814 (VI, p. 149), and to J. B. Say's 'doctrine that demand is regulated by production' in his letter to Malthus of 18 December 1814 (VI, pp. 163-4).

opinion depend upon the degree of these contrary operating causes' (Ricardo to Malthus, 11 August 1814; VI, p. 119).

A fall in the capital employed in the economy as a whole, Ricardo here submits, causes a rise in the general rate of profits if, and only if, it causes a fall in the capital employed on the land — for it is only the latter fall that can cause a rise in the agricultural rate of profits. If, instead, the capital employed on the land rises, no concomitant fall in the capital employed in the economy as a whole can prevent the agricultural (and thus the general) rate of profits from falling.

#### 4. *Malthus's reading of Ricardo's position in the letter of 5 August 1814*

Malthus's 'a hundred days labour' example is taken up by Ricardo in his letter of 25 July 1814:

*The capitalist 'who may find it necessary to employ a hundred days labour instead of fifty in order to produce a certain quantity of corn' cannot retain the same share for himself unless the labourers who are employed for a hundred days will be satisfied with the same quantity of corn for their subsistence that the labourers employed for fifty had before. If you suppose the price of corn doubled, the capital to be employed estimated in money will probably be also nearly doubled,—or at any rate will be greatly augmented and if his monied income is to arise from the sale of the corn which remains to him after defraying the charges of production how is it possible to conceive that the rate of his profits will not be diminished?* (Ricardo to Malthus, 25 July 1814; VI, pp. 114-5; italics added).

One may observe, *en passant*, that the argument in the foregoing passage implies (as, indeed, does Malthus's original argument) that the capitalist retains for himself the whole surplus produce obtained under the most unfavourable circumstances — both before and after the extension of cultivation to the quality of land requiring the employment of a hundred days labour. However, Ricardo's (and Malthus's) letters of 1814 say nothing about the sharing of the surplus produce obtained under more favourable circumstances (in the example, from the cultivation of the quality of land requiring the employment of fifty days labour, once the one

requiring the employment of a hundred days labour has been brought into cultivation). I shall come back to this in Section 5 below.

Malthus's answer, of 5 August 1814, is here divided for ease of reference into four parts (the second of which we have already encountered in the partial quotation of it made by Sraffa):

(a) If the nominal price of corn be doubled, and the nominal amount of capital employed, be not quite doubled which you seem to allow might be the case, instead of saying 'how is it possible to conceive that the rate of profits will not be diminished' I should say how is it possible to conceive that it should not be increased? (b) In no case of production, is the produce exactly of the same nature as the capital advanced. Consequently we can never properly refer to a material rate of produce, independent of demand, and of the abundance or scarcity of capital. (c) The more I reflect on the subject, the more firmly I feel convinced, that it is the state of capital, or the general profits of stock and interest of money, which determines the particular profits upon the land; and that it is not the particular profits or rate of produce upon the land which determines the general profits of stock and the interest of money. (d) A slight fall in the real price of labour, which according to general principles ought to take place on any diminution of capital, or what comes to the same thing, a rise in the price of produce without a *proportionate* rise of labour, a most natural and frequent occurrence, will allow of great variations in the rate of produce on land, and easily make up for some increase of difficulty in procuring corn (Malthus to Ricardo, 5 August 1814; VI, p. 117-8).

Ricardo's reference to the workers employed for fifty days as being satisfied with a certain 'quantity of corn for their subsistence' (and to those employed for a hundred days as not possibly being satisfied with the same quantity) can hardly fail to remind us of Smith's reference to the 'quantity of corn sufficient to maintain him [the worker] and his family.' According to Hollander, when objecting that 'we can never properly refer to a material rate of produce' (part *b* of the above passage), Malthus has in mind *nothing else* than this 'rather casual and inadequate restatement' of Ricardo's position (Hollander, 1973, p. 267).<sup>24</sup> A careful reading of parts

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<sup>24</sup> See also Hollander, 1979, pp. 127-8, where the author makes the point that Ricardo's corn-ratio argument, that Sraffa describes as non-extant, 'is perhaps extant; it may well be contained in the letter of 25 July,... upon which Malthus was actually commenting. For... [in this letter] Ricardo restated his own position on the determination of the profit rate in terms of a corn surplus relative to a corn capital'.

(c) and (d) of the passage does not, however, support this contention.<sup>25</sup> In them Malthus rejects (thus implicitly crediting Ricardo with) two theses: that it is 'the particular profits or rate of produce upon the land which determines the general profits of stock and the interest of money' (part c); and that an increase in the difficulty of procuring corn causes the agricultural rate of profits (the 'rate of produce on land') to fall (part d). As will be recalled, these are the same two theses Ricardo states in the letter to Trower, concluding that the general rate of profits falls with the rise in the capital employed on the land. It is this complex theoretical construction that Malthus perceives as being based on the assumption that the produce is 'exactly of the same nature as the capital advanced' (part b). Remove this assumption, he contends, and it will become clear, *first*, that it is 'the abundance or scarcity of capital' (relative to the demand for the products of capital) that determines the general rate of profits — which, in turn, 'determines the particular profits upon the land' (part c); and, *second*, that in the case under consideration the agricultural rate of profits will not fall, since 'a rise in the price of produce without a *proportionate* rise of labour... will... easily make up for some increase of the difficulty in procuring corn' (part d).

One more thing must be said regarding the exact content of the assumption Malthus ascribes to Ricardo. Taken literally, the assumption that the produce is 'exactly of the same nature as the capital advanced' undermines one of the two reasons for the fall in the corn price of labour contemplated in the *Observations*, namely the fall in the corn price of non-corn wage goods, but not the other — the fall in the workers' standard of living. For the produce could be said to be 'exactly of the same nature' as the wage even if the latter consisted in a *variable* quantity of corn, susceptible of being forced down by a rise in the money price of corn relative to the money wage. The assumption referred to in the passage under consideration is, however, one capable of making the agricultural (and thus the general) rate of profits 'independent of demand, and of the abundance or scarcity of capital'. What Malthus ascribes to Ricardo is not,

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<sup>25</sup> This, of course, is not to deny that the 'Smithian' assumption implicit in the italicized part of the passage (though not in the non-italicized part of it: a point on which I shall return later in this Section) may have triggered Malthus's comment.

therefore, the assumption that the worker supports himself and his family with whatever quantity of corn the money wage enables him to purchase, but the stronger assumption that the money wage is such as to enable the worker to purchase a *given* quantity of corn<sup>26</sup> — namely, the same assumption made by Smith in the chapter ‘Of Bounties’ and criticized by Malthus in the *Observations*.<sup>27</sup>

Let us go back, now, to the passage from Ricardo’s letter of 25 July 1814. If the italicized part of it may create the impression that, at this stage of his discussion with Malthus, Ricardo is arguing his position on the basis of the assumption that the wage consists in a given quantity of corn, the non-italicized part makes it clear that this is not so. For the statement that ‘the capital to be employed estimated in money will probably be... *nearly doubled,—or at any rate greatly augmented*’ shows that Ricardo’s argument does allow for a fall in the corn price of labour, the importance of which has been stressed by Malthus both in the *Observations* and in the letter of 6 July 1814. What Ricardo is arguing is not, in other words, that the money wage rises in the same proportion as the money price of corn (as maintained by Smith), but that — contrary to what Malthus claims in his letter of 6 July, which he is answering — the rise in the money price of

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<sup>26</sup> That the assumption ‘logically necessary... for Ricardo’s conclusion that the farmer’s profits *determine* the general rate’ is the latter, is stressed in Garegnani, 2000, p. 232.

<sup>27</sup> According to Peach (1993, p. 62), when arguing that ‘In no case of production is produce exactly of the same nature as the capital advanced’, Malthus is not rejecting the assumption underlying Ricardo’s reasoning, but abandoning ‘the capital-product homogeneity assumption, introduced by *him* [Malthus himself] in the letter of 6 July 1814’. The passage of the letter of 6 July referred to by Peach is the second of the two quoted in Section 3 above, namely the one in which the ‘a hundred days labour’ example is advanced. When examining this passage a few pages earlier, however, Peach does not claim that it contains the ‘capital-product homogeneity assumption’, but that it contains a ‘corn calculation’ (‘Here we do encounter a “corn calculation”, but with Malthus as his author’; Peach, 1993, p. 59). The latter is a correct description of the procedure followed by Malthus, which consists in comparing the quantity of corn produced with the ‘price in corn’ of the wages — a procedure that, obviously, does not entail any ‘capital-product homogeneity assumption’. To this it should be added that in the passage from the letter of 6 July the rise in the price of corn is said to cause ‘a diminution in the real wages of labour, or their price in corn’ — which is exactly what in the letter of 5 August the rise in the price of corn is said *not* to do when the produce is ‘exactly of the same nature of the capital advanced’. (And, for that matter, how could Malthus introduce into his argument the very same hypothesis, that the workers consume corn alone, that he had criticized, only a few months previously, as vitiating Smith’s argument?).



corn relative to the money wage *is not so great as to prevent the doubling in the number of working days from causing the rate of profits to fall*. (This, we shall see in Section 6 below, will continue to be the tenor of Ricardo's defence for many months to come.)

In stating the above argument Ricardo falls into an error, firstly noted by Hollander (1973, p. 266, note; see also 1983, p.168). If the number of working days required to produce a given quantity of corn doubles, and the money wage nearly doubles as a consequence of a doubled money price of corn, then the 'capital to be employed estimated in money' will turn out to be not nearly doubled, but nearly quadrupled — a double number of working days being paid at a nearly double daily rate. Ricardo's error gives Malthus an easy, if undeserved, victory in the exchange. 'If the nominal price of corn be doubled, and the nominal amount of capital employed, be not quite doubled *which you seem to allow might be the case*', he observes, 'how is it possible to conceive that it [the rate of profits] should not be increased?' (part a).

Neither, then, does Ricardo argue his position on the basis of the assumption that the wage consists in a given quantity of corn, nor does Malthus maintain that Ricardo does so. At the same time, Malthus appears to regard the determination of the profits by the difference (and of the rate of profits by the ratio) between two quantities of corn as the cornerstone of Ricardo's theoretical construction. The circumstance that Malthus offers a corn-ratio interpretation of Ricardo's position which does not appear to be justified by a dispassionate reading of the text he is commenting upon has appeared so puzzling as to suggest that if the corn-ratio theory of profits 'was really formulated, it took shape, for a brief period of time, in Malthus's fancy' (Faccarello, 1982, p. 134). The alternative explanation, which will be put forward in Sections 5 and 6 below, is that Malthus *knew* that Ricardo's reasoning (though not, from a certain point on, his explicit argument) was based on the (Smithian) assumption that the wage consists in a given quantity of corn. Before turning to this, it may be worth stressing that, as we shall presently see, the letter of 5 August 1814 *is not the only place* where Malthus offers a (*prima facie* unjustified) corn-ratio interpretation of Ricardo's position.

No reference to the means of production — as distinguished from

the wage goods — is made in the 1814 Ricardo-Malthus correspondence. It is only in the *Essay on Profits*, published in February 1815, that Ricardo refers to the ‘fixed capital, such as buildings, implements &c.’ (IV, p. 10) employed in the production of corn. Malthus promptly calls attention to the fall in the corn price of both ‘fixed’ and ‘circulating’ capital — the above fall not having been taken into account in the calculations contained in Ricardo’s celebrated *Table, shewing the Progress of Rent and Profit under an assumed Augmentation of Capital*:<sup>28</sup>

The expences estimated in Corn will be less, owing to the power of purchasing with a less quantity of corn the same quantity of fixed capital, and of the circulating capital of tea sugar cloaths &c: for the labourers (Malthus to Ricardo, 12 March 1815; VI, p. 185):

That Malthus continues to see Ricardo’s reasoning as based on the corn-ratio theory of profits, *in spite of the latter’s explicit allowance for fixed capital*, is shown by his letter to Horner two days later, where ‘the fault of Mr

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<sup>28</sup> See IV, p. 17. In the Table the capital employed in the growing of wheat is ‘estimated in quarters of wheat’, with the wheat prices of its non-wheat components being implicitly assumed to remain unchanged as inferior qualities of land are brought into cultivation. It is thanks to this way of reckoning that Ricardo can take it for granted not only that the wheat value of the capital employed on the old portions of land remains unchanged, but also, and more importantly, that employing a larger amount of labour and capital goods on the new portions in order to produce the same quantity of wheat involves employing more ‘capital estimated in quarters of wheat’ and obtaining a smaller ‘neat produce in quarters of wheat after paying the cost of production’ — this in turn involving a fall in the agricultural rate of profits (the ratio of the latter magnitude to the former on the no-rent quality of land).

As some readers of previous versions of this paper have pointed out to me, it is from this moment on that the change in relative prices is explicitly described by Malthus, and increasingly perceived by Ricardo, as the crux of the problem — this eventually leading the latter to realise that he will not be able to answer the former’s objections without a systematic theory of value. We have seen, however, that it is from the time of the *Observations* that Malthus calls attention to the rise in the money price of corn relative to that of non-corn wage goods as one of the two reasons (the other being the fall in the workers’ standard of living) why, in his opinion, the corn price of labour falls as the money price of corn rises. What is new in the post-*Essay* discussion is, I submit, that — the error in Ricardo’s Table having provided a punctual illustration of the relative-price aspect of the problem (also with reference to the, previously ignored, non-wage components of the agricultural capital) — Malthus was led to see it more clearly, and to disentangle it more accurately than he had done in the past, from the standard-of-living aspect.

Ricardo's table' is said to consist in forgetting that

the real capital of the farmer which is advanced *does not consist merely in raw produce*, but in ploughs waggons threshing machines &c: and in the tea sugar clothes &c: &c: used by the labourers' (Malthus to Horner, 14 March 1815; VI, p. 187; italics added).

5. *How Ricardo reached the conclusion that the profits of the farmer fall with the rise in the capital employed on the land...*

As we have seen, in the summer of 1814 Ricardo was conceding to Malthus that the money wage rises in a lesser proportion than the price of corn. Let us, however, go back to a moment in which the assumption that the wage consists in a given quantity of corn had not yet come under attack from Malthus. Smith had maintained, as will be recalled, that the establishment of a bounty on the exportation of corn leaves the effective demand for, and the production of, corn unchanged; the surplus produce obtained in corn-growing, he had further contended, also remains unchanged, since the number of workers employed remains unchanged, and each of them must be enabled to purchase an unchanged quantity of corn. The case contemplated by Ricardo was somewhat different. Import restrictions cause, in his opinion, a rise in the effective demand for corn, which can be met only by bringing into cultivation inferior qualities of land — namely, qualities of land on which *more labour* is required to produce a given quantity of corn. The conclusion Smith's reasoning leads to when applied to this case is that the *surplus produce* obtained under the most unfavourable circumstances falls relatively to the capital employed. To escape the further conclusion that the same is true of the *quantity of corn remaining to the farmer as his profits*, one would have to assume that the farmer now receives a larger (and the landlord a smaller) share of the surplus produce obtained under the most unfavourable circumstances.<sup>29</sup>

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<sup>29</sup> A redistribution of this sort is contemplated by Smith when describing the consequences of a tax on wages. Having to pay a higher money wage to an unchanged number of workers, the farmer must 'employ a greater capital. In order to get back this greater capital, together with the ordinary profits of stock, it would be necessary that he should retain a larger portion, or what comes to the same thing, the price of a larger portion, of the produce of the land, and consequently he should pay less rent to the landlord. The final

Such an idea, however, is quite alien to Ricardo's position. Though he employs a genuine theory of rent only in the *Essay on Profits*, where he acknowledges a debt to Malthus's *Inquiry into Rent*,<sup>30</sup> already in the pre-*Essay* correspondence — as has been observed in Section 4 above — he evidently holds that the surplus produce obtained under the most unfavourable circumstances is entirely absorbed by the profits. (This is also how Sraffa sees Ricardo's position when, in describing the corn-ratio theory of profits, he identifies the profits with 'the difference between total product and capital advanced'; Sraffa, 1951a, p. xxxi; quoted more fully in Section 1 above).<sup>31</sup> The road to the conclusion that (in the absence of

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payment of this rise of wages, therefore, would in this case fall upon the landlord, together with the additional profit of the farmer who has advanced it'. (Instead, the final payment of the rise in the wages of manufacturing workers, 'together with the additional profits of the master manufacturer, would fall upon the consumer'; WN, V.ii.i.2). A tax 'upon the necessaries of life operates exactly in the same manner as a direct tax upon the wages of labour' (WN, V.ii.k.5). As pointed out by Hollander (1979, p. 22), here rent is treated 'as a kind of "residual"'. In calling attention to the above-quoted passages, Garegnani (2000, note 28) refers to the compensatory change in rent as the element which in Smith's view of natural prices allows the wage and the rate of profits to change independently of each other. See also the formalisation of the Smithian price system provided by Dome (1998) — where the rate of profits and the wage basket are both taken as given, while rent 'is determined endogenously in the system' (p. 81).

<sup>30</sup> 'In treating on the subject of the profits of capital', reads the *incipit* of the *Essay on Profits*, 'it is necessary to consider the principles which regulate the rise and fall of rent; as rents and profits, it will be seen, have a very intimate connexion to each other. The principles which regulate rent are briefly stated in the following pages, and differ in a very slight degree from those which have been so fully and so ably developed by Mr. Malthus in his late excellent publication, to which I am very much indebted' (IV, 9).

<sup>31</sup> 'When in February 1815 Malthus's pamphlets [*An Inquiry into the Nature and Progress of Rent* (Malthus, 1815a); and *The Grounds of an Opinion on the Policy of Restricting the Importation of Foreign Corn* (Malthus, 1815b)] appeared', Sraffa submits, 'Ricardo was able to write within a few days his *Essay on the Influence of a Low Price of Corn on the Profits of Stock*, by using his already developed theory of profits, incorporating Malthus's theory of rent, and adding a refutation of the protectionist argument put forward in his *Grounds of an Opinion*' (Sraffa, 1951b, p. 4). This cannot possibly mean, however, that prior to the publication of Malthus's *Inquiry* Ricardo had no idea as to whom the extra surplus produce obtained from the cultivation of the superior qualities of land was appropriated by. As Sraffa himself points out, in the *Note on Rent* in McCulloch's edition of the *Wealth of Nations* (Smith, 1828, vol. iv, pp. 124-25) it is stated that Ricardo 'was in possession of the principle' of rent before the publication of the *Inquiry* — and of West's *Essay on the Application of Capital to Land* (West, 1815), where, also, rent is made to depend on the diminishing returns from land. 'As the Note was written in the main by John Stuart Mill, who had presumably derived the information from his father', Sraffa observes, 'it might be supposed to be authoritative' — although there is 'no evidence to

improvements in husbandry) the extension of cultivation to inferior qualities of land causes the rate of profits received in corn-growing to fall lay, then, fully open to Ricardo.

A corollary of this conclusion is that 'all other profits must diminish and therefore the rate of interest must fall' (Ricardo to Trower, 8 March 1814; VI, p. 104; quoted more fully in Section 4 above); for, as Ricardo will put it in the *Essay on Profits*, to conceive of rates of profits (permanently) different from one trade to another would be 'at variance with all the principles of political economy' (IV, pp. 23-4).<sup>32</sup> When the new, lower general rate of profits becomes established, the natural prices

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confirm its contention' (Sraffa, 1951b, pp. 6-7). (In the 'Editor's Note' prefixed to the text in vol. IV of the *Collected Works of John Stuart Mill*, 'Internal evidence' is, however, said to suggest that the relevant paragraph of the *Note on Rent* 'is by McCulloch'; see Mill, 1967, p. 162.) Indeed, what was to become known as 'the Ricardian theory of rent' (firstly invented by Andersen, 1777) appears to have been, for a while, a theory looking for an author... which ultimately found at least two (Malthus and West), and possibly four — if we include Ricardo and Torrens. The latter's *Essay on the External Corn Trade* (Torrens 1815) and Ricardo's *Essay on Profits* were published on the same day, February the 24<sup>th</sup>, 21 days after Malthus's and 11 days after West's; see Sraffa, 1951b, p. 5).

<sup>32</sup> A more extensive quotation may be to the point. 'Nothing is more common than to hear it asserted', Ricardo writes, 'that profits on agriculture no more regulate the profits of commerce, than that the profits of commerce regulate the profits on agriculture. It is contended, that they alternately take the lead; and, if the profits of commerce rise, which it is said they do, when new markets are discovered, the profits of agriculture will also rise'. If, however, 'none of the agricultural capital is withdrawn from the cultivation of the land, agricultural profits cannot rise, nor can rent fall: either then it must be contended, which is at variance with all the principles of political economy, that the profits on commercial capital will rise considerably, whilst the profits on agricultural capital suffer no alteration, or, that under such circumstances, the profits on commerce will not rise' (IV, pp. 23-4). Here, it may be observed, the contrast between Ricardo and Malthus is described in much the same terms as in the letter to Trower of little less than one year earlier. Ricardo's consistency in stating the principle of the determining role of the profits of agriculture' (Sraffa, 1951a, p. xxxi; see also above, note 20) — together with the thesis that the profits of agriculture fall as more capital is employed on the land — leaves Hollander unshaken. Neither in March 1814 nor in February 1815, he contends, does Ricardo mean what he says: 'Ricardo did not intend by his formal statements to maintain that the profit rate in agriculture literally determines the rate elsewhere, but rather that agricultural productivity alone influences profits generally in the event that corn alone enters the wage basket' — agricultural productivity doing so 'by way of the effect of the price of corn upon money wages' (Hollander, 1979, p. 145). Indeed, that Hollander ascribes to Ricardo a rather 'unusual use of language' (Garegnani, 1982, p. 66), is the least that can be said. (See also Hollander, 1983, and Garegnani, 1983.)

of non-farm products,<sup>33</sup> expressed in terms of money, will necessarily turn out to have fallen relative to the money wage. That they do so is, in fact, explicitly stated by Ricardo. In the summer of 1814 he is still convinced that 'The prices of all commodities must increase if the price of corn be increased' (Ricardo to Malthus, 25 July 1814; VI, p. 114; see also Ricardo to Malthus, 26 June 1814; VI, p. 108).<sup>34</sup> However, he qualifies this opinion to the effect that the rise in the price of non-farm goods 'will not be in the same proportion as the rise of labour' (Ricardo to Malthus, 11 August 1814; VI, p. 120).

That the line of reasoning followed by Ricardo was the one just described — that, in other words, he based himself on Smith's teaching, bringing it to bear on a new problem — is not only in agreement with Malthus's long-lasting perception of his correspondent's position as being based on the assumption that the wage consists in a given quantity of corn; it is also an idea that will sound familiar to anybody acquainted with Ricardo's theorizing and with the importance it accords to the authority of Smith. That, on the other hand, Ricardo overlooked the line of reasoning suggested by Smith's very well known, and widely discussed, 'argument relating to the nature of corn', and pursued an entirely different one, leading by pure coincidence to the same result — that the agricultural rate of profits falls as more capital is employed on the land — would indeed be a singular occurrence.

Let us consider, however, one such alternative line of reasoning that has been attributed to Ricardo. 'We *know*', it has been observed by Peach, that Ricardo 'maintained that all prices rise with the corn price, and this implies that corn price changes affect product and capital in the same direction, if not to quite the same extent, regardless of the physical composition of capital' (Peach, 1993, p. 67; see also Peach, 1984, pp. 741 ff.). It is on this basis, Peach submits, that Ricardo reached the conclusion that the bringing into cultivation of an inferior quality of land causes the agricultural rate of profits to fall — a conclusion which he stuck to in the

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<sup>33</sup> As for farm products see below, note 41 (point 1).

<sup>34</sup> In the *Notes on Bentham* (1810-11) we read: 'If a tax were laid on bread every commodity would rise, as there is no commodity to the production of which the labour of man is not necessary' (III, p. 270).

*Essay on Profits*, although the opinion that the rise in the money price of corn causes all money prices to rise was now expressly repudiated.<sup>35</sup> To rehearse the objections that have been levelled at Peach's reading of Ricardo's position (see de Vivo, 1994; Hollander, 1986; Kurz, 1994; Mongiovi, 1994; Prendergast, 1986b) and Peach's counter-objections (see Peach, 1986 and 1998) lies outside the scope of this work. There is, however, one basic aspect of Peach interpretation that may be worth calling attention to. According to Smith, the rise in the money price of manufactures is *the consequence* of the rise in the money wage (and of the rise in the money price of materials). In the argument attributed by Peach to Ricardo, instead, the rise in the money price of manufactures is *both the consequence and one of the causes* of the rise in the money wage. (It is because the money price of manufactures rises that, according to Peach, Ricardo is able to conclude that the money wage rises to the extent required to ensure that the rate of profits obtained in corn-growing falls.) The process implied is thus a cumulative one, leading from the rise in the money price of corn to a less than proportional rise in the money wage, from this — and from the rise in the money price of materials — to a rise in the money prices of manufactures, that in turn would cause a further rise in the money wage, and so on.<sup>36</sup>

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<sup>35</sup> 'It has been thought that the price of corn regulates the prices of all other things. This appears to me to be a mistake' (IV, p. 21, note).

<sup>36</sup> A process of this sort is described in Torrens's *Essay on the External Corn Trade*. Torrens refers with approval to Malthus's claim that workers do not consume corn alone (as also to Eden's analysis of family budgets). In one numerical example he assumes that 'corn forms one third of the labourer's subsistence'. On the further assumption that 'the wages of labour form a third part of the price of commodities', he states that 'a rise in corn, of nine per cent. would, in the first instance, raise goods one per cent. If, therefore, the effects of the price of corn upon that of goods rested here, such rise would be most beneficial to the landed interests. But its effects would by no mean rest here, because, the rise in one per cent. of all articles, would compel the labourer to give one per cent more for the clothing, fuel, and other things, which, no less than corn, are necessary to his support; and it would become requisite that he should obtain a rise of one per cent. on that part of his money wages, which purchases this part of his natural wages'. Thus, Torrens goes on, 'every rise in the money price of corn, raises the price of labour; and, through labour, the price of the other necessities of life. The advance upon these, again, raises wages, and the raise in wages, again, advances them; and so on, until the increased money price of goods, equals the increased money demand for them, which the rise in corn threw into the hands of the landed interests. Here the ascending scale of prices terminates' (Torrens, 1815, pp. 83-4; italics added). Though Smith is not mentioned, the above

This, however, is by no means how Ricardo sees the matter when, in the *Principles*, he describes the grounds of the opinion — which he has shared up to a few years previously — that the price of corn regulates the prices of all other commodities. Here Ricardo criticizes Horner for having

imbibed the common error which has misled Dr. Smith, and, I believe, most other writers on this subject [the consequences of the establishment of a bounty on the exportation of corn]. He supposes, because the price of corn ultimately regulates the wages, that therefore it will regulate the price of all other commodities (I, p. 302).

Ricardo proceeds, then, to quote a passage from Horner which clarifies in which sense, according to the latter, the money wage is only *ultimately* regulated by the price of corn:

He says that the bounty, 'by raising the profits of farming, will operate as an encouragement to husbandry; by raising the price of corn to the consumers at home, it will diminish for the time their power of purchasing this necessary of life, and thus abridge his real wealth. It is evident, however, that this last effect must be temporary: the wages of the labouring consumers had been adjusted before by competition, and the same principle will adjust them again to the same rate, by raising the money price of labour, *and, through that, of other commodities, to the money price of corn*' (I, 302-3; see Horner, 1804, p. 103).

The last words, italicized by Ricardo, emphasize the one-way nature of the causal chain implied — a causal chain which Ricardo himself describes a few pages later by quoting a passage from the *Wealth of Nations* all too familiar to the readers of this paper:

The error of Adam Smith proceeds precisely from the same source as that of the writer in the Edinburgh Review [Horner]; for they both think 'that the money price of corn regulates that of all other home-made commodities'... 'It regulates', says Adam Smith, 'the money price of labour, which must always be such as to enable the labourer to purchase a

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amounts to a vindication of his position on the consequences of a rise in the price of corn (see Section 2 above) — the conclusion that the 'money price of goods' rises in the same proportion as the money revenue (and thus the 'money demand' for goods) 'which the rise in corn threw into the hands of the landed interests' being now reached by a path not exposed to Malthus's criticism. For an entirely different reading of the Torrens's position see de Vivo (2000), p. x.



quantity of corn sufficient to maintain him and his family', etc. (I, pp. 307-8).<sup>37</sup>

6. ... and how he argued it before and after Malthus's criticism of the assumption that the wage consists in a given quantity of corn

'Have you Malthus's reply to you', Trower enquired of Ricardo on 2 March 1814, when returning to him the 'papers on the profits of Capital' (VI, p. 102). Malthus, then, like Trower, must have received them in February. The *Observations* were published a couple of months later.<sup>38</sup> If, then, in the papers Ricardo was still arguing on the 'Smithian' lines described in Section 5 above, Malthus's criticism of the assumption that the wage consists in a given quantity of corn must have reached him in March-April 1814 — Malthus advancing it either in his comments on the papers, or (if he failed to see the point immediately) at some later point during the writing of the *Observations*. It cannot be ruled out, however, that in the papers Ricardo was already arguing on the same lines as in the letter of 25 July 1814, Malthus having criticized the above assumption on an earlier occasion.<sup>39</sup>

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<sup>37</sup> A couple of pages above we encounter a joint paraphrase of the two arguments urged by Malthus against Smith's contention that the money wage rises in the same proportion as the money price of corn (see Section 2 above): 'If nothing were consumed by the labourer but corn, and if the portion he receives was the very lowest which his sustenance required, there might be some ground for supposing, that the quantity paid to the labourer could, under no circumstances, be reduced, — but the money wages of labour sometimes do not rise at all, and never rise in proportion to the rise in the money price of corn, because corn, though an important part, is only a part of the consumption of the labourer' (I, pp. 305-6).

<sup>38</sup> In the opening of the pamphlet we read: 'A revision of the corn laws, it is understood, is immediately to come under the consideration of the legislature' (Malthus, 1814, p. 87, note 4). The parliamentary debate on the corn laws was resumed on 5 May. A note (p. 109, note 3) contains a reference to 'The sudden fall of the price of corn', which took place after the peace of March 1814. Francis Jeffrey had already read the *Observations* by 12 May, on which date he wrote enthusiastically to their author, regretting that he had not published them in the *Edinburgh Review*. Jeffrey's letter is reproduced in Pullen & Hugues Parry, eds (1997), pp. 117-9.

<sup>39</sup> To what extent the writing of the *Observations* was influenced by the discussion simultaneously in progress between Malthus and Ricardo, cannot be stated with any certainty. It may, however, be conjectured that it was Ricardo's reliance on the assumption that the wage consists in a given quantity of corn, and the backing provided for it by Smith's authority, that called Malthus's attention to the circumstance that the unrealistic nature of the above assumption afforded a sufficient ground for rejecting not

When Ricardo put forward the thesis that the profits of the farmer fall as more capital is employed on the land, to treat the wage as consisting in a given quantity of corn was, as we have seen, a simplification fortified by the authority of Smith, endorsed by Ricardo's close friend and mentor, James Mill,<sup>40</sup> and widely (though, in Malthus's opinion, misleadingly) perceived as the crux in the corn-law debate. It must therefore have appeared to Ricardo (as it appeared to many others) as a legitimate simplification, and one able to supply an effective argument to use in discussion. It would no longer have seemed so after Malthus had dismissed it as both unrealistic and misleading. Compelled to desist from arguing his position on the basis of the assumption that the wage consists in a given quantity of corn, Ricardo conceded that the rise in the money price of corn causes the corn price of labour to fall (a point to which attention has been repeatedly called in the preceding Sections). The consideration of the above fall, he did however contend, *makes no substantial difference* to his conclusions. This is, indeed, what we found Ricardo doing in his letter of 25 July 1814, where the agricultural rate of profits is said to fall *in spite* of the rise in the money price of corn relative to the money wage (see Section 4 above).

Ricardo's defence of his theory would remain substantially unchanged till after the publication of the *Essay on Profits*. Thus, in his letter to Malthus of 14 March 1815 he contends that the circumstance that 'each individual labourer may receive *a less corn price for his labour*' does not prevent '*the whole corn amount of wages &c.*' from rising (as 'more

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only Ricardo's contention that the rate of profits obtained in corn-growing would fall with the rise in the capital employed on the land, but also (and, for the time being, more importantly) Smith's contention that a rise in the price of corn would leave the profits received in producing a given quantity of corn unaffected — no reference to the argument in the *Essay on the Principle of Population*, based on the constancy of money rents and taxes (see above, note 13), being any more required. (An echo of the old argument can, however, be detected in Malthus's letter to Ricardo of 9 October 1814, where one of the conditions required in order Ricardo's position to be 'correct in practice' is said to be that 'upon a rise in the price of raw produce, new leases would be immediately granted' and 'new taxes levied'; VI, p. 140.)

<sup>40</sup> As Sraffa observes, 'Mill characteristically came to adopt the role of educator, and Ricardo always acknowledged a large debt to him for urging him on and encouraging him to write' (Sraffa, 1952, p. xv).

labourers' must be employed to produce a given quantity of corn) — and thus the agricultural rate of profits from falling:

Observe that I do not question that each individual labourer may receive a less corn price of labour because I believe that would be the case, but I question whether the whole corn amount of wages &c. paid for the cultivation of the land can be diminished with an increase of the exchangeable value of corn. If no more labourers were employed and the price of corn rose your proposition could not be disputed, but the cause of the rise of the price of corn is solely on account of the increased expence of production (Ricardo to Malthus, 14 March 1815; VI, p.189).

On 8 May 1815 (to take one further example) he argues on similar lines, that an 'increase in average produce per acre' will cause the agricultural rate of profits to rise, since 'the fall in money value will be common to both capital and produce' — though, of the components of the former, *only those represented by farm products* undergo the same fall in price as the latter:

I have an account before me of the Capital actually employed on a farm of 200 Acres in Essex. It amounts to £.3433.— or about £. 17 pr. Acre, of which not more than £.1100 or £.1200 is of that description which is not subject to the same variation of value as the produce of the land itself; for £.2200 — consists of the value of the seeds in the ground, the advances for labour,— the horses and live stock &c. &c. If then the money value of the produce from the land should fall, *from facility of production*, it must ever continue to bear a greater ratio to the whole money value of the capital employed on the land, for there will be a great increase of average produce per acre, whilst the fall in money value will be common to both capital and produce (Ricardo to Malthus, 8 May 1815; VI, p. 226).

The fall in the price of the produce relative to the prices of the non-farm components of the (non-wage) capital<sup>41</sup> has a bearing, Ricardo contends in the above passage, on the *size* of the change in the agricultural rate of profits consequent upon the increased facility of production on the land, but not on the *direction* of that change, which remains the same as it would

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<sup>41</sup> Two aspects of the passage commented upon are worth emphasising. 1. Ricardo appears to share Smith's view that the money prices of all farm products rise and fall in the same proportion as the money price of corn (see Section 2 above). 2. Surprisingly enough, the 'advances for labour' are treated as consisting of farm products alone.

be if the whole capital was 'of that description which is... subject to the same variation of value as the produce of the land itself'.

Curiously enough, the circumstance that Ricardo 'did not rest his defence upon the assumption that corn *was* the only basic good' (Hollander, 1979, p. 155) is seen by both Hollander and Peach as incompatible with Sraffa's interpretation. Ricardo, Hollander contends,

did not, when he turned to the question of the determination of the general rate of return on capital, rely on a 'corn model' in the strict sense; that is to say, he did not maintain the view that the rate of profits in agriculture *determines* the general rate (Hollander, 1979, p. 154).

As this passage makes clear, the corn-ratio theory of profits (the 'corn model') and the 'principle of the determining role of the profits of agriculture' (Sraffa, 1951a, p. xxxi) are dealt with by Hollander as if they were one and the same thing (rather than with the former as representing the rational foundation of the latter, as contended by Sraffa).<sup>42</sup> Accordingly, the absence of the corn-ratio theory of profits from Ricardo's extant writings (the above passage refers to the *Essay on Profits*) is interpreted by him as evidence that the principle of the determining role of the profits of agriculture is not there either.

Commenting upon Malthus's letter of 5 August 1814, Peach observes that in Ricardo's reply of 11 August

Neither the rate of profit nor the assumption of capital-product homogeneity is mentioned, which, from Sraffa's Ricardo, would be a remarkable silence. Why should he miss such a fitting opportunity to defend, or even refer to, the putative "rational foundation" for his theory? (Peach, 1993, p. 62).

Though Ricardo's 'remarkable silence' is seen by Peach as lending support to an interpretation of Ricardo's position widely different from that put forward by Hollander,<sup>43</sup> his misunderstanding of Sraffa's interpretation is

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<sup>42</sup> See Section 1 and note 20 above.

<sup>43</sup> Peach's interpretation can be described as maintaining that the conclusion that the agricultural (and thus the general) rate of profits falls as more capital is employed on the land is not arrived at by Ricardo by assuming that the wage consists in a given quantity of corn, but on the basis of the view that the money price of non-corn wage goods rises in the

the same as Hollander's. Both authors meticulously scrutinize Ricardo's letters and the *Essay on Profits*, in the search for an explicit statement of that 'rational foundation' which according to Sraffa 'is never stated by Ricardo in any of his extant letters or papers' (I, p. xxxi; more fully quoted in Section 1 above)<sup>44</sup>, and arrive at the triumphant, if hardly surprising, conclusion that nothing of the sort can be found. This conclusion they regard as clear-cut evidence against Sraffa's interpretation.

What they fail to realise is that Ricardo *could not* base the defence of his theory on the assumption that the wage consists in a given quantity of corn. Nowhere does Ricardo appear to be interested in modern-type 'models', constructed for illustrative purposes and based on admittedly unrealistic assumptions. (The expression 'corn model' is in this respect highly misleading.) That the profits of the farmer, and thus the general rate of profits, fall with the increase in the capital employed on the land was, indeed, a thesis about the real world,<sup>45</sup> susceptible of being used as a basis for political action. Malthus's charge of lack of realism could not, then, be ignored. Whether the necessary abandonment of the simplifying assumption that the wage consists in a given quantity of corn made Ricardo's conclusions untenable, was, instead, open to discussion. Ricardo endeavoured to show that it did not. As, however, he was unable to give any clear reason why this should be so, it comes as no surprise that Malthus remained convinced that, though formally dismissed, the old simplification continued to underlie his reasoning.

(In 1820, by which time Ricardo had long embraced his new theory of profits, based on the labour theory of value, we find him reminiscent of the old train of reasoning. Annotating Malthus's *Principles* on the subject

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same proportion as the money price of corn. See Section 5 above. Hollander's interpretation, instead, has it that, when Ricardo states that 'it is the profits of the farmer which regulate the profits of all other trades' he does not mean what he says (see above, note 32).

<sup>44</sup> See also above, note 20.

<sup>45</sup> As Garegnani (1982, p. 71) puts it, Ricardo 'was, in fact, concerned with conclusions applicable to reality and not, merely, with correct deductions from an assumption — that of wages consisting entirely of corn — the realism of which could, and would, be immediately disputed'. In the same vein, Prendergast (1986a, p. 187, note 1) observes that it is 'not at all surprising that [Ricardo] did not choose to defend his model on the basis of the realism of its assumptions'.

of the accumulation of capital and the check imposed upon it by the fall in the rate of profits, he observes: 'Cannot such accumulation go on while the land last cultivated will yield more food than is consumed by the cultivators?'; II, p. 302.)

## References

- Anderson, J. (1777): *An Inquiry into the Nature of the Corn-Laws*, Edinburgh.
- de Vivo, G. (1994): *(Mis)interpreting Ricardo*, Contributions to Political Economy, vol. 13, pp. 29-43.
- de Vivo, G. (2000): *Introduction*, in Torrens (2000), vol. II, pp. vii-xxx.
- Dome, T. (1998): *Adam Smith's Theory of Tax-Incidence: an Interpretation of his Natural-Price System*, Cambridge Journal of Economics, vol. 22, pp. 79-89.
- Eden, T. M. (1797): *The State of the Poor, or an History of the Labouring Classes in England from the Conquest to the Present Period in which Are Particularly Considered their Domestic Economy with Respect to Diet, Dress, Fuel, and Habitation*, London. Reprint: Frank Cass, London, 1966.
- Faccarello, G. (1982): *Sraffa versus Ricardo: the Historical Irrelevance of the 'Corn-Profit' Model*, 'Economy and Society', vol. 11, pp. 122-37.
- Garegnani, P. (1982): *On Hollander's Interpretation of Ricardo's Early Theory of Profits*, Cambridge Journal of Economics, vol. 6, pp. 65-77.
- Garegnani, P. (1983): *Ricardo's Early Theory of Profits and its 'Rational Foundation': a Reply to Professor Hollander*, Cambridge Journal of Economics, vol. 7, pp. 175-78.
- Garegnani, P. (2000): *Samuelson on Sraffa's Hits and Misses*, mimeo.
- Hollander, S. (1973): *Ricardo's Analysis of the Profit Rate, 1813-15*, *Economica*, vol. 40, pp. 260-82.
- Hollander, S. (1979): *The Economics of David Ricardo*, Heinemann Educational Books, London.
- Hollander, S. (1983): *Professor Garegnani's Defence of Sraffa on the Material Rate of Profit*, Cambridge Journal of Economics, vol. 7, pp. 167-74.
- Hollander, S. (1986): *On a 'New Interpretation' of Ricardo's Early Treatment of Profitability*, *The Economic Journal*, vol. 96, pp. 1091-97.
- [Horner, F.] (1804): [*Observations on the Bounty on Exported Corn*], in Horner, 1957, pp. 96-114.
- Horner, F. (1957): *The Economic Writings of Francis Horner in the Edinburgh Review 1802-6*, edited by F. W. Fetter, Kelley and Millman, Inc., New York.
- Kurz, H. (1994): *Interpreting Ricardo*, *The European Journal of the History of Economic Thought*, vol. 1, pp. 411-20.
- Malthus, T. R. (1803): *An Essay on the Principle of Population*, second edition, in Malthus (1986), voll. II-III: *An Essay in the Principle of Population. The sixth edition (1826) with variant readings from the second edition (1803)*.

- Malthus, T. R. (1814): *Observations on the Effects of the Corn Laws, and of a Rise or Fall in the Price of Corn on the Agriculture and General Wealth of the Country*, in Malthus (1986), vol. VII, pp. 87-109.
- Malthus, T. R. (1815a): *An Inquiry into the Nature and Progress of Rent, and the Principles by which it is Regulated*, in Malthus (1986), vol. VII, pp. 115-145.
- Malthus, T. R. (1815b): *The Grounds of an Opinion on the Policy of Restricting the Importation of Foreign Corn: Intended as an Appendix to the 'Observations on the Corn Laws'*, in Malthus (1986), vol. VII, pp. 151-174.
- Malthus, T. R. (1986): *The Works of Thomas Robert Malthus*, William Pickering, London.
- Mill, J. (1804): *An Essay of the Impolicy of a Bounty on the Exportation of Grain*, in Mill, 1966, pp. 39-84.
- Mill, J. (1966): *Selected Economic Writings*, edited and with an introduction by D. Winch, The University of Chicago Press, Chicago; Oliver and Boyd, Edinburgh & London.
- Mill, J. S. (1967): *Collected Works of John Stuart Mill*; general editor F. E. L. Priestley, associated editor J. M. Robson, vol. IV, *Essays on Economics and Society*, University of Toronto Press, Toronto.
- Mongiovi, G. (1984): *Misinterpreting Ricardo: a Review Essay*, *Journal of the History of Economic Thought*, vol. 16, pp. 248-69.
- Peach, T. (1984): *David Ricardo's Early Treatment of Profitability: a New Interpretation*, *The Economic Journal*, vol. 94, pp. 733-51.
- Peach, T. (1986): *Ricardo's Early Treatment of Profitability: Reply to Hollander and Prendergast*, *The Economic Journal*, vol. 96, pp. 1105-12.
- Peach, T. (1993): *Interpreting Ricardo*, CUP, Cambridge.
- Peach, T. (1998): *On 'Interpreting Ricardo': a Reply to Sraffians*, *Cambridge Journal of Economics*, vol. 22, pp. 597-616.
- Prendergast, R. (1986a): *Malthus's Discussion of the Corn Ratio Theory of Profits*, *Cambridge Journal of Economics*, vol. 10, pp. 187-89.
- Prendergast, R. (1986b): *A Comment on 'David Ricardo's Early Treatment of Profitability: a New Interpretation'*, *The Economic Journal*, vol. 96, pp. 1098-104.
- Pullen, J., Trevor Hughes, P. (1997): *T. R. Malthus: The Unpublished Papers in the Collection of Kanto Gakuen University*, CUP, Cambridge, vol. I.
- Ricardo, D. (1951-73): *The Works and Correspondence of David Ricardo*, edited by Piero Sraffa with the collaboration of M. H. Dobb, CUP, Cambridge.
- Schumpeter, J. A. (1954): *History of Economic Analysis*, edited from the manuscript by E. Boody Schumpeter, Oxford University Press, New York; George Allen & Unwin, London.
- Smith, A. (1976): *An Inquiry into the Nature and Causes of the Wealth of Nations*; general editors R. H. Campbell and A. S. Skinner, textual editor W. B. Todd, Clarendon Press, Oxford. The Glasgow Edition of the Works and Correspondence of Adam Smith.
- Smith, A. (1828): *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. J. R. McCulloch, Black & Tait, Edinburgh.
- Sraffa, P. (1951a): *Introduction*, in Ricardo (1951-73), vol. I, pp. xiii-lxii.
- Sraffa, P. (1951b): *Note on 'Essay on Profits'*, in Ricardo (1951-73), vol. IV, pp. 3-8.
- Torrens, R. (1815): *An Essay on the External Corn Trade*, first edition, in Torrens (2000), vol. II: *An Essay on the External Corn Trade. 1<sup>st</sup> edition with the additions made in the 2<sup>nd</sup> edition.*

- Torrens, R. (2000): *Collected Works of Robert Torrens*, Thoemmes Press, Bristol; Kyokuto Shoten, Tokio.
- Tucker, G. S. L. (1954): *The Origin of Ricardo's Theory of Profits*, *Economica*, vol. 21, pp. 320-33.
- [West, E.] (1815): *Essay on the Application of Capital to Land, with Observations Shewing the Impolicy of Any Great Restriction of the Importation of Corn, and that the Bounty of 1688 did not Lower the Price of it*, by a Fellow of University College, Oxford; London, Underwood.



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