

THE 'MATERIAL EXPENSES' APPROACH TO THE THEORY OF VALUE AND DISTRIBUTION IN *THE WEALTH OF NATIONS*

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ABSTRACT

The paper discusses the influence of physiocratic ideas on Adam Smith's approach to the theory of value and distribution in *The Wealth of Nations* (WN). It is shown that Smith attempted to elaborate on the contributions of the Physiocrats by adopting elements of two different approaches to the theory of value and distribution which he found in their writings: A *material*-based approach and a *labor*-based one. While tentatively proposing a labor theory of value, Smith also retained elements of the material expenses approach which he had inherited from his precursors. The paper specifically draws attention to some tensions and inconsistencies that arise from the simultaneous presence of the two different approaches to the theory of value and distribution in the WN.

¹ Some of the ideas in the present paper were presented at an International Symposium on "Eighteenth Century French Political Economy" at Rikkyo University, Tokyo, on 23 November 2019 (Gehrke, 2019). I am grateful to the organizer, Ryuzo Kuroki, and to the participants for stimulating discussions and helpful comments. From this Symposium presentation also a related paper, entitled "Corn, cattle, land and labour: Physiocratic ideas in the *Wealth of Nations*" (Gehrke, 2024) has emerged, in which I also make use of some of the material presented in the present paper.

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EL ENFOQUE DE 'GASTOS MATERIALES' DE LA TEORÍA DEL VALOR
Y LA DISTRIBUCIÓN EN *LA RIQUEZA DE LAS NACIONES*

RESUMEN

El artículo discute la influencia de las ideas fisiocráticas en el enfoque de Adam Smith sobre la teoría del valor y la distribución en *La Riqueza de las Naciones* (RN). Adam Smith intentó elaborar su teoría adoptando elementos de dos enfoques diferentes de la teoría del valor y la distribución que encontró en los escritos de los fisiócratas: el enfoque que se basa en la *materia* y el que se basa en el *trabajo*. Mientras que de forma tentativa propuso una teoría laboral del valor, Smith también retuvo elementos de la teoría de los gastos materiales que había heredado de sus precursores. Específicamente, el artículo enfatiza algunas tensiones e inconsistencias que surgen de la presencia simultánea de los dos enfoques diferentes de la teoría del valor y la distribución en la RN.

Palabras clave: Adam Smith, Karl Marx, François Quesnay, renta, plus producto, teoría del valor.

Clasificación JEL: B11, B12, B31, D46.

1. INTRODUCTION

The influence of the French Physiocrats on Adam Smith's thinking and the presence of many quintessentially physiocratic concepts and ideas in *The Wealth of Nations* (WN) has been discussed by many commentators. The present paper draws attention to an aspect of Smith's adoption of physiocratic ideas which seems not to have been studied very closely yet. It concerns the conversion of the 'physical real cost' or 'material expenses' approach to the theory of value and distribution²,

² The notion of 'physical real cost' was used by Piero Sraffa in his unpublished manuscripts, referring to the 'objectivist' concept of cost which he had discerned in many preclassical and classical authors; for further details see Gehrke and Kurz (2018). The term 'material

which is to be found in the writings of the Physiocrats and other pre-classical authors, into the ‘embodied labor’ approach of the classical political economists and Marx, which Smith initiated with his tentative adoption of the labor theory of value in the WN. The paper will show that elements of the earlier ‘material expenses’ approach survived into the WN, where these are used side by side with, and partly in contradiction to, the better-known labor-based approach that is commonly associated with Smith’s value theory.

The paper is organized as follows. Section 2 discusses the (at least) two different approaches to the theory value and distribution that Smith found in the writings of the Physiocrats. In section 3, it is shown that the physiocratic ‘material expenses’ approach is still present in some of the most important passages of the WN with regard to the theory of value and price. In section 4, the tensions created by the remnants of the earlier material expenses approach, side by side with the labor-based one, in Smith’s theories of wages and profits are noted and his quintessentially physiocratic theory of rent is critically discussed. Section 5 offers some concluding remarks.

2. PHYSIOCRATIC APPROACHES TO THE THEORY OF VALUE

In his notes devoted to the reconstruction of the classical approach to the theory of value and distribution Piero Sraffa pointed out that at the beginning of systematic economic analysis authors like Sir William Petty, Richard Cantillon, and François Quesnay had adopted the right notion of cost, that is, the concept of ‘physical real cost’. These authors variously referred to notions like the ‘real’, ‘intrinsic’ or ‘necessary’ value of commodities —all of which were merely different expressions for the physical real costs or material expenses that had to be incurred in the production of a commodity. The latter were generally taken to include all material inputs that were necessary to obtain a commodity, including those required for the sustenance of those who work:

expenses’, which essentially designates the same concept, was used with regard to the value theories of the Physiocrats and other preclassical authors by Rubin (1979 [1929], p. 125), Meek (1962 [1951], pp. 334, 352) and Vaggi (1987, pp. 77-80).

Roughly speaking (and with several notable exceptions), previous writers had conceived of the value of a commodity in terms of the physical items which had been used up in order to produce it. The value of a finished commodity equalled the value of the raw materials embodied in it, plus the value of the subsistence goods consumed during the process of production by the men who worked up the raw materials. (Meek, 1962 [1951], p. 352).

It is from this value conception in terms of material expenses that one of the routes which eventually led to the formulation of the labor theory of value started out³. This route was begun to be followed by some mercantilist authors already in the 17th century. In the mercantilist period, the attention of British economic writers concentrated primarily on the international competitiveness of the wares that England traded internationally, that is, on the prices of manufactured commodities:

Those who then described labour as the source of value and wealth were often meaning to say only that wage-costs were usually the most important element in the cost of production of manufactured commodities. The labourers added an amount of value equal at least to the “value of their labour” —*i.e.*, their wages— to the raw materials which they worked up, and this added value was usually very large relative to that of the raw materials themselves. (Meek, 1973 [1956], p. 22)⁴.

Although labor was thus begun to be considered as the ‘source’ of value, for these writers value was still related primarily to the wage costs or material expenses for the laborers’ subsistence, rather than to amounts of embodied labor. However, a major problem that these writers (as well as all those following them) were confronted with consists in the fact that the material inputs that are used up in the production of

³ Another route along which the labor theory of value came to be developed goes back to John Locke’s ideas on the origin of property rights.

⁴ As William Petyt, one of the authors quoted by Meek, put it: ‘Most materials of Manufacture are of small value whilst raw and unwrought, at least in Comparison of the Manufacture, since by Manufacture they may be made of five, ten or twenty times their first value, according to the Workmanship.’ (Petyt, 1689, pp. 23-24). Petyt’s writings influenced also John Locke, who opened up another route towards the labor theory of value by means of his labor theory of property; on Locke’s contribution, see Meek (1973 [1956], pp. 21-22).

a commodity, including the workers' subsistence requirements, typically consist of a heterogeneous collection of produced commodities. Those costs can therefore be ascertained only by first determining the prices of those produced commodities, which in turn depend on the costs incurred in their own production. With circular production relations, determining prices on the basis of the physical real cost approach inevitably requires solving systems of simultaneous equations, and since the tools for solving such equation systems were not at their disposal, pre-classical and classical authors typically had recourse to some 'ultimate standard of value', such as food or corn (as sustenance for the workers), or of amounts of land and labor, in order to render the different cost elements commensurable. Looked at from the viewpoint of a system of simultaneous price equations such as the Sraffian one, these authors tried to cope with the problem of mutual interdependence by having recourse to some variant of the reduction method. The value theories put forward by major precursors of the Physiocrats, such as William Petty, Pierre de Boisguilbert, or Richard Cantillon, but also those of Smith, Ricardo, and Marx, all exhibit this characteristic feature in one form or another⁵.

The Physiocrats in some of their writings seem to have adopted the material expenses approach *without* attempting a reduction to some ultimate standard of value. In so far as they had a value theory at all, it thus remained incomplete and inconclusive, and failed to provide an explanation of value⁶. With respect to manufactured commodities, the Physiocrats simply maintained that competition would reduce the 'selling prices' of these commodities to their costs of production, which were taken to include, besides raw materials, the necessary means of subsistence of the artisans and their families. Under competitive conditions, the Physiocrats maintained, the selling price or 'price upon sale at first hand' would not exceed the fundamental or cost-covering price (*prix fondamentale*)⁷. Quesnay conceived of the members of the 'sterile class' as self-employed artisans, who expended nothing but raw materials

⁵ See Aspromourgos (1996, chaps. 3 and 5) and Vaggi (1987, pp. 77-80).

⁶ The 'material expenses' approach of the Physiocrats was also set out in Mercier de la Riviere's *L'ordre naturel et essentiel des sociétés politiques* (1767), which was partly written by Quesnay and described by Smith as 'the most distinct and best-connected account' of the physiocratic doctrine (WN IV.ix.38).

⁷ See Quesnay (1962 [1757], p. 105).

and their own labor, and merely received a compensation for their raw materials and the means of subsistence they needed for themselves and their families. In the case of primary commodities, the total expenses incurred by farmers in cultivating the land that make up the *fundamental price* were taken to comprise both the ‘physical costs’ that are technically necessary and the ‘social costs’, like rent and *taille*, which must be incurred for social, political or legal reasons⁸. In this way, the value of a commodity could be equated with its costs of production, but this can hardly be considered a satisfactory explanation or determination of value.

However, it is possible to discern, with Marx (1968 [1861-1863], pp. 54-63)⁹, elements of two different approaches to the theory of value in physiocratic authors: A *material*-based one and a *labor*-based one. The former can be said to have been characteristic of the earlier physiocratic authors, while the latter can be attributed to the later ones¹⁰. Marx noted that in the physiocrats an explanation of income distribution in terms of the surplus product did *not* require a labor-based concept of value, or, indeed, any concept of value at all. According to Marx, the physiocrats could do without such a concept because of their ‘general view of the nature of value, which to them is not a definite social mode of existence of human activity (labour), but consists of material things – land, nature, and the various modifications of material things’ (Marx, 1963 [1861-1863], p. 46). In the physiocratic system, the generation of a surplus can be grasped *directly* in physical terms. It

appears most palpably, most incontrovertibly, of all *branches of production*, in *agriculture*, the primary branch of production [...]. In agriculture it shows itself directly in the surplus of use-values produced over use-values con-

⁸ That rents do not originate from nature, but rather from social institutions, and thus constitute a ‘social cost’ which must be incurred for political and legal reasons, was clearly spelt out by Turgot: ‘The Cultivator has need of the Proprietor only by virtue of the human conventions and the civil laws.’ (Turgot, 1971 [1770], p. 16).

⁹ On Marx’s interpretation of the physiocratic approach to the theory of value, see also Gehrke and Kurz (1995, pp. 55-62).

¹⁰ The labor-based approach is to be found mainly in the writings of the late Physiocrats, and most notably in A.R.J. Turgot’s *Reflections* (1971 [1770]). However, also in Quesnay’s writings there is not only the well-known distinction between ‘classe productive’ and ‘classe stérile’, but also (although used rather sparingly) the distinction between ‘travail productif’ and ‘travail stérile’ (cf. Quesnay, 1958, pp. 829 and 911).

sumed by the labourer, and can therefore be grasped without an analysis of value in general, without a clear understanding of the nature of value. (Marx, 1963 [1861-1863], p. 46; see also 1963 [1861-1863], p. 51 and 1971 [1861-1863], pp. 115-116).

On the contrary, in the manufacturing sector, where ‘the workman is not generally seen directly producing either his means of subsistence or the surplus in excess of his means of subsistence’ (Marx, 1963 [1861-1863], p. 46), an analysis of value is indispensable for an understanding of the generation of a surplus. This could be avoided only by confining the generation of a surplus to the agricultural sector alone. Marx attributed to the physiocrats the idea that the physical contents of different products, consisting of various *concrete* materials, such as specific qualities of corn, iron, coal, stone and wood, can be reduced to some common denomination: Material *in genere*, or, if we may use a notorious notion of Marx’s own theory of value: *Abstract* material. Marx wrote:

Their error was that they confused the *increase of material substance*, which because of the natural processes of vegetation and generation distinguishes agriculture and stock-raising from manufacture, with the *increase of exchange-value*. Use-value was their starting point. And the use-value of all commodities, reduced, as the scholastics say, to a universal, was the material substance of nature as such, whose increase in the same form occurs only in agriculture. (Marx, 1963 [1861-1863], pp. 62-63).

The Physiocrats thus explained the surplus by the physical productivity of land and the ability of nature to create new material substance beyond that which had existed before. Such an increase cannot take place in manufacture, they argued, because there the existing material substance is merely given a different form: The work of the shoemaker, Quesnay maintained, consisted merely ‘in giving the raw materials a definite form’, but this is simply ‘production of forms’, and not a ‘real production’ or a ‘multiplication’ of wealth. The products of artisans are not creating new material substances, but are the result merely of the ‘combining’ of raw materials with the artisans’ means of subsistence, both of which were already in existence prior to production, and were obtained from the cultivators. Thus, in manufacturing, unlike in agri-

culture, there is no ‘generation or creation of wealth’, no real increase of material substance, as in agriculture¹¹.

3. SMITH’S CONFLATION OF THE MATERIAL EXPENSES APPROACH WITH THE LABOR-BASED ONE

In the *Lectures on Jurisprudence*, which he delivered at the University of Glasgow in 1762-1763 (LJ(A)) and 1766 (LJ(B)), Smith’s treatment of value and price kept closely to the lines laid down by Francis Hutcheson, who had suggested a demand-and-supply theory of value and price which largely followed Pufendorf’s earlier exposition. Although the distinction between market price and natural price appeared in the *Lectures*, there is considerably more concern with market price than with natural price, compared to the WN¹². Still absent from the *Lecture* notes was the prominent emphasis on labor, both in the form of a labor-embodied theory in the ‘early and rude state of society’ and in terms of the labor-commanded measure of value. This would seem to suggest that the predominantly labor-based theory of value that Smith then set out in the WN was significantly influenced by his better acquaintance with physiocratic ideas that he acquired after his departure from Glasgow. But one can in fact also find in the WN many remnants of the physiocratic ‘material expenses’ approach, side by side with and only partly integrated with Smith’s newly adopted labor-based approach to the theory of value and distribution. In several passages of the WN, as well as in the writings of other classical political economists, one frequently encounters references to the expenses for the maintenance of working animals, such as cattle, horses, donkeys or oxen. Like the Physiocrats, Smith indeed made no difference between human labor

¹¹ In this connection, Marx also referred to this quotation from *I veri mezzi di render felici le società* by Ferdinando Paoletti, a late Italian follower of the physiocrats: ‘Give the cook a measure of peas, with which he is to prepare your dinner; he will put them on the table for you well cooked and well dished up, but in the same quantity as he was given, but on the other hand give the same quantity to the gardener for him to put into the ground; he will return to you, when the right time has come, at least fourfold the quantity that he had been given. This is the true and only production.’ (Quoted in Marx, 1963 [1861-1863], p. 60).

¹² See Smith (1978), *Lectures on Jurisprudence* (LJ(A) vi.67-86 and LJ(B) 224-235).

and that performed by working animals; to him it was clear that what matters are the costs or material expenses which need to be incurred for the maintenance and subsistence of ‘those who work’¹³. In chapter 6 of Book I, “Of the component parts of the price of commodities”, where he presented his famous ‘adding-up theory of value’, Smith wrote in a well-known passage:

In every society the price of every commodity finally resolves itself into some one or other, or all of those three parts; and in every improved society, all the three enter more or less, as component parts, into the price of the far greater part of commodities.

In the price of corn, for example, one part pays the rent of the landlord, another pays *the wages or maintenance of the labourers and labouring cattle employed in producing it*, and the third pays the profit of the farmer. (WN I.vi.10-11).

While he stressed the overwhelming importance of ‘labor’ for the wealth and prosperity of a nation, it was by no means exclusively *human labor* that he was referring to. Like the Physiocrats, Smith emphasized the importance of the capital advances that have to be incurred, irrespective of whether these are used for the maintenance of agricultural workers, laboring cattle, or beasts of burden. Smith’s attempt to integrate the ‘material expenses’ approach into his ‘labor-based’ value approach naturally created some tensions and inconsistencies. One of these was noted by Edwin Cannan, who in his edition of the WN appended the following note to the passage quoted above:

Smith overlooks the fact that his inclusion of the maintenance of labouring cattle here as a sort of wages requires him to include it in the national income or “wealth of the nation”, and therefore to reckon the cattle themselves as part of the nation. (Cannan in Smith, 1904 [1776], p. 52n).

¹³ An implicit reference to Smith’s curious notion of the ‘wages or maintenance of the labourers and labouring cattle’, and to its physiocratic origins, can perhaps be found also in the following statement by Sraffa in chapter 1 of *Production of Commodities by Means of Commodities* (PCMC): ‘Suppose at first that only two commodities are produced, wheat and iron. Both are used, in part as *sustenance for those who work*, and for the rest as means of production — wheat as seed, and iron in the form of tools.’ (Sraffa, 1960, p. 3).

Such tensions and inconsistencies are also visible in Smith's confusing use of the terms 'wages' and 'labor' in other places. Thus the passage quoted above continues with the statement:

These three parts seem either immediately or ultimately to make up the whole price of corn. A fourth part, it may perhaps be thought, is necessary for replacing the stock of the farmer, or for compensating the wear and tear of his labouring cattle, and other instruments of husbandry. But it must be considered that the price of any instrument of husbandry, such as a labouring horse, is itself made up of the same three parts; the rent of the land upon which he is reared, the labour of tending and rearing him, and the profits of the farmer who advances both the rent of this land, and the wages of this labour. Though the price of the corn, therefore, may pay the price as well as the maintenance of the horse, the whole price still resolves itself either immediately or ultimately into the same three parts of *rent, labour, and profit*. (WN I.vi.11; emphasis added)¹⁴.

The same uncertain use of the terms 'wages' and 'labor' is to be found also in the writings of other classical authors, such as James Mill's *Elements*. It can be interpreted as a reflection of the gradual transition from 'physical real costs' or material expenses to the labor theory of value in the development of the surplus approach. Smith's treatment of the sustenance of the workers on the same footing as that of the working animals clearly reflects the earlier physical cost approach, which he had inherited from his precursors¹⁵. In one place Smith even 'calls an ox a

¹⁴ The use of 'labour' instead of 'wages' here can be read as a sign of Smith's conceptual confusion which emanated from his attempt at integrating the concepts of two different approaches. For Smith's uncertainty with regard to the proper use of terms see also chapter VII of WN, "Of the Natural and Market Price of Commodities", where he used, in a single paragraph, both 'rent, wages, and profit' and 'rent, labour, and profit' (WN I.vii.3, 8; emphases added).

¹⁵ A similar treatment can be found also in Ricardo's *Principles*: In chapter 31, "On Machinery", Ricardo argued that a country's net revenue, and even its gross revenue, can increase and yet the demand for (human) labor be diminished, 'and that is, when the labour of horses is substituted for that of man. If I employed one hundred men on my farm, and if I found that the food bestowed on fifty of those men, could be diverted to the support of horses, and afford me a greater return of raw produce, after allowing for the interest of the capital which the purchase of the horses would absorb, it would be advantageous to me to

productive labourer', as Marx (1968 [1861-1863], p. 365) noted with some irritation:

No equal capital puts into motion a greater quantity of productive labour than that of the farmer. Not only his labouring servants, but his labouring cattle, are productive labourers. (WN II.v.12).

The designation of laboring cattle as 'productive labourers' clearly emanated from the conflating of the physiocratic material expenses approach with the labor-based approach that Smith had tentatively put forward. But for Smith it is not the labor performed by men and beasts alone which is capable of generating value and surplus value: 'Nature' itself is said to 'labor' along with man:

In agriculture too *nature labours along with man*¹⁶; and though her labour costs no expence, its produce has its value, as well as that of the most expensive workmen. (WN II.v.12).

The idea that the surplus is generated by nature's generosity is a quintessentially physiocratic one, only newly expressed by Smith in terms of the labor-based approach to the theory of value. By taking over this idea from the Physiocrats Smith *ipso facto* adopted also the physiocratic explanation of rent.

As we saw above, Smith saw no difference between the labor of humans and that of working animals with regard to the generation of value and surplus value. What, then, about the 'labour' of 'inanimate working animals', that is, of machines? According to Smith, machines and instruments 'facilitate and abridge labour', and all 'improvements in machinery' (as well as a greater division of labor) generally increase 'the productive powers of the [...] labourers' (WN II.iii.32). Although he clearly recognized that all that matters for the choice of technique is the expenses that have to be incurred in obtaining a commodity, Smith

substitute the horses for the men, and I should accordingly do so' (Ricardo, 1951-1973, I, p. 394).

¹⁶ Obviously, in order to be consistent Smith would have to include also 'nature' in his category of 'productive labourers'.

was reluctant to consider machines, similar to horses or oxen, as ‘productive labourers’¹⁷.

The first author who clearly perceived the importance of ‘physical real costs’ for the determination of the surplus was the Russian mathematical economist Vladimir K. Dmitriev. He pointed out that ‘the origin of profit stands in no special relationship with human labour’ and showed that in (hypothetical) production conditions where all work is performed by working animals or, alternatively, by (self-reproducing) machines or robots,

the profit rate actually prevailing in all industries [...] would be determined by the production conditions (costs) of the subsistence of some domestic animal [...] [and] conceivably a state of technology could exist where [...] the profit level is determined in a production process where *no “living” power is involved at all* and “reproduction” of goods (including machines) is effected by “inanimate” natural forces. Therefore, we can imagine a state of society where *wage labour is not used* in production, *but where “surplus value” will nevertheless arise, and where, consequently, there will be profit on capital.* (Dmitriev, 1974 [1904], p. 214)¹⁸.

4. THE MATERIAL EXPENSES APPROACH AND SMITH’S THEORY OF INCOME DISTRIBUTION

Material expenses and Smith’s theory of wages. Smith also adopted some elements of the physiocratic conception of wages, which in turn was strongly influenced by the ideas of their British-French precursors Richard Cantillon and Pierre Le Pesant de Boisguilbert. These two authors basically treated labor as a reproducible input, with the costs of labor reproduction determined by customary subsistence requirements, and with corn constituting the most important item in the laborers’ consumption

¹⁷ John R. McCulloch, in his *Supplemental Notes and Dissertations to Smith’s “Wealth of Nations”*, advocated an even broader definition of ‘labor’ than Smith himself: ‘Labour may properly be defined as to be any sort of action or operation, whether performed by man, the lower animals, machinery, or natural agents, that tends to bring about a desirable result.’ (McCulloch (1828) in Smith, 1828 [1776], p. 75).

¹⁸ On Dmitriev’s contributions to the development of the surplus approach, see Gehrke and Kurz (2022).

bundle (Boisguilbert, 1966 [1704], p. 868). In view of the overwhelming importance of corn in the workers' subsistence, Boisguilbert suggested that money wages are strongly linked to corn prices: A high corn price, he argued, 'justifies raising the price of workers' (Boisguilbert, 1966 [1704], p. 875). This idea was adopted by Quesnay, who in his early economic writings simply linked money wages to the prices of subsistence goods, and in particular to the money price of corn. An increase in the price of corn, he argued, necessarily led to a corresponding rise in money wages in order to allow workers to purchase the necessary amount of food (Quesnay, 1962 [1757], p. 509). The real wages of common workers were supposed to be reduced to the customary subsistence level because of a chronic excess supply of labor. In Quesnay's words:

The level of wages, and consequently the enjoyments which the wage-earners can obtain for themselves, are fixed and reduced to a minimum by the extreme competition which exists between them. (Quesnay, 1962 [1761], p. 194).

Smith, referring explicitly to Cantillon's *Essay*, adopted this conception and similarly observed in chapter VIII of the WN:

A man must always live by his work, and his wages must at least be sufficient to maintain him. They must even upon most occasions be somewhat more; otherwise it would be impossible for him to bring up a family, and the race of such workmen could not last beyond the first generation. (WN I.viii.15).

Although Smith then complemented this with a bargaining theory of wage determination and made the natural level of wages depend on the advancing, declining, or stationary state of the economic system, he nevertheless can be said to have adopted the wage conception of the Physiocrats and their precursors by taking the real wage rate as given in terms of habitual subsistence requirements¹⁹.

¹⁹ See also Marx's comment: 'Adam Smith, like all economists *worth speaking of*, takes over from the Physiocrats the conception of the *average wage*, which he calls *prix naturel du salaire*' (Marx, 1963 [1861-1863], p. 376).

The material expenses approach and Smith's 'price theory of profits'. An erroneous proposition of Smith that also seems to originate from his confounding of the material expenses approach with the labor-based one is his 'price theory of profits', that is, his view of profits as being due to an *addition* to the prices of products²⁰. Thus, Smith argued in chapter VI of the WN that in capitalist economies, unlike in the 'early and rude state of society', where the 'real' prices of commodities (that is, the prices in terms of labor commanded) are regulated by the quantity of labor required for their production,

the quantity of labour commonly employed in acquiring or producing any commodity [is not] the only circumstance which can regulate the quantity which it ought commonly to [...] command [...] An additional quantity [...] must be due for the profits of the stock which advanced the wages and furnished the materials of that labour. (WN I.vi.7).

Smith is in fact asserting that the need to pay profits that arises in capitalist economies, as opposed to pre-capitalist primitive societies, in which the entire produce belongs to the laborer, necessitates a rise in the prices of the products —and this assertion, in turn, fosters the view that profits *originate* from such a price increase. The same view is conveyed more explicitly by a further passage in chapter VI²¹:

As soon as stock has accumulated [...], some [persons] will naturally employ it in setting to work industrious people, whom they will supply with materials and subsistence, in order to make a profit by the sale of their work. [...] In exchanging the complete manufacture either for money, for labour,

²⁰ Fratini and Ravagnani (2024) recently showed that Sraffa's Standard system can be used to criticize Smith's price theory of profit.

²¹ See also Ricardo's statement in a letter to James Mill, quoted by Sraffa in his Introduction to the *Principles*: 'Adam Smith thought, that as in the early stages of society, all the produce of labour belonged to the labourer, and as after stock was accumulated, a part went to profits, that accumulation, necessarily [...] raised the prices or exchangeable value of commodities, and consequently that their value was no longer regulated by the quantity of labour necessary to their production. In opposition to him, I maintain that it is not because of this division into profits and wages [...] that exchangeable value varies' (Sraffa, 1951, p. xxxvii).

or for other goods, *over and above what may be sufficient to pay the price of the materials, and the wages of the workmen*, something must be given for the profits of the undertaker of the work who hazards his stock in this adventure. (WN I.vi.5; emphasis added).

This falsely suggests that profits originate from the exchange of commodities, rather than in the production sphere, and that they are created and can be altered by raising the selling price of finished products above the total value of the inputs used in their production.

Rent, surplus, and corn. Smith opened his chapter on rent in book I of the WN by noting that land rent ‘is naturally a monopoly price’, which ‘is not at all proportioned to what the landlord may have laid out upon the improvement of the land’ (WN I.xi.a.5). If unrelated to the proprietors’ expenses for land improvement, what, then, determines the level of rent? Smith essentially followed the Physiocrats by making it dependent on the prices of agricultural products and relating the latter to demand:

There are some parts of the produce of land for which the demand must always be such as to afford a greater price than what is sufficient to bring them to market; and there are others for which it either may or may not be such as to afford this greater price. (WN I.xi.a.7).

For this reason, Smith contends, rent ‘enters into the composition of the price of commodities in a different way from wages and profit’ (WN I.xi.a.8). Whereas high or low wages and high or low profit ‘are the *causes* of high or low price’, high or low rent is not the cause but rather ‘the *effect*’ of a high price of agricultural products:

It is because high or low wages and profit must be paid, in order to bring a particular commodity to market, that its price is high or low. But it is because its price is high or low; a great deal more, or very little more, or no more than what is sufficient to pay those wages and profit, that it affords a high rent, or a low rent, or no rent at all. (WN I.xi.a.8).

In this way the level of rent is made to depend on the demand for particular agricultural products. Accordingly, the prices of those products

may exceed to varying degrees, depending on demand circumstances, the 'sufficient price', which corresponds to the costs of production, inclusive of a uniform rate of profits on the advanced capital (but exclusive of rent). It remains unclear how Smith could consider this reasoning to be compatible with his distinction between 'market prices' and 'natural prices', and the tendency of the former to gravitate around the latter. The origin of Smith's inconclusive and erroneous argument can perhaps also be found in physiocratic thinking, because Quesnay at one point had also attempted to argue that because of rapid population growth the demand for agricultural products is constantly in excess of supply, so that they are sold at a price that exceeds their costs of production (Rubin 1979 [1929], p. 126).

The main shortcoming of Smith's theory of rent, however, is his adherence to the physiocratic idea that

the labourers and labouring cattle [...] employed in agriculture, not only occasion, like the workmen in manufactures, the reproduction of a value equal to their own consumption, [...] but of a much greater value. Over and above the capital of the farmer and all its profits, they regularly occasion the reproduction of the rent of the landlord. This rent may be considered as the produce of those powers of nature, the use of which the landlord lends to the farmer. [...] It is the work of nature which remains after deducting or compensating everything which can be regarded as the work of man. (WN II.v.12).

Smith here completely takes over the physiocratic explanation of rent, and, like the Physiocrats, he also abstains from discussing the question how the landlord had acquired the right to appropriate those 'powers of nature' to himself and 'lend' them to the farmer. In the final analysis, however, Smith appears to have considered rents to originate, not from the 'work of nature' in general, but from its work specifically in the production of 'food' or 'corn' (WN I.xi.c.8). Since the workers' diet in England and Scotland consists mainly of corn, Smith argued, it is from the rents obtained in corn-growing that all other rents emanate:

Food is in this manner, not only the original source of rent, but every other part of the produce of land which afterwards affords rent, derives that part

of its value from the improvement of the powers of labour in producing food by means of the improvement and cultivation of land. (WN I.xi.c.8).

The existence of the ‘much greater’ value-added (or surplus *in value terms*), which the agricultural laborers are supposed to generate (as compared to the laborers employed in manufacturing and trade), Smith then sought to explain with a ‘food-ratio’ argument *in physical terms*. In the production of food, Smith noted, the origin of rent can be directly observed, because

land, in almost any situation, produces a greater quantity of food than what is sufficient to maintain all the labour necessary for bringing it to market, in the most liberal way in which that labour is ever maintained. The surplus too is always more than sufficient to replace the stock which employed that labour, together with its profits. Something, therefore, always remains for a rent to the landlord. (WN I.xi.b.2).

Marx commented on Smith’s line of reasoning with regard to the explanation of the origin and level of rent with the perceptive remark:

This sounds quite *Physiocratic* and contains neither proof nor explanation of why the “*price*” of this particular commodity pays a rent, a surplus *over* and *above* the “sufficient price”. [...] Having replaced the natural price by the sufficient price, and declared rent to be the surplus over and above the sufficient price, Smith forgets altogether, that it is a question of *price*, and derives rent from the ratio between the amount of food yielded by agriculture and the amount of food consumed by the agricultural worker. (Marx, 1968 [1861-1863], p. 123).

For Smith, the surplus of food produced over food used up constitutes not only ‘the original source of rent’, but also forms the material basis for increases in the social division of labor. It is only when ‘the labour of half the society becomes sufficient to provide food for the whole’, Smith observed, that ‘the other half [...] can be employed in providing other things’ (WN I.xi.6-7).

5. CONCLUDING REMARKS

The present paper has shown that Smith variously sought to integrate elements of the earlier material expenses approach to the theory of value and distribution into the labor-based approach which he had placed at the center of his value and distribution theory in the WN. It was clear to him that the social surplus, shared out between capitalists and landowners in the form of profits and rents, consists of a bundle of heterogeneous commodities that is given by the amounts of commodities produced in excess of those which have been used up in their production. By having recourse to labor as an 'ultimate standard' of value, Smith sought to render the latter two commodity bundles commensurable.

He also knew that for the existence of a surplus and the determination of its size it was of no consequence whether labor was performed by wage laborers or working animals; what mattered were only the amounts of the inputs that are used up by those who work. His attempts to acknowledge this fact led to his curious designation of the laboring cattle as 'productive labourers' and to his confusing use of the terms 'wages' and 'labour'. Moreover, in his theory of wages he vacillated between treating the workers' wages 'on the same footing as the fuel for the engines or the feed for the cattle' (Sraffa, 1960, p. 9), as the Physiocrats and their precursors had done, and allowing for the workers to participate in the sharing out of the surplus.

With regard to his theory of rent, his adoption of the physiocratic explanation of rent in terms of the generosity of nature, rather than its niggardliness, in conjunction with his recourse to the labor theory of value made him speak of nature laboring along with man at no expense. Finally, in his theory of profits he failed to perceive the existence of the inverse wage-profit relationship in given technical conditions, that is, the constraint binding changes of the real wage rate and the rate of profits, because of his incongruous amalgamation of the material expenses approach and the labor-based one. ◀

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