The Rate of Interest Independent of the Rate of Profit: a Review of Matthew Smith's *Tooke* (2011)

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1 The Role of Outdated Monetary Theories

In the study of monetary theory, perhaps to a greater extent than for other areas of economic theory, it is not possible to draw clear boundaries between the economic theory itself, the history of economic theory and the economic history. Money is an institution that is called upon to perform certain functions in a capitalist system of production. On the other hand, the capitalist system in its different stages of development shows specificities. The role that money plays in these stages has therefore both common traits and traits that are peculiar to each of them. Although the purpose of monetary theory in the strict sense is the identification of the common traits, these may not be fully understood if the discussion is not explicitly referred to the specific historical moment. Reference to history is also important because the understanding of these common traits depends on the dominant economic theory of the time. Different historical phases entail different economic theories, and the newcomer does not necessarily improve upon its predecessors. I am not just saying that to understand the current monetary debate it is necessary to know what preceded it. The issue is that 'outdated' theories can provide interpretive keys that current theories are unable to offer. The content of the controversy about central bank behaviour as discretionary or rule-based, for example, can hardly be understood without having a glimpse of the Keynesian-Monetarist controversy; the Keynesian-Monetarist controversy, in turn, repeats themes already present in the Currency School versus Banking School controversy, referring them to a theoretical framework completely changed by the influence of John Maynard Keynes's *General Theory*; the Currency-School/Banking-School controversy becomes clear as a development of the Bullionist controversy, determined by an enlargement of the role of fiat money, the growing importance of financial intermediation in the process of money creation, and the financial turmoil of the first half of the nineteenth century.

The importance of these connections, which I think almost everyone should be willing to admit, is not limited to the fact that any dispute is the harbinger of the next. Many earlier, now forgotten, debates are particularly vivid, due to some fundamental issues being rendered salient then, as a result of the earlier authors analysing the subject from diverse theoretical standpoints.

To give an example: those who seek to find in the literature of the thirty years before the subprime crisis an analysis of the role the central bank has to play as lender of last resort in order to prevent the collapse of the financial system in a time of exceptional financial disorder, would not find anything even remotely comparable to the writings of Francis Baring and Walter Bagehot on the subject. The reason for so great a lapse is not only that, as remarked by Knut Wicksell, the mathematical method is particularly ill-suited to address monetary issues[1]; it should rather be found in the economic theory that has dominated the past three decades – a theory which is unable even to *contemplate* events such as those which have occurred since 2007 (and, in fact, it has been unable to offer a satisfactory rationalisation of what happened even in the aftermath of the financial turmoil).

It is therefore particularly fortunate that the publication of a book on the work of Thomas Tooke should have occurred during one of the biggest financial crises in the history of the capitalist system. The book (to be read not only as a careful work of history of economic thought, but also as a broader contribution to the debate on the economic and financial crisis in progress) is the culmination of extensive research by Matthew Smith.[2] It is divided in four parts. The first part deals with Tooke's approach to value and distribution (Chapter 3). The second part analyses Tooke's explanation of price movements (Chapters 4 and 5). The third part discusses Tooke's monetary thought before (1819-1838) and after (1840-1857) he became one of the leading exponents of the Banking School (Chapters 6 and 7). The final part draws together the threads of the argument by making an assessment of the legacy of a nineteenth century monetary economist whose importance is much greater than the attention he has received in the literature (Chapter 8). Matthew Smith's account of Tooke's contributions is wide-ranging. Among the many topics analysed in his book, this review aims to discuss in particular Tooke's view of the connection between the interest rate and the incentive to invest, his notion of the interest rate as a cost of production, and the relationship of this notion with the classical theory of distribution.

2 What is Classical Monetary Theory About?

Together with Henry Thornton and David Ricardo, Tooke is undoubtedly a giant of classical monetary theory. But what exactly is classical monetary theory about? Put another way, what unites a platoon of writers who express very different positions, not only between the two great camps of the Anti-Bullionist/Banking School and the Bullionist/Currency School, but also within them? As we can now see clearly through the work of Piero Sraffa, the classical writers can be conceived as a unitary body – the classical school – because they based themselves on a theory of value and distribution completely different from what has emerged in the late nineteenth century with the prevalence of the marginalist school. This is the fundamental premise of Matthew Smith: Tooke's ideas can be approached only by understanding that they are unconnected to the standpoint of marginalist economics and have to be framed within the 'theoretical foundations of classical economics from which they logically sprang' (Smith 2011: 2).

For marginalism, value and distribution are determined simultaneously, and the theory of value and the theory of distribution are in fact just two aspects of the same theory. The determination of the activity levels is yet another aspect of the same problem; and of course – barring market 'imperfections' – these levels constantly tend towards those corresponding to the full employment of all factors of production. In the context of a theoretical conception in which the level of production is always such that, except for the disorders of the shortest period, the factors of production are fully utilised and the distribution of this production is governed by factor endowments, technology and consumers' tastes, money plays no role, or, rather, it might play a role in allowing this balance to be achieved. But then money plays no role in the *determination* of the real variables. For the classical school, the theory of value, the theory of distribution and the theory of activity levels are not only different from those of the marginalist school, but are also *distinct* theories. They are related, but they are not one and the same theory – not different facets of the same problem. This circumstance is extremely important for the book under review. If a significant monetary theory is a theory in which money can exert a non-transient influence on both the level and the distribution of the social product, the classical theory, unlike marginalism, can make room for a significant theory of money. The extent to which classical authors have exploited, more or less consistently, this opportunity is the constructive content of classical monetary theory, and marks the main differences between the individual authors of that school.

If we look at the most consistent formulation of classical monetary theory, namely, that of Ricardo, we can see that, though it offers many reflections showing that, in the short term, money is able to affect the level of the product as well as its distribution among social classes, it can reasonably be argued that the space of a significant monetary theory is denied in both the directions which we have referred to: the level of production is constrained by the level of accumulation; its distribution is set by the profit rate. From this standpoint, Ricardo can consistently conclude only that money is neutral. More important, however, is that the reasons for which money is neutral in Ricardo are quite different from those for which it is neutral in marginalism. In the theory of value and distribution on which Ricardo based his monetary analysis, money *can* be neutral. In marginalism, money *must* be neutral. When in the twentieth century – with Keynes's theory of the determination of the activity levels and Sraffa's re-opening of the theory of distribution – the road towards a significant theory of money will be opened, the process of integrating it into the classical theory can be started. This process will always be deeply alien to marginalism, being fundamentally incompatible with its theoretical setting. Of course, not all classical economists reached the theoretical consistency of Ricardo. Consequently, even if in ways theoretically convoluted, they ended up giving money a role that, strictly speaking, it could not exercise. Tooke is the most important exponent of this mainly empirical approach.

3 The Wrecker of the Quantity Theory of Money

Matthew Smith's inquiry on the monetary thought of the Banking School Tooke centres on the relationship between changes in the money supply, in the rate of interest and in prices. Pre-Banking School classical economists did not offer a clear explanation of this relationship. The indication of the interest rate as a causal link in the chain that leads from money to prices can be found, as remarked by Matthew Smith, in both Thornton and Ricardo. However, the only clear thing was that an abundance of money and low interest rates were a single phenomenon, and that, money being neutral, its variations would sooner or later result in a correspondent variation of prices, and the interest rate would recover its equilibrium level. During the process there could be some influence on 'industry' and income distribution. But after prices have in some way settled, no effect is present, and real magnitudes would be restored to their unperturbed equilibrium level.

Moving from the study of price trends and from a keen observation of the money market, Tooke objected to this transmission process, raising two fundamental questions. The first concerns the definition of money: according to Tooke, it consisted 'of not only coin and banknotes, but also cheques (that is, bank deposit transfers), bills of exchange, exchequer bills and any forms of credit used to make payments in the economy' (Smith 2011: 163); from this followed the idea 'that the *whole* quantity of money in circulation was endogenously determined by the demand for money' (Smith 2011: 166). Here we find Tooke as the leading member of the Banking School, the first economist to fully understand that money is mainly bank money, that bank money is credit money, and that credit money, unlike high-powered money, comes into being on demand. The second question concerns the relationship between changes in the interest rate and price changes. In Ricardo's explanation, whatever the specific connections between variations in the interest rate and in prices, reductions in interest rates had to be accompanied by price increases and vice versa. Now, thanks to the amount of empirical data examined by him, Tooke could safely conclude that 'The theory is not only not true, but the reverse of the truth' (Tooke 1844: 84). Here we meet with Tooke as the great wrecker of the quantity theory of money, able to find empirical evidence that is rich in analytical implications: the great advances in monetary theory by Wicksell and Keynes would be built upon a comparison with it. Indeed, it is Wicksell who recognised that it is impossible to develop the theory of money without dealing with the issues raised by Tooke, even though he hastens to add that in this work of development Tooke is of little or no help. Matthew Smith shows that Tooke has much to offer on the constructive side: what must be done to understand this aspect is to abandon the marginalist interpretation of Tooke advanced by Wicksell and read Tooke's work in the context of the neo-Ricardian framework. I shall argue however that it is not clear to what extent we can attribute to Tooke a line of thought that consistently put together a significant theory of money; that is, a theory able to take into account the influence of monetary phenomena on the distribution of the product and the determination of its level.

As already mentioned, the analytical implications of a direct relationship between the interest rate and prices are strong and Tooke, with the passing of time, became increasingly aware of them, concluding by 1838 that it is not possible to establish a causal relationship from money to prices: the causal relationship is from prices to money. The quantity theory is turned upside down. But this reversal is not something that can be done without calling into question the classical theory of the average level of prices, of the interest rate, and ultimately of the whole set of relative prices. Put differently, this inversion can acquire full meaning only when supported by a coherent alternative theory of distribution. If prices are not determined by the amount of money but the amount of money is determined by prices, what determines prices? What are the implications for the theory of interest? And further, what happens to the relationship between the rate of interest and the rate of profit? Tooke's answers to these questions can only be incomplete, mainly because the theory of distribution to which he refers, as was the case with many post-Ricardian economists who were his contemporaries, is a retreat from the fundamental contribution of Ricardo.

4 Market Prices and Normal Prices

The problem of prices is addressed by Tooke mainly empirically. The reader of the *History of Prices* is easily disoriented in the face of the amount of data and references to the actual circumstances of the periods he examines. This empirical approach has led many authors (Joseph Schumpeter being the most emblematic case[3]) to consider the work of Tooke as full of suggestions but deprived of any theoretical discipline. However, to consider the *History of Prices* as alien to the theoretical developments of its time would be a grave mistake. A founder and active member of the Political Economy Club, Tooke is undoubtedly a protagonist of the birth of political economy as a discipline in its own right. Nevertheless, like many businessmen and bankers who took part in the monetary debates of the early nineteenth century (Francis and Alexander Baring are other examples), Tooke's main purpose was to juxtapose facts to economic theories, while not explicitly entering into abstract theoretical issues. This is an important aspect that should not be misunderstood when evaluating the work of this author. The book under review shows the reader that picturing Tooke as a 'woolly' thinker unable to grasp the theoretical issues in the backdrop of the *History of Prices* is a caricature. Yet, it remains true that Tooke cannot be considered a coherent monetary theorist in the sense that one can attribute to this expression when speaking of Ricardo.

A very significant example in this regard is offered by Tooke's attitude about market prices. To Ricardo, market prices have little interest. Fluctuations of prices determined by supply and demand are rather a nuisance that does not allow one to observe long-term positions, the latter being the only ones he is interested in. Tooke instead shows a genuine interest in market prices, and in fact T.E. Gregory (in his Introduction to a reprint of Tooke's *History of Prices*) stresses that Tooke's general point of view (unchanged throughout his life) is that 'the most marked feature of economic life is the tendency of economic self-interest to exaggerate the swing of prices above and below the true equilibrium point' (Gregory 1928: 16). In his less mature writings, Tooke believed that real factors (bad harvests, wars) affect prices, that prices affect the medium of circulation (both in its rapidity and its amount), and that the medium of circulation magnifies price variations. Changes in the price level are not explained by money but, first and foremost**,** by real factors. This is a constant of Tooke, and the development of his line of thought can be seen as a progressive loss of weight of the role of money as a source of price changes, and a refinement of the argument in support of the idea that no causal chain from money to prices can be established.[4] But in any case it remains that, as noted by Ricardo, Tooke's main goal is to 'throw much light on the question of the influence of an over supply or of an increased demand, without a corresponding supply, on prices' (Ricardo to Malthus, 16 December 1822; in Sraffa 1951–1973: IX, 250 ; on this see also Arnon 1991: 45). This does not imply a lack of awareness of the importance of relative prices, or even a confusion between them and absolute prices.[5] What seems to emerge from the *History of Prices* is rather an attempt, necessarily ambiguous, to analyse the discrepancies between market prices and equilibrium prices without explicitly addressing the problem of how the latter are determined. Tooke lacks interest in those distributive issues that according to Ricardo formed the principal object of investigation of political economy. Tooke focuses his attention on an empirical notion of nominal equilibrium prices, without an involvement in Ricardo's labour theory of value from which Tooke clearly, albeit privately, keeps his distance.[6]

Matthew Smith follows a different line of reasoning, arguing that 'from the very beginning Tooke had a coherent theoretical conception of price determination as a frame of reference for his applied work' (Smith 2011: 31), Tooke having implicitly embraced Adam Smith's 'adding-up theory' of natural prices. Now, what Sraffa (1951–1973: I, xxxv) calls Adam Smith's adding-up theory of prices is the inability to see the constraint that forces variations in one direction of the profit rate to be balanced by variations in the opposite direction of the wage rate; it appears that each of them can be fixed independently of the other. This is the border of the realm of vulgar political economy, which, in Marx's words, 'deals with appearances only' (Marx 1867: 81). The adding-up theory, thus, seems to give

Tooke a theory of value and distribution, but at the price of putting on him the label of vulgar economist. According to Marx, a great admirer of Tooke, he was not; and I suspect that Marx's appreciation of Tooke depends on his 'indifference' about the controversy surrounding the labour-embodied versus the labour-commanded controversy – since the labour commanded and the adding-up theory were then almost one and the same thing.

Undoubtedly, Tooke shares with Adam Smith the idea that, while in the short term the market price suffers from the accidental disturbances in supply and demand, in the long term these disturbances play no role and thus the market price gravitates around a price given by the sum of an unperturbed level of wages and profits. This is not the adding-up theory, but simply the statement that nominal equilibrium prices must provide revenues that equal the sum of normal monetary expenses. By itself, it does not imply any adding-up fallacy. The problem, instead, is that this perspective is mute about the determination of distribution (or, which is the same thing, mute about what is meant by these unperturbed levels of wages and profits). This brings us back to the idea that Tooke was not much interested in determining the natural levels of wages and profits, and, consequently, in making his theory of nominal prices consistent with his 'implicit' underlying theory of the distribution.

That Tooke rejected Ricardo's labour theory of value as almost all the economists of the time, since 'by the end of the 1820s the core of Ricardo's theory had been largely abandoned by "Ricardians"' (Smith 2011: 32), is a fact. But it is also a fact that a limited comprehension of the problem of value and distribution did not prevent Tooke from analysing the relationship between prices and the state of the circulating medium. Similarly, as pointed out by Matthew Smith, it is this theoretical vagueness that allowed Tooke to obtain important insights on the theory of distribution, which will be made consistent by subsequent developments in that theory. With respect to these insights, whether Tooke adhered or not to the adding-up theory appears largely inessential.

5 Interest and Prices

As we have noted above, the classical economists had vaguely identified the interest rate as a connecting link between the money supply and the price levels. Money does not enter the economy by 'helicopter drop', it is offered on loan; moreover, it normally enters circulation as loans to investors. A reference to the interest rate and to the inducement to invest was thus unavoidable, the quantity theory not being conceived as a theory establishing a direct connection between increases in money supply and increases in consumption demand. It was nevertheless true that an explicit analysis of the relationship between reductions in interest rates and increases in spending was absent, as evidenced by the great importance attributed to speculation on the price of goods, which was a way of dealing with the additional supply of credit granted to capitalists as a fresh source of demand, and therefore as a cause of rising prices, without going into much discussion about the relationship between the interest rate and the inducement to invest. In any case, the essential point was that variations in the interest rate could only be transient, since, once prices rose, the 'natural' level of the interest rate had to recover.[7]

As remarked by Pivetti (1991: 77), 'Tooke had the great merit of managing to go to the heart of the matter: the question of the effects of the changes in the rate of interest on the inducement to purchase commodities'. In Tooke, not only the interest rate finally becomes the decisive factor in the so-called fundamental equation of price: going to the heart of the matter leads him to see, with the comfort of his empirical evidence against the association of a falling interest rate with rising prices, that there is no reason why the interest rate has to play a role in the causal chain from money to prices. Keynes points out that '[b]efore the crisis of 1836–37 the partisans of the "currency theory" – according to Tooke – considered that the influence of the Bank of England on the price-level only operated through the amount of circulation; but in 1839 the new-fangled notion was invented that the Bank-rate also had an independent influence through its effect on "speculation"' (Keynes 1930: 195). Hereupon, for Tooke denying the connection between falling interest rate and rising prices was tantamount to denying the idea that a lower interest rate was able to generate increased investment by dealers in stocks of goods. This is a goal that Tooke (equipped with a theory according to which real causes produce substantial variations in prices) could easily reach, arguing that few speculators 'ever speculate but upon the confident expectation of an advance of price of at least 10 per cent.', and then even large changes in the interest rate 'never induced or deterred a single speculative purchase' (Tooke 1840: 152-3). He does not conceive the interest rate as a decisive factor in speculative investment in goods, and thus he sees no reason why the rate of interest should influence the rate of investment in general (see Smith 2011: 172-80). Thus Tooke stands as the founder of a line of thought that will not be developed in all its implications even in Keynes's *General Theory*. Alfred Marshall will never cut the knot of the effect of the interest rate as operating on speculative investment in stocks of goods or on investment itself. Wicksell, leaving aside the subject of speculation, established a connection between the interest rate and the incentive to invest. Keynes will get rid of the speculative channel in the *Treatise*, and in the *General Theory*, as Wicksell, posits a connection between the interest rate and the incentive to invest.

For one reason or another, in all these authors the link between interest rates and the incentive to invest will remain active. But if it was not, would it still be possible for Tooke to have a coherent theory of the interest rate? In this respect, it is important to note that the connection the interest rate established between the abundance of money and a rising level of prices did not work only in the sense of offering a theory of the price level, but also in the sense of guaranteeing a consistent theory of the interest rate. It is thanks to the fact that additional money 'would be sent into every market, and would every where raise the prices of commodities' (as Ricardo puts it), that the excess of money supply is absorbed, bringing the interest rate to its previous level, thus not allowing a growing discrepancy between the market rate of interest and its 'natural' level. In other terms, once the connection is broken between the interest rate and prices, what fails is not only the quantity theory of the general price level, but also the loanable funds theory of the interest rate. The connection between interest rate and prices is so crucial that its working is able to absorb a theory of endogenous money without major complications, with the only consequence of putting more pressure on prices and making the inflationary spiral stop the process of endogenous creation of money. This point was clear to Wicksell, and in fact his stronger criticism of Tooke is only about a lack of a coherent theory of the interest rate: the interest rate would necessarily be unstable if its influence on prices were to go in the opposite direction to that postulated by the quantity theory of money. This does not necessarily imply a need to restore the link between interest rates and prices as suggested by

Wicksell. The other way out was to reach a monetary theory of interest, a way which Tooke would not follow to the end, because leading to conclusions that would have been unacceptable for him (more on this in section 6). Marx will have no difficulty in going down this path, getting to a monetary theory of interest. But this brings us to the question of the relationship between interest rate and profit rate, which is discussed in chapters 6 and 7 of Matthew Smith's book.

6 The Rate of Interest Independent of the Rate of Profit

The interest rate is without doubt a monetary phenomenon, being the price of *money* capital and not of *real* capital. Yet, it becomes a monetary phenomenon in a stronger sense when the formation mechanism of this price does not adapt itself to that of the rate of profit. The interest rate as a monetary phenomenon is the interest rate *independent* of the rate of profit, which means that it is subject to its own laws, and not to those governing the rate of profit. From this point of view, to break the association between a falling interest rate and rising prices is a key step, since this association ensures that the price of borrowed money capital is adapted to that of the real capital, whatever the changes in the amount of money – endogenously or exogenously determined.

A theory of the interest rate that is independent of that of the profit rate poses two problems. The first we have mentioned in section 5. If the interest rate is a truly monetary phenomenon, it is inevitable to conclude that its nature is purely conventional, its level being determined by the central bank. The second problem concerns the relationship between an interest rate fixed conventionally and the rate of profit. One possible line of thought is followed by Marx. He sees no relation between the interest rate and the profit rate, except in the sense of considering the latter a maximum limit to the former. The interest rate thus exerts distributional effects, but these effects are all confined within the capitalist class. The interest rate determines how the surplus is distributed between the money capitalist and the industrial capitalist (and in the second half of the nineteenth century Marx sees this conflict evolving in a manner favourable to the industrial capitalist). It does not concern the distribution of the social product between capitalists and wage earners. A different line of thought has tried to break this barrier, regarding the interest rate as a determinant of the distribution in the broadest sense, that is, as a factor capable of influencing real wages. Moving from the notion of surplus wages, it is not only the interest rate which is to be seen as a purely monetary phenomenon, but also the rate of profit, which is ultimately determined by the level of the interest rate. In the light of this line of reasoning Tooke's work is seen as a *first step* in this direction (Pivetti 1991: 75-81; 1998), because he regarded the interest rate as a determinant of production costs.

What is, according to Matthew Smith, Tooke's position on these two issues? On whether or not the rate of interest can be conceived as a purely conventional phenomenon, he agrees with other interpretations of Tooke (Pivetti 1991: 85-6; Arnon 1991: 70-72), arguing that 'the banking school Tooke continued to maintain his pre-banking school position that, through the conduct of its monetary policy, the Bank of England had the capacity to exert an influence on the rate of interest in the short run but not in the long run' (Smith 2011: 176). However, with respect to the relationship between interest rate and profit rate, Matthew Smith argues that there is in Tooke something more than what other commentators have seen, and that it is possible to consider the work of the Banking School Tooke as an *anticipation* of the monetary theory of distribution. But we cannot properly talk of a real advance, and this is strongly suggested by Matthew Smith himself. As he writes, on the one hand '[t]his conception of money interest as a normal cost of production is also the basis of Tooke's position … that, compatible with his adding-up approach to prices and distribution, the money rate of interest systematically governs the normal rate of profit, the latter determined by the sum of the average money rate of interest and the remuneration for risk and trouble on the employment of capital in production' (Smith 2011: 176). On the other hand, 'there is a major shortcoming in Tooke's articulation of this concept in the adding-up theory of prices and distribution as the latter is analytically deficient because it fails to account for the interdependence between the real wage and rate of profit in the determination of normal prices for a given technique of production' (Smith 2011: 222). And in fact Matthew Smith carefully notices that 'there is no firm textual evidence to support an interpretation that for a given technique of production Tooke believed the socio-technical maximum rate of profit was determined by reference to his socially determined minimum subsistence wage' (Smith 2011: 40).

Matthew Smith's central argument here is that the idea that 'the money rate of interest systematically governs the normal rate of profit' stems from Tooke's view that the rate of interest enters the cost of production of commodities and that its level thereby has a significant influence on the general price level over the long run. But this is not in itself a proof of the capability of the interest rate to govern the rate of profit, nor is the fact that the rate of profit is resolved into the interest rate and the return on risk and trouble a proof of this capability.

We are here touching the same issue we have discussed in section 4, seen from a different angle. The only sense in which Tooke's set of nominal equilibrium prices may be regarded as normal prices is that they are able to validate the system of relative prices determined by production methods and distribution. One could, for example, adhere to Tooke's view while aligning it with the idea that the remuneration of the risk and trouble occurs residually, once the real wage and the rate of interest are given. It would be possible to continue to maintain that a long-lasting variation in the interest rate might not fail to cause a correspondent variation in nominal prices. But as long as this variation is unable to affect distribution, real wages cannot change, and thus the variation in the interest rate must also cause a variation in money wages. This can be the basis of a theory of the rate of change in nominal prices, not of a theory of distribution, and it does not imply any adding-up fallacy. If, on the contrary, it is believed that the interest rate is able to govern the rate of profit (that is, that we must consider the risk and trouble component of the profit rate as exogenous), the variation in the interest rate can affect distribution also, and we have a theory of the determination of both relative prices and the rate of change in nominal prices.[8] This can be made a coherent outcome if there is a surplus component of the real wage. It cannot be made a coherent outcome if, as Tooke believed in accordance with the classical tradition, the real wage is always at its irreducible minimum level.

It is at this point that according to Matthew Smith the adding-up theory must step in, since we have a given real wage with a varying rate of profit. Nevertheless, in Tooke the level of prices is varying, since he recognises that the rate of interest enters the cost of production; thus either money wages must vary in order to validate the real wage used as the basis of the theory of distribution, or nominal wages do not vary with respect to prices and the outcome is the monetary theory of distribution. From this point of view, the question about how we can go forward with regard to a monetary closure of the theory of distribution, in spite of the fact that the theory of distribution is left open by the adding-up, seems to add an element of confusion and not of clarification in the interpretation of Tooke's equilibrium prices. Equipped with the adding-up theory, Tooke appears to be able to take a step forward towards the monetary theory of distribution, but in reality he ends up making two steps backwards. The adding-up theory eliminates the constraint of consistency between changes in the rates of profit and wages, and therefore apparently allows Tooke to develop the relationship between interest rate and rate of return regardless of what happens to real wages. However, the adding-up theory is not a theory, it is a fallacy, and to establish a strong link between Tooke's idea and a fallacy can hardly strengthen his main argument. Furthermore, this link weakens the cost-price connection that instead Tooke fruitfully set up, although he was unable to understand the full implications of that notion, lacking the basis of a theory of distribution whose deficiencies were generally seen as a justification for its rejection and not as a stimulus to its development.[9]

7 The Theory of Central Banking

Having denied the influence of money on prices, Tooke is the classical economist who finds himself in the best position to develop a meaningful monetary theory – in the sense of making money able to affect the level of output and its distribution among social classes. However, as regards the effects of money on distribution, he seems to go beyond Ricardo just because he is confused about value and distribution; as regards the capacity of money to exert an influence on the overall levels of production, he does not make any concession to the advances of William Blake, to whom he gives a rather tight opposition (Smith 2011: 102); lastly, as regards his theory of central banking, he remains far behind the brilliant advances of Thornton. Of course these are not 'failures' of Tooke, because the contribution of an author cannot be evaluated with the benefit of hindsight. However, it seems interesting to speculate why even Tooke remained a hard money man, as hard money men are basically all the respectable economists of the period, who were careful not to be confused with the Attwood brothers and their inflationist heresy. How to regulate the 'production' of money, which in no way can be subjected to the discipline of the free market and competition? This is the question that troubled all the members of the Political Economy Club, whether bullionists or anti-bullionists, of both the Banking School and the Currency School. One group argued that all would be for the better if paper money could be forced to behave like metallic money; the other held that this attempt would only exacerbate the instability of the system, since money was mostly credit money, and credit money must be managed.

Of the fact that this management was difficult to perform, Tooke was much more aware than other members of his school, such as John Fullarton, with his insistence on the law of reflux. But what exactly that would entail, apart from having a non-segregated very large amount of treasure in the coffers of the Bank of England, he was never really able to spell out. The concepts of cost inflation, causality from prices to money, endogenous money, acted as powerful weapons against the idea that mandatory 100 per cent gold cover for bank notes could recreate the perfect circulation, thus freeing the system from the need of a lender of last resort. These same ideas could not play an equally strong role in building an alternative theory of money, because they led to a monetary theory of interest that could hardly be accepted by a supporter of free trade. Lack of constraints on the action of the central bank, common sense and experience as a unique guide to the choices of its directors, no government interference, is in the end Tooke's theory of central banking. It would be necessary to wait another century to reach the idea that government intervention and discretionary choices are essential in order to manage the central bank with a view to the level of the social product and its distribution among social classes. Some might even argue that a century has not been enough, since even today, as in the days of Ricardo, non-neutrality of money in the short term and neutrality of money in the longer term is a precept that every respectable economist refrains from breaking. The mainstream theory of central banking is still neo-Wicksellian, a vulgarisation of Wicksell. As the valuable contribution of Matthew Smith reminds us, this monetary orthodoxy, today, as in the days of Ricardo, cannot cope with many of the most significant observations of Thomas Tooke.

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Notes

1 Wicksell wrote:

> I have on this occasion made next to no use of the mathematical method. This does not mean that I have changed my mind in regard to its validity and applicability, but simply that my subject does not appear to me to be ripe for methods of precision. In most other fields of political economy there is unanimity concerning at least the direction in which one cause or another reacts on economic processes; the next step must then lie in an attempt to introduce more precise quantitative relations. But in the subject to which this book is devoted the dispute still rages about *plus* as opposed to *minus*. (Wicksell 1898: xxx)

2 See, in particular, Smith (2001; 2002; 2003; 2006; 2008).

3 According to Schumpeter, the work by Tooke and Newmarch – though providing the first and unsurpassed large-scale application of the method of discussing individual situations – is a clear example of how the empirical approach, if not anchored to a solid theoretical basis, is entirely inconclusive:

> I am not alluding to the fact that, of course, they argued for one policy and, still more obviously, against another: this does not impair the value of either their facts or their reasoning, both of which may be appreciated by any opponent of their views concerning desirabilities. Nor am I alluding to the discursiveness and repetitiveness of their work: in 'realistic' theory of this type neither is without its function – the method is essentially one of 'thrashing out' things, and this cannot be done with Ricardian brevity. I am alluding to more fundamental defects of which no trained reader of these volumes can fail to become aware very quickly. Both authors were no doubt deficient in command of economic theory. Tooke was in addition a somewhat 'woolly' thinker – who often impaired his case by missing the opponent's

> point. And this told. Not only did his arguments sometimes call forth derogatory comment, that was quite justified as far as it went; but also, his authority, great as it was in his day and as it remained for the rest of the century, was never what it might have been had there been more theoretical edge to his thought. The work is nevertheless a classic and an example to follow. But it seems to cry out for rewriting by a better-trained or else a more adroit hand. (Schumpeter 1954: 495)

4 Indeed, the germ of Tooke's anti-quantity-theory position also existed when he was still a 'moderate bullionist', deriving from his empirical approach to pricing and the consequent discovery that real causes of price variations were operating alongside money. This 'openness' in Tooke's bullionism was seen and appreciated by Ricardo, who, writing to James Mill in 1823, refers to Tooke as a potential ally: 'I hope Tooke is making great progress with his book – he is a very useful and able ally' (Ricardo to Mill, 14 January 1823; in Sraffa 1951–1973: vol. IX, 266). Ricardo had probably in mind the possibility of using Tooke's alternative explanation of price variations to justify contingencies in which price movements did not conform to that of the monetary mass (such as for the process of deflation that occurred after 1821, that even Ricardo explained by resorting to real factors).

5 Indicative, in this respect, is Tooke's rejection of the notion of a general price index. Ricardo was very sceptical about the significance of this index, believing that no meaning could be given to an average that could hide upward and downward trends in the price of goods. In a sense, a general price index is something inconsistent with the idea that changes in relative prices are the really important thing, the change in relative prices being determined by variations of different sign and magnitude of absolute prices. Tooke's position does not differ much from that of Ricardo. Tooke's choice is clearly to make no aggregation, to consider individual prices separately, and to pay more attention to goods of greater importance in the determination of the real wage, such as wheat (see Smith 2011: Chapters 4 and 5).

6 Tooke writes to Say:

> Departing from the accepted principle that supply and demand determine exchange value, Ricardo and his followers start from the assumption that except for a few products, which are subject to monopolies, supply is always limited by the cost production and therefore an increase in demand cannot act permanently on the real value; continuing their deductions, they come to say that all the production costs are summarized in *labour*; that consequently the exchangeable value of every product is determined by the amount of work that the production has required, and that ultimately labour is both cause and measure of value. You have, in my opinion, successfully fought this doctrine in your chapter on *the basis of the value of things*. The error of the new school has two origins: first in the assertion that the natural price, or the exchange value, is determined solely by the cost of production, and then in the idea that production costs are always resolved in labour. (Thomas Tooke to J.-B. Say, 12 March 1828; in Say 1848: 530; my translation from the French)

7 I do not dispute, that if the Bank were to bring a large additional sum of notes into the market, and offer them on loan, but that they would for a time affect the rate of interest. The same effects would follow from the discovery of a hidden treasure of gold or silver coin. If the amount were large, the Bank, or the owner of the treasure, might not be able to lend the notes or the money at four, nor perhaps, above three per cent.; but having done so, neither the notes,

> nor the money, would be retained unemployed by the borrowers; they would be sent into every market, and would every where raise the prices of commodities, till they were absorbed in the general circulation. It is only during the interval of the issues of the Bank, and their effect on prices, that we should be sensible of an abundance of money; interest would, during that interval, be under its natural level; but as soon as the additional sum of notes or of money became absorbed in the general circulation, the rate of interest would be as high, and new loans would be demanded with as much eagerness as before the additional issues. (Ricardo, *The High Price of Bullion*; in Sraffa 1951–1973: III, 91)

8 On this, see Pivetti (1991: Chapter 6); also Schefold (2000: 346-9).

9 The nature of Tooke's confusion on the wage-profit relationship is exemplified by the following passage:

> Respect to the doctrine of wages, the Ricardo school says too resolutely, and without considering the facts, that any gap in *wages* is at the expense of *profits*, and *vice versa*. This is based on the assumption that capital and industry always give a fixed and limited product, from which follows that it would be a given quantity that wages and profits have to share; while, on the contrary, since a greater demand comes to raise prices, wages and profits can often walk in the same direction. To answer this objection, the supporters of this doctrine say that you should always imply the term *proportional* as included in their definition of wage. But nothing justifies this claim which, moreover, elucidates nothing; it does not allow the explanation of any phenomenon and I do not think this school has so far provided a clear definition of the point that really separates wage from profit. (Thomas Tooke to J.-B. Say, 12 March 1828; in Say 1848: 529-30; my translation from the French)

The reference to rising prices as a factor able to allow a simultaneous rise of wages and profits could appear to support Matthew Smith's idea (Smith 2011: 32-3) that Tooke commits the adding-up fallacy. It would rather appear that Tooke is rejecting the idea of an inverse relationship between the wage rate and the profit rate using post-Ricardian arguments (also shared by economists of the Ricardian school such as McCulloch) which are not so much related to the Adam Smith's adding-up fallacy, but instead to the difficulties encountered by Ricardo's line of reasoning (on this see De Vivo 1984: 51ff). It is difficult to think that Tooke – who was well aware of the post-Ricardian debates on value and distribution – should have countered Ricardo's position by falling back on pre-Ricardian inconsistent arguments such as the adding-up conception.

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