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Adam Smith as a monetary economist

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Abstract. The main purpose of this paper is to argue that Adam Smith was a much better monetary economist than he is usually given credit for. It is argued that he believed the general price level to be determined by the cost of production of gold relative to that of goods, and that so long as bank money was convertible into specie, the general price level would therefore not vary; that his analysis of the influence of the creation of bank money on the balance of payments must be seen against the background of this theory of the general price level, as must his adherence to the Real Bills Doctrine; and that his analysis of the replacement of specie with paper money makes his banking theory an integral part of his theory of economic growth.

Adam Smith, économiste de la monnaie. L'objectif de cet article est de démontrer qu'Adam Smith est un bien meilleur économiste de la monnaie qu'on le croit généralement. L'auteur suggère que Smith croyait que le niveau général des prix est déterminé par le coût de production de l'or relatif aux coûts de production des autres biens, et que, aussi longtemps que la monnaie fiduciaire des banques demeure convertible en espèces sonnantes, le niveau général des prix ne varie donc pas; il suggère aussi que l'analyse que Smith a faite de l'influence de la création de monnaie fiduciaire sur la balance des paiements et son support pour la doctrine des 'Real Bills' doivent être interprétés en prenant comme arrière-plan sa théorie du niveau général des prix; enfin l'auteur suggère que l'analyse que propose Smith du remplacement des espèces sonnantes par le papier monnaie est telle que sa théorie du système bancaire devient partie intégrale de sa théorie de la croissance économique.

INTRODUCTION

Adam Smith's contributions to the analysis of problems of allocation, distribution, growth, and development were unquestionably of extraordinary

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importance for the subsequent evolution of economics. However, when it comes to monetary economics his work is seldom praised and frequently discreetly ignored. Although more space in the *Wealth of Nations* (1776) is devoted to monetary matters than, say, to the division of labour, most commentators pass quickly over what he has to say about the subject, pausing perhaps to criticize him for confusing money and capital (Lekachman 1959), for ignoring his friend David Hume's (1742) analysis of the price-specie-flow mechanism (Viner 1937), or for presenting a 'static' theory of banking in a book otherwise devoted to analysing the dynamics of growth (Fetter 1965).

Those who devote more time to detailed discussions of Smith's monetary economics are equally uncomfortable. Thus Mints (1945) correctly identifies Smith as the originator of the Real Bills Doctrine, and criticizes him severely on this ground, while Vickers (1975) is distressed by the absence of any discussion of what we would now call the short-run non-neutrality of money from the *Wealth of Nations*. Vickers's view that '*The Wealth of Nations* must be accorded a less illustrious place in the history of [monetary theory] than it commands in other and more general respects' (1975, 503) is, to say the least, widely held, although the reasons for holding it vary a great deal among commentators. Even so, it is surely something of a puzzle that so great an economist could slip up so badly in such an important area; a key implication of this paper is that the solution of this puzzle is to be sought more with the commentators than with Smith. In the following pages I shall give an account of the monetary analysis presented in the *Wealth of Nations*, in the hope that such an account, in and of itself, will convince the reader that there is a great deal more credit due to Smith as a monetary economist than is usually granted him.[1]

THE THEORY OF THE PRICE LEVEL

The main body of Smith's monetary economics is to be found in the long chapter 2 of Book II of the *Wealth of Nations*, 'Of money ... .' Whatever else one may say about the chapter, it is certainly not one of the most readable in the book. Much of the difficulty stems from the long digressions into the history of the Scottish banks and into the comparisons of English and Scottish banking practices which the chapter contains, but there is a further and more fundamental problem with its exposition.[2] 'Of money ... .' is concerned with

1 All references to page numbers in the *Wealth of Nations* in this paper refer to Volume I of the 1976 edition of the *Wealth of Nations* edited by R.H. Campbell, A.S. Skinner, and W.B. Todd (Oxford, The Clarendon Press).

2 Which is not to say that this material is uninteresting to historians of banking, because as both Mints (1945) and Fetter (1965) point out, in these passages Smith systematically sets out an already well-established Scottish oral tradition having to do with banking practices. Checkland (1975) gives a particularly thorough account of the historical roots of Smith's analysis of banking.

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the effects of banks and paper money on the productive capacity of the economy, and with their influence, if any, on prices. However, it was not until the very end of that chapter that Smith explicitly reminded his readers of his theory of what we would now call the general price level. He had already stated the theory in question clearly enough in the *Wealth of Nations* (chapter 5, Book I, 48–9), but it forms so important a premise of the analysis contained in the chapter 'Of Money ... ' that the reminder in question should have been set down at the beginning rather than the end of that chapter. Smith's statement of his theory of the price level from 'Of money ... ' is worth quoting in full.

> The proportion between the value of gold and silver and that of goods of any other kind, depends in all cases, not upon the nature and quantity of any particular paper money, which may be current in any particular country, but on the richness or poverty of the mines, which happen at any particular time to supply the great market of the commercial world with those metals. It depends upon the proportion between the quantity of labour which is necessary in order to bring a certain quantity of gold and silver to market, and that which is necessary in order to bring thither a certain quantity of any other sort of goods. (328–9)

As Hegeland (1951, 47) has noted, Smith regarded the relative price of goods and specie as being determined, like any other relative price, by costs of production, particularly labour costs. It is well-known that Smith was not always clear about the distinction between a cost of production and a labour theory of the determination of value, treating labour sometimes as the sole determinant of value and sometimes merely as its measure. However, these matters are not central to the issue discussed in this paper; the important points are that Smith states a theory of the general price level of goods in terms of specie which is much the same as that found in the writings of many of his successors, not least in Ricardo's *Principles* (1817), and even more important, that the theory helps us to make sense of much that otherwise seems peculiar in his monetary economics.

Even in the context of the state of knowledge in 1776, the passage just quoted is not beyond criticism. Smith used the cost of production (or labour) theory of value as an explanation of 'natural' price, and the latter is usually interpreted as being akin to Marshallian long-run equilibrium price. In his discussions of the allocative mechanism, he always distinguished carefully between market price and natural price and placed deviations between the two at the very heart of his description of the way in which market mechanisms operate to reallocate resources from one use to another in the face of changes in the conditions of supply and demand. This distinction is conspicuous by its absence in the passage just quoted, and that absence is related to Smith's failure to incorporate Hume's price specie flow mechanism into his

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monetary analysis.[3] Nevertheless, the effect of this omission is to render Smith's analysis incomplete rather than erroneous, and since, as I shall show, the problems with which he dealt were fundamentally long-run in nature, the incompleteness in question is far from fatal.

BANK MONEY AND THE BALANCE OF PAYMENTS

Smith consistently argued that what we would now call the quantity of money is an endogenous variable. He held that if a banking system emitting paper money were to develop in any economy, its operations would have no effect on either the overall quantity of money or on the level of prices. He did not, as Mints asserts 'tacitly [assume] that the aggregate circulating medium of the community, no matter how defined, had no influence upon the price level' (Mints, 1945, 99). Rather he explicitly argued that under conditions of convertibility, which he treated as the typical case, the quantity of the circulating medium responded to prices, rather than vice versa.[4] In his words: 'The whole paper money of every kind which can easily circulate in any country never can exceed the value of the gold and silver, of which it supplies the place, which (the commerce being supposed the same) would circulate there, if there was no paper money' (300). The qualification in parentheses in the above quotation is important from Smith's point of view. As we shall see in due course, he believed that 'commerce' usually would increase with the introduction of paper money. However, we may at this point follow him in accepting that qualification as a working simplification and note that he rested

3 I am aware that Eagly (1970) has argued that the price-specie-flow mechanism is to be found in the *Wealth of Nations*, but the particular passages which he cites in favour of this proposition are taken from Smith's discussion of mercantilism. They do not occur in the chapter 'Of money ... ' where his analysis of the monetary system is set out. Thus, Eagly's arguments are not relevant to the point I am making here even if they are found otherwise acceptable.

In any event, I have reservations about Eagly's views, for two reasons. First, had Smith meant to incorporate Hume's analysis into the *Wealth of Nations*, it would have been natural for him to have done so in the chapter 'Of Money ... ,' He did not mention it in that chapter. Second, Eagly's interpretation of the quotations in question as showing that Smith understood and accepted the doctrine hinges upon Smith having said that specie moves easily internationally because of what amount to low transport costs. Smith did so, but in the same passage, he argues that goods are relatively expensive to move internationally. How big a discrepancy in price levels must open up between two countries before specie and goods start to move between them depends upon the transportation costs of both goods and specie, so that a low transportation cost of specie is by itself insufficient to guarantee that the discrepancy required will be 'small,' and Smith says nothing about this subject. Therefore, Eagly appears to be making too much of the passages in question. See Eagly (1970, 64–5), particularly fn. 12, where the key passages are quoted. On this matter see also Bloomfield (1975, 478–9) where Eagly's views are examined in some detail.

4 Smith is quite explicit that an increase in the quantity of the circulating medium is both possible, and will lead to an increase in the price level, where paper money is not immediately convertible. His descriptions of the monetary experiments of the North American colonies make this quite clear. Mints, of course, was well aware of these passages, but he does not seem to have appreciated their importance for this interpretation of Smith's views on the interaction of the quantity of money and prices. See also below, 197–8, where these matters are discussed further.

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his belief in the endogeneity of the money supply on the idea that there existed what he termed a 'channel of circulation' whose capacity to carry money was fixed, given the level of 'commerce' prevailing. The concept in question must strike the modern reader as odd, but we shall see that Smith used it in much the same way as modern monetary economists use the notion of a stable aggregate demand for money function.

As is well-known, Smith did not have the general notion of a market demand function. He conceived of the demand for a good as a 'force,' and when dealing with allocative questions, he typically talked about market prices responding to variations in the 'ratio' of demand to supply.[5] In his discussions of monetary theory, Smith came closer than he did anywhere else in his writings to describing a demand function. He talked of the individual merchant keeping a part of his capital 'by him ... in ready money for answering occasional demands' (304) and argued that the amount in question would vary with the volume of his business. It is analysis such as this, of which there is a good deal in the chapter 'Of Money ... ,' that led Marshall, as Viner (1937, 249) tells us, to regard Smith as the originator of the cash balance approach to monetary theory. However, Smith did not follow this approach through when he came to discuss the role of money in the aggregate economy. In that context, he relied on the 'channel of circulation' notion to which reference has already been made.[6]

Even so, just as Smith was able to analyse the allocative function of competitive markets without the idea of the market demand schedule for a particular good, so he was also able to analyse the consequences of the introduction of paper money into the economy without the device of a stable aggregate demand for money function. The idea of a 'channel of circulation' of fixed capacity was sufficient to enable him to achieve results essentially the same as those which modern adherents to the monetary approach to balance of payments analysis would derive, as the following passage illustrates quite clearly.

> Let us suppose, ... that the whole circulating money of some particular country amounted, at a particular time, to one million sterling ... Let us suppose too, ... that different banks and bankers issue promissory notes, payable to the bearer, to the extent of one million, reserving in their ... coffers ... two hundred thousand pounds ... There would remain ... in circulation ... eighteen hundred thousand pounds of paper and money together ... [T]he channel of circulation ... will remain precisely the same as

5 Indeed, it is not until the publication of John Stuart Mill's *Principles of Political Economy* that we get a clear statement to the effect that the right mathematical analogy for supply and demand is an equation rather than a ratio. See the Ashley edition of Mill (1848, 448), 'Thus we see that the idea of a ratio, as between demand and supply, is out of place, and has no concern in the matter: the proper mathematical analogy is that of an equation. Demand and supply, the quantity demanded and the quantity supplied, will be made equal.'

6 I am indebted to Ronald Shearer for forcing me to pay more attention to the matters discussed in this paragraph than I did in an earlier draft of this paper. He is not, however, to be held responsible for the particular interpretation of Smith's views which I advance here.

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before. One million we have supposed sufficient to fill that channel. Whatever, therefore is poured into it beyond this sum cannot run in it, but most overflow. (293)

In describing such an experiment a modern monetary economist would not talk in terms of more money being poured into a channel than it could hold; rather, he would talk of the supply of money being increased in the face of a constant demand for it and an excess supply of money thereby being generated. However, he might well continue with a hydraulic analogy very like Smith's by remarking that the excess supply of money would have to 'spill over' somewhere or other. He would also tell us that just where and how the spill-over in question would occur and with what consequences would depend on just those features of the economy Smith was particularly specific about.

First, how an economy reacts to an excess supply of money depends on whether or not it is operating at full employment. Smith always took full employment for granted as the equilibrium state of affairs, regardless of what was happening to the quantity of money, and held the volume of 'commerce' constant in the experiment we are discussing. Second, much depends on whether we are dealing with a closed or an open economy. Smith was quite clear that he was discussing an open economy. Finally, what we would now call the nature of the exchange rate regime will affect the outcome of an experiment such as this one. Smith explicitly envisaged bank money taking the form of 'promissory notes payable on demand,' and by that he meant payable in specie. Moreover, it has already been noted that he regarded the price of goods in terms of specie as being determined by relative production costs in 'the great market of the commercial world.' In modern terminology, Smith's domestic banks operated a fixed exchange rate against an international currency whose value was determined on world markets.[7] On these assumptions the modern monetary economist would argue that an excess supply of money will 'spill over' into a temporarily adverse balance of payments until it is eliminated; and so did Smith.

... though this sum [eight hundred thousand sterling] cannot be employed at home, it is too valuable to be allowed to lie idle. It will ... be sent abroad ... But the paper cannot be sent abroad, because at a distance from the banks which issue it, and from the country in which payment of it can be exacted by law, it will not be received in common payments. Gold and silver, therefore, to the amount of eight hundred thousand pounds will be sent abroad, and the channel of home circulation will remain filled with a million of paper, instead of the million of those metals which filled it before. (294)

7 Thus Smith may be regarded as having made what we would nowadays call the 'small country assumption' and he has in fact been criticized by Fetter (1965, 10) for overlooking the possibility that money creation in Britain might be on a sufficiently large scale relative to the size of the world economy to influence the price level operating abroad. Of course, if the supply of specie to the world's monetary system were perfectly elastic at a fixed price in terms of goods, money creation in Britain would not affect world prices, but Smith never raised this matter. However, he did base his analysis not on some hypothetical Britain vis-à-vis the rest of the world example, but on the actual experience of Scotland in the mid-eighteenth century, and the 'small country assumption' might be judged more appropriate in this case. On the practical roots of Smith's monetary theory in Scottish experience see Checkland (1975).

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This is not quite a statement of the modern 'monetary theory of the balance of payments.' The latter doctrine deals with the interaction of domestic monetary policy and the balance of payments conceived of as a policy target, and Smith had no conception of a central bank manipulating its assets and liabilities in order to achieve any policy goals. Although he got as far as recognizing that the Bank of England was 'a great engine of state' rather than just another commercial bank, he remained silent about just what that engine might be used to accomplish. It was left to his successors, notably Henry Thornton (1802), to develop the theory of monetary policy as we would understand it today.

Nevertheless, the passage just quoted bears a much more obvious resemblance to the monetary theory of the balance of payments than anything David Hume wrote, because the distinction between specie and paper in Smith's analysis corresponds to the modern distinction, between money backed by domestic credit and money backed by foreign exchange reserves, upon which that theory hinges. Hume was concerned with the international allocation of specie. He did discuss banks and paper money, displaying considerable ambivalence about their merits, but he never made any systematic attempt to integrate them into the heart of his analysis, which therefore contains no distinction analogous to that between domestic credit and reserves. However, this is not to say that Smith's analysis is superior to Hume's in every respect. What is missing from the passages I have quoted, as it is from everything that Smith wrote on the matter, is a full account of the mechanism whereby economic agents are actually induced to send gold abroad by the introduction of paper money. Hume's price specie flow mechanism is not there, although it could easily have been incorporated had Smith argued that the initial excess supply of money would drive domestic market prices above their natural level and generate a balance of trade deficit and therefore an outflow of gold.[8]

It is possible to defend Smith to a certain extent by noting that many modern economists, and even some of his nineteenth-century successors, argue that commodity arbitrage in world markets prevents discrepancies in relative prices of the type envisaged by Hume and most nineteenth-century economists ever arising. They rely instead on a direct real balance effect running from an excess supply of money to the demand for traded goods to produce the effects that Smith was analysing, and indeed, Smith himself did discuss certain elements of such a mechanism.[9] He argued that if the circulating medium were to be in excess of the amount which could 'easily circulate,' then '[m]any people would immediately perceive that they had more of this

8 But see fn. 3, above.

9 Frenkel (1976) gives a useful account of the classical origins of the modern monetary approach to balance of payments theory, an account which nevertheless does not seem to me to do justice to Smith's contribution. Note that Bloomfield (1975, 480) has also pointed out the similarity between what he calls Smith's 'explanation of the mechanism of specie flows in terms of money requirements and money expenditures without reference to relative price levels' and the modern monetary approach.

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paper than was necessary for transacting their business at home, and as they could not send it abroad, they would immediately demand payment of it from the banks. When this superfluous paper was converted into gold and silver, they could immediately find a use for it by sending it abroad' (301). However, Smith did not explain by what means individual merchants might discover that they could not obtain extra goods at home, nor by what means they would be induced to buy them from abroad. Thus, it would be wrong to credit him with having given anything approaching a full account of a real balance effect on the balance of payments as an alternative to a relative price level effect. Smith's treatment of the balance of payments transmission mechanism is certainly highly suggestive, but it is also fragmentary, and it is difficult to argue the superiority of his analysis to that of Hume on this basis.

A more sustainable defence of Smith's relative neglect of the details of balance of payments analysis is that the transmission mechanism in question is needed to deal with short-run phenomena which were not central to his concerns. By this I do not mean simply that the *Wealth of Nations* deals mainly with the economics of the long run, because, as we have already noted, the emphasis in his work did not prevent Smith spending much time and effort analysing the distinction between natural and market price when dealing with allocation questions. Rather, I mean that Smith's analysis of the effects of an issue of paper money on the balance of payments arose not in the context of a discussion of the balance of payments *per se*, but as part of a rather elaborate argument about the beneficial effects that banks and the use of paper money could have upon the level of economic activity.

That argument did not hinge on demand side considerations such as those underlying the work of John Law and a long line of subsequent inflationists. Vickers (1975) is quite right in arguing that Smith would have nothing to do with such analysis, and to the extent that Smith's unwillingness to entertain the notion of even short-run non-neutralities of money working through demand side effects was one of the reasons for his neglect of Hume's price-specie-flow mechanism, it must be acknowledged that he took a rather extreme position here. However, I certainly would not wish to criticize Smith as harshly as Vickers does for keeping his distance from the inflationist tradition in monetary economics. Few eighteenth-century advocates of the alleged wealth-creating properties of money stated as clearly as Hume did that these properties were only short-run phenomena. Smith's role in driving these doctrines into the background of monetary economics was an important one for the development of the subject over the next century and a half while their re-emergence in the last forty years has hardly been an unmixed blessing.[10]

10 That is to say that my disagreement with Vickers about the status of Smith's contribution to monetary economics does not hinge upon any difference of opinion about what Smith said and did not say, but upon a difference of opinion about the relative merits of alternative traditions in monetary economics. In general, I am inclined to praise Smith for the very reasons that lead Vickers to criticize him.

Note that Petrella (1968), without in any way allying himself with views such as those of

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MONEY, WEALTH, AND THE PRODUCTIVITY OF BANKING

Smith was a proponent of banking and paper money, and was in no sense an adherent of any type of 'money does not matter' doctrine. His advocacy here hinged on supply side considerations of a type analysed in the 1960s literature dealing with the influence of money on growth and economic welfare. The issues involved here are clearly long-run in nature and we shall now turn to a detailed discussion of what Smith said about them. The discussion will show that Smith does not, even in the chapter 'Of money ... ,' confuse money with capital, as Lekachman (1959) has suggested. It will also show that far from being 'static,' as Fetter (1965) suggests, Smith's treatment of banking was an integral part of his treatment of the process of economic growth.

The notion that money – particularly specie – is in and of itself wealth may have been entertained by some mercantilists, but it was *not* held by Smith. There is no position more consistently maintained throughout the *Wealth of Nations* than that it is 'the annual produce of land and labour [which constitutes] the real revenue of every society.' Smith was quite explicit that although we often value that produce in units of money, it is what is being valued, and not the money itself, which constitutes wealth. Smith's analysis of the interrelationship between money, banking practices, and capital formation may be summarized as follows. In order to calculate the net income of an individual capitalist, it is necessary to deduct from his gross income whatever he spends both upon maintaining his fixed capital, and upon replenishing his stock of circulating capital, which in turn is composed of 'four parts ... money, provisions, materials, and finished work' (288). From the point of view of society, however, the last three categories represent the income which supports the labour force during the period of production, and hence are part of society's net income. Therefore, '[t]he fixed capital, and that part of the circulating capital which consists in money, so far as they affect the revenue of society, bear a very great resemblance to one another.' (288). That part of current output which is devoted to the maintenance of either of them must be deducted from total production in order to arrive at an estimate of what Smith called the 'neat [(net)] revenue' of society.

Now for Smith, fixed capital exists to enhance labour productivity and '[e]very saving ... in the expense of maintaining the fixed capital which does not diminish the productive powers of labour, must increase the fund [of circulating capital] which puts industry into motion, and consequently the annual product of land and labour' (292). He attributed an analogous property to the money stock. He had a clear though rudimentary notion of the social productivity of money, based on the proposition that the existence of a

Vickers, ascribes Smith's omission of Hume's price-specie-flow mechanism in the *Wealth of Nations* to certain implications concerning the non-neutrality of money that Hume drew from the analysis in question and their incompatibility with Smith's polemic intent in writing the *Wealth of Nations*.

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monetary system permitted trade to be carried on more easily than under barter and hence led to a widening of markets.[11] Given the well-known limits imposed upon the division of labour by the extent of the market, and given the key role that Smith accorded the division of labour in rendering land and labour more productive, it follows at once that for him the existence of money enhances the productivity of labour just as the existence of fixed capital embodied in some piece of machinery does. Hence his frequent use of the metaphor of a 'great wheel' when talking about money; the water wheel was after all an ubiquitous form of fixed capital equipment in eighteenth-century Britain.

For Smith, 'the substitution of a paper in the room of gold and silver money, replaces a very expensive instrument of commerce with one much less costly, and sometimes equally convenient. Circulation comes to be carried on by a new wheel, which it costs less both to erect and to maintain than the old one' (292). Thus the analogy with fixed capital is carried forward yet another step, and the introduction of paper is seen as a form of technical change which releases resources to be transferred to the stock of circulating capital without reducing productivity. However Smith admits that 'in what manner this operation is performed, and in what manner it tends to increase either the gross or the neat revenue of the society, is not altogether so obvious, and may therefore require some further explication' (292). The argument to the effect that the introduction of convertible bank money leads to an outflow of specie from an open economy, which has already been described above, was explicitly offered as a first step in that 'further explication.' The second and final step is quite straightforward, and we can do no better than quote Smith's own account of it.

> But though so great a quantity of gold and silver is thus sent abroad, we must not imagine it is sent abroad for nothing, or that its proprietors make a present of it to foreign nations. They will exchange it for foreign goods ... to supply the consumption either of some other foreign country, or of their own ...
>
> So far as it is employed in the second way, it promotes industry; and though it increases the consumption of the society, it provides a permanent fund for supporting that consumption, the people who consume reproducing, with a profit, the whole value of their annual consumption. (294–95)

In short, Smith argued that when gold is displaced by paper money, it can and in practice will (not must, however) be used to acquire abroad goods to be added to the wage fund and thus make a permanent contribution to the stock of circulating capital.

What we have here then is not a static theory of banking, not a discussion that confuses money and capital, not an attempt at balance of payments theory inferior to Hume's but a clear and correct account of the social gains to be had from replacing commodity money with paper, a matter which has more

11 The relevant analysis is contained in Smith (1776, chapter 4, Book I).

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recently been analysed using the tools of modern monetary economics by, for example, Harry Johnson (1969). The analysis in question is carried out explicitly in the context of an open economy, and in the process an equally correct, though incomplete, statement of the effects of an issue of convertible paper money on the balance of payments is also offered. Indeed, Smith's analysis of these issues amounts to a major contribution to monetary economics, since there is nothing akin to this analysis to be found in the writings of Hume, with whom Smith is so often unfavourably compared as a monetary economist, or of any other eighteenth-century monetary economist of whom I am aware. Although Smith's failure to incorporate the price-specie-flow mechanism into his analysis is certainly regrettable, particularly given the ease with which he could have done so, as is his failure fully to develop any alternative, it is hard to see how this omission can be judged to amount to a fatal flaw in his contribution.

THE REAL BILLS FALLACY AND THE REGULATION OF BANKING

We have seen that Smith viewed the social productivity of the monetary system as arising from its contribution to furthering the division of labour, and that for him the introduction of paper money, though it did not make the monetary system itself any more efficient, was nevertheless beneficial to the extent that it allowed the specie embodied in the money stock to be converted into circulating capital. In his words: 'It is not by augmenting the capital of the country, but by rendering a greater part of that capital active and productive than would otherwise be so, that the most judicious operations of banking can increase the industry of the country' (320). However, this view made Smith an advocate of neither government-sponsored banking on the one hand, nor unregulated private banking on the other.

He was clear that whether or not paper money circulated was at the discretion of the public rather than of the government or the bankers, stressing that it was the public's confidence in banks which enabled those liabilities to circulate: 'When the people of any particular country have such confidence in the fortune, probity, and prudence of a particular banker, as to believe that he is always ready to pay upon demand such of his promissory notes as are likely to be at any time presented to him; those notes come to have the same currency as gold and silver money, from the confidence that such money can at any time be bad for them' (292). On the other hand, he did not expect that the confidence in question would, or should, become absolute. Although the activities of banks would augment 'the commerce and industry of the country ... it must be acknowledged ... [that they] ... cannot be altogether so secure, when they are ..., as it were, suspended upon the Daedalian wings of paper money, as when they travel about on the solid ground of gold and silver' (321). Smith took this view, in part at least, because he did not trust banks to act in

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the public interest even when it was, as he saw it, in their own private interest to do so. Experience told him that when unregulated, banks tended to overissue paper money: 'Had every particular banking company always understood and attended to its own particular interest, the circulation never could have been overstocked with paper money, but every particular banking company has not always understood or attended to its own particular interest, and the circulation has frequently been overstocked with paper money' (302). For this reason, banking needed to be subject to certain minimal regulation, and Smith displayed considerable impatience with arguments to the contrary based on the grounds that any such regulation would be a violation of natural liberty.

Such regulations may, no doubt, be considered as in some respects a violation of natural liberty. But these exertions of the natural liberty of a few individuals, which might endanger the security of the whole society, are, and ought to be, restrained by the laws of all governments; of the most free as well as the most despotical. The obligations of building party walls, in order to prevent the communication of fire, is a violation of natural liberty, exactly of the same kind with the regulations of the banking trade which I here propose. (324)

The only element in Smith's detailed arguments about these matters that is not completely defensible is the view that, if only banks would pursue their own self-interest, they would not overissue paper money. It is not completely defensible because it rests in part upon the Real Bills Doctrine which Smith states all too clearly.

When a bank discounts to a merchant a real bill of exchange drawn by a real creditor upon a real debtor, and which, as soon as it becomes due, is really paid by that debtor; it only advances to him a part of the value which he would otherwise be obliged to keep by him unemployed, and in ready money for answering occasional demands. The payment of the bill, when it becomes due, replaces to the bank the value of what it had advanced, together with interest. The coffers of the bank, so far as its dealings are confined to such customers, resemble a water pond, from which, though a stream is continually running out, yet another is continually running in, fully equal to that which runs out; so that, without any further care or attention, the pond keeps always equally, or very nearly equally full. (304)

It has been widely though unfortunately by no means universally understood, at least since Henry Thornton's *Paper Credit* (1802), that there are two problems with the Real Bills Doctrine as it is usually propounded. First, depending upon the number of transactions between merchants involved in bringing goods to market, and the period of credit customarily granted, any number of 'real' bills could be created upon the alleged security of the same goods; and second, many proponents of the doctrine say nothing about what determines the price of the goods in question.[12]

12 The first of these criticisms of the Real Bills Doctrine is to be found in Thornton (1802, 85ff.). The second criticism is dealt with in Thornton (1802, 252ff.). Mints (1945) is of course the modern *locus classicus* for the exposure of this doctrine's fallacious nature, and my criticisms of Mints's treatment of Smith in no way reflect upon the importance of this aspect of his work.

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The second of these criticisms ought not to be levelled against Smith's version of the doctrine although Mints (1945) did just that and at considerable length. As we have already seen, Smith assumed a paper money convertible into specie so that the price level was tied down by factors exogenous to the operations of banks. Furthermore, he maintained that assumption quite explicitly in the discussion from which the last quotation is drawn. However, the first element of Thornton's critique of doctrine may validly be applied to Smith's views. He believed that, if only banks would manage their loans to merchants so as to ensure that 'in the course of some short period (of four, five, six, or eight months, for example) the sum of the repayments which it commonly receives from them, is ... , fully equal to that of the advances which it commonly makes to them' (305), they would not tend to overissue paper money.[13] Observing that banks did indeed from time to time overissue, he concluded that they could not therefore be following the practices he recommended.

We now know that each individual bank adhering to the practices implied by the Real Bills Doctrine provides no guarantee against overissue as far as the banking system as a whole is concerned, and therefore we must conclude that Smith was wrong to attribute necessarily the fact of overissue to banks' neglect of their own self-interest. However, this was as far as he carried the error in question, because he went on to identify correctly specie convertibility as an overriding check against anything but temporary overissue of bank paper. Furthermore, although Smith argued that competition between banks would in and of itself lead to their taking care to maintain the convertibility of their liabilities, so great was the importance that he attached to this matter that for once he was unwilling to rely on market forces to achieve the desired end. He recommended that the specie convertibility of their liabilities be made a legal obligation on banks.

According to Smith, if under convertibility the activities of banks were such that the amount of paper money outstanding became greater than the quantity of gold and silver it had replaced in circulation, 'the excess ... must immediately return upon the banks ... to be exchanged for gold and silver' (301). Thus, such an overissue of paper would not raise prices. However he pointed out explicitly that 'it would be otherwise, indeed, with a paper money consisting in promissory notes, of which the immediate repayment depended, in any respect, either upon the goodwill of those who issued them; or upon a condition which the holder of the notes might not always have it in his power to fulfill; or of which the payment was not eligible till a certain number of years, and which in the meantime bore no interest' (325). Such a paper

13 As Ronald Shearer has pointed out to me, Smith was a strong advocate of the Scottish 'cash account' system of bank lending and cannot therefore be interpreted as having regarded the discounting of short-term bills of exchange as the only foundation for sound banking practice. However, as the above quotation shows, he was enamoured of the general principle of the 'self-liquidating loan,' and this general principle is just as vulnerable to the criticisms of Thornton (1802) and Mints (1945) as the more precisely defined practice of discounting only 'real' short-term bills of exchange.

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currency could certainly depreciate relative to both goods and specie, and Smith's long discussion of various monetary experiments in the North American colonies was mainly addressed to illustrating the proposition that no legislation would be able to prevent it from doing so if it was overissued. Only if bankers were obliged by law to convert their paper into specie on demand at a fixed price could there be a guarantee against the paper's depreciation.[14]

Smith recognized that individual banks, even when under a legal obligation to maintain convertibility, might be mismanaged and, being unable to meet their legal obligations, would fail. In view of this possibility, he further advocated a legal prohibition against the issue of bank notes of low denomination, by which he meant as a practical matter of less than five pounds. Where only large denomination notes were in circulation, he argued that they would primarily be utilized and held by merchants who could be expected to have both the experience and the information to be able to protect themselves from losses should a particular bank become or threaten to become insolvent. However, he also believed: 'Where the issuing of bank notes for ... very small sums is allowed ... many mean people are both enabled and encouraged to become bankers ... But the frequent bankruptcies to which such beggarly bankers must be liable, may occasion a very considerable inconveniency, and sometimes even a very great calamity, to many poor people who had received their notes in payment' (323). The prohibition of the issue of small notes was thus advocated as a device to protect the poor and ill-informed against losses which their own ignorance might lead them to incur, and was not so fundamentally important a matter as the obligation to maintain convertibility.[15] These two steps were all that Smith regarded as desirable as far as the regulation of banking was concerned: 'If bankers are restrained from issuing any circulating bank notes or notes payable to the bearer, for less than a certain sum; and if they are subjected to the obligation of an immediate and unconditional payment of such bank notes as soon as presented, their trade may, with safety to the public be rendered in all other respects perfectly free' (329).

Thus, although there can be no doubt that Smith espoused the Real Bills Doctrine, he was not led to argue, as were many later adherents of the fallacy, that the banking system could safely be left to its own devices, even in the absence of specie convertibility. It was not, therefore, a fundamental component of his analysis of banking policy in the same sense as his insistence upon

14 Thus, it is fair to regard Smith, even in his propounding of the Real Bills Doctrine, as a forerunner of the Banking School. However, in his insistence on the importance of convertibility he differs radically from the anti-bullionists, not to mention those proponents of the Real Bills Doctrine who, for example, were responsible for the Weimar hyper-inflation, or the inflation which resulted from the so-called 'Barber Boom' of 1972–3 in Britain.

15 However, Anna J. Schwartz has pointed out to me that it cannot be taken for granted that Smith's influence, inasmuch as it led to legal prohibitions against the issue of small notes in Britain and the United States in the nineteenth century, was altogether beneficial. Such prohibition inhibited the spread of banking and hampered the growth of competition in the industry.

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the importance of convertibility. Nothing illustrates this point more clearly than the fact that it was specie convertibility, not any limitation on the type of loans that banks might make, that Smith wished to see written into law. We should not allow the fact that later proponents of the Real Bills fallacy, not least the supporters of the Bank of England during the Bullion Controversy, often quoted Smith in their own defence, while omitting to mention his views on convertibility, to distort our picture of what he himself had to say on these issues.

CONCLUSIONS

It was suggested at the outset of this essay that Adam Smith deserves more credit as a monetary economist than is usually accorded him. It is to be hoped that the foregoing account of what he had to say about monetary matters will have at least caused the reader to take this suggestion seriously. We have seen that Smith had a quite conventional theory of the determination of the price level in a world of specie money, and that he had much that was correct and penetrating to say about the consequences of the development of banking in such a world.

Smith clearly understood the nature of what we would now call the social saving that arises from substituting paper money for specie, and used a basically correct, though incomplete, analysis of the balance of payments mechanism to show how those gains would be realized in an open economy. His understanding of what we would now term the productivity of banking did not blind him to the risks inherent in basing a monetary system on paper, and his argument that specie convertibility be made a legal obligation stemmed from a clear understanding that such a requirement was the ultimate check on overexpansion by banks. Although he propounded the Real Bills Doctrine, it did lead him, like many of its later exponents, to argue that unregulated private banking could be relied on to provide monetary stability, regardless of whether or not bank liabilities were convertible. Indeed, he explicitly denied this theory.

Although judgments about such matters ultimately rest on personal taste, and perhaps also on contemporary fashions in what is and is not regarded as important, I hope that some readers of this essay will agree that Smith's contribution to monetary economics is substantial enough, despite the errors and imperfections in it that we have noted, to warrant a good deal more praise than has been bestowed upon it by previous commentators.

REFERENCES

Bloomfield, A.I. (1975) 'Adam Smith and the theory of international trade.' *In* A.S. Skinner and T. Wilson, eds. *Essays on Adam Smith* (Oxford: The Clarendon Press)

Checkland, S.G. (1975) 'Adam Smith and the bankers.' In A.S. Skinner and T. Wilson eds, *Essays on Adam Smith* (Oxford: The Clarendon Press)

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Eagly, R.V. (1970) 'Adam Smith and the specie-flow doctrine.' *Scottish Journal of Political Economy* 17, 61–8
Fetter, F.W. (1965) *Development of British Monetary Orthodoxy 1797–1875* (Cambridge, Mass.: Harvard University Press)
Frenkel, Jacob A. (1976) 'Adjustment mechanisms and the monetary approach to the balance of payments.' In E. Claassen and P. Salin, eds, *Recent Issues in International Monetary Economics* (Amsterdam: North-Holland)
Hegeland, H. (1951) *The Quantity Theory of Money*. Reprinted in 1969 (New York: Augustus Kelley)
Hume, David (1742) *Essays: Moral, Political and Literary* (London). Latest edition (London: Oxford University Press, 1963)
Johnson, Harry G. (1969) 'Inside money, outside money, income, wealth and welfare in monetary theory.' *Journal of Money, Credit and Banking* 1, 30–45
Lekachman, Robert (1959) *A History of Economic Ideas* (New York: McGraw-Hill). First paperback edition (New York: McGraw-Hill, 1976)
Mill, John Stuart (1948) *The Principles of Political Economy ... with Some of their Applications to Social Philosophy* (London) Seventh edition, W.J. Ashley, ed., reprinted by August Kelley (New York, 1965)
Mints, L.W. (1945) *A History of Banking Theory in Great Britain and the United States* (Chicago: The University of Chicago Press)
Petrella, F. (1968) 'Adam Smith's rejection of Hume's price-specie-flow mechanism: a minor mystery resolved.' *Southern Economic Journal* 34, 365–74
Ricardo, D. (1817), *On the Principles of Political Economy and Taxation*. Third edition (London), reprinted as Vol. 1 of P. Sraffa, ed., *The Works and Correspondence of David Ricardo* (Cambridge: Cambridge University Press, 1951)
Skinner, A.S. and T. Wilson, eds (1975) *Essays on Adam Smith* (Oxford: The Clarendon Press)
Smith, Adam (1776) *An Inquiry into the Nature and Causes of the Wealth of Nations* (London). Reprinted in two volumes, R.H. Campbell, A.S. Skinner, and W.B. Todd, eds (1976) (Oxford: The Clarendon Press)
Thornton, Henry (1802) *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain* (London). Reprinted (1939) (London: London School of Economics). Introduction by F.A. von Hayek
Vickers, D. (1975) 'Adam Smith and the status of the theory of money.' in A.S. Skinner and T. Wilson, eds, *Essays on Adam Smith* (Oxford: The Clarendon Press)
Viner, Jacob (1937) *Studies in the Theory of International Trade* (New York: Harper and Brothers)

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