John Wheatley's Contribution to Monetary Thought

From Strict Monetary Neutrality to Real Effects of Monetary Policy and the Role of the Payment System

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This paper reassesses John Wheatley's contribution to the development of monetary doctrine at the beginning of the nineteenth century. His contribution is still underrated, despite an advanced methodological approach and his radical refinement of bullionist arguments. His contributions to theoretical monetary policy and international monetary economics deserve more attention as his often harsh criticism of fellow bullionists demonstrates his uncompromising adherence to methodological principle, his independence and his originality. However, he was willing to reassess his own conclusions in the light of contradicting evidence. Based on his "An Essay on the Theory of Money and Principles of Commerce" (1807) historians of economic thought portray him as a proponent of strict monetary neutrality. But his less popular pamphlets of 1816 and 1819 elucidate a more differentiated position. There, he highlights the role of the payment system in the propagation of monetary shocks to the real economy. In the light of the crises of 1814-16 he emphasises the pronounced real effects a reduction of the quantity of money can have due to a disruption of the payment system.

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1. Cornerstones of Wheatley's Biography

John Wheatley was born in Erith, Kent on October 22, 1772 into a well respected and wealthy family. His father, William, and his elder brother of the same name advanced to high military ranks in Kent and in the Peninsular Campaign under Wellington, respectively. A younger brother, Sir Henry, held positions at the courts of William IV and Queen Victoria. The family retained the title of the Lords of Manor Erith until 1875.

At the age of eighteen Wheatley commenced his studies at Oxford (Christ Church College), received his B.A. in 1793 and was admitted to the bar four years later. In 1799 he married into a prominent commercial and political family in London. His wife Georgina Lushington was the daughter of a member of parliament and the nice of a former president of the East India Company. A second cousin of hers was a member of parliament as well and served as the presiding officer of the House of Commons at the time of the Bullion Report (1811). Wheatley was closely connected with another prominent family, namely, that of Lord Grenville with whose nephew he studied at Oxford.

Despite the best upbringing, education and opportunity, financial difficulties, a rather unsteady career path and frequent court disputes plagued Wheatley's life. After a few years as a lawyer, he seemed to have been involved in West India trade via his wife's family. After his emigration to India in 1822 he served there as "sworn clerk" at the Supreme Court. After 1827 he spent most of his time in South Africa. He died on August 13, 1830 during his passage back to England.

2. Wheatley's Contribution to Monetary Doctrine

Between 1803 and 1828 Wheatley published nine books and pamphlets on monetary economics and commerce. His major legacy is *An Essay on the Theory of Money and Principles of Commerce* Vol. 1 (1807) which is – to a large extent – a much refined and enlarged edition of his first book *Remarks on Currency and Commerce* (1803). The clear structure of the book and of the arguments it entails, made it a major contribution to the economic literature of the time. The development of his theoretical positions and the resulting policy recommendations can be inferred from his later publications on monetary economics -

Letter to Lord Grenville on the Distress of the Country (1816) and *Report on the Reports of the Bank Committees* (1819).

Wheatley contributed to the development of monetary economics by refining bullionist arguments and by taking them to extremes well before Ricardo did so in *The High Price of Bullion* (1810). The bullionists (e.g. Francis Horner, Lord King, Henry Thornton) argued that the expansionary monetary policy of the Bank of England and the extensive note issue of country banks were responsible for the crises of 1793 and 1797. They urged the government to return to a gold currency. The antibullionists (e.g. William Colville, Jeremiah Harman) maintained the position that foreign expenditure due to the war, its adverse effects on trade and bad harvests caused the monetary problems and subscribed to the real bills doctrine.

Although Wheatley shared most of Thornton's economic insights (a related acknowledgement is to be found in *Remarks on Currency and Commerce* (1803), he cited him rarely; once affirmatively with respect to Thornton's rejection of Smith's real bills argument and twice critically with respect to Thornton's mechanism of international price adjustment and his assessment of the Bank of England's control of the note issue of county banks. Apart from the usual references to David Hume, Adam Smith and Sir James Steuart, he cited the pamphlet literature of his time (e.g. Walter Boyd, Lord King, Lord Liverpool, Rose). In addition to Steuart who served as the epitome of the "old school" (mercantilism), he also criticised Lord King – a fellow bullionist – very harshly.

Wheatley's methodological approach was characterised by the liberal tradition of the Scottish enlightment. He deduced his theoretical arguments from first principles (i.e. individual rationality, market transparency, low but positive transaction costs and a tendency towards market equilibrium). He built on economic history, comparative political economy and an intensive but not uncritical use of data sources to provide empirical support for his conclusions and policy recommendations. He frequently rested the empirical assessment of the path of inflation in England on George Shuckburgh Evelyn's statistical work on English prices since 1066 and on international price comparisons deduced from the letters of Le Maitre, Kotzebue and Arthur Young.

After the crises of 1793 the gold reserves of the Bank of England fell steadily from about £ 7 million to below £ 1 million (February 1797). The decline was accompanied by inflation and an unfavourable exchange of English bills at the most important financial centre of the continent, Hamburg. The price of gold bullion tended to be quite stable as the Bank of England redeemed its notes in gold. At the same time the balance of trade remained favourable throughout the course of events. The decline of the Bank's specie led to the Restriction issued by the King on February 26, 1797. In the following years the value of the British Pound declined internally and externally and the price of gold bullion increased. Even before the Restriction the economic analysis of the monetary system was further complicated by the prohibition of the melting of British gold coins and of the export of bullion. Consequently, the international adjustment mechanism of a convertible paper system could only work to the extent that these were evaded.

The postulate of strict purchasing power parity was the cornerstone of Wheatley's arguments. Based on Hume's quantity theory of money he highlighted the neutrality of money in the case of a monetary expansion in the long run. An increase of the quantity of money raised goods prices and wages proportionally and left the real wage and, consequently, employment and real output unaffected. He took the argument to extremes in his early works. As these are also his most popular publications, he is often portrayed as a proponent of strict monetary neutrality.[1] However, he also pointed at the negative distributional effects of inflation due to long-term contracts and the negative real effects of a sharp reduction of the quantity of money too. The interpretation of Wheatley's concept of monetary neutrality needs to differentiate carefully between increases and decreases in the quantity of money and the relevant time horizon. Especially in his later publications he repeatedly stressed his concern about distributional and secondary effects (bankruptcies). He emphasised that a short-term reduction of the quantity of money did have real effects due to a disruption of the payment system hampering economic conduct as well as the ensuing bankruptcies and that a monetary contraction was not neutral in the short run. From his *Letter to Lord Grenville on the Distress of the Country* (1816) it can be inferred that he was primarily concerned with the secondary effects (distribution, bankruptcies) of long-term contracts rather than the direct effects of the short-term inflexibility of prices and wages on allocation. He suggested indexation – based on Shuckburgh's statistics – as a possible solution. His condemnation of sharp monetary contractions grew over time due to the experience of the crisis of 1814-16. In 1816 Wheatley also started to get an inflationary bias. He regarded the aggregate short-term welfare effects of inflation (increases (!) in economic activity and the negative distributional effects) to be preferable to catastrophic consequences of deflation resulting mostly from reduced economic activity and bankruptcies.

[1] See inter alia Humphrey (1994).

Wheatley developed different international adjustment mechanisms for national inflation – which was solely due to increases in the quantity of money – for a gold standard (or convertible bank notes) and for an inconvertible currency. His international adjustment mechanism under a gold standard was more complex than Thornton's (or Hume's) which rested on trade in goods and services. According to Thornton, higher prices at home increased imports and decreased exports. The resulting excess supply of English bills in Hamburg led to an unfavourable exchange. He must have assumed that international trade patterns were more flexible than the exchange rate.

Wheatley, on the contrary, argued that trade patterns remained unaffected by a variation of the relative value of money in England because prices on foreign exchange markets were more flexible than international trade patterns and adjusted immediately. The adjustment of exchange rates eliminated the international price difference on goods markets such that the relative purchasing power of money remained unaffected for merchants in international markets. He postulated a very strict form of purchasing power parity. Any discount on English bills in Hamburg in excess of the transaction costs of exporting bullion provided an incentive for bullion merchants to buy English bills in Hamburg at the prevailing discount, redeem them for gold at par at the London banks and export the gold to Hamburg. As English bullion could not trade at a discount in Hamburg the profit was equal to the discount minus the transaction costs. The export of English bullion to Hamburg re-established purchasing power parity in national markets within the limits of transaction costs by deflating English prices but without effecting prices elsewhere.

Wheatley, however, implicitly assumed that the aggregate price level of exported goods perfectly corresponded to the aggregate price level of the entire economies involved, that the exchange rate adjusted instantaneously and that the international bullion market – once transaction costs are taken into account – operated without frictions despite the restrictive legal framework. He argued that the prohibition was evaded easily. As the adjustment mechanism rested on disparities between the paths of the price levels of different countries, a concerted over-expansion of paper in all countries could not be prevented by the mechanism.

The international adjustment mechanism under an inconvertible paper standard was even simpler. Gold merchants could profit from the export of specie as long as bank notes traded at par. If gold was more valuable abroad than the equivalent of the purchasing power of bank notes at home, individuals would sell gold for bank notes only at a premium under inconvertibility. The purchasing power of gold would be equal across the world. The discount of bank notes reduced the real quantity of bank notes proportionally to the increase in prices and the real quantity of money would remain unchanged. The real purchasing power of bank notes abroad was adjusted by the exchange rate in terms of paper while that in terms of gold remained unaffected. Again, Wheatley took into account transaction costs. If the international price differential in terms of gold did not exceed the transaction costs, gold and bank notes continued to exchange at par and the price differential vis-à-vis the rest of the world would not be eliminated.

After the Restriction the directors of the Bank of England stoutly opposed foreign expenditure to England's continental allies. They feared that it would further diminish the Bank's already low reserves. According to Wheatley, it did not even lead to a temporary outflow of specie or bullion as the most efficient means of payment were bills. The foreign subsidy was a transfer of current national income and not of money even if the means of payment were money. But if the foreign expenditure did not change the quantity of money in England relative to its quantity abroad, it did not change the relative price levels and, consequently, it had neither an effect on the exchange rate nor on the reserves of the Bank of England. Merchants on the continent who imported goods from England bought the entire additional supply of bills. Wheatley assumed that the increase of imports from England – due to the additional income provided by the foreign expenditure – and the reduction of English imports – due to a lower disposable income at home – summed up to the amount of foreign expenditure. Furthermore, the additional English exports had to compensate for the reduction of English consumption expenditure such that aggregate demand and prices remained unaffected.

Similar arguments applied to the adjustment mechanisms with respect to other non-monetary disturbances like bad harvests and England's military expenditure on the continent. Wheatley took an extreme bullionist view that inflation, the high price of bullion and the unfavourable exchange were solely caused by an excessive quantity of money. Consequently, they were unambiguous signals of an external drain and called for a monetary contraction so that his policy recommendations focused on the monetary regime.

He proposed that only chartered banks should have the right to issue bank notes (i.e. the Bank of England); that no small denomination bank notes must be issued at all and that England should return to a gold currency (and convertible paper); that the Bank of England should be required to disclose the stock of its circulating notes.

During the crisis of 1793 the Bank of England refused to provide liquidity support to country banks. In the following years the latter established business relationships with London banks that enabled them so secure the indirect support of the Bank of England. In 1797 the public assessment of the creditworthiness of the country banks again deteriorated. But due to their links with London banks the drain on their reserves was redirected to the Bank of England which led to the Restriction on February 26. Wheatley reached the conclusion that the issue of bank notes by country banks would have to be prohibited. In his *Report on the Reports of the Bank Committees* (1819) he reiterated that conclusion in a vivid and mock discussion of the bursting of the "bubble of paper" (p. 10) in 1803 and in 1814-16. There – and in his *Letter to Lord Grenville on the Distress of the Country* (1816) – he also argued that the monetary contraction and the ensuing deflation following the failure of country banks and the distress it caused, was his major motivation to prohibit country banks to issue notes. According to Wheatley's *Report on the Reports of the Bank Committees* (1819), the advantage of the Bank of England over the country banks was its invulnerability and the confidence it evoked in the public.

Small denomination bank notes substituted for gold coins which the banks partly held as reserves. In order to maximise profits banks reduced their reserves to a minimum. They invested as much as possible in securities at the London exchanges where gold merchants bought them. They exported them to profit from gold arbitrage due to the unfavourable exchange rate. The shortage of small change further increased the demand for small denomination bank notes. The over-issue of paper was self-feeding. A bank run constituted the only check but could lead to a liquidity crisis in the entire economy, as it did in 1793, 1803 and 1814-16. Furthermore, Wheatley stressed that the circulation of country banks' notes was subject to large fluctuations according to exogenously changing assessments of their liquidity and solvency. Wheatley rejected Thornton's proposition that the note issue of country banks was sufficiently controlled by their obligation to redeem in Bank of England notes because he regarded the profit maximising reserve ratio and, consequently, the quantity of bank notes to be excessively volatile. Initially small denomination Bank of England notes would have to substitute for country bank notes, but in due course no notes below £ 10 should be issued at all and England would return to a gold currency.

In *Letter to Lord Grenville on the Distress of the Country* (1816) he proposed a monetary policy target and a corresponding rule. In order to stabilize nominal prices, the quantity of money should increase in the same proportion as the population and real output in the long run. As population does not enter the quantity equation directly, he might have had in mind that an increase in population decreases the velocity of money. In the case of a negative shock (i.e. bank runs on country banks) the stabilisation of nominal prices called for an expansionary monetary policy in the short run. In the case of such an internal drain, the Bank of England should have increased its note issue in the short-run to prevent a liquidity crisis. As the exchange rate was favourable during the 1797 crisis, the drain could not have been the consequence of the over-issue of paper. However, the directors of the Bank aggravated the internal drain by a restrictive monetary policy.

In his *Report on the Reports of the Bank Committees* (1819) he defended the cost advantage of specie based currency vis-à-vis one based on country bank notes and on inconvertible Bank of England notes. The opportunity costs of circulating specie were below the opportunity costs of paper (about 5%) plus the costs of recurring liquidity crises. He focused on the relative costs of alternative institutional arrangements rather than of different materials.

In his *Remarks on Currency and Commerce* (1803) Wheatley also discussed trade policy and proposed to abolish any trade restrictions which he deemed inefficient. He argued that the Methuen Treaty, forced exports and imports in colonial trade had a negative effect on national income. He attacked the monopoly of the East India Company. The scarcity of their shipping capacity should have been augmented by private English companies rather than by foreign ships. Furthermore, he argued that the duties on transit trade discourage the export of services. Even though they are repaid upon re-exportation the system required too much capital and renders transit trade unprofitable to a large extent.

3. Conclusion

Wheatley's contribution to the evolution of monetary doctrine is still underrated. But by taking the bullionist arguments to extremes and arriving at clear and unambiguous policy implications he differed markedly from some of his fellow bullionists (notably from Thornton). The clear structure of his contribution and his criticism of arguments of fellow bullionists demonstrated the independence and originality of his thought and helped to advance the course of monetary doctrine.

Based on his "An Essay on the Theory of Money and Principles of Commerce" (1807) most historians of economic thought portray him as a proponent of strict monetary neutrality. In this paper I show that his position becomes more differentiated during his experience of the crisis of 1814-16 by drawing attention to his less popular pamphlets of 1816 and 1819. There, he highlights the role of the payment system in the propagation of monetary shocks to the real economy. He emphasises the pronounced real effects a reduction of the quantity of money can have due to a disruption of the payment system.

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