The recoinage and exchange of 1816-17

Kevin Clancy

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The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others

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Abstract

The Coinage Bill of 1816 was a turning point in monetary history, establishing Britain on the gold standard and making provision for a major recoinage and exchange of silver. The intention in this thesis has been to examine why the reform happened when it did, what its legacy was for the nineteenth century and what the surviving records, particularly of the exchange, reveal about the nature of the circulating medium.

In Chapters 1 and 2 the eighteenth-century background is explored in order to clarify why government chose to allow the condition of the silver coinage to decline. The argument is advanced that economic stability for many years lessened the necessity for reform and the importance of gold in the economy made ministers wary of damaging its position through change. An investigation into the wear of silver coins has also been conducted which demonstrates that by the 1780s they were likely to have lost virtually all trace of design details. The reasons why reform was enacted in 1816 are discussed in Chapter 3, the explanation offered being the importance of war with France having ended and the Bank of England's needing to prepare for the resumption of redeeming its notes in gold. In Chapter 4 the political reputation of William Wellesley Pole is assessed together with his contribution to the recoinage, while in Chapters 5 and 6 the administration of the reform is described and analysed in detail. The traditional view of its being a success is confirmed by new research. The accounts from exchange stations set up to effect the change-over, listed in Appendices 3 and 4, and discussed in Chapter 6, reveal that although there were trading centres and manufacturing areas in which the old silver currency was concentrated, it was nevertheless fairly well distributed across Britain. I have attempted throughout to link the silver coinage to the other elements of the money supply. This approach is particularly evident in Chapter 7 in which the impact of the political and economic forces pressing for a resumption of cash payments are seen to shape the survival of the settlement of 1816-17.

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Preface

My original purpose in writing this thesis was to study Class 11 of the Mint records at the Public Record Office which consists of a detailed collection of papers exclusively relating to the silver recoinage and exchange of 1816-17. Not until the late 1960s, when Mint records were listed and transferred to the Public Record Office, were these documents made readily accessible as a coherent collection. There have been accounts written of the recoinage in, for example, Sir John Craig's *The Mint* as well as in *A New History of the Royal Mint* edited by Christopher Challis. Monetary histories such as Sir Albert Feavearyear's *The Pound Sterling* have dealt with the theoretical and economic background, but in the context of covering over 1,000 years of history, these works have all necessarily summarised the events of 1816-17.

A purely administrative history of the recoinage and exchange might hope to explain how a government, with relatively limited resources, effected the national distribution of a coinage, but such an approach would be unlikely to discover why the recoinage became necessary, why it happened when it did, what it revealed about the relationship between money and an economy beginning to come to grips with industrialisation, and having been enacted, what the legacy of reform was for the nineteenth century. My secondary purpose was to explore these themes. As well as describing how the change-over to a new coinage was accomplished in 1816-17 and analysing the nature of the distribution throughout Britain of the old silver that was withdrawn, this study has therefore attempted to embrace broader monetary policy concerns of the period and to see the reform in relation to the eighteenth- and early nineteenth-century economy, especially its monetary aspects, in order to provide a narrative that addresses the 130-year misadventure of the silver coinage from the 1690s to the foundation in 1825 of the British imperial currency.

Where relevant, the gold and copper currencies together with developments in the banking sector and trends in economic thought have been included. A detailed numismatic study has not been attempted because the balance of the thesis would have been stretched in what seemed to be a contrary direction. But where appropriate, numismatic research has been employed in support of arguments. The use of money, as opposed to the conditions that determine its supply centrally, has been touched on briefly with respect to how compensations were made for a shortage of silver currency in the eighteenth century. Throughout the thesis the behaviour and ideas of the politicians and economists who shaped the course of events have been discussed. The intention overall has been to provide a rounded view of a hitherto neglected corner of monetary history in the hope that the social and political implications of the currency reform can be revealed alongside its economic significance.

Abbreviations

Bagot	Papers of the Bagot family
BE	Bank of England Archives
BNJ	*British Numismatic Journal*
BS	Bank of Scotland Archives
CLRO	Corporation of London Records Office
DNB	*Dictionary of National Biography*
DTC	*Dawson Turner Copies of Sir Joseph Banks' Correspondence*
EHR	*English Historical Review*
GC	Goldsmiths' Campany
GL	Goldsmiths' Library of Economic Literature
HMC	*Historical Manuscripts Commission*
MBP	Matthew Boulton Papers
NC	*Numismatic Chronicle*
NHRM	C. E. Challis (ed.), *A New History of the Royal Mint* (Cambridge, 1992)
PRO	Public Record Office
RM	Royal Mint

CHAPTER 1

JOHN LOCKE AND MONETARY REFORM

Introduction

During the eighteenth century gold was unofficially adopted as the means of regulating the value of the currency, but the favoured status that was consequently afforded the gold coinage marginalised the place of silver in the circulating medium. Very few silver coins were produced and the ones that remained in use became worn to the point of being completely smooth discs of metal. The government shirked its responsibility to provide the legislative framework that would enable the issue of adequate quantities of silver coin and not until the Coinage Bill of 1816 was passed by Parliament was the imbalance in the system corrected; gold was confirmed as the standard of value for the currency but provision was also made for a new coinage of silver, manufactured to a lower weight standard that was intended to prevent any conflict between the coinages of gold and silver. As part of the reforms of 1816-17 the old worn silver pieces were to be withdrawn and exchanged for the new, the plan being to regenerate completely this element of the currency. The answer to why change took place in 1816 and not decades earlier, as had been the plea of many writers on economic affairs, why tensions in the currency system were allowed to emerge at all and why the position in the money supply especially of silver was allowed to degenerate lies in an exposition of Britain's monetary policy during the eighteenth century. The foundations upon which this policy was based were the currency debates that surrounded the Great Recoinage and specifically the exchange of views that took place between the philosopher John Locke and Secretary to the Treasury, William Lowndes.

In the interests of clarity the terms employed to describe monetary changes should be defined. A debasement of the coinage refers to a reduction in the fineness of the metal used in the manufacture of coins. A deterioration means the loss of weight coins suffer in circulation compared to the weight standard to which they are struck. A depreciation refers to a fall in the purchasing power of coins. A devaluation is a reduction in the standard weights of coins introduced by government, or an official reduction in the face value ascribed to a coin.[1]

Prior to 1662 most coins produced in England had been manufactured by striking a blank piece of metal with a hammer between a set of coinage dies. After 1662 English coins were struck using a screw press, giving their appearance a more regular outline and designs set in higher relief. The hammer-struck coins produced before this date, however, remained in circulation for more than thirty years alongside the machine-struck pieces, until, that is, the Great Recoinage of 1696-99. The circumstances that guided the course of monetary reform in the 1690s stemmed from rapid increases in the prices of silver and gold combined with the deteriorating condition of the silver coinage, which was the result of the common practice of clipping or filing silver from the edges of coins. Since 1601 the Mint had coined from an ounce of silver 5s 2d, the equivalent of 62s to the troy pound. Through most of the seventeenth century the price of silver on the bullion market had fluctuated between 5s 2d and 5s 4d an ounce, but towards the end of 1694 it began to rise, advancing during 1695 to a peak in September of 6s 5d. Over this same period in the 1690s the value at which the gold coinage, in the shape of the guinea, changed hands increased at an even faster pace; from having fluctuated for many years as a coin that would pass at between 21s 2d and 21s 10d it rose in February 1695 to 25s and by the beginning of June to 30s. As far as clipping was concerned, this had always been a difficulty for hammered coins, but the problem became

[1] J. K. Horsefield, *British Monetary Experiments, 1650-1710* (London, 1960), p. 24.

more noticeably acute during the late 1680s and especially severe from 1694 because of the currency inflation. According to one estimate, silver coins in circulation had by 1695 lost just under 50 per cent of their original weight.[2]

The traditional way of coping with increases in the price of precious metals, and the one adopted when the silver coinage was last altered in 1601, was to mint coins to a lighter standard; inflation in the price of silver could be compensated for by reducing the amount of silver in a coin that retained the same face value. In 1601 this resulted in a change in the weight of the shilling from 96gr to 92.9gr. Over the course of 400 years, from the reign of Edward I in the thirteenth century, resort to this expedient had been thought desirable on several occasions, as is evident from the amount of standard silver coined from a pound weight in 1279 being 20s 3d.[3] The same end could be achieved by re-denominating coins at a higher value while maintaining the existing weight standard. To address the problems that troubled the currency in the 1690s the latter approach was suggested by William Lowndes in a report that he was commissioned to write by the Privy Council. He proposed a devaluation of 20 per cent which would have meant enhancing the value of the crown from a 5s piece to 6s 3d, and the other denominations in proportion. Having gone through the indentures of the Mint he concluded that the policy in former years was 'to Raise the Value of the Coin in its Extrinsick Denomination, from time to time, as any Exigence or Occasion required; and more especially to Encourage the bringing of Bullion into the Realm to be Coined'.[4]

Given the weight of historical precedent in his favour, Lowndes should have encountered few difficulties in having his proposals accepted, but he was not his

[2] C. E. Challis, 'Appendix 2. Mint Contracts, 1279-1817', *NHRM*, p. 737; C. E. Challis, 'Lord Hastings to the Great Silver Recoinage, 1464-1699', *NHRM*, pp. 380-82. A. E. Feavearyear, *The Pound Sterling. A History of English Money*, 2nd edition, E. V. Morgan, (Oxford, 1963), pp. 129-31.

[3] Challis, 'Mint Contracts', *NHRM*, p. 736; N. J. Mayhew, 'From Regional to Central Minting, 1158-1464', *NHRM*, p. 119.

[4] W. Lowndes, *A Report Containing an Essay for the Amendment of the Silver Coins* (London, 1695), pp. 3, 56, 61-62.

own best advocate. The raised value of coins, he wrote, 'may be Lowered again by the Wisdom and Authority of Parliament, when the wealth of the Nation should (by Gods Blessing) be Re-establisht'. The implication was the threat of currency instability, a threat to property and money incomes that was made all the more worrying by the extent of the devaluation that Lowndes was suggesting. When the silver coinage was last altered in 1601 the weight of the reduction was a little over 3 per cent. To support such a policy might have involved signing up to a perpetual cycle of currency devaluation and revaluation.[5] Those who opposed Lowndes argued that prices would be raised, especially of imported goods, lenders and *rentiers* would suffer and wages as well as the King's revenue would be hit.

Having digested his report, the government in 1695 consulted a number of other people, including the architect Christopher Wren, the former Governor of the East India Company Josiah Child, John Locke and the foremost scientist of the age Isaac Newton. Of this group, a majority favoured maintaining the existing currency standard over devaluation, but the debate extended beyond official advisers and beyond Parliament, capturing the attention of interested parties, of financiers, merchants and economic theorists of varying degrees of competence. The resulting flourish of economic publications stretched to hundreds of titles.[6]

The argument employed by Locke was not new. It was a restatement of the political economist William Petty's position on monetary policy, that to raise the denominative value of coins or to lower the quantity of precious metal in individual pieces was both futile and damaging. The accusation of futility

[5] Lowndes, *Essay for the Amendment of the Silver Coins*, pp. 87-88. J. Locke, *Some Considerations of the Consequences of the Lowering of Interest and Raising the Value of Money. In a Letter sent to a Member of Parliament*, 2nd edition corrected, (London, 1696), pp. 144-45. J. Locke, *Further Considerations concerning Raising the Value of Money, etc*, 2nd edition corrected, (London, 1696), pp. 69-70.

[6] Horsefield, *British Monetary Experiments*, pp. 51-52. Horsefield's Bibliography provides an extensive listing of the printed and manuscript titles of the 1690s. For Josiah Child see *DNB*. J. O. Appleby, 'Locke, Liberalism and the Natural Law of Money', *Past and Present*, 71 (1976), p. 48.

stemmed from the idea that the amount of silver was the determinant of the exchange value of coins, so that if new shillings were three-quarters of their former weight, they would only purchase three-quarters as much; the level of trade that such money could conduct would not therefore be raised. The status of the silver coinage as a medium of exchange, he believed, was founded exclusively on the intrinsic value of the metal out of which it was made, an idea that denied money could have an extrinsic value determined by the hand of legislators. The denomination or stamp under which a coin circulated could have no influence on the value of the coin unless, he maintained, it could add to one quantity of silver qualities which another quantity of silver lacked.[7] Locke compared devaluation to the boy who 'cut his Leather into five Quarters (as he called them) to cover his Ball, when cut into four Quarters it fell short: But after all his pains, as much of his Ball lay bare as before'. In a similar vein he compared raising the face value of coins to measuring a standard yard one fifth shorter in an effort to make a quantity of cloth cover a greater area. The damaging aspects of devaluation had implications for private property, because a government, in reducing the weight of coins, would have effectively taken away a proportion of men's goods or creditors' money.[8]

The starting points for Locke and Lowndes in their approaches to the nature of money were diametrically opposed. On the one hand was the belief that the monetary standard should always be the same fixed weight of silver, and on the other, that the standard should be allowed to fluctuate in relation to the wear of coins or the price of bullion. The contrast between the two perspectives can further be seen in the views of the merchant and writer Sir William Hodges who observed that bad as it was the old money did serve the needs of trade and that even if it were made of leather it would perform the same function. Conversely,

[7] W. Petty, *Quantulumcunque Concerning Money* (London, 1682), pp. 6-7. Locke, *Some Considerations*, pp. 134-35, 137.

[8] Petty, *Quantulumcunque Concerning Money*, p. 7. Locke, *Further Considerations*, pp. 64-65. Locke, *Some Considerations*, pp. 142-43. For earlier examples of opposition to altering the currency see E. Roll, *A History of Economic Thought* (London, 1938), pp. 53-54, 63, 82.

Locke wrote that '*the Standard once thus settled, should be Inviolably and Immutably kept to perpetuity*'.[9] The debate was not new. Knowingly or not, Hodges was echoing the views of the Knight in the sixteenth-century work, *A Discourse of the Commonweal of This Realm of England*. In response to the opinion that all manner of troubles were attendant on debasing the coinage the Knight responded that the coin was but a token to go from man to man, 'and since it is stricken with the King's seal to be current, what makes it the matter what metal it be of, yea, though it were but leather or paper?'.[10]

Locke's perspective on money was an integral element of his political philosophy. It was a view he had developed in his *Two Treatises on Government*, written more than a decade before the currency debates of the 1690s, and it represented a crucial element in his explanation of how property rights, a fundamental aspect of the formation of societies, were a part of a natural law which operated beyond civil jurisdiction. Locke's approach to the reform of silver was an argument that saw the market system as being directed by objective economic forces that were ingrained in the nature of man. Interfering in the free rein to such forces by effecting a devaluation of silver could therefore be interpreted as an act that would frustrate the operation of the natural economic order.[11] Against Lowndes' presentation of historical precedents for currency devaluation of the past, Locke therefore argued that money and the rate of interest had a natural value which as such could not be changed. The importance of this idea for him is evident from the sheer number of times he refers in his writings to the *natural* rate of interest or the *natural* value of the currency. In the context in which he used them, natural laws might be defined as human propensities that operate at a level beyond personal choice

9 Appleby, 'Locke', *Past and Present*, 71 (1976), p. 54. Locke, *Some Considerations*, p. 171. Locke, *Further Considerations*, p. 9.

10 M. Dewar (ed.), [Sir Thomas Smith], *A Discourse of the Commonweal of This Realm of England* (Charlottesville, 1969), pp. 69-70.

11 Locke, *Further Considerations*, pp. 3-5. Locke, *Some Considerations*, p. 1. Appleby, 'Locke', *Past and Present*, 71 (1976), pp. 43-45, 63-64. P. Laslett, *John Locke, Two Treatises on Government: A Critical Edition with an Introduction and Apparatus Criticus* (Cambridge, 1963), pp. 310-12, 318-19. Q. Skinner, *The foundations of modern political thought* (Cambridge, 1978), II, 153, 174, 328.

or the reach of regulations devised by society. The view that such laws governed economics grew in favour during the eighteenth century and the debates over the recoinage of the 1690s were a turning point in the advance of this perspective.[12]

The detail of Locke's theory of money can be questioned in terms of his deficient understanding of the significance of alterations in the value of the currency over hundreds of years, but more than this, the soundness of his reasoning was flawed. Despite repeatedly claiming that a coin obtained its value from the amount of silver it contained, Locke nevertheless conceded in his work on money and interest that clipped coin could be accepted at the same rate as heavier pieces. He wrote, '*clip'd* and *unclip'd Money* will always buy an equal quantity of anything else, as long as they will without scruple change for one another', and he went on to observe 'but whilst *clip'd* and *weighty* Money will equally change for one another, it is all one to him [a foreign merchant] whether he receives his Money in clip'd Money or not, so be it but current'. In explanation of this seeming contradiction of his basic theory he argued that the acceptance of clipped money, at its full face value, was quite a different matter from setting out purposely with the intention of altering the weight of the standard coin. Moreover, he believed that there was a degree of weight loss that would be reached beyond which clipped coins would no longer be accepted at their face value.[13]

The use of clipped coin was not necessarily a straightforward matter. Disagreements arose constantly in transactions, but this type of money did change hands at face value, while full weight pieces were culled from the circulation. His explanation does not prevent the solidity of his reasoning from being undermined because he departs from the principles that underpinned his arguments about the nature of the value of money. Although his initial work on

[12] Locke, *Some Considerations*, pp. 3, 8-9. Appleby, 'Locke', *Past and Present*, 71 (1976), pp. 43, 48.
[13] Locke, *Some Considerations*, pp. 156-58.

money and interest was first published in 1692, it was written in 1668. The extent of clipping in the late 1660s had not reached the severe proportions witnessed twenty-five years later and the nature of his views may have been a reflection of the condition of the coins. In his published response to Lowndes' report in 1695 he took a firmer position against the idea that clipped money could circulate at face value, maintaining that its continued use had only been by the intrinsic value of the silver it contained, which had consequently inflated the price of bullion. He could not understand that Lowndes referred to clipped coin as legitimate money. 'We have now', he argued, 'no lawful Silver Money current among us: And therefore cannot talk nor judge right, by our present uncertain clip'd Money, of the value and price of things, in reference to our lawful regular Coin, adjusted and kept to the unvarying Standard of the Mint'.[14]

If the debate had been a matter of presenting a case based on sound reasoning and impressive evidence taken from a detailed knowledge of currency history, Lowndes and his supporters would have won. The debate, however, was not just a question of alternative monetary policies, it embraced discussion of a philosophy that justified the freedom of the market over the regulatory power of government. If the state had the right to change the currency arrangements, logically it would have the right to take from a man his property. Having an uncertain grasp of the details of monetary circumstances was not, therefore, a deciding factor. Locke was inconsistent in his approach to the issue of whether at the end of the seventeenth century people exchanged goods for the specific amounts of precious metal coins contained and being overly theoretical in his approach he ignored the ample precedent of monetary reform, employing instead circular arguments to sustain his reasoning.[15] How, in such circumstances, could his position have possibly won through?

14 Feavearyear, *The Pound Sterling*, p. 156. G. Parry, *John Locke* (London, 1978), p. 6. Locke, *Further Considerations*, pp. 31, 33, 36. Horsefield, *British Monetary Experiments*, p. 26.

15 Locke, *Some Considerations*, pp. 135-39. Appleby, 'Locke', *Past and Present*, 71 (1976), pp. 43, 49.

Locke's political philosophy of popular sovereignty and the right of revolution was the one that had triumphed with the overthrow of James II and the revolution of 1688. He was a respected figure and in the arena of currency reform he presented a forceful case for a connection between economic and political freedom that appealed to parliamentary leaders. Rather than seeing their power to influence monetary matters circumscribed, some politicians saw in Locke's ideas a defence of their property rights and a clear demarcation of government's authority over a defining aspect of their ability to create wealth. The political magnates felt that they had too much to lose materially by devaluing.[16]

There are other ways of looking at the resolution of monetary policy in the mid 1690s. The economic historian J. K. Horsefield has argued that the coinage standard of 62s to the pound was maintained because 'in the end it was the fear of change, the instinct of conservatism, which won the day for Restoration'.[17] This is itself, however, too conservative a view. Towards the end of 1695 the government won a hotly contested debate in Parliament to maintain the standard; it was confronted and persuaded by the advice of eminent men who largely came out against devaluation, and although it could not have imagined that the costs of the recoinage would spiral upwards as they did, in taking the decision to recoin and maintain the standard it did choose the more expensive option - at least in the short term.[18] The decision may have been founded on a fear of an ever-depreciating currency, but Locke's solution, although on paper offering the prospect of stability, was not guaranteed to be effective. Indeed, as Lowndes demonstrated, Locke's ideas flew in the face of a centuries-old tradition of devaluation. The tried and tested method of responding to changes in the value of precious metals was set aside in favour of something new - the idea, that is, of the Mint weight standard having about it an air of sanctity. Rather than being

[16] Appleby, 'Locke', *Past and Present*, 71 (1976), pp. 55-56. Skinner, *Modern political thought*, II, 348.
[17] Horsefield, *British Monetary Experiments*, pp. 60, 68.
[18] Challis, 'Lord Hastings', *NHRM*, p. 397.

conservative, ministers were working against tradition and into the eighteenth century successive administrations, while not always following Locke's theory, were nonetheless reluctant to alter the standard of the silver coinage.[19]

Monetary policy in the eighteenth century

Throughout the eighteenth century homage was paid to Locke's legacy in the area of monetary theory and his views on the necessity of keeping inviolable the standard of value were rehearsed on many occasions. Joseph Massie, a writer on trade and finance, speculated 'whether any one Man hath differed from him [Locke] concerning Money, without being thought the worst of for it', and the suggestion was made that there seemed to be an almost universally adopted opinion that altering the standard would be dangerous because Mr Locke believed it to be wrong - superstitiously, faith was placed in his opinions. One anonymous author wrote 'a Prince is no more justifiable in corrupting the purity of his coin, than in poisoning the public Aquaduct...nor is it more allowable for him to diminish, or raise his Money, than to commit any other act of fraud or violence against his people'.[20]

The debate, however, had not run its course. With the realisation that the balance between gold and silver was preventing silver from being minted there were calls for either a lowering of gold or a raising of silver. The merchant and

[19] In Lowndes, *Essay for the Amendment of the Silver Coins*, pp. 33-58, details are given of the Mint indentures covering the alterations to the coinage from Edward I's reign. Feavearyear, *The Pound Sterling*, p. 148.

[20] J. Massie, *Observations relating to the Coin of Great Britain, etc* (London, 1760), p. 20. For examples of views in support of Locke's ideas see also [S. Clement], *Remarks upon a late Ingenious Pamphlet* [by D. Clayton] *entitled, 'A Short but thorough Search into what may be the real Cause of the present Scarcity of our Silver Coin, etc'* (London, 1718), pp. 11-12; P. Vallavine, *Observations on the Present condition of the Current coin of this Kingdom* (London, 1742), pp. 30-31; J. Harris, *An Essay upon Money and Coins* (London, 1757), pt I, 95; [P. Murray], *Thoughts on Money, Circulation and Paper Currency* (Edinburgh, 1758), p. 10; For the view that men have superstitiously adhered to Locke's views see [Beldam], *Considerations on money, bullion and foreign exchanges; being an enquiry into the present state of the British Coinage: particularly with regard to the scarcity of silver money, etc* (London, 1772), pp. 154-55.

Lord Mayor of London Sir John Barnard considered that the fineness of silver should be reduced from 11oz 2dwts to 10oz. A letter to the *London Magazine* contained the argument that diminishing silver in this way would correct the imbalance between the two metals because gold coins contained a higher proportion of alloy. The standard of sterling silver equated to 925 parts per thousand, while that of gold at 22 carats equated to 916 parts per thousand. Debasing the fineness of silver was directed at achieving the same end as the proposal of Customs Commissioner Corbyn Morris who suggested diminishing the weight of silver coins. A reduction to the shilling of 1/30 part - the near equivalent of 64s to the pound troy - Morris maintained was necessary, while Samuel Garbett, a Birmingham businessman who was commissioned by government in 1782 to write a report on the management of the Mint, thought a new rate of 76s would be required.[21] Added to this were the views of the Bank of England who made representations to ministers in April and again in July 1797 in support of devaluation. By the end of the century a significant weight of opinion had built up in favour of this course of action.[22]

What also stands against the impression of Locke's influence being all-pervasive is the reality of daily exchange. Even when Locke was writing there was evidence that the truth of his ideas on the monetary standard, that the quantity of silver was the measure of value of commodities rather than an assigned denominative value being attached to a coin, could be readily challenged. On the basis of experiments referred to by Lowndes, the silver coins circulating prior to the recoinage of the 1690s had lost, through clipping, in the order of 50 per cent of their original weight and so, according to Locke's formulation, an equivalent rise in prices should have taken place. This did not

[21] Sir John Barnard, *Some Thoughts on the scarcity of silver coin: with a proposal for remedy thereof* (London, 1759), p. 2. *London Magazine*, August 1762, p. 438-39. C. Morris, *A Letter balancing the causes of the present Scarcity of our Silver Coin and the Means of immediate Remedy* (London, 1757), p. 11. G. P. Dyer and P. P. Gaspar, 'Reform, the New Technology and Tower Hill, 1700-1966', *NHRM*, pp. 441, 444.

[22] BE. G8/8, 25 April 1797, pp. 46-47; BE. G4/27, 20 July 1797, p. 265.

happen - something which economic essayists at the time did not grasp.[23] In the eighteenth century a similar pattern was evident: as silver coin was melted down, exported or diminished in weight, prices up to 1750 entered a trough (*Figure 1 Tables 1* and *2*). This dissonance might be seen as reflecting the more important role that gold assumed in the economy, but it also indicates that the actual experience of exchange was of worn silver coins passing at their full face values and therefore demonstrates the importance of the extrinsic over the intrinsic value of money. Locke's ideas on the natural law of money triumphed in 1696 but in the hands of retailers the deteriorated silver coinage of the mid to late eighteenth century took its value from a trust in the denomination, from, that is, the man-made over the natural, and in this may be seen the acceptance of the notion of fiat money.

There was, though, a limit to the extent to which the fiduciary element of the coinage could be taken. Discussion of solutions to the currency problems was not couched in terms of adopting a copper coinage that would carry the denominations of shilling, sixpence and half-crown. A psychological attachment to an intrinsic value precious metal coinage was still apparent and continued throughout the nineteenth century; to an extent, though, this attachment had been overtaken by events.

The unofficially acknowledged devaluation was effectively given legal backing in 1774. In response to the appearance of considerable quantities of silver coins well below the standard Mint weight, that were believed to have been imported into Britain, an act was passed limiting the legal tender status of silver. Specifically, no payment of money in silver coin of sums exceeding £25 would be allowed as legitimate for more than its value by weight at the rate of 5s 2d an ounce. The implication of this measure was that tenders below the value of £25 would be legal without reference to weight and since the deterioration of

[23] Locke, *Further Considerations*, p. 2. Ming-Hsun Li, *The Great Recoinage of 1696 to 1699* (London, 1963), p. 9.

silver was widely reported and generally accepted, a tacit devaluation had thereby been enacted.[24] The extent of the devaluation that had been recognised can be gauged from the percentage figures for weight loss quoted in *Table 2*. Writing in 1762 George Whatley judged that shillings had lost 11.42 per cent of their original weight, while twenty-five years later the Mint determined a 20.61 per cent deterioration.

The primacy of Locke in guiding monetary policy was further challenged in the eighteenth century by the operation of a bimetallic standard. He had advocated a single metal silver standard and believed gold should be allowed to find its own level, there being no necessity, to his mind, that it should have a fixed value set by public authority. In 1717, on the recommendation of Isaac Newton, who was at the time Master of the Mint, a maximum rate for the guinea was established at 21s and throughout the rest of the century the position of gold in a bimetallic system was defended ahead of silver. Admittedly, in advising that the guinea be lowered to 21s, Newton was recommending a policy that he expected would bring about a recovery in the position of the silver coinage by providing less of an incentive for it to be exported.[25]

During the reign of Queen Anne, measures were also taken to encourage the coining of silver by paying a premium of 2½d an ounce on silver plate or foreign coin imported into the Mint. But the prompt action taken to recoin gold in the 1770s when its position became threatened by export and wear, a position which had afflicted silver for the preceding seventy years, is compelling evidence of the importance of gold.[26] In the 1790s, when the price of silver fell below the Mint price for two or three years and when a committee of the Privy Council was reconvened under the active leadership of the statesman Lord Liverpool, the prospect of a recoinage of silver seemed close at hand, but the fear that the new

[24] R. Ruding, *Annals of the Coinage of Great Britain and its Dependencies, etc*, 3rd edition, (London, 1840), II, 85. *Parliamentary History*, XVII, cols 1327-28 (10 May 1774).
[25] Locke, *Some Considerations*, p. 169. *Journal of the House of Commons*, XVIII, cols 664-66 (21 December 1717).
[26] Ruding, *Annals of the Coinage*, II, 63. Dyer and Gaspar, 'Tower Hill', *NHRM*, pp. 439-41.

coins might simply be exported proved a strong incentive for more fence-sitting on the question of the silver coinage.[27] The favouring of one metal over that of another was not something to which Locke subscribed but it was apparent in the way the British currency was managed in the eighteenth century.

Although Locke's influence did cast a shadow over monetary policy, there was also pragmatism in evidence. The drift towards gold as the chief element of the metallic currencies was not resisted and certainly not on the basis of a doctrinaire allegiance to the political philosopher. His thinking, moreover, cannot be employed to address some significant subsequent developments in monetary affairs. The opposition he expressed to the practice of paper being employed as money in transactions circumscribes fairly well the relevance of some of his ideas.[28] An indication of how far government departed from his views is provided by the debates during 1810 and 1811 surrounding the report of the Bullion Committee on the high price of gold, when ministers, under the exigencies of financing the war against France, were happy to see the continuation of an irredeemable note circulation (Chapter 3, p. 53).

The political philosophy that lay behind the origins of modern liberal democracies and constitutional government cannot be considered without looking back to Locke, and similarly the 150 years of currency history from the end of the seventeenth century cannot be considered without acknowledging his influence. A strong aversion to abandoning an intrinsic value coinage was his legacy to debates over the currency, but during the eighteenth century a shift was taking place from silver to gold, and from metal to paper that altered the character of monetary policy beyond the scope of the debates of the 1690s.

[27] G. P. Dyer and P. P. Gaspar, 'The Dorrien & Magens Shilling of 1798', *BNJ*, 52 (1982), 201.
[28] Locke, *Some Considerations*, p. 29.

CHAPTER 2

SCARCITY OF SILVER COIN IN THE EIGHTEENTH CENTURY

The impact of the Great Recoinage

The withdrawal of English hammered silver coins and their replacement by machine-struck pieces was a major undertaking, but the success of the operation was almost immediately marred by large quantities of the newly minted silver being taken out of circulation and melted down for profit. The debate over whether or not to devalue the currency, the outcome of which was the acceptance of Locke's theory of money, seemed to have been productive of a flawed system in which there was advantage in exporting silver abroad rather than importing it into the Mint to be coined. From the beginning of the eighteenth century rather than the sound foundation of a regenerated circulating medium, there existed the problems of an insufficient quantity of silver being produced and a consequent deterioration in the quality of the currency that remained in use.

The size of the silver circulation at the end of 1695, on the eve of the Great Recoinage, has been estimated at £11 million. The vast majority, in the region of £10 million, of the old currency was withdrawn over the course of several years and what remained unaccounted for was in any case demonetised in January 1698.[1] In the three years of the recoinage £6.8 million was produced to replace the hammered money, which meant that the resulting silver circulation was reduced by 38 per cent. The impact of this sizeable fall was almost certainly exacerbated by the deflationary influence of the new coins being minted at the

[1] For the estimate of £11 million see Craig, *The Mint*, p. 193. In Horsefield, *British Monetary Experiments*, pp. 14, 258, a slightly higher estimate of £12 million has been calculated. A more conservative estimate is given in R. E. Cameron, *Banking in the Early Stages of Industrialisation. A Study in Comparative Economic History* (New York, 1967), p. 42.

established standard of 62s to the pound troy - a full 50 per cent appreciation over the ardently clipped hammer-struck pieces that were withdrawn.[2]

As the eighteenth century progressed production of silver did not compensate for this decline. During the seventeenth century £22.5 million of silver coin was issued by the Mint, while in the eighteenth century the figure was less than £1 million (*Table 3*). What would have constituted an adequate supply of silver currency at any particular time is not easily determined. If, however, the assumption is made that a reduction in the size of the circulation of almost 40 per cent cannot have failed to generate difficulties, then a supply deficiency of some magnitude must have arisen in light of the large amounts of coin that were melted down and exported over the course of the subsequent fifty years.

The terms of the silver trade in which the East India Company was engaged during the eighteenth century were lucrative because of the relatively high price that silver attracted in the East. Between 1699 and 1717 the guinea was rated at 21s 6d, which with the Mint price of silver reaffirmed by the recoinage settlement at 62s to the pound resulted in a silver/gold ratio of 15.4 to 1. Isaac Newton made clear in his report to the Treasury of 1717 that this compared with ratios in China and Japan of 9 or 10 to 1, in India of about 12 to 1 and in several European countries, including France, Denmark, Holland and Germany, of roughly 14 to 1.[3] Silver's value was, therefore, closer to that of gold in many other parts of the world and the price it fetched being consequently higher meant that there was a profit to be made on exporting silver from Britain and importing gold. There were legal restraints on the trade in bullion in the shape of the requirement to swear an oath that silver for export had not been derived from melting down coin of the realm. The law was widely ignored and easily circumvented and inevitably, therefore, large amounts of the newly-minted silver disappeared. During the first half of the century the trade in silver varied markedly. In 1705 £193,000 was shipped overseas, while in 1717 the scale had increased to £1,151,000 and the following year to £1,894,000. Between the

[2] Challis, 'Lord Hastings', *NHRM*, p. 386. Lowndes, *Amendment of the Silver Coins*, p. 107.
[3] *Journal of the House of Commons*, XVIII, cols 664-66 (21 December 1717).

years 1701 and 1760 the East India Company exported an annual average of 1,631,922 ounces of silver - the equivalent of over £400,000 of silver coin.[4]

A fairly drastic realignment of the weights of coins would have been necessary to avert the business instincts of merchants from the potential gain particularly in relation to India and the Far East. The solution would have been to adjust the rates at which coins were struck so that the silver/gold ratio in Britain would fall from over 15 to 1 to a rate closer to 14 to 1 and thereby approximate more closely to the rest of Europe. The face value of existing gold coins could have been lowered, new coins with the same face value but an increased weight might have been released or the purity of the gold alloy used to strike coins could have been enhanced. Any of these methods would have narrowed the gap between the rate at which silver and gold were minted. Alternatively, keeping gold at the same standard, the adjustment could have been made to the silver coins (Chapter 1, p.3). Newton's recommendation, and the one adopted in 1717, was to operate on the face value of gold coins and reduce the guinea from 21s 6d to 21s. From being rated at £47 17s to the pound, gold was as a consequence of this change rated at £46 14s 6d, a shift in the silver/gold ratio from 15.4 to 1 to just over 15 to 1. He acknowledged that further changes in the same direction would be necessary in order to save the silver coinage from the further ravages of the melter and the exporter. When writers on economics in the eighteenth century referred to the Mint price of silver having been set too low, the intention in mind was to establish a silver/gold ratio in Britain more in keeping with other parts of the world.[5]

Britain's being relieved of its new silver coins was an unwelcome development and the quantities that were lost to Europe and the East failed to be matched by a comparable scale of production. Even if a compensation in output levels had not been required to accommodate the bullion trade, silver was still not minted during any decade in the eighteenth century on a par with what had

[4] Horsefield, *British Monetary Experiments*, pp. 77-78. T. S. Ashton, *An Economic History of England: The 18th Century* (London, 1955), p. 170. K. N. Chaudhuri, *The Trading World of Asia and the English East India Company, 1660-1760* (Cambridge, 1978), p. 177.

[5] *Journal of the House of Commons*, XVIII, cols 664-66 (21 December 1717).

come to be expected during most of the last two hundred years (*Table 3*). Commentators at the time referred to the silver coinage being prodigiously exhausted and there being an absolute necessity for a speedy supply. A cursory glance suggests the paradoxical situation of there being insufficient silver in circulation that was yet continually being withdrawn as if in response to a surplus.[6]

In the standard works on the British coinage as well as in economic histories, the tendency for the market price of silver in the eighteenth century to be above the Mint price has been well documented. However willing people may have been to maintain a healthy money supply they were not about to sustain voluntarily a loss on importing silver into the Mint.[7] Writing in 1730 John Conduitt, successor as Master of the Mint to Isaac Newton, remarked that the only silver coined at the Mint since 1701 had been forced there. Amongst other supplies he was referring to the proportion of the treasure seized at Vigo in Spain that was brought to the Mint in 1703.[8]

The difference between the market price and the Mint price of silver, as is apparent from *Appendix 1*, was not always large, but added to this difference were costs that an importer of silver to the Mint would have to bear, such as the loss of interest during the time taken to coin bullion, as well as fees to certain Mint officers. A relatively small margin would therefore be increased by the extent of practical minting costs. The higher market price was maintained because of the outlet provided by the flow of silver to the East. Rather than continuing its decline in value against gold, which had been taking place gradually from the thirteenth century and more rapidly during the seventeenth century, silver began to appreciate. In every decade of the first sixty years of the eighteenth century the international silver/gold ratio moved in favour of silver

[6] [D. Clayton], *A short but thorough Search into what may be the real Cause of the present Scarcity of our Silver Coin, etc* (London, 1717), p. 21.

[7] Ruding, *Annals of the Coinage*, II, 67. Oman, *The Coinage of England*, p. 356. Feavearyear, *The Pound Sterling*, p. 158. Horsefield, *British Monetary Experiments*, p. 83.

[8] Conduitt, *Observations upon our Gold and Silver Coins*, in Shaw, *Select Tracts*, pp. 216-17.

and, while gold regained some ground in the 1760s, silver did not suffer a marked fall until the last decade of the century.[9]

The reason why silver was not being minted was intimately connected with the international bullion trade, through which Britain dealt in large quantities of precious metals. The country was better placed than some other European nations to acquire regular supplies of both gold and silver through its close trading links with Portugal and Brazil. The large amounts of silver flowing through British ports meant that in an important sense there was no shortage of silver. Indeed a major reason why Britain was able to mint over £12 million worth of gold coin in the first thirty years of the eighteenth century lay in this relationship and in the constant trading surplus with Portugal and Brazil in favour of Britain during this period. By the settlement of balance of trade surpluses newly discovered Brazilian gold found its way to the Mint.[10]

The changing relationship between trading links and the money supply was not lost on contemporaries. Thomas Prior, one of the founders of the Dublin Society for the Promotion of Agriculture, Manufactures, Arts and Sciences, remarked that the late discoveries of gold mines in Brazil were bringing in large amounts of gold yearly and that as a result the ratio of gold to silver had dropped slightly. Reflecting on the plight of silver Simon Clement, a London merchant, observed that 'the solid Wealth of the Kingdom is sinking into the Indian Seas'. *The Gentleman's Magazine* in 1754 remarked that most crowns and half-crowns were thought to have been melted down or conveyed abroad and that many shillings and most sixpences were greatly defective in weight.[11] Trading networks provided the flow of precious metals both in and out of Britain, while

9 Feavearyear, *The Pound Sterling*, pp. 150-51. Lord Farrer, *Studies in Currency, 1898; or Inquiries into certain modern problems connected with the standard of value and the media of exchange* (London, 1898), Appendix II on the relative value of gold and silver since the beginning of the sixteenth century.

10 P. Vilar, *A History of Gold and Money, 1450-1920*, Trans. J. White, (London, 1976), p. 230.

11 [Prior], *Observations on coin in general*, pp. 12-13. [Clement], *Remarks upon a late Ingenious Pamphlet*, p. 19. For Thomas Prior see *DNB*; for Simon Clement see R. H. I. Palgrave, *Dictionary of Political Economy*, (London, 1894-99). H. E. Manville, *Numismatic Guide to British and Irish Periodicals* (London, 1993), II, pt I, 16.

the silver/gold ratio played an important part in determining whether guineas or shillings were minted.

The establishment of the currency balance that emerged from the reforms of the 1690s combined with structural trading arrangements to generate a preference for minting gold over silver, but this trend was, in addition, spurred on by the greater utility that a gold coinage acquired towards the end of the seventeenth century. Guineas had during the reign of Charles II taken on an increasingly visible role in commerce and industry, and as well as bankers choosing to base their reserves to a considerable extent on guineas, tax collectors came to prefer them to the flagging substance of the silver coinage.[12] Gold had become firmly entrenched as the chief metal of the circulating medium, as can be seen from the concern that greeted the reduction of the guinea in 1717 to 21s. Such was the reaction that a resolution had to be passed declaring that the value of the gold coin would not be altered again.[13]

Deterioration of silver coins

In the absence of a large enough supply continuing to permeate the existing stock, the silver coinage became exposed to longer bouts of active circulation. With reference to Ireland Thomas Prior argued that because silver was in short supply it passed swiftly and consequently wore at a faster rate. By the 1720s complaints were aired regarding coins having lost worryingly high proportions of their original weight. Some argued that part of the blame for this must rest with the melting of heavy pieces and illegal diminution as well as with the legitimate conditions of wear.[14]

The daily reality of poor quality money being experienced over several

[12] Feavearyear, *The Pound Sterling*, p. 156.

[13] *Parliamentary History*, VII, col. 530 (13 January 1718); *Journal of the House of Lords*, XX, col. 586 (27 January 1718).

[14] [Prior], *Observations on coin in general*, p. 2. Conduitt, *Observations upon our Gold and Silver Coins*, in Shaw, *Select Tracts*, p. 237.

decades led the plight of the silver coinage to become part of the language of eighteenth- and nineteenth-century literature. In *A Sentimental Journey* Laurence Sterne wrote, 'I had a few king William's shillings as smooth as glass in my pocket...See, Monsieur le Count, said I, rising up, and laying them before him upon the table - by jingling and ribbing one against another for seventy years together in one body's pocket or another's, they are become so much alike you can scarcely distinguish one shilling from another.' Covering the period 1788 to 1794 in the *Memoirs of Joseph Grimaldi*, Charles Dickens related the story of two young men who paid a landlord for refreshments with a piece of tin: 'and they hurried on, disputing all the way whether it was really a sixpence or not; a discovery which could not be made at that time, when the currency was defaced and worn nearly plain, with the ease with which it could be made at present'.[15]

During the second half of the eighteenth century the silver coinage had come to the unhappy pass of having suffered rates of wear of over 20 per cent (*Table 2*). At least two hoards back up the contemporary claims relating to the condition of silver. A hoard published in the *Proceedings of the Somersetshire Archaeological & Natural History Society* in 1908 contained a total of sixty-three cut shillings and sixpences, as well as four complete shillings, all of which were worn to the point of illegibility. About half a mile north of Moorhouse, near Carlisle, a hoard was discovered which included shillings and sixpences of William III and George II. The account of the find published in the *Proceedings of the Society of Antiquaries of Scotland*, 1915-16, described twenty of the coins as being worn smooth.[16]

Laboratory experiments into the wear of coins cannot accurately replicate and therefore predict what weight loss will be experienced by coins in daily circulation.[17] By gathering together worn examples of seventeenth- and

[15] L. Sterne, *A Sentimental Journey Through France & Italy by Mr Yorick* (London, 1768), II, 86-87. C. Dickens, *Memoirs of Joseph Grimaldi* (London, 1838), pp. 29-30. For a reference to the scarcity of money see O. Goldsmith, *The Vicar of Wakefield: A Tale. Supposed to be written by Himself* (Salisbury, 1766), I, 140.

[16] I am grateful to Stephen Minnitt of the Somerset County Museums Service for providing me with details of the Somerset hoard. Manville, *Numismatic Guide*, II, pt I, 370.

[17] RM. Library. P. Hatherley, 'Wear Testing of Coins', Paper presented to the XVIIth Mint Directors' Conference, 1992.

eighteenth-century silver that remain in museum collections and in the less glamorous parts of coin dealers' holdings an indication of the likely appearance of worn coins can, however, be determined. *Figure 2* illustrates eight coins at varying stages of deterioration. Sir John Craig believed that a loss of 10 per cent of the original bulk of a coin would be enough to remove all trace of design, but this figure is almost certainly an underestimate.[18] A coin that has lost up to 20 per cent of its standard weight, although having virtually no relief at all may still show some evidence of the outline of a design (*Figure 2 no. 5*). Beyond this level, virtually all remnants of design details will tend to have been lost and the coins, such as *Figure 2 no. 8*, which approximates to the size of a sixpence and on that basis has been diminished by 42.73 per cent, will be essentially blank discs of metal.

According to contemporary observations and experiments conducted by the Mint and presented in *Table 2*, shillings and sixpences might have approached the stage of being worn smooth by the 1780s. An alternative way of arriving at an estimate of likely deterioration is to make use of the aggregate figure for wear of 26 per cent derived from the £2.6 million of old silver coin withdrawn from circulation in 1817 (Chapter 6, p. 145). An annual rate of wear can be calculated by using a compound interest formula covering a certain number of years. The advantage of using the figure of 26 per cent is that all the coins withdrawn in 1817 had to be weighed and assayed prior to their being melted and the silver being put back into production. It therefore represents a definite figure for the extent of wear and is based on the largest sample of coins on which such weight tests during this period were carried out. One of the main reservations, however, is that in order to arrive at an annual rate of wear an assumption has to made about how long the coins that were withdrawn in 1817 had been in circulation. Implicit also in such a calculation is the assumption that weight loss would be uniform both by year and by denomination, a claim that can definitely be doubted.

[18] Craig, *The Mint*, p. xvi.

In spite of these drawbacks the advantages suggest that there is a case for determining the annual rate of wear and in taking 1700 as the initial date, the justification being that a much larger number of silver coins was released at the end of the seventeenth century than was issued during the subsequent 117 years. During the Great Recoinage £6,840,719 was produced, while between 1699 and 1817 only a further £1,321,040 was minted, a figure which includes the £320,372 struck during the silver recoinage between 1707 and 1709 at Edinburgh. Almost 84 per cent, therefore, of the total stock of silver coins that relates to the period was issued prior to 1700. The assumption that the recoinage issues of William III probably accounted for a majority of the silver still in use in 1817 and that the figure of 26 per cent should be taken to extend back as far as the beginning of the eighteenth century is probably not unreasonable. Calculated over this time-scale the annual rate of wear would be 0.257 per cent, and at that rate by the last twenty-five years of the eighteenth century shillings and sixpences could have lost over 20 per cent of their weight - enough, that is, to obliterate most design details (*Figures 3 and 4*). The percentage rates of wear quoted in *Table 2* would therefore appear to be confirmed.[19] Such obviously generalised observations nevertheless offer an impression of the likely condition of the currency during the course of over a century of use.

As is apparent from *Table 4*, a crown wears at a much slower pace compared with a shilling or a sixpence. The disparity is less obvious in the early stages of initial wear but there is a marked distinction over time. Partly this can be explained by the anticipated higher velocity of circulation of smaller denominations, but it is also the result of shillings and sixpences having a larger surface area in relation to their weight than is the case with crowns and half-crowns. Even a comparison between shillings and sixpences (*Figures 3* and *4*) reveals that sixpences wear more rapidly than the slightly bulkier shillings.

[19] Challis, 'Lord Hastings', *NHRM*, p. 386. Ruding, *Annals of the Coinage*, II, 62-63. M. Folkes, *A Table of English Silver Coins* (London, 1745), pp. 131, 154-55.

The decline in the quality of the silver coinage in the eighteenth century was certainly more gradual than in the years immediately preceding the Great Recoinage. Silver falling, however gently, into its parlous condition cannot have escaped the attention of ministers, but what might have required them to take action, a crisis of confidence in the currency such as that of 1695 when the price of gold coins in terms of silver rose by 35 per cent in six months, did not happen. Despite the shortage of silver and the extent of wear, despite what may be considered obligations to sustain a healthy supply of coin, the appearance was of a government not inclined to act unless confronted by a financial panic.

Economic stability

Legislative enactments relating to the silver coinage in the eighteenth century were few in number. While contemporary economic literature contains clamorous expressions of dismay regarding the condition of the currency and the havoc its scarcity was meting out to businesses, the thorough debate in Parliament that should have been stimulated by the worn surfaces of silver coins simply did not happen. Following the discussions that accompanied the reduction of the guinea in 1717 and 1718 to 21s, there was no substantive motion in Parliament relating to reform of the silver coinage until the act of 1774 to limit the legal tender status of silver to £25, a silence that in itself reveals the perception there was in government of monetary stability.[20]

Support for such a perception can be drawn from price trends during the mid eighteenth century. A level as high as that at which prices had been from 1696 to 1699 was not seen again for a hundred years (*Table 1* and *Figure 1*), and if the market price of silver had varied somewhat in the century after the Great Recoinage within a band of between 4s 11d and 5s 11½d (*Appendix 1*), the market price of gold was yet fairly uniform (*Appendix 2*). From the beginning to the end of the century the prices of wheat, malt and wool did advance but within the variations there was evident no sustained escalation until the fourth quarter.

[20] *Parliamentary History*, volumes VII to XXXVI cover the years 1714 to 1803.

Between 1700 and 1799 a bushel of malt increased from 3s 6d to 5s 5d, but in 1747 the price quoted was lower than it had stood some forty years earlier.[21]

Wage rates during the first sixty years of the century similarly revealed no signs of creating a destabilising pressure on the economy. The wages of labourers in London were largely set on a gradual upward trend, but in the period from 1710 to 1730 they remained reasonably static and through the inching up of prices during the third quarter of the century they showed an even stronger inclination to stability. Movements in wage rates in different parts of the country varied, as a comparison of London and Lancashire reveals (*Table 5* and *Figure 5*). In the north of England generally there was more upward movement and to a decisive extent from the mid 1760s, but during the previous thirty years wage levels stirred hardly at all. Adjusting the index of wage rates to take into account increases in the cost of living offers a more accurate indication of when there might have been placed on the money supply an added burden. Including these revisions, however, reveals no trends that would have generated serious alarm. In periods, for example, when money wages were increasing, as in Lancashire from the mid 1760s, the advance was not matched by higher real incomes. Moreover, at a time when real wages did outstrip money wages, as in the twenty-five years from 1730, prices were subdued, thereby helping to maintain conditions of stability.[22]

The pattern of economic growth in the eighteenth century was one of short cycles of depression followed by prosperity. The financial crisis of 1720, for example, centring on the collapse in the fortunes of the South Sea Company, caused a contraction in many industries and in several areas of trading activity; by contrast, in the three years from 1722 there was evidence of an expansion in building activity and of a growth in exports especially between 1724 and 1725. Increases in commodity prices and high rates of imports of cotton in 1761, as well as exports reaching record levels in the previous two years, point to

[21] T. S. Ashton, *Economic Fluctuations in England, 1700-1800* (Oxford, 1959), pp. 181-82, 190.

[22] E. W. Gilboy, *Wages in Eighteenth Century England* (Cambridge, [Massachusetts], 1934), pp. 219-20, 222-23.

flourishing conditions, which were followed, between 1764 and 1768, by poor harvests and depression, a situation compounded by a slump in British export markets in north America. The fluctuating pattern of growth in the economy, therefore, exerted varying degrees of pressure on the supply of money. There is, however, some reason to believe that added tension was brought to bear at the end rather than the beginning of the century. In absolute terms a number of economic indicators reveal marked advances: the total value of a range of imported goods including corn, coffee and textiles increased over fourfold from 1700 to 1799, and exports exhibited a similar rise, with iron and steel manufactures rising dramatically during the 1790s. The annual average production of copper in Cornwall in 1730 was 7,500 tons; in the 1790s the figure was 48,000 tons. The development of the textile industry was even more pronounced with the number of pieces of broad cloth milled in Yorkshire between 1731 and 1800 increasing by a factor of over six.[23]

Public revenue, including land and assessed taxes, customs and excise duties, increased gradually up to the end of the 1770s, thereafter the total over the next twenty years exceeded that for the previous forty years. The pattern of public expenditure was more volatile. The totals for net public expenditure for the two decades after 1720 fell and major fluctuations continued into the 1760s and 1780s, but spending from 1776 tended to be well above rates encountered earlier in the century.[24] Changes in population will have impacted on the demand for coins, but for many years demographic shifts exerted no significant stress on monetary conditions. Although not all the measures of population for the period reveal the same pattern of development, evidence of a decline during the first half of the century, notably after 1720, is confirmed by a number of separate studies.[25]

[23] Ashton, *Economic Fluctuations*, pp. 143-44, 149-50, 152-54. Ashton, *An Economic History of England*, p. 124. P. Mathias, *The First Industrial Nation: An Economic History of Britain*, 2nd edition, (London, 1983), pp. 431-32.

[24] Mitchell and Deane, *British Historical Statistics*, pp. 386-91.

[25] Mitchell and Deane, *British Historical Statistics*, p. 5. A. J. Little, *Deceleration in the Eighteenth-Century British Economy* (London, 1976), pp. 53-54.

Taking these circumstances as a whole, there may have been a margin for the overall stock of cash to grow very little in the years up to 1760 without marked shortages being apparent, but as output from the Mint unfolded, the large mintages of gold up to 1750 more than compensated for a decline in the production of silver. Sharp economic shifts caused short-term peaks in demand for money, but for many years official policy towards the silver coinage was probably justifiable, if not on the grounds of offering the necessary range of denominations, then probably in terms of the total money supply operating in conditions free of especial duress.

The marked increases in prices, and in wages in some areas of Britain, towards the end of the century were forces with which the monetary policy of the previous ninety years had not been confronted. During this period, the fourth quarter of the century, serious difficulties with the money supply began to emerge. The tendency towards inflationary pressures was especially apparent in the north of England, but throughout the country there was a more rapid pace of advance. Economic change built up a momentum that helped to reshape the circumstances in which money had to operate. By themselves, however, the circumstances did not generate a crisis, the motive force for that lay rather in the outbreak of war between Britain and France in the 1790s. In the changed economic environment of the late eighteenth century there was much less justification for the condition of silver to have been left in abeyance, and yet at this time the flow of silver from the Mint slowed to an intermittent drip.

In the language of contemporary literature, of great obstructions being caused to all sorts of businesses because of the want of small change, compensation should be made for a certain amount of hyperbole. The periods of prosperity enjoyed from 1781 to 1783, from 1789 to 1792 and on two other occasions before the end of the century suggest that the economy could do well enough without a plentiful amount of silver. The large mintages, however, during the recoinage of 1816-17 and the sustained healthy levels of output in the nineteenth century indicate that the population of Britain still required money in relatively small denominations; while people coped in the eighteenth century without abundant numbers of shillings and sixpences, these coins remained useful elements of the money supply. The number of transactions undertaken for modest sums did not decline, if anything it will have increased especially in the context of the shift to money wages in developing industrial areas. Some of the burden had to be shifted to other forms of currency. In looking for an explanation behind why the minting of silver was allowed to decline, as well as macroeconomic forces the existence of efficient alternative means of exchange may provide part of the answer, the smaller supply of silver being in such circumstances an inconvenience rather than a crisis.[26]

Paper money

A number of writers in the eighteenth century referred to the advantages of the note issues of various kinds and how they could help to bear the burden once carried by a more extensive silver coinage. Some argued that but for the advent of this type of credit rates of wear would have been much higher. The financier and businessman John Law went further, seeing in paper money all the qualities of conventional money, but without some of the disadvantages that beset metal currencies, such as a liability to uncertain value at the hands of legislators. As far as Scotland was concerned he thought the notable scarcity of silver made the prospect of notes an attractive option.[27] Notes for small amounts found their way into circulation but in England and Wales in the early eighteenth century this did not mean for values as low as £1. The millions of pounds sterling that the Bank of England issued for circulation (*Table 6*) tended to be employed in substantial transactions, and the use of paper currency for daily retail purchases was not evident.[28]

[26] Ashton, *Economic Fluctuations*, pp. 164-68, 173.

[27] Anon., *Observations on the state of the gold and silver in Great Britain, both coin and bullion* ([London], 1730), p. 1. J. Law, *Money and Trade considered, with a proposal for supplying the nation with money* (Edinburgh, 1705), pp. 76, 78, 93, 97. For John Law see *DNB*.

[28] Feavearyear, *The Pound Sterling*, p. 160. J. H. Clapham, *The Bank of England. A History* (Cambridge, 1944), I, 293-98.

During the second half of the eighteenth century provincial banks began to open for business, discounting bills of exchange, offering loans, taking deposits and gradually coming to assume a range of banking functions, one of the most important of which was the provision of money for tradesmen and farmers. Estimates of the number of country banks before the first decade of the nineteenth century are not reliable, but 150 are thought to have been in business in England by 1776, and in the early 1790s something in the order of 280. By 1804 there were 596 throughout Great Britain: 473 in England and Wales, sixty-nine in London and fifty-four in Scotland.[29] Not every bank issued its own notes and especially in the north of England the practice was not common. Of those that did, accurate figures are sketchy, which is partly a reflection of often precarious business conditions. The Chairman of the Board of Stamps estimated the value of country banknotes annually in circulation over the six-year period from 1812 to 1817 to be just under £16 million. He was reluctant to offer any indication of the size of this form of currency prior to 1804 because the Stamp Office records did not distinguish between banknotes and notes used in the course of commercial dealing[30] The economic historian Sir John Clapham judged that 'Englishmen of the rank and file - wage-earners and small traders - knew little of paper money, and in the early years of the suspension [of cash payments 1797-1821] they had learnt of its use only gradually'. Although the Whig politician Sir George Savile, when introducing a bill in 1775 forbidding English bankers from issuing notes for less than £1, made reference to paper money circulating in Yorkshire for as low as a shilling, such instances were probably not widespread.[31]

The experience that the population had of paper money included banknotes being employed by factory owners to pay their workers, and in some instances notes were actually being issued under the authority of the industrialists

[29] Clapham, *The Bank of England*, I, 160-63. T. S. Ashton, 'The Bill of Exchange and Private Banks in Lancashire, 1790-1830', in T. S. Ashton and R. S. Sayers (eds), *Papers in English Monetary History* (Oxford, 1953), p. 40.

[30] *Report of the House of Lords on the affairs of the Bank and the resumption of cash payments*. Parliamentary Papers, 1819 (291), Appendix F. 4, pp. 404-05.

[31] Clapham, *The Bank of England*, I, 162; II, 2-3. *Parliamentary History*, XVIII, cols 574-75 (27 March 1775).

themselves. Entrusting an employer with the creation of the currency with which he paid his own employees was a system open to abuse and the acts restricting the issue of promissory notes to sums over £1 in 1775 and over £5 in 1777 can be viewed as attempts to prevent such practices. When the ban was lifted in 1797, small value notes soon found their way into circulation. The iron magnate John Wilkinson printed cards for 1s 6d and even 3d, and paid them out in wages. In March of the same year in a letter to the Birmingham industrialist Matthew Boulton he wrote, '*good* notes will cure the evil of base metal better and more effectually than the gallows'.[32] However much such arrangements may have benefited a specific locality they were not of general application. More importantly, the arrival of country banking, combined with the note issues of the Bank of England, was not an answer to the shortage of silver in England and Wales even by the end of the eighteenth century.[33]

In Scotland, however, the question of paper money was viewed somewhat differently. From the end of the seventeenth century a preference had emerged in Scotland for the use of notes over coins. Partly this can be attributed to a loss of trust in the coinage that was the legacy of a scandal involving the Scottish Mint in 1682. Together with a series of other abuses, senior Mint officials were prosecuted on charges of corruption arising out of debasing the silver coinage. The Mint was as a consequence closed down for several years during the 1680s. In addition, temporary shortages of coin could often result from fluctuations in the rates of exchange between England and Scotland, an economic reality that continued to present difficulties well into the eighteenth century. The exchanges, for example, moved against Scotland in the early 1760s, which in practical terms meant that a bill sent from Edinburgh to London would realise less than one which was remitted in the other direction. In these circumstances transferring funds to England in coin - specifically gold coin - held out advantages to merchants, and as a consequence there was a major drain of gold south. In 1771 the author Tobias Smollett wrote 'for you will find that the exchange between the two kingdoms [England and Scotland] is always against Scotland; and that

[32] Ashton, *An Economic History of England*, p. 187 note 4.
[33] Feavearyear, *The Pound Sterling*, pp. 158-62.

she retains neither gold nor silver sufficient for her own circulation'.[34] The Royal Bank of Scotland sought to address the problem of the severe shortages of silver in the 1740s by transporting considerable amounts of coin from London. Notes, in contrast to coins, did not periodically leave the country in large numbers with the result that more confidence arose in their long-term use. Once an acceptable alternative was found, the sense was that gold was seldom to be seen in use and silver likewise was not as readily encountered as in England.[35]

The banking system in Scotland was founded on a more stable footing than that in England because there were not the same restrictions on the size of firms. The provisions of an act of 1708 limiting to six the number of partners of banks that issued notes, did not apply in Scotland. Joint-stock banking was therefore allowed to develop north of the border and a system more resilient to the operation of the economic cycle emerged. The note issues of Scottish banks were part of a financial system in which greater faith could be placed.[36] The system also accommodated the use of notes for small values from a much earlier date than in England. The Bank of Scotland started its issues of £1 notes in 1704, and the Royal Bank of Scotland followed suit soon after its establishment in 1727. Abuses were inflicted on the paper circulation especially in the 1750s and 1760s when notes for 10s and even 1s were released by tradesmen as a means of dealing with the shortage of silver. The spate of these issues was not serious enough to be a major disruption to the system and paper continued to play an extensive role in the circulating medium, displacing at the same time the position of gold and silver.[37]

Looked at from the point of view of government ministers, however, the financial changes at the end of the seventeenth century, the establishment of the Bank of England in 1694, the advent at the same time of the national debt, the

[34] R. Saville, *Bank of Scotland: A History, 1695-1995* (Edinburgh, 1996), pp. 71-72, 140-42. J. D. Bateson, *Coinage in Scotland* (London, 1997), pp. 149-50. T. G. Smollett, *The Expeditions of Humphrey Clinker* (Dublin, 1771), II, 140.

[35] S. G. Checkland, *Scottish Banking: A History, 1695-1973* (Glasgow and London, 1975), p. 65.

[36] Feavearyear, *The Pound Sterling*, pp. 167-68.

[37] Saville, *Bank of Scotland*, p. 48. Checkland, *Scottish Banking*, pp. 59, 104-06. Manville, *Numismatic Guide*, II, pt I, 24, 141.

emergence of large numbers of securities bearing fixed rates of interest - including Exchequer Bills and Navy Bills - assisted in the creation of money. Being able to discharge more of its obligations through the use of paper currency than it ever could before freed government in the management of monetary policy from being overly reliant on the metallic currencies. For ministers to sit back and witness the decline of silver into a less than acceptable condition, especially bearing in mind the stronger position gold had come to occupy within the circulating medium and in the area of settling overseas debts, was not the problem it would formerly have been. The transaction of business requiring small payments suffered, but the total size of the money supply did not fall, and if Bank of England as well as country banknote issues are included it may be shown to have substantially increased (*Tables 6* and *7*, and *Figure 6*). A similar process of the English economy weathering dramatic changes in the production of gold or silver and yet being sustained by an overall healthy money supply was apparent in the seventeenth century. From 1608 to 1621 while output of gold coin remained strong that of silver collapsed, recovering somewhat in the mid 1620s but only regaining a consistently high proportion of total Mint production in the 1630s after a further brief decline.[38]

The difference in the eighteenth century, however, was centred on a collapse of much longer duration, and help in sustaining the economy through this extended period of bimetallic imbalance between gold and silver came in the form of a burgeoning paper credit system. After the controversy of the debate surrounding the recoinage of the 1690s the attention of economists began to shift away from coins and towards banknotes, which was itself an indication of the diminishing degree of importance that attached to the coinage.

[38] Challis, 'Mint Output', *NHRM*, pp. 688-93. C. E. Challis, *Currency and the Economy in Tudor and early Stuart England* (London, 1989), pp. 7-8, 14.

Copper tokens and alternative forms of payment

Production at the Mint of copper coins in the eighteenth century was a little over £250,000 (*Table 8*) and, as with silver, their circulation was attended by a high degree of wastage and adulteration - the result of coins being withdrawn and melted down for private profit or for use in counterfeiting. Inadequate distribution led to surpluses accumulating in the hands of London retailers, while other areas of the country could be starved of small denominations. This is one problem at least that troubled silver less. With transport costs being in relation to value a much smaller proportion, and with a freer flow to meet local demand through the banking system, distribution difficulties for silver were reduced. Country banks tended not to deal in transfers of copper and the costs of meeting its supply would therefore fall on the retailer or businessman.[39]

If the coins were not reaching areas of the country that were developing rapidly and demanding small change, there would be difficulty in judging if the supply of copper from the Mint, which by the end of the 1780s had amounted to in the region of 170 million coins, could have satisfied demand. Estimates that the number of counterfeit copper halfpennies and farthings had exceeded that of genuine pieces by 1787 suggest there was a healthy demand that the Treasury were failing to meet A further difficulty for the regal copper coinage was its not being regarded as legitimate currency in the same way as gold and silver. Its status was that of token money and its manufacture did not necessarily fall automatically under the responsibility of the Mint. Within the circulating medium it occupied something of a twilight zone.[40]

The increased demands for wages that pressed upon industry towards the end of the eighteenth century eventually led businessmen to take matters into their own hands and arrange for the manufacture and release of copper tokens. Throughout Britain large quantities of initially good weight pieces were issued

[39] P. Mathias, *English Trade Tokens: The Industrial Revolution Illustrated* (London, 1962), pp. 12, 16, 26.
[40] Mathias, *English Trade Tokens*, pp. 14, 16.

from the 1787, beginning with the pennies and halfpennies of the Parys Mines Company of Anglesey. The total produced extended to hundreds of tons and for several years after their initial appearance they were welcomed as a means of supplying the want of small change and tolerated by the authorities. Samuel Fereday, a factory owner from Bilston, was by no means alone in having tokens manufactured in his own name and using them to pay his workforce. He arranged to have struck an estimated two million penny tokens. The high standards to which they were produced made them attractive to use but also to imitate, and with their popularity came also lighter and more unreliable copies.[41] The somewhat second class status that was conferred on copper money is indicated by the omission of copper tokens from legislation in 1812 that addressed the circulation of private silver tokens.[42]

The solace of an officially-sanctioned copper coinage came with the production from 1797 of Matthew Boulton's copper twopences and pennies, and from 1799 of his halfpennies and farthings. He sought to overcome the problem of imbalances in distribution by undertaking to deliver the coins throughout the country directly to the people from whom orders had been received. As industrialists found, the circulation of copper went some way to substituting for silver The likelihood is, however, that because of the weights involved, copper's use in paying wages will have been in association with other forms of currency (*Table 8*) [43]

Wages varied across the country but throughout most of the eighteenth century a London labourer could have expected to earn up to 2s a day, while in Oxford a rate increasing to 1s 4d was common by the late 1770s. For skilled workers in London over 2s 6d a day was typical in the seventy years after the 1720s, although most craftsmen at Westminster Abbey could earn 3s a day for a

[41] R. Dalton and S. H. Hamer, *The Provincial Token-Coinage of the 18th Century* (Cold Springs, 1990), introduction. C. Pye, *Provincial Coins and Tokens, issued from the Year 1787 to the Year 1801* (London, 1801), the index to the plates of illustrations contains estimates by weight of the number of provincial tokens produced. Mathias, *English Trade Tokens*, pp. 52-54.

[42] Ruding, *Annals of the Coinage*, II, 110.

[43] R. Doty, *The Soho Mint & the Industrialization of Money* (London, 1998), pp. 54-55, 315-20. Dyer and Gaspar, 'Tower Hill', *NHRM*, p. 448.

large part of the eighteenth century. Even in rural areas of the country where incomes were lower, payment solely in copper coins would have been an unwieldy business. If paid, for example, in Boulton pennies an Oxford labourer would have taken home a pound weight of copper for every day he worked. In settling wages silver's importance was probably greater than that of copper, although the reverse was more likely true of retail transactions.[44]

Evidence of the shortage of silver being alleviated through the agency of the gold coinage is not convincing, in spite of specific efforts being directed by the Bank of England towards this end. The Bank lobbied the Treasury for the striking of low denominations in gold, specifically for third-guineas or seven-shilling pieces, in March 1758, April 1761 and November 1762. Issues of quarter-guineas took place in 1718 and 1762, but the Bank had to wait until 1797 for third-guinea pieces to appear and when they did they were struck in only modest quantities Their relatively small size made them unpopular at the Mint and in exchange, which consequently meant that the advantages the Bank saw in extending downwards gold's denominational range were not widely shared.[45]

The idea of a shortage was not a uniform problem because variations in the demand for money took place over the course of a year. For a week or more prior to the payment of taxes there would be a want of currency. In his evidence to the parliamentary committee of inquiry into the high price of bullion in 1810, the banker and gold refiner William Merle described the extent of the premium on silver that towards the end of the eighteenth century bankers used to pay: 'I have given an hundred and one pounds for a quantity of coin worth sixty if it was melted down, though passing for an hundred, but I have given that premium to get it, bad as it is, particularly at harvest time; it is always very scarce then'. Paying a premium especially afflicted those who had to find cash to pay wages. In 1759 Sir John Barnard reported the practice of employers who were

[44] Gilboy, *Wages in Eighteenth Century England*, pp. 12, 14, 23, 47, 220. Mathias, *English Trade Tokens*, p. 26.

[45] G. P. Dyer, 'Quarter-Sovereigns and Other Small Gold Patterns of the Mid-Victorian Period', *BNJ*, 67 (1997), 73. BE. G16/3, index entry under gold and silver coin.

responsible for large numbers of workmen being charged a fee of 10s on every £100 of silver they acquired. The normal course of business conducted by the Bank of England involved it in submitting to this type of additional expense. In March 1798 the Governor of the Bank Thomas Raikes informed the Privy Council Committee on Coin that in purchasing silver coin for public circulation the Bank had over many years given a premium of from 10s to 1 per cent. Not only, therefore, did the worn silver circulate at face value, it attracted a premium at certain times which compounded the difference between the intrinsic and the face value.[46]

Some factory owners found themselves having to search over wide areas for sufficient coin, while to lessen the burden others might only settle employees' wages at one-month or two-month intervals, thereby enabling the use of larger denomination coins. Of course, interim payments might be required and if not in cash then this would have been in goods, miners receiving coal, or a ship's mate having a right to the sweepings of sugar or coffee from the hold. The use of coins was diminished by tradesmen regularly accepting the settlement of household accounts over a period of months, and the practice was not uncommon to extend the duration of credit to six months or beyond a year.[47] A sense emerges, therefore, in which as well as conventional money resort was made to improvised forms of payment and exchange that had accompanied a greater or lesser supply of currency for some hundreds of years.

[46] D. Ricardo, *Proposals for an Economical and Secure Currency with Observations on the Profits of the Bank of England, etc*, (London, 1816), pp. 37-38. Barnard, *Some Thoughts on the Scarcity of Silver*, p. 1. *Report and Evidence on the high price of gold bullion*. Parliamentary Papers, 1810 (349), Minutes of Evidence, pp. 40, 231. PRO. BT 6/118, Thomas Raikes to Sir Stephen Cottrell, 13 March 1798.

[47] Massie, *Observations relating to the Coin of Great Britain*, p. 21. Ashton, *An Economic History of England*, pp. 207-08. Gilboy, *Wages in Eighteenth Century England*, p. 197. Ashton, 'The Bill of Exchange', in Ashton and Sayers, *English Monetary History*, pp. 38-39. Suffolk Record Office, Bury St Edmunds, HA 541/1/45, Executors' Accounts of William Dyer, 1802-06. I am grateful to Graham Dyer for drawing these papers to my attention.

The restriction of cash payments, 1797

There were times during the eighteenth century when the possibility was considered of addressing the deficiencies of silver. In 1777 buildings were erected in the Mint to prepare for a silver coinage then supposed to be in contemplation. The expectations of activity, however, did not translate into a change of policy.[48] If what government required was a crisis to stimulate decisive action over the coinage, it found one in the second half of the 1790s that was driven by the financial strains of an over-extended system of paper currency and by the war against France. The Bank of England in 1793 had to survive damaging inroads into its bullion reserves immediately following France's declaration of war against Britain, a crisis that was sustained by the weakness of many banking houses across the country. The extreme nervousness created by the international situation resulted in a widespread loss of faith in the credit of country banks and some folded under the pressure. Four years later similar tensions, this time exacerbated by a failed invasion of Britain by French troops in February 1797, led to a financial panic in which massive demands were made on the Bank for the redemption of its notes. An Order in Council issued on 26 February proclaimed that for a limited period the Bank should be freed from its obligation to pay its notes in gold on demand. The restriction period had started and it was to continue for over twenty years, far beyond the Bank's original view of it as a temporary expedient.[49]

February 1797 was in many ways a watershed in British monetary history. By helping to generate paper credit on an unprecedented scale, the restriction of cash payments materially assisted in Britain's ability to conduct the war against France, and in addition, it forced attention to be directed to the copper and silver coinages. On 3 March, within a matter of days of the decision to suspend cash payments, Richard Sheridan proposed a motion in the House of Commons for a new copper coinage, and later in the year Matthew Boulton received an official

[48] PRO. Mint 1/17, p. 155.

[49] Feavearyear, *The Pound Sterling*, pp. 177-78, 181-83. Clapham, *The Bank of England*, I, 259-60, 262, 271-72. 38 Geo. III. cap. 59.

order to proceed with his pennies and twopences. A temporary solution for shortage of silver was also seized upon in terms of the Bank issuing Spanish dollars countermarked with a bust of George III and denominated 4s 9d. On the same day that Sheridan was introducing his motion on copper, the Mint received an instruction from the Treasury to begin preparations for stamping dollars. Within a week there were calls for more extensive reform. While acknowledging that the issue of the Spanish dollars was worthwhile, the Chairman of the East India Company William Devaynes urged the Secretary of War Henry Dundas, Lord Melville, to press for an immediate coinage of shillings and sixpences that as well as meeting demand for currency would, he thought, act as a safeguard against banknotes becoming too heavily discounted. The appetite for change went so far but did not embrace Devaynes' proposals.[50]

Government approach towards the management of the currency in the eighteenth century was characterised by a delegation of responsibility, either intentionally sanctioned as in the case of the Bank of England issues from 1797, or in the sense of for a time turning a blind eye to beneficial private initiatives as with the major output of copper trade tokens of the 1780s and 1790s. This is an explanation that reveals how the economy coped almost in spite of the underlying monetary policy Against the charges of the pamphleteers is the argument that there was evident an economic equilibrium. Added to this, expressions of concern over the hole in the overall extent of the circulating medium created by falling mintages of silver could have been countered by drawing attention to the increased production of gold and the note issues of the Bank of England But the disinclination to reform silver was not founded on the presence of alternative forms of currency; these acted as palliatives. It was rather founded on a policy of supporting the primacy of gold and the economic circumstances through the mid eighteenth century of modest growth and price stability assisted in maintaining this policy.

[50] Doty, *The Soho Mint*, pp. 315-17. Kelly, *Spanish Dollars*, p. 22. BS. 20/32/83-84, W. Devaynes to Lord Melville, 7 March 1797.

By the third quarter of the eighteenth century the gold currency had assumed such a position of dominance that altering its value with a view to addressing the scarcity of silver could have created a damaging imbalance. Behind the legislation of 1774 to limit silver's legal tender status and prevent the import of light silver, was the fear that Britain would continue to be flooded with counterfeits from abroad which, if circulated in large enough quantities, could have threatened the position of gold. Almost fifty years earlier the extent to which gold had acquired an enhanced importance had already been recognised. One writer observed that 'if you raise your Crown Piece above a Penny, I acknowledge you will soon have silver enough, but 'twill be dear Bought'.[51] A policy of seeking to maintain stability did not of course mitigate the practical difficulties of paying wages but it goes some way to explaining why authoritative economic thinkers such as Adam Smith (Chapter 3, p. 47), who were promoting devaluation of silver, were ignored or stalled on this subject for many years.

[51] [J. Jocelyn], *An Essay on Money and Bullion, etc* (London, 1718), p. 33. Farrer, *Studies in Currency*, pp. 31-32

CHAPTER 3

LORD LIVERPOOL AND THE ROAD TO THE RECOINAGE

Temporary expedients

One hundred years after the silver recoinage of William III's reign, in the midst of yet another continental war and the changed financial circumstances of Bank restriction, there were grounds for believing an overhaul of monetary policy was imminent. In the two years from the beginning of 1797 reform of silver was discussed by ministers with a sense of urgency that had been absent for most of the eighteenth century, and in the decade and a half that followed, efforts were made to supply Britain with silver, none of which was the government's direct responsibility but all of which were given a greater or lesser degree of tacit official approval One of the leading players in this changed environment was Charles Jenkinson, first Earl of Liverpool. He had been a member of the Privy Council Committee on Coin set up in 1787 to examine the problem of the copper coinage and he took an even more prominent role in the reconstituted version of that committee which was called together in February 1798. By this time he was reaching the end of his political career but he was still very much at the heart of events in the wake of the Bank restriction crisis.

The countermarked Spanish dollars that the Bank issued in 1797 only survived for a matter of months in circulation before the pressure from large numbers of counterfeits forced their withdrawal. The dollars did not have the protection in law that the regal silver coinage had and as a consequence, when the counterfeits began to proliferate, government's disinclination to act meant the Bank was forced to call in its dollars. But before it committed to withdrawal, the Bank was concerned that there be a replacement and it lobbied strongly in favour of sending silver to the Mint to be coined under the lighter standard of 66s to the troy pound. The Governor of the Bank had a meeting with Liverpool on 31 August, but Liverpool then, and earlier in correspondence with the President of the Royal Society, Sir Joseph Banks, judged that the time was not right. One of his chief concerns was that change along the lines put forward by the Bank should not be attempted until the Mint was reformed. Sir Joseph Banks had taken an interest over many years in currency reform in his capacity as a member of the Committee on Coin.[1]

Six months after the Bank of England's unsuccessful application to government, Matthew Boulton, his success in securing the contract for copper coins behind him, proposed a plan for striking silver. He suggested as part of his scheme that shillings be struck at the rate of seventy to the pound weight, or that dollar-standard silver should be used.[2] At 892 fine, dollar silver was lower than the sterling standard of 925 by 3.6 per cent. On this occasion Boulton did not succeed but he was putting his ideas forward at a time when the price of silver was continuing a trend from the end of the previous year of being below the Mint price Circumstances now obtained in which silver could be sent to the Mint without sustaining a loss. A group of London bankers, the most outspoken of whom was Magens Dorrien Magens, decided to avail themselves of this opportunity and in April delivered silver to the Mint for the purpose of having it coined At the beginning of May the Bank of England also expressed an interest in sending a large quantity of silver to the Mint with the same aim in mind. Learning of this activity, the government ordered a stop to be placed on the proposed coinage of the London bankers that effectively came into force at the Mint on 10 May The Committee on Coin had already intimated its sympathy for altering the weight standard of silver, and it will accordingly have been disinclined towards production taking place under the existing regulations. The prohibition remained in place until the recoinage of 1816.[3]

1 *Second Report of the House of Commons, with Minutes of Evidence on the affairs of the Bank and the resumption of cash payments.* Parliamentary Papers, 1819 (282), Appendix No. 2, p 269, reprint of Bank of England notice, 28 September 1797 indicating that the Bank's stamped dollars were to be withdrawn. *DTC* X, pt II, 117-21, Liverpool to Banks, 21 August 1797 Kelly, *Spanish Dollars*, pp. 28-31.

2 PRO. BT 6/118, Matthew Boulton to William Fawkener, 12 February 1798, pp. 35-38.

3 Dyer and Gaspar, 'The Dorrien & Magens Shilling', *BNJ*, 52 (1982), 199-201. *DTC* X, pt II, 271-72, Liverpool to Banks, 5 May 1798; 274-76, Banks to Liverpool, 6 May 1798.

In the months prior to this activity the reconstituted Committee on Coin, including in its membership the entire Cabinet, was called together for the purpose of reviewing the operations of the Mint and establishing the principles upon which a new coinage of silver should be introduced. The summary of British monetary history that Liverpool presented at the opening session on 10 February contained all the fundamental arguments that he was later to elaborate in his *Treatise on the Coins of the Realm*.[4]

Liverpool's ideas included reducing silver to the status of a token coinage and initially he received some support. The Bank of England in response to the committee's questions expressed the view that 'Silver being only a Medium of Change or Convenience among Ourselves and used in small payments we conceive the reducing the intrinsic value thereof, so as to prevent its being melted down or exported, could be attended with no Inconvenience whatever in our domestic or foreign transactions'.[5] Even the failed efforts of the London bankers and the Bank of England to have silver coined in the spring of 1798 could be interpreted as a positive sign. A year later, the writer on currency Rogers Ruding thought a change to the coinage that would involve the abolition of the present system was close at hand, partly because of the activities of Liverpool's committee but also because of the suspension of minting silver.[6]

After some months Liverpool had to acknowledge that the variety of opinion amongst members respecting the principles of coinage, the defects with the present system and what remedies might be applied 'was so great, as to throw the Business into an absolute state of Confusion'. But he remained undaunted and three months after the first meeting of his committee he undertook to submit a draft report detailing his firmly held views on how reform should be tackled. While the Prime Minister, William Pitt, may have publicly signalled a recognition

[4] Craig, *The Mint*, pp 257, 267-68 Dyer and Gaspar, 'Tower Hill', *NHRM*, p. 451. PRO, BT 6/126, letter from William Pitt, 2 November 1787, BT 6/127, 10 February 1797

[5] Kelly, *Spanish Dollars*, p 105.

[6] R. Ruding, *A Proposal for Restoring the Ancient Constitution of the Mint so far as relates to the Expence of Coinage, etc* (London, 1799), p. 5.

of the need to advance a new coinage, his response to the draft report was somewhat tardy and Liverpool feared any kind of momentum for change was likely to be the victim of an ossified political process. Liverpool waited for a response from Pitt through to the end of the year. There was eventually no decision in favour of his report and by July 1799 he was already contemplating the unhappy prospect of its being shelved. He began to wonder, however, if he might nevertheless air his views in a published letter to the king. Illness for a number of years delayed the project, but in 1805 his *Treatise* eventually appeared [7]

Lord Liverpool's Treatise

In his published recommendations Liverpool asserted that the principle upon which his scheme was based was that of a single metallic standard. The eighteenth century he recognised as having generated all the necessary evidence to reveal the difficulties of arriving at a correct balance between two metals in a bimetallic system He viewed bimetallism as causing perpetual conflict between coins of gold and silver and that it 'promoted the practice of melting down and exporting one or other sort of Coin, whenever the metal, of which either of them was made, happened to be under-rated at the Mint, and a profit could be made thereby' [8]

He outlined two sets of proposals. The first of these related to the standard of value, for which role he thought the most suitable metal would be gold because 'in this kingdom the Gold Coins only have been for many years past, and are now, in the practice and opinion of the people, the principal measure of

[7] RM Library Liverpool to George Chalmers, 1 December 1798; letter from Liverpool, 12 July 1799 Dyer and Gaspar, 'The Dorrien & Magens Shilling', *BNJ*, 52 (1982), 199. *DTC* X, pt II, 225, Liverpool to Banks, 21 February 1798; 281-82, Liverpool to Banks, 21 May 1798, *DTC* XI, 57-59, Liverpool to Banks 1 September 1798; *DTC* XV, 142-44, Liverpool to Banks, 2 October 1804.

[8] Earl of Liverpool, *A Treatise on the Coins of the Realm, in a Letter to the King* (Oxford, 1805), p 120.

property and instrument of commerce'.[9] Gold, he said, was the measure of all contracts and bargains, in reference to which prices were adjusted and ascertained and, moreover, for the requirements of an affluent nation like Britain coins of gold were best adapted. He did not support the idea of levying a seigniorage for the manufacture of the standard coin because he judged that coins occupying this position should be rated as close to their intrinsic value as possible in order to simplify exchange arrangements with other countries.

The second set of proposals dealt with the provision of token coinages and chiefly in this respect he had in mind silver. This subsidiary form of money, he argued, should be accepted as legal tender only up to a certain amount, to which end he proposed that the limit should be set no higher than the value of the largest gold coin in circulation. Further, there ought to be a charge for workmanship taken out of these inferior coins, 'because there can be no doubt, that they will pass in payment at their nominal rate or value, provided that their intrinsic value in metal and workmanship is equal to such nominal rate or value'. Given that foreign merchants were unlikely to receive balances in coins with an appreciable disparity between their intrinsic and nominal values, he saw in this a means of preventing silver coins from being exported and enabling them more properly to serve the purposes of internal trade. The potential for conflict between coins made of different metals that had plagued the eighteenth century whenever the market price of gold or silver rose above the Mint price would, he thought, thereby be removed Finally, he argued that the value of the metal in silver coins should be estimated according to the average price of silver bullion over a number of years, and from such figure could be resolved 'a fair average of what is likely to be its value in future at the market, with due attention to every circumstance, which is likely to influence the price of it'.[10]

The main problem Liverpool had to confront was how to make a convincing case for a devaluation of silver and adopting a gold standard without seeming

[9] Liverpool, *Coins of the Realm*, p. 153.
[10] Liverpool, *Coins of the Realm*, pp. 156-58, 168.

too controversial. An influential body of opinion may have shared his views but he sensed the potentially contentious nature of his ideas. The solution he settled on was to emphasise the essentially conservative nature of his scheme. The perambulatory historical survey of the British coinage that he embarked upon can be seen as part of this process of reassurance, through which he hoped to reveal that his suggestions were in large measure already in place and that any thoughts of radical change to the currency system were far from his mind. As a means of overcoming official reluctance to reform silver he did not resort to a theoretical discussion of economics, rather, as Lowndes had done before, he drew on monetary history to make his case and implied that giving the essence of the prevailing system legal definition was a matter of common sense.

Liverpool also had to deal with the difficulty that his proposal to abandon silver as the official standard and effect its devaluation was in opposition to Locke's theory of money. From the start of his *Treatise* he was aware of a ghostly presence guarding the monetary tradition and was 'conscious, that any opinion I may deliver cannot derive any weight from my single judgement, in opposition to the respectable authorities from which I am forced, on this occasion, to differ'. His way of dealing with this was to work at diminishing the reputation Locke had acquired during the eighteenth century and accordingly criticisms of the political philosopher surface on a number of occasions. He regarded Locke's analysis of the currency crisis leading up to the recoinage of the 1690s as too simplistic and he considered unworkable Locke's idea that the subsidiary type of money be left to find its own value in relation to market prices. Liverpool was politely savage in wondering if the time Locke spent on the philosophical speculation of monetary matters might not have been more productively occupied in dealing with the practical nature of the problem.[11]

Given this dissonance between Liverpool and Locke, Liverpool's system being respectfully acknowledged by the future Prime Minister Robert Peel, who was as firmly wedded as any nineteenth-century politician to Locke's idea of the

[11] Liverpool, *Coins of the Realm*, pp. 6, 76-79.

pound sterling being no more and no less than a specific quantity of precious metal, may seem curious.[12] How could Liverpool be included in the ranks of sound money men when he was departing from traditional views and arguing for a devaluation of silver? The composite legal tender system that Liverpool promoted might be viewed as taking Locke's idea of an unchanging monetary standard, applying it to gold and combining this with the spirit of Lowndes' belief in the need to adjust periodically the value of coins. In this way Peel's definition of the pound might be accommodated with Liverpool's *Treatise*.

Reviews of *Coins of the Realm* that appeared in periodicals at the time did not hail it as offering a panacea for the monetary ills of the country. Writing in *The Gentleman's Magazine*, Richard Gough acknowledged the substantial amount of work that had gone into its preparation but he denounced the conclusions as erroneous and if ever effected likely to result in considerable loss to the public The reaction in *The Edinburgh Review* was a good deal more complimentary It considered Liverpool had presented a concise and luminous statement of the facts of British coinage history, commended him for having stood apart from some established economic thinking and willingly admitted the truth of a large proportion of his doctrines. There was, though, less enthusiasm for his criticisms of the note-issuing activities of country bankers, the *Review* feeling that the Bank of England should carry responsibility for the extent of the paper currency Liverpool's principal recommendations regarding the adoption of gold as the standard of value and introducing a seigniorage on silver were judged to be theoretically questionable and practically unworkable. But the clarity of the objections to his ideas on gold as the measure of value were dissipated in a somewhat semantic discussion.[13]

If not presenting their proposals for reform in the same detail as Liverpool,

[12] S D Horton, *The Silver Pound and England's Monetary Policy since the Restoration, together with the History of the Guinea, illustrated by contemporary documents* (London, 1887), pp 298-300

[13] Manville, *Numismatic Guide*, II, pt I, 77 *The Edinburgh Review*, VII January, 1806 . 265, 276, 289-95.

several writers in the eighteenth century had nevertheless come to the same conclusion about the necessity of lowering the weight of silver coins and adopting a gold standard. There are, for example, strong echoes of Liverpool's work in Adam Smith's views on the currency. Like Locke, Smith was a strong opponent of state interference in the daily business of commerce and they shared a belief in an inherent natural order to which man-made social order should conform as nearly as possible. Writing in 1776, Smith did not devote much time to developing a theory of money, but he did suggest that the only way to prevent silver from being melted down was to effect a devaluation by rating it at a higher level, and to enact that it be legal tender for no more than a guinea. For Smith labour was the true measure of value, and so adjustment of a deteriorated silver currency did not carry the same undesirable implications as it did for Locke.[14] The distinctive nature of Liverpool's contribution lies less in the originality of his ideas than it does in the structured manner in which he drew together the prevailing realities of the currency and fashioned them into a new monetary policy, detailing along the way how this policy should be implemented and how it could be sustained.

Parliamentary committees on the currency

There were reports in *The Gentleman's Magazine* in September 1803 that a new and extensive coinage of shillings and sixpences was about to be issued from the Mint, a development that was described as extremely desirable in view of the difficulty of obtaining small change. The following year such reports were still being aired. The writer on currency Roger Ruding, however, envisaged the needless expense of coining silver that would soon find its way into the crucible, and he was not alone in harbouring reservations.[15] In the first five years of the nineteenth century the price of silver had been showing signs of instability

[14] A. Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, 4th edition, (London, 1812), I, 65-66. Roll, *A History of Economic Thought*, pp. 145-46, 149, 162.

[15] Manville, *Numismatic Guide*, II, pt I, 73, 75.

(*Appendix 1*), a trend which dissuaded Sir Joseph Banks from promoting the idea of any imminent change to the position of the silver coinage, but the conditions did not perturb Matthew Boulton. He believed that to wait for the price to stop fluctuating would be to wait forever. In a letter to Banks in February 1804 he outlined how he could contract to restore the silver currency in one year, if necessary coining silver at as high a rate as 72s to the troy pound. In May the Bank began to issue dollars as 5s pieces which had been completely overstamped with a Bank of England design on one side and a bust of George III on the other. These issues, the overstamping of which Boulton was responsible, took the urgency out of striking silver in any other form.[16]

The continued expedients of the Bank deflected attention away from thoroughgoing reform of the currency. Added to this, the return to some order of monetary stability was firmly anchored in the minds of politicians to a peace settlement with France. Although the Peace of Amiens in 1802 brought a cessation in the fighting, hostilities were renewed in 1803. At the same time the Bank of England's restriction on redeeming its notes in cash was prolonged, the legislation enacting that it should continue until after the end of the war.[17]

Lord Liverpool's plan may have been rejected but the Committee on Coin continued to sit. Through its activities during the first decade of the nineteenth century the Mint left the Tower of London and moved across the road to a purpose-built site on Tower Hill, complete with eight steam-powered coining presses of the type designed by Matthew Boulton. The new Mint, completed and ready to begin work by 1810, was erected and equipped specifically with a view to supplying the want of coinage.[18] The cost of relocation was over £300,000, a level of investment that during a time of war clearly revealed government's rediscovered sense of its responsibility as the provider of the

16 *DTC* XIV, 209-16, for the paper by Banks, 'Thoughts on the present state of our Silver Money etc', February 1804; 217-22, Boulton to Banks, February 1804.

17 D. Thomson, *Europe Since Napoleon* (London, 1985), pp. 59-60, 62. 44 Geo. III. cap. 1. Feavearyear, *The Pound Sterling*, p. 185.

18 Dyer and Gaspar, 'Tower Hill', *NHRM*, pp. 455-59, 461.

nation's coinage. Abandoning the screw-press technology of the Tower was a breakthrough that at least laid the physical foundations for change.

As the war against France progressed, an increasingly severe toll was being registered on the financial ingenuity of the Treasury. Gold coins were exported on a large scale at times when the exchanges moved against Britain as in the period 1799-1800 and again in 1809-10. National expenditure increased from £19.6 million in 1793 to £54.8 million in 1803, and ten years later it stood at £94.8 million. Such an expansion was sustained on the back of higher national income and a debt burden that more than doubled over the same twenty-year period. As the Chancellor of the Exchequer, Spencer Perceval's budgets of 1808 and 1809 reflected a sense of crisis management confronted by a national debt that seemed to be on the verge of edging out of control. He responded by making a point of looking for ways to cut public expenditure through the more careful husbanding of resources and improved methods of collecting taxes.[19] From one point of view this expansion in credit, combined with periods of very rapid increases in inflation between 1799 and 1809, was exerting pressure on the currency that might have justified change. But laying plans to issue a new silver coinage with all the attendant fears of coins being sacrificed to the export trade, was not considered practicable.

Those who might have turned their attention to the question of the coinage were distracted by other issues. During the first fifteen years of the nineteenth century the subject of the standard of value and the relative merits of gold and silver in this role was subsumed in larger issues concerning the suspension of cash payments. Not until 1816, when the decision was taken to adopt gold as the standard, did politicians and commentators become in any way animated about the questions raised by Liverpool, a debate that he did not live to

[19] Feavearyear, *The Pound Sterling*, pp. 192, 194. D. Gray, *Spencer Perceval: The Evangelical Prime Minister, 1762-1812* (Manchester, 1963), pp. 320, 353, 356-58. Mitchell and Deane, *British Historical Statistics*, pp. 388, 391-92, 396, 402.

witness.[20] An instance which demonstrates this was the controversy over the depreciation of the Irish pound in relation to the English in 1803-04. In the final section of the committee's report the question of finding a permanent solution to the shortage of silver coin was discussed. The committee felt its hands were tied on the issue by the need to resolve the larger question of stabilising exchange rates between Britain and Ireland, but it did nevertheless venture to recommend that the nominal value of the coinage should be retained at the existing level. The focus of attention was the impact the expansion of note issues had exerted on exchange rates and prices; the nature of coinage reform and possible alterations to the monetary standard were passed over fleetingly.[21]

Other indications of the trend in monetary debate were provided by *The Edinburgh Review*. In the April 1803 issue a pamphlet that argued for the perpetual continuance of restriction was severely criticised on the grounds of its sloppy reasoning and hectoring tone, but also for adopting such a position on managing the currency in the first place.[22] The importance of paper currency in terms of the value of transactions it sustained ensured that economic debate became trained in this direction. Very broadly two schools of thought marshalled arguments to explain the impact of restriction on the British economy Such views as have come to be regarded anti-bullionist looked for an explanation of the price rises of gold and silver, and of the depreciation of the pound on foreign exchanges in wartime public expenditure and the general disruptions afflicting trade The government and the Bank of England towards the end of the first decade of the nineteenth century tended to support this interpretation. They were reluctant to accept, at least temporarily, a return to the active operation of a metallic standard based either on gold or silver. The bullionist position, on the other hand, explained the same conditions in terms of

[20] F W Fetter, *Development of British Monetary Orthodoxy 1797-1875* (Cambridge, [Massachusetts], 1965), p. 58

[21] Fetter *British Monetary Orthodoxy*, pp 27, 37-39. F. W. Fetter (intro.), *The Irish Pound, 1797-1826 A Reprint of the Report of the Committee of 1804 of the British House of Commons on the Condition of the Irish Currency, etc* (London, 1955), pp. 31, 47, 86.

[22] *The Edinburgh Review*, II (April, 1803), 107.

the expansion of note issues, particularly by the Bank of England. Their ranks included the economists Thomas Malthus, John Wheatley and David Ricardo, but they were by no means unified in their beliefs. Malthus certainly did not agree with all that Ricardo had to say on the influence currency instability could exert on the balance of trade, and Francis Horner, a leading figure in the debate, placed greater weight on the role of excessive note issues in causing depression than his fellow bullionist William Huskisson. In general terms, though, as well as supporting a return to cash payments at the earliest opportunity and a more disciplined control of paper currency, re-establishing either gold or silver as the active standard of value would have satisfied most of them.[23]

The main crisis of the restriction period came in 1810-11. Again the opportunity for a fundamental examination of the whole currency system was not taken and instead the debate centred on the element of the money supply created by the banking sector A parliamentary committee was appointed in February 1810 charged with the task of looking into the causes of the abnormally high price of gold During the course of its deliberations officials from the Bank of England, traders in the London bullion market, merchants and bankers were examined, and often in such a way as to convey the strong impression that some committee members had already formulated fairly trenchant views as to what they thought lay behind the increase in the price of gold. Horner had managed to pack the committee with friends like Huskisson and Henry Thornton who had previously adopted a bullionist stance. The ministerial presence was by contrast weak [24]

The report of the committee, a clear expression of the bullionist position, concluded that the paper circulation had grown excessive and that the unequivocal symptoms of this were the high price of bullion and the low state of the British currency on the continental exchanges. In passing it recognised the

[23] Fetter, *British Monetary Orthodoxy*, pp. 47-48, 53, 58. Gray, *Spencer Perceval*, p. 372.
[24] *Bullion Committee*, 1810, Report and Minutes of Evidence, *passim*. Feavearyear, *The Pound Sterling*, p. 195. Gray, *Spencer Perceval*, p. 369.

need to frame solutions to the existing instability which would embrace reform of the coinage as well as reining in the issue of banknotes. On a number of occasions the minutes of evidence revealed the difficulties under which the currency was operating. Vincent Stuckey, a country banker, believed that guineas did not circulate in the west of England to any considerable extent, while fellow banker William Merle reported that he had seen no guineas recently and that even seven-shilling pieces had disappeared. Bullion dealers referred in an almost casual way to withdrawing huge numbers of gold coins from circulation. There were also some indications of the fears surrounding the impact depreciated paper might have on restoring the coinage. The report observed that there was the temptation 'to resort to a depreciation even of the value of the gold coin by an alteration of the standard, to which Parliament itself might be subjected by a great and long continued excess of paper'.[25]

The debates in Parliament in May 1811 that followed the publication of the report inevitably touched on discussion of the difficulties faced by the circulating medium as a whole Worn and good weight silver seeming to have the same legitimacy in law to pass at face value led the future Chancellor of the Exchequer Nicholas Vansittart to question the nature of the currency standard. As part of his response from the other side of the argument, Huskisson also commented on the forlorn condition of silver, drawing attention to the imbalance in the silver gold ratio and the unhealthy influence he felt it had exerted on the coinage. Silver, he argued, had been exported on a large scale because of this imbalance and that an essential reform for the future should therefore be to adjust the ratio. The prominent politician George Canning viewed the disappearance of silver in the eighteenth century in similar terms and, prompted by the necessity that the silver coinage be restored to a proper condition, the Irish MP Henry Parnell discussed the negative implications of producing coins to a lighter standard.[26]

[25] *Bullion Committee*, 1810, Report, pp. 41-42, 50, 73-74; Minutes of Evidence, pp. 28, 176-77, 210-13.

[26] *Parliamentary Debates*, 1st ser., XIX, cols 924-26, 969-70 (7 May 1811); XIX, cols 1032-34, 1103 (8 May 1811).

As was true of the committee on Irish currency, the Bullion Committee's function was not to suggest proposals for a new silver coinage. Consequently the debates in Parliament and the dozens of pamphlets that were written addressing the issues raised by the report, while acknowledging the broad picture of currency instability, wrestled ultimately with the question of whether or not there should be a return to cash payments within two years irrespective of a peace treaty with France.[27] The government succeeded in defeating the committee's proposals, the need to maintain a high degree of financial flexibility in order to continue the war being one of the most important considerations.[28]

Including in his *Treatise* a section on paper money was very much an afterthought for Liverpool and consequently his influence over the course of debate during the first decade of the nineteenth century was not telling. He did, however, have strong feelings about the subject and his views reflect bullionist fears of an ever-increasing and depreciating stock of paper currency.[29] As a group, bullionists had more to say on the prospect of coinage reform but they tended to believe that this could only be successful if it were preceded by a reduction in the paper circulation and ideally by a return to cash payments. For both sides in the debate the two key issues were, with differing degrees of emphasis, war and restriction, and support for a new monetary settlement outside a resolution of either one of these was not evident.

[27] *Bullion Committee*, 1810, Report, p 75. For the extensive debates in the House of Commons on the resolutions of Francis Horner to adopt the recommendations of the Bullion Committee see *Parliamentary Debates*, 1st ser., XIX, cols 798-919 (6 May 1811); XIX, cols 919-1012 (7 May 1811), XIX, cols 1020-1128 (8 May 1811); XIX, cols 1151-69 (9 May 1811), XX, cols 1-128 (13 May 1811); XX, cols 134-46 (14 May 1811); XX, cols 150-76 (15 May 1811)

[28] Gray, *Spencer Perceval* pp 376, 384 *Parliamentary Debates*, 1st ser., XIX, col. 1169 (9 May 1811), XX, cols 73-74 (13 May 1811).

[29] *DTC* XV, 259-61, Liverpool to Banks, 18 January 1805. Liverpool, *Coins of the Realm*, pp 219-31

Silver tokens

Lord Lauderdale and several others kept the debate on currency reform alive over the next five years, but they had little influence over ministers.[30] The Bank once again, however, stepped into the breach. In the years 1810 to 1811 the Mexican War of Independence led to a reduction in the supply of silver and to the production of poor quality dollars that few would trust. The disruption in the silver market and the consequent increases in price were part of the impetus behind the Bank's commissioning the production of silver tokens.[31] In 1811 it re-denominated its overstamped dollars at the higher rate of 5s 6d and up to 1816 it supplied the new Mint at Tower Hill with dollar-standard silver which was used to strike tokens of 3s and 1s 6d. In 1797 and 1804 £420,500 of the countermarked dollars were issued to the public; between 1811 and July 1816, production of Bank of England tokens amounted to £3,469,973, while the overstriking of Bank dollars between 1804 and 1812 totalled £1,134,483. All told, in the nineteen years from 1797 the efforts of the Bank increased the quantity of silver in circulation by just over £5 million. With the total amount of regal silver in circulation during that period estimated to be in the region of £2 million, this was a welcome contribution and one broadly within the denominational range that had been neglected.[32]

The problem of counterfeits had continued to disrupt the silver currency of the Bank but, unlike in 1797, the issues after 1804 were granted greater legal protection, a feature shared by the similarly semi-official tokens released in Ireland Counterfeiting Bank of England dollars of 1804 was made illegal and this was extended to the Bank tokens for 3s and 18d. The same defence was given to the Bank of Ireland 6s tokens of 1804, and the later additions to this

30 G Booth. *Observations on Paper Currency, the Bank of England Notes and on the Principles of Coinage and a Metallic Circulating Medium* (Liverpool, 1815), pp. 20-22; [R Foster]. *Thoughts on Peace, in the Present Situation of the Country with respect to its Finances and Circulating Medium* (London. 1814), [GL], pp. 4, 163. T. Smith, *A letter to the Earl of Lauderdale in reply to his Depreciation of Paper-Currency Proved* (London, 1814). [GL]. pp 65-68

31 Vilar. *History of Gold and Money*, p. 321.

32 Craig, *The Mint*. p 214 Kelly, *Spanish Dollars*, pp. 25 note 30, 58, 74, 119-20.

series, the 5d and 10d tokens first struck in 1805, and the 30d pieces of 1808. Beyond this, the legislation giving the Irish tokens currency affirmed that in order to promote their circulation they were to be received in payment of public revenues, an added element of legitimacy that the Bank of England token money acquired only in 1818 as a means of encouraging its withdrawal. Specifically, the English dollars and tokens were permitted to be tendered in payment of taxes, rates or duties from 5 July 1818 to 5 April 1819, after, that is, the period allowed for their general circulation had come to an end.[33] The problem of counterfeiting did not go away and it did hamper the Bank's otherwise helpful intervention

The semi-official initiatives of the Bank of England helped to fill a gap in the money supply, but there was yet further demand to be satisfied. From 1811 the commercial sector in England and Wales attempted to address the continuing want of money by releasing large quantities of their own token currency in silver. Most of the issuers were merchants looking to ease the inconvenience suffered by their respective communities Some advertised prosaically the purpose for which the tokens were intended the inscription on a token of Shaftesbury read, **For the accommodation of the public**, while messrs Ratcliffe, Elam and Thurbon of March in Cambridgeshire proclaimed their tokens were **To facilitate trade** The denomination favoured by many of the firms who arranged for the production of these pieces was the shilling, but tokens for two-shillings and for sixpence were available One issuer at least, Edward Butt of Stamford, followed the Bank's lead and opted for a value of eighteen pence. The importance of the country banking system in the distribution of silver as currency was apparent from the involvement of many hundreds of firms in the release of new coins in 1817 (Chapter 6, p 112) But their role in this respect also reveals itself in the active part banking houses played in promoting the fashion for tokens James Gomme of High Wycombe, Wakeford & Sons of Andover and King, Gosling &

[33] Ruding. *Annals of the Coinage*, II, 103-10 44 Geo III cap 71, 45 Geo III. cap 42; 48 Geo III cap 31, 51 Geo III cap 110, 58 Geo III cap. 14 Kelly, *Spanish Dollars*, pp 28-29 88-89 109

Co. of Marlborough were all responsible for managing silver coin exchange stations in 1817 and they all also issued silver shilling tokens in 1811 (*Appendix 3)*.[34]

Although the tokens contained an intrinsic silver content often 3d or more below their face value, the official silver coin was by then deficient by at least the same amount; tokens acquiring a fair level of acceptance should not therefore have been surprising. After a degree of uncertainty attending their legal status, legislation was brought in on 29 July 1812 forbidding their circulation, but to aid in their withdrawal the ban was only to take effect from 25 March the following year, a provision that says a good deal about their popularity.[35]

The leading Whig politician the Earl of Lauderdale, who published several works on trade and monetary matters, argued in a pamphlet of 1813 that necessity alone had given rise to the local token issues and that although Parliament was inclined to suppress them the public were indebted for their accommodation Included in an appendix to this pamphlet are extracts from letters written to Lauderdale celebrating the advent of the private silver token. Several of these are instructive of the daily trial that could result from conducting business in the context of a shortage of small change. An undated letter from Scarborough referred to the familiar sight of a shopkeeper's servant trying every door in a street in an effort to obtain change for a guinea note, and being unable to get any satisfaction the shopkeeper would be forced to give credit or refuse goods A correspondent from York on 4 November 1812 wrote of the common practice, before the tokens were issued, of giving a premium of 1s to procure a 20s note, and in Bath receiving change for a pound note could sometimes involve taking up to 15s in copper. The estimated quantity of local

[34] The Earl of Lauderdale, *Further Considerations on the state of the Currency etc* (Edinburgh and London, 1813), Appendix No. IX. J. O. Mays, *Tokens of Those Trying Times: A Social History of Britain's 19th Century Silver Tokens* (Burley, 1991), pp. 14, 36, 138.

[35] Kelly, *Spanish Dollars*, pp 89-91, 95, 99-100. G. R. Gilmore and G. Berry, 'Chemical analysis of some nineteenth-century silver tokens from the north of England', in D. M. Metcalf and W A Oddy (eds), *Metallurgy in Numismatics* (London, 1980), I, 187.

tokens in Swansea was thought to be about five-sixths of the silver change in circulation, while in Sheffield and Bridlington the judgement was that tokens composed four-fifths of the silver money in use. The facility the tokens provided was acknowledged in further legislation which prolonged their circulation into July 1813, and additional extensions were subsequently introduced that ensured these pieces remained in legitimate use well into the new year.[36]

Pressure for reform

The twenty years from the beginning of restriction were defined by conditions of monetary instability The demand for silver was stronger than it had been at any time during the eighteenth century, but ministers and their advisers remained wary of the implications of restructuring the currency; their attitude throughout the period was decidedly conservative and responsibility for supplying sufficient coin was shuffled onto the shoulders of the Bank of England. In the summer of 1815 the war with France came to an end. Unlike a hundred years earlier, an inflationary crisis had been survived without major reform of the coinage, but post-war attitudes and economic conditions engendered other pressures for change

Responding to a question during a sitting of the Bullion Committee on the likely consequences of a scarcity of money, the merchant John Louis Greffulhe considered that it would be but momentary because 'other means would speedily be devised to supply the wants of circulation'.[37] The implications of this spirit of improvisation were later to bring the businessman and politician Pascoe Grenfell to his feet in the House of Commons on 22 March 1816 The scarcity of silver coins, he observed, had been compensated for by the activities of Birmingham

[3] Lauderdale. *Further Considerations on the state of the Currency*, pp 23-29 See *DNB* for reference to Lauderdale. towards the end of his career, shifting his political views from that of leading Scottish Whig to firm supporter of Lord Liverpool's administration Kelly, *Spanish Dollars*, pp 99-100 Mays, *Tokens of Those Trying Times*, p 20

[3] *Bullion Committee*, 1810, Minutes of Evidence, p 130

counterfeiters and the import from France of twelve and twenty-four sous pieces. With the price of silver at that time only marginally above the Mint price he wondered whether ministers would consider making provision for a new coinage. On this occasion Vansittart, now Chancellor of the Exchequer, held out no hope for a restoration of the silver currency. In a subsequent debate in April, by which time silver had been quoted in the bullion market at the Mint price and gold was also falling towards its par, Grenfell estimated that in the last twelve months £200,000 French of silver coins had been shipped across the English Channel In a pointed - if grossly exaggerated - turn of phrase he indicated that in change for a pound note people usually received one half in French coin and the other half perhaps in counterfeits.[38]

There was a certain amount of resentment that peace seemed to have exacerbated economic conditions and as more and more evidence was presented there arose a debate on the state of the country that embraced the question of the currency Agricultural prices fell from 1813 to 1816 by almost 30 per cent, which was almost twice the rate of decline of other consumer goods, and the monthly rate of bankruptcies increased markedly in the two years from the end of 1814 Landowners blamed a reduction in the circulation of country banknotes and a currency that after many years of depreciation was instead increasing in value The opinion was voiced that outbreaks of violence in the spring of 1816 in some agricultural areas had been provoked by the adverse economic impact of changes in the supply and value of the currency.[39] As well as pointing to the abundant harvests of 1813 and 1814 as a cause of the fall in agricultural prices, *The Edinburgh Review* supported the idea that restoration of the currency's value from 1815 and a reduction in the circulation of country banknotes had contributed to the deflationary momentum. In the House of Commons Thomas Frankland Lewis argued that a gradual re-issuing of the paper currency by the

[38] *Parliamentary Debates*, 1st ser., XXXIII, cols 535-36 (22 March 1816); XXXIII, cols 1148-50 (10 April 1816). By May 1816 gold had been quoted at £4. The standard Mint price for gold was £3 17s 10½d per ounce.

[39] *Parliamentary Debates*, 1st ser., XXXIII, cols 699-700 (28 March 1816). *The Times*, 10 May 1816. Mitchell and Deane, *British Historical Statistics*, p. 469. Fetter, *British Monetary Orthodoxy*, p 74

country banks would raise commodity prices and ease the economic distress that deflation had caused. In pamphlets some went further by urging the continuation of restriction, while on the other hand, the merchant Charles Prinsep proposed a return to cash payments on the basis of a devalued silver standard. The London banker Mathias Attwood thought a cut in the gold content of the pound was required and he found a supporter in the controversial writer Edward Tatham, who suggested that a reduction of the order of ten per cent would be necessary.[40]

The fall in prices was also accompanied by a less dramatic decline in wages evident from 1813 amongst agricultural workers throughout Britain. Wage rates in the cotton industry slumped sharply in 1815 and continued to decline over the course of the next three years. In such economic conditions the pressure being brought to bear on the money supply was reduced and the prospects of currency reform could have been viewed as less encouraging.[41] Grenfell, a veteran from the Bullion Committee and decidedly bullionist in his sympathies, had nevertheless assumed the mantle of chief lobbyist on behalf of the beleaguered silver coinage, and once the press began to support him the government found itself being criticised from inside and outside Parliament for its policy towards the currency *The Times* proclaimed that in the wake of Bank restriction had come 'a miserable debased currency, the disgrace of our country in the eyes of all foreigners', and was concerned that even the religious education of children had suffered A whole generation, the paper lamented, would probably fail to understand the parable of tribute money because 'the greater part of the counters which pass among us for money have either no "image or superscription" '. Like Grenfell *The Times* recognised in the fall in the price of silver an ideal opportunity to take action [42]

4 Fetter. *British Monetary Orthodoxy*, pp. 68, 74. *The Edinburgh Review*, XXVI (February, 1816), 144-45, 152 C. R. Prinsep, *A Letter to the Earl of Liverpool on the Causes of the Present Distresses of the Country* (London, 1816), [GL], pp. 22, 30. For Charles Prinsep see F Boase, *Modern English Biography* (Truro, 1892-1921); for Edward Tatham see *DNB*

41 Mitchell and Deane, *British Historical Statistics*, pp. 348-49.

42 *The Times*, 13 and 30 April 1816.

With the current act covering Bank restriction due to end on 5 July 1816, a bill was introduced in April postponing resumption for a further two years. Reform of the coinage and the suspension of cash payments had become linked and opinion inside and outside Cabinet on occasion treated of them in the same breath. Ministers' thoughts along these lines were expressed by Vansittart who feared that an immediate resumption would soon exhaust the Bank of England's stocks and drive it once again to call for protection. This could be avoided, he maintained, by waiting until a considerable quantity of coin had entered circulation and public appetite had thereby been sated. For members of the opposition in favour of coinage reform, additional opportunities to press ministers were presented in the form of Bank restriction debates. Horner took just such an opportunity on 1 May when he was able to inform the House that he understood a new silver coinage was being considered, although there had been no mention of such a measure in the Prince Regent's speech in February at the beginning of the parliamentary session. Horner urged caution in deciding the standard at which it would be set given that simply re-establishing the old Mint rate could be inconvenient and unjust for some. While Vansittart was giving nothing away at this stage, suggesting the old currency could only be restored by gradual change, plans were in the process of being laid. In the meantime the government won its two-year reprieve from resuming cash payments without much dissent [43]

Grenfell was helped in his cause by a petition presented by retail traders from a ward of the City of London praying for a new silver currency. Leading off a debate on 3 May on the state of the coinage he was able to extract from William Wellesley Pole, Master of the Mint, an assurance that the subject was indeed under the consideration of ministers.[44] Members of Parliament might have been forgiven for regarding this as just official prevarication of the type that had led the silver coinage into its worn condition in the first place. There were certainly

[43] *Parliamentary Debates*, 1st ser., XXXIII, cols 1-4 (1 February 1816); XXXIV, cols 147-49, 152 (1 May 1816).
[44] *Parliamentary Debates*, 1st ser., XXXIV, cols 239-43 (3 May 1816).

considerations that might have led government to take a circumspect attitude.

The last time a major recoinage of silver had taken place, at the end of the seventeenth century, the cost was some £2.7 million.[45] In the unfavourable post-war economic circumstances of 1816 and with relentless demands for reductions in public spending, the prospect of a potentially expensive recoinage might have led ministers to think twice. Liverpool, Vansittart and the Foreign Secretary, Lord Castlereagh, wrote a collective letter to the Prince Regent urging upon him the absolute necessity for retrenchments in expenditure and in particular desiring that no further alterations be carried out at the Royal residence at Brighton.[46] There was also the question of the restlessness of the 'lower orders' and threats of riotous behaviour on account of the difficult economic climate. Might not the adoption of a new coinage and the prospect of losses that this could entail for the holders of the old currency seem overly provocative at such a time? Moreover, although silver was at par in 1816, at times in 1815 it had been as high as 6s 9½d (*Appendix* 1) What guarantee could there be that new full-weight pieces would not fall victim to a rise in the price of silver and quickly disappear into melting pots?

Government cannot have been blind to such reservations but there were other factors to consider The need to prepare for an eventual end to restriction had begun to occupy ministers' thoughts and the provision of a new silver coinage was seen as a necessary step towards resumption. The much improved state of the foreign exchanges and the return of silver to its standard Mint price, whatever the fluctuating nature of such indicators, made the conditions for a recoinage in 1816 more suitable than they had been for some time A modest amount of public and parliamentary pressure had also built up during the first few months of the year, at the same time as the appearance in circulation of large amounts of light foreign silver threatened a descent into even more instability

45 Challis, 'Lord Hastings', *NHRM*, p 397

46 A Aspinall (ed), *The Letters of King George IV, 1812-1830* (Cambridge, 1938), II, 158-59, Liverpool, Vansittart and Castlereagh to the Prince Regent, 15 March 1816

The political class had undergone an education in monetary affairs through the restriction period, as a consequence of which such matters were more readily debated. In post-Waterloo Britain there was less likelihood that an extended period of time would be allowed to elapse without the question of the coinage being aired

The circumstances, however, were not those of an administration caving-in under pressure. Ministers earlier in the parliamentary session had persisted with deeply unpopular property tax proposals, suffering in the process a barrage of petitions and acrimonious parliamentary debates. The fiscal measures were defeated by a triumphant opposition but the episode reveals a government prepared to live with considerable public hostility in pursuit of its aims. In referring to petitions against the tax Lord Castlereagh said, 'no one would say that the deliberative faculties of parliament ought to be so limited or paralysed by them, that the legislature of the country was to look to the sentiments entertained beyond the walls of that House for the rule and guide of the course it had to pursue' [47] The administration might, therefore, have been expected to withstand the comparatively slight lobbying for coinage reform, with its negligible attendant petitions, had it not wanted change. The intervention of Grenfell doubtless helped to prompt ministers to reflect that without the excuse of wartime disruption to fall back on the chaotic condition of the currency, which could only grow worse, had become indefensible. Once this realisation had dawned there was little need for persuasion.

With a determination now to proceed with reform, proposals were drawn up in some haste On 17 May, the Prime Minister, the second Earl of Liverpool, and Vansittart had a meeting with Jeremiah Harman, the Governor of the Bank of England, at which they put forward the scheme, clearly sent before its time, like Shakespeare's Richard III, 'into this breathing world, scarce half made up',

[47] J E. Cookson, *Lord Liverpool's Administration: The Crucial Years, 1815-1822* (Edinburgh and London, 1975), p 60. *Parliamentary Debates*, 1st ser , XXXIII, cols 421-55 (18 March 1816)

that the Bank take upon itself the silver coinage. The Bank firmly declined. The Prime Minister even conceiving of the Bank's taking on this role is an indication of the importance it had assumed as a supplier of the nation's metallic as well as paper currency. The approach was also, however, a demonstration of the extent to which ministers had become divorced from their responsibility for the silver coinage.[48]

The Privy Council Committee on Coin met on 10 May and by the twenty-first a series of recommendations had been decided upon setting forth the principles of a new currency system. In the years that had elapsed since the committee's disagreements over the first Earl of Liverpool's ideas, its membership had changed, and it now outlined a set of resolutions occupying a remarkably succinct four pages - one of those the title page - that was in essence the plan originally advocated by Liverpool.[49]

Gold coins alone were proposed to be declared the standard, while those of silver were to be considered merely as representative and not acceptable as legal tender in sums exceeding two guineas. The fineness and the denomination of the silver coins was to remain unchanged, but the report suggested that to prevent their being melted down the weight of the pieces should be diminished to the extent of 66s instead of 62s being struck from a pound of silver. The coinage of gold was to remain unchanged in fineness, weight and denomination, and the practice was to continue of exacting no charge for the expense of minting. The committee, however, thought that for silver a charge for manufacture and a small allowance for seigniorage ought to be levied to the extent of 4s out of each troy pound of silver minted In settling on this figure the committee had 'endeavoured to fix on such a Rate as will on the one hand be sufficiently high to protect the new coins, by a small increase of their nominal Value, from the danger of being melted down and converted into Bullion when the Market Price of Silver rises, while on the other, it will, they trust, not be found to be so low as

[48] Shakespeare, *Richard III*, Act I, Scene 1. Kelly, *Spanish Dollars*, p 105.
[4] PRO BT 6 128A. 10 May 1816, pp 320-22

to afford any encouragement to the issue of counterfeit Coin if the Market Price of Silver should fall'. The advice was offered that before any issue of new coin a stockpile of £2.5 million should be built up - £2 million for use in Britain and £500,000 for Ireland. Finally, the report gave some general guidance on the latitude that should be allowed in exchanging the existing currency for the new. Provided that officers of the Mint could judge that a coin had emanated from the Tower of London then it should be received in equal value by tale for the new silver.[50]

The difference between the proposals of this report and those contained in Liverpool's *Treatise* are of detail rather than substance. The report, for example, gave figures for the higher nominal rate of silver, while Liverpool was happy merely to state the principle and advantages of such a measure. On the few occasions when he did resort to specifics his lead was not taken by the committee The upper legal tender limit for silver it doubled from Liverpool's suggestion of a guinea because two guineas was thought likely to be the largest gold coin in circulation, and the minimum stockpile of new silver required before a general issue it set at £500,000 less than Liverpool's estimate.

The Coinage Bill

Events now moved swiftly The conclusions of the report were accepted and within a week the Prime Minister was proposing a motion in the House of Lords on the adoption of a new coinage of silver, requesting the concurrence of peers in enacting the necessary legislation. In the debates that followed two days later, he acknowledged the contribution his father, the first Earl of Liverpool, had

[50] *Report of the Lords of the Council on the state of the coin*. Parliamentary Papers, 1816 (411) There is no evidence in the Treasury Papers that reform of the silver coinage was being discussed at official level any earlier than May 1816: PRO. T 2/73; T 9/5-6; T 27/74-75; T29/139-42.

made to the subject and then moved on to detail the new settlement, following closely the recommendations of the Committee on Coin.[51]

Some reservations were naturally enough expressed. Francis Horner was not alone in believing reform of the coinage was possibly unwise before the end of restriction. Presenting a reasoned case, the financier and statesman Alexander Baring urged the adoption of silver as the standard on the grounds that establishing a restored currency would be easier with silver because it was valued at four per cent less than gold. Outside Parliament the London accountant and pamphlet writer Thomas Smith thought the Coinage Bill had not gone far enough in reducing the weight of silver coins; he believed that unless a rate of 80s to the pound were adopted the new currency would still be at risk from increases in the price of bullion. There was also the question of the twenty-shilling piece as opposed to the guinea.[52]

As early as 7 May *The Times* had optimistically reported that striking such coins was being seriously considered, commenting that a great convenience to trade would be achieved if this was in prospect. Virtually every speaker during the second reading of the bill made a point of expressing support for the introduction of a coin denominated twenty-shillings. Thomas Frankland Lewis estimated the number of guineas in circulation to be half a million and that no great inconvenience could therefore be expected to arise from recoining them. The Master of the Mint admitted that consideration had been given to the possibility of introducing a pound coin but that the suggestion was initially ruled out on the grounds that recoining a potentially large amount of gold would be inconvenient, and that the guinea was very widely accepted. The weight of opinion inside and outside Parliament could not now be ignored, and reassurances were given that the question would be re-examined in a more positive light In musing that the appearance of a twenty-shilling coin could be

[51] *Parliamentary Debates*, 1st ser., XXXIV, cols 857-58, 860 (28 May 1816); XXXIV, cols 912-17, 946-64 (30 May 1816).

[52] *Parliamentary Debates*, 1st ser., XXXIV, cols 964-65 (30 May 1816). T. Smith, *A Letter to the Rt. Hon. Earl of Liverpool on the Proposed New Coinage* (London, 1816), pp. 24-26.

so distinct from the old guineas as to cause no confusion from their circulating together, Pole was already conveying the government's change of heart.[53]

Of all the members of the House then present John Wilson Croker, Secretary to the Admiralty, seems to have been most pleased with the shift in position on the question of the pound coin. For him this was recognition of the principle of applying a decimal division of money and he saw the debate on coinage reform as an ideal opportunity to consider giving the various parts of the circulating medium a decimal relation to each other. 'It would be almost unpardonable', he said, 'for the legislature at this time to re-enact and legalize-a-new those barbarisms in the division of our coin which were attended with great inconvenience ' Even though his scheme to coin an ounce of standard gold into five twenty-shilling pieces, each shilling being worth ten pence of the existing money, was given strong backing in the press, decimalisation, unlike in the 1960s, was not 'a mysteriously inflammatory subject'.[54]

On a number of occasions *The Times* ran commentaries, initially congratulating Croker for making the suggestion, then moving on to put forward its own detailed plans for a decimal currency backed by a silver standard. After the Coinage Bill had been passed the newspaper continued to press for further debate on the subject Sir Joseph Banks received a decimal currency plan from the geologist John Farey on 16 June. Despite Farey's efforts at persuasion Banks expressed reservations and he remained opposed to the scheme. In the House Croker's colleagues were not overly taken with the prospect of decimalisation As usual Baring's contribution was more penetrating than most. Although he saw it as the best system to adopt if a currency were being established, he felt the existing arrangements were extremely convenient for the

[53] *The Times*, 7 May 1816 *Parliamentary Debates*, 1st ser., XXXIV, cols 1018-20, 1022-23 (7 June 1816) *The Times*, 31 May 1816; 8 June 1816.

[54] *Parliamentary Debates*, 1st ser., XXXIV, cols 1024-25 (7 June 1816). N. E. A. Moore, *The Decimalisation of Britain's Currency* (London, 1973), p. 46.

common purposes of life.[55]

Concerns were registered about the expense of the recoinage and on the strong feelings that would be encountered in calling in the old silver, but on the whole the plans stimulated little debate in the House of Commons. The measures were not picked over in any detailed way and the opposition to the bill, such as it was, lacked any kind of cohesion. Pole was doubtless relieved that the bill passed without even a division of the House and that he had carried it through 'with as great a degree of unanimity as was ever manifested upon a question of such interest, importance, and difficulty'.[56]

The same could not be said of the House of Lords. The proposals for reform were subjected to a dogged if not hugely persuasive challenge from Lord Lauderdale, who of all his parliamentary colleagues was the only one to express serious misgivings about the principles upon which the legislation was based. In his view the measures failed on virtually every level. The wrong metal had been chosen as the standard for the wrong reasons at the wrong time, during a period of restriction when the continued circulation of banknotes would drive the new coins into the hands of bullion refiners. Consequently, he saw the scheme as a great and needless cost to the public purse, the population in general also suffering at the hands of a policy that would force them to exchange their old coin at a discount He wanted Parliament to have time to reflect on this, a matter of great importance that 'must involve the country in very serious additional difficulties, and impose very heavy additional burdens on the public, without doing an earthly good, or serving any useful purpose whatever'.[57]

[55] *Parliamentary Debates*, 1st ser., XXXIV, cols 1025-26 (7 June 1816). *The Times*, 11, 14, 17, 21 and 28 June 1816. Sutro Library, California, Co. 3:66, Farey to Banks, 16 June 1816. For details of another proposal for a decimal system see H. Goodwyn, *A Short Account of a Plan for the New Silver Coinage for Improving the Currency of the Kingdom and Introducing the Decimal Principle into all Money Transactions* (London, 1816), [GL], pp. 8-10.

[56] *Parliamentary Debates*, 1st ser., XXXIV, cols 1018-20, 1024-26 (7 June 1816). *Journal of the House of Commons*, LXXI, col. 461 (14 June 1816); col. 499 (21 June 1816).

[57] *Parliamentary Debates*, 1st ser., XXXIV, cols 917-23 (30 May 1816); XXXIV, cols 1122-25 (17 June 1816); XXXIV, cols 1235-39 (21 June 1816).

He was supported in this view by opinion in the press. Alongside its decimalisation campaign *The Times* unleashed a series of withering editorials throughout June and into July highly critical of the government's conversion, as it perceived, to Lord Liverpool's doctrines over Locke's theory of money. It poured scorn on the idea of establishing a gold standard in a country that had long since ceased to be acquainted with the sight of gold coins. The measures were described as 'hasty and inconsiderate', representing 'a great and dangerous innovation', and they should certainly be discussed more thoroughly before being forced on the country. Lauderdale's motion to appoint a committee to inquire into the present state of the coinage and the expediency of adopting the system now proposed was, however, negatived without a division, and by 22 June the Coinage Bill was on the statute books.[58]

What had been provided for was the repeal of such aspects of earlier legislation of Charles II, William III and George III as related either to prohibitions against minting silver coins of the realm or the proscription that 62s to the pound was the weight at which such coins should be struck. Gold was to continue to be accepted by the Mint at the existing rate of £3 17s 10½d per ounce and it was to be the sole standard measure of value, legal tender in payments without reference to limitation Silver was to be coined at 66s to the pound and to be legal tender only up to payments of 40s (*Table 9*) Old coin would be received at face value at the Mint and, in addition, the Treasury might appoint persons throughout the country to assist in carrying out the business of exchange A clause in the act also indicated that from a date yet to be set by Proclamation the Mint would be open to accept silver from the public, who in return would receive 62s to the pound, a seigniorage being levied of 4s General access to the coining of silver, however, never became operative because the necessary Proclamation was never issued (Chapter 7, pp 161-62) [59]

[58] *The Times* 14. 15. 25 and 28 June 1816; 1 and 9 July 1816
[59] 56 Geo III cap 68

After submitting its report on 21 May the Committee on Coin continued to sit. Two sessions were held in 1817 and three the following year, but its deliberations were of less moment. A pattern of two or three meetings annually continued into 1822, after which sessions became more infrequent, until in February 1836 the committee was finally wound up, almost fifty years after it was first convened.[60] The problems that had brought it into being had largely been resolved, and with the advent of an active Mint Board it became marginalised

[60] PRO BT 6 128A. pp 323-85

CHAPTER 4

WILLIAM WELLESLEY POLE

Biographical background

The move from the Tower of London to Tower Hill changed the technology of coining at the Mint and also something of the ethos of the organisation. The investment in heavily engineered machinery and imposing new buildings massively increased capacity, and ministers were intent that, unlike in the Tower, the coining presses would not be left idle for months at a time. Under this changed environment and with an extensive recoinage in prospect the Treasury found in William Wellesley Pole a thoroughly appropriate Master. He was regarded by colleagues in government as an energetic and sound administrator. More than anyone else Pole can be credited with the introduction of the new coins and with shepherding the country through the disruption of a recoinage and exchange

In her memoirs the society mistress Harriette Wilson wrote that in the next instalment she would immortalise 'Lord Maryborough, Grand Master of the Mint, and the Art of Love'. In a cartoon published in February 1817 on the subject of the recoinage and exchange, the same man was depicted as Matt of the Mint, one of the unsavoury characters who peopled John Gay s eighteenth-century play *The Beggar's Opera*, the Mint being the name given to a district in Southwark that had been notorious for its criminal element.[1] Such allusions to Pole as a man of salacious and disreputable ways are, unfortunately for the colour they would have injected into a brief glance at his career, not the stuff of

[1] T Little, pseud, [J Stockdale], (ed), *Memoirs of Harriette Wilson written by herself* (London, 1831), IV, 248-49. I am grateful to Hugh Pagan for drawing this reference to my attention Pole was created Baron Maryborough in 1821. P. E. Lewis (ed.), *John Gay: The Beggar's Opera* (London, 1976), p. 119 *Catalogue of Political and Personal Satires preserved in the Department of Prints and Drawings in the British Museum* (London, 1870-1954), IX, 733-34, no 12865, cartoon by C Williams

which his life was made. If applied to William his son, on the other hand, who acquired the sobriquet Wicked Willy for his dissolute lifestyle, they would have about them a more plausible air. But the subsequent volume of Harriette Wilson's memoirs was never published, leaving her readership tantalisingly ill-informed. As for Pole's life as a villain in Southwark, no evidence has as yet come to light.

Pole was born on 20 May 1763 at Dangan Castle, Ireland, into an established gentry family. He had one sister and four brothers. His elder brother Richard, Lord Wellesley, became Governor General of India, and was one of the foremost political figures of his time but never quite fulfilled the promise of his early career. Of his other brothers, Arthur, later Duke of Wellington, in contrast to Richard went on to achieve more than anyone could have expected; Gerald, amongst other clerical appointments, served as Bishop of Durham; while Henry, later Lord Cowley, pursued a successful career as a diplomat. Pole acquired the surname by which he became generally known in 1778 on his inheriting the estates of his cousin William Pole of Ballyfinn. He held three seats during his political career, representing the family borough of Trim in the Irish Parliament from 1783 to 1790, East Looe in Cornwall under the government interest for the following five years and from 1801 until he was created Baron Maryborough in 1821 he sat for Queen's County in Ireland. He acquired the additional title of third Earl of Mornington on the death in 1842 of Lord Wellesley. He did not show any serious interest in politics until his late thirties when his opposition to the union with Ireland in 1801 led him to seek re-election to Parliament after a five-year absence. From acquiring the seat for Queen's County he supported the government and soon found an official position, his first appointment in 1802 being Clerk of the Ordnance Office. In June 1807 he became Secretary to the Admiralty and from October 1809 until August 1812 he was Chief Secretary for Ireland, also holding during his tenure in that office the chancellorship of the Irish Exchequer. He was appointed Master of the Mint in September 1814 with a seat in Cabinet, a position he retained until August 1823 when he joined the household of George IV as Master of the Buckhounds. From 1834 into the following year, at the age of seventy-one, he returned to government service under the ministry of Robert Peel as Postmaster General. He died ten years later on 22 February 1845.[2]

Parliamentary and political reputation

Being Master of the Mint, Pole stood at the centre of the recoinage and exchange. He set demanding standards for those with whom he worked and was a vigorous official who raised the office of Master above the sinecure-tarnished reputation it had acquired during the eighteenth century. His standing in the world of politics was more mixed. Lord Grenville, Prime Minister from 1806 to 1807, said Pole was 'one of the most efficient men that ever filled the station he held at the Ordnance', and George Canning too had a favourable opinion of him. Political commentators, and indeed colleagues, could at times, however, be far from gracious in their assessment of his qualities; the image emerges through their eyes of a deeply conceited, hot-tempered individual, who had a view of his own talents that orbited far above any contact with reality.[3]

Political historians have tended to be rather dismissive of Pole, portraying him as relevant to the flow of events only by virtue of his family connections and his moving in the same circles as the major political figures. He is bracketed with that second rank of ministers in Liverpool's post-Waterloo Cabinet upon whom the Prime Minister could not readily rely should legislation have been in need of a stout defender. Lord Bathurst, Frederick Robinson, Charles Bragge-

[2] *DNB* R G Thorne (ed), *History of Parliament: House of Commons, 1790-1820* (London, 1986), V, 511-15 E Longford, *Wellington. The Years of the Sword* (London, 1969), pp. 9-10, 27 E Longford, *Wellington, Pillar of State* (London, 1972), pp. 43-44, 468. See PRO. Mint 1 18, p 29, Mint 22 12

[3] Craig, *The Mint*, pp 225-28. Thorne, *House of Commons, 1790-1820*, V, 512. There is a reference in J S Batts, *British Manuscript Diaries of the 19th Century: An annotated listing* (Fontwell and London, 1976), p. 27, to a diary kept by Pole from 1808 to 1822 and said to be in the possession of the Duke of Wellington, but the current archivist of the Duke's papers is not aware of any such diary having survived. A further reference to the diary is to be found in W Matthews, *British Diaries, An Annotated Bibliography of British Diaries written between 1442 and 1942* (London, 1950), p. 168.

Bathurst, Nicholas Vansittart and Lord Sidmouth are amongst those ministers often included with Pole under the heading of unexceptional. Benjamin Disraeli deemed the Cabinet ministers who held office in the twenty or so years after 1815 to be a cluster of mediocrities headed by an arch-mediocrity - the arch-mediocrity being Robinson who was Prime Minister in 1827.[4]

If *The Times*' obituary of Pole were to be believed, he should be seen as someone who bungled his way through Regency politics with an agenda of priorities that began and ended with the pampering of his own vanity. His speeches in the House of Commons were judged undignified and ineffectual, his conduct of official business by no means skilful, his talents in general mediocre, while his grasp of the principles of government was thought limited. In his favour, *The Times* was prepared to concede that at Eton he was a writer of elegant Latin verses and a sound scholar, recognising in him the qualities of manliness and zeal, and paying him the slighting compliment of 'not being deficient in that sort of practical activity which sometimes obtains for men in high office the reputation of being men of business'. His service as Master of the Mint was passed over with the comment that the office he held did not require abilities of the highest description, and waspishly the obituary supposed that the duties of the undemanding post of Master of the Buckhounds were sufficient to occupy his entire attention[5] The writer Samuel Johnson once said of journalists that they were 'without a Wish for Truth or Thought of Decency', and Pole without doubt suffered at the sharp end of this aphorism.[6]

A profile written by Thomas Barnes, editor of *The Times* from 1817 to 1841, published in *Parliamentary Portraits* - a collection of character sketches of leading political figures of the early nineteenth century - embellishes the sense

[4] For Disraeli's comment see Robinson's obituary, *Annual Register*, 1859, pp. 475-77. Cookson, *Lord Liverpool's Administration*, pp. 7-8, 284, 308, 333, 384. N. Gash, *Lord Liverpool The Life and Political Career of Robert Banks Jenkinson, Second Earl of Liverpool* (London, 1984), pp 5, 116, 174. W Hinde, *George Canning* (Oxford, 1989), p 305

[5] *The Times*, 24 February 1845

[6] D Hudson, *British Journalists and Newspapers* (London, 1945), p. 7.

that Pole was a minor political player with a further series of cutting remarks. Barnes judged that one of Pole's most noteworthy features was the inquietude of his temper: 'his tone and manner makes him nearly the most unpleasant speaker in the House. He is always angry, and his voice being sharp and shrill, and always raised to its highest pitch, grates on the ear a discord nearly as horrible as the tuning of five fiddles.' Edward Bootle Wilbraham, who in an attack that included most of Liverpool's Cabinet expressed similar sentiments, remarking that Pole rarely spoke in the House of Commons but that when he did he was always in a passion.[7] Bootle Wilbraham being an opposition MP and Barnes a Whig journalist, their opinions might with some justification be regarded as less than even-handed In his assessment of Castlereagh, however, as an urbane man, conciliatory in tone, graceful in manners and possessing 'invincible courtesy', Barnes at least showed that he could be generous in his treatment of Tory politicians, whatever Barnes' liberal inclinations he was not a belligerent partisan [8]

Against the jaundiced assessment of Pole in *The Times* and the somewhat caricatured sentiments of Barnes should be set other views. The novelist and Tory MP Robert Ward had a deep respect for him, commenting once that in a comparison with Lord Wellesley, Pole stood a thousand times higher. Spencer Perceval also held him in high regard. In a letter to the statesman Lord Lonsdale in 1812 on prospective changes to the administration, Perceval wrote that should Pole give up the Irish secretaryship he would 'justly look to some high official situation in this country', and he went on to note that such were his claims upon him 'in consequence of his firm adherence made in recent circumstances, and his

[7] Criticus, pseud . [T Barnes], *Parliamentary Portraits, or, Sketches of the Public Character of some of the most distinguished Speakers of the House of Commons* (London, 1815), pp 32, 118-24 Hudson, *British Journalists*, pp. 30-32. D. Hudson, *Thomas Barnes of The Times* (Cambridge, 1943), p. 21; Charles, Lord Colchester (ed.), *The Diary and Correspondence of Charles Abbot, Lord Colchester, Speaker of the House of Commons, 1802-1817* (London, 1861), II, 201, Bootle Wilbraham to Lord Colchester, 26 January 1821

[8] [Barnes], *Parliamentary Portraits*, pp. 18-19. Cookson, *Lord Liverpool's Administration*, p. 37.

very considerable abilities, I could not leave Pole to retire without an office'.[9] As a speaker in the House of Commons his reputation waxed and waned. While he came to the defence of his brother's activities in India and intervened in relation to the business of his own official duties, during the first decade of the nineteenth century he seldom took part in parliamentary debate. When he did, the Duke of Richmond, who was Lord Lieutenant of Ireland during Pole's tenure as Chief Secretary, said that Pole lacked command either of himself or of his audience On assuming his position in the Mint he took a more active role in the business of the House He mounted a staunch defence of the Prince Regent in 1816 against whom accusations of profligacy had been made, and even those with whom he was not close, like Robert Peel, recognised that he could be a daunting opponent [10]

Over the course of his career in Parliament Pole did not tend to distinguish himself as an orator He may have been offering advice behind the scenes, but he was not overly inclined to run to the aid of fellow ministers when the government's case was under attack The attributes Pole brought to the office of Master of the Mint did not include a particular knowledge of economics In the extended debates of 1811 on the report of the Bullion Committee, the Speaker of the House of Commons was not troubled by a contribution from him, and between the coming of peace with France and 1819 he only briefly involved himself in any meaningful way in debates on the question of the resumption of cash payments [1] Being essentially responsible for the running of a manufacturing establishment, the nature of his duties as Master by no means made such an involvement a prerequisite Although the Coinage Bill of 1816 did not require a great deal of defending, for Pole this was fortunate given his self-confessed shaky grasp of the intricacies of monetary theory In a debate in the

E Phipps *M irs of the Political and Literary Life of Robert Plummer Ward Esq* (London. 1850 . I, 424 S Walpole, *The Life of the Right Hon S. Perceval* (London, 1874) pp 260-71

Thorne, *H u f Common 1790-1820*, V 512, 515 N Ga h, *Mr Secretary Peel The Life of Sir R b rt Peel to 1830* (London 1961), p 285 *Parliamentary Debates* 1st ser XXXIII cols 5)3-10 20 March 1816)

Parliamentary Debates 1st ser , XL, cols 714-724 (24 May 1819)

Commons three years later he declared that he had endeavoured to make himself master of the subject of currency reform by reading carefully all the pamphlets that professed to discuss the question, concluding that he should speak with great diffidence on this issue, only seeing, as he did, a great difference of opinion rather than the clarity of a single answer. He was not allowed to get away with such a naïvely honest expression of his ignorance. The opposition may have had little cohesion but there were among its ranks men as such Henry Brougham and George Tierney whose debating skills outshone those of most on the government front bench. On this occasion Tierney criticised Pole for not addressing himself properly to the question that had been raised and for answering a matter of some concern to Parliament in such a lame and unengaged fashion. The brief debate descended into a petty squabble, but laying himself open to such an attack is indicative of Pole's at times unconvincing performances in the Commons.[12]

From the Mint's point of view, and as far as the recoinage was concerned, to have a Master who was not deeply embroiled in the business of government was an advantage Lord Bathurst in 1809 combined his control of the Mint with being President of the Board of Trade and Foreign Secretary, while Lord Clancarty for a time during his mastership between 1812 and 1814 also served as head of the Board of Trade as well as being Ambassador to The Hague.[13] The criticism that can be levelled against many of his predecessors and several of those who followed him of devoting too little time to the affairs of the Mint, does not apply to Pole

The completion of the recoinage may also have been assisted by his having a nervous temper He reacted angrily to set-backs, prompting him constantly to urge greater effort from his colleagues to ensure that the timetable for striking the new coins would not slip (Chapter 5, p. 107). If not always a commanding presence in the Commons he did have other qualities that set him apart from

[12] *Parliamentary Debates*, 1st ser., XXXIX, cols 149-56 (29 January 1819).
[13] Craig. *The Mint*, pp 226, 258, 300-01.

some other ministers and to which Perceval was doubtless alluding. The assessment of Richmond, balancing Pole's weaknesses and strengths, is apposite:

> Pole's unpopularity is against us. His manner is not conciliatory and even our best friends are often out of humour with him. You know before his appointment I feared his warmth might do harm. I really have a great regard for him and should be sorry to do anything to prejudice you or anybody else against him, but it is impossible to conceal his extreme unpopularity. He is a most excellent man of business but wants some of the qualifications to be a perfect chief secretary.[14]

A reforming Tory minister

During Pole's time at the Mint, the impression is that he represented a force for change. Within a year of assuming control he submitted proposals for alterations to the Mint establishment that struck at the deputy system, ensured higher salaries for those officers whose jobs were judged to have been hitherto ill-rewarded and redefined the responsibilities of several posts. In addition, two years later he presided over the most significant change in a century to have effected the silver coinage. But to what extent should he be given credit for these reforms? Was he administering policy formulated elsewhere or was he responsible for the ideas on which changes were based?

There are indications in his career before coming to the Mint of his seeking to alter existing systems. Reflecting on the impact he made at the Admiralty Robert Ward was convinced that Pole had 'done more for the Board in three weeks than ten years had done before'. While he may have been spirited in his conduct of affairs there is also evidence that he allowed practices to continue

[14] *HMC Report on the Manuscripts of Earl Bathurst preserved at Cirencester Park*, (London, 1923), p. 155. The term warmth was here referring to Pole's temper.

that his successor to that office, John Wilson Croker, on discovering them, regarded as a point of principle upon which to resign. Within two weeks of assuming the secretaryship, Croker established a reputation for integrity by refusing to sign the monthly requisition for cash that came from the Paymaster of the Marines, at that time George Villiers, without evidence of how previous advances had been used. Further enquiry relieved him of the need to stand down when the discovery was made that serious deficiencies did indeed exist in the Paymaster's accounts which, as Croker pointed out some years later, had been allowed to pass unnoticed by his two predecessors. Villiers was not so fortunate, being forced to relinquish his position in January 1810.[15] Pole had therefore been willing to live with the status quo of other departments without necessarily questioning too deeply long-established practices, and indeed by conducting himself in this way he was behaving in an entirely acceptable manner. The idea of Tory ministers under Liverpool's administration introducing radical changes within departments of state was very much the exception rather than the rule [16]

As he settled into his responsibilities as Master there was within the Mint a more commanding presence directing affairs. Pole's name was more visible than was that of his immediate predecessor, Lord Clancarty, in the daily management of business, in the writing of letters, in the closer supervision of colleagues and, with the impression he gives of being more demanding of those around him, there was an air of a department instilled with a greater sense of purpose.[17]

Although Pole's contribution was almost certainly decisive in the introduction of reforms to the Mint establishment in 1815, the inspiration behind

[15] B Pool (ed). *The Croker Papers, 1808-1857*, New and abridged edition, (London, 1967), pp 3. 14-15 Thorne. *House of Commons, 1790-1820*, III, 535; V, 453, 513.

[16] For details of the difficulties Pole encountered as Chief Secretary to Ireland see W E Vaughan (ed). *A New History of Ireland. Volume V, Ireland Under the Union, 1801-70* (Oxford. 1989). II, 43, 45-48, W. Wellesley Pole, *Substance of the Speech of the Rt. Hon William Wellesley Pole in the House on the 8th March 1811 upon a motion of the Rt. Hon George Ponsonby relative to the conduct of the Irish Government* (London, 1811); and Phipps, *Robert Plummer Ward*, I, 394, 403.

[17] PRO Mint 1 18, *passim*

the changes originally came from Sir Joseph Banks. In a paper that he prepared in 1812 and presented to Clancarty, Banks put forward proposals for altering the administrative structure and some of the rates of pay within the Mint. No immediate action was taken but having familiarised himself with the organisation, Pole evidently concurred in the plan, and not only in the character of what had been proposed but also the detail. Banks appears as a kind of guiding spirit in Pole's mastership. The coincidence of views between Banks' sentiments in 1812 and stances later adopted by Pole both in respect of the principles underlying coinage design as well as in the general operations of the Mint, is too strong for the Master not to have been influenced by the President of the Royal Society. The donation to the Mint through Banks of an important collection of coins, medals and books in 1818 was not a one-off act of generosity, but rather the culmination of years of mutual respect.[18]

The attack on the deputy system, as part of the reforms of 1815, although important in that it happened at all, was also less a product of Banks' or even Pole's originality than of a movement to abolish sinecures that had been rumbling away within official circles since the 1780s. The proposals, though, seem to have been a little more forthright in this regard than the Act which gave them legal force. The Comptroller, John Tekell, remained in place along with a deputy into the 1840s, while Pole's intention had been that Tekell attend to his duties personally, thereby relieving the establishment of the need for a deputy. Although on the recommendation of a Select Committee of Finance many sinecures were abolished in 1817, pensions were granted in lieu of those sinecures which in effect is what the retention of the post of Comptroller for John Tekell represented.[19] Despite what might have been seen as positive action, a cartoon by William Elmes probably published in 1816, accused Pole together with Liverpool, Vansittart, Viscount Melville and others of being 'State

[18] *DTC* XVIII, 199-225, paper by Sir Joseph Banks on reform of the Mint. PRO. Mint 1/54, pp. 9-47, 48-77; Mint 1/18, p. 153-62. Dyer and Gaspar, 'Tower Hill', *NHRM*, pp. 473, 479-80.

[19] A. S. Foord, 'The Waning of the Influence of the Crown', *EHR*, 62 (1948), 499-500. J. Wade (ed.), *The Extraordinary Black Book etc. Lists of pluralists, placemen, pensioners and sinecurists* (London, 1831), p. 402.

Cormorants' swallowing annually 'an aggregate sum: under the name of salaries, independent of *indefinible* emoluments which result from other sources of gain...'. The 1815 reforms, confirmed by a new indenture of 16 August, were more of a realignment within the Mint than a revolution; the basic structure of how the department operated remained intact for a further twenty years. Although Pole's activity in this regard might nevertheless be felt to conform to the description of him as a good man of business, his energies are worthy of more than a double-edged compliment. He was here setting about reordering a branch of government that had throughout the eighteenth century been one of the bastions of sinecurism. Two of his political colleagues, Clancarty and Bathurst, although in a position as former Masters to have effected change, had not addressed as he did some of the more antiquated arrangements that had been handed down as good administrative practice.[20]

When Pole took to the floor of the Commons on 30 May 1816 to introduce the Coinage Bill, he did so not as its author - the credit for that lies largely with the first Earl of Liverpool - but as an administrator seeing a piece of legislation onto the statute book. His abilities in this direction were never much in doubt, the questions rather surrounded his judgement as a politician and reputation as a parliamentarian. The task with which Pole was charged of introducing a new coinage may not have required the dexterity of a diplomat but its successful completion did require the asperity of an energetic and determined man, and in these qualities he was not deficient.

Looking at his time at the Mint, the restoration of the gold and silver coinages stands out as his major and lasting contribution. Although of an administrative nature, the expectation might not have been misplaced that this very real achievement would have prompted a more sympathetic treatment by *The Times* - even of a Tory politician by a Whig newspaper. Moreover, he was a

[20] *Catalogue of Political and Personal Satires*, IX, 679-80, no. 12781. Dyer and Gaspar, 'Tower Hill', *NHRM*, pp. 472-77. PRO. Mint 1/18, pp. 153-62, 332. *Report from the Select Committee on the Royal Mint*, Parliamentary Papers, 1837 (465), Appendix No. 1, pp. 1-11.

minister who shuffled between the second rank of appointments, never holding any of the major offices of state. He was at no point, therefore, charged with the responsibility of taking momentous decisions, which makes *The Times'* attack on him, peppered as it is with faint praise and knowing jibes, seem somewhat gratuitous.[21] With the exception of Frederick Robinson, who was roundly taken apart as weak and indecisive, contemporary assessments of his parliamentary colleagues, while pointing out their suspect debating talents, or their meagre political skills, were by no means as harsh.[22] His arrogant manner and fiery temper probably made him too many enemies down the years but whatever the reason, he was certainly singled out for special treatment. There is in Pole the hard-working, artistically sensitive man who was concerned above and beyond the strict demands of his duties to restore the British currency to a condition of being not merely functionally acceptable but beautiful as well. Then there is the pompous, self-serving character who operated on a fuse too short to sustain the unqualified respect of many of those with whom he worked.

[21] For Pole's dismissal from the Cabinet and as Master of the Mint see F. Bamford and the Duke of Wellington (eds), *The Journal of Mrs Arbuthnot, 1820-1832* (London, 1950), I, 205, 208-10, 253-55, L Strachey and R. Fulford (eds), *The Greville Memoirs, 1814-1860* (London, 1938), I, 149; J. Bagot, *George Canning and his Friends etc* (London, 1909), II, 192-94, Aspinall, *The Letters of George IV*, III, 38-39, George IV to Lord Liverpool, 6 November 1823, and Duke of Buckingham and Chandos, *Memoirs of the Court of George IV, 1820-1830* (London, 1859), I, 488-89, II, 7.

[22] For the obituary notice of Lord Bathurst see *Annual Register*, 1834, p 233, for Nicholas Vansittart see *Annual Register*, 1851, pp. 261-62; for Lord Sidmouth see *Annual Register*, 1844, pp 208-11

CHAPTER 5

THE RECOINAGE

Popular reaction to the recoinage

From June 1816 the theory of currency reform gave way to the practical concerns of striking and planning the exchange of the coins. But the most immediately controversial aspect of the recoinage for Pole and his colleagues surrounded what was to be done with the existing currency. If Parliament had been fairly docile in its response to the Coinage Bill, out in the country, amidst the serious economic slump of 1816 and the troubled atmosphere this fostered, news of the recoinage was received with more emotion. Anxieties were inevitably raised by the announcement, and initially ministers did not help their cause. Statements were made with regard to the condition of old coins that were to be accepted in exchange for the new that had an eye more on economy within the public service than on a generous or sympathetic treatment of holders of the worn currency.

Speaking to the Committee on Ways and Means on 27 May, the day before the Coinage Bill received its first reading, Vansittart said that the Mint was planning to accept old coins only if they bore some legitimate impression and, he continued, given that this would not include a very large proportion of the present currency, no great expense was anticipated. The appalling condition of the coinage meant that the chances of coming across a regal silver coin bearing any kind of impression were slim. Reports of what was proposed accordingly caused alarm in the press and were considered as 'a gross and crying injustice'. An editorial in *The Times* later in the year mentioned that 'it has been justly observed, that the plain shillings are to those which bear a distinguishable impression in the proportion of nearly 30 to 1'. A concerned inhabitant of Neath explained in a letter to the Mint that 'the lower Order of people cannot get goods unless there is a dye on each Shilling which of course is Impossible to find'.[1]

Government had added a measure of tension to a country already enduring economic hardship and bouts of popular unrest. Pole himself was evidently conscious of the unhappy mood of the country in the summer of 1816 when he described how 'the citizens have lost all their feelings of pride and richness and flourishing fatness, trade is gone, contracts are gone, paper credit is gone, and there is nothing but stoppage, retrenchments and bankruptcy'. Pole's interest in the stars remains to be confirmed, but if he had been an enthusiast he would have discovered that they were also presaging ill omens: according to the calculations of an astronomer from Bologna, who had observed spots on the sun, a great solar catastrophe on 18 July 1816 was to put an end to the world by conflagration. He was arrested.[2]

A more considerate government approach towards the existing currency emerged in the months following the initial announcement, and even from the first discussion of the Coinage Bill in Parliament such intimations were apparent. In explaining as he did in May the guidelines on the old silver, Vansittart had done nothing more than express the official position as presented by the Prime Minister in Parliament, if handled by Liverpool with a little more political sensitivity. Pole, by contrast, gave in the House of Commons a much more liberal slant to the policy, explaining that the plan was to accept all coins of the realm however reduced they might be in weight, but with the proviso that 'it could not be expected that base or foreign coin could be received in exchange for the new coin'.[3]

The straitened nature of the times may have imbued in people a meagre amount of trust in the word of ministers, and the situation was not helped by the exposition of the policy at Westminster being less than consistent. The

[1] *Parliamentary Debates*, 1st ser., XXXIV, cols 827-28 (27 May 1816). *The Times*, 29 May 1816; 23 September 1816. PRO. Mint 11/70, T. Morgan to Pole, 24 June 1816.
[2] Bagot, *George Canning and his Friends,* II, 33-32. *The Times*, 20 June 1816.
[3] *Parliamentary Debates*, 1st ser., XXXIV, cols 916-17, 960-61 (30 May 1816).

response to reports of what was intended led, in more than one city, to the issue of notices by bankers and shopkeepers to the effect that they would receive no shillings and sixpences in future. By the second week in June the Mint had begun to receive letters complaining of the restriction retailers were placing on the circulation of old silver and the pressures this was exerting on trade. In many instances worn coins were submitted to the Mint for examination in the hope of obtaining reassurance that such specimens of the circulation would be accepted when the new silver was released. The response, however, did not always offer solace. Out of the twenty shillings belonging to John Cockell of Chippenham, twelve were judged counterfeit after examination at the Mint, and while the shillings submitted by George Weedon of Bath were given a clean bill of health, the sixpence he sent was found to be a foreign coin and therefore unacceptable. John Radley of Bath mentioned in a letter, passed on to the Mint for reply, the report he had heard that of the coins sent to Tower Hill not more than one third had been found acceptable. Being precise about the proportion considered dubious following examination is not actually possible because figures were not always recorded. Nevertheless, on the basis of the quantities that are specified, in the region of half were identified during the last six months of 1816 as either foreign or counterfeit.[4] In view of the relatively small numbers involved there would be little value in extrapolating from this any statistical significance.

Uncertainty fed the rumours of the supposed harsh line over the position of the old silver; retailers and the general public alike were wary for fear they would be left with a stock of unexchangeable coin on their hands. A passage in *The Gentleman's Magazine* from the second half of 1816 suggested that tensions over the refusal of the old currency stemmed from certain ill-disposed people having spread reports that on the appearance of the new silver coin none of the current sixpences would be accepted in the exchange.[5] For many years a live and let live attitude had prevailed towards the questionable authenticity and obviously deficient weight of the silver circulation. Once the foundation of

[4] PRO. Mint 11/70, J. Cockell to Pole, 2 July 1816; G. Weedon to Pole, 22 June 1816; J. Radley to R. H. Davis, 19 June 1816; and *passim*.

[5] *The Gentleman's Magazine*, Supplement to LXXXVI, pt II (1816), 620.

trust upon which this ad hoc token coinage system was based came into question, chaos of uncertainty threatened. Reports coming out of Bristol in June revealed that the Post Office there had refused to take plain shillings and sixpences, and W. Ringer, a tradesman acting as Overseer and Guardian of the poor of St Nicholas Parish in Bristol, confirmed the sense of anxiety when he wrote to the Mint of the public apprehension, particularly amongst the poorer classes, at the restrictions on passing the old silver coin.[6]

At an early stage in response to these reports official notices were circulated. Following complaints from shopkeepers in Dumfries regarding receipt of the old currency and the convening of a public meeting on the subject, a letter was written to Vansittart which elicited on 15 June something of a volte-face from the Chancellor. His line was now that because large numbers of the plain shillings and sixpences appeared to be of the established fineness, they would not be refused when presented for exchange. On 21 June, the day after disquiet in Liverpool arose as a result of thirty or forty tradesmen asserting that they would take 'no silver coinage except Bank Tokens and the genuine coin of the Mint', an announcement from the Home Secretary was published in the press that was to be sent to mayors throughout the country.

> I am directed by Lord Sidmouth to inform you, that his Lordship is aware that considerable inconvenience has arisen, in many parts of the country, from an apprehension that the defaced silver coin now in circulation will not be taken in exchange for new coinage, now preparing: he therefore directs me to apprize you, that the defaced coin of the realm will be taken in exchange for the new coinage, as soon as the latter is completed.[7]

Throughout the second half of 1816 the Mint received dozens of letters reflecting the loss of confidence in the circulation of the old silver, to which the usual response included the promise very much in the same vein as Lord

[6] PRO. Mint 11/70, T. Fuidge to Pole, 14 June 1816; W. Ringer to Pole, 14 and 16 June 1816.
[7] *The Times*, 20 and 21 June 1816. Ruding, *Annals of the Coinage*, II, 115.

Sidmouth's. Official reassurances doubtless had their effect, but by September the prospect of considerable disturbance, warnings of which had been heard from Chester and Lichfield, took on a more threatening aspect.[8] Mid to late September was harvest time, one of the peak periods of demand for coins during the year and therefore one particularly fraught for those who had to deal in a currency in which trust was ebbing. Differences in the seasonal demand may help explain why in the autumn tempers became especially frayed, rather than four months earlier when details of the reforms were first announced.

The refusal during September of several tradesmen in Hull to receive shillings at their nominal value resulted in a considerable crowd of people gathering in protest. Tensions grew during the day, leading in the evening to a violent attack by an angry mob, said to have consisted chiefly of women and children armed with stones and brickbats, on the house of a grocer, J. Todd & Co; although its role in the incident is not detailed in the newspaper report, the firm was presumably one of those which had looked askance at the worn coin.[9]

Sunderland suffered a serious disturbance in very similar circumstances. As in Hull, the Riot Act was read and troops were called out to calm the populace, but not before the large assemblage of rioters had nearly demolished the windows of several shops and looted all the stock from the premises of Mr Middlebrook. On 21 September London also experienced a short-lived crisis of confidence in the old currency - albeit with less violent consequences - from the refusal at Billingsgate Market of shillings and sixpences. On the same day the Police Office in Queen Square, Westminster, was thronged with tradesmen enquiring of the Magistrates how they must proceed in the wake of uncertainty in the coinage. A report in *The Times* identified one person who said that he had taken £50 in plain silver that morning but could get no other tradesman to take any of it from him in business. Notices issued from the Magistrates' office at Queen Square and by the Lord Mayor, Francis Hobler, declaring that the Bank of England would not refuse any shillings or sixpences on account of their

[8] *The Times*, 3 and 6 June 1816. PRO. Mint 11/70, J. James to Pole, 14 September 1816; T. Lister to Lord Sidmouth, 3 September 1816.

[9] *The Times*, 20 September 1816.

being plain, provided they were English, offered the necessary expression of official confidence. Crowds thereafter assembled at the Bank with the peaceful intent of exchanging their old coin for Bank of England notes and tokens. The Bank itself issued a notice which practically speaking determined the beginning of the exchange period for the old silver several months ahead of the official two-week period: 'all shillings and sixpences of the Coin of the Realm, whether Plain or Not, will continue to be exchanged at the Bank of England as heretofore, till the issue of the new Silver Coinage, which will not take place before the month of February next'. The unease in London soon subsided but not before alarm and disruption of trade had for a time been felt throughout the City.[10]

In October Sir Joseph Banks was sanguine about the situation. He believed that the difficulties experienced with the circulation of sixpences were being mitigated by the copper coinage. But as the exchange approached, further crises of confidence swept through several areas. In December a magistrate from Anglesey claimed that officers of the Customs had begun to refuse plain shillings and that retailers had therefore followed suit, while by the third week of January Henley, Reading, Nettlebed and Marlow were reported to be in a state of considerable confusion because of shopkeepers' distrust of the old money. *The Courier* on 22 January under the heading 'On the Obstruction to the Circulation of Silver' ran the following verse:

> What wonderful change we see in our day,
> How varied and inconsistent our woe;
> Hard times, we complain, will not let our cash stay,
> While we grumble and growl that we can't make it go![11]

Not as threatening as the activities of the frame-breakers in Nottingham nor the inflammatory resolutions of radicals like Henry Hunt that were being

[10] *The Times*, 23 and 27 September 1816. Ruding, *Annals of the Coinage*, II, 117.

[11] Museum of the History of Science, Oxford, Gunther MS 14-17, Banks to Davies Gilbert, 16 October 1816. PRO. Mint 11/70, J. H. Hampton to the Mint, 23 December 1816; G. Norton to the Mint, 16 January 1817. *The Courier*, 22 January 1817.

published and aired at public meetings across the country directed towards reform of Parliament, the disturbances connected with the currency, especially during the autumn of 1816, nevertheless form part of the picture of social unrest. The recession in trade after the end of the war with France brought with it protests against unemployment, made worse by the discharge of a third of a million men from the armed forces. But as well as being economically based, the dissent also had political aspirations that sometimes denied the ending of the war any influence over economic matters. At a meeting in Palace Yard on 11 September, the promoter of parliamentary reform, the Rev. Mr Parkes, said:

> The present unexampled and increasing sufferings in agriculture, manufacture and commerce, are not an effect of a sudden transition from war to peace, but of an underlying progressive transition from the constitutional liberty of Englishmen, to the abhorrent despotism of an usurping borough faction, with its taxation without representation, and its septennial power.[12]

There was a degree of collective action against government's recoinage policy, but the riotous behaviour never generated momentum enough to develop into an organised network of opposition. Although impacting on commercial as well as the 'labouring' interests, what was noticeably lacking in these outbursts, and what helps define their scope, was any sustained petitioning of the newspapers and Parliament such as happened during the successful challenge to Vansittart's property tax proposals earlier in 1816.

From the Chancellor's uncompromising parsimony, the official line softened when confronted by the realities of the circulation. By January 1817 James Morrison, formulated an interpretation that went so far as to embrace a general perception of authenticity as being acceptable when, in response to enquiries, he wrote that plain or not, all sixpences and shillings 'that have been generally considered as coin of the Realm' will be received for the new coin. Although the target figure of striking £2.5 million of new silver coin was not

[12] Gash, *Lord Liverpool*, p. 128. *The Times*, 12 September 1816.

adjusted in light of the more open-minded official attitude, the original estimate that very little would be legitimately received necessarily shifted towards embracing a much larger proportion of the existing coin.[13]

New silver coins for Ireland

Reform of the currency was needed in 1816 and this was no less the case in Ireland where the deficiencies of the silver circulation had for many years been widely reported. In the House of Commons on 2 March 1804 John Foster, MP for County Louth and last Speaker of the Irish Parliament, determined to bring the condition of the currency of Ireland to the attention of a committee of enquiry. 'There was scarcely any thing in the shape of money to be seen', he lamented, 'but a miserable coinage of adulterated copper, and of counterfeit shillings, so bad, that for a pound Bank note, even at its depreciated value, 26 or 27 of such shillings would be given in exchange.'[14] Foster got his committee of enquiry but the problems remained. Twelve years later there was still doubt over whether the strains under which the Irish currency laboured would be addressed.

Immediately prior to embarking upon the recoinage a new assessment of the quantity of silver coin still active in Britain and Ireland was not commissioned, the figures that were employed to assess the size of what was thought immediately necessary being based on subjecting available estimates to the judgement of ministers. In his *Treatise* Liverpool believed that £1 million would be required as a first step in renewing the coinage of Ireland. Consistent with its approach to other estimates proposed by Liverpool, the Committee on Coin decided on a smaller figure, £500,000, and recommended that this quantity be supplied out of the stockpile of new coins. This was in line with the range of between £400,000 and £500,000 that Jeremiah D'Olier, a Director of the Bank of Ireland, judged in 1804 would be necessary to restore the silver circulation.

[13] *The Times*, 3 and 28 December 1816. PRO. Mint 11/71, Morrison to J. Mountford, 15 January 1817.
[14] *Parliamentary Debates*, 1st ser., I, col. 652 (2 March 1804).

With its Dublin, east coast and midlands bias, the Bank of Ireland was probably presenting a limited impression of the whole country; as with views on the extent of the silver coinage circulating in Britain as a whole, such a sum did not necessarily bear a close relation to what was required.[15]

The Coinage Bill omitted the recommendation of the Committee on Coin in relation to assigning a proportion of the new currency for Ireland. The exclusion was justified on the grounds that since the Bank of Ireland tokens had been made legal tender in the payment of all taxes and duties up to the repeal of the Bank Restriction Act, at which point they were to be exchanged for coin of the realm, there was no need to make any provision for a separate distribution of the new silver. In 1816 the dollars and tokens of the Bank of England did not share this added legitimacy (Chapter 3, pp. 54-55).[16] The Committee on Coin through its recommendation of £500,000, however, had drawn attention to a deficiency, and so the issue arises of whether the government was ill-judged in excluding Ireland from the provisions of the recoinage or whether there was in fact good reason to believe that the silver circulation was adequately served by bank tokens.

Although the condition of the British and Irish currencies was not hugely dissimilar, in Ireland the situation was somewhat more parlous. Aside from the irregular issues of siege pieces during the Civil War of the mid seventeenth century, no Irish silver had been minted since the reign of James I. The absence of a designated silver currency prompted the circulation of British coin, but rather than passing at the same face value, in Ireland these coins were accepted at the enhanced rate of 13d. One assessment suggested that during the first decade of the nineteenth century the lack of anything like a sufficient quantity of coin had resulted in the best silver coins in Ireland having suffered a 57 per cent loss of weight.[17]

[15] Liverpo l, *Coins of the Realm*, pp. 185, 204. *Report of the Committee on Coin*, 1816. F. G. Hall, *The Bank of Ireland, 1783-1946* (Dublin, 1949), p. 91.

[16] *Parliamentary Debates*, 1st ser., XXXIV, cols 959, 963 (30 May 1816).

[17] Ruding, *Annals of the Coinage*, II, 102, 104. A. Dowle and P. Finn, *The Guide Book to the Coinage of Ireland from 995AD to the present day* (London, 1969), pp. 52 99. Fetter, *The Irish Pound*, pp. 10, 17.

The distinct legal position of the Irish tokens was a corollary of the especially appalling condition of its currency. Although the state of the silver coinage in Britain made the circulation of counterfeit pieces alongside genuine coins something of an inevitability, in Ireland the situation had been taken a stage further towards the legal recognition of counterfeits by the practice of government offices accepting them and paymasters in the army knowingly using them to pay troops. The currency committee of 1804 was even reluctant to refer to a silver coinage circulating in Ireland at this time, preferring instead to talk in terms of 'the base metal and notes and I.O.U.'s substituted in its place'. To have promoted the official acceptance of tokens in Ireland, in the context both of a more corrupted circulating medium and a history of a more liberal official attitude towards adulterated pieces, was not all that unexpected. Allowing the tokens to be accepted in payment of taxes and duties will have enabled them to become an integral part of the money supply and this may have coloured ministers' thinking on deferring the introduction of the new silver.[18]

Excluding the countermarked dollars issued by the Bank of England in 1797 and 1804, the vast majority of which did not remain long in circulation, between 1804 and July 1816 production of Bank of England dollar-standard currency amounted to £4,604,456 - more than double the estimated size of the official silver coinage of Britain. Between 1805 and 1816, £1,340,000 was produced of the Bank of Ireland tokens of 5d, 10d and 30d; issues of the Irish dollar of 1804 amounted to £237,468, giving an overall total of £1,577,468. Taking D'Olier's admittedly low estimate of the size of the Irish silver circulation of £500,000, over three times more in tokens was therefore struck.[19] To this might be added the 600,000 unstamped dollars that the Bank of Ireland put into circulation in 1804 before production of any of the other token money. Far more dollar-standard money was released in both Ireland and Britain than was thought to be circulating of the official silver currency, but Ireland seems to have been relatively better served.

[18] Fetter, *The Irish Pound*, pp. 18, 85. Kelly, *Spanish Dollars*, p. 64.

[19] Kelly, *Spanish Dollars*, pp. 33-34, 59, 119-20. Dyer and Gaspar, 'Tower Hill', *NHRM*, pp. 454, 472. Doty, *The Soho Mint*, pp. 327-28.

Attitudes differed as to whether the amount of tokens met the needs of circulation. In response to Henry Parnell's motion for the assimilation of the British and Irish currencies in April 1809, John Foster judged that the quantity of currency in Ireland was sufficient to answer all domestic purposes. Henry Parnell's silence on the subject might be considered as supporting Foster; in seeking to unify the currencies, drawing attention to the existence of any inadequacies should have been a legitimate concern. By contrast, in December 1812 William Vesey Fitzgerald, the Chancellor of the Irish Exchequer, wrote to Robert Peel, then Secretary for Ireland, about the need for additional numbers of tokens to supply the demands of bankers and merchants. The supply of tokens may not always have been ideal but their presence certainly helped and if thought more accommodating than those of the Bank of England, less urgency might legitimately have attached to an immediate release of new silver in Ireland.[20]

Adequately to provide for Ireland on the same basis as Britain with a network of exchange stations and very probably a larger stockpile of new coin would have delayed the completion of the recoinage by several months. The inconvenience and additional expense may have presented a problem but there was no obvious legal impediment to issuing the new coins in Ireland. By the Proclamations of 12 February and 1 March 1817 the new silver was made current in Great Britain and Ireland. Although the assimilation of the British and Irish currencies did not take place until 5 January 1826, the question to be resolved by that time was merely one of abolishing the higher rate at which British coins had circulated in Ireland and enforcing the standard rate.[21]

In the debates in Parliament over the Coinage Bill during May and June 1816, the claims for renewing the silver coinage of Ireland were not pressed; the government's intentions were neither referred to again nor challenged. The

[20] *Parliamentary Debates*, 1st ser., XIV, cols 75-77, 85-86, 90-91 (18 April 1809). The reference to 600,000 unstamped dollars is taken from unpublished notes on the Irish tokens compiled by Colm Gallagher, as are the comments of William Vesey Fitzgerald: BL. Additional MS 40202, fol. 715, December 1812.

[21] 6 Geo. IV. cap. 79.

currency pamphleteer Thomas Smith was one of the few voices of support in 1816 for extending the measures of the Coinage Bill throughout the United Kingdom. In September of that year the Prime Minister raised with ministerial colleagues the question of the effect the recoinage and exchange might have in Ireland and the regulations that might be necessary with respect to its debased currency. Nothing more, however, was heard of his enquiry. Between 1814 and 1826 the monetary situation in Ireland was hardly ever raised in Parliament, as was instanced by the debates on the resumption of cash payments in 1819, during which little separate consideration was given to conditions there. The first report of the House of Commons committee appointed to investigate the Bank and resumption drew from Henry Parnell the comment that 'it would almost appear that the committee on Bank affairs had wholly forgotten those of the Bank of Ireland, since no mention was made of them by any member of the committee'. His resolution ten years earlier to assimilate the currency of Ireland with that of Britain received no significant support, and although the merits of what he had to say on the subject in 1819 were not denied, action was again deferred. The eventual passage of assimilation onto the statute books in 1826 was marked in the House of Commons by the most perfunctory of debates.[22]

The release of Irish dollars and tokens from 1804 did much to dampen the more extreme abuses the currency suffered towards the end of the nineteenth century. The extent of these issues and the added time and expense of fully involving Ireland in the recoinage and exchange probably helped cool official backing for the Committee on Coin's original recommendation. But more than this, the exclusion of Ireland had about it the symptoms of a selective amnesia which afflicted Westminster politicians on the subject of Irish currency matters. The unsp ken assumption might have been that, as with the old silver, the new coins would in the normal course of trade find their way across the Irish Sea.

[22] *Parliamentary Debate* , 1st ser., XIV, col 91 (18 April 1809); XXXIX, col. 1424 (6 April 1819 ; XL, col 1194 (16 June 1819); 2nd ser., XIII, col. 576 (12 May 1826). Letter, *The Iri h P und* pp 55-61 Smith, *A Letter to Liverpool on the Proposed New Coinage*, p. 31. PRO. M nt 1 54 Liverpo l t Van ittart, 25 September 1816, pp 375 76. For Parnell see *DNB*

Government policy conveys the impression, then, of an absence of interest as opposed to the absence of any problem. The irony of this episode is that the removal of the Bank of Ireland tokens from circulation in July 1825 was justified on the grounds that the recent issues of the new silver coins meant they were no longer necessary.[23]

Assistance from the Soho Mint

Even without having to worry about Ireland, the recoinage was a major undertaking and one that represented the beginning of a new era for the British coinage. On 8 June 1816 James Lawson, Superintendent of Machinery at the Mint, in a letter to Matthew Robinson Boulton, son and heir to Matthew Boulton's industrial businesses at Soho, Birmingham, wrote that 'as you will see from the newspapers we are now going to be busy'. News of the recoinage did indeed have a dramatic impact on the atmosphere within the Mint. In a note to the Treasury, officials were informed on 11 May that no coinage was then carrying on, except for a small quantity of silver tokens for use in the colonies of Essequibo and Demerary, of which the total struck amounted to £8,000. The end of May was such a quiet time that the Mint Board did not meet because there was little or no business to discuss. From this somnolence the organisation was thrown into the mild panic of the beginning of June when Pole and Morrison were arranging for rebuilding work to be carried out by the Office of Works, worrying about potential staffing problems and placing orders with Matthew Robinson Boulton for the supply of additional coining presses and a raft of other pieces of machinery and equipment.[24]

The first order identified as specifically relating to the recoinage was dated 7 June; in the following eighteen months, over two dozen further orders were

[23] 6 Geo. IV. cap. 98. I am grateful to Colm Gallagher for his advice on the nature of the Irish currency during the first two decades of the nineteenth century and for his guidance on the likely size of the silver circulation.

[24] PRO. Mint 1 18, pp. 340, 358. MBP. 413, J. Lawson to M. R. Boulton, 8 June 1816.

addressed to Birmingham, the total cost amounting to £2,039 1s 1d.[25] Good business though this was for Boulton, there was an element of altruism in his approach to the needs of the Tower Hill mint, or rather, a sense of being willing to assist in what was an undertaking for the benefit of the nation. The Mint having placed an order with Boulton for two new coining presses, as a safeguard against failure, the offer was made from Birmingham that in the event of an emergency one of the Soho presses could be sent down to London - a handsome gesture that halved the Mint order.[26] Boulton was also willing to assist the Mint in the preparation of coinage tools by freely placing at its disposal his reducing machine at Soho. Operating as a three-dimensional pantograph, a reducing machine traces the details of a relief image and translates them to a cutter which reproduces the design in the form of a steel punch at coin size. Towards the end of December 1816, Benedetto Pistrucci, the Italian artist who had been appointed to the Engraving Department of the Mint some months earlier, accompanied by Lawson, spent several days in Birmingham supervising the production of a tool from one of the artist's models.[27]

Being uncooperative was not in Boulton's interests, but in placing orders with Soho during 1816 the Mint nevertheless encountered little of the frostiness that had grown up between the two establishments over the years. By taking on the striking of copper coins in 1810 for the East India Company, the new Mint had begun to accept work, that is, the supply of copper coins, that Boulton felt was exclusively his preserve. The years 1816 and 1817 may not be typical of a mood that had developed into one of mistrust, but this period nevertheless suggests a situation in which the assistance of Soho was readily and willingly available.[28] Apart from the request made of Boulton to supply a replica of his reducing machine to be erected at Tower Hill, something that he was keen to discourage, orders were responded to promptly and with courtesy. An

[25] MBP. 413, *passim*; MBP. 470, *passim*.
[26] MBP. 413, Lawson to Boulton, 13 June 1816; Morrison to Boulton, 24 June 1816; Boulton to Morrison, 26 June 1816.
[27] MBP. 533, Lawson to Zacchaeus Walker (an employee of Boulton's at Soho), 18 December 1816. PRO. Mint 11/71, Pole to Lawson, 23 December 1816.
[28] Doty, *The Soho Mint*, pp. 145, 159, 161-63.

explanation of the cordial relations probably lies in the fact that the dispute between the two mints was over the copper rather than the silver coinage.[29]

Striking the first of the new coins

Serious consideration was being devoted to initiating a recoinage at the end of April and within two months the Mint was on the verge of going into mass production. This represented a remarkably compressed time-scale. On 1 May Francis Horner indicated in the House of Commons that he understood ministers were contemplating a new silver coinage; on 10 May the Committee on Coin met and raised a number of questions with Pole which gave a clear indication of the Committee's position as later detailed in its formal recommendations; on 17 May Liverpool and Vansittart made their approach to Jeremiah Harman to ask if the Bank would be prepared to take over responsibility for the silver coinage; on 21 May the Committee on Coin submitted its report that formed the basis of the Coinage Bill; on 28 May Liverpool and Pole presented the Bill to Parliament (Chapter 3, *passim*).

One of the first references to the recoinage in the Mint records and one that suggests there was not much prior warning given to the Mint establishment before the announcement was made in Parliament, was a letter of 1 June from Pole to Colonel Stephenson of the Office of Works requiring bricklayers and carpenters for work on some of the offices. In a similar vein, Pole wrote on 3 June to Robert Smirke, the Mint's architect, stressing that the moneyers, who were responsible for the production of coins, must begin their work with all despatch and requesting as many rooms as possible be given over to them.[30] There are indications that the Commissariat Office had begun sending silver to the Mint as early as 24 May, and the Bank of England had also commenced similar deliveries before the end of the month. While this activity predates by three or four weeks the successful passage of the Coinage Bill and therefore

[29] PRO. Mint 11/70, Boulton to Pole, 16 January 1817. MBP. 413, Boulton to Lawson, 16 January 1817.

[30] PRO. Mint 1 18, p. 340.

might be thought jumping the gun somewhat, the impression is of the Mint establishment being suddenly jolted into action at the beginning of June.[31]

A potential lead to unravelling when notice of a recoinage may first have been given is provided by the presence of Benedetto Pistrucci. An artist of some repute in his field of gem engraving, he came to England in the summer of 1815 and was recommended to Sir Joseph Banks by the French mineralogist Etienne Gilbert, Marquis de Drée. Banks is thought to have introduced the Italian to Pole probably at some point during the first few months of 1816. In his autobiography, Pistrucci refers to a commission given to him by Banks to execute an effigy of George III based on the portrait by the Mint engraver Nathaniel Marchant used on the Bank of England 3s token. The stylistic similarities between the Marchant effigy and Pistrucci's portrait of George III, as used on the new shillings and sixpences, suggest that either this commissioned model or one very much in the same vein was utilised for the new coinage. Exactly when Pistrucci began work on his portrait of the king is not clear. Coinage tools were, however, available towards the end of June and the Chief Engraver, Thomas Wyon Jnr, who copied the Italian's model in steel, would have needed at least a month to generate two punches - one for the shilling and a smaller one for the sixpence. But even if the Mint were in possession of Pistrucci's effigy of the king by early to mid May, which suggests the preparation of the original model dates from April at the latest, the presumption should not be made that Banks and Pole had at that point been forewarned of a recoinage and were making progress on the design work. Nevertheless, Wyon was almost certainly busying himself on copying the king's effigy before the Coinage Bill was presented in Parliament, but extending the start of the recoinage back into March or April is a speculative venture.[32]

[31] Dyer and Gaspar, 'Tower Hill', p. 482. *Commons' Report on Resumption*, 1819, Appendix No. 18, pp. 319-21.

[32] Treasury approval for Pistrucci's appointment was granted on 26 June 1816. PRO. Mint 1/18, pp. 358-59; Mint 1/19, pp. 7-8; Mint 21/1, Morrison to Master's Office, 22 June 1816. RM. Library. RM. Museum Accessions Register, 1816 to 1850, p. 5. A. Billing, *The Science of Gems, Jewels, Coins, and Medals, Ancient and Modern* (London, 1867), pp. 174, 190. H. B. Carter, *Sir Joseph Banks, 1743-1820* (London, 1988), p. 516. Mitchell Library, New South Wales. ML Banks MS 743.3, Banks to Sir Charles Blagden, 19 August 1816.

The progress towards striking the first coins is indicated by reference on 25 June to technical problems having been encountered with the dies. Pole's account of the recoinage written in 1817 specifies 4 July as the day on which the production of the new coins began, and reports of activity, of close to 300,000 new sixpences having been coined in recent days, appeared in *The Times* on 9 July.[33] The Governor of the Bank of England received half a dozen of the new sixpences from the Mint on 4 July. The next day in a letter to his son-in-law, the diplomat Charles Bagot, Pole reported that he was fully engaged about the coinage, and enclosed for him one of the sixpences.[34] On 27 June, Pole had an audience with the Prince Regent and with struck pieces being despatched to members of the Master's family within a week's time, an opportunity to seek the Regent's unofficial approval of the new coinage designs based on preliminary strikings may have presented itself. Specimens of the shillings and sixpences were formally submitted to the Prince Regent on 25 July, approval to proceed with the proposed designs being given on 3 August.[35]

Difficulties over design

With the new coins being passed around ministerial circles as soon as they were struck and other pieces no doubt leaving the Mint during the summer and autumn, there should have been no surprise that they were being discussed in the press several months prior to their official release. *The Times* on 20 August referred to the controversy that surrounded the use of **BRITT** in the inscription, a debate that was revisited in 1860 over the issue of bronze coins. A letter of 18 September to the editor of *The Gentleman's Magazine* outlined the objections that had been raised to the inscription on the new coins, in particular to the doubling of the **T** in **BRITT**. The correspondent discussed at length the accurate use of Latin abbreviations and concluded that there were precedents for using a double **T** in such a context.[36]

33 PRO. Mint 1 54, p. 530. *The Times*, 9 July 1816.
34 PRO. Mint 1 18, p. 358; Mint 1/19, pp. 10-11. Bagot, *George Canning*, II, 31-32.
35 *The Times*, 28 June 1816. PRO. Mint 1/19, pp. 26, 107-08.
36 *The Times*, 20 August 1816. *The Gentleman's Magazine*, LXXXVI (1816), 299-300. G. P. Dyer and P. P. Gaspar, 'Richard Sainthill and the New Bronze Coinage', *BNJ*, 54 (1984), 266-70.

A different effigy from that used on the shillings and sixpences was planned for the half-crown, and this created one of the major difficulties over the design of the new coins. On 10 November Pole asked for adjustments to be made and requested Thomas Wyon Jnr to show Sir Joseph Banks a trial piece for him to comment on. Banks was approached for advice on questions of taste as well as on matters of policy; he was consulted not out of idle routine but as a semi-official part of the decision-making process. Having heard from his friend, Pole reported to Morrison on 17 November that Banks very much disapproved of Wyon's head for the half-crown: 'Sir Joseph criticises it very severely and thinks Pistrucci is very much dissatisfied with it'. The production schedule, however, was such that there had to be a commitment to Wyon's dies. The distaste Pole had for the work of his Chief Engraver in this instance manifested itself in an instruction that half-crowns struck from his dies be sent, when the time came for distributing the new coin, to the most distant parts of the country. During the first week of January, Pole lamented, 'I am in despair when I think of the number of bad half-crowns we shall issue!'. Once the coins were released, there was no shortage of detractors who shared his opinion and laid the blame squarely at his feet (Chapter 6, p. 138).[37]

The attempts made by Pistrucci at revising the portrait were not successful, and at this point the solution of using Boulton's reducing machine to create a more accurate reproduction was seized upon. In view of his having worked at Soho for several years before coming to Tower Hill, the idea of exploiting the technical assistance that this device offered more than likely came from Lawson. The intention was for a half-crown tool generated in Birmingham to be put into production on 1 January. Although Pole admitted that he could hardly expect this, it was a typical example of his forcing progress against the odds, especially given that Lawson and Pistrucci did not arrive at Soho until 24 December.[38]

[37] PRO. Mint 4/26, Pole to Morrison, 29 September 1816; 10 November 1816; 17 November 1816; 21 November 1816; and 5 January 1817.

[38] PRO. Mint 11/70, Pistrucci to Pole, 24 December 1816; Lawson to Pole, 26 and 29 December 1816; Mint 11/71, Pole to Lawson, 23 December 1816. MBP. 533, Lawson to Walker, 18 December 1816.

The work undertaken in Birmingham in December and January acted as a kind of trial by which the Mint assessed the potential of Boulton's reducing lathe. The initial results delighted Pistrucci, and Pole wrote to Boulton commending the copy of one of the gems as admirable. But the trip did not resolve the question of the effigy for the half-crown. The plan eventually adopted was for part of the neck and shoulder to be cut away on the existing Wyon punch from which Pistrucci could then work. A new portrait was prepared along these lines and thereafter a more positive view of the aesthetic qualities of the coin began to emerge.[39] In defence of Wyon, whatever changes were made to the effigy by cutting away the shoulder, no radical difference is evident in the essential character of the likeness (*Figure 7 no. 4* and *no. 5*). If Pole and Banks were dissatisfied with Wyon's copy they must presumably have been dissatisfied with Pistrucci's amended version.

Accounts that have been written of when the Mint in London first acquired a reducing machine have mentioned 1819 because of Pistrucci's purchase of one from Paris. Looking at the question slightly differently, however, through the use made of Boulton's machine, its association with the Mint can be dated from 1816[40] The difficulties experienced over the design of the half-crown were fruitful in one sense - the Mint was made aware, sooner than would otherwise have been the case, of the benefits of employing a reducing machine. But whatever advantages it brought, Pistrucci did suffer at the hands of the new technology on the way back from his visit to Soho, he endured a rather eventful journey during which his trunk came loose, the chaise broke down and he and his travelling companion both caught colds - Lawson catching his from having to walk up to his knees in mud.[41]

[39] PRO. Mint 11 70, Lawson to Pole, 25 December 1816; Mint 11/71 Pole to Boulton, 14 January 1817, Mint 4/27, Pole to Morrison, 3 January 1817. MBP. 413, Boulton to Pole, 25 December 1816, MBP. 322, Lawson to Boulton, 6 January 1817.

[40] PRO. Mint 11/71, Pole to Lawson, 23 December 1816; Pole to Boulton, 14 January 1817. MBP. 413, Boulton to Pole, 16 January 1817. J. G. Pollard, 'Matthew Boulton and the Reducing Machine in England', *NC*, 7th ser 11 (1971), 316-17.

[41] MBP. 322, Lawson to Boulton, 6 January 1817; MBP. 533, Lawson to Walker, 11 January 1817

Precisely when production of the first effigy for the half-crown gave way to the new type is not clearly documented. A possible answer lies in the coincidence of the break in output of all silver coins between 4 March and 21 April, and royal approval of the new design for the half-crown being received on 26 April. Minting of the new design might, therefore, have begun from the third week of April and, if so, the delay would have been consistent with the not unreasonable wish of ensuring that all half-crowns released for distribution during the period of the exchange in February were of one type. The availability of master tools for the half-crown does not necessarily give a clear indication that production of the new design took place from 21 April. Pistrucci's half-crown punch being packed off to Birmingham to be copied for the sovereign on 21 February suggests that acceptable master tools were probably available by at least that date. It is not certain, but not impossible, that they remained idle up to the March break in striking silver.[42] While the designs may have been the same, the new coins released in February 1817 were not of the same type in one sense: the tradition of changing the date on the coins at the turn of the year was maintained.[43]

Building up the stockpile

The Coinage Bill specified that the Mint was to strike the £2.5 million in seven months, which equated to producing 62,500,000 pieces, 37,500,000 pieces being in shillings and 25,000,000 pieces in sixpences.[44] No mention was made of the proportion of the new coinage that was eventually to be accounted for by half-crowns. The programme of work was daunting. A memorandum from Pole to the Mint Board on 12 June set out how he saw the recoinage unfolding: 500 ingots were to be assayed, melted and coined each week, and he believed that, provided the bullion came in regularly from the Bank of England, keeping

[42] Royal approval of the original design for the half-crown was received 18 January. PRO. Mint 1 54, pp. 315-16; Mint 4/71, pp. 18-19. MBP. 413, Lawson to Boulton, 21 February 1817.

[43] PRO. Mint 4/26, Pole to Morrison, 1 December 1816.

[44] *Parliamentary Debates*, 1st ser., XXXIV, cols 959-60 (30 May 1816).

pace with the supply of raw material would entail a daily production of 335,000 pieces; to achieve this the Mint's eight presses would each have to work at a rate of sixty a minute for very nearly twelve hours each day; and he imagined that the stockpile could be produced within thirty weeks. Even starting immediately - a luxury that he did not have - this programme would have taken the recoinage into the second week of January 1817. Depending, therefore, on the length of time before mass production began, February or possibly even March should realistically have been in his mind as probable finishing dates.[45]

The machinery had been prepared for its task and the moneyers blooded in the use of the Boulton presses by the five years of Bank of England token production amounting to 28,177,254 pieces. There were delays encountered during the first years of using the new machinery, for example, in 1811 the rolls of the rolling mill were broken. In one sense government's dawdling for several years over when or whether or not to issue a new coinage allowed for a potentially swifter period of transition during 1816 in view of the familiarity the workmen had acquired in using the new technology. Compared, however, to the intensity of the recoinage, the token production paled. From the end of October 1811 through to the summer of 1812 the Mint, when in production of Bank of England tokens of 3s and 18d, tended towards a weekly rate of approximately £47,500, which equates to just over 400,000 pieces. Pole was therefore asking his colleagues in 1816 to strike in a day or so what had taken a week to produce five years earlier.[46]

The scheme was ambitious, heralding a period of change and adaptations that proved necessary to cope with the planned output. The Mint was equipped well enough to strike the new coins without a massive re-investment programme; the Tower Hill site had after all been erected with this purpose in mind, but concern centred around the speed at which the stockpile was to be built up. As well as a need for extra workmen and for sundry alterations conditional on coping with a substantially increased flow of work, in the event

[45] PRO. Mint 1 18, pp. 351-53.
[46] Kelly, *Spanish Dollars*, p. 120. PRO. Mint 1/17, *passim*.

of progress being halted there was also the requirement for emergency cover in the shape of spare capacity. As was mentioned above, Boulton was asked to provide an additional coining press; two new adjusting rolls for the rolling mill were also ordered together with six additional boilers for the steam engines and two further carriages and sets of moulds for the Silver Melting House. The coining press was not in the end needed during 1816, and did not actually arrive from Birmingham until April 1817, after the initial stockpile had been completed. Alterations were suggested to the construction of buildings that would aid the processing of blanks. From mid August the moneyers began to work twenty-four hours a day, and the hours of work of smiths and labourers engaged in the production of dies were regularised at a ten-hour shift starting at six in the morning.[47]

Putting a precise figure on the number of people employed at the Mint at any one time is not possible in part because the records of how many casual workmen were employed by the moneyers have not survived. The size of the core body of employees that made up the Mint establishment and the Company of Moneyers can, however, be ascertained, and from this an estimate can be calculated of the increase in staffing that was necessitated by the recoinage. In accordance with the Indenture of 16 August 1815, the establishment during 1816 totalled thirty-two, while the number of moneyers was eight with one apprentice. To this fixed group of forty-one were added two assistants in the King's Assay Office and two in the Master's Assay Office, two extra clerks in the Bullion Office and a weighing assistant in the Mint Office. As the recoinage progressed, further appointments were made, including two turners, an engineer and a die polisher, which by 12 August amounted to twenty-three additional employees. By April 1817, the extra clerks and assistants numbered forty-six.[48]

[47] PRO. Mint, 1 18, pp. 361-62, 366; Mint 1 19, pp. 24, 33-36, 74, 179. MBP. 413, Lawson to Walker, 5 April 1817.

[48] *Indenture between His Majesty and the officers of the Mint*. Parliamentary Papers, 1816 (414). *Mint Report*, 1837, Appendix No. 1, pp. 19-20, gives details of the indenture of 6 February 1817 which brought the establishment to thirty-three. RM. Library. Company of Moneyers' file. PRO. Mint 1 54, pp. 113-15; 272-73; Mint 1/19, pp. 43, 186-87.

This figure gives the temporary increase in the establishment, to which should be added the artificers and workmen employed by the moneyers and the melter. Nineteen of those who started in 1816 were still serving in these two departments in February 1823 but a larger number will almost certainly have been taken on, and the same applies to other departments where casual workers were called on but whose names have not survived. The need for assistance also extended to the request being made of Boulton to supply any skilled workmen that he could spare, but his response to Lawson's approach on 8 June was not encouraging; Boulton was concerned that he would be depriving his own operation.[49] The 106 people known to have been working at the Mint during the period of the recoinage represented almost a threefold increase on the core group. The actual number employed will have been higher and an overall figure of 150 may not be wide of the mark.

As the stockpile was being amassed silver was supplied from the Bank of England and the Commissariat Office in the form of ingots and Spanish dollars. Newspaper reports in September of bullion once more ebbing back towards Britain indicated that the balance of international trade was turning in the Mint's favour. Of the silver imported into the Mint up to the end of 1816, 54 per cent was in the form of dollars. Robert Bingley, the King's Assay Master, drew attention to a problem having been encountered with meltings derived from the use of dollar silver. Larger variations in the standards to which the different South American mints manufactured dollars meant that the fineness of the silver was slightly outside the expected range. To a marginal degree the silver for the new coinage was therefore inferior in fineness to the trial plate against which the coinage would be judged. A rating, however, of 8dwt worse than standard silver as opposed to the 7.5dwt, which had been applied up to the end of November, he believed would address the matter. Taking the recoinage to the end of 1817, at £2,039,990 3s 3d the Bank of England supplied a much larger quantity of bullion both in the form of ingots and dollars than the £449,173 made available by the Commissariat Office. After the old silver had been

[49] PRO. Mint 1 18, pp. 362-63; Mint 3/94, names of artificers, workmen and boys employed by the moneyers and melter, 1 February 1823; Mint 1/19, pp. 285-86. MBP. 413, Lawson to Boulton, 8 June 1816; Boulton to Lawson, 10 June 1816.

withdrawn it was melted and employed to continue the recoinage; at the new rate of 5s 6d an ounce, over £2 million was generated from the worn silver, the equivalent of 44 per cent of the bullion imported for the currency.[50]

Pole and the moneyers

There were set-backs. Some, such as the problems in July of dies clashing together without a blank having been fed through, which caused sixpences to be struck that were thought unfit for circulation, were difficulties that would have been encountered in the normal course of minting. Others, however, related to the unusually rapid production.[51] The intense rate at which the coins were struck inevitably meant that there would be misstruck pieces amongst those released. They are represented in the collections of museums and continue to turn up not infrequently in the hands of coin dealers, but their extent in relation to total production was probably very small. Their survival may be more representative of an interest in unusual pieces, rather than evidence of extensive minting errors.

The most persistent and seemingly insoluble problem that threatened the progress of the recoinage, at least as far as the Master was concerned, was the rate of output sustained by the moneyers. On 21 August, in a melancholic mood, he wrote to Morrison that he could not conceive the meaning of the moneyers' inadequate level of production. Two days later he expressed at length and in uncompromising terms his deep anxiety at the very great deficiency in the numbers struck in the preceding three weeks, a deficiency he calculated to have reached 1,340,396 pieces. He suggested to the moneyers that at the heart of their failure was a want of method in the way they processed the metal strip and blanks, going on to detail ways in which they could improve the flow of work. The moneyers, although conceding that improvements could indeed be made, nevertheless felt that Pole was pushing too hard too soon.

[50] *The Times*, 2 and 21 September 1816. *Commons' Report on Resumption*, 1819, Appendix No. 18, pp. 319-21. PRO. Mint 1/19, p. 127.
[51] PRO. Mint 1 19, pp. 11-12.

Comparing the estimated daily output of 335,000 that had originally been thought necessary in June with the record of what was produced from the beginning of August, during the three weeks referred to, the moneyers did have a point. To have included in the actual output figures the deficiency mentioned by Pole would have set the daily rate of production at over 400,000, whereas the moneyers' rate was closer to 350,000 - in keeping, that is, with the original target.[52]

The profile of output suggests a reasonably consistent pattern of production (*Table 10* and *Figure 8*). When the deliveries that the moneyers made to the Mint Office were recorded on consecutive days, something which was even more regular than the specified target of every other day and which happened frequently throughout the second half of 1816, a fairly reliable daily picture emerges. Production slowed in September as evidenced by an eight-day period during which the moneyers made no returns to the Mint Office. On the nineteenth Pole referred to the interruption, prefacing his comment with mention of a potential problem over the supply of dies, but he did not point specifically to what lay behind the interruption. By the twenty-eighth the situation had improved to the extent that he could write, 'I am very much pleased with the returns and it makes me very happy to find the moneyers have exerted themselves so much. I hope now there is no doubt of the numbers continuing to be fully and regularly kept up.' From mid October through into November, however, Pole became increasingly incensed, referring to the 'bungling uncertainty of their manufacture', to 'frightful' deficiencies and 'provoking and unpardonable' work rates. The essence of the problem, eventually fixed upon in November, was that twice as many blanks were being punched from the metal strip as were being sized. Identifying the problem did not bring a solution and the onset of January was still eliciting from him comments regarding 'scandalously deficient' returns.[53]

[52] PRO. Mint 1 19, pp. 67-75; Mint 9/33, Account of silver monies coined, 13 July 1816 to 31 May 1817.

[53] PRO. Mint 4/26, Pole to Morrison, 19 September 1816; 28 September 1816; 20 October 1816; 17 November 1816; 24 November 1816; Mint 4/27, Pole to Morrison, 3 January 1817. Sizing was a method of correcting the weight of blanks by filing their edges.

For all the ink that Pole expended on chastising the moneyers, the difficulties encountered, although causing concern that the programme of work might be hampered, did not resolve themselves into major set-backs. Neither did they alter materially a monthly production rate that between August 1816 and February 1817 was sustained, with the exception of September, at between seven and nine million pieces. An even clearer view of the consistency of production is revealed through the deliveries of coin to the Mint Office; out of the 153 separate deliveries made between 13 July 1816 and 29 May 1817, 130 were for the sum £19,800.[54] There is a temptation to look at the overall pattern of output which never fell precipitously below original calculations and read into Pole's concerns the groundless anxiety of a bullying manager. The language he used was often immoderate and the moneyers would have had some justification for thinking their efforts had gone unrecognised. The difficulty he confronted was in being a victim of the timetable he had proposed to government; he was induced to seize on the vagaries of daily output figures because there was little provision for days of lost production.

Breakdown of output by denomination

Between the beginning of July 1816 and the end of February 1817, output of the new silver amounted to £2,696,166 (*Table 11* and *Figure 9*), the target of £2.5 million being reached about 17 February. With the recoinage starting early in July, the estimated thirty weeks that were thought necessary to complete the stockpile would have taken production up to about the end of January. The optimism of the estimate was therefore foiled by roughly two weeks - hardly a disaster - indeed, something of an achievement.

The month and a half gap between 4 March 1817 and any further output of silver coin might reasonably be seen as bringing to an end the completion of the stockpile. In spite of the omission of half-crowns from the original plan, they were struck to the extent of 17.9 per cent of the value of output up to the first

[54] PRO. Mint 9/33, Account of silver monies coined, 13 July 1816 to 31 May 1817.

week of March. At 65.8 per cent, shillings made up by far the largest share of the new coinage, with the value of sixpences amounting to 16.3 per cent (*Table 12* and *Figure 10*). Looking at the production of new silver over the whole of 1816 and 1817, a not dissimilar picture emerges, with shillings at 58 per cent of the value of output, although representing a lower proportion than in the stockpile, still coming out as the principal coin; sixpences at 15.5 per cent mirrored fairly closely their stockpile figure, but half-crowns at 26.5 per cent had advanced a good deal.[55]

In the eighteenth century, or at least until 1757, the different denominations were produced in a fixed value ratio from a given quantity of silver: crowns represented 20 per cent of the total, half-crowns 30 per cent, shillings 40 per cent and sixpences 10 per cent. From 1757 through to 1816, production of regal silver coins was limited to shillings and sixpences, together with very modest quantities of the smaller silver denominations of fourpence, threepence, twopence and penny. With shillings accounting for two-thirds of the value of output and sixpences one-third, the infrequent mintings in the second half of the eighteenth century do not offer a suitable comparison with a complete recoinage, but the balance of the 1816-17 production did reflect a continuing trend towards a larger number of smaller denomination coins. Production over the eighteen months from July 1816, resembles only very broadly the traditional early eighteenth-century approach to the output of denominations. Sixpences and shillings, though, took up more of the proportion formerly assigned to crowns. In arriving at the denominational breakdown of the new coins, consideration was no doubt given to the likely composition of the existing silver circulation. The calculations of the first Earl of Liverpool in this regard, which put half-crowns at 30 per cent and shillings and sixpences combined at 70 per cent, may well have acted as a rough guide.[56]

Why crowns and half-crowns should have been excluded from the initial stockpile and why no fuss at all was made of their exclusion might be explained

[55] For the number of pieces struck of each denomination see *Table 13* and *Figure 11*.
[56] PRO. Mint 1 16, pp. 42-43. Liverpool, *Coins of the Realm*, p. 185.

by the experience, recounted in many instances in pamphlet literature as well as by Liverpool in his *Treatise*, of people rarely encountering them in the course of trade. The intention, as detailed in the Coinage Bill, was however to strike half-crowns as well as crowns - an intention repeated by the Prime Minister in Parliament on 17 June 1816. From the point of view of the pressing nature of completing the stockpile, a larger number of higher denomination coins would have had the attraction of easing the burden. Their being struck was merely a question of timing and when in September the Governor of the Bank of England specifically requested that they make up a proportion of the new silver to be issued the following February, the Mint complied.[57]

Evidence of one or more of the coining presses failing for any length of time during the recoinage was not apparent until 26 March, when Lawson informed Zacchaeus Walker at Soho that the great screw of one of the presses had given way. He was accordingly more than usually keen to enquire after the progress of the new coining press that had been ordered from Boulton. In reflecting that the broken screw had, in the course of producing the 3s Bank of England tokens and the half-crowns, struck millions of blows, he saw little reason to complain.[58] Escaping major delays at the hands of unreliable machinery was a cause for no small amount of satisfaction. Pole was personally disappointed by the original effigy for the half-crown and annoyed about the public ridicule he was forced to suffer on its account, but he might have drawn solace from the knowledge that the Mint had delivered the £2.5 million of new coins broadly within the time-scale he had set out. The currency of silver that had been anticipated for decades was completed roughly within seven months.

[57] *Parliamentary Debates,* 1st ser., XXXIV, col. 1125 (17 June 1816). PRO. Mint 1 54, Pole to Vansittart, 16 September 1816, pp. 342-44.
[58] MBP. 413, Lawson to Walker, 26 March 1817.

CHAPTER 6

THE EXCHANGE

Regional distribution of the new coin

The gold recoinage of the 1770s had a regional element built in to the withdrawal of the old coin which at that time involved a network of receivers in twenty-four locations across the country taking in, over the course of a month and a half, the worn gold coin and exchanging for it coin of lawful weight. Some forty years later the scale of a similar operation with respect to silver was to be executed over a much wider area in a shorter time scale.[1] No detailed proposals dealing with this question were laid before Parliament by the Prime Minister, but Pole sketched out the plan as it was eventually implemented of distributing to all principal towns and cities a sum of money, supposed to coincide with the circulation of the district, and of effecting an exchange of the currencies within a short period of time [2]

In 1799 Ruding had proposed that the old silver be withdrawn gradually. The receivers of public revenue, he thought, could after a certain time take in the silver money by weight only, cutting it when tendered and thereby in a very few years nearly all of it could be brought to the Mint. An extended period for removing the existing currency had been adopted during the recoinage of William III's reign and it had resulted in a major fraud being committed against the Mint, whereby counterfeiters profited by defacing the new coin as it was issued and returning it to the Mint as old silver. In 1816 withdrawal and issue over a number of years was specifically ruled out with reference to the mistakes of the Great Recoinage [3]

1 Liverpool, *Coins of the Realm*, p 204 Ruding, *Annals of the Coinage*, II, 88-89.
2 *Parliamentary Debates*, 1st ser., XXXIV, cols 912-23, 960-64 (30 May 1816).
3 Ruding, *A Proposal for Restoring the Constitution of the Mint*, p. 29. *Parliamentary Debates*, XXXIV, col 960 (30 May 1816).

Detailed proposals for the conduct of the exchange, to set the new silver on its way unencumbered by the presence of the plain shillings and sixpences, were prepared during the summer months of 1816 and by September they were being discussed by ministers and others.[4] One of the thorniest questions to be resolved was how much each area would be assigned. There was a suggestion at one point that the local knowledge of country bankers be utilised to ascertain what quantity of new coin a given locality would require to exchange the old currency. The problems of such a system falling prey to over-estimation were obvious, but the system was nevertheless adopted for Scotland. The allocation of money for England and Wales, as initially described in Pole's plan, was rather based on population, using as a guide the most recent abstracts laid before Parliament; the estimated stockpile of £2.5 million was to be divided by the gross number of people of both sexes and all ages. The resulting figure of coin per person on the basis of a population for England, Scotland and Wales of roughly 12 million, would have been 4s 2d. Using this as a guide the coin was allocated to a selection of hundreds of towns and then apportioned according to the number of bankers established at each place. Francis Freeling, Secretary of the Post Office, was called in to give his advice not only on matters of population and means of transport but also to assist in making revisions to this formula by taking into account regional variations in trade[5]

Once the exchange had begun, many stations made applications for more coin and the Mint responded as it saw fit Flexibility was also built into the arrangements by encouraging bankers to share consignments of new coin and transfer quantities to neighbouring towns. Given the necessarily uncertain art of calculating a specific amount for each town or even county, the decision was made in favour of a form of distribution that could respond to the actual demands of the country as they arose The final accounts of how much each

[4] PRO Mint 1 54, Pole to Vansittart, 16 September 1816, pp. 342-44, for details of the plan for the exchange see pp. 345-68, Vansittart to Pole, 23 September 1816, pp. 372-74; Liverpool to Vansittart, 25 September 1816, pp 375-76.

[5] PRO Mint 1 54, p 535, Mint 11 74, minutes of meeting of London bankers, 22 January 1817 *Abstracts Answers and Returns of the Population of Great Britain in 1811*, Parliamentary Papers, 1812 (316), p 509

town received are not, therefore, consistent with the application of a pattern of distribution based on coin per head of population.[6]

Applying to the distribution demographic considerations was not a new idea. In 1811 the Bank of England had decided upon this course as a means of providing a more demand-centred approach to the circulation of its tokens. The scope of the Bank's scheme was less ambitious than that proposed for 1817, including as it did eighty-one locations, but the policy nevertheless demonstrated an awareness in the capital of one of the enduring problems with the system of circulating the metallic currencies - its being not sufficiently sympathetic to the requirements of the country as a whole. Matthew Boulton, too, had made efforts in this direction, committing himself to delivering copper coins to any part of the country from where orders were received.[7] For the new silver to have been issued only from Tower Hill would therefore have been going against recent trends A system of national dissemination was not, though, extended to the gold coins when they came to be issued later in 1817 and copper for years to come had to rely on the natural momentum of commerce to reach the provinces.

The role of the banking community

After the announcement in May 1816 that there was to be a recoinage, enquiries were received at the Mint and the Bank from firms or individuals requesting that they be considered as agents in the exchange of the new coin They were politely logged For England and Wales the network of hundreds of people, appointed by and acting under the authority of the Treasury, who would administer the daily business of the exchange, was founded on the country banking system The involvement of this group made a good deal of sense: through their activities, in association with their London agents, large quantities

[6] PRO Mint 1 54, pp 480-81, Mint 11 71, Attwood & Co to the Mint, 1 February 1817, Nunn & Co to the Mint, 8 February 1817.

[7] Kelly, *Spanish Dollars*, pp. 84-85. Doty, *The Soho Mint*, p. 318.

of the existing currency had ended up in the tills of retailers. The Bury St Edmunds' banker James Oakes will not have been alone in organising regular deliveries of Bank tokens from London. They were used to handling significant amounts of cash and the position of some as tax collectors further added to their familiarity with the currency; the nature and prevalence of counterfeits and foreign pieces would have been common knowledge to them. They had become an essential part of the fabric of regional finance throughout the country and their coverage was such that a comprehensive dispersal of the coin to almost every part of Britain could be assured from the very start.[8]

There is not complete agreement between banking historians on the extent of the increase in provincial banking during the second half of the eighteenth century, but there is consensus that it continued apace through the Napoleonic Wars with the result that by 1810 there were 783 firms operating. The slump of 1816 had led to bankruptcies within their ranks but with roughly 700 remaining in business, calling upon their services for the exchange was particularly appropriate Legislation limiting the number of partners a firm could contain made them vulnerable to the vagaries of the economic cycle; by 1825-26 they had declined to 554 and by the beginning of the 1840s to 311.[9] Conducting the exchange through the agency of an extended banking community would have remained an option ten or twenty years after the recoinage but that the timing coincided with one of the high points in the spread of local banking was opportune In cities such as Liverpool and Newcastle several firms were employed to release the new money. In places where the local bankers refused to act, Commissary officers assumed responsibility for the exchange and were also on hand in other areas to offer assistance. Choosing them to run some of the stations may have been determined by their availability in view of the recent slackening of military commitments. The exchange in Scotland was placed under

[8] PRO. Mint 11 70, R Cattle to Lord Lascelles, 5 June 1816; M. Abraham to Pole, 26 June 1816. Ashton, *An Economic History of England*, pp. 181-82. J. Fiske (ed.), *The Oakes Diaries Business, Politics and the Family in Bury St Edmunds, 1778-1827* (Woodbridge, 1991), II, 205, 8 July 1816.

[9] Clapham, *The Bank of England*, II, 1-2, 120-21. L. S. Pressnell and J. Orbell, *A Guide to the Historical Records of British Banking* (Aldershot, 1985), p. xvi.

the control of the Bank of Scotland.[10] A further advantage in asking country bankers and the Bank of Scotland lay in their being expected to act without payment, except in respect of their expenses and an allowance for the inspection of the old silver. The support the scheme received within the Treasury is not surprising.

To effect the exchange within two weeks was acknowledged at the time as likely to be of benefit to trade by minimising disruption. There was little feeling that such an operation, although complicated, was unduly fraught.[11] The Governor of the Bank of England's view was that a fortnight would be ample, while Sir Joseph Banks, although seeing no better way of proceeding, confessed 'I quake a little when I consider the possible result of 770 persons in England etc, an unknown number in Scotland and Ireland [being] entrusted with the management of £2,500,000 without any responsibility attaching itself to any one of them' His summary was not necessarily correct, for example in relation to the inclusion of Ireland and the actual numbers who were eventually to be involved But his questioning of the extent to which bankers would be obligated to conduct the exchange and held to account for the money sent to them should have been a concern for ministers. The tone of his remarks reflected well the sense that despite the sanguine attitude of government and the Bank, nothing quite like this comprehensive regional exchange had previously been attempted.[12] The country mints established at Bristol, Chester, Exeter, Norwich and York during the Great Recoinage of the 1690s did not make a significant contribution to the overall amount of coin issued. Only 26 per cent of the pieces struck during that recoinage were produced at a local level, whereas in 1817 the idea was to issue the vast majority of the new silver regionally, direct to the people. A further difficulty for the exchange lay in the silver having to be sent out in the middle of winter Fortunately, at least in some parts of Britain, the winter was

[1] PRO Mint 1 54, pp 450-52, 463-66; Mint 11 9, station numbers 205, 210-14, 277.

[11] *The Times*, 18 and 21 January 1817.

[12] PRO. Mint 1 54, Pole to Vansittart, 16 September 1816, pp. 342-44; Banks to Pole, 20 September 1816, pp 369-70.

particularly mild: primroses and cowslips were reported to be in blossom before the end of January.[13]

To have expected a department the size of the Mint, with a permanent staff of less than one hundred, to take on the business of a nationwide distribution without help from those who could reasonably be thought of as interested parties would have been asking too much. The involvement of several groups in this operation, the Bank of England, the Bank of Scotland, the hundreds of country bankers, the Commissariat, as well as the Corporation of London and the Goldsmiths' Company, should not have been viewed as the Mint in a crisis seeking help where it could; rather it represents evidence of a policy which made the best use of the most appropriate people to help realise an important public undertaking

Along the way, however, relations between the cooperating parties were not always entirely harmonious In May 1816 the Bank had declined Liverpool's offer to take over outright control of the silver coinage, and in the original scheme for the exchange a similarly extensive devolvement of responsibility to the Bank had been envisaged Pole indicated to Vansittart, 'you will perceive that the Issue and Exchange will be wholly managed by the Banks of England and Scotland, and by the private Bankers'. As the exchange drew closer increasingly large quantities of old coin were being presented at the Bank and the attitude took hold in Threadneedle Street that the Old Lady was being too readily put upon The Governor, Jeremiah Harman, in a meeting with the Prime Minister and the Chancellor pointed to the unreasonableness of thinking to impose on the Bank 'so much of the Odium and responsibility of a measure which in fact exclusively belonged to the Mint'. By offering advice and being the only bank in London to permit the exchange to take place on its premises the

[13] Challis, 'Lord Hastings', *NHRM*, pp. 385-86. *The Times*, 13 February 1817.

Bank of England did become an active participant; it avoided, however, submitting to the administrative minutiae of the undertaking.[14]

Postponement of the exchange

Batches of the new coin were packed ready to be transported across the country in boxes containing six £100 bags - four bags of shillings and one each of half-crowns and sixpences. The distribution began on 18 January 1817. Within the next eighteen days approximately £1,800,000 was sent to towns and cities in England and Wales as well as to stations in London. On one day alone, 21 January, £553,800 was despatched. The bulk of the new coin was transported by coach, specific amounts being delivered to individual country bankers. After the dust had settled on the exchange, Pole reflected that of all the coin sent out not a single bag had gone astray The boast was true as far as new coin was concerned but a small quantity of the old, specifically two bags which probably amounted to £200, was stolen on its return journey to the Mint from the charge of Gill & Co of Tavistock A man was arrested [15]

The exchange was scheduled to begin on Monday 3 February and to last until the seventeenth Proclamations and notices to that effect appeared in the press. The Prince Regent on opening the new session of Parliament on 28 January informed the House of Lords that the new coinage had been completed and its issue was imminent The following day a further Proclamation was circulated postponing the start until Thursday 13 February, with the period for the exchange now to continue up to and including the twenty-seventh. The explanation, reported in *The Times*, was that Monday had not after all been thought the best of days to begin, because workmen would still have most of

BE G8 18 Memorandum from the Governor to the Committee of Treasury, 6 February 1817 PRO Mint 1 54, Pole to Vansittart, 16 September 1816, pp 342-44 *Annual Register* 1817. p 13

PRO Mint 1 54 pp 397-408, 530-42, Mint 11/72, the Mint to Gill & Co 2 April 1817, the Mint t Curtis & Co 19 April 1817 their wages left and business at the stations would therefore be too hectic. Moreover, a meeting at Spafields, organised by the political radical Henry Hunt, had been planned for 3 February and the authorities feared for the tranquillity of London. The announcement coming with less than a week's notice gives cause to suspect the official line. The reasons reported may have been justification for a delay of a day or two, but *The Times* was not convinced that they could explain a deferment of several days. Some other unforeseen impediment was suspected. No fan of Hunt, the paper speculated whether he could have been prevailed upon to put off his meeting 'and have gathered his pretty little innocent lambkins together on some future day'.[16]

In his account of the exchange, Pole claimed that all the principal towns and districts in Britain had been provided with the new coin by 3 February - upwards of 70 per cent of the £2.5 million stockpile of new coin had left London by that date - but that a Cabinet decision changed the day to the thirteenth. The most likely reason for the postponement, however, was that insufficient time for distribution and setting up the exchange stations had been allowed. Delaying sending out the new coin as long as possible was understandable given the temptations that might have arisen. In addition, Liverpool was concerned that publicising the government's intentions could have been profitable for the coiners of Birmingham Enough complaints were received by the Mint during the first and second weeks of February from towns - evidently not principal towns - that had seen no sight of the new coin to suggest that this policy had not been altogether successful.[17]

The timetable of events became very compressed during the last two weeks of January The country bankers were formally asked to cooperate during mid January, the Bank of Scotland was consulted about its involvement on the

[16] *Parliamentary Debates*, 1st ser., XXXV, cols 1-5 (28 January 1817). PRO. Mint 1/54, pp. 452-54, transcript of Royal Proclamation, 29 January 1817; pp. 470-74, transcript of Royal Proclamation, 12 February 1817. *The Times*, 29 and 31 January 1817.

[17] PRO. Mint 1 54, pp. 530-42; Liverpool to Vansittart, 25 September 1816, pp. 375-76; Mint 11/71, the Mint to Ray & Son, 5 February 1817; the Mint to R. Surridge, 12 February 1817.

sixteenth; a committee of bankers, brought together to assist in organising the operation in London and more generally throughout the country, was set up on the twenty-second; and an application was made to the Common Council for use of the Guildhall as the central station for the exchange in the City on the twenty-third. Although a great deal was done prior to 3 February it was not enough to begin the exchange as originally intended.[18]

Dollar-standard silver

There was a certain amount of positive anticipation about the appearance of the new coinage In his *Political Register* William Cobbett wrote that it would drive out of circulation a considerable quantity of 'fictitious trash', and that 'we should now, to a limited extent at any rate, hear our tills once again rattle, our pockets chink with the sound of something real'. The marketing angles of its introduction were not neglected by Kipling of Cheapside, who advertised the assurance that he would continue to take French coin as well as English shillings and sixpences for the best and cheapest hosiery manufactured, while those who required a means of detecting counterfeits could buy Andrew's Gold and Silver Taste at 3s a bottle[19] But there was also apprehension that having the new coins circulate alongside the Bank of England tokens was courting disaster.

Not only were the Bank issues struck in dollar-standard silver, which at 892 was inferior to the sterling silver of the new coins by 3.57 per cent, but the difference between the intrinsic value of the tokens and their face value was also greater than the seigniorage that applied to the new currency: the market value of dollar silver varied constantly, but taking the price as 5s 4d, the highest at which the Bank of England bought dollars in that year, the tokens, being struck

[18] *The Times*, 24 January 1817. CLRO Common Council Papers, 23 January 1817 PRO Mint 11 74, minutes of meeting of London bankers, 18 and 22 January 1817, Mint 11 71, Pole to Lord Melville, 16 January 1817.

[19] *Cobbett's Weekly Political Register*, 1 February 1817 *The Times*, 6, 22 and 27 February 1817

at the rate of 6s 4d per ounce, were then circulating at 12d over their intrinsic value; the new silver coins, taking the price of sterling silver in 1817 at its highest of 5s 3½d per ounce, by comparison were to be issued at just 2½d above their intrinsic value. The fear was that since the new coins circulated at a lower face value than the Bank issues in relation to their silver content, they would be taken out of daily use, melted down and the silver employed to produce counterfeit tokens. The *Morning Chronicle* argued that the higher premium over intrinsic value at which the old coin had circulated compared with the issues of the recoinage, meant the government's policy towards the Bank's metallic currency was no different from releasing the new and yet allowing the old silver to continue in use. Why bother with an exchange at all if it was not going to apply to the whole of the silver currency?[20]

The withdrawal of the Bank issues was the responsibility not of the Treasury but of the Bank and, probably not unmindful of the possible costs involved, ministers had no intention of interfering in the redemption arrangements. Pressure could of course have been brought to bear to effect the calling in of the tokens, but the dual circulation of both types of money was expected for a limited period only. Whatever further reservations may have surrounded the acceptance of a token regal silver coinage soon evaporated when the coins were released. The old silver, by virtue of its severe wear, had effectively been a token coinage for many years and in using the Bank issues a familiarity with fiduciary currency had evidently become well established.

The exchange in England and Wales

The view of the press was that the exchange would cause a little bustle but no great inconvenience to the public. *The Courier* said of 13 February, 'nothing is

[20] Kelly, *Spanish Dollars*, pp. 78, 124. *Morning Chronicle*, 22 and 28 January 1817. *Parliamentary Debates*, 1st ser., XXXV, cols 894-901 (5 March 1817). Although of a lower fineness, dollar-standard silver on occasion fetched a higher price than standard bar silver partly on account of the shifting supply of Spanish dollars from South America.

heard this morning but the tinkle of the new coinage: the issue in a few hours is without precedent in extent in any country: the order and regularity with which it is conducted is admirable'. One man was reported to have turned up at a London station with 1,100 sixpences and to satisfy him took virtually the whole day. A firsthand account of the exchange from a banker comes from James Oakes.

> We occupied the Guild Hall & had *Mr Clay*, *Mr Fortnum* and *Jno Haddock*, our Clerk, as *Inspectors*. Being the first Day Numbers thronged but due order was kept - only 2 admitted at a time from ten to four o'clock & nothing could be more orderly. We took in about 6 or 700£ of old silver for New & agreed to a single 6d finish[in]g tell[in]g, weigh[in]g & sealing up by abt ¼ before 6 & left me rather before 8 We then sent to the Bank & completed every thing for the Eveng [21]

As can be seen from Oakes' description of the day, the exchange will have involved the bankers in a considerable amount of work. If the rate of business was not always as intense as on the first day, the bankers nevertheless had to be available over the course of the fortnight and the operation will accordingly have dominated much of their time. They took custody of the new coin sent; they set up stations suitable for the accommodation of the public which were often but not always at the premises of the bank; they ensured the presence of clerks to record the details of each application for new silver; they submitted accounts to the Mint - the request from Tower Hill was for daily returns - detailing in summary form the transactions of silver from and to the public; they transmitted surpluses of new coin to neighbouring stations when necessary; they arranged for carpenters to erect counters, constables to keep order and the inspectors to examine the old silver tendered, eventually, they ensured the despatch back to

[21] *The Times*, 25 January 1817; 17 February 1817. *The Courier*, 13 February 1817. Fiske, *The Oakes Diaries*, II, 213, 13 February 1817.

London of the old coin, as well as the return of any excess new silver that they did not wish to purchase in Bank of England notes.[22]

Despite being a Thursday rather than a Monday, and the somewhat genteel picture painted of the initial issue in London and Bury St Edmunds, the first day was in many places a frenzied affair. There were reports of windows being smashed at Tonbridge because of the pressure of the crowd, a problem also experienced at Appleby and Salisbury. Mistakes in the accounts of stations at Wellingborough, Chipping Norton, Windsor and Aberdeen were blamed on the hurry of business on the first day.[23] There was the story of a pickpocket having relieved two gentlemen of £37 in banknotes as they were forcing their way through the crowd at the exchange station in Hatton Garden. Some complained of having to wait for hours and still failing to have their silver exchanged. In his study of the London poor, Henry Mayhew recorded the memories of the 'Aristocratic' Crossing Sweeper of the day the old silver was cried down: 'my hat wouldn't hold the old silver and halfpence I was given that afternoon. I had *such* a lot, upon my word, they broke my pocket'. He went on to say that he was nearly squeezed to death when he took his hatful down to Coutts to have it changed A week into the exchange *The Times* assessed that there had been an initial rush of business followed by a marked slackening off. 'So rapid and extensive has been the exchange of the old silver for the new coinage, that the large hall given exclusively by the Bank of England for the public accommodation was yesterday nearly empty, and three-fourths of the persons employed for the purpose of exchange were left entirely idle.'[24] Throughout England, Wales and the Channel Islands £2,176,087 was received in old coin, and out of that total, including the money taken in by the Bank and the Mint,

[22] PRO. Mint 1 54, pp. 435-39.

[23] BS. Unsorted Letter Book for Silver Coins Exchanged, Bank of Scotland to Morrison, 29 July 1817 PRO Mint 11/15, station number 13; Mint 11/25, station number 201; Mint 11 28, station number 275, Mint 11/29, station number 292; Mint 11 36, station number 430, Mint 11 37, station number 442.

[24] H Mayhew, *London Labour and the London Poor: A Cyclopaedia of the Condition and Earnings of those that* will *work, those that* cannot *work, and those that* will not *work* (London, 1967), II, 467-68 *The Times*, 14, 17 and 19 February 1817. *Morning Chronicle*, 15 February 1817

£612,819 was withdrawn in London (*Table 14*). Rather like the decimalisation of Britain's currency in 1971, the success of the recoinage and exchange meant that it was news for a day or so, and thereafter without much of a controversy to exploit the press understandably lost interest.

For London large amounts of silver were dealt with at four principal stations all within the City - at the Bank of England, Goldsmiths' Hall, Guildhall and South Sea House, which was located at 37 Threadneedle Street. In addition, notice was given in the press of parts of the capital that would be served by sixteen auxiliary stations; Abbey Street, Oxford Street, Westminster, Spitalfields and Bermondsey were amongst the places chosen (*Appendix 3*). London banking houses had refused, when asked by the Mint, to open their doors to the inhabitants of the capital for fear of too much disruption to the normal course of business. But they were not uncooperative: they agreed to take charge of some of the smaller stations in London, to have their clerks offer assistance where they could, to involve themselves in the committee of bankers on the introduction of the new coin and they expressed a willingness to take in old silver as it was presented to them. Fifty-five banking houses in London received £1,200 each for the accommodation of their customers. Out of that number the accounts of only forty-four have survived. On the day before the beginning of the exchange, to satisfy himself that the arrangements were well in hand, Pole conducted a tour of several of the London stations.[25]

Old coin could also be presented at the Mint but this was to take place only from the beginning of March, after it had ceased to be current, and to continue through to the end of May; the facility was offered as a means of sweeping up what remained of the heavier silver, a minimum weight for shillings being set at 87gr which only allowed for a 6 per cent reduction from the standard. Worn

[25] GC Court Minute Book 23, 5 February 1817, p 185. *The Times*, 13 February 1817. PRO Mint 11 74, printed notice issued by the Mint, 11 February 1817; Mint 1/54, pp 417-19, 469-70, 536

silver could legitimately be cut, broken or defaced if tendered in payment from the end of the official exchange period on 27 February.[26]

The exchange in Scotland

In the autumn of 1816 the Bank of Scotland requested from the Mint information on the arrangements for the exchange, but along with many others it had to wait until January for confirmation of the nature of its involvement. The Mint from an early stage constructed its plans for Scotland around the Bank. The delay in providing information, however, stemmed from the deliberate policy of not only keeping the new coins from being seen too widely but also in preventing any knowledge of the detailed arrangements for the exchange being disclosed The advice from Pole to the Chancellor was that implementing much of the programme could be postponed until January and 'our mode of Distribution even need not be known to the Bank of Scotland till that time'.[27] Robert Dundas, Viscount Melville, Governor of the Bank of Scotland and in 1816 first Lord of the Admiralty, made a direct application to Pole on the subject of the Bank's role and he is probably to be credited with securing for the Bank the distribution of the new coinage. Pole wrote to him on 16 January expressing the wish of the government for the Bank to play an important part in the change-over, and in the weeks that followed, the frustrating silence of the previous months was transformed into a regular exchange of letters. Although the Bank had been granted control over the introduction of the Scottish recoinage issues of 1707-09, it was not necessarily the automatic choice 110 years later. Having the duty bestowed upon it was regarded as something of a coup against its old

[26] PRO Mint 11 74, printed notice issued by the Mint, 20 February 1817; Mint 1/54, pp. 489-91, transcript of Royal Proclamation, 1 March 1817

[27] PRO Mint 11 70 G Sandy (Secretary to the Bank of Scotland) to T Coutts, 30 August 1816, Mint 1/54, Pole to Vansittart, 12 October 1816, pp 377-78 BS. 1/21/3, Sandy to Pole 27 November 1816, p 78

rival the Royal Bank of Scotland which traditionally had stronger connections with London and enjoyed a greater degree of official favour.[28]

How much each area was to receive and who were to be the individuals appointed to issue the coin were decisions left to the Bank of Scotland. The Mint having ultimate responsibility was not, however, a disinterested party in how matters were organised. Advice passed readily between London and Edinburgh and there was little if any evidence of friction or of either party's regretting the choice of this way forward.[29] Details of how the operation was planned to work in England and Wales were provided and in large measure the same system was adopted, but in the area of distributing the coin the Bank relied on estimates supplied by bankers throughout Scotland. In Kirkcaldy, the branch of the Bank of Scotland suggested that in the order of £6,000 would be necessary for the accommodation of that town. Charles Campbell, the Bank's agent in Greenock, judged that between £20,000 and £40,000 would be required, a gross over estimation when seen in relation to the £10,600 of old silver eventually taken in.[30] A further difference between the systems adopted related to the involvement of Commissariat officers. Their assistance was not available north of the border which meant that the coverage of the exchange was not as comprehensive as perhaps it might have been. The Bank admitted that the northern regions in particular had not been as well served as had originally been intended because of the difficulty in finding suitable people to conduct the exchange.[31]

On 23 January £300,000 was despatched by ship to Scotland, a further £40,200 following in March by the same route. Two days prior to the shipment on the twenty-third, a convoy of Ordnance waggons carrying £200,000 of silver

[28] PRO Mint 11/70, Lord Melville to Pole, 16 January 1817; Mint 11/71, Pole to Melville, 16 January 1817, Pole to Sandy, [23 January 1817]. Checkland, *Scottish Banking*, pp. 65, 295. Saville, *Bank of Scotland*, p. 78. For Lord Melville see *DNB*.

[29] PRO. Mint 1/54, Pole to Sandy, 23 January 1817, pp. 428-34.

[30] BS 1/438/33, G Drysdale to Sandy, 24 January 1817, p. 1; BS. Unsorted: Letter Book for Silver Coins Exchanged, pp. 1-3, 54.

[31] BS. 20/32/139, Sandy to Pole, 15 March 1817.

set out to deliver coin to Scotland and the north of England. The *Nottingham Journal* reported that the progress of the 'cavalcade' excited much interest; each waggon was drawn by six horses and attended by two well-armed artillerymen, in addition to the drivers who were also armed. William Stace, of the Ordnance Department, who was charged with ensuring the safe passage of the convoy, wrote to Pole from Morpeth in Northumbria that 'all classes seem to feel an anxiety for the new coin to be brought into circulation and we *have* crowds of people at every place we *stopped*'. The convoy arrived in Edinburgh on 3 February with £93,000, over half the original sum having been distributed to towns in Yorkshire.[32]

The pattern of the exchange as reported in England of a rush of business on the first day was similar to the experience of the Bank of Scotland's office in Greenock On 13 February £700 was taken in, and in the following two weeks amounts varying between £100 and £400 were received. On the last day a further flurry of activity beset the office with £1,600 being presented.[33] The view of the Bank was that the plan devised for Scotland had given general satisfaction Accounting for the major shipments as well as transfers of coin for smaller amounts, £433,800 was sent to Scotland during the first few months of 1817, in exchange for which £423,400 was received in old coin (*Table 14*). Mint records refer to seventy-one stations having been established in Scotland. Accounts of the exchange that have survived in the Bank of Scotland's archive, however, suggest that there were at least as many as eighty-five in operation. The disparity can probably be accounted for by the survival of more detailed records at the Bank, and at least in some instances by the amalgamation of the accounts of separate stations into one town account before submission to London (*Appendix 4*).[34]

32 *The Times*, 25 January 1817. *Nottingham Journal*, 1 February 1817. PRO. Mint 11/5, invoice to the Bank of Scotland for £300,000 in new coin, 21 January 1817; Sandy to Pole, 24 March 1817, Mint 11/4, W. Stace to Pole, 30 January 1817; 3 February 1817; 14 February 1817

33 BS Unsorted. Letter Book for Silver Coins Exchanged, pp. 22-43; unpaginated account sheets for the Bank of Scotland's office at Greenock.

34 BS Unsorted· Letter Book for Silver Coins Exchanged, the Bank of Scotland to Pole, 3 December [1817]. PRO. Mint 1/54, pp. 410-11.

Although the banking historian S. G. Checkland has argued that the Bank made a profit out of the exchange, there seems little other than circumstantial evidence to support this claim. Bank dividends paid in October 1817 did rise to 4¾ per cent from the 4¼ per cent paid in April of that year, and there was an increase in the Bank's undivided product in the accounts at March 1818 over that at March 1817. There is no evidence, however, pointing to the exchange making or even contributing to this enhancement, and apart from the £2,765 of expenses claimed from the Mint, how the Bank could have generated any revenue from the operation is difficult to see.[35]

The silver circulation of Scotland by the second decade of the nineteenth century consisted principally of the remnants of the £320,372 struck at the Edinburgh mint between 1707-09 and a proportion both of the issues of the London mint and the token money of the Bank of England In his estimate of the number of coins remaining in circulation throughout Britain, the first Earl of Liverpool did not make separate allowance for Scotland, although he did remark that the country suffered from a great want of coins and capital. The greater reliance on notes in Scotland might account for there being no issue of silver tokens under the authority of the Bank of Scotland, to meet the dearth of official coin as there had been with the Banks of England and Ireland. In addition, the commercial sector in Scotland during the second decade of the nineteenth century did not follow Wales and England in the issue of silver tokens[36] Despite the sense of a modest amount of specie, the Bank of Scotland's Secretary, George Sandy, nevertheless found himself having to concede that the quantity of old coin had turned out to be much greater than originally supposed Inevitably there were deficiencies in some places[37]

The plan to execute a swift distribution in Scotland floundered a little on the sheer distances involved in transporting the coin to all the outlying regions, and if

[35] Checkland *Scottish Banking* p 295 BS 1/5/11, Ordinary Court Minutes 31 March 1818 PRO Mint 1 54 pp 561-63
[36] Liverpool *Coins of the Realm*, pp 186 225-26
[37] BS 2 32 13) Sandy to Pole, 15 March 1817

the winter weather was going to be a factor anywhere it would be in the Highlands and the west of Scotland. Reports from Buteshire on 7 March referred to there still being numerous applications for exchange by poor people from the Highlands, who had been prevented from coming sooner by tempestuous weather.[38] The Sheriff Deputy of Inverness-shire wrote at the end of February of between £15,000 and £20,000 of old coin remaining in circulation, for which, he believed, twice as long as had been allowed would be needed to complete the exchange if the ruin of thousands of people were to be avoided. Such applications were often attended with a touch of melodrama. Far from seeing a short change-over period as an advantage some pointed to the way in which trade had been hampered by this policy. Alex Robertson, an upholsterer from Peterhead, was addressing precisely this issue when in March he wrote to the Home Secretary, Lord Sidmouth. 'The Emissaries of factions', he warned, 'are availing themselves of every thing that may further their views' and, he went on, 'let me assure your Lordships it is easier to quell 10 Mobs in London than one in the Highlands of Scotland.' George Sandy believed there to be a certain amount of exaggeration in the reports of severe distress, and in relation to the charges of Alex Robertson he thought a complete misrepresentation of the situation in Peterhead had been related. Additional time in remote areas was, nevertheless, officially sanctioned by the Directors of the Bank of Scotland on 15 March and under the authority of this decision the withdrawal of the old silver continued into June.[39]

Inspecting the old silver

The inspectors of the old coin were appointed by the bankers. The advice offered from Tower Hill was that people be chosen for this role whose regular employment involved them in handling silver or coin, such as shopkeepers, and,

[38] BS Unsorted Letter Book for Silver Coins Exchanged, p. 47.

[39] PRO Mint 11 6, C. Grant to S. A. Lushington, 6 March 1817; A. Robertson to Lord Sidmouth, 14 March 1817; Sandy to Pole, 15 March 1817; 26 March 1817. BS. Unsorted: Letter Book for Silver Coins Exchanged, Bank of Scotland to Morrison, 17 June 1817.

therefore, in whose professional judgement trust could be placed when confronted by blank discs purporting to be coin of the realm. The inspectors were drawn from the ranks of silversmiths, tax collectors and bank employees, all of whom were vouched for by the bankers themselves or other respectable members of the community. Charles Campbell in Greenock appointed as inspectors two silversmiths, Robert Tumbull and John McLeod. Over thirty years later the practice of the Mint's using bank tellers during the recoinage on account of the well-known accuracy of their work was still being held up as an example of sound administration. When confronted with particularly large quantities of silver a selection was made from the total amount, examined as representative of the whole and if confirmed genuine the remainder would be assessed in bulk by weight. In settling cases of dispute inspectors were instructed by the Mint to err on the side of the public. The government was faithful to its assurances of the previous year in the sense that whether by design details, colour and ring or by scraping the surface, if coin could be determined genuine it was to be allowed as such at its nominal value regardless of its condition Notices from 1816 advising the public of the proscriptions attaching to base and foreign coin were repeated. The provision was made, however, that silver rejected at exchange stations could be presented at the Mint where it would be accepted in quantities of not less than £5 by tale at its standard silver value [4]

Although promises had been made in 1816 that no coin would be excluded on account of its weight, a minimum, below which old silver was not to be received, was enforced With the allowance for wear at 32 per cent for shillings and 50 per cent for sixpences, the parameters were, however, set at their most reasonable and with reference to what was estimated to be the state of the old silver The Mint had from time to time carried out experiments on the extent to which the old coins had been diminished by wear (*Table 2*). In September 1816,

[4] PRO Mint 1 54, pp 350-51, 440-44; Mint 11/74, notice issued by the Mint, 11 February 1817, Mint 1 41, pp. 148-50. BS Unsorted: Letter Book for Silver Coins Exchanged, pp 18-19

with arrangements for the exchange in mind, a total of £500 in old coin was received from the Bank of England. Sample shillings were found to have lost approximately 30 per cent and sixpences up to 40 per cent of their original weight, results which acted as a guide to formulating precisely how generous the tolerance for wear should be.[41]

One of the questions frequently asked of the Mint by bankers responsible for the stations was whether or not taking Irish coins in exchange for the new silver was acceptable. Press reports of Irish shillings and sixpences, which 'seem scarcely to possess any intrinsic value at all', inundating the circulation indicated the difficulty that might have arisen. The stock answer to such an enquiry was that most of the Irish shillings being of good silver would be allowed.[42]

The pieces referred to will not have been examples of the last regular issue of Irish silver, being hammer-struck coins of James I they would have had 200 years' use behind them, and Bank of Ireland tokens for 10d and 5d are unlikely to have acquired the labels 'shillings' or 'sixpences'. The newspaper reports and references in Mint documents more than likely had in mind a type of coin of which magistrates were warned in 1804. A notice issued by the Lord Mayor of London on 8 December included the observation that the Irish counterfeit coin 'is not only very light, but base in quality, and will be readily known from the thinness of both shillings and sixpences, and their being marked with a number of letters and figures'[43] In the collection of the National Museum of Ireland there is a group of fifty-five extremely worn silver coins that correspond fairly closely to this description They approximate to the diameters of shillings and sixpences, and are defaced with punch marks. In some instances full surnames are visible, probably of tradesmen, but mostly the countermarks are a seemingly random arrangement of letters. The composition of these pieces, known as slap tokens, was evidently variable, sometimes British silver coins being employed,

[41] PRO Mint 1 54, Morrison to the Bank, 18 September 1816, pp. 368-69; 370-71; 442-43.

[42] *The Times*, 13 April 1816. PRO. Mint 11/71, the Mint to Raper, Swann & Co, 1 February 1817, the Mint to Davis, Williams & Co, 6 February 1817.

[43] Ruding, *Annals of the Coinage*, II, 104-05.

while on other occasions coins of baser alloy, but there is nevertheless a strong probability that bankers were referring to this type of money during the course of the exchange in 1817.[44]

The often quoted view of the first Earl of Liverpool that by 1760 half-crowns had vanished in great numbers and crown pieces had almost totally disappeared, should be taken to mean disappeared or lost from active circulation. The indications in the years prior to the exchange of hoarding were strongly confirmed during the change-over to the new currency. In January 1805 John Tennent was convicted of breaking into the house of Robert Shaw from whom amongst other items he stole a quantity of gold coins, three crowns, four half-crowns, sixty shillings and nine sixpences. When rumours of doubts surrounding the acceptance of the old currency surfaced in the summer of 1816 the wife of a church warden in Monmouth was induced to reveal her secret of hoarding silver coin, over some considerable time she had accumulated £300 in shillings.[45]

Twelve years after John Tennent's conviction the inspector at the station in St Martin's Lane, London, was seeing the clear evidence of coins having been deliberately set to one side. He assessed on one day that the silver taken had been of the very best description, principally consisting of crowns and half-crowns *The Manchester Mercury* reported that the last three days of the exchange had chiefly brought in hoarded coins of Elizabeth I and succeeding reigns in good preservation, including crown pieces of Charles II and William III as well as various coins of Anne and George II. The likelihood of a story that appeared in the same Manchester newspaper being accurate is questionable, but if true it too would point to large quantities of silver lying idle. Lately, the paper

[44] W J Davis, *The Nineteenth Century Token Coinage of Great Britain, Ireland, the Channel Islands and the Isle of Man* (London, 1904), p. xxxix. P. Seaby, *Coins and Tokens of Ireland* (London, 1970), pp 154-55. R. A. S. MacAlister, 'A Catalogue of the Irish Traders' Tokens in the Collection of the Royal Irish Academy', *Proceedings of the Royal Irish Academy*, XL (1931), 167-70. I am grateful to Michael Kenny of the National Museum of Ireland for drawing the collection of worn Irish silver to my attention, and to Donal Bateson of the Hunterian Museum for his advice in identifying these pieces.

[45] Liverpool, *Coins of the Realm*, p. 2. *A New Pocket Dictionary of the Lives of Upwards of One Hundred Criminal Characters* (London, 1811), p. 119. *The Preston Chronicle and Lancashire Advertiser*, 10 August 1816.

related, an apparently poor old man with a clownish gait had been observed walking to and fro before the British Linen Company's bank in Dumfries. After considerable hesitation he ventured in, whereupon, having asked if they took the old silver, he presented £500 worth. One writer summed up the situation by commenting that 'many a fusty bag of accumulating faces have been dragged from their ''cave of slumbers'' '.[46]

Problems with the change-over

Originally allowing a uniform two-week period for the exchange throughout Britain was something of a misjudgement of the time that would be necessary to accommodate places as far apart as Inverness and Ipswich. Not only had several stations received no consignment of new coin by the postponed start date, with only a few days of the exchange period remaining some were still awaiting their first delivery Following several failed attempts to secure a supply direct from the Mint, the anxiety of the people of Bolton was only relieved by a hastily arranged transfer of coin from Preston; the delay, however, extended the exchange beyond 27 February (*Figure 12*).[47]

A few days after the official close of the stations, Morrison informed Commissary Officers employed across the country in issuing the new coin that 'the time for the general Exchange cannot be prolonged but any relief you can afford the Poor is desirable, you must make it appear that it is quite your own Act, Keep it quiet and consider this letter as perfectly Confidential'. In his evidence in 1819 to the parliamentary committee on the resumption of cash payments, Pole conceded that a few days further time had been allowed to the inhabitants of a few distant or obscure places for them to bring in their old coin. But a few days was a positive gloss on an extension that for example on the

46 PRO Mint 11 62, London station number 22. *The Manchester Mercury and Harrops General Advertiser*, 11 and 18 March 1817.

47 PRO. Mint 11 6, I Brocklebank to Pole, 22 February 1817; Mint 11/71, Mint to Clayton & Co. 22 February 1817

Channel Islands amounted to some weeks: the exchange began on 29 March and ended on 5 April. While such a concession would not be unexpected for Jersey and Guernsey or parts of Scotland, other towns with much less claim to obscurity, such as Abergavenny, continued receiving old coin well into March.[48]

In many instances too little coin was originally despatched. Over 400 requests were received at the Mint from stations seeking additional quantities. In most cases either a fresh consignment was despatched or the bankers were told to approach other stations in the hope that they had been sent an amount over and above what was needed. Objections were raised from communities that were not allocated their own station and supply of silver. On 16 February Maurice Johnson, a Justice of the Peace from Spalding, wrote to the Mint complaining of the town having been passed over in the distribution arrangements 'The clamour of the people', he pleaded, 'is increasing for want of an exchange of the old silver ' While this town's demands were addressed directly, others, such as Rochdale, had to rely on neighbouring areas for an exchange facility The number of times stations reported surpluses of new coin was in the region of half the number that complained of shortages.[49] But regarding initial efforts to estimate the needs of the country as unimpressive would be harsh Built into the system were mechanisms, such as the transfer of coin between stations, for addressing shortages and surpluses which helped refine what were inevitably rough indications of how much a given area would require Moreover, the intention had been to absorb with the new silver as much of the old as possible, rather than to provide a quantity of coin that was actually required for a healthy circulation. Complaints of shortages of new silver were not therefore unexpected. A wish to have an amount in excess of the exigencies of the exchange probably accounts for a fair number of the demands for additional supplies

[48] *Lords' Report on Resumption*, 1819, Appendix D. 10, pp. 378-79. PRO. Mint 1/54, p. 492; Mint 11/34, station number 393; Mint 11/74, notice on the exchange on Guernsey issued by Commissary G White.

[49] PRO. Mint 11/6, M. Johnson to the Mint, 16 February 1817; Mint 11/71, J. Entwistle to the Mint, 17 February 1817; and *passim*; Mint 11/72, *passim*.

Counterfeits of the new silver appeared very soon after their release. On 14 February reports were published of base money, simulating that of the new, already having been received in change. A Drury Lane Theatre was accused of tendering a counterfeit coin and before long they were being sighted from Gloucester to Kilmarnock. Denials from *The Courier* on 14 and 19 February that such coins existed were overtaken some weeks later by a report in the same paper of the prosecutions of William Clarke, Mary Anne Porter and Diana Ford, for uttering counterfeits of the new silver.[50] Elsewhere details of the base coins and their more obvious defects were made public. The shillings were reported to weigh about the same as a sixpence and the casing of silver to be very thin, but the edge milling and the design details, of some counterfeits at least, were thought good and therefore capable of deceiving. In the case against William Hutchison and his wife the pieces purporting to be shillings were said to be of a bad colour and imperfect impression. One suggestion was that a method had been devised of beating a sixpence to the size of a shilling, which in certain instances could account for the designs having an enlarged appearance and the pieces being visibly defaced A number of weeks after the initial reactions of concern a less complimentary view of the counterfeits tended to surface in the press, an attitude which probably developed alongside an increasing familiarity with the genuine coins [51]

A study of the court cases dealing with the counterfeiting of coin held at the Somerset Quarter Sessions during the first half of the nineteenth century, has revealed that between 1828 and 1837, whenever details of the dates of the coins are recorded, they mainly comprised the coinage of 1816-20 Moreover, of the surviving counterfeits of the period 1816-55 the overwhelming majority are copies of the last coinage of George III [52] For some years to come, therefore, the recoinage issues remained a favourite of coiners.

[50] Ruding. *Annals of the Coinage*, II, 109 *The Courier*, 14 and 19 February 1817, 5 March 1817 *Morning Chronicle*, 21 February 1817; 6 and 7 March 1817

[51] *The Times*, 17 February 1817, 6 March 1817 *Morning Chronicle*, 7 March 1817. *The Manchester Mercury*, 3 March 1817 *The Salisbury & Winchester Journal*, 3 March 1817

[52] I am grateful to Stephen Minnitt for providing me with details of his study into counterfeiting in Somerset in the early nineteenth century.

Assessment of the exchange

A year after the change-over had been completed, the lessons that could be drawn from it were being discussed with reference to the withdrawal of the Bank tokens. Thomas Babington, in the House of Commons, argued that agents should be appointed in all large towns in the country to call in the token money as had been the case some time ago with respect to the old Mint silver, while John Curwen, MP for Carlisle, on the other hand, called to mind a letter he had received from Selkirk which bemoaned the plight of many poor persons who were kept in want of the necessaries of life on account of the difficulties of exchanging their old silver coin. Curwen hoped that the same difficulties would not be repeated over the tokens. There were critics and supporters of how the exchange was conducted, the balance of opinion, however, tended in favour of seeing the operation as a success.[53]

The view of *The Salisbury & Winchester Journal* that the banks of Weymouth had completed the exchange to the entire satisfaction of the public was a view echoed throughout Britain, and even *The Times*' 'stern alarums' in 1816 respecting the Coinage Bill had been changed to remarks that referred to 'this useful measure of the new coinage' that had been 'happily and ably conducted' Twenty-four years later Pole was still receiving congratulations for the manner in which the exchange had been administered. In June 1841 the Duke of Cambridge, on returning a book Pole had sent him on the introduction of the new silver, remarked that he was 'astonished at the quickness with which you have executed the very difficult task. It proves clearly the admirable system upon which you acted and the perfect method you adopted to carry this intricate business through in a *fortnight*.'[54]

53 *Parliamentary Debates*, 1st ser., XXXVII, cols 331-32 (11 February 1818).
54 *The Salisbury & Winchester Journal*, 3 March 1817. *The Times*, 3 February 1817; 6 March 1817. Levens Hall Bagot Papers, Documents relative to His Majesty's Mint from 1812 to 1819, letter inserted at pp. 45-46, Duke of Cambridge to Pole, 25 June 1841. The book to which reference was made seems never to have been published.

A spirit of cooperation pervaded the undertaking in the country, which was reflected in banking houses who may otherwise have been rivals for business helping to meet the balance of regional demand by transferring new coin amongst themselves. James Oakes had a meeting with fellow bankers from the surrounding area of Bury St Edmunds to ensure they all acted in each other's interests during the exchange. So far from regarding their involvement as an unwanted burden were quite a number of bankers that they asked to be considered for exchanging the gold coin if such an operation were to take place. The matter of expenses was one of the largest elements of the correspondence relating to the change-over, extending to hundreds of letters, but the idea that claiming excessive allowances might be a legitimate recompense for their efforts occurred to virtually none of those employed. In only three cases out of many hundreds did a serious dispute arise between the Mint and those who ran the stations all in Gloucestershire and two curiously from the same town, Cirencester [55]

The correspondence between the Mint and those involved in the exchange amounted to over 14,000 letters. The Master of the Mint opened accounts with 496 country bankers, fifty-five London bankers, sixty-five Commissary Officers, twenty-four carriers and many minor suppliers. The actual number of exchange stations throughout Britain was probably in the region of 640. The summary details of the accounts in *Appendices 3* and *4* do not include every appointed location at which silver was issued As well as this stemming from not all of the accounts having survived, the omission also reflects the situation at some stations of the business transacted involving only the receipt and onward distribution of new coin, rather than the operation of an actual exchange facility. The average cost of running a station worked out at about £40. The net expense incurred in freight, insurance, paying inspectors and charges relating to the recoinage itself was £527,267 This calculation includes a deduction of £233,764 for the profit arising from the difference between the purchase price of

[55] Fiske, *The Oakes Diaries*, II, 212, 6 February 1817. PRO. Mint 11/71, *passim*; Mint 11/72, *passim*. Mint 1 54, p 523.

silver and the Mint price at which the new coins were issued.[56] The machinery of government had been strengthened since 1793 as a consequence of many years of war and the major logistical operation of maintaining an army overseas. Managing the recoinage and exchange seems at once fraught, but however demanding, as an exercise in the functioning of government it was not remarkable.

The involvement of many others outside the Mint in the execution of the exchange meant many letters of thanks were despatched after the accounts had been settled Pole wrote of his sincere gratitude to the Committee of Bankers, a body upon whom the Mint leant heavily in coordinating affairs throughout the Wales and England Circular letters were sent out to all the country bankers who managed the withdrawal and issue of the coin, acknowledging the commitment they demonstrated and praising the 'peculiar moderation' of the expenses submitted and 'the total abstinence from all desire of remuneration'. The Bank of Scotland also received thanks for its exertions and effectual assistance on behalf of the public. In the House of Commons, the Master expressed his sincere belief that without the active assistance of the banking interest in London, Westminster and every other part of the country the measure could never have been completed [57]

James Morrison, like the Mint official Thomas Hall during the Great Recoinage, was the unsung hero of this whole business; he provided the constant administrative backbone and was the man charged with executing the Master's instructions [58] An extra payment from the Treasury was made to Morrison at Pole's behest in recognition of his efforts, embracing as they did responsibilities beyond the normal scope of his duties. Of Pole's relationships with his colleagues, that with Morrison stands out as having been especially good, but it was not necessarily an unbroken vista of *bonhomie*. On a not infrequent number

PRO Mint 1 54 pp 409-11, 530-42, 579
PRO Mint 1 54. pp 495-96, 522-23, 528-29, Mint 11/71, Pole to I Smith, 3 March 1817
Parliamentary Debates. 1st ser , XXXV, cols 894-901 (5 March 1817)
8 Challis 'Lord Hastings', *NHRM*, p 393

of occasions Pole wrote to his deputy in an angry and impatient tone. In October 1817 he asserted that 'I cannot tell you how vexed I am at the matrix for the reverse of the crown piece being spoilt in the die press room', going on to rebuke Morrison by insisting that 'the next order you give for work not to be begun till Pistrucci is on the spot, must be given to some person responsible, and who must take care, at his own peril, that it is not disobeyed'. Although Morrison was always left in no doubt as to the strength of the Master's feelings, he was rarely the chief target of Pole's chagrin.[59]

In a letter of 30 August 1823 addressed to Pole - by that time Lord Maryborough - the chief officers of the Mint expressed their admiration for him, for the manner in which he had not only managed the department but also for the mettle he had shown in introducing the reforms of 1815. These were more than perfunctory statements of appreciation that for formality's sake the chief officers felt obliged to make. They also commissioned the design of a medal to commemorate his time at the Mint, an expression of gratitude, paid for by the officers themselves, that other Masters of the first half of the nineteenth century were not accorded The inscription on the medal drew attention to the recoinage as the major achievement of his mastership. To be honoured by his colleagues in this manner speaks well of those attributes of sound administration that even his political opponents were prepared to concede.[60]

Reaction to the new coins

The balance of opinion was in favour of the idea of reform and tended to compliment the manner in which it was introduced, but the response to the designs of the new coins was mixed. The *Morning Chronicle*'s opinion of the shillings as 'very handsome' stands out against much hostility. *The Times*

[59] Morrison had exercised the duties of Master's deputy since 1802 but only in September 1815 was the post formally recognised as part of the Mint establishment. PRO. Mint 1/18, p. 182. PRO Mint 4 27, Pole to Morrison, 19 October 1817. PRO. Mint 1/23, pp. 242-43.

[60] PRO Mint 1/23, pp. 244-47. Bagot, *George Canning*, II, 193 note.

reported that 'the new shilling and sixpenny pieces are more enriched than usual in their ornament, but we do not recognise that superiority of design and execution over all forms of coins, which the improved state of the arts gave reason to expect'. The detail of the heraldic reverse designs attracted criticism but not as much as the choice of portraits of George III. *The Gentleman's Magazine* reported the following views on the work of Pistrucci: 'as of course this Artist could not have seen his Majesty, it is a reasonable conjecture, from the discordancy of the heads on the different new Coins with each other, that we are indebted to the fertility of his genius for these varieties of deformity which disgrace the Coinage'.[61]

The debates in Parliament in 1817 did not address the reform of the currency in any fundamental way and the discussion that took place on 5 March had about it an air of frivolity Although conceding the work had been accomplished by the Mint with celerity, the opposition spokesman in the House of Commons, Henry Brougham, was on the whole disparaging. In view of comments about the coinage to which he wanted a response from Pole, and observing that the Master was seldom present other than when called upon to vote, he quipped that he should prefer Pole in the House not by tale but by his weight in his seat. Brougham thought the head of George III extremely ill-executed, and a poor likeness, particularly on the half-crown.[62] The piece was indeed vilified; the expression given to the king was thought somewhat troubled, presenting a monstrous caricature rather than a regal portrait. *The Examiner* commented that 'surely the artist must have been a wag or a Jacobin! - perhaps both Jacobin and wag' Within a matter of weeks of their issue the announcement was made that another, more sympathetic, portrait of the King was in preparation. Pole, who was probably more unhappy than anyone with the portrait on the half-crown, had to suffer the following trivial verse:

[61] *The Times*, 17 February 1817. *Morning Chronicle*, 4 February 1817. Manville, *Numismatic Guide*, II, pt I, 96.
[62] *Parliamentary Debates*, 1st ser., XXXV, cols 759-75 (27 February 1817); XXXV, cols 894-901 (5 March 1817). *The Gentleman's Magazine*, LXXXVII, pt II (1817), 309-10.

It is allowed throughout the town,
the head upon the new half-crown
Is not the George we so much prize:
the chin's not like, the nose, the eyes.
This may be true; but, on the whole,
the fault lies chiefly in the Pole.[63]

Pole emerged from the withering scorn of the sketch written by Thomas Barnes (Chapter 4, pp. 73-74) as a man with a towering sense of his own self-importance. His attitude to the silver coinage also revealed him to be something of a self-publicist He was well within his rights, as specified in his indenture, to insist on having his own privy mark on the coins struck under his mastership, but the lengths to which he went to ensure the inclusion of this mark convey the sense of a man wrapped in his own vanity. He wrote to Morrison in August 1817 reminding him of the importance of his initials, WWP, being included as part of the reverse design of the crown piece, and before the end of October he had reminded Morrison a further three times.[64] He boasted about the matter to Charles Bagot in July 1816, jokingly referring to the similarity his actions bore to those of Archbishop of York, Thomas Wolsey, who in the sixteenth century had put a Cardinal's hat on groats struck at the York mint. The presumption, Pole remarked, formed one of the articles of Wolsey's impeachment. The actual problem for Wolsey was more to do with his lack of any royal authority to strike groats at York than with the use of a particular symbol.[65]

Pole's actions in this instance indicate how intimately he felt the recoinage to be an undertaking upon which his personal reputation depended. To initial the coins was a way of anchoring the association in people's minds. Including his

[63] *Morning Chronicle*, 19 February 1817. *The Examiner*, 16 February 1817. *Parliamentary Debates*, 1st ser., XXXV, cols 894-901 (5 March 1817). Bagot, *George Canning*, II, 31.
[64] PRO Mint 4 27, Pole to Morrison, 10 August, 11 and 20 September and 5 October 1817.
[65] Bagot, *George Canning*, II, 32. C. E. Challis, *The Tudor Coinage* (Manchester, 1978), pp. 76-77

own mark may have seemed harmless enough to Pole but others saw it quite differently. The press and his parliamentary colleagues, Brougham amongst them, took great pleasure in chiding him on his weakness for self-promotion. Pole's parliamentary opponents would have regarded the counterfeits of the new currency as welcome in one respect if no other: their weak reproduction of the designs meant the Master's initials were no longer visible. Perhaps, though, Pole should have drawn comfort from attention being focused on questions of design, in the sense that it demonstrated there was no disaster to pick over. In the midst of the ribaldry there were those from whom he received support and one such was moved to write the following poem:

> Sure never the State had a Servant before
> Who gave such complete satisfaction;
> For Slander herself cannot find in her store
> One fault as a theme for detraction.
>
> She thought she *had* found one, but when it was shown,
> There was not a mortal would mind it;
> So puny it was, that no sight but her own
> Unaided by glasses could find it.
>
> Then success to the *Mint*! and its *Master* and all!
> Such censures! we well may defy them;
> May the State long have Servants whose faults are so small,
> That microscopes *only* can spy them![66]

[66] *Morning Chronicle*, 3 March 1817. PRO Mint 18/25. The poem was written by B. Barton who enclosed it in a letter to Morrison of March 1817. For the coverage the question of Pole's initials generated in the regional press see *The Manchester Mercury*, 3 March 1817; *The Salisbury & Winchester Journal*, 24 March 1817; *Shropshire Chronicle*, 7 March 1817.

The documents held at the Public Record Office dealing with the silver exchange include the accounts submitted by most of the exchange stations in England and Wales; the records of the exchange in Scotland are held at the Bank of Scotland's archives in Edinburgh. The accounts provide an insight, founded on an extensive national sample, into the possible size of the silver circulation, its distribution regionally and the extent to which it was tainted by base coin. In Leeds, for example, £15,326 was accepted, in Ludlow £3,276, in Market Rasen £929 and so on (*Appendices 3* and *4*). Throughout Britain £2,599,487 in old silver was withdrawn: £2,176,087 in England, Wales, the Channel Islands and £423,400 in Scotland (*Table 14*).

For all the detail that the returns contain they should be used with a certain degree of caution Whether stations attempted to exchange all the old coin available in a town or if they merely absorbed what they could with the quantities of new that they were sent is not clear. There is evidence, however, that suggests the totals for each town are probably a fair guide to the overall size of the silver circulation After the exchange was over some stations found themselves with more new coin than they needed, and upwards of £200,000 was returned to the Mint unexchanged. This would suggest that in many areas most of the old had a fair chance of being swept up. In addition, there are plenty of instances of stations, having exhausted their supply of new coin, resorting to banknotes or tokens to continue the exchange. Pole's judgement was that the estimated amount of silver coin in circulation of £2.5 million, prepared prior to the recoinage, appeared to have been nearly correct.[67] The attitude by and large was to make an effort to gather in as much of the existing currency as possible, even if that meant improvising. The amount of new silver available does not

[67] PRO Mint 11 15, station number 13; Mint 11/29, station numbers 221 and 235; Mint 11/14, accounts relating to the exchange. *Lords' Report on Resumption*, 1819, Appendix D. 10, pp 378-79

then seem to have strictly dictated in advance the quantity of old that was received.

As well as the distinct nature of the circulation in Scotland, the north of England exhibited features uncommon in the rest of Britain that may have affected the amount of currency withdrawn. The banker Lewis Lloyd, in his evidence to the Commons' committee on the resumption of cash payments, considered that there was a clear preference in the north west for paper currency over coin. The circulation in that part of the country in the late eighteenth and early nineteenth centuries, especially in Lancashire, consisted to a very large extent of bills of exchange and amounts for small denominations, such as £2, might have been expected to take over something of the role of coins in the settling of accounts As late as the 1820s, an estimated 90 per cent of the business of Manchester was conducted in bills of exchange. The issue by local banks of their own notes although not unheard of in Lancashire was nevertheless seldom encountered and a preference instead developed for notes of the Bank of England [68] The proportion of old coin recalled in Lancashire was by comparison to other counties in Britain fairly large, indeed the only area in excess of it was London (*Tables 14 and 15*). If the assumption is correct that the circulation of bills of exchange reduced the quantity of coin in use, then an even higher proportion of coin might have been expected had the county's currency been more typical Alternatively, the view that small denomination bills necessarily displaced the use of silver coin may require revision.

The returns of the country stations can be related to population and used to assess the extent to which a higher population actually determined a higher incidence of coin The census of 1811 provides a rough guide to the population of the country in 1817 and the number of inhabitants in each town. To achieve a more accurate picture a compensating factor would have to be employed in

[68] Ashton, 'The Bill of Exchange', in Ashton and Sayers, *English Monetary History*, pp. 37-39, 45 J H Clapham, *An Economic History of Modern Britain, The Railway Age, 1820-1850*, 2nd edition, (Cambridge, 1967), p. 265 note. *Commons' Report on resumption*, 1819, Minutes of Evidence, p. 165.

order to accommodate increases over the intervening six years. There are, however, problems with an analysis that would attempt to relate the amount of silver in towns with exchange stations to the populations of those towns, largely because it generates information that is too precise. The old coin was more than likely drawn in from districts beyond the strict boundary of a town, which if then associated with the population of that town would tend to inflate the figure for the amount of coin per person. The difficulties in this regard that might be encountered over a wider area would not disappear but would tend to be reduced The amount of old coin received by each county might then offer a more reliable guide to the relationship between population and the incidence of old coin (*Table 15*)

Throughout England the expectation that more densely populated counties had a larger circulation is not necessarily confirmed by the results. Out of the forty counties of England, excluding London and including Monmouthshire, the amount of old coin withdrawn increases progressively with advances in population in only eleven instances. On eighteen occasions the next successive increase in population reveals a fall rather than a rise. Looked at in the broadest sense, the figures do show a relationship between sizeable populations and more coin but the two are not anchored as an inevitability. There are a few notable counties whose coin/population ratios diverge strongly. The circulation of old silver in Gloucestershire at £78,857 was greater than that of five other counties with higher populations, and Northumberland's £60,286 was in advance of twelve other more populous regions. The value of coins per person in Northumberland at 7s, being by far the highest of any English county, confirms the sense of a disproportionately large number of coins in circulation in the north east The county totals of coin withdrawn placed in relation to the overall national amount of old silver, might also be employed as ratios to estimate very roughly what the incidence of other centrally issued coinages, for example that of gold, might look like

The map of the distribution of old silver (*Figure 13*) reveals that the region south of Rutland through Cambridgeshire, Hertfordshire and down to Surrey was one of fairly light coinage use, a feature shared by some areas in the north of England, together with Monmouthshire and Herefordshire. The average figure for coin per person for these areas of 2s 6d is fairly low compared to many other English counties. The highest incidence of old silver occurs in the counties of Devon, Gloucestershire, Lancashire, and the West Riding of Yorkshire all of which contained major commercial or trading centres and the extent of coin circulating at these places usually dominated the rest of the county. Almost £38,000 was withdrawn in Bristol, which is over £31,000 more than the next highest total for a town in Gloucestershire. Whether in industrialising or in agricultural areas the presence in a county of a major town or port such as Norwich, Maidstone, Canterbury, Birmingham or Coventry resulted in higher volumes of coin As with London, the larger urban areas in the provinces probably drew in currency from the surrounding region. The value of coin per head of population in the capital was 12s, and such a large figure may in part account for the seeming paucity of coin in Middlesex and Surrey.[69]

In five counties, Devon, Gloucestershire, Lancashire, Northumberland and Yorkshire, over £60,000 was withdrawn and they account for almost 30 per cent of the total exchanged in England and Wales. Outside these pockets of higher density there was a moderately even distribution of coin. Amounts within a range of £20,000 to £40,000 account for seventeen out of the forty English counties Traditionally the silver currency has been seen as not suffering, to the same degree, the problems of being deficiently spread across Britain as was the case with copper, and the records of the exchange stations confirm that the coverage of silver was genuinely national. There is no question that the silver coinage was attracted to London in larger quantities than any other part of the country, it accounted for 28 per cent of the old coin withdrawn in England and Wales, but the handful of regions that benefited from healthy supplies suggest that silver was able to find its way to areas of higher demand.

[69] *The Population of Great Britain, 1811.* Parliamentary Papers, 1812 (316), pp 510-11.

The extent of wear of all the silver coinage withdrawn throughout Britain was 26 per cent. The worst quality coin seems to have gravitated towards the Bank of England; at 30.06 per cent the old silver presented at Threadneedle Street had suffered a noticeably higher loss of weight than that presented anywhere else in Britain. The figures recorded for the London stations, the London bankers and the exchange stations throughout England, Scotland and Wales range from 24.12 per cent to 26.36 per cent. Why the Bank should have attracted more worn coin is not entirely clear.[70]

A breakdown of the weight loss of old silver in terms of denomination was not possible because mixed quantities of coin tended to be grouped together by the country bankers for despatch to the Mint; the exchange stations in England and Wales only rarely recorded in their accounts the weights of bags of silver by denomination An experiment was however conducted at the Mint after the exchange on the old silver on the basis of £24,000 split evenly between shillings and sixpences a weight loss of 28.24 per cent was found to have afflicted shillings, and a loss of 47.54 per cent applied to sixpences. In the six instances where country stations provided similar figures, which amounted to a sample size of £7,700, the wear rates for shillings tended to be between 28 and 30 per cent, while the range for sixpences was largely between 45 and 50 per cent. For Scotland a broadly similar picture was evident. Calculations based on tables of weights drawn up by the Bank of Scotland on a sample of £23,000 reveal that sixpences had suffered on average a diminution of 43.96 per cent, shillings 27.41 per cent, half-crowns 8 29 per cent and crowns 5.38 per cent.[71]

As far as fineness was concerned, the story is less straightforward. Contemporary comments suggest that the circulation was littered with counterfeits and the expectation would be that, because of the worn condition of

[70] PRO Mint 1 54, pp 584-85

[71] PRO Mint 1 54, pp 500-02, Mint 11/20, station number 112, Mint 11 22, station number 143, Mint 11 23, station number 176, Mint 11 24, station number 200, Mint 11/28, station number 277 C, Mint 11/32, station number 346 BS Unsorted Silver Coin Book (Recoinage) 1817, pp 30-34

the coin and the liberal instructions given to inspectors, large quantities of base money would have passed through the exchange stations. This, however, would be to ignore the care that was taken over the choice of appropriate individuals to act as inspectors. Sample meltings of the coins in 1817 did indeed reveal that some of the silver was well below the sterling standard of 925, but taking together all the old coin received, the fineness was a surprisingly respectable 911. Only £38,000 of absolutely base material would have been required to lower the fineness of £2.6 million of old coin to that level and this works out at just 1.5 per cent of the total value of old coins in circulation. Put another way, out of every £1 of old silver handled about 3½d was likely to have been base. The judgement of the Birmingham magistrate Isaac Spooner in January 1817 that although base coins were numerous, the quantity would probably be found less great than anticipated seems to have been sound.[72]

If the skill of the country station inspectors weeded out a majority of the obviously counterfeit pieces, then what came to be accepted might present rather too favourable an impression. The adoption, however, of a deliberately lenient attitude would have meant a fair representation of the overall standard of silver reached the Mint, and in that case the results suggest the old currency will have contained very little adulterated material. On the basis of the figures the balance of judgement ought to rest in favour of the withdrawn silver being a fair reflection of the condition of the coin in common currency, and therefore in favour of a modest number of counterfeit pieces.

The recoinage and exchange was designed to sweep away the improvised arrangements and instability of the previous twenty years. But despite its immediate success in retiring much of the old money, in March 1817 the currency remained in a troubled state. Bank dollars were still circulating, as were Bank tokens, together with a huge variety of country banknotes; the gold coinage had been exported wholesale during the Napoleonic Wars and the proposed new sovereigns were not yet on the scene; in addition, there must have

[72] PRO. Mint 11 54, pp. 584-85; Mint 11/6, Spooner to Pole, 25 January 1817.

been some ministerial anxiety about whether the new silver coinage could survive future changes in bullion prices and, avoiding the melting pot, actually remain in use. Much of the instability had been eased by 1825, but more than a decade had to elapse before the settlement of 1816-17 became firmly established.

CHAPTER 7

THE LEGACY OF CURRENCY REFORM

Concluding the design process

Although the initial recoinage and exchange at the end of George III's reign was largely concluded within ten months, by the time the full complement of denominations was finished, the whole exercise had lasted for almost four years. While, therefore, the new shillings, sixpences and half-crowns were being released into circulation, part of the substance of implementing the provisions of the Coinage Act, the issue of crowns, sovereigns and half-sovereigns as well as the larger gold coins, remained to be completed. Expressions from the Master during 1816 and 1817 of the need for haste in completing and having ready for issue as soon as possible the remaining coins ensured steady progress, but the pressure to comply with the strict deadline set for the beginning of the exchange gradually evaporated during the secondary wave of the recoinage (*Table 16*).

Of the denominations still being prepared during the spring of 1817, the sovereign and the half-sovereign were reckoned more necessary for circulation and were therefore put into production before the end of the year. The crown piece, on the other hand, had fallen out of favour as a part of the circulating medium and its decline in this respect was confirmed during the last four years of George III's reign It was reborn, however, as a coin through which an ideal could be expressed, identical to that propounded by Sir Joseph Banks several years earlier, of striving for the highest standards of craftsmanship and taste At the outset speed was urged but as the months went by the important point ceased to be despatch and became rather the perfection of every aspect of the coin Early encouragement came from Ennio Visconti, a member of L'Institut Royal de France In response to having seen a cast of Pistrucci's St George, which was intended to be used on the reverse of the crown piece, he conferred upon it praise in the most fulsome terms, referring to the excellence of its style and composition as something which set it apart from other modern coins.[1]

Pistrucci may have had the Master of the Mint as a firm ally but hand in hand with that went collaboration in the design process. In practical terms for the Italian artist, this meant he had to endure Pole's dissection of the St George composition in the form of a series of detailed amendments, from the type of sword St George should carry to concern over a deficiency in the dragon's ferocity. Towards the end of a three-month visit to Paris in the autumn of 1817, Pole insisted Pistrucci join him, believing a few face to face meetings would advance more swiftly the design of the crown than the conveying of his directions through any number of letters. The same care was afforded to the striking of the coin, the suggestion even being made at one stage that the only way to secure the necessary quality was for Pistrucci to inspect personally each of the three or four thousand coins from each day's production. Returns to the Mint Office start recording deliveries of crowns on 11 September 1818, putting the beginning of production therefore some days earlier. Once a sufficient number of satisfactory pieces was available, the pride the Master of the Mint felt in the coin was evident from the use he made of it as a presentation piece both to his political colleagues and other members of the establishment, such as the Speaker of the House of Commons and the Archbishop of Canterbury.[2]

The reaction to the second phase of the recoinage was, like that which greeted the new coins in 1817, somewhat mixed. There were plenty of compliments The Prince Regent judged the portrait on the crown to be the best head of his father he had ever seen, and Pole was so taken with the flattering notes from Banks and Lord Bathurst, again regarding the crown, that he insisted the remarks be conveyed to the moneyers. *The Gentleman's Magazine* was very

[1] PRO Mint 9 32, Account of gold monies coined, 4 June to 11 July 1817; 15 July 1817 to 13 June 1818, Mint 4 26, Pole to Morrison, 1 December 1816; Mint 1/54, Visconti to Pistrucci, 13 November 1817, pp 335-39. *DTC*, XVIII, 199-225, paper by Sir Joseph Banks on reform of the Mint.

[2] PRO Mint 4 27, Pole to Morrison, 5 and 26 October 1817; 17 and 27 September 1818.

complimentary about the crown, especially noting the technical competence of its manufacture. It also read into the reverse design a good deal more than the artist probably had in mind, seeing an obvious allegorical reference to the 'genius and valour of Britain triumphing over the Demon of anarchy and Despotism...The coin will transmit to posterity a record of the great and brilliant events which, under Providence, have led to the restoration of peace and happiness throughout the world.' There were other expressions, printed in *The Gentleman's Magazine*, of praise for the reverses of the crown and the sovereign on the basis of their presenting a welcome change from the monotonous recurrence of royal arms.[3]

Detractors included the numismatist and antiquarian Richard Sainthill who could see no discernible likeness between George III and Pistrucci's portraits of him, describing the features of the crown effigy as conveying an aspect of weakness and vacancy Subsequent generations have been more generous. The numismatic aesthete Humphrey Sutherland described the head on the crown piece as powerfully characterised, while the reverse he thought encapsulated the whole essence of classical revivalism of the early nineteenth century. The coinage as a whole is now regarded as having injected new life into the British tradition of numismatic art that had suffered for many years at the hands of mediocre late eighteenth-century engravers.[4]

Post-exchange traumas

The smooth transition over the period of the recoinage through the production and issue of the new coins was of course important, but as was found at the beginning of the eighteenth century, the operation of market forces could undo

3 PRO Mint 4 27, Pole to Morrison, 28 August 1818; 22 and 27 September 1818. *The Gentleman's Magazine*, LXXXVIII, pt II (1818), 368; XC, pt I, (1820), 227-28.

4 R Sainthill, *An Olla Podrida, or Scraps, Numismatic, Antiquarian, and Literary* (London, 1844 and 1853), I, 46-47. C. H. V. Sutherland, *Art in Coinage: The Aesthetics of Money from Greece to the Present Day* (London, 1955), p. 196.

the best laid plans. For the spring and summer of 1817, with the balance of trade running in favour of Britain and the price of precious metals at par, the new coinage was released into a sympathetic economic environment. The years immediately following, however, suggested problems ahead: the price of silver fell during 1816 to below 5s an ounce for the first time in over one hundred years, (*Appendix 1*) but from that level it rose on average each year up to 1819, reaching a high point of 5s 7d in February. The very circumstance which had obtained throughout most of the eighteenth century, of the market price being higher than the Mint price, the situation government had sought to avoid by raising silver to 5s 6d, was a reality. At the same time the foreign exchanges turned against Britain, gold coins issued by the Bank of England a few months after the silver exchange were exported to France in large numbers and the possibility of major financial reform, in the shape of planning for the resumption of cash payments, gave hope to those who in any case had reservations about the settlement of 1816 To have argued that the reforms were beginning to acquire the appearance of being something of a costly mistake would not have come as a surprise [5]

Such was the familiarity that had attached during the period of restriction to the use of notes, that in response to the Bank's offer on 28 November 1816 to pay certain of its notes in guineas in eleven days' time, very few demands were received Striking sovereigns started towards the end of May 1817, that of half-sovereigns beginning four months later, but as with the offer relating to guineas, once the new gold was available in July the response from the public was not overly enthusiastic The former Governor of the Bank Jeremiah Harman commented in February 1819 that 'people seemed indifferent about gold; that instead of coming to the bank for gold, they brought their gold to the bank'. Resolutions passed by the Bank's Court of Directors on 17 April and 18 September 1817, by which notes issued prior to specified dates could be redeemed in cash, meant a trial resumption of specie payments was under way. Although the price of gold had fallen during 1816 to £3 18s 6d, it thereafter

[5] *Parliamentary Debates*, 1st ser., XXXVII, col. 1252 (9 April 1818).

increased and sustained a level for the next two years above the Mint rate at which the sovereigns and half-sovereigns were issued.[6]

As the gold price rose and profits began to be realised from dealing in sovereigns, so the Bank encountered more demand. From July 1817 to the end of July 1818 £4,459,716 was released in new gold coins, the first substantial issue taking place in October. Sir John Newport, in the House of Commons on 10 April 1818, felt that although hardly any of these remained in circulation, only a small number had gone abroad. They were, he believed, in the possession of bankers who were amassing stocks in preparation for a return to cash payments. On the other hand, Lord Bathurst's estimate in May 1818 was that all of the £3 million to £4 million in gold recently issued had been exported, and less than a year later Robert Peel indicated that of the gold coined in France since October 1818, 75 per cent, or £5 million, was believed to have come from British gold issued since the beginning of 1816. Witnesses called before the parliamentary committees in 1819 on the resumption of cash payments testified in a similar vein The prominent Whig politician Dudley North referred to the export of struck gold to Europe as the 'twisting of straw for asses to eat'.[7]

Given the financial context in which gold was finding difficulty remaining in circulation, critics of the government's policy such as Lauderdale considered that unless a change was made to the Mint's regulations, unless, in fact, the Coinage Act was repealed, returning to a system of cash payments was an impractical proposition Lauderdale wanted to begin afresh the process of discussion into the metallic and paper currencies, justifying his arguments in favour of a silver standard by pointing to Europe and the logic of being part of a currency system employed throughout most of the continent. In indicating the pressure increases

[6] PRO Mint 9 32. Account of gold monies coined, 4 June to 11 July 1817; 15 July 1817 to 13 June 1818 *Commons' Report on resumption*, 1819, Minutes of Evidence, p. 41; Appendix 2, pp 269-70
Lords' Report on resumption, 1819, Minutes of Evidence, p. 103; Appendix D. 3, p. 372. W. Smart, *Economic Annals of the Nineteenth Century, 1821-30* (London, 1917), p. 43. *Parliamentary Debates*, 1st ser., XXXVII, cols 1229-34 (9 April 1818); XXXVII, cols 1284-85 (10 April 1818); XXXVIII, col. 944 (26 May 1818); XXXIX, cols 1398-1415 (5 April 1819)

in the price of gold were putting on the new system, he was correct, but his motions that committees of investigation be set up to examine the state of the circulating medium received the same chilly reception as did his suggestions for redrafting currency legislation in 1816.[8]

The rise in the price of silver to 5s 6d and the suspicion that is was likely to go two or three pence higher, led Thomas Frankland Lewis in March 1818 to speculate on the imminent disappearance from circulation of the new silver coinage. Opposition leader George Tierney was worried that the change in the ratio between gold and silver effected in 1816 was operating to raise the price of gold Like Alexander Baring he saw merit in the French currency system, which survived without the equivalent of £1 and £2 notes, the withdrawal of which he thought would assist in the establishment of the new metallic currencies. William Huskisson, on the other hand, had no truck with the idea of a token silver coinage having any especial influence. While discussion of the change in the ratio was a concern aired in the press in 1816, it was not an issue that had engaged Parliament during debate of the Coinage Bill, but with two years' reflection and one year of seeing the system in practice, the debate had moved on But the trends of the bullion market and the course of the foreign exchanges were yet only a cause for concern not alarm. The fundamental questioning of the reforms of 1817 was therefore neither particularly long nor involved.[9]

By the beginning of 1819 the circumstances surrounding the new currency were still unsettled and the temperature of the debate advanced, silver in the market was at 5s 7d, one penny above the newly established Mint price - an ill omen for the survival of the new coins. With fairly recent experience over the Bank of England tokens denominated 5s having to be raised in value to 5s 6d

[8] *Parliamentary Debates*, 1st ser, XXXVIII, cols 187, 190-92, 206 (20 April 1818); XXXVIII, col 947 (26 May 1818); XXXVIII, cols 971-75 (27 May 1818), XXXIX, cols 33-35 (21 January 1819) *Lords' Report on resumption*, 1819, Report, p 3

[9] *Parliamentary Debates*, 1st, ser, XXXVII, cols 710-13 (2 March 1818); XXXVIII, cols 443, 455, 490 (1 May 1818). *The Times*, 11 and 13 June 1816

several years after their original release in 1804 because of increases in the price of silver, ministers should not have been surprised at being confronted by the prospect of adjusting the rates of the new silver. Added to this there was the decline in the Bank of England's reserves of gold, from £11½ million in August 1817 to less than £4 million in February 1819 largely on account of the exodus of gold to France. Taunting expressions of uncertainty from Pascoe Grenfell in January 1819 that the consequence of silver's continued rise in price, and the prospect of its disappearance from circulation, was likely to be the introduction of paper shillings, brought from the ministers speculative responses that the recent increases in silver would probably not be sustained. The old spectre of the over issue and depreciation of paper currency was fixed in some politicians' minds as the villain in the advancing price of silver which, following through on the government's reasoning, would have led to the circular argument that a new metallic currency was judged essential before the ending of restriction and yet the continuance of restriction, because of the pressures exerted by an excessive paper currency, acted to deny any kind of stability. Whether or not change was to be effected to the coinage as a result of the strain the new system was under, the likelihood was that it would be as a consequence of attempts to resolve the future of the paper currency and its relationship to gold. The Coinage Act was not just about the mechanics of introducing a set of new coins. It was also concerned with establishing gold as the standard of value and on the security of gold in this role depended the future of the silver coinage.[10]

Petitions were read in Parliament from merchants in Leeds and Halifax, from bankers in Liverpool and from a range of financial and manufacturing interests in Bristol, pleading the case for the continuation of restriction, at least for the time being, on the grounds that resuming cash payments would cause too much economic disruption and that the country would suffer a diminution in the circulating medium In a series of letters to *The Times* during the first few

[10] Ruding, *Annals of the Coinage*, II, 107. Feavearyear, *The Pound Sterling*, pp. 215-16. *Parliamentary Debates*, 1st ser, XXXIX, cols 130-31 (27 January 1819); XXXIX, cols 149-55 (29 January 1819).

months of 1819, Richard Page, writing under the pseudonym Daniel Hardcastle, commented on the absurd regulations of the Mint which had not observed the correct value between gold and silver, making a return to specie payments highly inexpedient. Little impetus towards a decisive course of action was evident. Instead the Bank indicated its willingness for a parliamentary committee to be appointed rather than leave the question unresolved, and early in February 1819 a Lords' and a Commons' committee - the one in the House of Commons chaired by Robert Peel - were appointed to examine the state of the Bank of England with reference to the expediency of resuming cash payments.[11]

Parliamentary committees on resumption

The plan for the resumption of cash payments as detailed in the reports of the two committees presented to Parliament during the first week of May was based largely on David Ricardo's idea of a staged re-introduction of gold and was in its recommendations in essence the same. At the beginning of 1819 gold was at £4 3s, which represented a 5s ½d advance on the Mint price. Provision in the resumption plan was made for a gradual return to the long-established gold price over the course of four years by the Bank of England's redeeming its notes in gold at a progressively lower rate. From 1 February 1820 to 1 May 1823, notes were only to be exchanged for gold in the form of bullion and in quantities not less than 60oz, the redemption of notes for gold coins and an end to restriction was to be effected from 1 May 1823. The recommendation was also made from the committees that the law prohibiting the export of coin of the realm be repealed on the grounds that it had for many years been almost entirely ineffectual The intention therefore was for Britain to remain on the gold standard and the balance between silver and gold as established in 1816 to be left

[11] *Parliamentary Debates*, 1st ser, XXXIX, cols 188-89 (1 February 1819); XXXIX, cols 212-13 (2 February 1819); XXXIX, cols 276-80 (3 February 1819). *Lords' Report on resumption*, 1819, Appendix A. 2, p. 300. D. Hardcastle, pseud., [R. Page], (ed.), *The Letters of Daniel Hardcastle to the Editor of* The Times *Journal on the subject of Bank Restriction, of the Regulations of the Mint etc* (London, 1819), pp. 11-13.

intact.[12] Ricardo's ideas, as elaborated in his *Proposals for an Economical and Secure Currency*, published in 1816, had been a little more extreme than the plan in its final form, since he felt that to have gold coins circulating was a needless expense; their place in the circulation he thought could be taken by small notes. For him founding the currency system on a gold standard would only require people in extreme cases to redeem their notes in gold bullion, which meant the resulting circulation would have consisted of paper accompanied by silver and copper.[13]

The deliberations of both committees centred on the workings of the major credit instruments of the paper circulation, their impact on the economy and what difficulties might be encountered in attempting to return to a circulating gold currency Witnesses were nevertheless questioned, especially by the Lords' committee, in relation to what influence had been exerted over the price of gold and international payments by the recent changes to the silver coinage. Neither Alexander Baring nor the economist Thomas Tooke saw any grounds for being convinced of such an influence For those, however, who expressed reservations from the point of view of there seeming to be an invitation to failure if the existing Coinage Act were grafted onto a resumption plan, the fundamental point was that the Mint regulations be changed on account of the adverse effects the devaluation of silver had meted out to a range of economic indicators.[14]

Richard Page and Matthew Fletcher, both merchants with interests in Europe, were the two most forthright in supporting this perspective. As well as seeing in adjustments to the Mint price of silver the roots of increases in gold, they maintained that under the present arrangements, with gold rated higher in comparison to silver on the continent than it was in Britain, the tendency would be to export gold and import silver. The whole edifice of the currency system

[12] *Commons' Report on resumption*, 1819, Report, p. 15. *Lords' Report on resumption*, 1819, Minutes of Evidence, pp 86-87.

[13] Ricardo, *Proposals for an Economical and Secure Currency*, pp 25-26

[14] *Parliamentary Debates*, 1st ser., XL, cols 706-07 (24 May 1819). *Lords' Report on resumption*, 1819, Minutes of Evidence, pp. 121-24, 178, 188-89, 219.

was therefore seen as being built on sand. They sustained the view that there had been an effect on the value of sterling in international trade by pointing to the coincidence between the devaluation of silver by 6 per cent in 1816 and the fall in the value of British currency on foreign exchanges from 1817 by approximately the same amount; the further deduction followed that there was in this clear evidence of Britain's operating on a silver standard. For Fletcher, especially, such a reality would have been desirable. Reducing the extent of silver's devaluation, which would have entailed increasing the weights of silver coins and thereby redefining the silver/gold ratio in favour of gold, was seized on as essential if sovereigns were to be made less attractive for export. Page suggested that if gold were to remain at £3 17s 10½d then to obtain the same ratio as existed in France the Mint price of silver ought to be brought down to 5s per ounce Under the new Mint regulations the silver/gold ratio stood at 14.16 to 1, while in a majority of the markets of Europe it was over 15 to 1.[15] Behind their position was the air of legitimacy of there having been for many years no coinage of gold in general circulation to any substantial amount and of silver therefore occupying the role of principal coinage in daily use, a situation which still obtained despite the recent production of gold.

In the Report of the Lords' committee the views of Fletcher and Page were mentioned on one side and those of Robert Mushet, First Clerk of the Mint, on the other The conclusion of the committee on this question was that it could see no grounds to change the Mint regulations prior to a resumption of cash payments Liverpool had argued against such reasoning as that of Page and Fletcher in 1818 The changed status of silver he believed made it no longer capable of commanding an influence over the flows of bullion abroad by reference to its relative value as compared with gold. He commented at one point, 'silver might with reference to the gold, be leather coin or counters', and further, 'how it could be supposed that £27,000,000 of Bank of England paper, and 23 millions of country bank paper could be representative of a silver coinage

[15] *Lords' Report on resumption*, 1819, Minutes of Evidence, pp. 150-67, 237-40.

not legal tender beyond 40s and in its total amount not exceeding 4 or 5 million, was beyond his imagination to conceive'.[16]

The analysis of Page and Fletcher in relation to the international value of sterling was flawed. The principal circulating coinage for several years prior to 1817 had indeed been silver but crucially it had then consisted of coins deteriorated by a far larger degree than the six per cent of the revised Mint price. Bearing in mind the old silver was worn to the extent of twenty or thirty per cent, the Coinage Act might legitimately be seen as having represented an appreciation of fifteen per cent or more. Had Britain actually been operating on a silver standard, the foreign exchanges should have reflected something of this appreciation after 1817 but the fact that they showed no signs of shadowing silver is an indication of the weak position from which Page and Fletcher were arguing Moreover, the fall in the exchange rate as well as the drain of gold can be explained more satisfactorily, and was at the time, with reference to a straightforward trade imbalance. The value of grain imported into Britain during 1818 was nearly six times that of the value imported in 1815 and 1816 and more than double that of 1817, added to which there was a substantial export of capital during 1817 and 1818 from Britain to France, Russia, Austria and Prussia [17]

As far as Pole was concerned, proof of the efficacy of the new Mint regulations was negatively demonstrated. He commented that 'not a murmur was now any where to be heard relative to the coinage' and 'there was now no want of change' He was overstating matters somewhat, but he more modestly maintained the same opinion in his written evidence to the Lords' committee, judging the reforms of 1816 to have been administered efficiently and to be working well In the three years since the Coinage Act had come into force he

[16] *Parliamentary Debates*, 1st ser., XXXVIII, col. 192 (20 April 1818); XL, col. 627 (21 May 1819), XL, cols 1162-63 (15 June 1819). *Lords' Report on resumption*, 1819, Report, p 23

[1] *Commons' Report on resumption*, 1819, Minutes of Evidence, p. 118. Feavearyear, *The Pound Sterling*, p. 217

had not recognised in the market price of silver any immediate threat to the settlement, and to the committee as well as in Parliament he echoed Liverpool's sentiments as to the impotence of silver with reference to movements in the exchanges and the price of gold. Silver was by virtue of its limited legal tender status, and its now having to function more directly under the control of government, no different from copper as to its influence.[18]

An increase in the number of pamphlets published on the currency question from about twenty in 1818 to roughly seventy the following year is a reflection of the heightened concern. The debate in Parliament in 1819 on resumption, however, did not generate as much heat as did the report of the Bullion Committee in 1810. Those who challenged the official position in 1819 on the basis of establishing a silver standard, were ineffectual both in terms of arguments presented to the parliamentary committees and their impact on the floor of the House of Commons The bill was carried without a recorded vote.[19]

The influence of John Locke was apparent in the debates of 1819. The starting point for Peel, who leant especially heavily on Locke as an intellectual support, was the resolution in his own mind of the definition of the pound sterling as a specific quantity of metal, a belief he continued to champion many years later in the debates on the Bank Charter Act of 1844.[20] He mentioned in support of his view that Locke had entertained no abstract idea of a shilling or of a standard of value Whatever its theoretical deficiencies and Peel's unwillingness to acknowledge the strong fiduciary qualities of the currency over the past fifty years, this perspective satisfied the determination of government to turn its back on the policy adopted during the currency crisis of 1810-11. On that occasion, in answer to the debates over the report of the Bullion Committee, the wartime necessity of financial liquidity had determined a course in favour of

[18] *Lords' Report on resumption*, 1819, Appendix D. 10, pp. 378-79. *Parliamentary Debates*, 1st ser., XL, cols 720-21 (24 May 1819).

[19] Fetter, *British Monetary Orthodoxy*, p. 99. *Parliamentary Debates*, 1st ser., XL, cols 604-57 (21 May 1819), XL, cols 676-748 (24 May 1819); XL, cols 750-800, 802-04 (25 May 1819) 59 Geo III, cap 49.

[20] *Parliamentary Debates*, 3rd ser., LXXIV, col. 723 (6 May 1844).

sustaining an unredeemable paper currency; in 1819 the official position was reversed and gold was chosen over paper. Peel was the embodiment of this change of mind, as he acknowledged in his presentation of the Resumption Bill to Parliament, admitting that although he had voted against the resolutions of the Bullion Committee in 1811 he would now support such resolutions or at least the principles that underlay them.[21] There is a sense, however, in which the resumption plan was controverting Locke. It represented the confirmation of an alteration to the standard - the adoption of gold - in acknowledgement of the need to adapt to changes in the economy, and this was for Locke, who had opposed any reform of the standard, the central issue at stake. Choosing gold over silver as the standard was a concession to long-term inflationary pressures.

Survival of the gold standard

The rise in the price of silver proved to be temporary, one explanation posited being the unusually high demand, in particular from the East, at the beginning of 1819 for Spanish dollars From the end of 1817 through most of 1818 an increased demand for dollars had, despite their inferior fineness, pushed their price up on several occasions above that of sterling silver and this probably accounts, to some degree, for the rise in sterling silver over that period. The price of both types of silver began to fall rapidly by May 1819, standard silver in bars reaching 5s 2d by July and remaining at that rate for the rest of the year before dipping below 5s the following year, a rate at which it tended to stay well into the mid nineteenth century. The idea that there was in operation a currency system backed by silver did not enjoy much support after 1819, at least in the arena of parliamentary debate. Gold also gradually fell in value. From £4 3s in January 1819 it declined to a par with the Mint price by August, and the Bank

[21] *Parliamentary Debates*, 1st ser., XL, cols 678, 679-80, 695-96 (24 May 1819).

was able to administer an end to restriction by paying its notes in coin from 1 May 1821, two years before its express official obligation (*Appendix 2*).[22]

Discussion of the Coinage Act continued through the resolution of further currency issues over a number of years, its merits and defects being examined from the continually altering perspective of how the reform worked in practice. A decisive factor in the preservation of the gold standard and therefore of the Coinage Act, especially in the years immediately following the recoinage and exchange, was the indefinite postponement of opening the Mint to the public for the coinage of silver Had the necessary Proclamation been issued, as specified in the legislation of 1816 granting the public access to bring silver to the Mint, there would have existed the risk that a disproportionately large number of silver coins could have found their way into circulation and thereby presented a challenge to the position of gold.

Much was made by defenders of the resumption plan of the exclusive control ministers now had over the quantities of silver being issued. Pole referred in the House of Commons in May 1819 to the first Earl of Liverpool's recommendation that management of the silver coinage, in order that it be properly regulated, be lodged with the Bank of England and that in putting it in the hands of the government the spirit of that sentiment had been followed. This position contrasts sharply with the stated policy of the Mint in August 1816 of there being a possibility that the public would be permitted access to have silver coined in a matter of months. By March 1817 the Mint was still not ruling out the option of opening to the public, the excuse for an expected further delay of a 'very considerable time' being the quantity of old coin received through the exchange that was yet available for the production of new silver. No clear statement was offered by ministers as to why the legislation that established

[22] *Parliamentary Debates*, 1st ser., XL, col. 784 (25 May 1819). Craig, *The Mint*, p. 286. 1 and 2 Geo IV, cap 26. *Royal Mint. 1st Annual Report, 1870* (London, 1871), p. 25. See *Lords' Report on resumption*, 1819, Minutes of Evidence, p. 45, for the former Bank Director and foreign merchant William Haldimand's observation that in February 1819 there was a remarkable scarcity of dollars owing to substantial shipments to India.

the gold standard contained a clause respecting the public's access to have silver coined. Looking back at bullion prices, as the second Earl of Liverpool did in presenting the Coinage Bill, since 1773 silver had averaged a price of 5s 4d per ounce. The anticipation of a relatively high silver price and the expectation that no profit would be made from the private import of silver to the Mint may explain this matter. Alternatively, and more likely, the implications of including the clause had probably not been properly thought through. There is enough evidence of haste in the preparations for the recoinage for the suspicion to be aroused that ministers were wanting in theoretical rigour. Less than two years after the Coinage Bill became law, Lord Liverpool was defending the establishment of a gold standard on the basis of there being no open access to the Mint for the unlimited coinage of silver, suggesting, therefore, that the prospect of a Proclamation being issued was by that stage no longer on the agenda From 1816 all silver was coined on government account or with specific Treasury authority and because it was bought at the market price - at some points in that year falling below 5s per ounce - the Treasury stood to benefit over and above any 4d seigniorage. Silver being now a token coinage, the Treasury certainly saw advantage, through the fear of there being an excess, in controlling its supply [23]

The provision in the Coinage Act dealing with the public's access to coin silver was eventually dropped in 1870 following the efforts in that year of Colonel George Tomline to have silver minted on his personal account. Without the necessary legal backing his request could not be satisfied and soon after the Mint was relieved of the potential obligation by legislation which consolidated the existing coinage laws.[24]

23 *Parliamentary Debates*, 1st ser., XXXIV, cols 914, 962-63 (30 May 1816); XXXVIII, col. 192 (20 April 1818); XL, col. 720 (25 May 1819). PRO. Mint 11/72, the Mint to H. Holland, 17 March 1817. Challis, 'Mint Contracts', *NHRM*, p. 757. Craig, *The Mint*, p. 286 Fetter, *British Monetary Orthodoxy*, pp. 66-67.

24 Fetter, *British Monetary Orthodoxy*, p. 198.

Debate over the return to cash payments and, by association, of the coinage reforms continued for a number of years both in Parliament and in the pages of economic pamphlets. Pointing to the stability of the French currency system, Alexander Baring, who in 1816 had expressed reservations about the adoption of a gold standard, in March 1821 raised the idea of adopting a bimetallic standard and further suggested that in the place of notes there could circulate gold tokens. Supported by Matthias Attwood, who had opposed the resumption plan in 1819, he continued his criticism of the currency settlement later in the year, arguing that because it had led to a fall in the quantity of notes in circulation and that to the operation of the Act could be ascribed at least part of the distress of the country, it ought to be reconsidered. On both these occasions his amendments failed [25]

There had been a contraction of money and credit, this happening at the same time as a fall in prices, particularly evident in agricultural products. The total note circulation of the Bank of England fell gradually after August 1819 from £25 3 million to £17 5 million by August 1822; the Bank's deposits also declined as did the public securities it held. The effects of resuming cash payments, which were seen in the country in unemployment and a depressed state of agriculture and industry, turned what had been a general consensus in favour of official policy into doubts concerning its efficacy [26] Charles Western, a leading spokesman for the agricultural interest, in June 1822 called for a committee to examine its impact The point for Western was that given the depreciation the currency had suffered since the beginning of the 1790s, to resort to the gold standard in 1819 as it had existed more than twenty years earlier inevitably involved losses for people with long-term contracts. The appreciation of the

[25] *Catalogue of the Goldsmiths' Library of Economic Literature* (London, 1970), II, 1801-50, *passim* *Parliamentary Debates*, 2nd ser., IV, cols 1327-31 (19 March 1821); V, cols 91-97, 112 (9 April 1821).

[26] Clapham, *The Bank of England*, II, 72-74. Feavearyear, *The Pound Sterling*, pp. 224-29. *Parliamentary Debates*, 2nd ser., VII, cols 342, 344 (6 May 1822); VII, col. 375 (7 May 1822)

currency since returning to cash payments meant that debts were having to be honoured that were in real terms worth more in the 1820s than when contracted. Ministers attempted to alleviate something of the distress of agriculture by urging the Bank to cooperate in the issue between February and October 1822 of £2 million in gold coin. The Bank agreed. The debate nevertheless continued the following year with calls for a reduction in the standard and Western submitted a further resolution that a committee be appointed to take into consideration changes to the currency since 1793, together with their effects on contracts and the income of the country. Opposition to Western focused by this time on the feeling that the worst of the readjustment was over and that to embark on alterations to the settlement would be more productive of disruption than would continuing on the current basis. As in 1822, long debates were followed by defeat for the proposed measures.[27]

A further inquisition into the currency settlement occurred in 1828 under the Duke of Wellington's ministry when he and Henry Goulburn, his Chancellor, sought the opinion of the Bank on a series of issues which called into question the position of silver Baring and Huskisson had for some time been pressing the claims of bimetallism and in April 1828 some movement in that direction was made when Baring was called before the still functioning Committee on Coin to give evidence on the advantages of altering the standard of the silver currency, and the Bank was asked its opinion on a proposition to issue notes redeemable only in silver The following month an enquiry was directed at ascertaining if the Bank felt that changes respecting silver, either in altering the weight or the fineness of the coins or restoring their unlimited legal tender status, would have a positive impact on its ability to manage effectively the currency and the foreign exchanges The response from the Bank in both instances was that the arrangements as they stood were satisfactory and that reforming the silver

[2] *Parliamentary Debates*, 2nd ser., VII, col. 896 (11 June 1822); VII, col. 1606 (10 July 1822); IX, cols 833-49, 898 (11 June 1823). BE. G4/44, 4 February 1822, pp. 253-56; 28 February 1822, pp 272-77. Thorne, *House of Commons, 1790-1820*, III, 98.

currency in the manner suggested would in no way improve matters. Parliament heard nothing of the initiative.[28]

The new silver coinage therefore escaped post-war recession, the serious reservations entertained over the workings of the gold standard and the practical implications of Peel's resumption plan. Challenges resurfaced in 1830 and 1833 but they fared no better than those of the 1820s.[29] Banking and the regulation of banknotes aside, the currency survived for several decades after 1819 fairly unscathed by fundamental change, which suggests either a further instance of official neglect comparable to the eighteenth century or a system that was working reasonably well. During the greater part of the nineteenth century circumstances approximated more closely to the latter.

Managing the silver currency

After the exchange of silver in February and March 1817, many of the bankers who had been charged with the responsibility of issuing the new coins requested of the Mint information on when the exchange of the guineas would be put in hand On asking in May 1817 if the nominal value of existing gold was to be allowed in exchange for the new, one enquirer was told by the Mint that the sovereigns, which were about to be issued, were to pass into circulation alongside the guineas and that no exchange should therefore be anticipated. There was reflected in such questions a concern over the deficiency in weight of many of the guineas and whether the same terms as had applied to light silver would be repeated A large number of complaints was received at the Mint from May through to July expressing anxiety over the refusal of light gold. Those who wrote in were reminded very often of the legal restraints on the passing of worn coin and of the least current weight of a guinea, 5dwt 8grs. The new

[28] BE G4 51, 15 May 1828, pp. 52-59. *Minutes of Evidence taken before the Committee for Coin* Parliamentary Papers, 1830 (31). Fetter, *British Monetary Orthodoxy*, pp. 125-26.
[29] Fetter, *British Monetary Orthodoxy*, pp. 127-28. Smart, *Economic Annals*, pp. 519-33.

sovereigns were lighter than the guineas by one twenty-first part, so that in effect there was no difference in the standard to which the two were struck and therefore not the same unease as surrounded the circulation side by side of old and new silver (*Table 9*).[30]

There was a good deal of discussion during the deliberations of the parliamentary committees into resumption of what number of gold coins would be necessary under a restored system of specie payments. Ricardo reflected that 'the taste of the public for paper is now so confirmed, that they would have little inducement to demand gold coin, and in that case a very small quantity would be sufficient for all purposes of circulation'. Lewis Lloyd agreed that less coin than before restriction was likely to be required if notes continued in use. Whatever familiarity had attached to notes and whatever initial reluctance was abroad regarding a renewed use of gold, output levels from the Mint suggest sovereigns and half-sovereigns were fairly well rehabilitated into the circulation by the early 1820s In the ten years after their first issue, £38,270,553 were struck, as compared with a gold output of £19,051,886 in the ten years prior to 1798 and the falling off in gold production during the Napoleonic Wars. In one year, 1821, over £9 5 million were coined, 98 8 per cent of which comprised sovereigns The judgement that a smaller quantity of gold would suffice proved to be mistaken, but that prediction was made on the assumption of a sizeable number of notes remaining in circulation. The Bank, however, chose to retire many of its notes below the value of £5, their quantity falling from £6,692,050 on 5 May 1821 to £925,180 by 6 July 1822. The fall in the quantity of small Bank of England notes was offset somewhat by increases in the number of small notes issued between 1821 and 1825 by country banks [31]

Unlike the tribulations the gold coins suffered during the first years after their

[30] PRO Mint 11 72, the Mint to J. C Wilson, 13 May 1817; the Mint to Grylls & Co, 13 June 1817, the Mint to W Rea, 15 July 1817

[31] *Commons' Report on resumption*, 1819, Minutes of Evidence, pp 229, 165 Challis, 'Mint Output', *NHRM*, pp 693-94 *Mint Report*, 1837, Appendix No 35, p 224 Fetter, *British Monetary Orthodoxy*, p 107.

issue, the new silver stayed within Britain and the impression is that, after the ripples of hostility that tend to greet the introduction of any new coinage had been calmed by familiarity, they were readily accepted. Their position in the circulation having been established, the problem became one of management, of ensuring that all the efforts of 1816 and 1817 were not ruined through inattention to the condition of the coins once in use, or through a failure to keep pace with the levels of demand that the expanding economy of early nineteenth-century Britain required.

After the old coin received by the Mint during the exchange was exhausted fresh supplies of bullion were required and Britain's trading contacts with South America ensured a healthy supply. By May 1819 over £5 million in new silver coin had been issued but some of the industrial regions of Britain were still demanding further supplies That the recoinage had not absolved the country of all the currency ills and ad hoc arrangements developed during the eighteenth century is indicated by the view expressed in the *Manchester Herald* in April 1818 'it has long been a matter of surprise that the Government has not proposed some remedy to the mischiefs which the public has experienced from little shopkeepers in provincial towns, and indeed in many a paltry village, issuing cash notes upon the faith of a single, and too often obscure name'.[32] By the end of 1821 the economy had taken on board over £7 million and with a sense that the country's demands were now probably sated production thereafter calmed down More silver was coined up to and including 1821 than in the next thirty years (*Table 17* and *Figure 14*) The approach was to build up a critical mass of coin in order to gratify demand and from then on sustain a more modest profile of supply The quantity made available to absorb the stock of old silver was never meant to represent an estimate of what would be adequate, and in any case for more than two years after February 1817 the burden of circulation for the new silver was eased by the presence of the Bank dollars and tokens The

[32] J D A Thompson 'British Currency and the Importation of Bullion, 1793-1840', *BNJ*, 27 (1952-54), 76 Ashton 'The Bill of Exchange' in Ashton and Sayers, *English Monetary History* p 42

objections raised in Parliament in 1816 to their continued presence alongside the new coins because of the apprehension that the different standards to which they were struck - the coins at 5s 6d per ounce, the Bank tokens at 6s 8d - would lead to the new silver being driven out of circulation, proved groundless. They both remained in circulation through to the end of December 1818, by which time nearly all the tokens had been withdrawn, suggesting that there was more interest taken in their face value than their intrinsic value.[33]

From the end of March 1819, sporadically through to the end of June 1821, there was in production a full complement of circulating silver coin denominations, from crown through to sixpence, for the first time in almost seventy years The eighteenth-century practice of dividing a given quantity of silver into specified amounts of the various denominations (Chapter 5, p. 108) was not officially revived once building up the stockpile of new silver was completed, but through the first half of the nineteenth century a balance of output was confirmed that nevertheless approximated very closely to those proportions With half-crowns at 35.5 per cent, shillings at 43.7 per cent and sixpences at 13 8 per cent of the total silver coined, the levels of production were at most only about 5 per cent adrift from the proportions employed during the first half of the eighteenth century. Crowns at 4.19 per cent had, however, declined markedly from the 20 per cent proportion they had represented of silver output 100 years earlier [34]

The banking system, and in particular the Bank of England, played a central role in distribution of new silver throughout the country. The Mint was in all but theory closed to the striking of silver coin on private account, and the Bank therefore became the primary conduit through which issues into circulation were

[33] *Lords' Report on resumption*, 1819, Appendix D. 10, p. 378. Challis, 'Mint Output', *NHRM*, pp 694-95 BE. G23/51, Governor to Morrison, 26 December 1818, p. 88. *Parliamentary Debates*, 1st ser., XXXIV, cols 912-23 (30 May 1816).

[34] PRO. Mint 9 33, Account of silver monies coined, 21 May 1818 to 31 December 1821. *Accounts of gold, silver, and copper monies coined at the Mint*. Parliamentary Papers, 1847-48 (601), 1854 (2)

directed.[35] Discussions between the Mint, the Bank and the bankers of London regulated the quantities of silver required. On 12 March 1818 the Bank issued a notice to the effect that for a period of roughly four months from 19 March it would be in a position to issue to each of the London banks current silver coin of the realm to the amount of £20,000 in exchange for banknotes. This type of arrangement the Bank subsequently advertised on a number of occasions. A similar resolution, for example, passed on 13 July 1820, indicated that in view of London bankers' demands for silver, £1 million, in proportions to be agreed, was to be made available from 18 July. The scheme of distribution worked on the basis of the bankers of London receiving the coin from the Bank of England and thereafter, through their country bank clients, the coin was sent out across the country The fear in official circles was not of there being a shortage but rather a superabundance, a fear that it was hoped would be nullified through collaboration with the banking community. Ricardo did not share such worries concerning an excess of coin; his reading of the situation was to view with extreme scepticism the prospect of the Bank's being saddled with a stock of coins for which there was no demand. The Bank, however, had to suffer precisely that inconvenience [36]

In view of the public's being permitted to pay into the Bank of England silver coin to an unlimited amount in exchange for notes or gold, a crude impression of an excess of coin in circulation could be judged by the stock of silver held by the Bank Adequate supplies to all parts of Britain, however, could never be guaranteed regardless of the improvements in the system of distribution since the eighteenth century, and complaints from the Bank respecting their holdings of silver coin should be judged against the Old Lady's performing an at times too burdensome public duty from which she was receiving little return. During the 1820s the Bank had expressed on a number of occasions anxiety that it be

[35] Feavearyear, *The Pound Sterling*, p. 227.
[36] *Lords' Report on resumption*, 1819, Appendix D. 10, pp. 378-79. BE. G4 40, 19 March 1818, pp 229-30, BE. G4 43, 13 July 1820, pp. 102-03. *Commons' Report on resumption*, 1819, Appendix No 2, p. 270. *Parliamentary Debates*, 2nd ser., IV, col. 1332 (19 March 1821)

protected against the occasional overflowing of silver currency. Whatever else might be happening to the circulating medium, the sense from the Bank was that both silver and gold were not in short supply.

It had faithfully distributed coin through the banking system but by 1831 a pattern of receiving more coin than it was issuing resulted in the accumulation of roughly £1 million in silver coin, a quantity it described as 'a large and unquestionable excess'. Coinciding with this reported surplus of silver, and possibly a reflection of it, was a distinct decline from 1827 through to 1833 in the amount of silver coined. During those seven years less than £200,000 was minted, which represented a conspicuous fall given that between 1816 and 1850 on only four occasions, outside this seven-year period, did annual production fall below £100,000 In disposing of part of this excess, questions arose that challenged the Bank's role in helping to manage the currency. The decision was made to send to the Mint £600,000 of coin, out of the £1 million, to be melted but as a consequence the Bank found that it sustained a loss in the order of 10 per cent on the seigniorage charge - the difference between the face value and the intrinsic value of the coin A request was made for indemnity against the loss by allowing the Bank to receive subsequently from the Mint £600,000 in silver coin free of seigniorage The Bank made the point that 'it is not upon the amount of silver coin issued from the Mint, but upon the quantity required for general circulation that the government can expect ultimately to retain a seigniorage' Moreover, in order to protect itself from the recurrence of such an accumulation, the Bank specified a sum of £250,000 as a maximum stock that it would be happy to carry but amounts of coin above this sum it wanted to be a liberty to return to the Mint The resolution of this matter continued for some time Initially the Chancellor, Lord Althorp, was less than keen on the suggestion that government be obliged to accept any excess over £250,000 and the idea that there might be some public liability for losses the Bank sustained in 1831 also received a lukewarm reception. He acquiesced in January 1834 to an agreement along the lines proposed regarding the claims over the losses, but the question of arrangements being made for the receipt of surpluses of silver continued to generate tensions for several years to come. There were occasions when the Bank reported its stocks of silver to be lower than was desirable for the accommodation of the public, for example, in December 1833, only two years after it indicated a surplus, but in March 1841 an over-abundance of silver currency was again complained of by the Bank.[37]

There was a system for the supply of coin throughout the country that by the description in January 1871 of George Forbes, the Chief Cashier of the Bank, was well-founded and when managed properly worked to supply deficiencies and relieve excesses Warming to his subject he commented 'the Bank of England has its finger on the pulse of the whole kingdom, and through the Bank the Mint is always kept informed, and is always ready to supply whatever coin may be required'. From the Bank's point of view the difficulties seemed to arise less in identifying demand than they did in managing surpluses. The system clearly did not always work to everyone's satisfaction but neither did it generate crises so severe as to warrant its abolition [38]

During the fifty years after the recoinage the silver currency was not without its troubles In 1844 complaints were raised about the condition of the coinage, the collector Sir George Chetwynd feeling that its wear was as bad as when the old silver was exchanged in 1817; despite the technical advances in production areas at the Mint, the recoinage issues were amongst the most widely counterfeited of any of the first half of the nineteenth century; that gold and silver could not be processed by the Mint at the same time - a problem that centred on rolling the metal which was not resolved until the early 1880s - led to interruptions in the consistent supply of coinage; and although up to 1870 the bullion price of silver did not create tensions, towards the end of the century a marked fall in silver acted as an invitation to coiners to practise their arts. There had, however, been put in place systems to deal with some of these difficulties.

37 Challis, 'Mint Output', *NHRM*, pp. 694-95. BE. G4/51, 15 May 1828, pp. 56-59; BE. G4/56, 5 December 1833, p 218; 2 January 1834, pp. 252-61; BE. G4/63, 3 March 1841, pp 310-11

38 *Royal Mint 1st Annual Report*, pp. 72-73.

The Bank agreed to withdraw from circulation and return to the Mint worn silver, and a provision was made in the Mint accounts for the loss arising out of the silver being recoined. There were, also, what might be regarded as symbols of success. Britain in 1825 began deliberately to export its currency to those parts of the world over which it had a controlling interest - it established an imperial currency. Of coins struck by the Mint, proportions were thereafter set aside for shipment overseas; between 1825 and 1832 £1,323,192 were allocated in this way. Ministers' regarding the silver currency as ripe for export speaks well of the reforms of 1816-17.[39]

Having endured decades of a currency worn to the point of illegibility, the public's first sight of the new silver coins in February 1817 must have been a revelation But the reforms of 1816-17 carried a significance beyond the much needed supply of shillings, sixpences and half-crowns. In the 120 years after the Great Recoinage of 1696-99 the system of currency founded on gold and silver was transformed into one founded on gold, silver and paper, with silver becoming, in terms of its influence over the primary economic concerns of the country, a progressively less important element When economists talked of a shortage of currency in 1819 they were not referring to silver coins but rather to the paper circulation of the Bank of England and of the country banks. The silver coinage did not therefore wield the same influence that it did in former centuries, but the Coinage Bill of 1816 was nevertheless one of the building blocks of monetary policy in the nineteenth century. The bimetallic imbalance of the previous 100 years and the monetary instability of the restriction period found resolution in the adoption of the gold standard - a settlement that provided the framework for managing the British economy until the outbreak of the First World War

[39] PRO. Mint 4 40, George Chetwynd to the Master of the Mint, 21 September 1844. *Royal Mint. 1st Annual Report*, p. 25; *Royal Mint 23rd Annual Report, 1892* (London, 1893), p 27; *Royal Mint 24th Annual Report, 1893* (London, 1894), p. 35. Dyer, 'Quarter-Sovereigns', *BNJ*, 67 (1997), 75-76. Craig, *The Mint*, p. 311. For figures on the quantities of silver coin issued overseas see RM. Library file, Imperial Currency.

Prices of standard silver, 1697-1820
(Price of silver per ounce)

	Market prices of standard silver, 1697-1820				Prices paid by the Bank of England for silver bullion, 1697-1811			
	Lowest		Highest		Lowest		Highest	
	s	d	s	d	s	d	s	d
1697	-		-		5	1½	5	2¾
1698	-		-		5	2½	5	2½
1699	-		-		-		-	
1700	-		-		5	2	5	2
1701	-		-		5	1¾	5	2
1702-1709	-		-		-		-	
1710	-		-		5	3	5	3
1711-1717	-		-		-		-	
1718	5	5	5	5¾	-		-	
1719	5	3½	5	5¾	-		-	
1720	5	4½	5	8	5	0	5	4
1721	5	4	5	6	-		-	
1722	5	4	5	4¾	-		-	
1723	5	3¼	5	4¾	-		-	
1724	5	3½	5	3½	5	2	5	2
1725	5	3½	5	3½	-		-	
1726	5	4	5	6	-		-	
1727	5	3¼	5	4	-		-	
1728	5	3¼	5	5½	5	5¾	5	5¾
1729	5	5½	5	5½	5	2	5	2
1730	5	4½	5	5½	5	2	5	2
1731	5	3½	5	5	5	4½	5	5
1732	5	3⅝	5	4¾	5	4	5	4⅝
1733	5	4	5	4¾	5	2	5	4¼
1734	5	2½	5	3¼	5	1⅞	5	3
1735	5	2⅝	5	3¼	5	2¼	5	2¼
1736	5	3	5	4	5	2	5	3¼
1737	-		-		5	3½	5	4⅝
1738	-		-		5	2	5	4
1739	-		-		5	5½	5	5½

	Market prices of standard silver, 1697-1820				Prices paid by the Bank of England for silver bullion, 1697-1811			
	Lowest		Highest		Lowest		Highest	
	s	d	s	d	s	d	s	d
1740	-		-		5	4	5	7
1741	-		-		5	7⅜	5	8
1742	-		-		5	2	5	2
1743	-		-		5	2	5	2
1744	-		-		5	2	5	2
1745	-		-		5	0	5	2
1746	5	3	5	5½	5	2	5	2
1747	5	5	5	5½	5	3¾	5	3¾
1748	5	4	5	5½	5	3½	5	3½
1749	5	4	5	5¼	5	3½	5	3½
1750	5	4	5	6¼	5	5	5	5
1751	5	4⅝	5	5¾	5	4¾	5	4¾
1752	5	5¾	5	6⅝	5	5	5	5
1753	5	6¾	5	7¼	5	6	5	6
1754	5	5½	5	7	5	5	5	5
1755	5	4⅛	5	5	5	3⅜	5	3⅜
1756	5	3½	5	5	5	2¾	5	2¾
1757	5	3¼	5	5⅜	5	2½	5	2½
1758	5	4¾	5	8	5	7	5	7
1759	5	6⅛	5	8½	5	0	5	0
1760	5	6	5	9	5	5¾	5	5¾
1761	5	6¼	5	9½	5	8	5	8
1762	5	4⅜	5	8½	5	5	5	5
1763	5	4½	5	8	5	4	5	4
1764	5	3⅜	5	4½	5	2	5	2
1765	5	3½	5	5¾	5	3	5	3
1766	5	5¾	5	7½	5	4¾	5	4¾
1767	5	6¼	5	7½	-		-	
1768	5	5½	5	6¾	5	4⅛	5	5½
1769	5	6¾	5	7¾	5	5½	5	6¼
1770	5	6½	5	8¼	5	6¼	5	7¼
1771	5	7	5	8	5	5¾	5	7¼
1772	5	4½	5	8¼	5	6¼	5	6¼
1773	5	2¾	5	4¾	-		-	
1774	5	2¼	5	4	-		-	

	Market prices of standard silver, 1697-1820				Prices paid by the Bank of England for silver bullion, 1697-1811			
	Lowest		Highest		Lowest		Highest	
	s	d	s	d	s	d	s	d
1775	5	3½	5	5¼	5	2¼	5	2½
1776	5	3½	5	6½	5	2¼	5	3½
1777	5	6¼	5	9	5	4	5	4½
1778	5	2	5	9	5	0½	5	3
1779	5	2	5	4½	5	0	5	0½
1780	5	2½	5	6	5	0	5	0
1781	5	5½	5	10¼	-		-	
1782	5	8	5	11½	-		-	
1783	5	6	5	10¼	-		-	
1784	5	2¾	5	5½	4	11½	5	3½
1785	5	1½	5	2¾	4	11	5	1¾
1786	5	2¾	5	3¾	5	0½	5	2
1787	5	2¾	5	4	5	0¾	5	1¾
1788	5	3¾	5	3¾	5	1	5	1
1789	5	2½	5	3¾	4	11½	5	1
1790	5	2½	5	3¾	4	11½	5	0¼
1791	5	2¼	5	3½	4	11½	5	2
1792	5	4	5	6	5	1	5	1½
1793	5	1	5	5	4	10½	5	0
1794	5	1	5	2	4	10½	5	1
1795	5	1	5	5½	4	10½	5	1
1796	5	3½	5	6	5	1	5	3½
1797	5	0½	5	6½	4	10	5	5½
1798	5	0	5	1½	4	11	5	1
1799	5	2	5	8	5	1	5	6
1800	-		-		5	4	5	7½
1801	-		-		5	9	5	11
1802	5	6	5	11½	5	9	5	11
1803	5	6	5	8	5	2½	5	8¼
1804	5	5	5	8½	5	0	5	10
1805	-		-		5	1	5	6
1806	-		-		5	5	5	7
1807	5	6	5	8	5	3	5	6
1808	-		-		5	3	5	6
1809	-		-		5	3	5	7

	Market prices of standard silver, 1697-1820				Prices paid by the Bank of England for silver bullion, 1697-1811			
	Lowest		Highest		Lowest		Highest	
	s	d	s	d	s	d	s	d
1810	-		-		5	5	5	10½
1811	5	11½	6	4	5	8½	5	10
1812	6	3½	6	7	-		-	
1813	6	7½	6	11	-		-	
1814	6	11½	6	11½	-		-	
1815	5	4½	6	9½	-		-	
1816	4	11½	5	4½	-		-	
1817	5	0½	5	3½	-		-	
1818	5	3½	5	6	-		-	
1819	5	2	5	7	-		-	
1820	4	11½	5	2	-		-	

Note In virtually every year for which both sets of prices are quoted the Bank paid less than the market price for its silver.

Source *Account of Market prices of gold and silver bullion.* Parliamentary Papers, 1810-11 (43), 1812-13 (131); 1813-14 (101); 1818 (30, 216); 1819 (18, 354); 1821 (350) *Account of prices paid by the Bank of England for gold and silver bullion.* Parliamentary Papers, 1810-11 (69).

Appendix 2

Market prices of standard gold, 1710-1820
(Price of per ounce)

	Lowest £ s d	Highest £ s d
1710	4. 0. 0	4. 0. 0
1711	4. 0. 0	4. 0. 0
1712	3.19.10	3.19.10
1713	3.19.10	3.19.10
1714	4. 0. 0	4. 0. 0
1715	3.19.10	3.19.10
1716	3 19 11	3.19.11
1717	3 19 11	3.19.11
1718	3 18. 1	3.19.10
1719	3 17 9	3.18. 3
1720	3 18 0	4. 1. 6
1721	3.17.10	3.18. 9
1722	3 17.10	3.18. 0
1723	3 17.10	3.18. 9
1724	3 17 11	3.18. 1
1725	3 17 11	3.17.11
1726	3 17 10	3.17.11
1727	3 17 10	3.17.10
1728	3 17.10	3.19. 0
1729	3 18 2	3.19. 1
1730	3 18 2	3.19. 0
1731	3 18. 0	3.18. 4
1732	3 18. 0	3.18. 3
1733	3 18 1	3.18. 4
1734	3.18. 0	3.18. 2
1735	3.18. 1	3.18. 8
1736	3.18. 1	3.18. 2
1737	3.18. 0	3.18. 0
1738	3.18. 0	3.18 0
1739	3.17.10½	3.18. 0

	Lowest	Highest
	£ s d	£ s d
1740	3.17.10½	3.17.10½
1741	3.17.10½	3.18. 0
1742	3.17.10½	3.17.10½
1743	3.17.10½	3.17.10½
1744	3.17.10½	3.17.10½
1745	3.18. 0	3.18. 0
1746	3.17.11	3.17.11
1747	3.17.11	3.18. 8
1748	3.17.10½	3.18. 6
1749	3.17.10½	3.17.10½
1750	3.17.10½	3.18. 8
1751	3.17.10	3.17.11
1752	3 17.10½	3.18. 3
1753	3 18 0	3.18. 6
1754	3 17 10	3.18. 5
1755	3 17 10	3.17.11
1756	3 17 10½	3.17.11
1757	3 17 10½	3.18. 0
1758	3 17 11	3.19. 2½
1759	3 18 6	4. 0. 3
1760	3 18. 5	3.19. 6
1761	3 18 2	4. 0. 8
1762	3 18 9	4. 0. 0
1763	3 18 3	4. 1. 6
1764	3 18 0	3.18. 3
1765	3 18 0	3.18. 8
1766	3 18 4	4. 0 0
1767	3 19 3	4. 0. 0
1768	3 18 8	3.19. 7
1769	3 19. 7	4. 0. 8
1770	3 19 4	4. 0. 6
1771	3 18 9	4. 0.10
1772	3 18. 0	4. 1. 3
1773	3.17 9	3.18. 0
1774	3 17. 7	3.17. 9

	Lowest	Highest
	£ s d	£ s d
1775	3.17. 7	3.17. 7
1776	3.17. 0	3.17. 7
1777	3.17. 7	3.17. 7
1778	3.17. 7	3.17. 7
1779	3.17. 6	3.17. 7
1780	3.17. 6	3.17. 6
1781	3.17. 6	3.17. 6
1782	3.17. 6	3.17. 9
1783	3.17. 9	3.18. 0
1784	3.17.10½	3.18. 0
1785	3.17. 6	3.17.10½
1786	3.17. 6	3.17. 6
1787	3 17. 6	3.17. 6
1788	3.17. 6	3.17. 6
1789	3.17. 6	3.17. 6
1790	3 17. 6	3.17. 6
1791	3 17 6	3.17. 6
1792	3 17 6	3.17. 6
1793	3 17 6	3.17. 6
1794	3 17 6	3.17. 6
1795	3 17. 6	3.17. 6
1796	3 17. 6	3.17. 6
1797	3 17 6	3.17.10½
1798	3 17 9	3.17.10½
1799	3 17. 9	3.17. 9
1800	3 17 9	3.17. 9
1801	-	-
1802	-	-
1803	-	-
1804	4 0. 0	4. 0. 0
1805	4. 0. 0	4. 0. 0
1806	4. 0. 0	4. 0. 0
1807	4. 0. 0	4. 0. 0
1808	4. 0. 0	4. 0. 0
1809	4. 0. 0	4. 0. 0

	Lowest	Highest
	£ s d	£ s d
1810	4. 4. 0	4. 5. 0
1811	4.11. 0	4.19. 6
1812	4.15. 0	5. 7. 0
1813	4.17. 0	5.10. 0
1814	5. 8. 0	5. 8. 0
1815	4 2. 0	5. 7. 0
1816	3.18. 6	4. 2. 0
1817	3.18. 6	4. 0. 6
1818	4. 0. 0	4. 3. 0
1819	3.17.10½	4. 3. 0
1820	3 17 10½	3.17.10½

Source *Account of Market prices of gold and silver bullion.* Parliamentary Papers, 1810-11 (43); 1812-13 (131); 1813-14 (101), 1818 (30, 216); 1819 (18); 1821 (350).

Appendix 3

Silver coin withdrawn in England, Wales,
the Channel Islands and the Isle of Man, 1817

England

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Bedfordshire		
Ampthill	S May	1,200. 0. 0	1,228.12. 6
Bedford	Barnard & Co	3,000. 0. 0	3,114. 7. 0
Biggleswade	Hogg & Co	1 200. 2. 0	1,205. 8. 6
Leighton Buzzard	Bassett, Grant & Co	3,000. 0. 0	3,064. 6. 6
Luton/Dunstable	Hampson & Co	1,200. 0. 0	1,267. 5. 0
	Berkshire		
Abingdon	Spenlove & Co and Knapp & Co	3,600. 0. 0	3,281.13. 0
Farringdon	Ward & Co	2,400. 0. 0	3,042.14. 0
Maidenhead	G W Wetton	-	16.10. 0
Newbury	Bunny & Co	4,800. 0. 0	5,027. 1. 0
Reading	Stephens, Harris & Stephens	4,800. 0. 0	5,857. 3. 0
	J C & H Simonds	4,200. 0. 0	5,871.14. 6
Wallingford	Wells, Allnot & Co	3,000. 0. 0	3,433.11. 0
Windsor	Ramsbottom & Co	2,400. 0. 0	2,498. 9. 0
	Buckinghamshire		
Aylesbury	Rickford & Son	4,200. 0. 0	5,044. 0. 6
Buckingham	Bartlett & Nelson	2,700. 0. 0	3,577. 9. 6
	Box & Parrott	900. 0. 0	958.14. 6
High Wycombe	J Gomme	3,600. 0. 0	3,263. 8. 6

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Buckinghamshire (continued)		
Stony Stratford/ Newport Pagnell	Olivers & Co	3,000. 0. 0	3,370. 0. 0
	Cambridgeshire		
Cambridge	Mortlock & Sons, Fisher & Son and Foster & Co	9,000. 0. 0	10,582. 2. 0
Chatteris	Gurney & Co	1,500. 0. 0	1,245.18. 0
Ely	Mortlock & Sons	2,400. 0. 0	2,177.19. 0
Newmarket	Eaton, Hammond & Co	3,000. 0. 0	2,413.15. 0
Wisbech	Gurney, Buckbeck & Peckovers	5,100. 0. 0	5,811. 2. 0
	Cheshire		
Chester	Williams & Co	12,000. 0. 0	7,279.14. 6
	Dixon & Chilton	9,600. 0. 0	6,095. 1. 0
Congleton	Johnson & Co	2,400. 0. 0	2,100. 0. 0
Macclesfield	Daintry & Ryle	2,400. 0. 0	2,486. 4. 6
	Brockelhurst & Co	1,800. 0. 0	1,859. 6. 0
Nantwich	Broughton & Co	1,800. 0. 0	3,220.14. 0
Northwich	T. W. Williams	3,000. 0. 0	2,480. 8. 6
	Cornwall		
Bodmin	Glyn & Co	3,600. 0. 0	3,133.14. 6
Falmouth	Banfield & Co	1,800. 0. 0	1,794. 0. 0
	Praed, Rogers & Co	2,027. 2. 0	2,128. 2. 6
Helston	Grylls & Co	2,400. 0. 0	3,747.11. 0
Launceston	Glyn & Co	1,800. 0. 0	1,095. 9. 6
	Harvey & Son	1,800. 0. 0	1,471. 1. 0
Liskeard	Robins & Co	2,400. 0. 0	2,599.15. 6
Mevagissey	Ball & Son	1,800. 0. 0	1,210. 9. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Cornwall (continued)		
Padstow	Rawlings & Son	1,200. 0. 0	758.16. 0
Penzance	Batten, Carne & Boase	4,800. 0. 0	6,531. 0. 0
Redruth	Pryce & Co	1,800. 0. 0	1,587. 0. 0
St Columb	Norway, Mager & Co	1,200. 0. 0	1,203. 7. 0
Truro	Praed, Rogers & Co	3,972.18. 0	3,948.14. 6
	Daniell, Willyams & Co	1,200. 0. 0	1,661.16. 6
	Cumberland		
Carlisle	Elliott, Forster & Co	3,600 0. 0	3,418.11. 0
	Forster & Co	8,400. 0. 0	8,385.13. 6
	Graham & Co	3,000. 0. 0	2,909.18. 0
	Carrick & Sons	3,000. 0. 0	3,000. 0. 0
Penrith	Atkinson, Craig & Co	4,070. 0. 0	3,152. 6. 6
	W James	1,199.19. 0	599.19. 0
Whitehaven	Johnston, Raney & Co	4,200. 0. 0	4,000. 0. 0
	Hartley & Co	5,400. 0. 0	5,398.11. 0
	Harrison & Co	4,200. 0. 0	2,672. 8. 0
Workington	W Swinborn	2,400. 0. 0	858. 6. 6
	Derbyshire		
Chesterfield	Abney & Maltby	5,400. 0. 0	4,682. 7. 6
Derby	Smith & Co	6,600. 0. 0	6,599. 6. 6
	Crompton, Newton & Co	5,400. 0. 0	4,973. 8. 6
Wirksworth	Arkwright, Toplis & Co	4,200. 0. 0	4,336.16. 0
	Devon		
Ashburton	Brown & Co	3,600. 0. 0	2,900. 0. 0
Barnstaple	Bury, Pike & Co	5,400. 0. 0	6,633. 3. 6
Bideford	Burnard & Co	2,300. 0. 0	1,811. 0. 6
	Ley & Co	1,200. 0. 0	1,311. 0. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Devon (continued)		
Brixham	Hine, Holdsworth & Co	1,200. 0. 0	966. 4. 6
Cullompton	Skinner, Brown & Co	2,000. 0. 0	1,821. 7. 6
Dartmouth	Hine & Holdsworth	1,400. 0. 0	1,045. 4. 0
	Harris, Longhorn & Co	1,200. 0. 0	1,167. 9. 0
Exeter	Williams, Sparkes & Co	11,600. 0. 0	11,851.18. 0
	Sanders & Co	6,442.19. 6	5,685.19. 0
	Milford, Nation & Co	6,600. 0. 0	6,370. 7. 6
Holsworthy	Fry & Bassett	1,200. 0. 0	957. 8. 0
Honiton	Flood, Lott & Co	2,500. 0. 0	2,387.11. 6
	Smith & Co	1,700. 0. 0	1,560. 0. 0
Ilfracombe	Lee, Locke & Co	600. 0. 0	441.19. 0
Kingsbridge	Prideaux, Square & Co	3,000. 0. 0	1,866.12. 6
Modbury	R Perring	1,200. 0. 0	805.14. 0
Newton Abbot	Wise, Farwell & Co	2,400. 0. 0	2,411. 4. 6
Okehampton	R Dymond	1,800. 0. 0	1,800. 0. 0
Plymouth	Elford & Co	4,800. 0. 0	6,140. 8. 0
	Glencross, Hodge & Norman	3,000. 0. 0	2,623. 1. 0
	St Aubyn, Shiells & Co	3,000. 0. 0	2,540.18. 6
	Husband & Son	3,600. 0. 0	3,363. 4. 0
	Harris, Rosden & Co	3,600. 0. 0	3,613. 2. 6
Tavistock	Gill, Rundle & Co	1,800. 0. 0	1,940.19. 0
Teignmouth	Langmead, Holland & Jordan	1,200. 0. 0	1,100. 0. 0
Tiverton	Dunsford, Barne & Boase	2,400. 0. 0	2,543. 5. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Devon (continued)		
Torrington	Cooke, Kingdon & Co	1,300. 0. 0	1,191.11. 0
Totnes	Wise & Co and Prideaux & Co	2,557. 0. 6	2,517.12. 6
	Dorset		
Blandford	Fryer, Andrews & Co	1,900.10. 0	1,770. 8. 6
	Dansey & Co	999.10. 0	1,108. 5. 0
Bridport	Gundry & Co	3,600. 0. 0	3,245. 9. 6
Dorchester Beaminster	Cox, Merle & Pattison	4,800. 0. 0	3,964.17. 6
Shaftesbury	Story & Co	3,000. 0. 0	4,279. 8. 0
Sherborne	Praetor & Co	2,400. 0. 0	2,234. 8. 0
	Thorn & Co	1,100. 0. 0	864. 7. 0
Sturminster	Warry & Co	1,200. 0. 0	1,200. 0. 0
Weymouth	W. Bower	2,400. 0. 0	1,481.16. 0
	Henning, Bower & Co	1,200. 0. 0	961. 3. 0
Wimborne Poole	Fryer, Andrews & Co	6,700. 0. 0	5,021. 0. 0
	Durham		
Darlington	Backhouse & Co	6,877.18. 6	6,029. 0. 0
Durham	Backhouse & Co	5,122. 1. 6	5,047.19. 6
Stockton	Hutchinson & Place and Skinner & Co	8,400. 0. 0	6,668.16. 0
Sunderland	Backhouse & Co	10,800. 0. 0	8,159.16. 6
	Essex		
Bishop's Stortford	Mortlock & Sons	3,000. 0. 0	2,575. 7. 6
Braintree	Sparrow, Brown & Co	6,600. 0. 0	5,839. 2. 0
Chelmsford	Crickett, Russell & Co	3,600. 0. 0	2,964.16. 0
	Sparrow, Brown & Co	4,800. 0. 0	3,520.19. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Essex (continued)		
Coggeshall	Sparrow, Brown & Co	2,400. 0. 0	2,211. 3. 6
Colchester	Crickett, Round & Co	10,300. 0. 0	10,794.11. 6
Grays/Rayleigh	Attersole & Co	600. 0. 0	510. 0. 0
Harwich	Cox & Nunn	1,800. 0. 0	1,179.13. 0
Maldon	Crickett, Russell & Co	2,400. 0. 0	2,400. 9. 6
Manningtree	Alexanders & Co	1,800. 0. 0	1,637. 4. 0
	Nunn, Mills & Co	2,400. 0. 0	1,588. 8. 0
Romford Brentwood Rochford	Joyner, Surridge & Co	3,600. 0. 0	4,093. 3. 0
Saffron Walden	Searle, Low & Co	3,600. 0. 0	3,363. 2. 6
Snaresbrook	J & E Clarke	1,200. 0. 0	851. 9. 0
Witham	Sparrow, Brown & Co	2,300. 0. 0	1,605.10. 6
	Gloucestershire		
Bristol	Commissary T Osborne	38,800. 0. 0	37,892.13. 0
Cheltenham	Fisher, Wells & Co	2,700. 0. 0	2,472. 8. 0
Cirencester	Pitt, Croame & Co and Cripps & Co	4,346 6. 0	5,629.14. 6
Dursley	Bloxsome & Co	1,264 9 0	1,823. 9. 0
	Commissary A Trotter	1,800. 0. 0	1,761.14. 0
Gloucester	J Wood	4,800. 0. 0	4,116. 7. 0
	Turner, Morris & Co	7,200. 0. 0	5,972. 6. 6
Marshfield	Baldwin & Co	600. 0 0	600. 0. 0
Stow-on-the-Wold	J E. & C. Cripps	3,453 14 0	3,373. 0. 0
Stroudwater	Martin, Mills & Co	5,400. 0 0	4,625 0. 0
Tetbury	Wood, Pitt & Co	4,000. 0 0	4,401. 1. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Gloucestershire (continued)		
Tewkesbury/ Upton	Lechmere & Co	2,400. 0. 0	2,112.10. 6
Tewkesbury	Hartland & Co	2,400. 0. 0	2,592.16. 6
Thornbury	Yates, Watkins & Co	600. 0. 0	600 0. 0
Winchcombe	Fisher, Ashmore & Co	900. 0. 0	751.18. 0
Wotton-under-Edge	Le Chevalier & Potter	135.11. 0	132. 0. 0
	Hampshire		
Alresford	Knapp & Co	1,200. 0. 0	1,031.17 6
Andover	Heath & Co	1,500. 0 0	1,904 5 6
	Wakeford & Son	900 0 0	1,070 19. 6
Basingstoke	Ruggett, Graham & Co	3,000 0 0	2,270 3. 0
Bishop's Waltham	Fox, Seymour & Gunner	600 0 0	837 16 6
Christchurch	Dean, Castlemann & Adams	600 0 0	572. 4 6
	Sleat, Aldridge & Elliott	600 0 0	634 7 6
Gosport/Fareham	Goodeve & Co	1,800 0 0	1,871 19 6
Isle of Wight	Kirkpatrick & Co	802 14 0	600 0 0
Lymington	St Barbe & Son	2,400 0 0	2 255 13 0
Newport (Isle of Wight)	Bassett, Clarke & Roe	4,200 0 0	3,600 0 0
	Commissary E Robinson	397 0 6	397 0 6
Petersfield	Patrick & Co	1,200 0 0	2 055 14 0
Portsmouth/ Portsea	Grant, Durby & Co	6 300 0 0	5,978 1 0
Portsmouth/ Portsea/Gosport	Godwin & Co	9,900 0 0	9 497 19 6

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Hampshire (continued)		
Ringwood	Hicks & White	3,000. 0. 0	1,644. 0. 0
Romsey	Sharpe & Son	900. 0. 0	1,112.14. 6
	Warner, Newman & Co	900. 0. 0	1,262.16. 0
Southampton	Harrison & Maddisons	3,000. 0. 0	2,304.16. 0
	Hilgrove & Atherley	3,000. 0. 0	3,387. 6. 6
	Smith & Sons	2,400. 0. 0	2,227. 2. 0
Winchester	Knapp & Co	4,800. 0. 0	3,169.16. 6
	Herefordshire		
Hereford	Matthews, Holloway & Co	3,600. 0. 0	2,200. 0. 0
	Bodenham & Co	3,600. 0. 0	2,596. 7. 0
Kington	Harris & Co	3,000. 0. 0	589. 3. 6
Ledbury	Webb & Co	1,800. 0. 0	1,585. 0. 0
Leominster	Coleman, Smith & Co	2,395. 0. 0	2,341 17. 6
Ross	Newman & Prichard	2,400. 0. 0	1,722.14. 6
	Hertfordshire		
Cheshunt	Raikes & Armstrong	600. 0. 0	436 5. 0
Hemel Hempstead	Grover & Pollard	2,400 0. 0	2,139 3. 6
Hertford	S & T. Adams	3,000. 0. 0	1,912.10. 0
Hitchin	Chapman, Pierson & Co	2,400. 0 0	2,181. 1 6
Royston	Fordham & Co	2,400. 0 0	2,464 6 0
St Albans	Commissary G Maddox	3,000 0 0	2,427 9 6
Ware	S & T Adams	1,200 0 0	1,168 10. 0
	Jones & Cobham	1,200 0 0	1,444 15 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Hertfordshire (continued)		
Watford	E. Wharmby	1,200. 0. 0	575.13. 0
	Huntingdon		
Huntingdon	Pasheller & Co	4,200. 0. 0	3,680.19. 0
St Neots	Rix, Gorham & Co	3,000. 0. 0	2,055.18. 0
	Kent		
Ashford	Haffenden & Co	1,500. 0. 0	998.19. 6
	G & W Jemmett	2,100. 0. 0	2,256.17. 6
Canterbury	Hammond & Co and Baker & Co	11,400. 0. 0	11,366.12. 6
Chatham/ Rochester	Jeffreys & Gurr	9,000. 0. 0	4,254. 3. 0
Dartford	Budgen & Co	1,800. 0. 0	1,455. 7. 6
Deal	May, Wyborn & Co	3,500. 0. 0	3,283.15. 0
	Hulke, Sampson & Co	1,300. 0. 0	1,299.12. 0
Dover/Folkestone	Minett, Fector & Co	3,600. 0. 0	3,431.10. 0
Dover	Latham, Rice & Co	2,400. 0. 0	2,400. 0. 0
Faversham	Watson & Martin	2,400. 0. 0	1,894. 2. 6
Gravesend	Brenchley & Co	1,800. 0 0	987.16. 6
	Miller & Co	1,200. 0. 0	928. 9. 6
Maidstone	Edmeads, Atkins & Tyrrell	9,000. 0. 0	9,153. 4. 0
Margate	Cobb & Son	1,800. 0. 0	1,533. 4. 6
Ramsgate	Austins & Co	1,500. 0 0	803. 6. 6
	Burgess & Son	900. 0. 0	794. 0. 0
Sandwich	Emmerson & Co	1,800. 0. 0	1,848. 0. 0
Sevenoaks	E. Jardine	3,200. 0. 0	3,061. 2. 0
Sheerness	Chalk & Co	1,800. 0. 0	1,701. 6. 6

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Kent (continued)		
Sittingbourne	Bradley & Co	1,200. 0. 0	925.14. 0
Tenterden/ Cranbrook	Mace & Co	1,200. 0. 0	1,495.18. 6
Tonbridge	Beeching & Son	2,200. 0. 0	2,036. 0. 6
Woolwich	Commissary T. F. Winter	2,400. 0. 0	1,778.16. 6
	Lancashire		
Blackburn	Cunliffes, Brooks & Co	6,000. 0. 0	3,867. 9. 0
Bolton	Woods & Co	1,148.15. 0	370. 4. 6
Bury Burnley	Howarth, Hardman & Co	6,200. 0. 0	5,261.12. 6
Lancaster	Worswick & Co	9,000. 0. 0	2,593. 1. 0
	Dilworth & Co	9,000. 0. 0	2,900.16. 6
Liverpool	Commissary C. Purcell	6,820. 5. 0	6,698.10. 6
	Moss, Dale & Co	2,450. 1. 0	2,450. 1. 0
	Roscoe & Co	7,913.13. 0	7,913.13. 0
	Heywood & Sons	12,816. 1. 0	8,150. 0. 0
	Leyland & Bullins	3,600. 0. 0	2,717. 5. 6
	Hadwin & Co	4,200. 0. 0	4,200. 0. 0
Manchester	Geaves & Co	6,000. 0. 0	6,000. 0. 0
	Heywood & Co	17,400. 0. 0	17,400. 0. 0
	Jones, Lloyd & Co	30,000. 0. 0	22,416. 1. 0
	T Mottram	9,600. 0. 0	9,600. 0. 0
Preston/Bolton	Commissary P. Roberts	2,051.15. 0	2,020. 5. 0
Preston	Pedders & Co	6,200. 0. 0	2,348.14. 6
	Claytons & Wilson	9,000. 0. 0	6,291. 0. 0
Warrington	Parr, Lyon & Co	3,600. 0. 0	4,778. 6. 0
Wigan	Thicknesse & Hoodcock	5,400. 0. 0	4,276. 2. 6

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
		Leicestershire	
Ashby-de-la Zouch	Fisher & Co	3,000. 0. 0	4,609.16. 6
Hinckley	Jarvis & Lane	2,400. 0. 0	2,559. 4. 6
Leicester	Mansfield & Babingtons	9,600. 0. 0	12,553.16. 0
Loughborough	Thorp & Middleton	3,600. 0. 0	3,968.18. 6
Lutterworth	Goodacre & Buzzard	2,400. 0. 0	2,375.13. 6
Market Harborough	Inkersole , Goddard & Goddard	3,600. 0. 0	3,396.19. 0
Melton Mowbray	R Norman	2,400. 0. 0	2,429.14. 6
		Lincolnshire	
Boston	Gee, Clarke & Co	12,000. 0. 0	12,000. 0. 0
Boston/Spalding	Claypon & Sons	9,242. 1. 6	4,198.11. 6
Brigg	W Owston	1,800. 0. 0	1,620.15. 6
Folkingham	Smith, Hall & Co	1,800. 0. 0	1,360.17. 0
Gainsborough	Smith, Ellison & Co	5,400. 0. 0	4,714. 0. 6
Grantham	Holt, King & Co	3,600. 0. 0	5,400. 2. 0
Holbeach	Gurney & Co	1,200. 0. 0	1,370.10. 0
Lincoln	Smith, Ellison & Co	6,600. 0. 0	5,681.16. 0
Louth	Commissary E. Pitman	4,557.18. 6	4,478.10. 6
Market Rasen	Clarke & Son	1,200. 0. 0	928.10. 0
Sleaford	Peacock, Handley & Co	2,800. 0. 0	2,808. 3. 0
Stamford	Commissary W. B. More	7,800. 0. 0	6,834.11. 0
		Middlesex	
Brentford	W Nicholls	3,000. 0. 0	2,870. 7. 0
	P. Norbury	2,400. 0. 0	2,319.12. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Middlesex (continued)		
Staines	Ashby & Co	2,400. 0. 0	2,394. 5. 6
Uxbridge	Commissary J. Slade	3,000. 0. 0	2,758. 9. 0
	Monmouthshire		
Abergavenny	Commissary T. T. Smith	2,400. 0. 0	2,412.17. 0
	Commissary T. Osborne	1,200. 0. 0	931. 4. 0
Chepstow	Buckle, Thompson & Proctor	1,800. 0. 0	1,715. 5. 0
Monmouth	Commissary J. Lawrence	3,000. 0. 0	2,609. 7. 0
Newport	Forman, Fothergill & Co	3,000. 0. 0	3,727.13. 0
	Norfolk		
Diss	Fincham & Sons	2,600. 0. 0	2,403. 6. 6
	Taylor, Dyson & Brown	1,600. 0. 0	1,402. 0. 6
Fakenham	Gurney, Birkbeck & Buxton	3,000. 0. 0	3,144. 0. 0
Harleston	Gurney, Turners & Brightwen	600. 0. 0	600. 0. 0
Holt	Gurney & Co	600. 0. 0	600. 0. 0
King's Lynn	Bagge & Bacon	3,000. 0. 0	3,001.15. 6
	Gurney, Birkbeck & Co	3,000. 0. 0	3,200.10. 6
North Walsham	R Baker	-	20.16. 0
Norwich	Kett & Back	6,000. 0. 0	6,000. 0. 0
	Day & Sons	4,800. 0. 0	4,800. 0. 0
	Bignold & Co	3,600 0. 0	3,588. 2. 0
	Harvey & Hudsons	4,800. 0. 0	4,018. 5. 6
	Gurney & Co	6,000. 0. 0	6,648.13. 6

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Norfolk (continued)		
Swaffham	Gurney & Co	600. 0. 0	600. 0. 0
	Day & Sons	600. 0. 0	711. 9. 0
Thetford	Willett & Co	2,411.13. 0	2,221.19. 6
Yarmouth	Lacon & Co	9,600. 0. 0	6,176. 4. 6
	Northamptonshire		
Daventry	Hall & Morgan	1,200. 0. 0	1,482. 7. 6
Kettering	Keep & Co	1,800. 0. 0	1,763.17. 0
Northampton	Percival & Sons	6,000. 0. 0	4,861.13. 6
	Smith, Hall & Co	6,000. 0. 0	5,465. 1. 6
Oundle	Smith & Co	2,400. 0. 0	1,877.17. 0
Peterborough	Squire & Co	2,400. 0. 0	2,339. 6. 0
	Boultbee & Cole	2,400. 0. 0	2,297.17. 0
Thrapston	Johnson, Eaton & Eland	2,400. 0. 0	1,518. 5. 0
Wellingborough	Morton, Rodick & Co	3,000. 0. 0	2,773.12. 0
	Northumberland		
Alnwick	E Stamp	3,124.15. 6	3,098. 7. 6
Berwick-upon-Tweed	Batson, Reed & Co	12,000. 0. 0	9,282. 3. 6
Hexham	Commissary G Hayward	3,073. 8. 6	3,000. 0. 0
Morpeth	Reed, Batson & Co	2,593. 0. 2	2,564.11. 6
Newcastle	Reed, Batson & Co	15,602.16 3	14,026 6. 6
	Lambton & Co	11,400. 0. 0	11,400 0. 0
	Ridley & Co	12,000. 0. 0	12,000. 0. 0
North Shields	Reed, Batson & Co	5,005 19 7	4,914. 5. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
		Nottinghamshire	
Mansfield	Abney & Maltby	6,600. 0. 0	4,447.12. 0
Newark	Godfrey & Hutton	1,800. 0. 0	4,541. 0. 0
	Handleys, Peacock & Co	2,000. 0. 0	2,464.10. 6
Nottingham	Moore, Maltby & Robinson	6,438. 8. 6	6,429. 2. 6
Retford	Yarborough & Co	3,326. 0. 0	3,511.17. 6
Southwell	Wylde & Bolger	600. 0. 0	600. 0. 0
Worksop	Yarborough & Co	1,474. 0. 0	1,461.19. 0
		Oxfordshire	
Banbury	Haydon, Wyatt & Co	2,700. 0. 0	3,297.15. 0
	Cobb, Wheatley & Co	3,300. 0. 0	4,240. 8. 0
Bicester	Tubb, Wootten & Co	2,400. 0. 0	2,300. 8. 0
Chipping Norton	Commissary W. Fletcher	2,400. 0. 0	214. 4. 6
Henley	Hewitt & Cooper	2,400. 0. 0	2,112.15. 0
Oxford	Cox, Morrell & Co, Fletcher, Parsons & Co, Tubb & Co and Walker & Co	10,800. 0. 0	8,910. 4. 0
Thame	Seymour & Co	2,400. 0. 0	2,400. 0. 0
Witney	Clinch & Son	1,800. 0. 0	3,739. 3. 0
Woodstock	W. Carter	1,200. 0. 0	993. 8. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Rutland		
Oakham	T. Hawker	1,200. 0. 0	404.16. 0
	Commissary W. C. Heydinger	600. 0. 0	569.13. 0
	Shropshire		
Broseley/ Bridgnorth	Vickers & Pritchard	4,200. 0. 0	3,820.15. 6
Ludlow	Coleman & Wellings	3,000. 0. 0	2,676. 2. 6
	Prodgers & Co	600. 0. 0	600. 0. 0
Market Drayton	Jarvis, Dicken & Co	1,400. 0. 0	1,463.16. 6
Newport	Parsons & Co	1,200. 0. 0	1,425. 8. 0
Oswestry	Croxen & Co	3,600. 0. 0	4,208. 3. 0
Shifnal	Botfield & Co	1,300. 0. 0	1,346. 5. 0
Shrewsbury	Rocke, Eyton & Co	4,200. 0. 0	4,512.11. 6
	Scott, Burton & Co	3,600. 0. 0	3,900. 0. 0
	Beck, Dodson & Co	4,200. 0. 0	4,807. 0. 0
Wellington	Reynolds, Charlton & Shakeshaft	3,000. 0. 0	1,290. 0. 0
Wenlock	Collins, Pitt & Howells	600. 0. 0	599.16. 6
	Somerset		
Bath	Tuffnell, Collett & Co	3,600. 0. 0	3,184.13. 0
	Hobhouse & Co	3,000. 0. 0	2,378.10. 0
	Clement & Co	6,000. 0. 0	5,458. 0. 0
	Cavenagh, Browne & Co	4,200. 0. 0	3,603. 4. 6
Bridgwater	Sealy & Sons	3,600. 0. 0	4,915.11. 0
	Stuckey & Woodlands	3,000. 0. 0	3,388.19. 0
Bruton	Prince & Co	1,200. 0. 0	1,230.18. 6

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Somerset (continued)		
Chard	Sparks & Co	1,724.10. 0	1,707. 4. 0
Crewkerne	Gray, Slade & Co	800. 0. 0	679.18. 0
	Sparks & Co	1,475.10. 0	1,178. 2. 0
	Perham, Phelps & Co	800. 0. 0	763.16. 6
Frome	H. G. & W. Sheppard	6,000. 0. 0	4,752. 9. 0
Glastonbury	Lilly, Brown & Reeves	600. 0. 0	599.17. 6
Ilminster	W. Henning	600. 0. 0	285. 0. 0
Langport	G & V. Stuckey	1,800. 0. 0	1,760. 0. 0
Shepton Mallet	Lilly, Brown & Reeves	3,000. 0. 0	1,440.15. 6
Taunton	Woodford & Co	3,900. 0. 0	3,740.10. 6
	J & D Badcock	4,300. 0. 0	4,765.17. 0
Wellington	Commissary H. Basnett	3,600. 0. 0	2,650. 6. 6
Wells	Payne, Tufnell & Co	4,800. 0. 0	2,941.19. 0
Wincanton	Messiter & Co	1,200. 0. 0	1,259.15. 6
	Musgrave & Co	1,200. 0. 0	1,200. 0. 0
Wiveliscombe	P & W Hancock	2,000. 0. 0	2,268.12. 6
Yeovil	Daniell, Hutchings & Co	1,000. 0. 0	1,137. 4. 6
	Whitmarsh & White	900. 0. 0	900. 0. 0
	Staffordshire		
Burton upon Trent	Blunton, Webb & Co	3,600 0. 0	2,220 19. 0
	Harding & Co	1,200. 0. 0	1,100. 0. 6
Lichfield	Scott & Co	4,800. 0 0	2,673 13. 0
Newcastle-under-Lyme	Sparrow & Co	5,200. 0. 0	2,980.17. 6
	Kinnersley & Co	5,400 0 0	4,856 18. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Staffordshire (continued)		
Stafford	Stevenson, Webb & Co	1,800. 0. 0	-
	Birch, Moore & Yates	7,200. 0. 0	3,033. 2. 0
Stone	Birch & Moore	1,200. 0. 0	1,068.15. 6
Tamworth	Harding, Oakes & Co	3,000. 0. 0	2,723. 7. 0
Uttoxeter	T. Hart	1,200. 0. 0	1,200. 0. 0
	J Bell	2,400. 0. 0	3,352. 9. 0
Walsall	Foster & Co	3,000. 0. 0	1,700. 0. 0
	Barber, Marshall & Co	2,188.18. 6	1,170.13. 0
Wednesbury	S. & W Addison	6,000. 0. 0	1,247. 1. 0
Wolverhampton	Hordern, Molineux & Co	3,000. 0. 0	1,826. 1. 6
	R Fryer	3,000. 0. 0	1,810. 3. 0
	Wrottesley & Co	2,900. 0. 0	1,942. 6. 6
	Suffolk		
Brandon	Willett & Sons	1,200. 0. 0	1,200. 0. 0
Bungay	Gurney & Co	2,400. 0. 0	1,935.13. 0
Bury St Edmunds	Oakes & Son	5,400 0. 0	4,349. 2. 6
	Sparrow, Brown & Co	6,000. 0. 0	4,137. 6. 0
Clare	Ray & Son	3,000. 0 0	2,328. 5. 0
Eye	E. Lingwood	1,200. 0. 0	857. 6. 6
Hadleigh	Alexanders & Co	3,600. 0. 0	2,930. 7. 6
Halesworth	Gurney & Co	4,200. 0. 0	3,893 9. 0
Ipswich	Crickett & Bacon	3,600 0 0	3,074 10 6
	Alexanders, Spooner & Co	6,600 0. 0	6,440 19. 6
Mildenhall	Willett & Sons	1,200 0 0	1,188 7 0
Needham Market	Alexanders, Spooner & Co	1,200 0. 0	1,080.18 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Suffolk (continued)		
Stowmarket	Sparrow, Hanbury & Brown	2,400. 0. 0	1,377.15. 6
	Oakes & Son	1,200. 0. 0	974.18. 0
Sudbury	Fenn & Addison	2,400. 0. 0	2,250.15. 6
Woodbridge	Alexanders & Collett	6,600. 0. 0	5,220.19. 6
	Surrey		
Chertsey	T. & G La Coste	1,200. 0. 0	1,160. 0. 6
Croydon	Commissary J. Cooper	3,000. 0. 0	1,405. 6. 0
Dorking	Piper, Dewdney & Co	2,400. 0. 0	1,937. 1. 6
Farnham	Cock & Co	9,000. 0. 0	2,499.11. 6
Godalming	Moline & Weale	1,800. 0. 0	1,313. 0. 0
	Mellersh, Kidd & Co	1,200. 0. 0	929.16. 0
Guildford	W T & J Haydon	3,600. 0. 0	1,761.18. 6
	Sparks & French	1,800. 0. 0	1,323. 2. 0
Kingston	Shrubsole & Lambert	1,800. 0. 0	2,034.18. 0
Reigate	Piper, Gale & Co	3,000. 0. 0	1,245. 5. 0
	Piper, Dewdney & Co	1,200. 0. 0	712. 1. 0
	Sussex		
Arundel	Henty & Co	3,000. 0. 0	2,325.16. 6
Brighton	Wigney, Hanford & Co	2,100. 0. 0	1,800. 0. 0
	Hall, Lashmar & Co	2,450. 0. 0	1,909. 6. 6
	Mitchell, Mills & Co	1,450. 0. 0	1,242.12. 6
Chichester	Ridge, Murray & Ridge	3,600. 0. 0	4,100. 0. 0
	Hack, Dendy & Co	2,400. 0. 0	2,250.16. 6
Eastbourne Hailsham	Michell & Co	2,400. 0. 0	2,076.12. 6
Hastings/Battle Robertsbridge	Smith, Gill & Co	3,600. 0. 0	3,146.14. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Sussex (continued)		
Horsham	Piper, Dewdney & Co	3,000. 0. 0	2,125. 0. 6
Lewes/East Grinstead	Hurley & Co	5,127. 1. 6	5,011.18. 0
Lewes	Wood, Hall & Co	1,472.18. 6	1,392.12. 0
Petworth	Stoveld & Upperton	2,400. 0. 0	1,881.14. 0
Rye	Curties & Co	3,000. 0. 0	3,093.15. 6
Worthing	Henty & Co	1,800. 0. 0	1,777.13. 0
	Warwickshire		
Atherstone	Chapman & Co	1,200. 0. 0	852.15. 6
	Willday & Co	600. 0. 0	600. 0. 0
Birmingham	Woolley, Gordon & Co	4,200. 0 0	4,200. 0. 0
	Taylor & Lloyd	4,200. 0. 0	4,196.15. 0
	Freer & Co	4,200. 0. 0	4,171. 7. 6
	Smith, Gray & Co	4,200. 0. 0	4,468.10. 0
	Attwoods, Spooner & Co	4,411. 1. 6	4,411. 1. 6
	Galton, James & Co	3,600. 0. 0	3,623. 8. 0
Coventry	Troughton & Co	1,800. 0. 0	1,800. 0. 0
	Beck & Adams	1,799. 9. 0	1,798.17. 6
	Little, Woodcock & Son	1,800. 0. 0	1,833.10. 6
	Eagle, Goodall & Co	2,400.17. 0	2,213. 4. 0
	Lant & Co	1,800. 0. 0	1,800. 0. 0
Nuneaton	Craddock & Bull	1,800. 0. 0	1,200. 0. 0
Rugby	Butlin & Son	1,200. 0. 0	1,091.19. 6
Stratford-upon-Avon	Whitehead, Weston & Co	3,600. 0. 0	2,741.13. 6
Warwick	Tomes, Russell & Co	5,400. 0. 0	6,936. 0. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Westmorland		
Appleby	Briggs & Co	1,800. 0. 0	1,575.17. 0
Burton	Rev. H Sill	1,200. 0. 0	873. 9. 6
Kendal	Wilson & Co and Wakefield & Co	11,400. 0. 0	4,626. 5. 0
Kirkby Lonsdale	Gibson, Moore & Co	1,800. 0. 0	1,201. 1. 0
Westmorland	Commissary Le Fevre	130. 0. 0	26.16. 0
	Wiltshire		
Bradford	Hobhouse & Co	1,200. 0. 0	487. 0. 0
Chippenham	Gundry & Co	1,800. 0. 0	2,280. 0. 0
Devizes	Tyler, Salmon & Co	4,800. 0 0	5,460. 3. 0
Malmesbury	Robins, Young & Co	600 0. 0	1,382 6. 0
Marlborough	King, Gosling & Tanner	2,400. 0. 0	3,175.14. 0
	Ward, Brown & Co	2,400. 0. 0	2,980 19. 0
Melksham	Freeman & Co	1,200. 0. 0	985. 7. 0
Salisbury	Everett & Co	4,200 0 0	3,183.13 0
	Brodie & Co	6,000 0 0	5,727 11 0
Swindon	Strange & Co	2,145 0 0	2,128 10. 0
Trowbridge	Ludlow & Co	1,200 0 0	997 14. 0
Warminster Heytesbury	Everett, Thring & Co	2,400. 0 0	2,112 18 0
Warminster	Phipps, Biggs & Co	1,200 0 0	1,200 0 0
Wootton Bassett	Commissary J Radford	855 0 0	850 3 6
	Worcestershire		
Bewdley	Roberts, Baker & Co	1,000 0 0	842 8 0
	Pardoe & Co	1,530 0 0	1,505 19 6
Bromsgrove	Rufford & Co	2,400 0 0	2,071 9 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Worcestershire (continued)		
Dudley	Hordern & Co	3,600. 0. 0	2,236. 0. 0
Evesham	Oldaker, Day & Co	3,600. 0. 0	4,072.13. 6
	Hartland & Co	1,200. 0. 0	1,900. 0. 0
Kidderminster	Wakeman & Co	3,470. 0. 0	2,528.11. 6
Stourbridge	Rufford & Co	3,600. 0. 0	3,262. 4. 0
Worcester	Berwick & Co	7,500. 0. 0	8,300. 0. 0
	Farley, Johnson & Turner	3,300. 0. 0	3,627. 0. 0
	Attwood, Spooner & Co	1,200. 0. 0	1,200. 0. 0
	Yorkshire		
Barnsley	Beckett, Birks & Co	4,800. 0. 0	2,187.19. 0
Beverley	Machell, Pease & Co and Bower	3,000. 0. 0	2,588. 8. 0
Boroughbridge	Fletcher, Stubbs & Co	1,800. 0. 0	910. 6. 0
Bradford	Commissary W. Miller and Commissary G Bodley	7,800. 0. 0	6,167. 3. 6
Burlington	Thompson, Harding & Holtby	1,200. 0. 0	1,270.16. 0
Dewsbury	Hagues, Cook & Co	600. 0. 0	600. 0. 0
Doncaster	Lathams, Jackson & Co	9,000. 0. 0	5,009.15. 0
Halifax	J William and C. Rawson	3,521.15. 6	2,660. 0. 0
	Rhodes, Briggs & Co	3,678. 4. 6	3,660.15. 0
Howden	Schofield, Cootes & Co	1,200. 0. 0	1,302. 5. 0
Huddersfield	Dobson & Sons	3,034.10. 1	3,000. 0. 0
	Hirst & Sykes	3,565. 9.11	3,540.18. 6
Hull	Pease, Harrison & Co	16,200. 0. 0	11,782. 4. 6
Knaresborough	Harrison, Terrys & Co	2,400. 0. 0	2,350. 2. 0

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Yorkshire (continued)		
Leeds	Fields, Greenwood & Co	7,200. 0. 0	5,600. 0. 0
	Beckett & Co	6,000. 0. 0	3,200. 0. 0
	Perfect, Hardcastle & Co	6,000. 0. 0	3,200. 0. 0
	Nicholson, Brown & Co	5,400. 0. 0	3,326. 9. 0
Leyburn	Hutton, Wood & Co	3,000. 0. 0	1,489. 3. 6
Malton	Bower, Duesbery & Co	900. 0. 0	66. 2. 0
	Pease, Dunn & Pease	5,100. 0. 0	4,118.16. 0
Pontefract	Perfect & Co	2,400. 0. 0	2,081.14. 0
	Leathams & Co	2,400. 0. 0	2,100. 0. 0
Richmond	Hutton & Co	6,600. 0. 0	2,859. 2. 0
Ripon	Harrison, Terrys & Harrison	5,400. 0. 0	3,286.15. 6
	Coates & Co	600. 0. 0	135. 9. 0
Rotherham	Walkers, Eyre & Stanley	4,200. 0. 0	2,700. 6. 0
Saddleworth	Buckley, Roberts & Co	1,200. 0. 0	949. 1. 0
Scarborough	Woodall, Taylor & Co	3,000. 0. 0	1,427. 7. 0
	Lister, Moorsom & Co	2,400. 0. 0	1,200. 0. 0
Settle	Birkbecks, Alcock & Co	2,400. 0. 0	1,093. 3. 6
Sheffield	Parker, Shores & Blakelock	4,200. 0. 0	4,040. 0. 0
	Walkers & Co	3,600. 0. 0	3,600. 0. 0
	Remington & Younges	5,400. 0. 0	3,472. 4. 6
Skipton	Commissary T. Sedgwick	2,400. 0. 0	2,093.12. 0
Thirsk/Ripon	Bretains & Co	1,800. 0. 0	825.12. 6

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Yorkshire (continued)		
Wakefield	Wentworth, Chaloner & Co	7,800. 0. 0	4,502. 7. 0
	Leathams, Jackson & Co	4,200. 0. 0	2,400. 0. 0
Whitby	Simpson, Chapman & Co	1,200. 0. 0	1,163. 7. 6
	J & J. Saunders	1,200. 0. 0	1,187.12. 0
	Richardson, Holt & Co	1,200. 0. 0	1,079. 7. 6
York	Wilson, Tweedy & Co	4,800. 0. 0	2,366.18. 0
	Raper, Swann & Co	5,400. 0. 0	4,944. 5. 6
	Wentworth, Chaloner & Co	7,200. 0. 0	3,591.14. 0

London	New silver coin available for exchange	Silver coin withdrawn
	£ s d	£ s d
	Principal stations	
Bank of England	415,755. 0. 0	415,755. 0. 0
Goldsmiths' Hall	25,200. 0. 0	9,647.10. 0
Guildhall	14,400. 0. 0	12,956. 8. 0
South Sea House	15,000. 0. 0	13,783.19. 0
	Auxiliary stations	
Bermondsey	4,800. 0. 0	4,159. 0. 6
Covent Garden	7,800. 0. 0	7,175.17. 6
Denmark Street	8,400. 0. 0	7,994. 0. 0
Hatton Garden	7,200. 0. 0	6,275. 9. 6
Lambeth	3,000. 0. 0	2,671.15. 6
New Sessions House	6,003.13 0	5,496. 1. 0
Oxford Street	7,200. 0. 0	6,660. 9. 0
Picket Street	7,800 0 0	6,928.13. 0
St Thomas Street	-	4,274. 0. 0
Sessions House	11,400 0 0	10,420. 9. 0
Shadwell	3,000. 0 0	2,704.17. 6
Spitalfields	6,000. 0. 0	6,000.15. 6
Swallow Street	9,600. 0. 0	9,200. 0. 0
Wapping	2,400 0 0	2,332. 5. 0
Whitechapel	4,000. 0. 0	3,900. 0. 0
Worship Street	6,000. 0. 0	5,400. 0. 0
	London bankers and other stations	
Biddulph, Cocks & Co	-	200. 0 0
Birch & Chambers	-	400. 0. 0
Bond & Sons	-	590. 0. 0
Bosanquet & Co	-	200. 0. 0
Chatteris & Co	-	1,790. 0. 0
Coutts & Co	-	-
Curries, Raikes & Co	-	1,200. 0. 0
Curtis & Co	-	1,200. 0 0

London	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	London bankers and other stations (continued)	
Dorrien, Magens & Co	-	400. 0. 0
Drummond & Co	-	1,000. 0. 0
Esdaile & Co	-	500. 0. 0
Fry & Chapman	-	600. 0. 0
General Post Office	-	1,134.13. 6
Glyn, Mills & Co	-	700. 0. 0
Goslings & Sharp	-	446. 5. 0
Grote & Co	-	1,100. 0. 0
Hammersley, Brooksbank & Co	-	526. 0. 0
Hanbury, Taylor & Lloyds		474. 0. 0
Hankey & Co	-	1,183. 6. 0
Herries & Co	-	771.13. 0
Hoare & Co	-	1,200. 0. 0
Ladbrokes & Co		865. 0. 0
Lees, Brassey & Farr	-	518.12. 6
Lubbock & Co	-	600. 0. 0
Marsh & Co	-	600. 0. 0
Martin, Stone & Martin	-	300. 0. 0
Morland, Ransom & Co	-	200. 0. 0
W Parlett	-	55.13. 6
Paxton, Cockerell & Co	-	143. 0. 0
Perring & Co	-	900. 0. 0
Pole & Co	-	1,200. 0. 0
Praeds, Mackworth & Co	-	346 10. 0
Pryce & Co	-	1,000. 0. 0
Rogers, Towgood & Co		800. 0. 0
St Martin's Lane	800 0 0	656. 1. 0
Sansom, Postlethwaite & Co	-	500. 0. 0
Sikes, Snaith & Co	-	1,200. 0. 0
Smith, Payne & Co	-	1,200. 0. 0
Snow, Sandby & Paul	-	525. 2. 0
Spooner, Attwoods & Co	-	1,901. 5. 6
Stephenson & Salt	-	711.11. 6
Vere, Smart & Co	-	751. 3. 0
Weston & Co	-	-
Williams & Co	-	148. 5 6
Willis, Percival & Co	-	1,252 7 6

Wales

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
Aberystwyth	Davis, Williams & Co	3,600. 0. 0	2,554.17. 6
Brecon	Wilkins & Co	5,400. 0. 0	3,447. 0. 0
Caernarfon	Commissary G. Manville	7,800. 0. 0	9,249. 3. 0
Cardiff	Wood & Co	4,800. 0. 0	3,342. 7. 6
Carmarthen	Waters & Sons	15,000. 0. 0	15,372. 2. 0
Denbigh	R & C Sankey	7,200. 0. 0	6,661. 5. 6
Dolgellau	Commissary B Smith	1,800. 0. 0	2,067.17. 0
Haverfordwest	Phillips & Co	4,920. 0. 0	1,000. 0. 0
	Commissary H. Hewetson	7,179.18. 0	7,076.17. 0
Holyhead	Commissary C. W. Beverley	1,800. 0. 0	1,652.18. 6
Llandovery	Jones & Co	1,800 0. 0	1,889.15. 0
Merthyr Tydfil	Pierce, Williams & Co	3,000. 0. 0	2,243. 9. 6
Narberth	Saer, Thomas & Co	1,800. 0. 0	1,802. 8. 6
Neath	Gronow, Eaton & Gibbins	3,000. 0. 0	1,860.16. 6
Newtown	Tilsley, Jones & Blayney	1,200. 0. 0	1,465.17. 0
Pembroke Milford Haven	Rotch, Phillips & Starbuck	2,900 2 0	2,709 3. 0
Swansea	Gibbons, Gronow & Eaton, and Haynes & Son	6,000. 0. 0	3,931. 7. 6
Wrexham	W & R. M Lloyd	1,200. 0. 0	1,200. 0. 0
	J Kenrick	5,200. 0. 0	6,153. 1 6

Channel Islands and Isle of Man

Town/City	Exchange station agent	New silver coin available for exchange £ s d	Silver coin withdrawn £ s d
	Jersey		
-	Commissary G. Miles	2,400. 0. 0	2,385.16. 0
	Guernsey		
-	Commissary G. White	8,105. 2. 0	8,839.13. 6
	Isle of Man		
-	-	-	297. 8. 6

Notes New silver coin includes coin received from the Mint and/or coin transferred from other stations.
In instances where the silver coin withdrawn is higher than new silver coin available the difference was made up with banknotes or Bank of England tokens
The accounts of London bankers do not always indicate if quantities of new coin were received The old coin tended to be withdrawn and the bankers later credited with the amount by the Mint
The aggregate figure for coin withdrawn being less than the total quoted in *Table 14* indicates that a complete record of all station accounts has not survived
The spelling of names varies in Mint records.

Source PRO Mint 11 14-68, Mint 11 73; Mint 1 54, pp. 409-11, 503-19.

Appendix 4

Silver coin withdrawn in Scotland, 1817

Town/City	Exchange station agent	Silver coin withdrawn £ s d
Aberdeen	Commercial Banking Company	11,349. 5. 0
	Aberdeen Banking Company	21,518.13. 6
	Aberdeen Commercial Banking Company	14,137.13. 6
	Bank of Scotland	29,619. 6. 6
Alloa	J MacMillan	1,000. 0. 0
Annan	Commercial Banking Company	1,575. 6. 6
Arbroath	W Mill	1,800. 0. 0
Ayr	Bank of Scotland	4,954. 9. 0
	Hunters & Co	7,322. 7. 0
Banff	Commercial Banking Company	8,795.12. 6
Beith	Commercial Bank	2,400. 0. 0
Brechin	A Ritchie	2,251.16. 0
Buteshire	A Moore	676.16. 0
Castle Douglas	J Napier	973. 6. 6
Crieff	Leith Bank	599. 4. 0
Cupar	British Linen Company	3,348. 3. 0
Dumfries	Bank of Scotland	4,242.16. 0
	British Linen Company	5,143.17. 6
Dundee	Bank of Scotland	3,600. 0. 0
	Dundee New Bank	2,000. 0. 0
	Dundee Union Bank	4,000. 0. 0
	British Linen Company	2,468. 0. 0
	Dundee Bank	3,634. 0. 0
Dunfermline	Bank of Scotland	4,677. 8. 0

Town/City	Exchange station agent	Silver coin withdrawn £ s d
Dunkeld	Commercial Bank	1,200. 0. 0
Duns	British Linen Company	865. 5. 0
Edinburgh	Royal Bank of Scotland	9,000. 0. 0
	British Linen Company	6,200. 0. 0
	Commercial Banking Company	15,600. 0. 0
	Forbes & Co	16,200. 0. 0
	Ramsays, Bonars & Co	600. 0. 0
Elgin	British Linen Company	4,300. 0. 0
Falkirk	A Ramsay	5,169. 0. 6
Forfar	W Don	1,800. 0. 0
Forres	British Linen Company	3,914.18. 6
Glasgow	Royal Bank of Scotland	7,381. 6. 0
	Glasgow Bank	10,200. 0. 0
	Paisley Bank	2,400. 0. 0
	Commercial Bank	1,800. 0. 0
	Thistle Bank	660. 0. 0
	J & R Watson Bank	2,500. 0. 0
	Paisley Union Bank	3,600. 0. 0
	Ship Bank	4,200. 0. 0
	Bank of Scotland	14,216.17. 6
	Paisley Banking Company	2,400. 0. 0
	Paisley Union Banking Company	3,000. 0. 0
	Kilmarnock Banking Company	5,785.10. 0
Greenock	Bank of Scotland	10,600. 0. 0
Haddington	Bank of Scotland	5,256.13. 0
Hamilton	Union Bank	3,000. 0. 0
Hawick	British Linen Company	1,519 16. 0
Inverness	Bank of Scotland	11,524.10. 0
	Perth Bank	1,800. 0. 0
	British Linen Company	2,400. 0. 0
Irvine	T McClelland	2,620. 5. 6
Jedburgh	British Linen Company	1,527. 1. 0

Town/City	Exchange station agent	Silver coin withdrawn £ s d
Kelso	Bank of Scotland	2,985.17. 0
Kirkcaldy	Bank of Scotland	7,037. 0. 0
Kirkcudbright	Bank of Scotland	2,491. 1. 6
Lanark	Magistrates of Lanark	1,173. 8. 6
Langholm	Henderson & Scott	320. 2. 0
Leith	Leith Banking Company	4,447.11. 6
	British Linen Company	2,400. 0. 0
Linlithgow	A Dawson	700. 0. 0
Lockerbie	Martin & Son	292. 9. 6
Montrose	Bank of Scotland	6,319.15. 6
Newton Stewart	British Linen Company	1,149.11. 6
Orkney & Shetland	G Forbes	13,167. 3. 0
Paisley	Provost of Paisley	3,600. 0. 0
Peebles	J Ker & W Brown	600. 0. 0
Perth	Bank of Scotland	5,400. 0. 0
	British Linen Company	3,000. 0. 0
	Perth Bank Company	7,200. 0. 0
	Perth Union Bank	600. 0. 0
Peterhead	Commercial Banking Company	3,986. 1 0
Prestonpans	H Riddell	195.11 0
St Andrews	Bank of Scotland	2,599 15 0
Selkirk	A Lang	276 9. 6
Stirling	Bank of Scotland	12,194 17. 6
Stonehaven	G Guthrie	600 0 0
Stranraer	British Linen Company	652 6 0

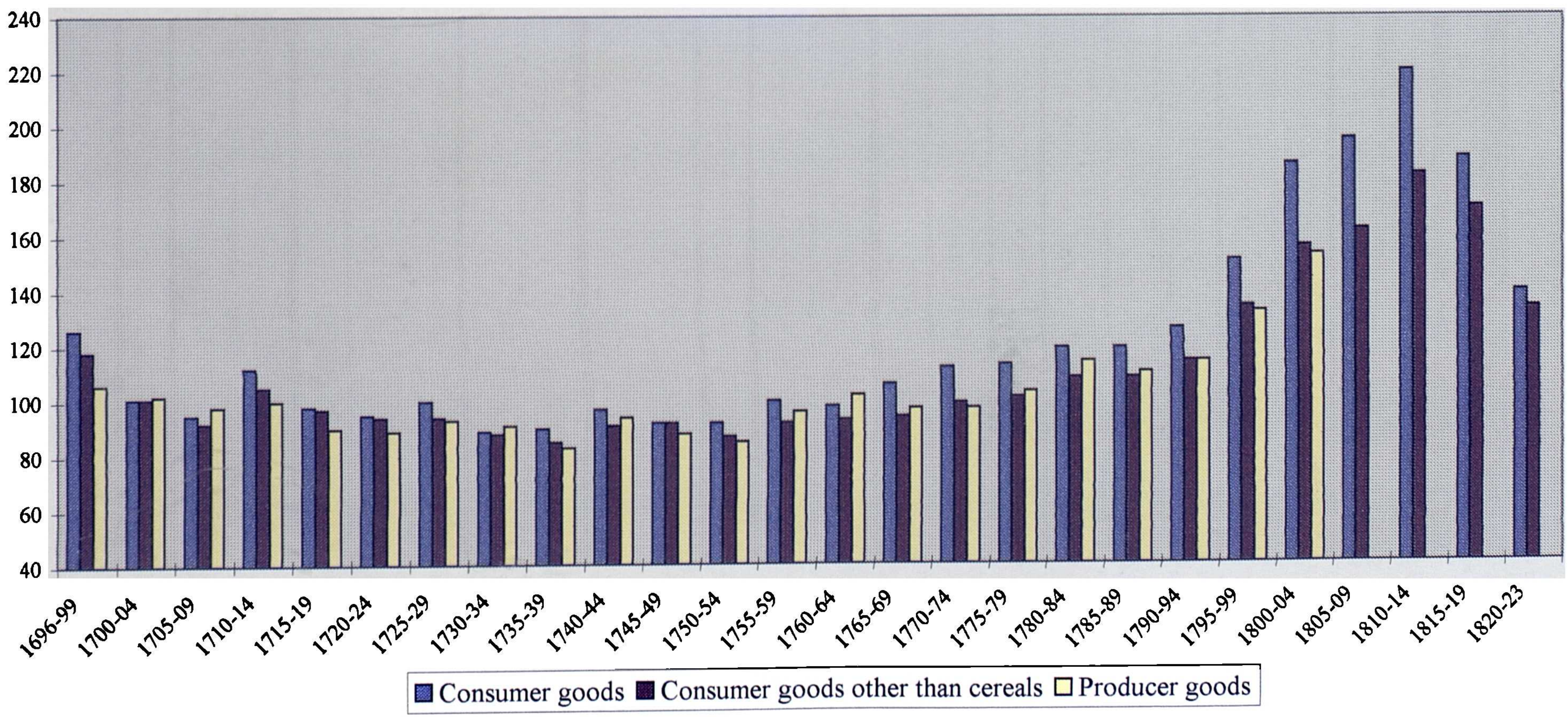
Town/City	Exchange station agent	Silver coin withdrawn
		£ s d
Tain	British Linen Company	2,100. 0. 0
	Commercial Banking Company	1,800. 0. 0
Thurso	Commercial Banking Company	1,780. 9. 0
Wick	J Mackay	2,657. 8. 0
Wigton	Bank of Scotland	1,254. 5. 6

Notes Details of new silver coin available for exchange have not been included because frequently the figures were recorded in a manner not readily accessible
The aggregate figure for coin withdrawn being less than the total quoted in *Table 14* indicates that a complete record of all station accounts has not survived

Source BS Unsorted Silver Coin Book (Recoinage), 1817, *passim*. PRO. Mint 1 54, pp 520-22 *The Edinburgh Almanack, 1817* (Edinburgh, 1817)

Figure 1

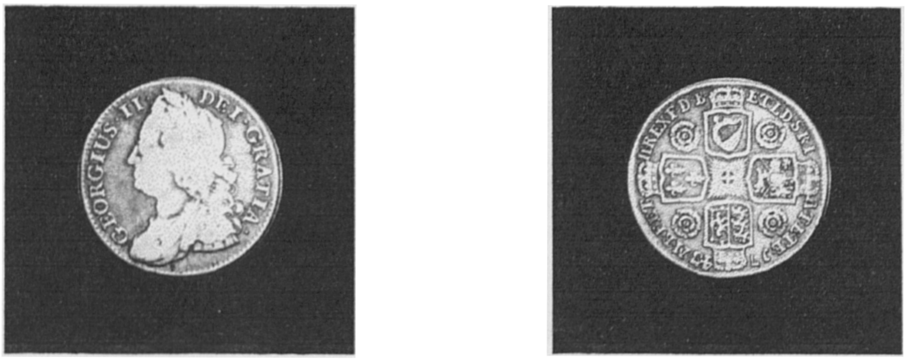
Schumpeter-Gilboy price indices, 1696-1823
(1700=100)



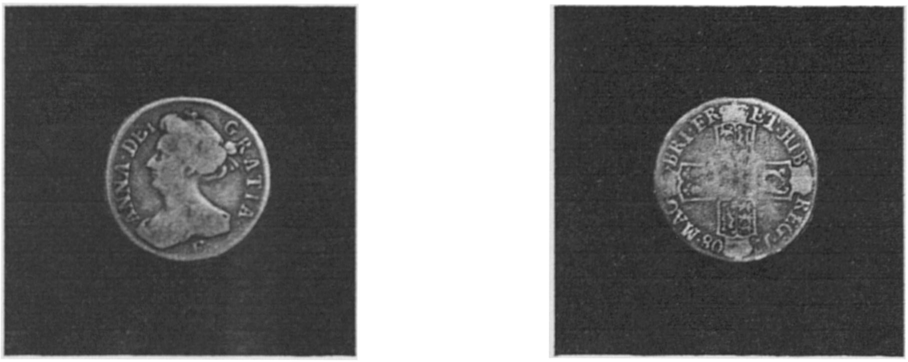
Source: *Table 1*

Figure 2

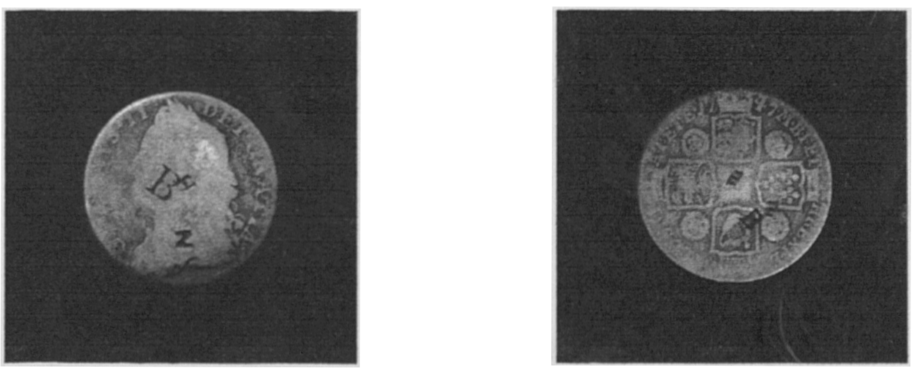
Wear of silver coins



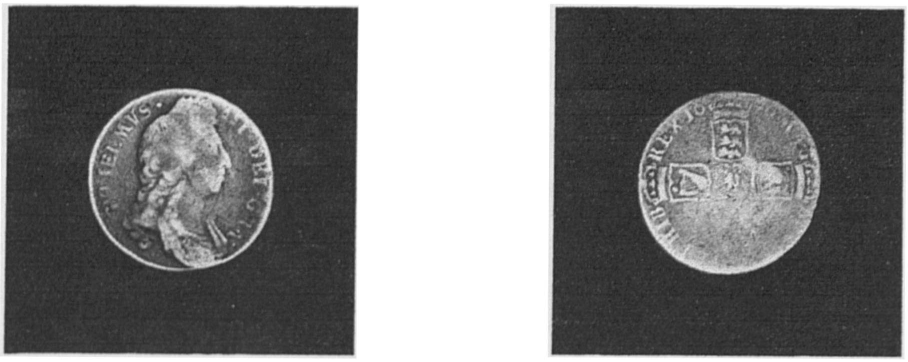
1. George II shilling, 1743
   Weight loss 6.04 per cent



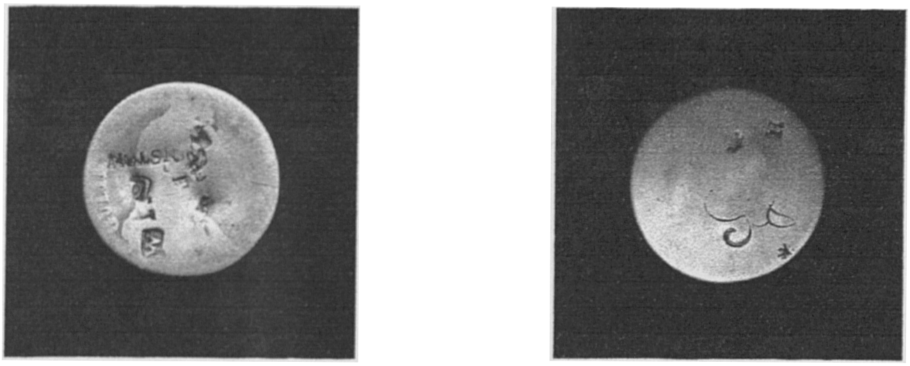
2. Anne sixpence, 1708E
   Weight loss 6.57 per cent



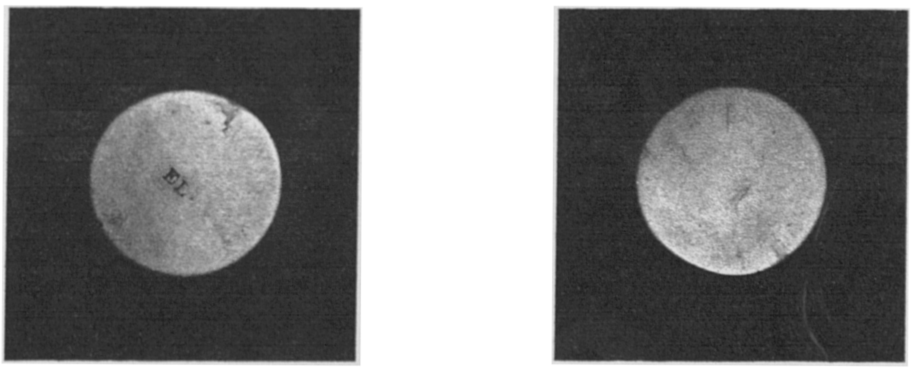
3. George II shilling, 1747
   Weight loss 10.95 per cent



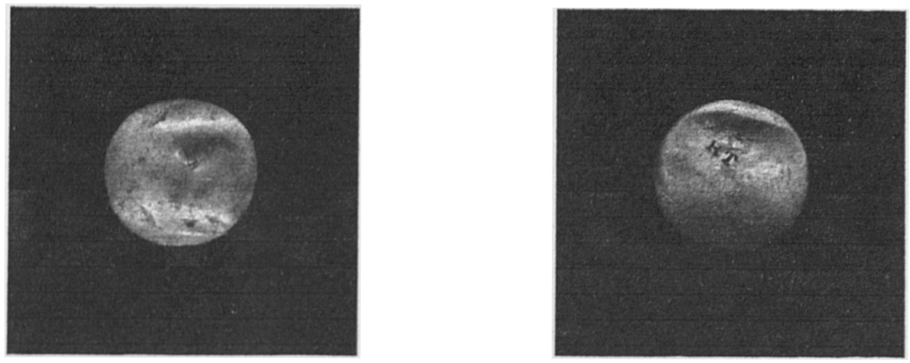
4. William III shilling, 1698
Weight loss 14.08 per cent



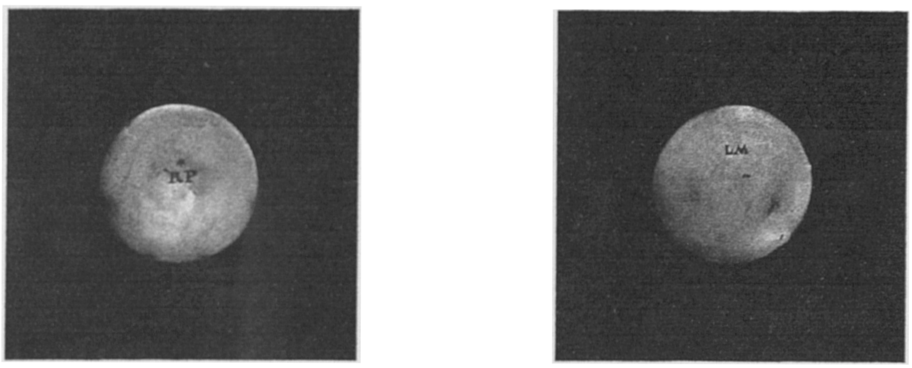
5. William III shilling
Weight loss 20.04 per cent



6. William III shilling
Weight loss 23.97 per cent



7. William III sixpence
Weight loss 31.53 per cent

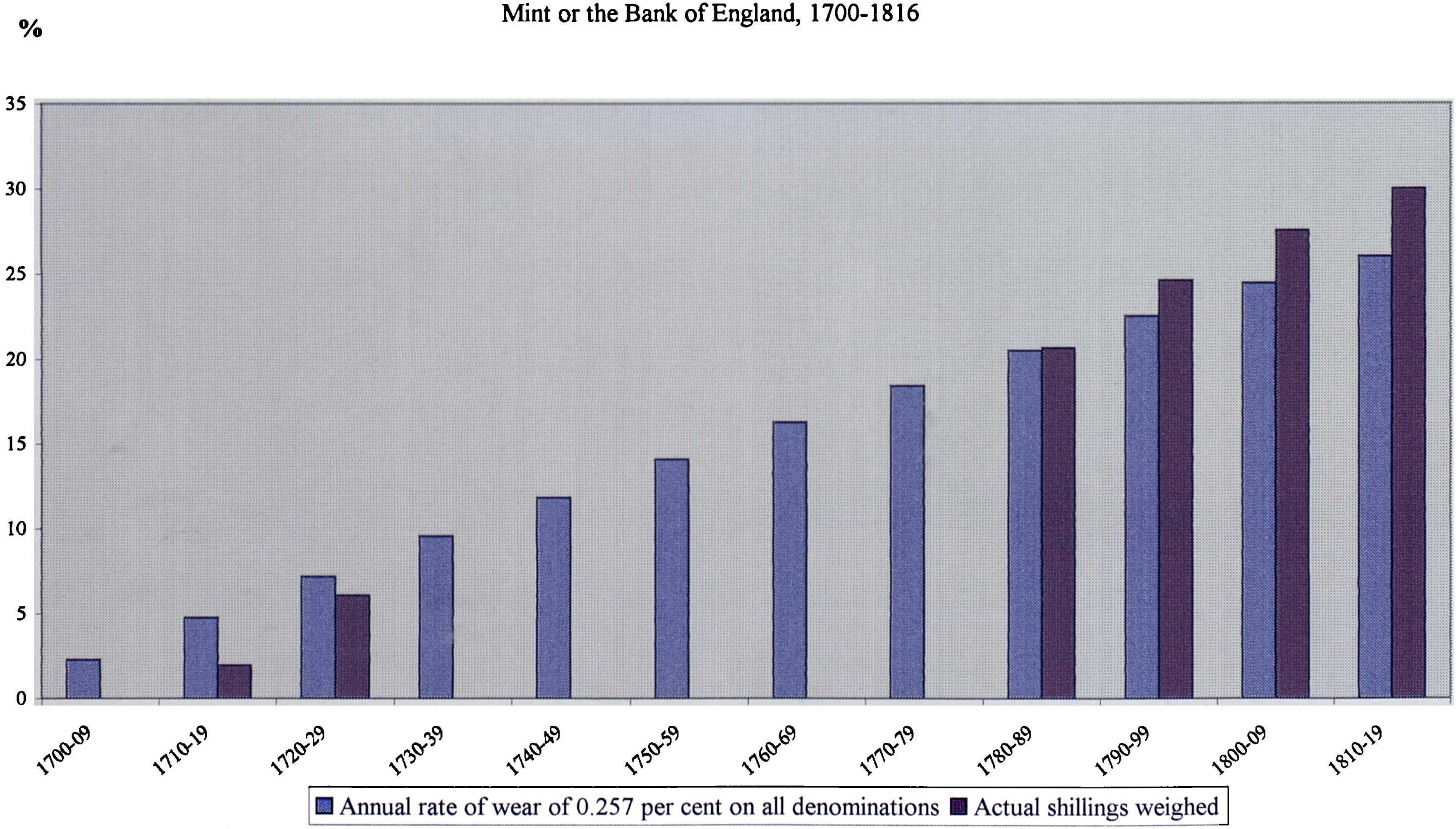


8. Sixpence [?]
Weight loss 42.73 per cent

Note: I am grateful to Spink & Son, Lloyd Bennett and especially to Gavin Scott for making available specimens of the worn coins illustrated.

Figure 3

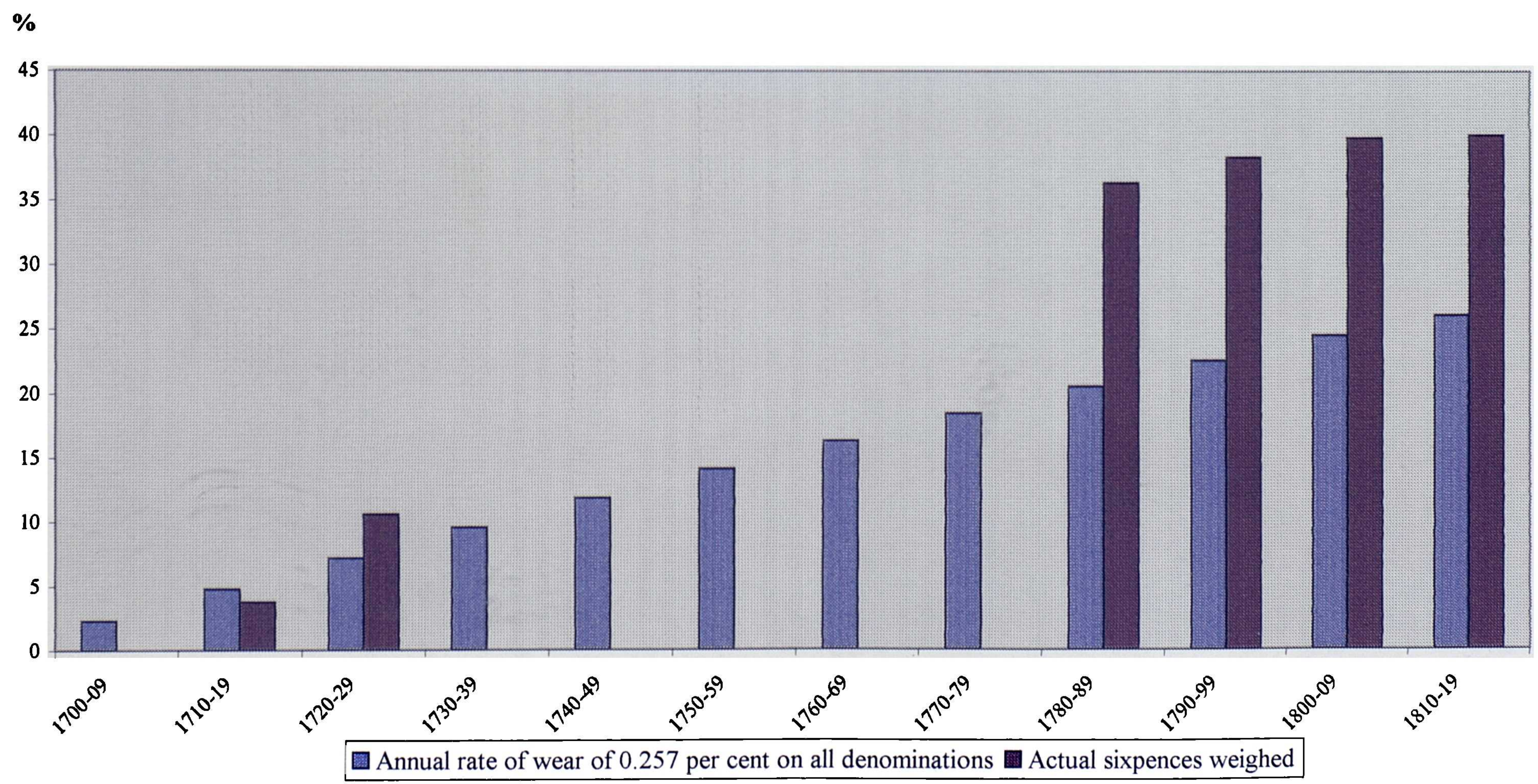
Rates of wear of shillings weighed at the
Mint or the Bank of England, 1700-1816



Source: *Table 2*

Figure 4

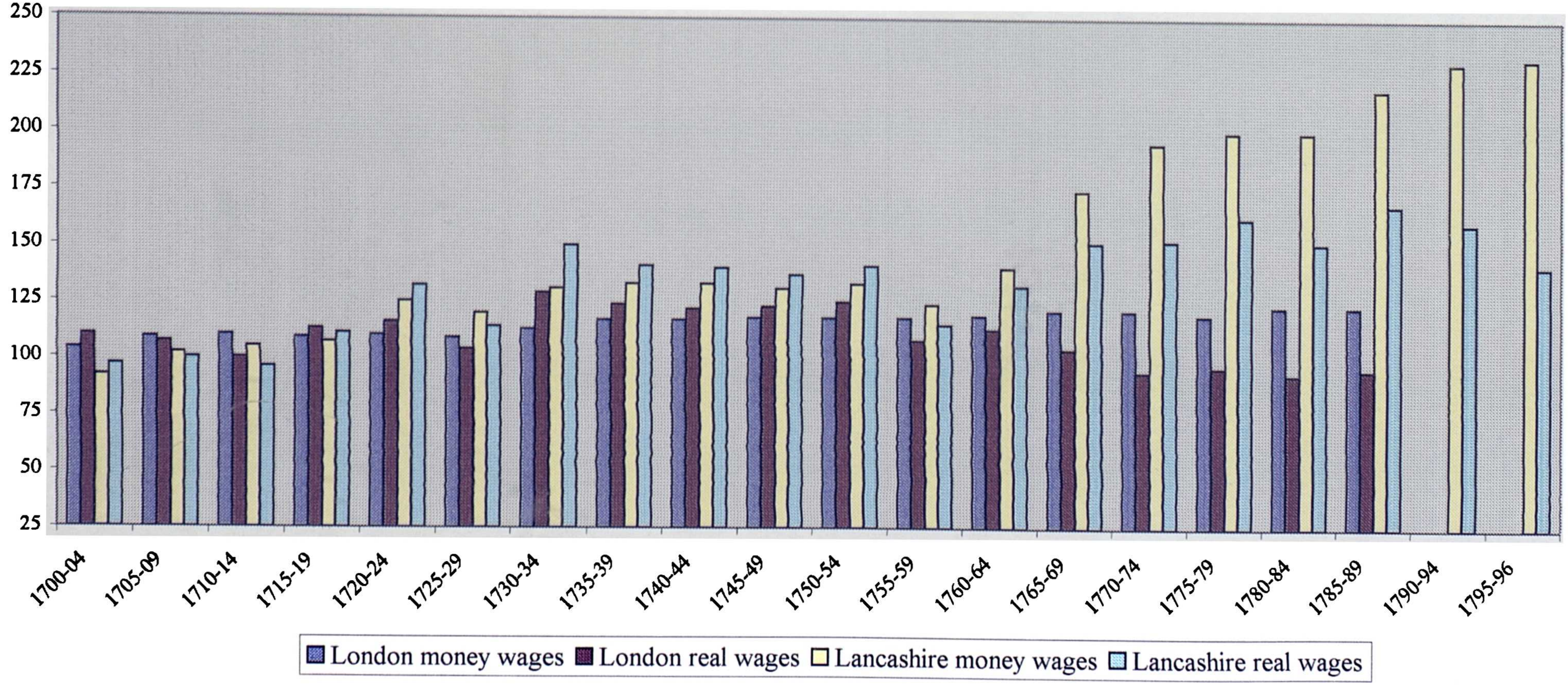
Rates of wear of sixpences weighed at the
Mint or the Bank of England, 1700-1816



Source: *Table 2*

Figure 5

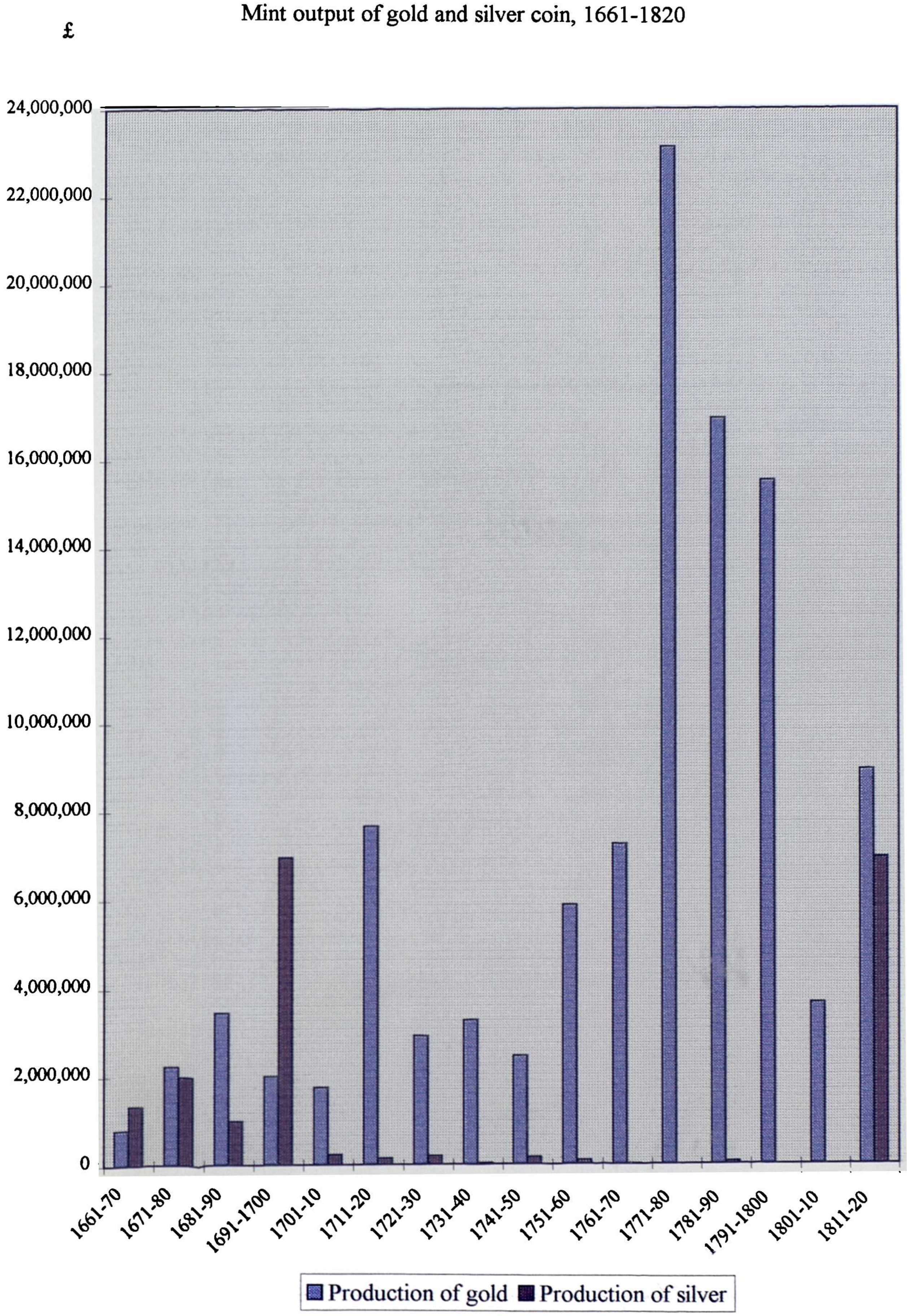
Indices of wages of labourers in London and Lancashire, 1700-96
(1700 = 100)



Source: *Table 5*

Figure 6

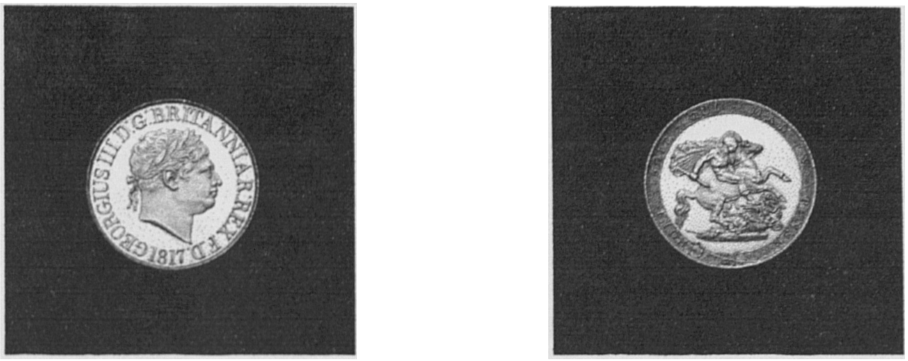
Mint output of gold and silver coin, 1661-1820



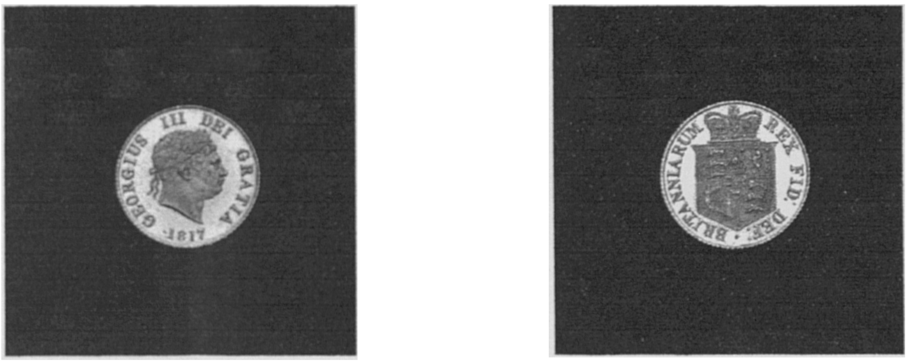
Source: *Table 7*

Figure 7

Gold and silver coins, 1816-18

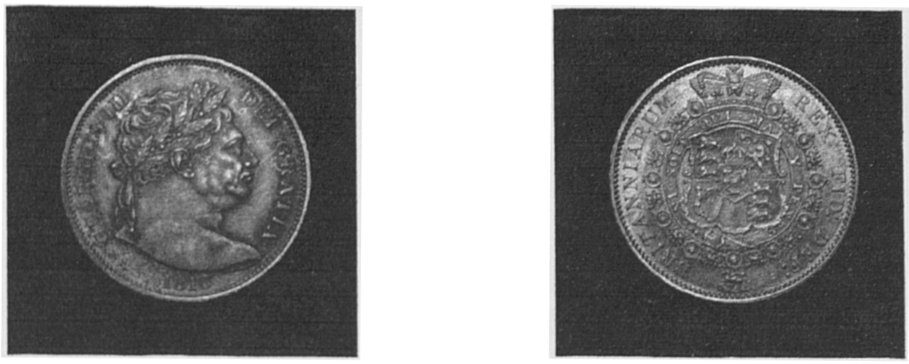


1. Sovereign

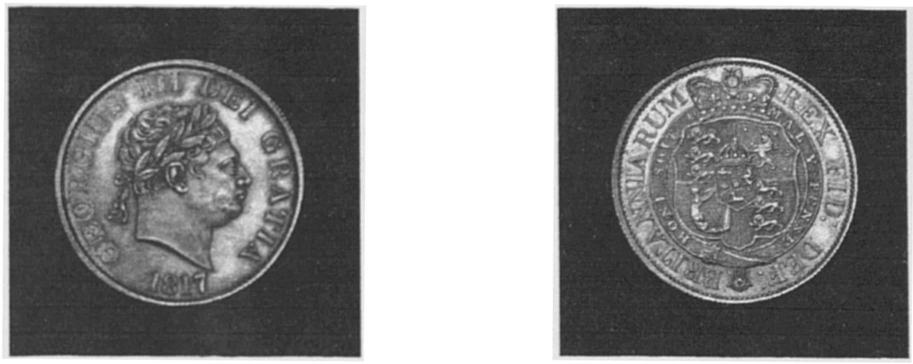


2. Half-sovereign

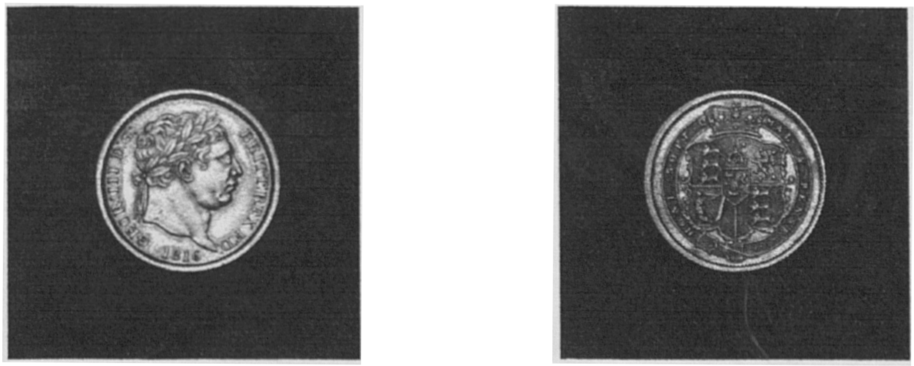
3. Crown



4. Half-crown (first type)



5. Half-crown (second type)

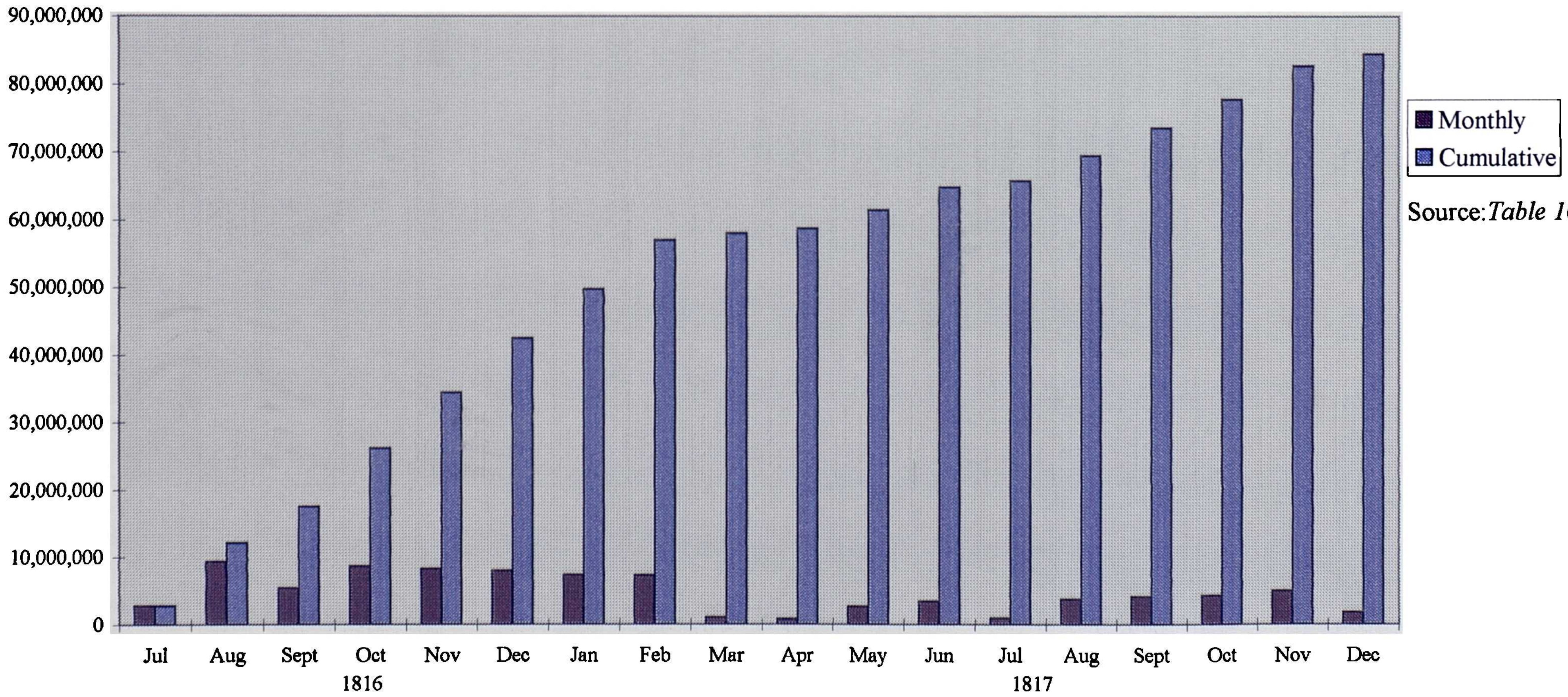


6. Shilling

7. Sixpence

Figure 8

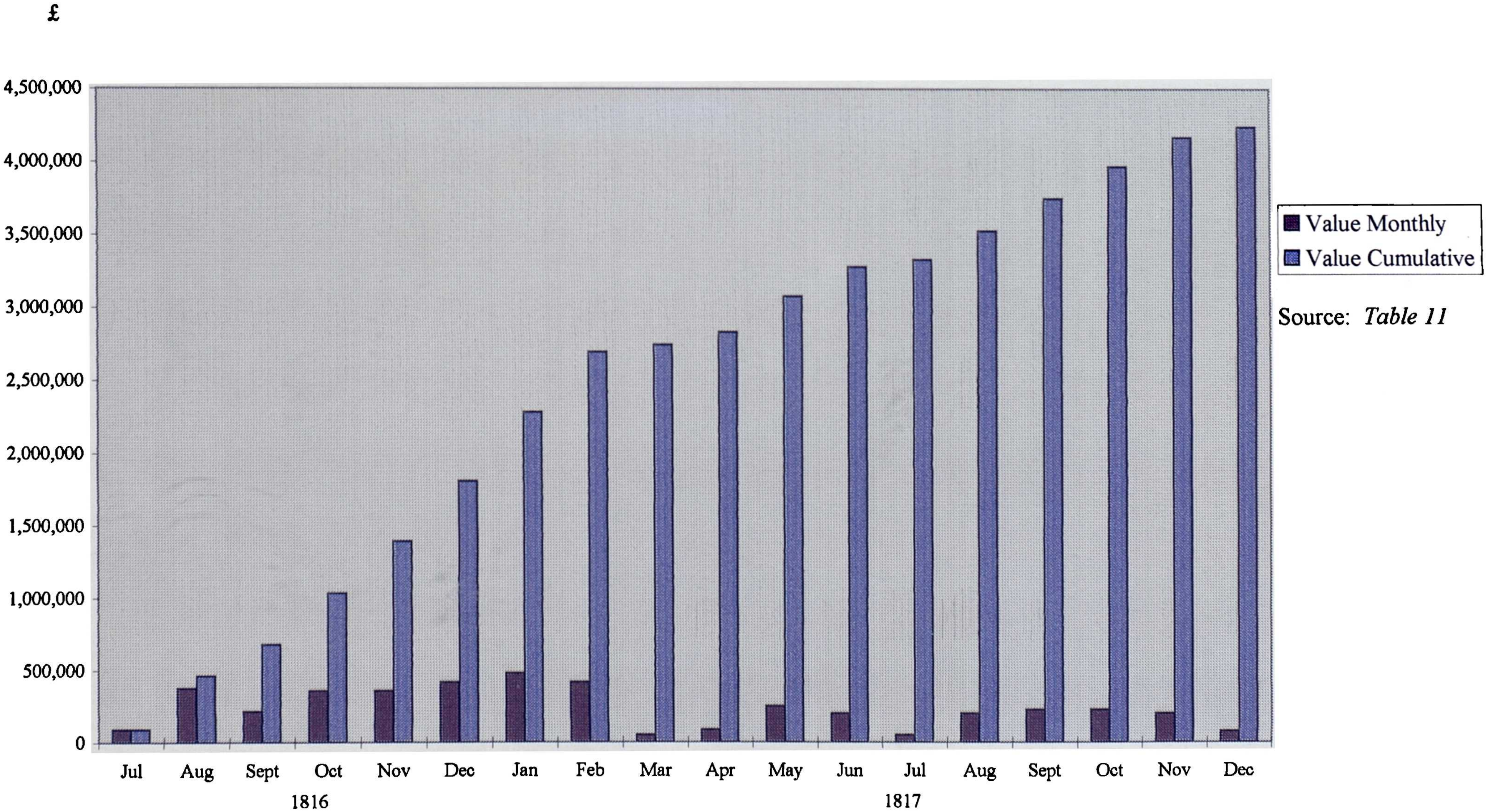
Mint output of silver coin, July 1816 to December 1817
(Number of pieces)



Source:*Table 10*

Figure 9

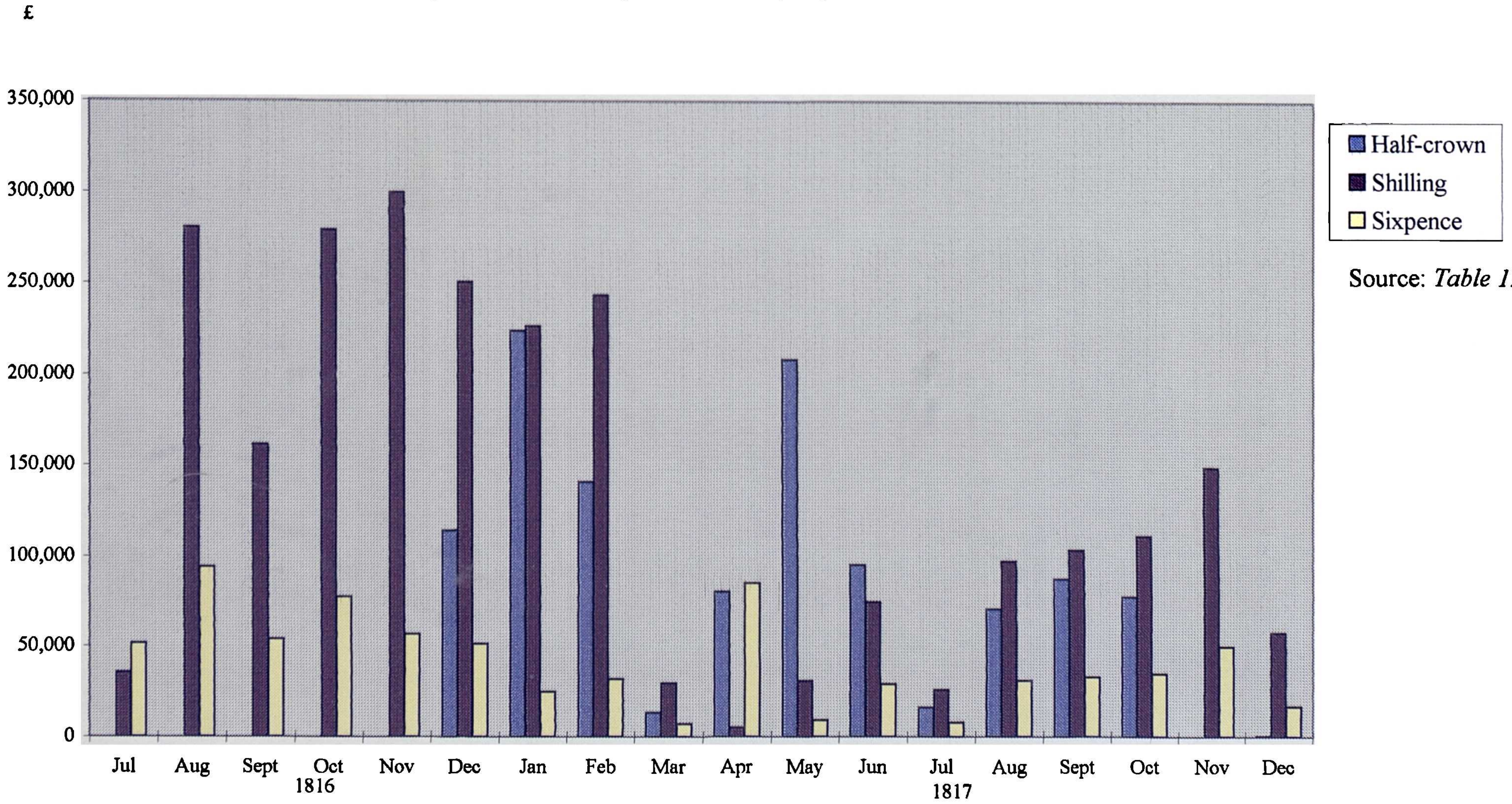
Mint output of silver coin, July 1816 to December 1817



Source: *Table 11*

Figure 10

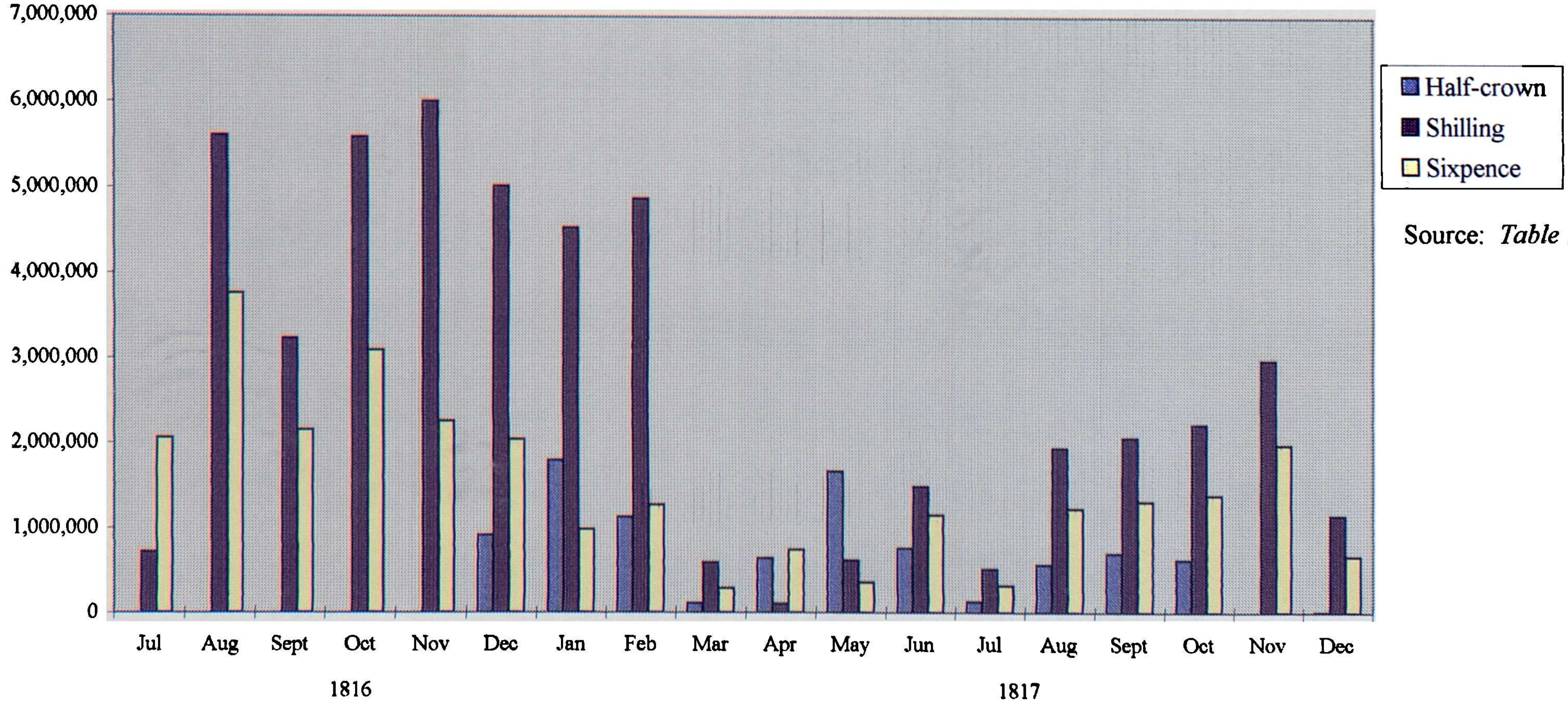
Mint output of silver coin by denomination, July 1816 to December 1817



Source: *Table 12*

Figure 11

Mint output of silver coin, July 1816 to December 1817
(Number of pieces)



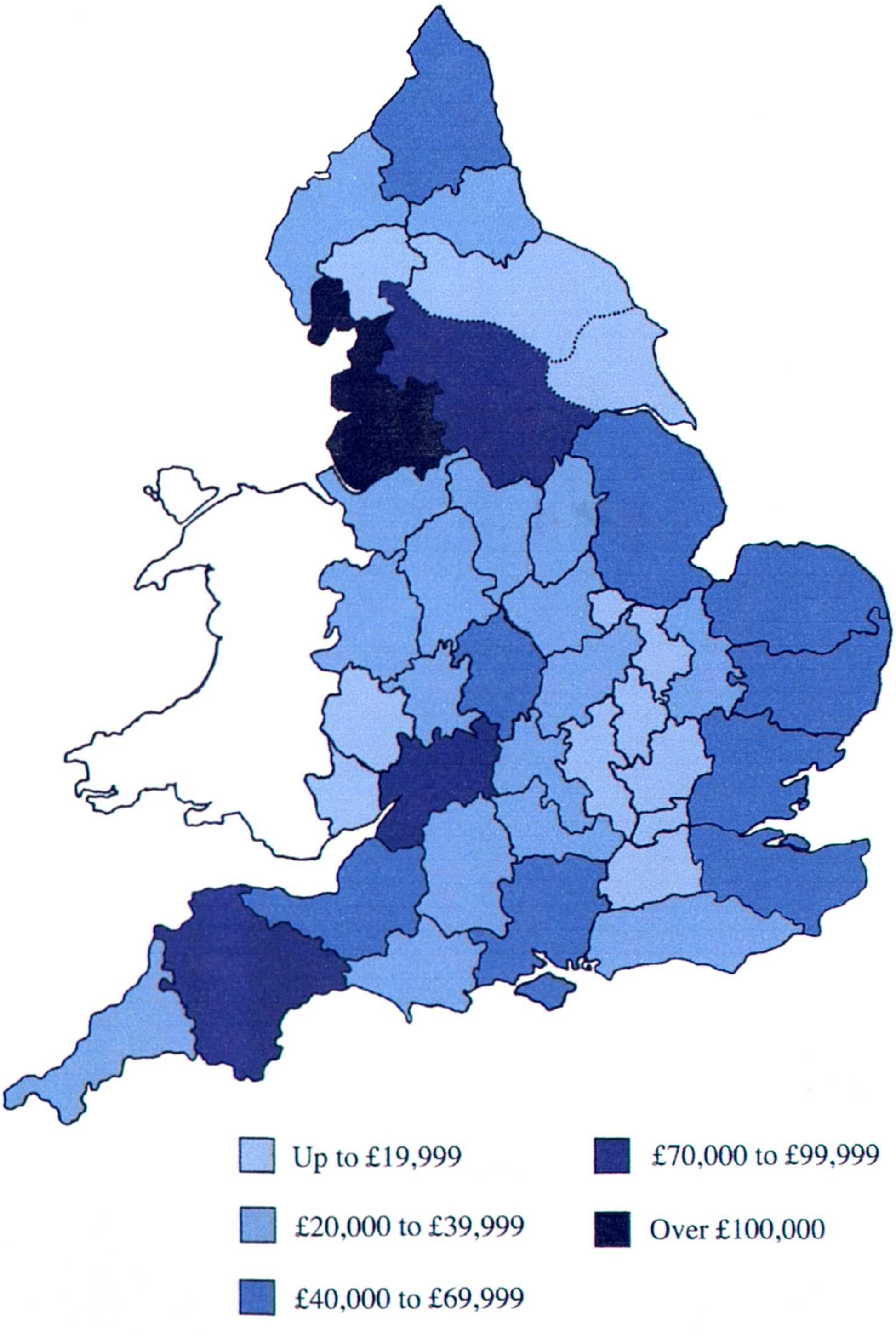
Source: *Table 13*

Figure 12

Notice from exchange station at Boulton

Figure 13

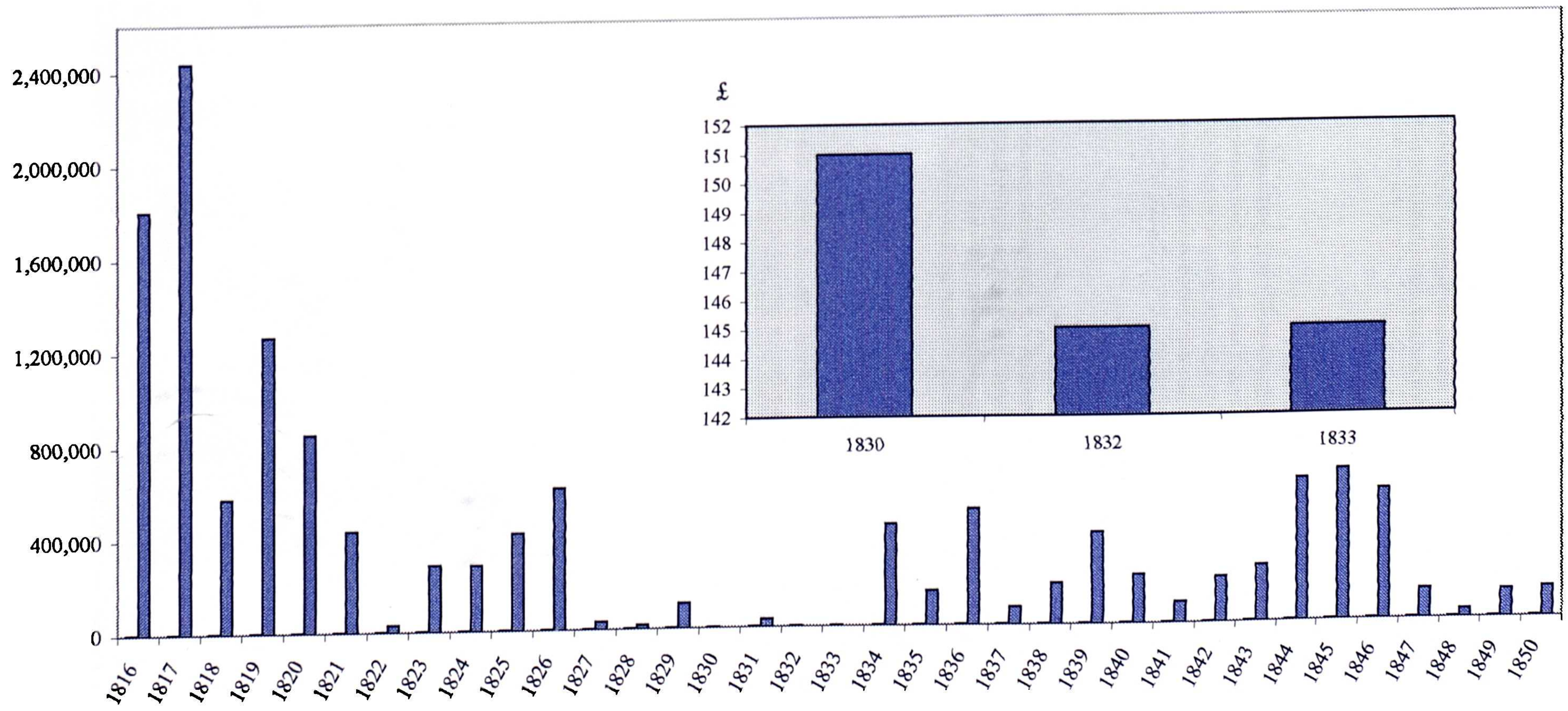
Regional distribution of silver coin withdrawn in English counties, 1817



Source: *Table 15*

Figure 14

Mint output of silver coin, 1816-50



Source: *Table 17*

Table 1

Schumpeter-Gilboy price indices, 1696-1823
(1700 = 100)

	Consumer goods	Consumer goods other than cereals	Producer goods
1696-99	126	118	106
1700-04	101	101	102
1705-09	95	92	98
1710-14	112	105	100
1715-19	98	97	90
1720-24	95	94	89
1725-29	100	94	93
1730-34	89	88	91
1735-39	90	85	83
1740-44	97	91	94
1745-49	92	92	88
1750-54	92	87	85
1755-59	100	92	96
1760-64	98	93	102
1765-69	106	94	97
1770-74	112	99	97
1775-79	113	101	103
1780-84	119	108	114
1785-89	119	108	110
1790-94	126	114	114
1795-99	151	134	132
1800-04	186	156	153*
1805-09	195	162	-
1810-14	220	182	-
1815-19	188	170	-
1820-23	139	133	-

*1800-01 only

Source B R Mitchell and P. Deane, *Abstract of British Historical Statistics* (Cambridge, 1962), pp 468-69.

Table 2

Rates of wear of silver coin, 1700-1816

	Denomination	Reduction in weight (%)	Source
1712	Crowns	1.03	J. Conduitt, *Observations upon the Present State of our Gold and Silver Coins, 1730,* in W. A. Shaw, *Select Tracts and Documents Illustrative of English Monetary History, 1626 - 1730* (London, 1896), pp. 236-37. Coins weighed at the Mint.
	Half-crowns	1.03	
	Shillings	1.94	
	Sixpences	3.75	
1728	Crowns	2.96	Conduitt, *Observations upon our Gold and Silver Coins*, pp. 236-37 Coins weighed at the Bank of England.
	Half-crowns	3.67	
	Shillings	6.08	
	Sixpences	10.57	
1730	Half-crowns	3.38	[T. Prior], *Observations on coin in general with some proposals for regulating the value of coin in Ireland* (Dublin, 1730), p. 14.
	Shillings	8.50	
	Sixpences	10 87	
1737	Shillings	6 – 11	W. A. Shaw, *The History of Currency, 1252 to 1894* (London [1895]), p. 231.
	Sixpences	11 – 22	
1742	Shillings	8	Vallavine, *Observations on Coin of this Kingdom*, p. 30.
	Sixpences	10	
1762	Shillings	11 42	G. Whatley, *Reflections on Coin in general, on the coins of gold and silver in Great Britain in particular, etc* (London, 1762), pp. 11-12.
1786	Half-crowns	12	C. Oman, *The Coinage of England* (Oxford, 1931), p. 356.
	Shillings	23	
	Sixpences	36	
1787	Crowns	3.12	PRO. Mint 1/14, pp. 26-27.
	Half-crowns	8 15	
	Shillings	20 61	
	Sixpences	36.28	

	Denomination	Reduction in weight (%)	Source
1798	Crowns	3.31	PRO. Mint 1/15, p. 120.
	Half-crowns	9.90	
	Shillings	24.60	
	Sixpences	38.28	
1807	Shillings	27.54	PRO. Mint 1/16, pp. 208-09.
	Sixpences	39.80	
1811	Shillings	20	P. R. Hoare, *Reflections on the possible existence and supposed expediency of National Bankruptcy* (London, 1811), p.11.
	Sixpences	50	
1816	Shillings	29.54	PRO. Mint 1/54, pp. 370-71.
	Sixpences	40.02	

Notes William Jacob has estimated that at the end of the eighteenth century the annual loss of silver from the coinage by wear was on average about 0 3 per cent[1]. The aggregate rate of wear on coins withdrawn during the silver exchange of 1817 was 26 per cent, which would mean an annual rate of wear from 1700 to 1817 of 0.257 per cent. A figure of 0 2 per cent for annual wear can be calculated from the estimate referred to by Sir John Craig on the basis of his example of a reduction in weight of 10 per cent resulting from £1,000 being lost a year on a circulation of £500,000 over the course of fifty years.[2]

The accuracy of some of the estimates quoted is questionable because they are based on observation or a general assumption of weight loss rather than on experiments. When coins are referred to as having been weighed at the Mint or the Bank of England, however, there is probably a greater likelihood of the figures being reliable.

[1] W. Jacob, *An Historical Inquiry into the Production and Consumption of the Precious Metals* (London, 1831), quoted in Horsefield, *British Monetary Experiments*, p. 258.

[2] PRO. Mint 1 54, pp 584-85. J. Craig. *The Mint, A History of the London Mint from AD287 to 1948* (Cambridge, 1953), p. xvi.

Table 3

Mint output of silver coin, 1220-1800

	Output of silver coin (£)
July 1220 - 29 Sept. 1300	3,196,416
30 Sept. 1300 - 29 Sept. 1402	1,688,290
30 Sept. 1402 - 29 Sept. 1501	866,367
30 Sept. 1501 - 28 July 1601	8,228,470
29 July 1601 - 1700	22,502,379
1701 - 1800	924,229*

*Excludes the £320,372 struck at the Edinburgh Mint between 1707 and 1709.

Source C E Challis, 'Appendix 1. Mint Output, 1220-1985', *NHRM*, pp 673-93

Table 4

Rates of wear of silver coin by denomination, 1700-1816

	Reduction in weight (%)				Source
	Crown	Half-crown	Shilling	Sixpence	
1712	1.03	1.03	1.94	3.75	Conduitt
1728	2.96	3.67	6.08	10.57	Conduitt
1730	-	3.38	8.50	10.87	Prior
1737	-	-	6 - 11	11 - 22	Shaw
1742	-	-	8	10	Vallavine
1762	-	-	11.42	-	Whatley
1786	-	12	23	36	Oman
1787	3 12	8.15	20.61	36.28	Mint
1798	3 31	9 90	24.60	38.28	Mint
1807	-	-	27.54	39.80	Mint
1811	-	-	20	50	Hoare
1816	-	-	29.54	40.02	Mint

Note For details of the sources see *Table 2*.

Table 5

Indices of wages of labourers
in London and Lancashire, 1700-96
(1700 = 100)

	Cost of living	London wages Money	London wages Real	Lancashire wages Money	Lancashire wages Real
1700-04	95.6	104	110	92	97
1705-09	105 2	109	107	102	100
1710-14	112 4	110	100	105	96
1715-19	96 4	109	113	107	111
1720-24	95	110	116	125	132
1725-29	105	109	104	120	114
1730-34	87 6	113	129	131	150
1735-39	95	117	124	133	141
1740-44	97	117	122	133	140
1745-49	95 8	118	123	131	137
1750-54	94 4	118	125	133	141
1755-59	109 6	118	108	124	115
1760-64	106	119	113	140	132
1765-69	116 2	121	104	174	151
1770-74	128 8	121	94	195	152
1775-79	123 8	119	96	200	162
1780-84	132 4	123	93	200	151
1785-89	130 2	123	95	219	168
1790-94	144	-	-	231	160
1795-96	166	-	-	233	141

Notes The cost-of-living index is derived mainly from contract prices, and must be regarded as very rough. It relates principally to London and southern England, but was nevertheless used to estimate Lancashire real wages
All wage indices relate to the weekly wages of men in full employment.

Source Mitchell and Deane, *British Historical Statistics*, pp. 346-47.

Table 6

Bank of England notes issued, 1721-1810

	Notes issued (£)
1721-31	35,305,066
1731-40	45,630,426
1741-50	39,541,554
1751-60	45,037,072
1761-70	48,044,053
1771-80	66,058,797
1781-90	75,702,353
1791-1800	116,381,558
1801-10	163,935,680

Note The above figures are grouped into decades from yearly totals. Since notes will have been continually withdrawn the figures are an indication of the amount of notes issued rather than sum totals that will have circulated at any one given time.

Source E M Kelly, *Spanish Dollars and Silver Tokens: An account of the issues of the Bank of England 1796-1816* (London, 1976), pp. 121-23.

Table 7

Mint output for gold and silver coin, 1661-1820

	Output of gold coin (£)	Output of silver coin (£)	Total (£)
1661-70	804,364	1,333,551	2,137,915
1671-80	2,214,331	1,981,771	4,196,102
1681-90	3,430,982	985,194	4,416,176
1691-1700	1,991,649	6,933,452	8,925,101
1701-10	1,729,278	232,014	1,961,292
1711-20	7,628,756	144,385	7,773,141
1721-30	2,898,727	192,414	3,091,141
1731-40	3,255,330	36,330	3,291,660
1741-50	2,447,455	167,704	2,615,159
1751-60	5,853,579	87,896	5,941,475
1761-70	7,226,443	6,223	7,232,666
1771-80	23,120,040	904	23,120,944
1781-90	16,924,033	55,724	16,979,757
1791-1800	15,500,552	635	15,501,187
1801-10	3,649,504	793	3,650,297
1811-20	8,922,787	6,933,123	15,855,910

Source Challis, 'Mint Output', *NHRM*, pp. 689-94.

Table 8

Output of copper and tin coin from the Mint and Soho, Birmingham, 1661-1820

	Output of tin coin (£)	Output of copper coin (£)
1661-70	-	-
1671-80	-	41,662
1681-88	27,861	-
1689-1700	38,153	23,998
1701-10	-	-
1711-30	-	38,714
1731-40	-	78,460
1741-50	-	60,938
1751-60	-	27,939
1761-70	-	5,734
1771-80	-	44,523
1781-1820	-	685,330

Note The years 1781-1820 exclude the copper coins struck by the Mint for Ireland The figures relate entirely to Matthew Boulton's copper coins produced at Soho

Source Challis, 'Mint Output', *NHRM*, pp. 689-94. *Account of the quantity of copper coined by Mr Boulton.* Parliamentary Papers, 1819 (404).

Table 9

Specifications of gold and silver coins, 1601-1817

	Weight		Fineness		Weight		Fineness
	grains	grammes			grains	grammes	
Gold from 1670				Gold from 1817			
Guinea	129.40	8.39	916.66	Sovereign	123.28	7.99	916.66
Half-guinea	64.70	4.19	"	Half-sovereign	61.64	3.99	"
Third-guinea	43.13	2.80	"				
Quarter-guinea	32.35	2 10	"				
Silver from 1601				Silver from 1817			
Crown	464.50	30.10	925	Crown	436.36	28.28	925
Half-crown	232.25	15.05	"	Half-crown	218.18	14.14	"
Shilling	92.90	60.02	"	Shilling	87.27	5.66	"
Sixpence	46.45	3.01	"	Sixpence	43.64	2.83	"

Source: Challis, 'Mint Contracts', *NHRM*, pp. 737, 745-46, 750, 753, 757.

Table 10

Mint output of silver coin, July 1816 to December 1817

	Number of Pieces	
	Monthly	Cumulative
1816		
July	2,772,000	2,772,000
August	9,365,400	12,137,400
September	5,381,640	17,519,040
October	8,672,400	26,191,440
November	8,256,600	34,448,040
December	7,969,104	42,417,144
1817		
January	7,305,408	49,722,552
February	7,262,640	56,985,192
March	975,744	57,960,936
April	738,936	58,699,872
May	2,633,400	61,333,272
June	3,393,720	64,726,992
July	958,320	65,685,312
August	3,730,320	69,415,632
September	4,062,960	73,478,592
October	4,221,360	77,699,952
November	4,950,000	82,649,952
December	1,812,888	84,462,840

Source PRO Mint 9 33, Accounts of silver monies coined, 13 July 1816 to 31 May 1817 and 3 June 1817 to 21 May 1818.

Table 11

Mint output of silver coin, July 1816 to December 1817

	Monthly (£)	Cumulative (£)
1816		
July	87,120	87,120
August	374,220	461,340
September	215,226	676,566
October	356,400	1,032,966
November	356,400	1,389,366
December	415,800	1,805,166
1817		
January	475,200	2,280,366
February	415,800	2,696,166
March	49,500	2,745,666
April	84,942	2,830,608
May	247,500	3,078,108
June	198,000	3,276,108
July	49,500	3,325,608
August	198,000	3,523,608
September	222,750	3,746,358
October	222,750	3,969,108
November	198,000	4,167,108
December	74,250	4,241,358

Source PRO Mint 9 33 Accounts of silver monies coined, 13 July 1816 to 31 May 1817 and 3 June 1817 to 21 May 1818.

Table 12

Mint output of silver coin by denomination, July 1816 to December 1817

	Half-crown (£)	Shilling (£)	Sixpence (£)
1816			
July	-	35,640	51,480
August	-	280,170	94,050
September	-	161,370	53,856
October	-	279,180	77,220
November	-	299,970	56,430
December	114,048	250,668	51,084
1817			
January	224,136	226,512	24,552
February	140,580	243,540	31,680
March	13,068	29,304	7,128
April	79,992	4,950	84,942
May	207,900	30,690	8,910
June	95,040	74,250	28,710
July	15,840	25,740	7,920
August	70,290	97,020	30,690
September	87,120	102,960	32,670
October	77,220	110,880	34,650
November	-	148,500	49,500
December	396	57,222	16,632

Source PRO Mint 9 33, Accounts of silver monies coined, 13 July 1816 to 31 May 1817 and 3 June 1817 to 21 May 1818.

Table 13

Mint output of silver coin, July 1816 to December 1817

	Number of Pieces		
	Half-crown	Shilling	Sixpence
1816			
July	-	712,800	2,059,200
August	-	5,603,400	3,762,000
September	-	3,227,400	2,154,240
October	-	5,583,600	3,088,800
November	-	5,999,400	2,257,200
December	912,384	5,013,360	2,043,360
1817			
January	1,793,088	4,530,240	982,080
February	1,124,640	4,870,800	1,267,200
March	104,544	586 080	285,120
April	639,936	99,000	738,936
May	1,663,200	613,800	356,400
June	760,320	1,485,000	1,148,400
July	126,720	514,800	316,800
August	562,320	1,940,400	1,227,600
September	696,960	2,059,200	1,306,800
October	617,760	2,217,600	1,386,000
November	-	2,970,000	1,980,000
December	3,168	1,144,440	665,280

Source PRO Mint 9 33, Accounts of silver monies coined, 13 July 1816 to 31 May 1817 and 3 June 1817 to 21 May 1818.

Table 14

Summary account of the exchange

	Consignment of new coin £ s d	Returns in old coin £ s d
England and Wales, including Guernsey and Jersey	1,790,505. 2. 0	1,563,268. 4. 6
Scotland	433,800. 0. 0	423,400. 2. 0
London stations	160,400. 0. 0	128,609. 9. 6
London bankers	72,000. 0. 0	30,164. 1. 6
Mint	-	1,290. 7. 0
Bank of England	415,755. 0. 0	415,755. 0. 0
Base coin received at rate of standard silver	200. 0. 0	6,929. 3. 8
Silver coin received at the Mint between 1 March and 31 May 1817	30,070. 0. 0	30,070.17. 0
Total	2,902,730. 2. 0	2,599,487. 5. 2

Note The aggregate figures for coin withdrawn in *Appendices 3* and *4* being less than the totals listed in this table indicate that a complete record of all station accounts has not survived.

Source PRO Mint 11 14, Mint 1 54, pp. 584-85.

Table 15

Comparison of population and silver coin withdrawn in English counties, 1817

	Silver coin withdrawn (£)	Population 1811
Rutland	974	16,380
Huntingdon	5,737	42,208
Westmorland	8,303	45,922
Monmouthshire	11,396	62,127
Bedfordshire	9,880	70,213
Herefordshire	11,035	94,073
Cambridgeshire	22,231	101,109
Hertfordshire	14,750	111,654
Middlesex	10,343	112,126
Buckinghamshire	16,214	117,650
Berkshire	29,029	118,277
Oxfordshire	28,208	119,191
Dorset	26,131	124,693
Cumberland	34,396	133,744
Northamptonshire	24,380	141,353
Leicestershire	31,894	150,419
Surrey	16,322	155,455
Worcestershire	31,546	160,546
Nottinghamshire	23,456	162,900
Northumberland	60,286	172,161
Durham	25,906	177,625
Derbyshire	20,592	185,487
Sussex	34,135	190,083
Wiltshire	32,952	193,828
Shropshire	30,650	194,298
Cornwall	32,871	216,667
Cheshire	25,521	227,031
Warwickshire	47,939	228,735
Suffolk	43,241	234,211
Lincolnshire	51,396	237,891
Hampshire	49,687	245,080
Essex	45,134	252,473
Gloucestershire	78,857	285,514
Norfolk	49,137	291,999

	Silver coin withdrawn (£)	Population 1811
Staffordshire	34,906	295,153
Somerset	58,191	303,180
Kent	59,689	373,095
Devon	81,368	383,308
Lancashire	122,253	828,309
Yorkshire	121,131	973,113

Source: PRO. Mint 11/14-68. *The Population of Great Britain in 1811.* Parliamentary Papers, 1812, (316), p. 427.

Table 16

Design of silver and gold coins, 1816-20

Denomination	Year of first issue	Artist	Modeller/Engraver	Obverse/Reverse
Crown	1818	Benedetto Pistrucci	Modeller & Engraver	Obverse & Reverse
Half-crown	1816	"	Modeller	Obverse
"	"	Thomas Wyon Jnr	Engraver	"
"	"	"	Modeller & Engraver	Reverse
"	1817	Benedetto Pistrucci	"	Obverse
"	"	Thomas Wyon Jnr	"	Reverse
Shilling	1816	Benedetto Pistrucci	Modeller	Obverse
"	"	Thomas Wyon Jnr	Engraver	"
"	"	"	Modeller & Engraver	Reverse
Sixpence	"	Benedetto Pistrucci	Modeller	Obverse
"	"	Thomas Wyon Jnr	Engraver	"
"	"	"	Modeller & Engraver	Reverse
Five Pounds	1820	Benedetto Pistrucci	"	Obverse & Reverse
Double-sovereign	"	"	"	"
Sovereign	1817	"	"	"
Half-sovereign	"	"	"	Obverse
"	"	William Wyon	"	Reverse

Source: RM. Library. RM. Accessions Register, 1816-50, pp. 5-8.

Table 17

Mint output of silver coin, 1816-50

	Output of silver coin (£)		Output of silver coin (£)
1816	1,805,251	1833	145
1817	2,436,297	1834	432,775
1818	576,279	1835	146,665
1819	1,267,272	1836	497,719
1820	847,717	1837	75,385
1821	433,686	1838	174,042
1822	31,430	1839	390,654
1823	285,271	1840	207,900
1824	282,070	1841	89,641
1825	417,535	1842	192,852
1826	608,605	1843	239,580
1827	33,019	1844	610,632
1828	16,288	1845	647,658
1829	108,259	1846	559,548
1830	151	1847	125,730
1831	33,696	1848	35,442
1832	145	1849	119,592
		1850	129,096

Source Challis, 'Mint Output', *NHRM*, pp. 694-95.

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