THESIS ABSTRACT

Monetary Policy 1833-9; with special reference to the Anglo-American crisis of 1839

Submitted for the degree of Doctor of Philosophy, Trinity Term, 1983

W.P.Ledward, Nuffield College, Oxford

This is a study of the monetary policy followed by the Bank of England between the years 1833 and 1839 - the instruments that it used to try to achieve the objective of specie convertibility chosen by Parliament.

The approach adopted is non-quantitative, because of data limitations, and institutional. This has the advantage of allowing study of a sub-sector of the financial system usually bypassed in monetary histories - the seven London and Liverpool merchant banks which were at the centre of Anglo-American trade and finance. A second theme is to emphasise the importance of divisions over policy among the Directors of the Bank of England. These led to frequent changes of direction which did much to diminish the Bank's reputation among contemporaries and historians.

The conclusion is broadly favourable to the Bank of England, or at least that part of it led by Horsley Palmer which was responsible for the evolution of 1830's policy. In particular, the acknowledgement by the Bank of its duty to act as a lender of last resort attracts praise, as having prevented the complete collapse of the British financial system during the crises of 1837 and 1839.

With the benefit of hindsight, some criticisms can be made: the most important is that the Bank was too rigid in its response to external developments and it allowed itself too little discretion in the formation of policy. But it was acting within the context of the monetary philosophy of the time, which was strongly antipathetic to giving too much power to any one institution. And, if a more discretionary policy had been adopted, it must be doubted whether this would have been much more successful, for the lesson of the monetary history of the 1830's is that monetary control is very difficult to achieve in a sophisticated financial system.

ABSTRACT

MONETARY POLICY 1833-9; WITH SPECIAL REFERENCE TO THE ANGLO-AMERICAN CRISIS OF 1837

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This thesis is a re-examination of the monetary policy followed by the Bank of England between 1833 and 1839. The objective of monetary policy had already been established by Parliament in 1819 - the convertibility of bank notes into gold at a fixed price. The task for the Bank of England was to find a method of controlling the financial system which would achieve this objective, and which at the same time would avoid financial instability.

From 1833, the Bank of England began to implement a new set of measures which it hoped would attain these twin goals. At the end of the decade, however, contemporary opinion was largely disenchanted with the Bank of England, believing that the policy it had chosen was inappropriate and that its implementation of this policy was incompetent. Historians have mainly concurred in this hostile judgement. This thesis questions whether such a view of the Bank is justified. It suggests that both the choice and implementation of monetary policy in the 1830's were rather better than has been commonly supposed, particularly if the behaviour of the financial system is taken into account.

One method of analysing monetary history is to view the determination of the money supply in terms of the money supply multiplier,

$$M = R\left[\frac{1 + R/D}{R/D + C/D}\right]$$

where M is the total money supply, R is the stock of reserves available to the private sector (sometimes called the monetary base or high-powered money), C/D is the non-bank private sector's preference between currency and bank deposits (or more strictly total bank liabilities) and R/D is the

banks' reserve/liabilities ratio. Movements in the money supply can be 'explained' by the behaviour of any of the three variables. An increase in the monetary base will increase the money supply according to the $^{C}/_{D}$ and $^{R}/_{D}$ ratios. If the public were to increase its preference relative to deposits (i.e. the $^{C}/_{D}$ ratio rises), then the banks lose some of their reserves and are forced to contract their liabilities by a proportionate amount. Likewise, a rise in the banking system's reserve/liability ratio will mean that a given amount of reserves will support a smaller quantity of bank liabilities, implying a fall in the total money supply.[1]

However, this thesis chooses not to use the money supply multiplier approach. The main reason for this is the absence of suitable data for Britain in the 1830's. For example, we have no figures for coins in circulation or bullion, the most liquid financial asset, let alone their distribution between the public, the banking system and the Bank of England. Information as to the banking system is just as hard to come by. Quarterly figures for the total note issue of banks in England and Wales exist but there are no data for deposit liabilities, and information concerning reserve ratios can only be gleaned from the few bank archives which have survived. Quarterly values for the creation of inland bills of exchange do exist, but these are a very untrustworthy tool to work with without a knowledge of the purposes for which they were drawn. As for as the London discount market, just one balance sheet survives for Overend, Gurney & Co., the largest discount house. Data limitations dictate that the analytical method of this thesis is non-quantitative. Its concern to analyse the credit cycle rather than the behaviour of any closely defined aggregate such as the 'supply of money' - to extend beyond what is conventionally defined as the monetary sector to investigate the wider financial system.

Therefore this thesis will not discuss the relationship between the Bank of England's liabilities, the size of the banking system and the preferences of the public between coin and bank notes, nor the connection between the money supply, the price level and the exchange rate. Instead, it will concentrate upon the activities of a group of seven London and Liverpool merchant banks, responsible for the finance of Anglo-American commerce. The major defect of current accounts of the monetary history of the 1830's is their failure to examine the consequences for policy of this new sector of the London capital market. As a result, no adequate explanation has yet been given of the most interesting financial event of the decade, the Anglo-American financial crisis of 1837. An explanation of this crisis and an elaboration of its significance for the formation of monetary policy, it is hoped, are the main contributions of this thesis.

The main body of the work is structured chronologically, describing the monetary events of the decade as they presented themselves to the Bank of England. Two main themes recur at various times throughout the narrative: first, the financial system did not behave as the Bank of England expected it to at the beginning of the decade. This can be seen at various levels - in the international economy, the increasing importance of international capital flows reduced the importance of the foreign exchanges as an indicator of international price levels. On another plane, the techniques used for the finance of international trade in the nineteenth century were prone to breakdown. Indeed, their fragility increased over the trade cycle as the liquidity of financial portfolios throughout the economy was reduced. This made financial collapse more likely to occur.

Secondly, the Bank of England was by no means a united body. Divisions over the correct course of policy did take place, and at critical junctures in the 1830's they led to embarrassing turnarounds in policy.

When the monetary history of the 1830's is reconsidered in this light, the record of the Bank of England does not turn out to be a bad one, and certainly a good deal better than has been made out to be the case. It deserves praise for acknowledging the responsibility of the Bank to act as lender of last resort, and its willingness (at least on the part of some of its Directors) to perform this role in 1837 and 1839 prevented financial damage to the economy from being a great deal more severe than it was.

Yet with the benefit of hindsight criticism can be made of certain aspects of 1830's monetary policy. The Bank accepted too easily the notion that monetary contraction was needed to correct a weak foreign exchange rate. Secondly, it was too naive in believing that it could actually determine the level of reserves in the financial system at any one time. Thirdly, its attempts to prevent other financial intermediaries from indulging in various business practices reduced the allocative efficiency of the financial system and in the long run would prove unsustainable.

However, it is easy to criticise from hindsight. Contemporary monetary thought strongly supported the principles on which 1830's policy was based and, if anything, the policy followed by the Bank in this decade was too modern for their liking. For this reason, a change was made in 1844 to a policy more in tune with these principles and less well-equiped to avoid financial instability. The lesson of the 1830's is that monetary control is very difficult and perhaps impossible to achieve in a sophisticated financial system.

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WITH SPECIAL REFERENCE TO THE ANGLO-AMERICAN CRISIS OF 1837

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Nuffield College

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Chapter One : Introduction

This thesis is a re-examination of the monetary policy followed by the Bank of England in the 1830's; more specifically, it is not a study of the social philosophy behind monetary theory and policy,[1] nor of the relationship between money, prices and economic activity,[2] nor of the role of money in the trade cycle,[3] nor of the ultimate objectives of monetary policy,[4] but of the execution of monetary policy and its interaction with developments in the wider financial system.

The monetary history of the 1830's has always been overshadowed by the controversy surrounding the Bank Charter Act of 1844 and the divisions between the Banking and Currency Schools of monetary theory. This is unfortunate, for the 1830's is worthy of study in its own right as a significant decade in the evolution of monetary management. In 1832, for perhaps the first time in history, the Bank of England publicly acknowledged its responsibility as a central bank for the control of the remainder of the financial system, and attempted to construct a policy capable of both securing the convertibility of its own notes into gold, and minimising the occurrence of financial instability. At the end of the decade, this policy was widely considered by contemporaries to have failed, and a search began for a more suitable alternative. Several questions arise. Was the Bank of England's plan poorly conceived, or was it implemented in an incompetent fashion? Alternatively, could contemporaries be said to have expected too much in their hopes of what monetary policy could achieve, and the policy pursued in the 1830's not to have been so unsuccessful after all?

1 : F.W.Fetter, Development of British Monetary Orthodoxy, 1797-1875 (Cambridge, Mass., 1965).
2 : P.Temin, The Jacksonian Economy (New York, 1969).
3 : R.C.O.Matthews, A Study in Trade-Cycle History. Economic Fluctuations in Great Britain 1833-42 (Cambridge, 1954); & P.Temin, 'The Anglo-American Business Cycle, 1820-60', Econ. H. R., xxvii (1974), 207-21.
4 : R.S.Sayers, 'The Question of the Standard, 1815-44', Economic History, iii (1935), 79-102.

Secondly, many of the problems which typically bedevil the implementation of monetary policy cropped up between 1833 and 1840. The domestic and international financial system was undergoing a period of rapid innovation, which was to make monetary management according to any fixed rule increasingly difficult to accomplish.

Thirdly, the 1830's is an important decade, because the differences between the Currency and the Banking Schools first arose out of the controversy surrounding the effectiveness of monetary policy between 1833 and 1839.

In 1819 Parliament had decided to restore within two years the convertibility of bank notes into gold at the pre-war parity, but it did so in the face of considerable hostility from the Bank of England. In that year the Court of Bank Directors had informed a House of Commons Select Committee that it was "unable to discover any solid foundation" for the idea that "the Bank has only to reduce its issues to obtain a favourable turn in the exchanges"[1] - an explicit rejection of the central concept behind the Bullionist theories which recommended resumption. This traditional view of the Bank of England, derived from the evidence of William Ward before the 1832 Bank Charter Committee, as hostile to resumption and anti-bullionist in theory, has been questioned by Dr.J.K.Horsefield, but is confirmed by the unpublished autobiography of G.W.Norman, a Director from 1821.[2] Norman recalled how at the time of his first being elected to the Court he found it dominated by "the Harmans", whose absurdities, such as "the uselessness of adverting to the State of the Exchanges in managing the Bank of England, & the impossibility of over-issue, when we only discounted good Bills not having more than 60

1 : J.H.Clapham, The Bank of England. A History (Cambridge, 1944), ii. 116.

2 : 'The Bankers and the Bullionists in 1819', Jour. Pol. Econ., lxii (1949), 442-8.

"days to run, and at 5%, had disgusted sensible men".[1] The title came from Jeremiah Harman (Governor 1816-18) who, in Norman's opinion, had long ruled over the Bank "with almost despotic sway, was ignorant, pompous, prejudiced and over-bearing".[2] His opinion of other Directors was little better: the current Governor and his Deputy, Pole and Bowden, were not "deficient in ability", but "utterly without scientific principle". Other members of the Committee of Treasury, the Bank's senior management committee composed of the present and immediate past Governors, were of "a still humble grade of intellect".[3] What is more, it was the senior Directors sitting in this Committee who effectively decided the policy of the Bank: "the power of the old Aristocracy, embodied in the C.(ommittee) of Treasury, which had previously been omnipotent, began to wane, not but that it still governed the proceedings of the Court".[4]

But there was a small and growing minority of "malcontents" in the Bank which professed a more Bullionist or Ricardian approach to monetary affairs. Led by William Haldimand and William Ward, this group asserted that "it was not always safe to discount all the Bills that might be tendered at a fixed rate of interest - That it was wise in managing the Bank to advert the state of the Exchanges, & finally, the Scandalous Heresy, that the notes had been depreciated by over-issue".[5]

But the hour of this group of Directors was not yet at hand. It appears that in the immediate period after resumption of specie convertibility in 1821 control of Bank policy remained in the hands of anti-Bullionist directors who administered the Bank in much the same way as during the Napoleonic Wars. Their administration must be held partly

1 : Kent Archives Office, Maidstone, Norman MSS., F69: Autiobiography, f. 429.
2 : ibid., f. 292.
3 : ibid., ff. 291-2; two of them, Manning and Pearse, made anti-Ricardian speeches in Parliament - see B.Gordon, Political Economy in Parliament 1819-23 (London, 1976), pp. 50-1, 129 & 196 n. 41.
4 : Norman MSS., F69: f. 293.
5 : ibid.

responsible for causing the crisis of 1825.

When Great Britain returned to gold in 1821, economic conditions in Britain were severely depressed, in part due, Ricardians argued, to the unnecessary contraction of issues by the Bank prior to resumption.[1] Lord Liverpool's Government, under pressure from political interests representing agricultural areas, let the issue of small bank notes (under £5), which had been intended to disappear, be continued until 1833. It also gave a helping hand to the fall in interest rates by converting £150m of 5% stock to a 4% coupon in 1822. It repeated the operation two years later, when it converted £70m of 4% stock to 3%.[2]

It must be admitted that the Bank of England aided and abetted the government in its reflationary policy. Its accumulation of bullion, "which would probably have been excessive in any case, but which the Government's concession to the country bankers rendered burdensome",[3] brought a shortage of income-earning assets for the Bank, particularly discounted bills of exchange. It attempted to remedy this by increasing the échéance of bills eligible for discount to 95 days in December 1821,[4] and reducing Bank Rate to 4% in June 1822. But these measures did not succeed in raising the amount of discounts given. Instead, the Bank of England increased its holding of public sector assets by advancing £4m on the security of Exchequer Bills to finance public works in Ireland. The following year, when the Government tried to sell an Annuity on the open market for the purpose of raising funds to pay off the burden of pensions left over from the Napoleonic Wars (nicknamed the 'Deadweight Annuity' by Cobbett), the Bank helped the Government out by buying some of this

1 : ibid., C192: Palmer to Norman, 8 Aug. 1839; for Ricardo on the Bank, see Gordon, Political Economy, pp. 127-8.
2 : for the Government's position see Gordon, Political Economy, pp. 123-6 & 149-50; & B.Hilton, Corn, Cash and Commerce. The Economic Policies of the Tory Governments 1815-30 (Oxford, 1977).
3 : L.S.Pressnell, Country Banking in the Industrial Revolution (Oxford, 1956), p. 478.
4 : Clapham, Bank of England, ii. 85.

annuity after it had met a total rejection at the hands of the public. In addition, from May 1823 it began to lend on mortgage, and from September, on the security of Government stock.

The consequence was an expansion in all forms of finance and trade. Pressnell estimates that country bank note issue rose by approximately 15%.[1] There was a boom in foreign trade and investment, with many joint stock companies floating their shares on the London Stock Exchange. Some of these flotations were downright fraudulent, being set up so that Directors might sell their private holdings of shares at a profit to the public. Others were not, although with the benefit of hindsight it can be said that they were set up on the basis of unrealistic expectations. Norman thought that the South American mining companies came into this latter category: "I am unable to blame those who in 1824 & 5 took shares in the various Anglo-American companies. It seems to me that they acted on principles sound, which had also been supported by a vast experience".[2] Nonetheless, almost all failed, including the Company of which Norman became a Director. Despite the unfortunate outturn, Norman still thought that "on the whole the speculation was conducted with great ability and I may add with sterling honesty".[3] Such experiences, "the consequence of over-sanguine expectations by businessmen, of commitments by them in excess of immediate or early returns",[4] were to be common in nineteenth century trade cycles.

The turning point came in December 1824, when the foreign exchanges depreciated below the par rate and gold started to leave the country. With monetary conditions becoming increasingly tight, demand on the Bank of England for advances and discounts grew throughout 1825, and

1 : Pressnell, Country Banking, p. 481.
2 : Norman MSS., F59: Autobiography, ff. 351-3.
3 : ibid., f. 352.
4 : Pressnell, Country Banking, p. 492.

it was forced to sell securities, like Exchequer Bills to make up for these. Country bankers began experiencing difficulties, and a leading Anglo-American merchant, Samuel Williams, failed in October leaving £517,000 of acceptances unpaid. The crisis really began at the beginning of December, prompted, according to Pressnell, by the regular quarterly withdrawal of liquidity from the money market prior to the payment of dividends on the National Debt. A London bank with many country correspondents, Pole, Thornton & Co., were the first to find themselves in trouble and they appealed to the Bank for help. This was given, but it proved to be insufficient, and they failed on 12th Dec. 1825. This affected adversely all their banking connections, spreading illiquidity and loss of confidence all over the country, and the crisis snowballed, manifesting itself ultimately in a run on the Bank for gold.

The Bank of England's handling of the 1825 crisis does not appear to be very praiseworthy. Its policy for much of the year was deflationary, but it did not seem to see the crisis approaching. In Pressnell's words, "the Bank of England did not act decisively until the crisis seemed to be getting out of hand, and until its own reserves were in danger of imminent disappearance".[1] The Bank's conduct was hindered by strained relations with Lord Liverpool and his ministers, and by divisions within its own ranks. Norman, for example, recalls how he strongly resisted a suggestion in the Court that the Bank should seek from the Government an Order-in-Council suspending convertibility. Eventually, the Bank decided to re-commence issuing £1 and £2 notes (a conscious act of policy it seems, and not the happy accident of discovering a box of small notes),[2] which was a suitable stopgap measure until Nathan Rothschild had procured gold from the Continent in the latter part of December. This

1 : ibid., p. 489.
2 : Norman MSS., F69: Autobiography, f. 388.

liberal policy was continued into the New Year, when they offered to make advances on security of commodities (albeit reluctantly, at the behest of the Government, who were unwilling to supply themselves Exchequer Bills on the security of goods, as had been the case in 1793).

The crisis of 1825 had destroyed the widely-held notion that the ever-present threat of being asked to pay out gold on the presentation of bank notes would prevent their over-issue. This threat was perceived to have worked before 1797. Monetary instability occurred because of the existence of a multitude of paper financial instruments whose fluctuations could exert inflationary or deflationary influences on economic activity, independently of changes in the metallic currency base. There was a need for a monetary policy which would control the monetary system with the ends of securing the maintenance of specie payments and also preventing the recurrence of financial instability on the scale of 1825.

Some steps were taken in this direction shortly after the crisis of 1825, through changes in the legislative framework regulating banking. The privilege of issuing small notes was removed during 1826-9 and, since the system of private partnership was considered as more likely to lead to abuse in the world of country banking, the law was altered so that joint stock banks could be set up outside London. In addition, the Bank of England decided to establish branches (or Branch Banks, as they came to be known) in provincial centres of England and Wales. Lord Liverpool had proposed this innovation prior to 1825, but his overtures had been rejected by the Bank. Norman re-introduced the measure in the Court of Directors in 1826 and carried his motion "in spite of the opposition of most of the Seniors and of the C.(ommittee) of Treasury"[1] - an indication, perhaps, of a new feeling in the Bank.

1 : Norman MSS., F69: Autobiography, f. 360.

Changes were also to take place in the direction of policy at the Bank of England. In 1827, shortly after Jeremiah Harman retired from the Court, the Court of Directors rescinded the 1819 motion which had denied any connection between Bank of England note issue and the exchanges; in the five years before the renewal of the Bank Charter came up for consideration, a vigorous reappraisal of policy took place at the Bank.[1] The results of this reappraisal were presented to the House of Commons Committee of 1832 by Horsley Palmer, Deputy Governor 1828-30 and Governor 1830-3, and their reception was favourable. Norman later expressed the opinion that it was Palmer's achievement to transform the standing of the Bank in the eyes of the public. Previously this institution had been regarded as little more than "a great overgrown job, deserving of being consigned to the Limbo of things that were". But the "general effect" of the 1832 proceedings, and especially Palmer's testimony before it, was, Norman believed, "to enlighten the Public, as to the importance and public utility of a great Central Issue, & of the Bank of England, as the regulator of the Currency".[2]

The Bank of England's Charter was renewed by Parliament and although the Commons Committee made no comment in its Report upon particular policies, it can be taken that the new approach to monetary policy had been "tacitly approved by Parliament and the Public".[3] It was put into formal operation from 1st October 1833.

However, the expectations entertained of the new approach by its supporters were to be cruelly disappointed in the remainder of the decade.

1 : see Norman MSS., F59/1: Draft Resolutions on Banking Affairs, 1829, and Palmer to Norman, 3 Jan. 1829; & F37: Memoranda on Banking and Currency Affairs, 1829.
2 : Norman MSS., F69: Autobiography, f. 429.
3 : J.H.Palmer, Reply to the Reflections etc. etc., of Mr. Samuel Jones Loyd on the Pamphlet entitled 'Causes and Consequences of the Pressure upon the Money Market' (London, 1837), p. 6. Palmer was fond of referring to this phrase in the late 1830's.

The monetary system continued to suffer from periods of instability, with financial crises occurring in 1837 and 1839. There are many points of similarity with the 1820's, although the crises of the later decade were nothing like so sharp and severe as that of 1825. The financial system was undergoing a period of great innovation: on the one hand, within the bounds of what is conventionally known as the monetary system, there was a large increase in the number of provincial banks following the authorisation given to joint stock banks in the provinces from 1826 and in London from 1833. As in the 1820's, great difficulty was experienced in controlling the activities of all provincial banks. On the other hand, in the non-monetary financial world, there was a vast increase in the size of the London discount market and the use of bills of exchange, and a similar manifestation of the phenomenon of 'overtrading' at the peak of the cycle. The objects of speculation may have been different in the 1830's - in North American state shares, for example - but the spirit behind this kind of financial activity is the same as that displayed at the top of the 1820's trade cycle.

In addition, there were criticisms of the Bank of England's conduct at the head of the financial system. It was widely felt that, just as in 1822-4, the Bank of England was to blame for providing an impetus to the expansion of credit in 1836 and 1838. Likewise, the Bank of England was considered to have provoked the crises of 1837 and 1839 by cutting back too severely in response to its previous expansion. The necessity of the Bank of England borrowing from the Banque de France in 1839 was regarded as a 'national humiliation' and served to diminish greatly the Bank's reputation. By 1839 the widespread view was that the failure of the 1832 policy to prevent instability and the proliferation of

note-issuing banks since 1833 made another enquiry into monetary policy necessary.

From what later came to be known as the Currency School, S.J.Loyd (Lord Overstone) judged the Bank of England's implementation of monetary policy in the light of the theoretical notion that movements in circulating notes should coincide with those in bullion. When he discovered that between January and October 1839 bullion had fallen by £6,811,000, with a comparable fall of only £600,000 in the circulation, Loyd was led to conclude: "Is this not a clear reduction of the rule to a practical absurdity; and a proof, that so long as it applied to the joint liabilities, and not to the circulation exclusively, it affords no security whatsoever?"[1]

From a theoretically different tack, Thomas Tooke was equally critical of the Bank: "it appears, by reference to particulars, that the measures of the Bank were characterised by anything but a due and vigilant regard for the interests of the public in the maintenance of the convertibility of Bank paper or for its own credit, which has been much impaired both at home and abroad".[2]

The Circular to Bankers, which defended the interests of country banks, reported that "there is a general and deeply-seated feeling of insecurity pervading the mercantile classes regarding their dependence on the Bank of England. They are all convinced there must be something flagrantly wrong and riskful in a system, the operation of which has...disturbed the habits, deranged their calculations, and alarmed their minds more than all preceding events".[3] Even an impartial figure like

1 : S.J.Loyd, Remarks on the Management of the Circulation and on the Condition and Conduct of the Bank of England and of the Country Issuers, During the Year 1839 (London, 1840), p. 36.
2 : T.Tooke, History of Prices and of the State of the Circulation (London, 1840, repr. 1928, ed. T.E.Gregory), iii. 115.
3 : Circular to Bankers, 13 Sept. 1839.

Thomas Baring, a partner of Baring Brothers, who had managed the Bank of England's loan from the Banque de France in 1839, felt that "the public debt (to the French) can easily be justified - not so easily perhaps the conduct which caused the necessity....the conduct of the Bank from 1836 onwards affords ample ground to ask for an enquiry".[1] Most importantly, his brother, Francis Thornhill Baring, Chancellor of the Exchequer since September 1839, doubted that the Bank's administration of monetary policy since 1832 had been the best and so proposed in March 1840 a Parliamentary Enquiry into Banks of Issue.[2]

In general, the judgement of historians has mirrored that of contemporaries. In discussing the historiography of 1830's monetary history, it is helpful to make a distinction between two themes: first, the policy and conduct of the Bank of England itself; secondly, the nature of the financial behaviour which can be observed at the top of the boom, its significance and the responsibility for its generation.

First, the Bank of England. Here it is appropriate to separate comments on the usefulness of the policy undertaken by the Bank from comments upon the Bank's implementation of this policy. Judgement of the policy chosen by the Bank differs according to the theoretical line taken by each writer. Prof.J.Viner, a supporter of Currency School doctrines, was hostile. Referring to "the utter impractability of the (Palmer) Rule under a metallic reserve currency", he declared that "the adoption of the Palmer Rule was a flagrant error, and the rule was repeatedly violated in such a manner as to make things worse and not better".[3] From a more eclectic position, Dr.J.K.Horsefield feels that the policy instituted in 1833 was too rigid and was especially unsuitable in light of the Bank's own position in the London money market: "Sooner or later - and in the

1 : Baring MSS., HC.1.204/1: T.Baring to Baring Bros, 19 Mar. 1840.
2 : Journals and Correspondence of Sir Francis Thornhill Baring, afterwards 1st Lord Northbrook (privately published, 1905), i. 160-1.
3 : J.Viner, Studies in the Theory of International Trade (New York, 1937), pp. 227 & 255; see also D.P.O'Brien (ed.), The Correspondence of Lord Overstone (Cambridge, 1971), i. 73, D.P.O'Brien, The Classical Economists (Oxford, 1975), p. 154.

"event sooner rather than later - the Bank's business as a borrower and lender of deposits was bound to involve it in variations in its securities", thus destroying one of the main planks of 1830's monetary policy, the unchanging level of the Bank of England's portfolio of income-earning assets.[1]

Others, however, have taken a much more favourable view of the new approach to monetary policy instigated by Horsley Palmer. In the words of Mr.W.T.C.King, it "represented a substantial advance upon those followed before 1825. On all fundamental points, it differed but little from what has since come to be regarded as the classic principle of orthodox central bank credit control".[2] Again, Prof.R.C.O.Matthews has concluded that "the Palmer Rule may be held to be vindicated once its fundamental premises are conceded. The policy of keeping the securities constant was well calculated to ensure that rises or falls in the Bank's bullion were associated with easing or tightening respectively of credit conditions in the London money market".[3]

But if the more enlightened commentators feel that the monetary policy adopted in 1832 was a significant improvement on earlier variants and was well-constructed to ensure the maintenance of specie payments, judgement of the Bank's implementation of this policy has been much more unfavourable. Viner refers to the Bank's "misguided violations of its own rule";[4] Prof.E.V.Morgan believed that "we can hardly acquit the Bank of the charge of having forced down market rate at the very time when it should have been rising, in the first and second quarters of 1836, and of having delayed its rise during the autumn of that year". He notes the

1 : J.K.Horsefield, 'The Origins of the Bank Charter Act, 1844' in T.S.Ashton & R.S.Sayers (eds.), Papers in English Monetary History (Oxford, 1953), pp. 113-4.
2 : W.T.C.King, History of the London Discount Market (1st edn., London, 1936), p. 79.
3 : R.C.O.Matthews, Trade-Cycle History, pp. 169-70.
4 : Viner, Studies, p. 227.

similarities between 1825 and 1836, in particular "the artificial reduction of the rate of interest" before both crises.[1] Sir John Clapham, in his history of the Bank of England, received the impression that "the leaders of the Bank were pursuing vague and not well-thought-out policies, that they were working from hand-to-mouth, by trial-and-error", and that they "did not look far enough ahead, or carefully enough into continental affairs and their possible reaction to the flow of precious metals".[2] Prof.F.W.Fetter believed that in 1835-6 "the Bank was expanding its credits in the face of declining reserves...a far call, from the Palmer Rule of holding the securities constant and letting deposits and notes fluctuate in line with specie...the case against the Bank was a strong one".[3] He describes a similar expansion of Bank lending in the face of declining reserves in 1839 as "the result of lack of foresight and absence of policy".[4] More recently, Prof.M.Lévy-Leboyer has written that "the record of the Bank in the 1830's has been somewhat disappointing". With reference to the 1837 crisis he speaks of "the indecisiveness of the Court (of the Bank), its tardiness in raising Bank Rate to stop the gold outflow, and its tendency to react to the situation by taking discriminating measures".[5] Likewise, in 1839 "the Court did not react firmly to the situation, it waited from three to five months before taking action, and later, when its rates of discount and advances were finally unified and stepped up, the move was made so abruptly that the credit contraction had damaging effects".[6] Leaving aside for the moment discussion of Bank measures in particular circumstances, the majority

1 : E.V.Morgan, The Theory and Practice of Central Banking (Cambridge, 1st edn., 1943), pp. 106 & 112.
2 : Clapham, Bank of England, ii. 162 & 166.
3 : Fetter, Development, pp. 166 & 169.
4 : ibid., p. 174.
5 : M.Lévy-Leboyer, 'Central Banking and Foreign Trade; the Anglo-American Cycle in the 1830's', in C.P.Kindleberger & J-P.Laffargue, Financial Crises. Theory, History and Policy (Cambridge, 1982), pp. 68 & 80.
6 : ibid., p. 68.

opinion is that, although the policy chosen by the Bank was a good one, it was unable or unwilling to adhere to it sufficiently closely, and that deviations from it were calculated to promote, rather than dampen, instability. In particular, the Bank of England stayed its hand for too long in the upswing of the cycle, and when it did eventually take action, did so in such a manner as to provoke a crisis.

On the minority side, Prof.Matthews believes that "The policy adopted was a consistent one, not very far removed indeed from the tenets of monetary orthodoxy, and its underlying principles were seriously departed from on only one occasion, namely, in 1839, and then for good reason. All in all there is no ground for disbelieving that the policy of the Bank ensured that international gold movements were accompanied by the appropriate expansion or contraction of domestic credit".[1] But it is significant that even Prof. Matthews finds one "persistent fault in its policy. When the Bank's discounts showed a tendency to rise which it was desired to check, the obvious thing to do was to raise the Bank Rate. Under the Palmer régime this was apparently regarded as an expedient to be avoided if possible, unless a jolt to confidence was felt to be specially desirable...There was consequently on a number of occasions...a delay between the efflux of bullion and the transmission of stringency to the discount market".[2] It is interesting that this criticism of dilatoriness is similar to those labelled at the Bank of England for the crisis of 1825, when it was managed according to a completely different philosophy. Pressnell's judgement of the Bank's conduct then, that "the Bank of England did not act decisively until the crisis seemed to be getting out of hand, and until its own reserves were in danger of imminent disappearance",[3] could easily be taken as a typical judgement of the Bank in the 1830's.

1 : Matthews, Trade-Cycle History, p. 174.
2 : ibid., pp. 174-5; cf. M.Collins, 'The Bank of England and the Liverpool Money Market', (London Univ. Ph.D. thesis, 1972), pp. 172-80.
3 : Pressnell, Country Banking, p. 489.

Historians, in so far as they have examined in detail the financial behaviour current in the 1836 mania and the 1837 crisis, have described it as a typical example of 'overtrading' by the institutions involved, the merchant banks engaged in the Anglo-American trade. The concept of 'overtrading' is by no means a precise one, but two things are immediately clear: first, the merchant banks are held to have extended their business artificially, in excess of the sustainable demand for their services coming from real, soundly-based sources. This over-extension was a result of excessively optimistic expectations of future business. The implication is that they were bound to suffer a reaction from these high levels of activity.

Secondly, there is an emphasis upon a deterioration in the quality of credit - new, more risky methods of finance were adopted in place of traditional and 'sound' techniques which had hitherto prevented fraudulence and speculation. A third, optional theme is the responsibility of the Bank of England at the centre of the financial system for extending the credit by which these excessive and unsound levels of activity could be financed.

Thus Prof.R.W.Hidy notes how after 1834 "in both the United Kingdom and the United States business men soon displayed unmistakable signs of an uncritical boom psychology...easy credit granted by the Bank of England was reflected in easy credit by the 'American houses' to merchants, bankers and politicians in the United States, who were in need of no stimulus to unwarranted optimism". Some of the American houses "plunged heavily into expansion of credits, relaxation of sound operating rules, and uncritical marketing of securities...many doubtful bills were presented to the aspiring new (joint stock) bankers as a consequence of

"of the lax policies pursued by several of the Anglo-American firms...in truth, some of the paper discounted was of the 'fictitious', or accommodation, variety which had not been carefully enough scrutinised by receivers and buyers".[1]

Prof. Matthews' method of analysis is similar, although he does not ascribe to the Bank of England responsibility for the development of the 'overtrading'. The mania or euphoria "may be described as a sudden rise in profit expectations and weakening of normal standards of business caution unjustified...by current changes in the objective rate of profit".[2] Many of the new ventures entered into in 1836 were motivated by a spirit of "irrational optimism", and one example of this was "the overextension of firms engaged in the finance of exports to the United States...as was the uncritical readiness with which their acceptances were received in the London discount market".[3] The reaction from this mania was inevitable: "it required the passage of only a short space of time for the unsound or fraudulent nature of many of the projects to become clear".[4] Prof. Lévy-Leboyer does not seem to have advanced significantly from this standard of analysis in his description of how "overtrading tendencies (unspecified) were becoming prevalent" towards the end of 1836,[5] and in his following comments upon Anglo-American finance: "initially, the new Anglo-American houses had applied strict rules in their operations to prevent excess lending...But in the early part of the 1830's, during the period of high prices and activity, competition between banks brought a loosening of controls".[6] Implicit in Prof. Levy-Leboyer's account, as Prof. Temin has

1 : R.W.Hidy, The House of Baring in Anglo-American Trade and Finance. English Merchant Bankers at Work 1763-1861 (Cambridge, Mass., 1949), pp. 181-4 & 205.
2 : Matthews, Trade-Cycle History, pp. 207-8.
3 : ibid., p. 208.
4 : ibid., p. 210.
5 : Lévy-Leboyer, 'Central Banking', p. 70.
6 : ibid., pp. 77-8.

pointed out, are the assumptions that "the expansion of credit in the boom years of the 1830's was extraordinary, and it made a contraction inevitable". Another argument, optional but quite commonly found in contemporary and academic literature, was that the blame for this extraordinary expansion of credit "lay with the permissive monetary policy of the Bank of England".[1]

This thesis sets out to re-examine these traditional interpretations of the 1830's. First, it believes that too much emphasis has been placed on the 'Palmer Rule' (strictly only the reserve policy of the Bank of England) at the expense of other constituent parts of Bank policy. An incorrect impression has been given that monetary policy in this decade was little more than a half-hearted application of the Currency principle, which was only applied in full rigour after the Bank Charter Act of 1844. Considerations of other parts of monetary policy in addition to the Palmer Rule suggest that the Bank of England was beginning to construct policy in the light of how the monetary system actually behaved, rather than according to any theoretical doctrine.

Secondly, this thesis looks at the process of policy formation within the Bank of England as a means of explaining some of the confusing changes of direction made by the Bank of England in this decade. The Court of Directors was by no means an united body, and throughout the 1830's was increasingly divided between two factions, one which can be loosely described as Currency School thinking, and the other which took a more pragmatic and eclectic approach to the formation of monetary policy. As the balance of power swung to and fro between these two groups in the two crises of 1837 and 1839, so did Bank policy chop and change, with consequent damage to its standing in the eyes of contemporaries.

1 : Temin, 'Comment', in Kindleberger & Laffargue, Financial Crises, p. 113.

Thirdly, there is a need to examine the nature of the 'overtrading' of the Anglo-American merchant banks in more depth - what was responsible for its evolution and what connection, if any, it had with the liquidity crisis at the beginning of 1837. Too often the easy assumption is made that because the American houses did experience liquidity problems the size of their business had exceeded some maximum level. This management failure is seen as the product of over-optimistic expectations at the peak of the cycle. The argument becomes circular when it is stated that the liquidity crisis occurs at the moment at which it becomes apparent that the scale of their operations was no longer justified according to any objective basis. The main contribution of this thesis is to describe the potential instability of the system of financing international trade in the first half of the 19th century, to set out how financial innovation over the short run might increase the systematic propensity to collapse, and to explore the consequences of this instability for the formation of an optimal monetary policy.

I conclude that the Bank of England's conduct of monetary policy in the 1830's was not nearly so bad as has been made out by both contemporaries and historians. On occasions, it acted with great wisdom, for instance when it gave lender of last resort aid in 1837 and when it stabilised the foreign exchanges (with the help of the Banque de France) in 1839; where it can be criticised for taking inappropriate measures, for example in the credit restrictions of February 1837 and June 1839, it was acting under the influence of those Directors who subscribed to Currency School doctrines, and in opposition to those who had been responsible for devising 1830's policy.

Where strong criticism can be made of monetary policy in the 1830's is in the strongly non-interventionist role of the Bank of England. In retrospect, it can be said that the Bank should have considered more carefully whether pressure on reserves caused by external bullion flows should always be transmitted to domestic financial markets. In addition, the institutional structure of the London money market casts doubt on whether the Bank could always ensure that the stock of reserves available to the financial system would move in line with the Bank's bullion stock. Thirdly, the Bank of England should have paid more attention to the state of commercial credit. The financial instrument of domestic and international commerce, the bill of exchange, was prone to breakdown and its fragility sometimes increased over short run periods, such as the trade cycle. The Bank should have attempted to ensure that unstable financing structures did not arise, in addition to their already-acknowledged commitment to pick up the pieces if the financial system did collapse.

In view of the judgement that monetary policy, where it did err, erred on the side of giving too little discretion to the Bank of England, it must be concluded that the move to a more rules-bound policy in the Bank Charter Act of 1844, which had been foreshadowed internally within the Bank since 1840, was a retrograde step.

Chapter Two: Objectives and Instruments of Monetary Policy

In May 1832 the House of Commons Secret Committee investigating the renewal of the Bank of England's Charter began taking evidence. This provided a splendid opportunity for the Bank to publicise its new approach to monetary policy, which it had been evolving since 1827 under the aegis of Horsley Palmer. This chapter will set out, in the light of the modern theory of macroeconomic policy, what the Bank was trying to achieve by the conduct of monetary policy, and the instruments that it intended using to secure these objectives.

Historians have tended to over-emphasize the importance in the 1830's of the Palmer Rule of fixed securities (strictly the reserve policy of the Bank of England).[1] This has led them to err in placing the new approach to monetary management in its correct historical and theoretical context.

Thus Mr. J.K.Horsefield conceives that the Bank in the first half of the nineteenth century was continually searching for (and failing to discover) "a fool-proof method of monetary management.....a simple and automatic rule". By 1832

> "we may guess that the Court persuaded itself that the real answer was the current variant of the Bullion Committee's theory, associated with the powerful name of David Ricardo. This early version of the Currency Principle substituted for the test of convertibility the test of correspondence with an all-metallic currency....Accepting this doctrine, the Bank translated it into the practical policy of the 'Palmer Rule'...This was, of course, a rough and ready way of achieving Ricardo's aim, and had for the Bank the all-important merit of simplicity".[2]

This chapter argues that monetary policy in the 1830's was rather more complex than has hitherto been made out.[3] Consideration of all relevant parts and comparisons with the current state of monetary theory

1 : see pp. 24-5.
2 : Horsefield, 'Origins', pp. 113-4.
3 : as pointed out by Pressnell, Country Banking, p. 212.

show that the Bank of England was beginning to assume the responsibilities of a modern central bank for the management of both domestic and international financial systems.

2.1 : Objectives

Let us examine the new approach to monetary policy followed after 1832 within the framework of the theory of macroeconomic policy, which describes how 'instruments' are manipulated in order to achieve certain 'objectives', possibly via the targeting of 'intermediate objectives'; the latter may in addition serve as an 'indicator' of the degree to which manipulation of instruments is bringing about the fulfillment of the ultimate objectives.[1]

The objective of the Bank of England after 1825 was a narrow one, the maintenance of the convertibility of its liabilities (strictly its notes) into gold or, as Palmer put it in 1832, "in ordinary times to furnish upon a stated principle, an adequate supply of paper money convertible into coin and bullion upon demand, and to act as a bank of safe deposit of public and private money".[2]

There were two threats arising to specie convertibility, one from a loss of confidence in the Bank, such as might occur in a financial or political crisis, the second from a balance of payments deficit which took bullion away from Britain. Ultimately, as Palmer recognised, there was no defence against the first,[3] commonly known as an internal drain, except a 100% specie reserve ratio, but such an unprofitable asset balance was obviously inconsistent with the Directors' obligation to provide Bank of England shareholders with a sizeable income from their investments.

1 : M.J.Artis & M.K.Lewis, Monetary Control in the United Kingdom (London, 1981), p. 40; also T.R.Saving, 'Monetary Policy Targets and Indicators', J. Pol. Econ., lxxv (1967), 446-56.
2 : P.P. 1831-2, vi (722), q. 477.
3 : ibid., q. 656; Norman MSS., F37: Memo. on Banking and Currency (1829).

Nevertheless, this does not mean that the Bank considered it should remain completely motionless in a financial crisis. At such times Palmer believed it was the duty of the Bank to act as a lender of last resort, "to uphold public and private credit when called upon. When commercial credit is affected, it is in such times that the credit of a great body like the Bank of England is available, and has the power to uphold the credit of the country".[1] To preserve the rest of the financial system from illiquidity by lending freely at such a juncture was also the Bank's best (albeit not certain) defence against the possibility that the crisis would culminate in a loss of confidence in, and a run for gold on, the Bank of England itself. Orthodox measures of restraint like the raising of Bank rate, as well as condemning other institutions to failure, might well precipitate such a run and so would not be able to protect the Bank in such a predicament. Palmer was always very careful to say that the Bank's normal rules to control its liabilities did not apply under "special circumstances",[2] those of an internal drain, and it is important to remember these in discussing the events of the 1830's.

The second threat to specie convertibility was the flow of bullion away from Britain following a deficit in her external payments balance - this is the well-known external drain. Palmer's measures sought to prevent such a drain occurring or to bring it to a swift conclusion once it had developed. He thought that the Bank was in a position to protect itself against an external drain and would succeed in doing so, if the right measures were adopted.

1 : P.P. 1831-2, vi (722), q. 198.
2 : ibid., q.82.

It should be remembered that the Bank was operating within an international metallic standard and hence within a system of fixed exchange rates. It is for this reason that the foreign exchanges played a very important role in the Bank of England's strategy, acting as an indicator of how strong the external threat to convertibility was, since bullion would only flow abroad when the foreign exchanges were below par. They are therefore an excellent example of an 'intermediate objective' or target of monetary policy, since they were "capable of being closely determined by the authorities through their instrument setting and....can be thought of, in turn, as either influencing, or being an early indicator of, the goal variables of the system".[1] Through their policy of aiming at a foreign exchange rate target, the Bank was acting to remove any external threat to specie convertibility. As early as 1829, when he was Deputy Governor of the Bank, Palmer had written that the only way to regulate Bank issues "for the object of keeping in possession of the Bank that quantity alone of bullion, which is requisite for ensuring the convertibility of its paper" is "by reference to the foreign exchanges".[2]

2.2 : Market Instruments

Thus, under conditions of an international metallic standard with freedom of international bullion movements, the Bank of England sought to achieve its object of specie convertibility by aiming at an intermediate objective, a foreign exchange rate target (determined by the specie import and export points), which incidentally doubles as an indicator of the success of policy. What were the instruments that Palmer envisaged as operating to achieve this intermediate target?

1 : M.J.Artis, in F.T.Blackaby (ed.), British Economic Policy 1960-74 (London, 1978), p. 259.
2 : Norman MSS., F59/1: J.H.Palmer to G.W.Norman, 3 Jan 1829.

It is customary to classify monetary instruments into regulatory instruments - to do with the control of other financial intermediaries - and market instruments - official transactions in financial markets which aim to alter the supply of money and/or the level of interest rates. Bank policy in the 1830's, and indeed throughout the nineteenth century, mainly consisted of the latter rather than regulatory instruments. The best known market instrument of the Bank in this decade is the Palmer Rule, although technically this was not a market instrument but a regulation imposed on itself; however, its significance lay in the quantitative limit it imposed on total Bank lending to the money market. I believe that too much emphasis has been given to the Palmer Rule, or the reserve policy of the Bank, to the neglect of other equally important aspects of Bank policy. This has led to misunderstandings in placing the monetary policy of the 1830's in its historical context.

Table 2.1: Bank of England Balance Sheet 1st Oct 1833 (£m)

Liabilities			Assets		
Circulation		18.796	Bullion		10.527
Deposits		12.141	Securities		22.640
of which			of which		
Public Sector	3.805		Government Debt	17.182	
Bankers'	3.605		Discounts	1.280	
Others	4.731		Qtrly. Loans	1.226	
			Others	2.952	
		30.937			33.167

Table 2.2: Bank of England Balance Sheet 1st Oct 1833
(Average of the preceding three months - £m)

Liabilities		Assets	
Circulation	19.823	Bullion	10.905
Deposits	13.057	Securities	24.244

Source: P.P. 1840, iv (602), Appendix 16.

Palmer informed the 1832 Commons Committee on the Bank Charter Act that the 'stated principle' of the Bank's reserve policy was, during a period of equilibrium in the foreign exchanges, "to invest and retain in securities, bearing interest, a given proportion of the deposits, and the value received for the notes in circulation, the remainder being held in coin and bullion; the proportions which seem to be desirable, under existing circumstances, may be stated at about two-thirds in securities and one-third in bullion".[1]

There are three important things to note about this policy: first, the Bank recognised that it was keeping rather a larger reserve ratio than other banks - that it was in effect acting as the central repository of the nation's bullion reserve; secondly, the ratio applied to <u>all</u> liabilities payable on demand, not just the note circulation but deposits as well; and thirdly, this did not mean that the Bank must keep a constant 33% reserve ratio. As the drain of bullion continued, the fall in total liabilities would be exactly equal to the fall in bullion: therefore the reserve ratio will decline during the drain and increase during an inflow.

The point was to let international bullion flows, via a corresponding movement in Bank of England liabilities, automatically influence credit conditions in the British monetary system. As notes or deposits were paid in to withdraw bullion, the rule of fixed securities would ensure that Bank liabilities would not increase in the form of extra lending. Thus Bank liabilities, and the supply of reserves to the financial system, would fluctuate in line with bullion. In this way, the Bank would try to approximate the movements of its liabilities, and hence the level of activity in the London financial system, to the ideal of the Currency Principle - that a paper currency should fluctuate as nearly as possible to the metallic currency which it replaces.[2]

1 : <u>P.P. 1831-2</u>, vi (722), q.72.
2 : Norman MSS., F37: Memo. on Banking and Currency (1829).

The similarity of the Palmer Rule of fixed securities with the Fixed Fiduciary Issue of the Bank of England Issue Department after 1844 is obvious - but it is possible to read too much into this. For one thing, the Palmer Rule applied to all Bank liabilities, both circulating notes and deposits, and this betrays a fundamental difference of view on the role of Bank of England deposits. Palmer's comments on these are worthy of consideration.

It was, of course, common sense to hold a reserve against deposits, even if one did not believe that they affected prices, as was to be the position of the Currency School. To some extent Palmer subscribed to this line of reasoning, for he did not believe that deposits had the same influence on prices and activity as circulation, and nor did he explicitly conceive of Bank of England deposits as a reserve base on which other financial intermediaries expanded their liabilities by some due proportion.

But this is not the whole story, for Palmer distinguished between different kinds of Bank deposits.[1] The largest single category were the deposits of the public sector, which were fairly stable in the medium term - over the short run they varied greatly - at an average level of about £3.8m to £4m. It was considered unnecessary to hold a reserve against them. Second in the classification were the ordinary drawing accounts of individuals and firms. These had been growing in size during the 1820's. But they had been lodged at the Bank for security and, like the public deposits, were not subject to much variation (although they did fluctuate more than similar deposits in the hands of ordinary banks). Third was the category of bankers' deposits. These too had been growing since the 1820's. Bankers' deposits were a great deal more volatile than those of

1 : figures for the different kinds of deposits can be found in P.P. 1840, iv (0.53), Appendix 16.

private individuals; in the drain of 1830-2 they had fallen by 50%, compared to a fall of 6% in individual deposits.[1]

From this, it might appear that the only distinction Palmer makes between different kinds of deposits is that some are more liable to withdrawal in the event of a drain than others. Taken in the aggregate, deposits were less likely to be presented for payment than notes.[2] But Palmer believed that the different behaviour of the bankers' deposits on the one hand, and the individual and government accounts on the other, constituted a difference of character - a difference that justified the bullion reserve being set against total liabilities and the laying aside of the convention that securities should vary in line with deposits. The first category, which he later defined as "the surplus money belonging to the East India Company and the bankers of London temporarily deposited with the Bank....(above their ordinary balances)...", "ought to be considered as part of the Bank Notes issued, being no other than notes wanting a demand for employment".[3] These deposits were liable to be drawn for in a drain, when there is more opportunity for their employment.[4] This kind of deposits constituted on the 1st October 1833 around £2.5m of the

1 : P.P. 1831-2, vi (722), qq. 145-6, 331 & 338-46; it is interesting that the economist James Pennington, in Appendix C to Tooke's History of Prices Vol. II, followed Palmer's distinction between different kinds of Bank of England deposits - see R.S.Sayers (ed.), The Economic Writings of James Pennington (London, 1963), pp. lx-lxi.
2 : P.P. 1831-2, vi (722), q. 77.
3 : J.H.Palmer, Reply, pp. 5 & 6.
4 : J.H.Palmer, The Causes and Consequences of the Pressure upon the Money Market; with a statement of the Action of the Bank of England from 1st Oct. 1833, to the 27th Dec. 1836 (London, 1837), pp. 34 & 35.

London bankers' and East India Company's deposits, just over 20% of total Bank deposits.[1] The second kind of deposits resembled the deposits held in an ordinary commercial bank and could be described as "currency in _posse_ but not in _esse_".[2]

What Palmer was trying to say was, that the former kind of deposits were in fact excess reserves kept by the London banks and the East India Company. This is made quite clear by his insistence that it did not matter, in so much as the Bank was concerned with general credit control, whether these reserves were kept in the form of Bank notes in the vaults of the bankers or deposits at the Bank of England, so long as the Bank recognised their true nature. "Whether, therefore, these notes remain for a time in the possession of the Bank, or whether they remain in the possession of the parties to whom they belong, is really the same thing, the only difference being the mode of stating the account".[3]

Palmer tends to confuse the first argument about some deposits being more liable to withdrawal than others with the second, conceptually different, theme, concerning the different characteristics of deposits. In fact, it is the latter which leads to the Bank holding a reserve against all demand liabilities and casting aside the convention that deposits should vary in line with securities. Since some part of the deposits were equivalent to notes, it made sense to hold a reserve against all liabilities, rather than separating the Banking and Circulation halves of the Bank as was to be the case after the Bank Charter Act of 1844.

From this, it is clear that the fixed total of securities depended upon the amount of and character of the deposits. Supposing the amount of deposits were to rise permanently in the sector that would be classified

1 : ibid., p. 35.
2 : ibid., p. 35.
3 : ibid., p. 35; see also _P.P. 1831-2_, iv (602), q. 1551.

as ordinary deposits, then the fixed level of securities would have to be increased.[1] The level of securities aimed at from October 1833 was £24m; from 1838 the target was reduced to £22.5m, because of a fall in Government deposits and a long-run decline in the Bank circulation.[2]

An ancillary point is that, if the London bankers held their excess reserves at a time of monetary ease in the form of deposits at the Bank, then Palmer's comment about their tendency to fall during a drain suggests that the London banks did not keep a constant reserve ratio. As rising interest rates during an efflux of bullion offered more inducement to the employment of previously idle resources, they lowered their reserve ratio to take advantage of the increase in yields. This negated to some extent the contractionary effect of the reduction in Bank of England liabilities.

Once it was decided to hold a reserve against all liabilities, and not just notes, it was necessary to hold a fixed level of total securities for the 'Currency Principle' to be maintained. Palmer obviously was confident that the Bank could control the total amount of its lending but his preferred method of doing so was certainly novel. Palmer firmly held that in normal times the great proportion of the Bank's income-earning assets should be acquired at the initiative of the Bank, like short and medium Exchequer Bills. This was in contrast to the old anti-Bullionist school of the Napoleonic era and the emerging Currency School spokesmen, who maintained that Bank securities should mainly consist of short-term commercial bills of exchange. Palmer, on the other hand, felt that "the discount of private paper is one of the worst means which the Bank, as a

1 : P.P. 1831-2, vi (722), q. 360.
2 : P.P. 1840, iv (602), qq. 1321-4.

"bank of issue, can adopt for regulating its issues".[1] To ensure a low discount issue on the part of the Bank, Bank Rate should be placed well above the market rate of discount for commercial bills, so that those in need of credit would have no incentive to come to the Bank for funds.

Obviously, if the Bank of England wished to maintain a fixed security portfolio, it was more sensible to hold assets acquirable and disposable entirely at its own initiative than to hold, for instance, discounted bills of exchange and to rely for the control of lending upon alterations in Bank Rate and/or credit rationing. But Palmer possessed more substantial reasons than this for preferring the Bank to hold its securities in the form of government debt. These reflect his conception of the place taken by the Bank of England in the British financial system.

A large discount issue by the Bank would mean entering into competition with other London banks and interfering with their legitimate business as bankers. It would be harmful to the currency as well, since the competition would lead to "that extension of the circulation, which might prove prejudicial to the the Bank", through causing an excess level of prices in Britain relative to those overseas and consequently an external drain of bullion. What was the mechanism which would produce such an outcome?

The most important link in the chain was the effect which the Bank's competitive discounting would have on other financial institutions, rather than the first round effect of an increased availability of discounts. Just as the Bank holding its balance of productive assets in the form of commercial bills would lower interest rates at the short end of the market, the release of an equal amount of funds onto the government securities market would increase their prices and lower their yields. To

1 : P.P. 1831-2, vi (722), qq. 173-4, 477, 562-3, 570 & 575; the quotations in the following three paragraphs are taken from these references.

the extent that arbitrage existed between short and long term financial markets, it would also tend to lower interest rates on the discount of commercial bills.[1]

The difference between the two cases was that the Bank's competition for discounts would induce changes in the behaviour of its competitors. Since the Bank is "the only body issuing money ad libitum" at a given rate, in effect it sets the maximum rate of interest in the money market - any bill its discounts "is an offer to make money at that rate". If the Bank were to compete in the provision of discounts it would have the effect of driving the maximum rate downwards, as far as, or even beyond, the level charged by private discounters. The latter would have to follow Bank Rate downwards, or risk losing their business. The result of competitive discounting by the Bank would be "an undue reduction of the value of money" - an abnormally low level of interest rates, below what would have been the case if the Bank had kept its securities balance in the form of Exchequer Bills. Through the encouragement this gave to speculation, it would cause an extraordinary and perhaps reckless expansion of business activity and in time an excessive level of prices, which would rebound on the Bank in the form of an external drain of bullion from its vaults. The expansionary power of a discount issue by the Bank of England was obviously different from that of other financial intermediaries. The Bank was different in its nature from other banks and therefore should not be expected to compete with them.

For these reasons, Palmer believed that the Bank should desist from stimulating the discount market in times of ease, but that its discounting activities should be limited to the "special circumstances" of an internal panic, which have already been discussed. This was why Bank

1 : as pointed out by E.Wood, English Theories of Central Banking Control 1819-58. With Some Account of Contemporary Procedure (Cambridge, Mass., 1939), pp. 84-6.

Rate was normally kept above the market rate of interest, so that traders would have no incentive to go to the Bank; indeed, Palmer later stated it should never be below 4%.[1]

The implementation of a low discount policy seems to have come a little time before the rule of fixed securities became part of Bank policy. Palmer had expressed his dislike of "a general and continued discount issue" as early as 1827,[2] and from this time on Bank Rate was kept well above market rate. On the other hand, in 1829 he had allowed for the possibility of fluctuations in the amount of Bank lending in certain circumstances,[3] and up to 1833 total Bank securities continued to vary. It seems that the Palmer rule of fixed securities was little more than a rationalisation of the experience of the Bank during the first two years of Palmer's governorship.

But the rule of fixed securities does not mean that the Bank should remain completely passive in the face of bullion flows. Let us consider its response to a persistent outflow of bullion.

The policy of not re-issuing notes which were presented at the Bank to take out bullion was well-calculated to ensure that a decline in the Bank's bullion was associated with a tightening of credit conditions in the London money market. But as market rates rose nearer to Bank Rate following the liquidity shortage, the demand upon the Bank for discounts would increase. To maintain its rule of fixed securities the Bank would meet this increasing demand either by sales of government securities, not with a view to making any increase in interest rates effective, but so that resources would be available to give extra discounts at an unchanged level of Bank rate; or by attempting to choke off the demand for discounts

1 : P.P. 1847-8, viii (395), qq. 2102 & 2206.
2 : Brit. Mus. Addit. MSS. 38,749 (Huskisson Papers), f. 167: Palmer to Huskisson, 31 Mar. 1827.
3 : Norman MSS., F59/1: Palmer to Norman, 3 Jan. 1829.

by increasing its own rate of discount, Bank Rate. Palmer, at least in the late 1820's, was keen to follow the latter course, because he believed (correctly) that the open market operations would take yet more liquidity out of the market and further increase the demand for credit on the Bank. In addition, they may well alarm the public unnecessarily. This preference for raising Bank Rate reflects the importance then ascribed by Palmer to interest rate variations in the transmission mechanism.[1]

By 1832, however, he told the Commons Committee that Bank policy was to sell Government securities to make way for more discounts and raise Bank Rate only when there was no more scope for this delaying tactic.[2] This may indicate a change in Palmer's views since November 1830 (his opinion on the utility of Bank Rate changes was to alter radically in the 1830's), or it may be the result of a compromise with those in the Bank who preferred to see it lending to commerce, and not Government.[3]

However, the ultimate necessity for raising Bank Rate to correct a weak foreign exchange was admitted by all and Palmer successfully argued in 1832 that the Usury Laws should be relaxed, so that when circumstances made it unavoidable, Bank Rate could be raised above 5%. This was preferred as a method of cutting down discounts to crude measures of credit rationing.

On the reverse side, as bullion flowed into the Bank, the extra liabilities issued by the Bank would have an automatic easing effect on liquidity and reduce market interest rates. As the amount of discounts made by the Bank fell, it would not reduce Bank Rate, or at least would

1 : ibid.: Addit. MSS. 38,749, f. 167: Palmer to Huskisson, 31 Mar. 1827; Bank of England MSS., LB6, ff. 188-90: Palmer to Nicholls, 17 Nov. 1830.
2 : P.P. 1831-2, vi (722), qq. 151 & 154-6.
3 : see, for example, Norman MSS., F59/1: Norman's Resolutions of Jan. 1829.

not reduce it as far as market rates fell, but instead would purchase government debt to maintain a constant amount of securities.

There is another Bank of England open market operation which, if it played no part in the Bank's strategy for maintaining convertibility, illustrates the Bank's wish to alleviate temporary distortions in the money market and its confidence in its own ability to control the amount of its lending to the money market. This was the system of quarterly advances. Every quarter before the payment of interest on the National Debt, government deposits began to build up in the Bank and liquidity in the financial system was reduced. Bank of England operations to restore liquidity by open market purchases of government debt were impossible, because prior to the payment of dividends every quarter, the transfer books were closed. Instead the Bank announced itself willing to make short term loans on assets like commercial bills of exchange, Exchequer Bills and East India Bonds. The Bank did not consider that these advances had any long term effect on its circulation, nor did it use the quarterly advances as a lever in an attempt to alter credit conditions in the money market. Thus the interest rate charged was what was considered by the Bank to be the current market rate, not Bank Rate which, as we have seen, was deliberately placed above market rate.[1] This is another example, like the Bank's low discount policy, of the Bank's reluctance to intervene actively in the money markets and its desire that they should find their own level.

2.3 : the Scope for Discretion

Thus far Bank of England policy in 1832 seems to have left it little opportunity to use its discretion: the supply of Bank reserves fluctuated automatically in line with bullion and the Bank had no intention of interfering with the 'natural' course of the money market. But this would be a misrepresentation of the ideas expounded by Horsley

1 : P.P. 1831-2, vi (722), qq. 255-9; Bank of England MSS., LB6, f. 199: Palmer to Lunell, 12 Jan. 1831.

Palmer in 1832. The Bank was at liberty to take discretionary action within the spirit of the rules, and indeed at times to break them. These departures from a rules-bound monetary policy stem from an awareness that in some circumstances the financial system did not operate in the manner commonly supposed by conventional theory. One example is the freedom of the Bank to break the rule of fixed securities and to issue notes freely at a time of financial crisis, when orthodox measures were ineffective and often caused more harm than good. Another is the readiness of the Bank to differentiate between different kinds of external drains.

The orthodox instruments of monetary control - the contractionary effect of not re-issuing notes paid in to take out bullion, open market operations to allow more discounts as market rates rise near to Bank Rate, and an increase in Bank Rate when necesssary - were all appropriate when the external drain was caused by a 'derangement' or 'excess level' of prices - a higher price level in Britain than in the rest of the world. But not all external drains were necessarily of this character.[1]

Thus Palmer diagnosed that the drain of 1828-9 had been caused by an increased demand for gold from Russia consequent upon the mobilisation of the army there, a drain to Ireland following the run on the Provincial Bank of Ireland, and payments for corn imports.[2] Since "it was evident to the Bank that it (the drain) was not probable to continue",[3] Palmer argued that the Bank could safely issue a limited amount of extra notes on the security of Exchequer Bills. This may well increase the total Bank holding of securities but it would also reduce the market interest rate and ease the pressure for discounts on the Bank.[4]

1 : P.P. 1831-2, vi (722), qq. 397 & 403.
2 : ibid., qq. 134, 408 & 411.
3 : ibid., qq. 134.
4 : Norman MSS., F59/1: Palmer to Norman, 3 Jan. 1829.

Such discrimination is more clearly seen in the long drain that set in after July 1830. Palmer placed the blame for the drooping foreign exchanges from 1830 to 1832 on "a state of foreign discredit....a commercial discredit arising from political causes",[1] like the July Revolution in France and the possibility of the outbreak of war on the Continent. This foreign discredit lowered continental prices relative to those of Britain and in time the British foreign exchanges weakened. This diagnosis led Palmer to adopt "a temporising system",[2] designed to delay as long as possible the implementation of measures to reduce the British price level, since these would unnecessarily harm commercial and manufacturing interests; although he admitted that if the external drain lasted long enough, the duty of maintaining convertibility came first and the necessary measures could not be avoided.[3] Therefore between 1830 and 1832, the increasing demand from the public for discount was met by sales of approximately £3m Exchequer Bills, and not by an increase in Bank Rate. Simultaneously the Bank was intervening in the foreign exchange market to prevent the export of gold.

Although the Bank had been obliged after 1821 to pay its notes in gold only, it normally kept part of its bullion reserve in the form of silver coin and bar silver. Silver coin still circulated as part of the low denomination means of payment in Britain, of course, but bar silver was kept because it was available to make foreign payments. During an external drain of bullion, the Bank would provide the precious metals necessary for export by selling silver on the open market in London, if the price was high enough. This operation is analogous to a modern central bank selling foreign exchange reserves to support its own

1 : P.P. 1831-2, vi (722), q. 403.
2 : Norman MSS., C192/2: Palmer to Norman, 27 July 1839.
3 : P.P. 1831-2, vi (722), q. 682.

currency. Without impairing its ability to defend convertibility, the Bank had taken a measure which would both prevent a drain of gold and reduce liquidity in the London money market.[1]

The problem in 1830-2 was that the Bank did not consider the price of silver in London high enough to sell. Therefore the Bank exported silver for sale in Paris, indirectly in 1831 through the agency of Messrs. Heath & Co., and directly at the beginning of 1832, when it melted down at the Mint £1m of silver coin into bar silver (at a loss of £60,000 to itself) and sent this abroad. The proceeds of the sales were used to purchase bills of exchange on London, and in this way the transaction proved "extremely beneficial in supporting the Rate of Exchange on the Continent". The bills, once they matured in London, would be paid off in Bank notes and thus, like the sale of silver in London, would have the effect of reducing the liabilities of the Bank. In these two years the Bank reduced its holding of silver by £3m.[2]

Eventually in 1832 the bullion drain ceased, but Palmer believed this improvement came about more as a result of "the return of foreign credit than any great alteration in our prices".[3] Palmer, looking back in 1848 on these events, concluded that "it was by effecting these sales of Exchequer Bills and silver that the Bank were enabled during that period to maintain a continued drain without any interference or damage to the public".[4]

1 : ibid., qq. 221-5.
2 : J.H.Clapham, Bank of England, ii. 117; Norman MSS., C192: Palmer to Norman, 8 Aug. 1839; P.P. 1831-2, vi (722), qq. 213-25; P.P. 1840, iv (602), qq. 1442-51; P.P. 1847-8, viii (395), qq. 1984 & 2183; P.P. 1847-8, viii (pt. iii), qq. 986-1001.
3 : P.P. 1831-2, vi (722), qq. 685 & 687.
4 : P.P. 1847-8, viii (395), q. 2071.

This episode shows that Palmer had recognised by 1832 that the international monetary system on some occasions did not work according to the conventional model of the price-specie-flow mechanism - international bullion movements taking place solely according to relative price differentials. In these circumstances, he admitted, it was not appropriate for the Bank to take the usual measures to protect itself against an external drain, or at least not until the drain had proceeded far enough to endanger convertibility. It is a tribute to Palmer that his empirical formulation of monetary policy predominated over the theory with which he was obviously so familiar. But it does raise a question on the desirability of the Bank adopting as normal policy measures suggested by a theory of international bullion movements, which even it admitted did not completely conform to practice. It all depends upon whether bullion flows were more likely to be generated by shifting relative prices or by some other cause. Palmer in 1832 evidently thought that it was more likely to be the former and that when some other influence was brought to bear, it was unlikely to be of sufficient duration to cause problems for the Bank. The experience of the 1830's would cause him to reconsider this opinion.

2.4 : Regulatory Instruments

In the nineteenth century, the Bank of England's operations were mostly limited to protecting its own position and it took very few measures that could be construed as circumscribing the activities of other banks. In spite of the lack of regulation, however, the Bank was not indifferent to the behaviour of other financial intermediaries for, as Palmer remarked in 1827, "it is what I term collateral currency, such as bills of exchange, credits (and Country Bank issues so long as they exist) which govern prices".[1] The Bank wished to ensure first, that provincial

1 : Addit. MSS. 38,749, f. 166: Palmer to Huskisson, 31 March 1827.

banks' liabilities moved in line with those of the Bank, and secondly, that provincial banks followed sound internal business practices, so as to minimise the risk of financial crisis.

Palmer was fond of referring to the Bank of England as "the head and pivot of the Circulation of the Empire",[1] by which he was not only describing the Bank as the largest bank in the British Isles. He was also expressing the hope that when the Bank of England took action to cut back its circulation, its example would be followed by the rest of the banks throughout the United Kingdom.

The problem was that in the past the convertibility of paper money had been endangered by the practice of country banks issuing more notes when the Bank of England was cutting back. When the Bank was forced at long last to make an "evident demonstration" of its desire to safeguard its own stock of bullion, the "foundations of alarm" had been laid, the issues of provincial banks quickly became discredited, and recourse was had to the Bank to make further issues to prop up these institutions.[2] Palmer did not blame the country bankers for all this, for in their business as bankers they made advances, not with reference to the foreign exchanges as any note-issuer should, but according to the demand for credit as it arose from their local customers.[3] Since the demand for credit in the provinces was dependent on the price level, a high price level would cause an increase in the country bank issue at the same time as it caused an external drain and put pressure on the Bank to cut its liabilities at the centre.

1 : Bank of Ireland MSS., Court of Directors Transactions 9 (CoDT9), f. 520: Palmer to Lunell, 9 Feb. 1829.
2 : Addit. MSS. 38,749, f. 169: Palmer to Huskisson, 31 March I827.
3 : P.P. 1831-2, vi (722), q. 470.

Theoretically Palmer believed that the circulation of bank notes should be removed from country bankers, who would then be free to get on with their proper job of banking, and entrusted instead to a central bank like the Bank of England. This would not compete with other banks but would be solely concerned to maintain the convertibility of the note issue into specie, and would look to the foreign exchanges to achieve this objective: "banking is better managed and more satisfactorily managed for the commercial interest of the country by individuals, than by any public body; but I think circulation, which always ought to have reference to the foreign Exchanges, and to the relative values between this and other countries, should have one centre".[1] But Palmer recognised the existence of vested interests which would make such a plan impossible to implement and so throughout his Governorship was content to push forward less ambitious schemes designed to secure "that unity of action which seems to me to be so desirable".[2]

To some extent Palmer believed that this difference in outlook between country banks and the Bank of England could be surmounted by measures to reduce liquidity in the London money market, which would be transmitted to the periphery by means of the close relationship that existed between a country banker and his London agent.[3] Before the 1832 Committee he described how an autonomous increase in country bank note circulation could not be maintained indefinitely, as it worked to cause bullion to leave the country following a depreciation in the foreign exchanges. The bullion would be taken from the capital and the resultant decline in liquidity there would soon make itself felt upon the country

1 : ibid., q. 469.
2 : Bank of England MSS., LB6, ff. 195-8: Palmer to Lunell, 10 Jan. 1829.
3 : Bank of Ireland MSS., CoDT9, ff. 530-2: Palmer to Lunell, 30 Mar. 1829; see also the discussion by other bankers of this mechanism, in Pressnell, Country Banking, pp. 217-24.

bankers. Palmer also believed that Bank measures to increase liquidity and reduce interest rates in the London money market would cause an increase in country circulation, through a switch by country banks of their earning assets from London to the country consequent upon a decline in yields in the capital.[1]

However, Palmer doubted whether this primitive form of monetary base control would work in the opposite direction - a reduction in the Bank's London circulation and hence in London liquidity forcing a similar reaction in the provinces. This scepticism on the possibility of control reflects the experience of the Bank during the long external drain which set in from July 1830. Palmer wrote in November when the Bank was contemplating a rise in Bank Rate to 5%, that "the great evil we sustain is not being able to compel others to act upon the same system" of reducing circulation in a period of weak foreign exchanges.[2] The Bank now made rather stronger efforts to bring other financial intermediaries closer under its wing.

One step in this direction had already been taken after the crisis of 1825 when the Court had decided to establish branches throughout England and Wales. Not only did this innovation introduce Bank of England notes into the provinces, where previously they had circulated to only a limited extent, but there is also evidence that the Branch Banks, through the facilities offered by them for remitting money across the country, strengthened the tendency towards a national money market and so reinforced the dominance of the capital over the provincial money markets.[3]

1 : P.P. 1831-2, vi (722), q. 361.
2 : Bank of England MSS., LB6, ff. 188-90: Palmer to Nicholls, 17 Nov. 1830.
3 : M.Collins, 'Liverpool Money Market', p. 57; see also R.O.Roberts, 'Bank of England Branch Discounts, 1826-59', Economica, xxv (1958), 230-45; D.J.Moss, 'The Bank of England and the Country Banks: Birmingham, 1827-33', Econ. H. R., xxxiv (1981), 540-53.

After 1830 a more direct attempt was made to replace country bank circulation with Bank of England notes. Acting almost exactly in accordance with the plan suggested in a memorandum of February 1827 sent by Palmer to Huskisson,[1] Branch Banks were instructed to open 'circulation accounts' with banks that agreed to give up their note issue and promised not to re-issue bills of exchange as cash. In return they were guaranteed a certain amount of discounts at the Bank of England, usually equal to the circulation they had relinquished, at the cheap interest rate of 3%. Lest the 'contract' banks press upon the Bank at a time of dear money by deliberately underusing their facilities during periods of monetary ease they had to use 85% of the extent of the account at any one time.[2]

In 1833 Palmer attempted to take this idea, which he admitted to be "a great favourite of mine", further when he asked the Royal Bank of Scotland if they would act in a similar way as Branch Banks in England and Wales for a Scottish Bank which wished to substitute Bank of England notes for its own.[3] But this and other attempts to make the Bank of England the sole issuer in England and Wales were broken on the back of powerful vested interests in the House of Commons, although Palmer had the support of the Chancellor of the Exchequer, Althorp.[4]

A second, and lesser, concern of the Bank towards other financial institutions was for the organisational framework which best promoted 'sound' internal business practices and hence solvency in the banking system (the two issues are difficult to distinguish in practice since it

1 : Addit. MSS., 38,749, ff. 169-72.
2 : Collins, 'Liverpool', pp. 45-6; P.P. 1831-2, vi (722), qq. 419-22 & 843-6.
3 : Bank of England MSS , LB6, f. 123: Palmer to Thomson, 29 Jan. 1833 & f. 128: Palmer to Thomson, 14 Feb. 1833.
4 : Times, 4 Jan. 1838; Fetter, Development, pp. 157-8.

was likely to be an imprudent bank whose liabilities moved out of line with those of the Bank of England). Palmer was impressed with the need to secure "the necessity of solidity" among provincial banks and in 1829 he believed that this was likely "to be better promoted by Joint-Stock Banks than by individual establishments. The former....being governed by fixed rules and regulations, and by parties having no considerable interest of their own to promote, are less likely to be led astray by speculative mania".[1] By 1833 his opinion of the advantages of joint-stock banks had been modified, for he was now "by no means satisfied of their present benefit and they may from mismanagement and undue competition, become extremely prejudicial".[2] Palmer possessed extremely firm ideas on the correct way to administer a provincial bank, and his growing disenchantment with joint-stock banks reflects the failure of some of these banks to live up to his expectations.[3]

In addition to the use of market and regulatory instruments for the purposes of quantitative credit control, the Bank was not indifferent to some of the internal business practices accepted by the rest of the financial system - a different form of regulation, concerned with the quality, and not quantity, of credit. The Bank of England's disapproval of certain financial techniques was expressed through the classification of what was acceptable security for its own lending.

First of all, it should be made clear that there were two main concerns in the construction of Bank discount policy: the first was, for want of a better term, inward-looking - a desire to maintain its own

1 : Bank of Ireland MSS., CoDT9, f. 520: Palmer to Lunell, 9 Feb. 1829
2 : ibid., CoDT10, ff. 445-6: Palmer to Colville, 1 Apr. 1833; also to be found in Bank of England MSS., LB6, ff. 138-9.
3 : reprinted in J.K.Horsefield, 'The Opinions of Horsley Palmer', Economica, xvi (1949). 157 n. 3.

solvency. Therefore the Bank imposed rules on the kind of bills it discounted: all bills must be trade, not accommodation, bills and must bear two good British names as security, excluding the customer to whom the discount was given. Limits were also placed on the discount account of each of its clients. While these restrictions might seem similar to the tenets of the 'Real Bills' doctrine, they were in fact little more than a practical rule of thumb to safeguard the Bank from loss.[1]

The second consideration was outward-looking. The Bank was keenly aware that its own lending had consequences of the rest of the economy and so it tried to ensure that it did not foster by short-term lending what it saw as unsound trading practices - a concern with the quality of credit. Thus it did not lend money on the security of stock nor did it discount brokers' acceptances. These were bills drawn, in the case of the cotton market, by the cotton importer upon the broker to whom he had entrusted the cotton for sale, which the importer would discount so that he could obtain ready funds before the commodity was actually sold. Because they were not based upon a real transaction, and were sometimes used as a means to delay immediate sale (the drawing and re-drawing of bills could allow the importer to withhold his cotton from sale indefinitely in an unfavourable market), the Bank of England refused to have anything to do with them. If it had discounted them, the Bank believed it would be fostering the maintenance of **artificial** conditions in the cotton market.

Although this part of Bank of England policy received very little discussion in the 1832 House of Commons hearings, this does not mean that it should be underestimated or regarded as some kind of alternative to measures of a quantitative kind, like open-market operations or changes in Bank Rate. These kind of measures probably did not attract much attention

1 : Collins, 'Liverpool', pp. 42-3.

because they were relatively non-contentious. Notions about the proper scope and role of financial techniques were held quite widely in the commercial community, and the Bank of England in enforcing them was acting as the representative of commercial opinion.

In addition, it can be argued that qualitative measures should be regarded as complementary, and not as an alternative, to the orthodox measures of quantitative credit control. There is an analogy between the purpose of the Currency Principle - to make a paper currency behave like a metallic one so that conditions in the capital market would be determined by the 'real' forces of supply and demand - and the logic behind the Bank's refusal to discount brokers' acceptances: that the cotton market would not be disturbed from its equilibrium or 'natural' state where the price was set by the market forces of supply and demand.

Ironically, although the Bank clashed periodically with note-issuing banks, the major problem of control that it faced in the 1830's came from a group of financial intermediaries which were not mentioned at all in the evidence before the 1832 Committee - the Anglo-American merchant banks. Bank policy towards this sector would become clear in time.[1]

2.5 : the Transmission Mechanism

The transmission mechanism through which Palmer saw a reduction in circulation working to improve the foreign exchanges is at first sight the standard Ricardian one: "the first operation is to increase the value of money; with the increased value of money there is less facility obtained by the commercial Public in the discount of their paper; that naturally tends to limit transactions and to the reduction of prices; the reduction of prices will so far alter our situation with foreign countries, that it

1 : see pp. 158-60.

"will no longer be an object to import, but the advantage will rather be upon the export, the gold and silver will then come back into this country".[1]

To explain varying trade flows, and hence changes in the balance of payments, by sole reference to changing relative price levels is the standard explanation of classical political economy, but what is interesting is the importance attributed by Palmer to interest rates in the determination of business behaviour. Looking at the problem from the opposite side of an increase in circulation, the first effect of this is to lower the interest rate and thereby make profitable some ventures which were previously not so, thus increasing the demand for credit. The increase of money 'in circulation' and the consequent rise in price are seen as the result of the fall in the interest rate, not as directly-linked events with the line of causation running from the former to the latter. The analogy with the 'Natural Rate of Interest' doctrine of K.Wicksell,[2] which had been briefly foreshadowed in H.Thornton's Paper Credit,[3] is obvious. Once the level of prices had adjusted to match the increase in circulation, the rate of interest will revert to its former level.

It is quite clear that for Palmer, changes in Bank liabilities only affect activity inasmuch as they change interest rates; conversely, he was also suggesting that the supply of money was determined by the demand for credit, itself a function of the level of interest rates. This explains his keenness to raise Bank Rate at a period of weak foreign exchanges, and his emphasis that instruments of Bank policy should not be used for the sole object of cutting back Bank liabilities, but to influence liquidity conditions in the money market.

1 : P.P. 1831-2, vi (722), q. 678.
2 : see 'The Influence of the Rate of Interest on Commodity Prices', in E.Lindahl (ed.), Knut Wicksell: Selected Essays in Economic Theory (London, 1958), pp. 67-89.
3 : H.Thornton, An Enquiry into the Nature and Effects of the Paper Credit of Great Britain (London, 1802, repr. 1939 & 1962, ed. F.A.Hayek), pp. 253-6.

Palmer took care to stress that the period between contraction and the resulting price fall was of uncertain length - it depended "upon the state of credit and the means that may exist of upholding that credit during the the period of the contraction".[1]

Note also that there is no mention of rises in interest rates working to affect the foreign exchanges through 'hot money' flows between international financial centres, as was to be the case in the later nineteenth century.

2.6 : a Ricardian Strategy?

This chapter has shown that the monetary policy instigated by the Bank of England under Horsley Palmer was considerably more complicated than has been the impression given by some accounts. But what was the relationship of this new approach to the current state of monetary theory? Could the Bank be said to have been implementing the policy recommendations of classical monetary theory or did it incorporate the practical reasoning of bankers engaged in day-to-day business? A discussion of the evolution of classical monetary theory up to the 1830's is needed.

A quite advanced monetary theory appropriate to a commodity money economy had been developed by the end of the eighteenth century. Smith possessed the clearest idea of the role played by money in the economy. Describing it as "the great wheel of circulation and distribution", he saw the adoption of any one commodity as the universally-accepted means of exchange as an essential part in the transformation of the barter into the modern exchange economy. But in theory, the classical economists conceived that in the long run money was a 'veil' laid over the equilibrium position of the economy: "the total volume of production and

1 : P.P. 1831-2, vi (722), q. 696.

"income, and the structure of relative prices, were reflections of real rather than monetary forces".[1] Under these circumstances, the value of money was determined by the long-run marginal cost of production of the commodity serving as the medium of exchange. But in conditions of short-run equilibrium and of disequilibrium, money possessed a more important role.

Viner lists four stages in the development of the central analytical core of classical monetary theory: recognition that net international balances of payments must be paid in specie, that the quantity of money is a determinant of the level of prices, that the volumes of imports and exports depend on the level of prices at home relative to those abroad, and the integration of these propositions into a coherent theory of a self-regulating international distribution of specie.[2] Once it was accepted that the level of domestic prices was in some way connected with the quantity of money, the combination of this idea with those concerning the external trade position quickly produces the notion of a price-specie-flow mechanism and, in the long-run, an equilibrium distribution of the precious metals.[3] In Ricardo's words,

> "the precious metals...have been supposed,,to have been divided,,among the different civilized nations according to the state of their commerce and wealth, and therefore according to the number and frequency of the payments which they had to perform...While so divided (the precious metals) preserved everywhere the same value, and as each country had an equal necessity for the quantity actually in use, there could be no temptation offered to either for their importation or exportation".

1 : B.A.Corry, Money, Saving and Investment in English Economics 1800-50 (London, 1962), p. 41.
2 : J.Viner, Studies in the Theory of International Trade (New York, 1937), p. 75; also O'Brien, Economists, p. 143.
3 : in P.Sraffa (ed.), The Works and Correspondence of David Ricardo (Cambridge, 1951-73), iii. 52.

But this was a long-run position only, and economists long before Ricardo had allowed for the possibility of disturbances arising from changes in the supply of money. In Hume's classic account,[1]

> "suppose that all the money of Great Britain were multiplied fivefold in a night...Must not all labour and commodities rise to such an exorbitant height, that no neighbouring nations could afford to buy from us; while their commodities, on the other hand, become comparatively so cheap, that, in spite of all the laws that could be formed, they would be run in upon us, and our money flow out; till we fall to a level with foreigners, and lose that great superiority of riches, which laid us under such disadvantages?

In this manner, equilibrium in the international distribution of the money stock would be restored.

However, the early economists were divided over the interim effect on real output and interest rates. Hume, assuming some previous under-utilisation of resources, maintained that the increase in the money supply would produce a temporary increase in output before the money supply expansion fed through into higher prices;[3] but other economists, including Smith,[4] were to deny any beneficial influence on the level of real output.

A similar divergence of opinion existed over whether an increase in the money supply would alter the level of interest rates. At the end of the 17th century, Locke had analysed the rate of interest in terms of the demand for and supply of loanable funds, contending that changes in the money supply affected the rate of interest in as much as they altered the supply of loanable funds.[5] The trend in the eighteenth century was for writers on economics to view the interest rate as determined by 'real' forces, i.e. the **flows** of real savings and real demand for investment

1 : 'Of the Balance of Trade', in E.Rotwein (ed.), David Hume: Writings on Economics (London, 1955), p. 63; see also R.Cantillon, Essai sur la Nature du Commerce en General (1755, repr. London, 1931, H.Higgs ed.), pp. 105 & 167.
3 : 'Of Money', in Rotwein (ed.), Hume, p. 30; also S.Hollander, Economics of Adam Smith (London, 1973), pp. 75-6.
4 : ibid., p. 207.
5 : ibid., p. 71 n. 78.

funds, and not by monetary or **stock** considerations.[1] Thus David Hume did not allow for any monetary effects on the rate of interest;[2] one is left to conclude that money supply changes operated via some kind of real balance effect on output and/or the level of prices. Adam Smith, at least in the Wealth of Nations, if not in other parts of his work, followed Hume in subscribing to a 'real' theory of interest, which in the next century was to become "one of the cornerstones of orthodoxy".[3]

The suspension of convertibility in 1797 prompted a renewal of interest in monetary theorising in the succeeding years which built upon the foundation stones of 18th century theory but constructed a far more rigorous superstructure.[4] For analysis of equilibrium, the quantity theory of money, the price-specie-flow mechanism and the concept of the rate of interest as the outcome of 'real' forces, were retained, but perhaps the greatest progress was made in the analysis of short-run disequilibrium conditions, appropriate for conditions of an inconvertible paper money and an uncontrolled banking system. It was from such analysis that mainstream classical monetary theory derived the policy proposals which were to have such influence in the 19th century.

Take Ricardo as an example. He still continued to regard paper money as behaving identically to a commodity money: "paper money conforms, or should conform, to the value of gold, and therefore its value is influenced by such changes only as influence the value of that metal".[5] And he followed Smith in believing that "the rate of interest for money is regulated by the rate of profits on that part of capital only which does not consist of circulating medium....Profits can only be lowered by a competition of capitals not consisting of circulating medium,...by the[6]

1 : J.R.Low, 'The Rate of Interest: British Opinion in the Eighteenth Century', Manchester School, xxii (1954), 115-38.
2 : 'Of Interest', in Rotwein (ed.), Hume, pp. 47-59.
3 : Low, 'Rate of Interest', p. 136.
4 : J.H.Hollander, 'The Development of the Theory of Money from Smith to Ricardo', Q. J. of Econ., xxiv (1911), 429-67.
5 : Works, i. 105; S.Hollander, The Economics of David Ricardo (London, 1979), pp. 177-8.
6 : Works, iii. 25-6.

"relation of the amount of capital with the means of employing it".[1] An increase in the quantity of the circulating medium "will increase the prices of all commodities, but will not lower the rate of interest".[2] So the effects of changes in the supply of paper money are identical to those caused by changes in the quantity of bullion:[3]

> "If instead of a mine being discovered in any country, a bank were established...with the power of issuing its notes for a circulating medium; after a large amount of money had been issued either by way of loan to merchants, or by advances to government, thereby adding considerably to the sum of the currency, the same effect would follow as in the case of the mine. The circulating medium would be lowered in value, and goods would experience a proportionate rise".

But it is important to remember that Ricardo only said an increase in bank money would not **permanently** affect the rate of interest.[4] This is an indication that Ricardo had given some thought to the process of money supply creation in a paper money economy. Rather than the extra money entering the economy as if it were mined from the earth or, to use a modern analogy, dropped from a helicopter, Ricardo believed that the original point of influx was additional bank lending, as is clear from the quotation in the last paragraph. For a bank to increase its note issue by making more advances, it would have to lower the rate of interest it charges below the market rate then prevailing. But the loans having been made, the increased note issue would not[5]

> "be retained unemployed by the borrowers; they would be sent into every market, and would everywhere raise the prices of commodities, till they were absorbed in the general circulation. It is only during the interval of the issues of the Bank, and their effect on prices, that we should be sensible of an abundance of money; interest would, during that interval, be under its natural level".

An once-and-for-all increase in Bank advances, he later suggested, would only affect the market rate of interest for six months - at the end of this period, it "would find its wholesome and natural" level again.[6]

1 : Works, iii. 92 & 194.
2 : ibid., iii. 26
3 : ibid., iii. 54-5.
4 : Hollander, Ricardo, p. 106 n. 21.
5 : Works, iii. 91; also i. 298 & v. 445.
6 : ibid., v. 222.

Ricardo starts from the assumption that under normal circumstances the market rate of interest is the natural rate, the rate which would equate the ex ante supply of and demand for loanable funds, and which is equivalent to the rate of return on real capital. The initial cause of the disequilibrium would be an offer to supply an extra amount of loanable funds, in the form of circulating medium and not real savings, at a level under the equilibrium rate; after the first round had passed, the increased quantity of circulating medium would work its effect via the real balance effect.

Perhaps the clearest example of how fluctuations in income depended on the volume of savings relative to investment came from an economist who has been previously regarded as unorthodox, Thomas Joplin.[1] Ordinarily, savings and investment are kept in equilibrium by a single interest rate.

> "From whatever cause the demand for money arises, it must be limited to the supply of income saved within the year; but, as may be inferred, the supply and demand vary from year to year, the demand is greater and sometimes lesser than the amount saved, and is kept to an equality with the supply by a variation in its price, or the rate of interest charged for its use".[2]

For equilibrium to exist, "the supply and demand for the savings of income, or money in the money market, must correspond".[3] The rate of interest which would bring about this equality Joplin referred to as the "real return on capital" or even the "natural rate". Disturbances were possible either because the rate of interest charged by the banks and thus prevalent in the money market was sticky and did not adjust sufficiently swiftly to autonomous changes in saving and investment decisions; or because the banks made advances which were not the result of real saving.

1 : on Joplin, see R.G.Link, English Theories of Economic Fluctuations 1815-1848 (New York, 1959), pp. 73-102; and R.L.Meek, 'Thomas Joplin and the Rate of Interest', Review of Economic Studies, xviii (1950-1), 154-63.
2 : T.Joplin, Outline of a System of Political Economy (London, 1826), p. 26.
3 : idem, An Analysis and History of the Currency Question (London, 1832), p. 104.

Joplin's policy proposals followed from this analysis: in order for equilibrium to be maintained, the power to issue paper currency at will should be taken away from banks. This would ensure that their note circulations would fluctuate exactly like the metallic currency that they replaced, and hence - an equally important condition - that the rate of interest in the capital market would remain undisturbed by monetary influences. It would be free to adjust automatically savings and investments flows.

Although the specific form which Joplin's policy proposals took were unorthodox for his time, and need not be discussed here, the conditions which he sought to bring about were very much in the mainstream of classical political economy. They were indeed very similar to the suggestions made by Ricardo himself in a posthumously published pamphlet, Plan for the Establishment of a National Bank. He now maintained that the Bank of England's business was composed of two quite distinct functions: that of issuing notes as a substitute for metallic currency, and that of lending to merchants and others, using for this purpose deposits entrusted to its care.[1] His proposed National Bank would make notes fluctuate in line with the bullion stock, thus ensuring not only that paper money would behave like a commodity money, but that the capital market would be unaffected in the short run by banking policy.

How does 1830's monetary policy shape up in the light of this reconsideration of classical monetary theory? There are many features which give the impression that the monetary policy adopted in 1832 adhered to Ricardian doctrines: first, the asssumption that external bullion drains were usually caused by international absolute price differentials; and secondly, the effect of the rule of fixed securities to ensure that

1 : Works, iv. 271ff.

Bank liabilities, or the supply of reserves to the financial system, should fluctuate in line with bullion - in contemporary parlance, to make a paper money fluctuate exactly as a metallic currency would.

The same impression is gained from the Bank's reluctance to intervene actively in the money market. In the 1830's the Bank of England was implicitly adhering to the Ricardian view that conditions in capital markets should be set by market forces and not distorted by central bank intervention when it attempted to prevent the occurrence of such distortions by abstaining from any money market transactions; or, if they did take place, when the Bank tried to correct these distortions and return the money market to the status quo ante. Thus when the build up of public sector deposits in the Bank prior to the dividend payment on the National Debt reduced liquidity in the money market, the Bank always offered to give advances to balance this reduction. Significantly, it charged on these loans what it considered to be the market rate at the time, and not what the Bank considered appropriate in the circumstances then existing. The logic behind the low-discount rule, and especially the rule of fixed securities, was the same - the desire to prevent the creation of artificial conditions in the capital markets through fluctuations in the total amount of Bank lending or, more particularly, through changes in the level of its discounts. In these respects the Bank of England was attempting to implement rules which would prevent it from affecting the terms of borrowing and lending. It is fair to say that in the 1830's it was more non-interventionist than after the Bank Charter Act of 1844.

However, it is possible to read too much into these 'Quantity Theory' aspects of Bank policy, since consideration of other parts lead to the conclusion that the Bank of England was slowly assuming the role of a

modern central bank. For a start, it is clear that Horsley Palmer considered the Bank of England as quite different from other financial institutions. It held a much larger bullion reserve than other banks; it recognised its duty to break its reserve policy and make additional lending at times of financial crisis; it considered that a portion of its deposits were different in character from those ordinarily entrusted to commercial banks and were equivalent to notes in circulation; and one reason why the Bank refused to countenance an active role for itself in the discount market was its awareness that a large discount issue by itself would have very different effects on the rest of the financial system than similar discounting activity by, for example, a London private bank. These last two positions are ones that mainstream economists were unable to accept.

In addition, the Bank of England was beginning to accept that in some circumstances the international monetary system did not behave in the manner suggested by orthodox economics. External drains of bullion might be caused by reasons other than 'a derangement of prices'. In these cases the Bank, rather than responding passively to the drain, should attempt to stabilise the foreign exchange rate so that bullion would not continue to leave the country. Already, the Bank accepted that it should interfere in certain circumstances in the working of a private sector financial market to disturb it from its 'natural', i.e. free market, position.

In addition, the Bank's readiness to take measures of qualitative credit control, the exercise of which is by definition discretionary,[1] is some way from the generally rules-orientated policy recommendations of classical economics.

1 : H.Simons, 'Rules Versus Authorities in Monetary Policy', in Economic Policy for a Free Society (Chicago, 1948), p. 332 n. 19.

Some contradictions remain, of course. It seems inconsistent for the Bank of England, if it had already recognised that special measures should be taken to meet external drains due to reasons other than differing national price levels, to have maintained its rule of fixed securities in these circumstances, so causing the pressure on the Bank's bullion stock to be transmitted to the remainder of the financial system. The Bank's policy would have been more coherent if it had treated its bullion stock as an 'exchange defence fund'[1] and allowed large fluctuations in it to occur without taking any domestic measures. By 1848 Horsley Palmer had come round to this view.[2]

Notwithstanding these inconsistencies, the new approach to monetary policy adopted in 1832 may be regarded as the descendant of the tradition of moderate bullionism first espoused by Henry Thornton, who himself had written thirty years before concerning the Bank:[3]

"To limit the total amount of paper issued, and to resort for this purpose....to some effectual principle of restriction,....to allow of some special, though temporary, encrease in the event of any extraordinary alarm or difficulty, as the best means of preventing a great demand at home for guineas; and to lean to the side of diminution, in the case of gold going abroad, and of the general exchanges continuing long unfavourable; this seems to be the true policy of the directors of an institution circumstanced like that of the Bank of England".

1 : the term is Wood's, Central Banking Control, p. 150.
2 : P.P. 1847-8, Memorandum, ff. 167-8.
3 : Thornton, Paper Credit, p.259.

Chapter Three: The Upswing of the Trade Cycle - October 1833 to April 1836

Economic activity began to recover in 1833 after several years of what was considered unsatisfactory trade, since 1825. This long delay was due to a succession of poor harvests which halted incipient recovery in 1827-8 and 1830-1, but the recovery of national income and investment in 1833-4 was due to other causes than good harvests or favourable changes in the balance of payments. Matthews outlines three reasons: first, the absorption of investment made in previous booms and the running down of surplus capacity. Secondly, two events which he describes as largely fortuitous: the first was the advent of railway promotions and the second was the encouragement given to the formation of joint-stock banks in the Bank Charter Act of 1833. Thirdly, and most important, was a psychological revival of confidence, which led to the upwards revision of profit expectations. "It appears most likely that a psychological recovery of this sort played some independent part, if not a very large one, in the revival of investment and business generally in the early 1830's."[1]

The date of commencement for the Bank's new rules of monetary management was October 1833 but financial influences were by no means favourable during the initial part of the upswing.

From October I833 to May 1835 the Bank of England suffered a drain of bullion to the extent of £5.1m. The export of gold in the first half of 1834 was mainly to the U.S.A.. Monetary conditions became much tighter there in 1834, consequent to the Bank of the United States winding up its nationwide business following the loss of its Federal Charter. In addition, the revaluation of silver and gold in the American coinage at the beginning of 1834 had the effect of converting the United States from a _de facto_ silver to a _de facto_ gold standard. In the latter half of 1834 and in 1835, the outflow of bullion was due to an export of capital to the Iberian peninsula, following the sale in London of Spanish and Portugese

1 : Matthews, _Trade-Cycle History_, p. 206.

and Portugese stocks floated to finance the civil wars currently taking place in both countries. The export of gold ceased as soon as speculation in these stocks was broken in May 1835.

From this period to the spring of 1836, there was an inflow of bullion to the Bank, amounting to £2m. Financial events at the end of 1835 were dominated by the West Indian Compensation Loan, floated by the Government to compensate plantation owners for the loss of their slaves, and the extensive Bank of England money market transactions caused by this loan. At the end of this period, interest rates fell slightly and there was a very considerable boom in financial and commercial activity. In the six months up to June 1836, the liabilities of the Bank of Liverpool doubled by £1m to £2m.[1]

The Bank of England has been severely criticised for its conduct of policy in these two-and-a-half years up to the spring of 1836, both for not adhering to the rule of fixed securities which it had set himself, and for being responsible for the boom in financial activity which took place in 1836.

On the first count, some have criticised the Bank for not holding to its own rule because the, supposedly fixed, level of securities was allowed to fluctuate from £24m in October 1833 through £28.7m in September 1834 to a high point of £31.9m in the beginning of 1836. Prof.F.W.Fetter, mirroring contemporaries like Colonel Torrens,[2] believed that "the Bank was expanding its credits in the face of declining reserves....a far call, from the Palmer rule of holding securities constant and letting deposits and notes vary with specie...the case against the Bank was a strong one".[3]

1 : Collins, 'Liverpool Money Market', pp. 73-83.
2 : R.Torrens, A Letter to the Right Honourable Lord Viscount Melbourne (London, 1837).
3 : Fetter, Development, pp. 166 & 169.

A more subtle form of criticism was made by Samson Ricardo (brother of David) and Thomas Tooke. They admitted that the increase in the Bank's holding of securities was justified, but claimed that the low interest rate charged on its advances and the quality of collateral accepted from borrowers helped to cause a financial mania in the spring of 1836.[1] This view has received much support in the literature. In King's words, the vast increase in the creation of bills of exchange in 1835-6 was due to "the almost unprecedented ease in the money market...for this the policy of the Bank of England was clearly responsible".[2] Prof. E.V.Morgan stressed, like Ricardo and Tooke, the effect of these transactions upon the rate of interest: "we can hardly acquit the Bank of the charge of having forced down market rate at the very time when it should have been rising, in the first and second quarters of 1836".[3] He also noted the similarity between monetary developments in 1836 and 1825: "In each case there was an expansion of the Bank's liabilities and a reduction in the market rate of interest at a time when trade would naturally have been reviving. In each case there followed a period of intense activity, rising prices, and speculation on the stock exchange and in commodity markets".[4] More recently, Dr.M.Collins has given moderate support to this view: "although this imprudent credit policy was not the cause of the crisis in late 1836 and early 1837, it was instrumental in its timing and perhaps its severity".[5]

1 : S.Ricardo, Observations on the Recent Pamphlet of J.Horsley Palmer (London, 1837); idem, A National Bank the Remedy for the Evils Attendant upon our Present System of Paper Currency (London, 1837); T.Tooke, Prices, ii. 279-42; cf. D.Salomons, A Defence of the Joint-Stock Banks (London, 1837), pp. 24-31 & 36-7.
2 : King, London Discount Market, p. 95.
3 : Morgan, Central Banking, p. 106.
4 : ibid., p. 109; cf. Hidy, House of Baring, pp. 183-206; & Fetter, Development, p. 165.
5 : Collins, 'Liverpool', p. 92.

By contrast, I argue in this chapter that if special circumstances led the Bank of England to break the letter of the new policy rules it had recently adopted, it at least dealt with these unexpected problems in a manner consistent with its spirit. The most important financial transactions of these years were those concerned with the West Indian Compensation Loan. A strong case can be made out that the flotation of this loan was bungled, but the consequence of this mismanagement was to make monetary conditions tighter than they otherwise would have been in the winter of 1835-6, not easier as has been suggested by most contemporaries and historians. Whatever was responsible for the mania which characterised financial markets at the beginning of 1836, the Bank of England can definitely be found not guilty.

The defence of the Bank was made in a pamphlet written by Horsley Palmer entitled Causes and Consequences. Palmer's intention in writing this "was purely to prove that the Bank had kept within the principle of the evidence of 1832"[1] for he maintained that if special factors were taken into account, the Bank had kept a roughly even level of securities (see Table 3.1). The excess amended amounts of £24.9m in September 1834 and £25.1m in March 1835 were over the limit of £24m because of the unusually large and lengthy advances on Deficiency Bills (advances made to the Government to pay off interest due on the National Debt when the revenue was temporarily deficient). The norm was again exceeded after September 1836, when the Bank was issuing notes upon securities for the purpose of upholding commercial credit.[2] This kind of lending, Palmer predicted in his pamphlet published in February 1837, would increase in 1837.

1 : Norman MSS., C192: Palmer to Norman, 6 Mar. 1837.
2 : J.H.Palmer, Causes, p. 22.

Table 3.1: the Bank of England's holding of Securities 1833-6
(average of the preceding quarter - £m)

Date	Actual	Palmer's Amended Figure
1 Oct 1833	24.244	24.2
31 Dec 1833	23.576	23.6
1 Apr 1834	25.970	23.5
1 July 1834	27.593	22.6
30 Sep 1834	28.649	24.9
30 Dec 1834	26.179	23.4
31 Mar 1835	26.406	25.1
30 Jun 1835	25.678	23.8
29 Sep 1835	28.081	22.9
29 Dec 1835	31.174	22.0
29 Mar 1836	28.392	22.0
28 Jun 1836	27.153	22.6
27 Sep 1836	29.296	24.8
27 Dec 1836	29.668	25.0

Source: Palmer, Causes, p. 21; Norman, Remarks, p. 81, corrects a misprint in Palmer's figures.

Palmer argued that if the extraordinary deposits placed with the Bank from 1834 onwards (along with the securities acquired by the relending of those deposits) were netted out of the account, the fall in total liabilities had matched that of bullion. Indeed, as the amended figures of below £24m suggest, at many periods liabilities had fallen by rather more than bullion. The argument turns on whether the Bank was justified in lending out these extra deposits to their full extent.

The increased resources of the Bank came from three sources: first, the Commissioners for the National Debt increased their deposits at the Bank on behalf of the Savings Banks from February to October 1834, reaching a height at one time of over £3m.[1] Secondly, the East India Company started making special deposits at the Bank from 1834. The Company had been forced by Act of Parliament to give up all trading activities and was now beginning to realise its commercial assets, most notably a large stock of Chinese tea held in London. Prior to paying off various forms of debt in Britain, it accumulated a larger than normal deposit at the Bank, on which it wished to be paid interest. The Bank did not normally pay interest on deposits but made an exception in this case,

1 : P.P. 1840, iv (602), q. 1155.

preferring to retain control over the distribution of these funds, rather than let the East India Company lend them direct to the money market. Palmer considered this operation as "a mere substitution of the Bank for the East India Company, as the party lending those sums to the bill-brokers".[1] Thirdly, the Bank of England handled the sums raised by the West Indian Compensation Loan in the autumn of 1835. A large deposit accumulated at the Bank and "it became necessary, in order to preserve the currency in the same state as if the payments for the loan had not been made, and to prevent its undue contraction, to re-issue the money to the public".[2]

As Prof.R.C.O.Matthews[3] and Dr.M.Collins[4] have pointed out, the logic for relending these funds was the same as that which justified the making of temporary advances during the quarterly shuttings, when government deposits built up in the Bank prior to the payment of interest on the National Debt.[5] G.W.Norman described the reasoning behind the Bank's decision to expand its lending: if the Bank, with a view to maintaining its rule of fixed securities, had not relent these deposits, a vast sum "would have been abstracted unnaturally from the currency of the metropolis, to the serious inconvenience of the public". As market rates rose to the level of Bank Rate, the demand on the Bank for discounts would have grown, so that the outcome would have been the same in any case - it was impossible to keep securities even. "Would not such a forced action (as not lending out the deposits) have interfered materially with the natural play of the currency and the ordinary affairs of business?"[6]

1 : ibid., qq. 1172 & 1707; Clapham, Bank of England, ii. 147.
2 : Palmer, Causes, p. 13.
3 : R.C.O.Matthews, Trade-Cycle History, pp. 171-2.
4 : Collins, 'Liverpool', p. 91.
5 : see p. 34.
6 : G.W.Norman, Remarks upon some Prevalent Errors with respect to Currency and Banking, and Suggestions to the Legislature and the Public as to the Improvement of the Monetary System (London, 1838), pp. 83-4; P.P. 1840, iv (602), q. 1722.

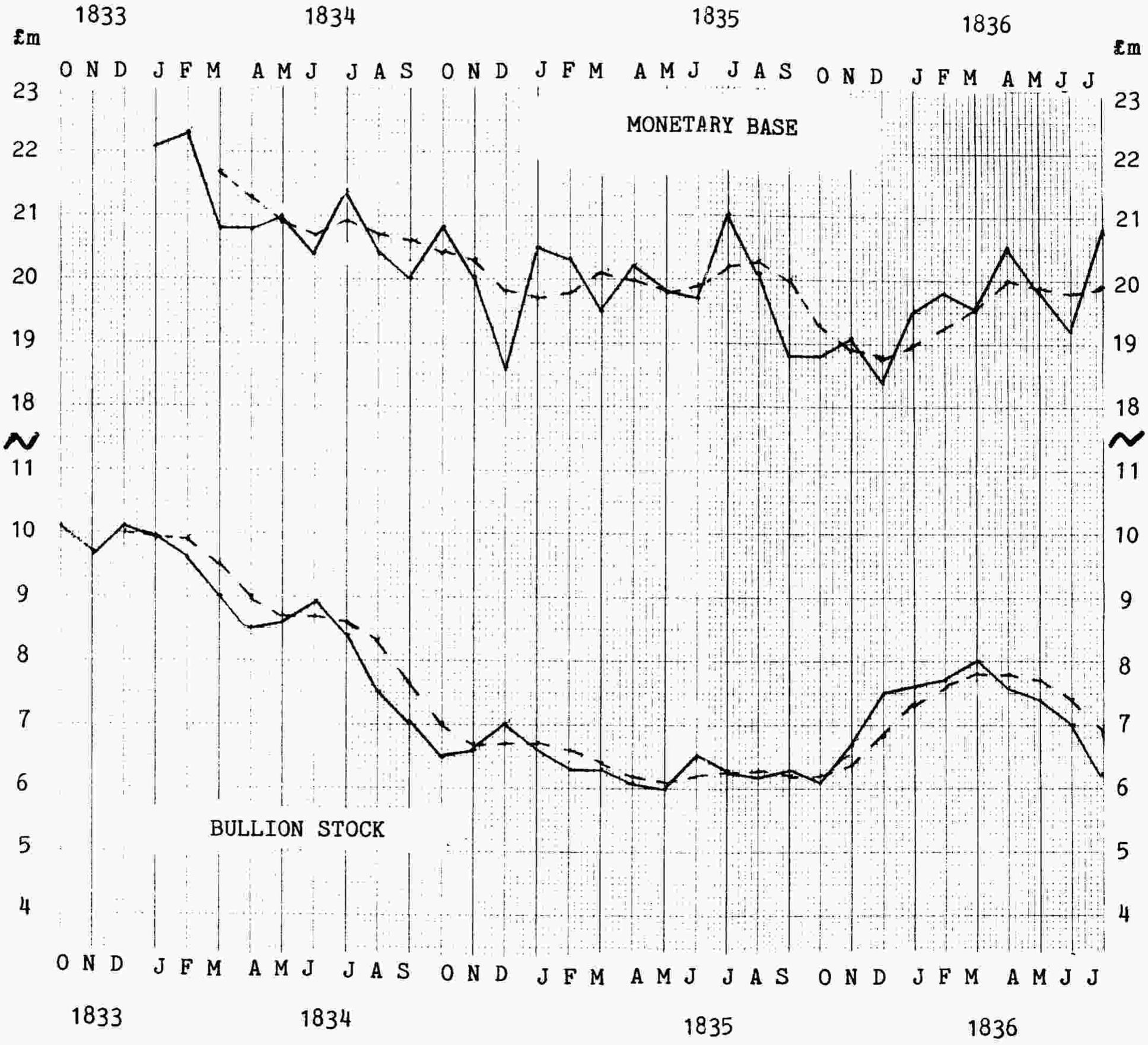
But if Palmer could reasonably claim that the Bank of England had adhered to the spirit of its rule of fixed securities in lending out all the additional deposits entrusted to it, it is necessary to investigate further and ask if this rule was suitable for implementing the purpose of monetary policy, that the supply of ultimate liquidity to the money market should move in line with bullion. Since a large part of the deposits of the Bank, for example government deposits and the ordinary public's drawing accounts, can in no sense be regarded as reserve assets, but were rather similar to deposits in ordinary banks, it seems inappropriate to include them in any measure of the stock of reserves available to the financial system. An increase in public sector deposits at the expense of note circulation, for instance, would clearly reduce liquidity in the money market, although the total of Bank liabilities would remain the same.

Therefore I have constructed a measure (see Chart 3.1) which combines both the notes of the Bank in the hands of the banks and non-bank private sector, and those deposits considered as equivalent to circulation. In 1832 Palmer said that the latter category consisted of the deposits of the London bankers and the East India Company,[1] and accordingly I shall term these 'reserve deposits'. This measure is in modern parlance called the monetary base and it is similar in construction to the 'wide monetary base' used by the Bank of England today, and published in its Quarterly Bulletin.[2] The difference is that we have no nineteenth century figures for the amount of coin in circulation among the general public or held by private banks as reserves. The total is likely to have been quite considerable. In 1831 Alexander Baring estimated that

1 : see pp. 26-9.
2 : M.Collins, in 'Monetary Policy and the Supply of Trade Credit, 1830-44', Economica, xlv (1978), constructs a variable representing "non-bank liabilities" - i.e. both notes in circulation and deposits of the non-bank private and public sectors. He excludes commercial bankers' deposits, which I think is a mistake.

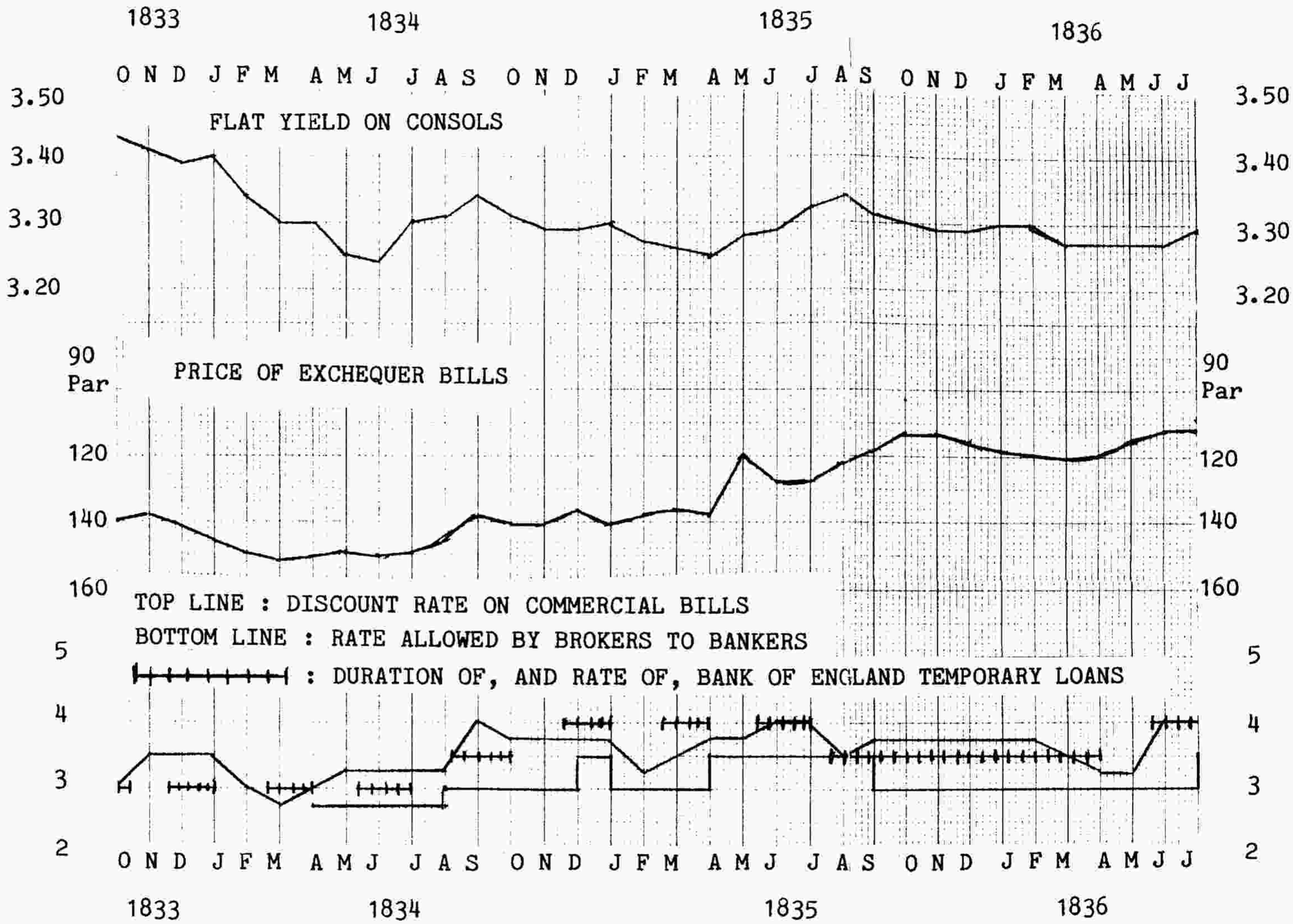
CHART 3.1 : BANK OF ENGLAND BULLION STOCK AND MONETARY BASE 1833-6

———— = monthly average ------- = average of the preceding three months



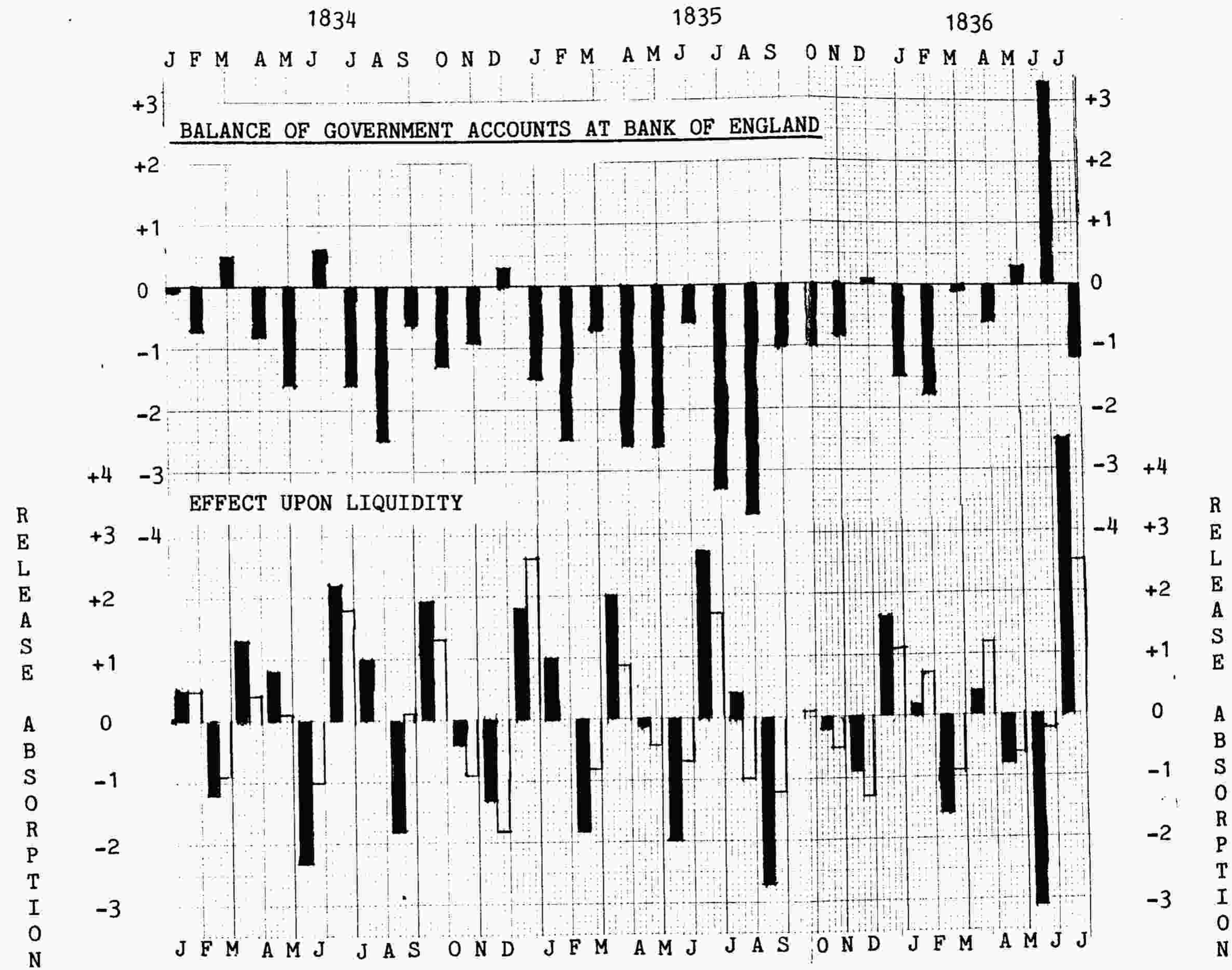
Source: P.P. 1840 (0.53) iv, Appendix 16; for definition see text.

CHART 3.2 : MARKET INTEREST RATES 1833-6



Sources: Yield on Consols - Gayer, Rostow & Schwartz, Statistical Appendix, Table 186.
Price of Exchequer Bills - ibid., Table 210.
Commercial Bill Discount Rate - P.P. 1857, Sess. 2., x Pt. i, pp. 463-4 (Overend Gurney & Co, Best Bill rate).
Rate Given by Brokers to Bankers - ibid.
Bank of England Temporary Loans - P.P. 1840, (0.53) iv, App. 16.

CHART 3.3 : BANK OF ENGLAND BANKING TRANSACTIONS AND MONEY MARKET LIQUIDITY 1834-6



shows how variations in the Government's position at the Bank increased (+) or decreased (-) the supply of reserves to the money market.
represents the release of liquidity to (+), or absorption from (-), the money market as a result of the Bank of England's total banking transactions.

SOURCE : P.P. 1840, iv (0.53), App. 17.

£45m was the amount of gold required for circulation in Great Britain;[1] Levy-Leboyer reports Horsley Palmer telling the Bank of the United States in 1839 that £35m was the amount of specie in the hands of the public.[2] But if we assume, not unreasonably, that all external movements of bullion took place through the Bank of England's gold reserve, then the amount of bullion and coin in the possession of both the non-bank private and the banking sector will remain constant, except when they withdraw gold from the Bank for internal purposes, when the figures are not very important. If the Bank desired that liquidity in the London money market should be determined by international bullion movements, then the monetary base should fluctuate according to alterations in its bullion stock. If this was not the case - if, for example, the measure remained stable during a drain of bullion - then a reduction in non-reserve deposits and/or an increase in Bank lending had offset the liquidity taken out of the London money market by notes being presented at the Bank to take out bullion.

Chart 3.1 plots the movement in the Bank's bullion stock and the monetary base from October 1833. The solid line showing the monthly average fluctuates violently, reflecting large monthly changes in both the Bank's security holding and its non-reserve deposits. These are due to the changing position of the Exchequer at the Bank. As the Bank made advances to the Government to allow it to make the quarterly payment of dividends on the National Debt, and as these advances were repaid over the succeeding months, so the balance of Government accounts at the Bank fluctuated quite widely (see Chart 3.3); in this way Government transactions caused a substantial release and absorption of funds from and into the Bank on a seasonal basis (the dark column in Chart 3.3 measures the extent of this). On most occasions, the contribution of fluctuations in the Government's balance to changes in the monetary base is rather more

1 : Bates MS., Diary: 9 Jan. 1831.
2 : Levy-Leboyer, 'Central Banking', pp. 70 & 103 n.11.

than the effect on liquidity of what might be called the Bank's total banking transactions (the light column in Chart 3.3 - defined as the sum of the change in the monthly averages of securities and non-reserve deposits). This shows that the Bank's measures to offset the distortions in the money market caused by variations in the Exchequer balance - the giving of temporary loans when the Exchequer was absorbing funds, and vice versa - were partially but not completely successful.

Taking an average of the preceding three months should remove some of the monthly fluctuations due to this cause. Comparing the two broken lines in Chart 3.1, there does seem to be some similarity in their movement. But over the complete period, the tendency is for the monetary base to fall by less than bullion (possible reasons for this are discussed in the concluding chapter). And even considering three monthly averages, there seem to be some strange short run discrepancies. For example, the sharp decline in the monetary base between August and December 1835, simultaneous with a small rise in the bullion stock, stands out. This indicates that monetary policy may have been resrtictive during the initial period of the West India Compensation Loan.

What were the level and structure of market rates in this period? Ricardo and Tooke had aimed their comments at the effect that relending the special deposits had upon the cost of credit and the quality of lending by the discount houses. Ricardo blamed the foreign stock market boom of 1834 and 1835 on a low rate of interest, itself caused by the Bank making advances on its special deposits.[1] Tooke believed that the Bank had missed an opportunity in the winter of 1835-6 to engineer a rise in the rate of interest, and thereby to halt the speculative tendencies which were beginning to appear. In Tooke's mind, the falling market rate of interest led to an undue extension of credit and the loans to the money

1 : Ricardo, Observations, p. 9.

dealers caused a deterioration in the quality of credit, since with increased resources at their disposal the discount houses purchased almost any bill that they could procure. This facility of credit led many, and the American houses in particular, to become over-extended.[1] Let us examine in more detail the mechanics of the Bank's money market transactions.

With the first two sources of the increased deposits, those of the Savings Banks and the East India Company, the Bank approached prospective borrowers (such as the discount houses, but also including N.M.Rothschild & Sons). Loans were made to these parties for fixed periods, so that the Bank retained complete control over the distribution of the funds entrusted to its care. Thus it cannot be argued that through the relending of the East India Company deposits the Bank lent more to the money market than would have been the case if the Company had lent direct to the discount houses. The question is one simply of the consequences for interest rates of these loans.

The Bank paid to the Company for these deposits 2% per annum from December 1833 to August 1836, 2½% from August to December 1836 and 3% from December 1836 to January 1837,[2] rates which were well below those paid by discount houses to banks. At the same time, the Bank lent to the discount brokers at rates which, if they were sometimes below the rate for quarterly advances and the market discount rate, were equal to or slightly above the normal cost of funds to the discount houses. Thus in December 1834, loans were made to N.M.Rothschild and Overend, Gurney & Co. for six months at a rate of 3½%.[3]

1 : Tooke, Prices, ii. 288-97.
2 : P.P. 1840, iv (602), qq. 1162 & 1165.
3 : Bank of England MSS, LB8, f. 30: Pattison to Rothschild, 4 Dec. 1834 & f. 31: Pattison to Overend Gurney, 4 Dec. 1834.

In the period up to the autumn of 1835 when these loans were relatively small in scale, they do not seem to have distorted market rates, with the effect of making commercial bills cheaper to other forms of finance. The only significance of the Bank's advances on the East India Company deposits up to the end of 1835 was that the Bank took part of the profits which would otherwise have accrued to the Company if it had lent the sums directly to the discount market. In the spring of 1836, however, the magnitude of these loans increased, doubling to over £4m, and the greater funds at the command of the discount houses may well have caused the discount rate for commercial bills to fall from 3.75% in February to 3.25% in April - a fall that was not mirrored in other money market rates. It should be pointed out, however, that the inflow of bullion at this period tended to increase liquidity.

The question of the advances made during the period of the West Indian Compensation Loan is a good deal more complicated and necessitates a discussion of the mechanics of government loan flotations in the early nineteenth century. In some respects the West India Compensation Loan of 1835, the first long term Government borrowing since the unsuccessful Deadwight Annuity of 1823, was very similar to the annual loans raised during the Napoleonic Wars to finance the war effort against France.[1] A total of £15m was to be raised, and in exchange for this £11,250,000 3% Consolidated Annuities and £3,750,000 3% Reduced Annuities would be issued.[2] Together these stocks paid a coupon of £225,000 every six months, or £450,000 in every full year. There was no fixed redemption date - they were redeemable only at the option of the Government. In addition, a Long Annuity of a maximum amount of £150,000 per annum would be paid up to

1 : see P.K.O'Brien, 'Government Revenue and Borrowing 1793-1815. A Study in Fiscal and Financial Policy in the Wars against France' (Oxford Univ. D.Phil. thesis, 1967).
2 : for the technical details of the loan, see P.P. 1836, xlix (i) (597), ff. 3-4 (Slave Compensation Fund).

January 1860. The loan would be sold in toto to one of several consortia of contractors, who would effectively underwrite it and be responsible for its marketing to London and country banks, other financial institutions and private investors.[1] The competition to decide which consortium won the contract for the loan would take place in the Long Annuity. Each syndicate would name the amount of Long Annuity which they were prepared to accept if they took the loan; the group which bid for the smallest amount (i.e. received the stock at the lowest cost to the government) would win the contract.

However, there were also novelties about the Loan of 1835. Unlike the loans of the Napoleonic Era, which were issued to meet the Government's need for finance and whose proceeds would be required as soon as possible to pay for government expenditure, the West India Loan was raised to provide funds to compensate plantation owners throughout British territory (mainly, but not only the West Indies) for the loss of their slaves. It was very difficult to predict in advance when these funds would be distributed.[2] Payment would certainly be spread over a very long time, and so the Chancellor phased the payment of instalments of the loan over the unusually lengthy period of thirteen months to take account of this. At first it was planned that payment of compensation should temporarily exceed the deposits paid into the Bank by the subscribers. While this was the case, some payments would be made in the form of interest-bearing certificates payable to the bearer (and hence negotiable), specifically charged upon further instalments of the loan, and which would be payable at the Bank as soon as the instalment had been paid in - "a very simple and a very admirable method to prevent all derangement of the currency in consequence of the loan".[3]

1 : O'Brien, 'Government Revenue', pp. 49-59.
2 : Monteagle MSS. 551, f. 10: T.Spring Rice to Lord Ashburton, 14 May 1839.
3 : P.P. 1840, iv (602), q. 859; Monteagle MSS. 13,381/1: Memo. Treasury Chambers, 29 July 1835; Hansard, 1835, xxx, 13-23.

Two other innovations concerned the size of the initial deposit and the possibility of early payment of instalments. The Chancellor, Sprin Rice, set the deposit, payable at the signing of the contract, to be only 5% instead of the customary 10%, so that liquidity should not be unduly contracted between the first and second payments.[1] Secondly, he did not propose to allow a discount for early payment of instalments. During the Napoleonic Wars a discount was given for early payments at a rate just under the Exchequer Bill rate, since early payment would obviate the need for the Government to borrow in the Exchequer Bill market.[2] Presumably because the need for funds was not so pressing in this case - indeed, the Chancellor had explicitly allowed for the likelihood that out-payments to slave-owners would temporarily exceed sums raised by the loan - there was no need to give this discount.

Three syndicates - Rothschild/Montefiore, Baring/Reid Irving, and Ricardo/Maubert - met the Chancellor and the Governor of the Bank of England on the 29th July 1835 to hear the arrangements for the loan. Two important changes to Spring Rice's plans were made at this meeting, after prolonged discussions with the possible contractors: first, the size of the initial deposit was raised to the normal 10% and secondly, the Government agreed to allow a discount at the rate of 2% <u>per annum</u> for early payment of instalments.[3]

One continued source of confusion was the attitude of the Bank of England to the Loan. The custom during the Napoleonic Wars had been for the Bank to let loan subscribers pay the first two instalments without help and then offering to advance the remaining payments on the security of the <u>omnium</u> (the term applied to the aggregate of the several stocks

1 : ibid., 551, f. 79: Rice to Pattison, 5 Aug 1835.
2 : O'Brien, 'Government Revenue', p. 36.
3 : Bank of England MSS. Correspondence with His Majesty's Government No. 2 (CHMG2), f. 146: Minutes of Meeting, 29 July 1835; Monteagle MSS. 13,381/1: Memo. Treasury Chambers, 29 July 1835 & 551, f. 76: Memo. to the King, 29 July 1835; <u>Times</u>, 30 July 1835.

Table 3.2: the West Indian Compensation Loan 1835-6
(all figures in £m)

	Receipts		Payments		Bank of England	
Date	Planned	Actual	Planned	Actual	Balance	Advances
6/8/35	1.5	1.610	------	------	1.610	-----
25/8/35	1.5	3.725	------	------	3.665	2.243
22/9/35	1.5	4.892	------	0.154	4.658	4.137
20/10/35	3.0	10.472	2.074	1.226	9.076	8.058
17/11/35	4.125	12.520	4.823	3.534	8.785	7.233
15/12/35	5.25	14.232	8.379	7.068	6.939	7.504
12/1/36	6.75	14.666	9.777	7.981	6.456	3.983
9/2/36	8.10	14.916	11.688	10.636	4.051	0.707
15/3/36	9.45	14.975	13.100	12.498	2.248	0.293

Source: P.P. 1840, iv (0.53), Appendices 20 & 21; q. 859

that made up the loan).[1] However, the Directors declined to do this in 1835 because they did not wish "to pledge themselves to any specific advance which might endanger the state of the currency";[2] such a risk would presumably occur when deposits created by Bank of England advances on stock were converted into active circulation and paid out to the recipients of compensation. Instead, since the Bank desired that "the circulation of London should not be permitted to be contracted by the payments being made by the contractors, so as to cause an advance in the market rate of interest", it decided to "re-issue so much as might be requisite at the market rate" of interest,[3] in the form of advances on the security normally accepted for the quarterly loans - bills of exchange, Exchequer Bills and India bonds. Therefore on the 5th August, well before the commencement of the usual quarterly loans, it issued a notice offering advances on such terms at a rate of 3½%.

1 : S.R.Cope, 'The Goldsmids and the Development of the London Money Market during the Napoleonic Wars', Econ., ix (1942), 198.
2 : P.P. 1840, iv (602), q. 1245.
3 : ibid., q. 1241; see also the comparison made by James Pennington of the West India Compensation Loan with the problems encountered in the railway boom of the 1840's - Goulburn MSS., Acc. 319, Box II/20.

By the time bidding took place for the loan on 3rd August, the Baring and Ricardo consortia had withdrawn from the running.[1] Rothschilds were the sole bidders, and their price for the Long Annuity was £111,875. This was above the minimum price acceptable to the Government, £101,875 (which was kept secret until the Rothschilds' bid had been put forward), and for a time it seemed that the whole transaction might be placed in jeopardy. However, Rothschild eventually agreed to accept the Government's price.[2] The Loan was issued at a yield of 3.48%, a little above than the flat yield of 3.33% on government stock current in the market on the 3rd August.[3] The fact that the Omnium of the new loan passed hands at nearly three points premium when it was first dealt in the market reflects the cheapness of the Loan.[4]

Things could hardly have turned out more differently from the Chancellor's expectations at the beginning of August, as instalments were paid in more quickly and the compensation money was distributed more slowly than anticipated (see Table 3.2). The rise in the size of the deposit to £1.5m obviously worked to increase the initial balance at the Bank but the main cause of the build-up of the West Indian deposit was the incentive to pay up instalments given by some of the technical conditions of the Loan. First, the allowance of discount at an annual rate of 2% was not given from the time of early payment to the date when payment was due, as might be imagined, but to the date of the last instalment, 13th September 1836. Thus the discount was effectively at a rate of rather more than 2% per annum. For example, to take the most extreme case, if the second instalment of £1.5m was paid up on 6th August, instead of 16th October, a discount of £33,123 would be given - a per annum interest rate

1 : Bates MS., Diary: 30 July 1835; BB MSS., LB5A, BB to Hott, f.386: 25 July 1835; f. 415: 4 Aug 1835; Times, 30 July & 1 Aug 1835.
2 : Bank of England MSS., CHMG2, ff. 148-9: Minutes, 3 Aug. 1835; Monteagle MSS. 551, f. 77: Report, 3 Aug. 1835.
3 : P.P. 1836, xlix (i) (597), f. 4 & Apps. A & B.
4 : Times, 3 Aug. 1835.

for the 71 days when the money was actually in the subscribers' hands of more than 11%!

The second influence tending to early payment resulted from the payment of coupons on the stocks issued in the Loan. The Consols paid their half-yearly dividends on 5th Jan. and 5th July, the Reduced and the Long Annuity on 5th April and 10th October. Those who contracted for the Loan received interest from the date of the previous coupon for each of the stocks, not from the date of the contract. So on the 10th October 1835 the Government might expect to pay an additional £56,250 on account of the Reduced recently issued (i.e. the dividend from 5th April to 10th Oct. 1835) from and an extra £50,938 for the Long Annuity.

Here a complication must be introduced. Until the Loan was fully paid up, the stock certificates for the respective stocks were not issued - rights to the loan were held in the form of scrip. Because the stocks had not been issued, then coupon payments on them could not be made at the proper time, but would be delayed until the loan had been fully paid. So on the 10th October 1836, the first coupon payment after the final instalment had been made on 13th Sept. 1836, not only would the £56,250 apposite for that date be paid out on account of the Reduced, but an additional £112,500 to cover the two previous coupon payments of October 1835 and April 1836. The same procedure would be followed for the Long Annuity payments coming due on the same day and the Consol dividends becoming first payable on 5th Jan. 1837. On the other hand, if the whole loan was paid up on 6th August 1835, dividends would be payable from the first possible dates - 10th Oct. 1835 and 5th Jan 1836. The subscriber who paid up early benefited by being able to re-invest dividends up to a year earlier than if he paid at the specified times.

There were thus two financial incentives to paying instalments before the prescribed dates: first, the generous discount allowed for early payment; secondly, the earlier availability of coupon payments for

reinvestment. Against this, of course, there was an opportunity cost to paying up early - the amount of interest that could be earned in the money market. My calculations suggest that the rate of interest in the money market which would make a subscriber indifferent between the two alternative methods of paying up the loan was 4%. Since the rate allowed by bill-brokers to bankers on money placed with them at call was 3½% in August and 3% in September 1835, it was obviously to the financial advantage of the subscriber to pay up the loan early. Indeed, if the subscriber did not have the money available to pay all instalments immediately, it paid him to borrow from the Bank of England at 3½% per annum.[1] It is hardly surprising that 20% of the Loan was paid in by the 20th August. The Bank of England was worried that this build-up of deposits might contract the circulation and so announced on the 20th August its willingness to lend on the security of government stock, in addition to the above-mentioned assets.[2] Since the scrip of the new loan was now suitable security for a loan from the Bank of England, this move strengthened the tendencies towards early payment of the loan.

Where did the funds used to pay up early subscriptions to the Loan originate? The question is an important one for, leaving aside for the moment the matter of out-payments to plantation owners, they have different effects on the money market. To borrow from the Bank, either on commercial bills or on stock, to pay an instalment on the loan, has a neutral effect on liquidity; to draw down a bank deposit to make a payment to the Bank of England would reduce liquidity in the money market. We have no certain knowledge to what extent West Indian deposits at the Bank were 'created' by its own lending - but an indication is provided by the extent of the Bank's advances on stock, which were made only to Stock Exchange subscribers to the Loan. No advances on stock were made before

1 : P.P. 1840, iv (602), q. 859; Ricardo, National Bank, footnote on p. 17.
2 : Times, 21 Aug.1835.

6th October, and only £1.2m by the 20th October, when total Bank advances to the money market were £8.1m, and £10.5m had already been paid up on the Compensation Loan. On the 5th January, when £14.4m had been paid up on the Loan, the Bank was advancing £2m on stock out of total advances of £7m.[1] This suggests that most of the early payment of instalments on the loan was financed by funds taken out of the money market, rather than by advances from the Bank.

This would not necessarily be contractionary, depending on how quickly payments were made to recipients of the Compensation funds. Unfortunately extraordinary delays were experienced in effecting these. There were many difficulties over how claims to compensation should be evaluated and the outcome of these problems was that many claims had to be adjudicated in a Court of Law. While litigation was in progress, payments were halted; in addition, there were many delays in paying claims over which there was no dispute. The result of both influences was that payments were substantially slower than expected; the result was, of course, that the money remained locked up in the Bank of England.[2]

The consquence of the early payment of subscriptions and the slow distribution of the funds was, by the end of October, a very large positive, instead of a negative, balance at the Bank and exceptional tightness in the money markets,[3] a tightness which was worsened by the usual phenomenon of increasing government deposits at the Bank prior to the dividend payments. The Bank, despite its willingness to lend at the rate of 3½%, slightly below the rate for commercial bills, could not advance all the extra balance accumulated on account of the Loan, and so proposed to the Chancellor that they should purchase government stock in the open market with the funds immobilised by the litigated claims, on

1 : P.P. 1840, iv (602), qq. 1203-6; Times, 12 Sept. 1835.
2 : Times, 7 & 17 Oct. & 17 Nov. 1835; B of E MSS., CHMG2, Pattison to FTB, f. 201: 17 Oct. 1835; f. 205, 30 Oct. 1835; f. 207, 31 Oct. 1835.
3 : Monteagle MSS. 13,381/1: Ashburton to Rice, 30 Nov. 1835; Times, 31 Oct. & 8 Nov. 1835.

which payment could not be expected for some time.[1] This proposal was accepted and the purchases made are included in the column 'Actual Payments' in Table 3.2. Hence this column exaggerates the extent to which claimants received their money.[2] This was no doubt an effective way of relieving monetary tightness - but the prospect of a regular and large demand for government stock provided a splendid opportunity for subscribers to convert their scrip into stock by early payment and then to sell the new stock at a handsome premium of around 4%.[3]

This is all very different from what would have happened if the Chancellor's original intentions had been adhered to. The Bank would have made no advances to loan subscribers before the 13th November, but the withdrawal of funds from the market would have been much less up to this point due to the smaller initial deposit and the absence of discount on anticipated payment, which would not have induced subscribers to pay up early. The Bank would have made the usual temporary loans in September and October but commercial borrowers would not have been able to obtain funds from the Bank outside the period of these loans, for example in August and November, as was the actual outcome. Subsequent to November, the Bank's original fear that, by offering to advance all instalments subsequent to the second, it would be issuing notes upon the backing of securities and thereby derange the currency, proved groundless. As it turned out, the distribution of compensation was considerably delayed and the subscriptions financed by Bank lending would have remained locked up in the Bank, with a neutral effect upon the money market.

1 : Bank of England MSS. CHMG2, f. 195: Pattison to Baring, 6 Oct. 1835; ff. 198-9: Pattison to Baring, 13 Oct. 1835 & ff. 200-2: Pattison to Baring, 17 Oct. 1835; PRO, NDO 9/10, ff. 463-4: 28 Aug. 1835; & T27/123, f. 168: Treasury to National Debt Office, 23 Oct. 1835.
2 : around £2.2m of the £3.5m paid out by the 17th Nov. had been transferred to the Accountant General in Chancery and used by him to purchase stock - PRO, NDO 4/26.
3 : ibid., ff. 205-6: Pattison to Baring, 30 Oct. 1835; f. 207: Pattison to Rice, 24 Nov. 1835; ff. 212-3: Pattison to Rice, 24 Nov. 1835 & f. 215: Pattison to Rice, 26 Nov. 1835; Times, 22 Sept., 15 & 20 Nov. 1835.

Nevertheless, if it is hard to escape the conclusion that the Bank mismanaged the administration of the West Indian Compensation Loan, its errors did not necessarily give the money market an undue stimulus and so cause the financial euphoria of 1836. There are two ways by which the Bank's operations on account of the Loan might have caused the mania of 1836 to take place: first, by offering to advance money for a continuous period from August 1835 to April 1836, the Bank might have surrendered control over the level of its own securities and in effect allowed the market to procure the amount of reserves necessary to support a 'maniacal' level of transactions. But Chart 3.1 shows that between August and December 1835, the quarterly average of the monetary base fell by over £1m, at the same time as the quarterly average of the bullion stock rose by over £0.5m (the figures should move together). In short, the effect of the West Indian Compensation loan was to reduce the flow of reserves to the financial system far below what it would otherwise have been!

Alternatively, the Bank's extensive money market transactions may have distorted the level and strucure of market interest rates. The Bank chose to lend at a rate of 3½% per annum because it was "calculated to call for, and which indeed did call for nearly the whole amount of the loan".[1] This was an error, for the consequence was that, because the financial incentives to early payment tended to absorb money market funds, the Bank "was really in a position for several months of maintaining an upper and lower peg on Stock Exchange loans".[2] This stability is reflected in the discount market, where the market bill rate rose to 3.75% in September 1835 and remained there until March 1836. But if the Bank does seem to have played a large part (unintentionally) in determining the level of interest rates during the period of the loan, it does not mean that they were at an unduly low level. The period was one of a bullion

1 : Norman, Remarks, p. 84.
2 : E.Wood, Central Banking Control, p. 93.

inflow, which would operate automatically to increase liquidity, and the Bank's transactions may well have prevented market rates from falling in line with this increase in liquidity. The Bank's open market operations do not seem to have had any connection with the fall in commercial bill rates in the spring of 1836 - from early February its advances to the money market were less than £1m.

Thus, although the Bank of England broke the limit of the £24m security holding, it was justified in so doing and was indeed acting in a manner consistent with the spirit of the principles of monetary policy adopted in 1832: to let credit conditions in the money market fluctuate according to international bullion flows and not let them be distorted by irregular financial events. The Bank of England cannot be accused of stimulating the money market either through the injection of new reserves or through low interest rates. The only possible criticism that can be made is that the Bank may have caused the cost of commercial bill finance to be relatively cheap in the spring of 1836, aggravating an already existing tendency to lower interest rates. But even if this is the case, it is a different matter entirely to argue that the decline in the cost of bill finance was responsible for the financial mania of 1836. I argue elsewhere[1] that this is more satisfactorily explained as the culmination of forces present throughout the trade cycle.

The Bank of England may of course be criticised, as it was by Thomas Tooke, for not using the weapons at its disposal to engineer a rise in interest rates and so nip in the bud the export of capital to the Iberian peninsula in early 1835 or the mania and speculation in the spring of 1836. This is an attack upon the whole policy of the Bank rather than its administration of it for, as is implicit in the reasoning behind the

1 : see pp. 141, 144-5 & 216-22.

Bank's choice of 3½% as the appropriate interest rate for lending out the West Indian deposits, the Bank of England sought only to restore the money market to what it would have been in the absence of the Loan. As yet, it entertained no idea of managing the money market so as to defend itself against prospective threats to convertibility.

Chapter Four: the Anglo-American Trading and Financial Structure in the 1830's

The financial crisis which crippled the London capital market in 1836-7 featured a group of seven London merchant banks, at the centre of commercial and financial relations between the two countries. It is necessary to digress from the narrative for a short while to describe the institutional context within which the American houses, as they were called by contemporaries, functioned. This chapter examines the structure of trade and finance between Britain and the United States, the role of the institutions carrying it on and how that role changed over time. In particular it will examine the contribution of the Anglo-American merchant banks based in London and Liverpool.

Two themes underlie the descriptive material of this chapter: first, the fragility of early nineteenth century techniques of commercial finance; and secondly, the adaptability of these techniques, so that innovations may occur over the quite short run, which might improve the efficiency of the financial system but which at the same time might make it more unstable.

4.1 : the Place of the Accepting House in the Bill of Exchange System

Merchant banks are a curious example of financial institution. On the one hand, they have had a long, distinguished and sometimes spectacular history and, perhaps because of this, retain today a greater amount of prestige than their importance in the financial system really warrants. On the other hand, their contribution as a financial intermediary to the running of the economy has always been difficult to analyse. This is partly because their origins as a financial intermediary cannot be pinpointed to any specific date, as in the case of the

foundation of a joint stock bank, for there was a long evolutionary process by which what was once a mercantile firm was transformed into a purely financial one - indeed, for some this process has not been completed today. It is also because their business has retained a largely hybrid quality, reflecting their origins in trade; merchant banks are by no means a financial intermediary specialised in one part of the capital market.

The consequence is that modern books and articles on merchant banking, while they offer an adequate introduction to the business of a modern merchant bank, do not illuminate the reader as to the economic contribution of merchant banks in the nineteenth century.[1] Nor is modern theory much help, for the textbook conception of a financial intermediary sheds little light upon such a peculiar institution. The most important purpose of this section is to establish the economic significance of the characteristic activity of the merchant bank, the acceptance credit business.

Let us first consider the role of the accepting house within the simplest financial system.[2] Of course, saving and investment can take place in the absence of any kind of financial system, where all units have balanced budgets and all investment is financed internally. However, the limitations of such a system are obvious, and it is likely that a mechanism will grow up whereby budget deficit units, or borrowers, will

1 : the best example is T.M.Rybczynski, 'The Merchant Banks', Manchester School xli (1973), 107-21.

2 : J.G.Gurley & E.S.Shaw, 'Financial Intermediaries and the Saving/Investment Process', J.F., ii pt. 2 (1956), 257-66; idem, 'Financial Aspects of Economic Development', Amer. Econ.R. , xlv (1955), 518-23.

be financed externally by budget surplus units, or savers, through the issue of primary or direct securities. Today examples of primary securities are equity and debenture shares of a public company, but in the eighteenth and nineteenth centuries most direct external finance was short term and took the form of a bill of exchange drawn by a creditor (drawer) upon his debtor (the drawee and, after he had accepted his liability to pay the bill, the acceptor), the usance of the bill representing the length of the credit given by the drawer to the drawee. In this sense the bill of exchange was little more than an I.O.U., but it was also a negotiable instrument so that, if he wished to gain ready funds, the drawer could sell the bill for cash. He would receive the face value of the bill, less a discount equal to the per annum rate of interest for the period till the maturity of the bill. Hence the expression to discount a bill of exchange, and the use of the 'discount rate' on commercial bills as a proxy for the short term interest rate. If a bill was discounted, then it was the purchaser of the bill and not the drawer who was transferring financial resources for a short period to the borrower, the drawee.

The problem was that, in all kinds of trade in the eighteenth and early nineteenth centuries, there was a lack of information about the credit worthiness[1] of the names of drawer and drawee appearing on every bill of exchange. The information problem was bad enough for bills based upon domestic trade within Britain, so that it was all the more difficult for bills which originated overseas or were drawn on overseas firms. This led to uncertainty about the ultimate payment of any bill of exchange and

1 : the drawer was important because, although he was the creditor, he remained liable to pay the bill if for any reason the drawee was unable to do so.

thus a risk premium was incorporated in the price of discount. In eighteenth century Britain, the emergence of a decentralised banking system, the country banks, manned by people previously involved in local trade of some kind, overcame this problem of information and uncertainty for domestic bills of exchange. If they did not discount trade bills out of their own resources, they sent the bill bearing their own endorsement (a promise to pay if the drawee defaulted on his liability) to a London banker or discount broker. The difference between the rate of discount charged by the country bank to the discounter and that given by the London to the provincial bank was the country bank's reward for assuming the risk of non-payment by the drawee. It was able to perform this service because it possessed superior information on the credit worthiness of the names upon the bill. The London financial institution only took the bill because the country banker's endorsement made it an almost risk-free asset.

The role of the accepting house towards an international bill is analogous to that of the country bank towards a domestic bill. The acceptance of the foreign bill by a respectable English house, other than the drawee, guaranteed the payment of the bill and made it a very liquid financial asset. Such was the reputation of the accepting house that it circulated at a very low discount. The merchant banker put his reputation and credit to the service of a third person; for this he received a commission.

At first, the merchant bank only endorsed or guaranteed a bill of exchange drawn by a second on a third party, but in time bills were drawn direct upon the merchant bank who now acted as both drawee and acceptor. This is known as an indirect method of external financing because the surplus unit no longer holds a direct claim upon the borrower, but has lent the money indirectly through the intermediation of a financial

intermediary, which holds the primary security of the deficit unit and has issued its own liability to the surplus unit. In our example this change might seem merely cosmetic since, whether it has endorsed a bill drawn upon another or accepted a bill drawn upon itself, the accepting house had put itself under an obligation to pay the bill in case of need; the service performed by the merchant bank, that of improving the risk position of the lender, was the same in both cases. But in the circumstances of nineteenth century trading conditions and commercial mores, there was a slight difference, because the drawer of a bill (the creditor) was likely to incur considerable discredit if the drawee was unable to pay it at maturity, despite the fact that the bill was endorsed by a stronger and more liquid financial institution. Thus the drawer was in a marginally safer position if the former guarantor of the bill agreed to serve as both the drawee and the acceptor, although neither his solvency nor his liquidity were improved by so doing.

The acceptance was for the merchant bank a contingent liability. This meant that it hoped to receive funds before the maturity of the acceptance, with which it could pay off the bill. In the event of these not arriving, or being unable to turn them into cash, then the merchant bank would have to pay the acceptance out of its own resources. In technical language it would become an absolute liability. An acceptance appeared on the liability side of the balance sheet of the merchant bank as a contingent liability and correspondingly on the asset side there was a contingent asset.

In balance sheet terms, the endorsement of a bill of exchange is similar. If one unit received as payment a bill of exchange drawn upon a third party, and wished to procure cash for it, it would discount this bill, adding its own endorsement. If, at maturity, the drawee/acceptor

was unable to pay, then the holder would have recourse for payment to any name that appeared on the bill as either drawer or endorser.[1] But the common practice was for the holder to go to the last endorser (i.e. the person from whom he had purchased the bill) for payment, and for the latter to do likewise by presenting it to the person from whom he had received the bill; and so the unpaid bill would travel down the chain of endorsers until it reached the original drawer. Therefore any unit which had discounted or made over a bill of exchange incorporated in his balance sheet a contingent liability, the endorsement of the bill, and a contingent asset, his legal claim upon previous parties in the chain.

It was customary in some parts of Britain, notably Lancashire, for bills of exchange to circulate from hand-to-hand as a means of payment, collecting an additional endorsement every time they exchanged hands.[2] This practice was very much a double-edged sword: on the one hand, as it collected endorsements, the likelihood of ultimate payment of the bill increased as more names appeared on the bill; on the other hand, if the drawee/acceptor was unable to produce funds at maturity, then the bill became an absolute liability for each endorser as it proceeded back to the drawer and was likely to cause them considerable liquidity problems, since normally such an event was not anticipated. Very rarely would a contingent liability be transformed into an absolute one, but the tendency was for such an event to occur in a period of monetary tightness, when a firm's liquidity was already much diminished and it was difficult to raise money at short notice. Often the consequence was serious enough to make a commercial house stop payment, so causing the effect to be repeated

1 : J.M.Holden, History of Negotiable Instruments in English Law (London, 1955), pp. 127-52.
2 : T.S.Ashton, 'The Bill of Exchange and Private Banks in Lancashire, 1790-1830', in Ashton & Sayers, Papers, pp. 37-49.

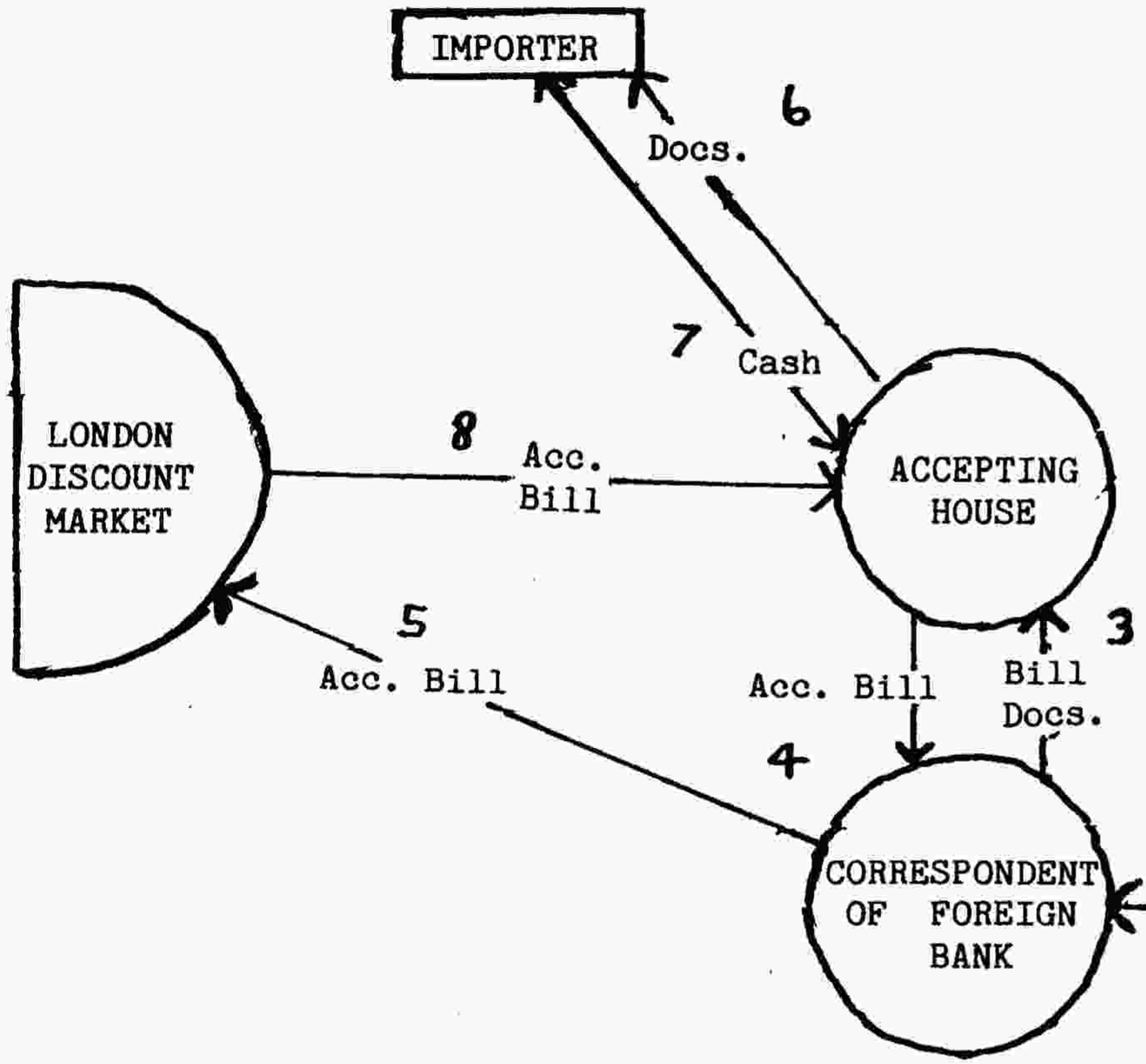
among the holders of its own liabilities, which would now lie unpaid. Thus the bill of exchange system was very much a fair-weather one: it worked well enough in good times, but when problems occurred, it tended to collapse like a house of cards, spreading the original illiquidity right across the economy.[1]

The flow diagrams[2] describe the basic procedure of the acceptance credit mechanism in three transactions, the financing of the British export trade, the British import trade and third country trade. It should be noted that all the transactions involve the transmission of the shipping documents through the London accepting house, so providing it with some degree of security in the event of the failure of one of its clients. Textbooks always represent the acceptance credit system as having worked in this way, but in fact in the nineteenth century this use of shipping documents was often felt to be unnecessary. But it would not be true to represent this disregard of security as an aberration from the original principles of the system; rather the textbook model involving the use of shipping documents was the exception and not the rule in the nineteenth century, and was employed by textbook writers as the standard example in order to further their own subjective judgements of what was 'sound', as opposed to 'unsound', commercial practice.

These diagrams show up well the importance of the short-term money market in the acceptance credit system, for the actual funds are provided not by the merchant banks but by the discount houses. What the holder of a bill wants is cash immediately, not just the guarantee of payment in three month's time (or shorter, according to the usance of the bill), and

1 : I.P.H.Duffy, 'Bankruptcy and Insolvency in London in the late Eighteenth and early Nineteenth Centuries' (Oxford Univ. D.Phil. thesis 1973), pp. 232 & 326.
2 : derived, with amendments, from H.Pouyanne, 'Le Crédit Par Acceptance à Londres', Revue d'économie politique, xliv (1930), 72-86.

GREAT BRITAIN



ABROAD

1. The foreign exporter draws a bill upon Britain and discounts it for cash at a bank in his own country.

2. The foreign bank sends the bill and documents to their London correspondent.

3. The London correspondent presents the bill for acceptance and hands over the documents.

4. The acceptance house returns the accepted bill.

5. The correspondent discounts the accepted bill.

6. The accepting house hands over the documents.

7. It receives cash from the importer.

8. The acceptance is presented for payment at maturity.

FIGURE 4.1

THE FINANCING OF

THE BRITISH IMPORT TRADE

GREAT BRITAIN

1 . British exporter draws bill on accepting house and presents it for acceptance (accompanied by documents).

2 . The bill is returned accepted.

3 . The exporter discounts the accepted bill.

4 . The documents are sent to the agent in the foreign country.

5 . The agent only releases them when he is placed in funds by the importer.

6 . The agent sends a bill of exchange to London as a remittance.

7 . The acceptance is presented for payment at maturity.

ABROAD

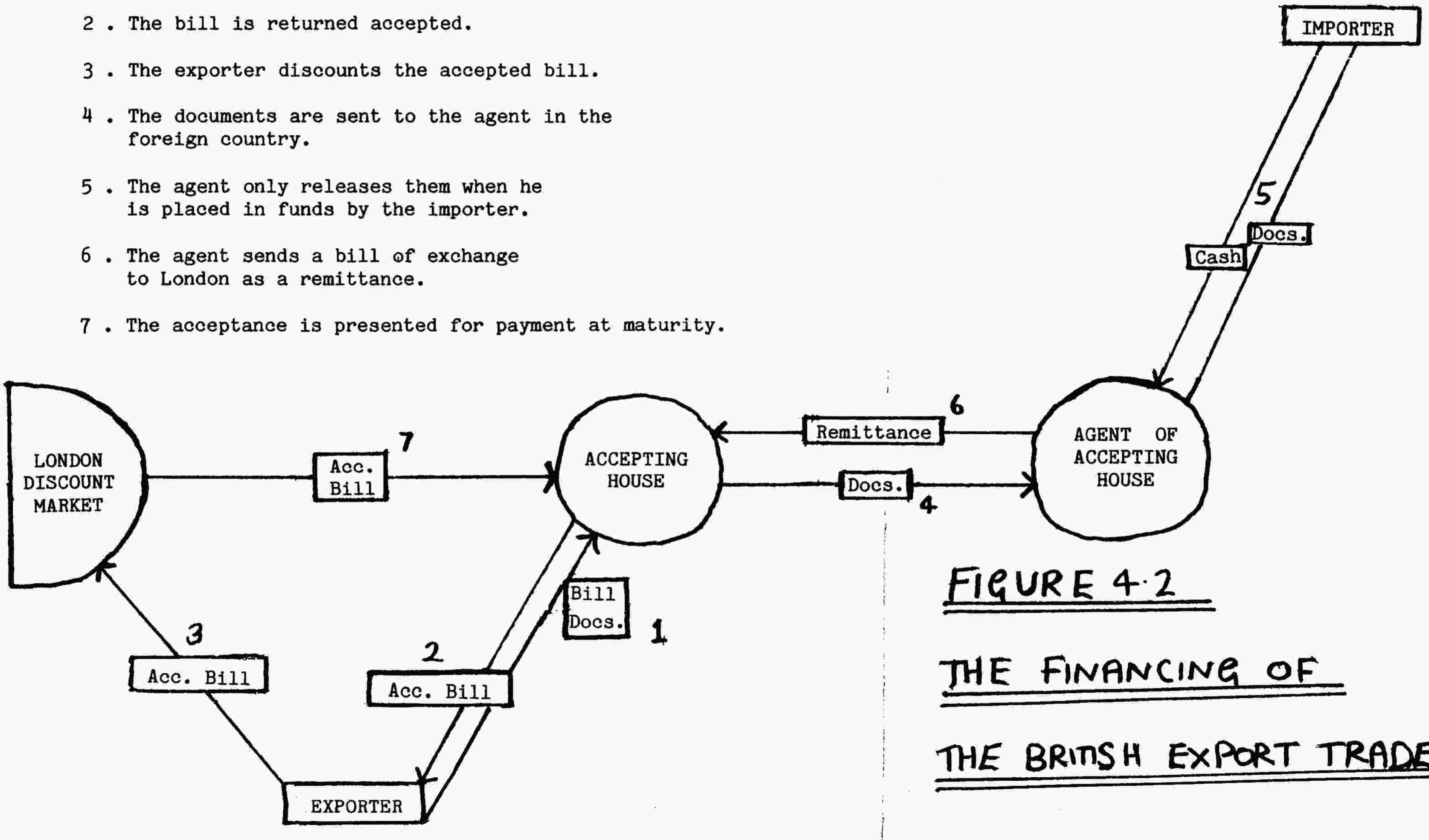


FIGURE 4·2

THE FINANCING OF THE BRITISH EXPORT TRADE

GREAT BRITAIN

1 . Exporter draws a bill on London and sells this.

2 . Bill and documents are sent to the London correspondent of the foreign bank.

3 . Correspondent presents the bills for acceptance and releases documents.

4 . He discounts the accepted bill.

5 . Documents are sent to the agent of the accepting house abroad.

6 . The Agent only releases them when he receives funds from the importer.

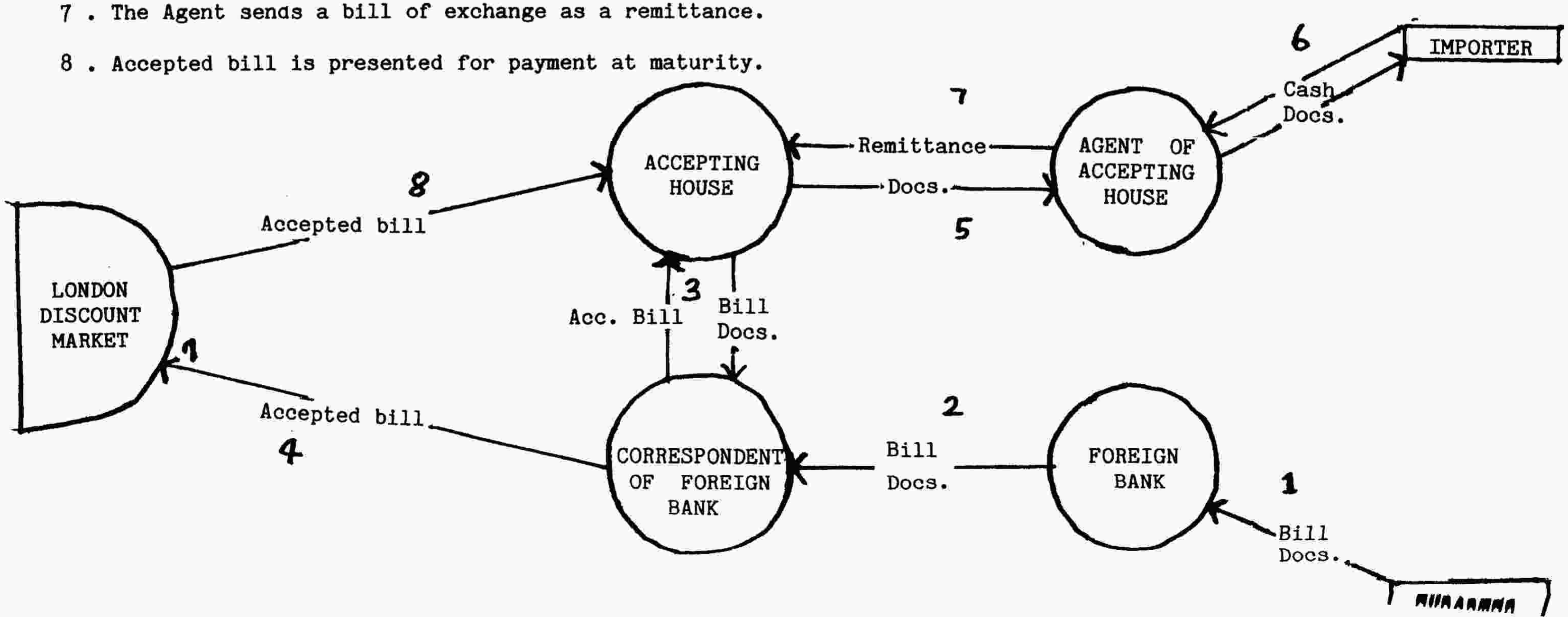
7 . The Agent sends a bill of exchange as a remittance.

8 . Accepted bill is presented for payment at maturity.

ABROAD

FIGURE 4.3

THE FINANCING OF THIRD COUNTRY TRADE BY LONDON



will receive cash by discounting the bill at the bank and ultimately from the discount market. The discount house is complementary to the accepting house; their simultaneous development during the Napoleonic Wars, and the absence of such combinations elsewhere, suggests why London became so prominent in the finance of international trade. Without the resources of the British banking and credit mechanism the London merchant banks could never have developed their activities quite so widely. It was the juxtaposition of their name and reputation on foreign bills of exchange that pooled the risks inherent in discounting such bills and so opened up another form of investment, the finance of foreign trade, for the vast flows of British savings. The contribution of the merchant bank is to make the foreign bill of exchange a more acceptable asset for the British financial system.

4.2 : the Composition and Organisation of Anglo-American Trade

a) American exports - British imports

The eastward trade across the Atlantic from the United States to Britain was an important determinant of the economic well being of both countries, albeit in slightly different ways. Between 1831 and 1835, exports to the United Kingdom comprised 41% of total U.S. exports on average, while for the United Kingdom over the same period imports from the U.S.A. averaged 19% of total imports. American exports to Britain were dominated by the shipment of raw cotton, which comprised 75% of the trade value between the two countries, reflecting its great importance in the foreign trade of the U.S. as a whole - cotton exports amounted to 50% of total U.S. exports. Turning to Britain, American raw cotton supplied

on average between 1831 and 1835 78% of Britain's total cotton supply; by contrast, Britain was not so dependent on the American supplies of the other raw materials, such as tobacco, which made up the remaining exports to Britain.[1] From this it follows that, since such a large share of American exports went to Britain, the fortunes of the American economy were highly influenced by the performance of the British economy. For Britain, on the other hand, although American imports were not so important in a strictly quantitative sense, she largely depended on America for supplies of raw cotton, a vital import for one of the most important British industries. Therefore this section will concentrate first upon the marketing, distribution and financing arrangements for cotton shipments across the Atlantic.

It is important to recall the extremely rapid growth of this trade. In 1790 only 80 bales of American cotton had been imported in all, giving an average weight per bale of 150lb. By 1810, 145,000 bales or 36,172,000lb. were imported into Britain, showing an increase in the average weight per bale to 250lb. In 1830 the imports amounted to 596,000 bales or 201,947,000lb., reflecting a further increase in the average weight to 340lb.. Over the same period the price of cotton fell in Liverpool: it fluctuated widely during the Napoleonic Wars, due to wartime trading conditions, reaching as high as 12½d. per lb. in 1814, but by

1 : J.Potter, 'Atlantic Economy, 1815-60: the U.S.A.and the Industrial Revolution in Britain', in L.S.Pressnell (ed.), Studies in the Industrial Revolution (London, 1960), pp. 243 & 247; N.S.Buck, The Development of the Organisation of Anglo-American Trade 1800-1850 (1st edn., repr. 1969, Newton Abbot), p. 2; J.Killick, 'Risk, Specialisation and Profit in the Mercantile Sector of the Nineteenth Century Cotton Trade: Alexander Brown & Sons, 1820-80', Bus. Hist., xxvi (1974), 2.

1829-31 the average price had declined to 5.75d.[1] Some of this can be ascribed to the post-1815 price deflation, but over a number of years the price of cotton fell relative to the trend of general prices: one reason for this was the drop in transatlantic freight charges after the war (on the New York to Liverpool run they fell from 1.24 cents per lb. in 1822 to 0.76 cents per lb. in 1833), which was probably caused by the introduction by Americans of more efficient forms of shipping on the transatlantic route.[2]

In America the key relationship in the distribution system was between the planter and the inland factor or commission merchant. The latter provided a wide variety of services to farmers, the most basic being selling the output of cotton and purchasing supplies on behalf of the planter. But he possessed considerable financial importance as well because he endorsed the planter's financial contracts, thus improving the latter's access to outside sources of finance, while not tying up his own capital. But usually he became more directly involved in financing the planter, paying for supplies himself - he made funds available to the planter before the crop was even grown, rather than just as an advance upon shipments.[3]

"Usually, very little of the credit that the factor supplied came from his own saving. Instead, he was in turn indebted to others further up the chain of credit". Through their risk-pooling activities, factors were able to open up the supply of savings held in the banking system to aid in the financing of the cotton crop.[4]

1 : S.W.Bruchey (ed.), Cotton and the Growth of the American Economy 1790-1860 (New York, 1967), Table 3A; Buck, Development, pp. 31 & 34-6; D.M.Williams, 'Liverpool Merchants and the Cotton Trade 1820-50', in J.R.Harris (ed.), Liverpool and Merseyside: Essays in the Economic and Social History of the Port and its Hinterland (Liverpool, 1969), p. 183.
2 : D.C.North, The Economic Growth of the United States 1790-1860 (New York, 1961), Table B-X; P.P. 1833, vi (690), q. 802-04.
3 : Buck, Development, pp. 67-80.
4 : G.D.Green, Finance and Economic Development in the Old South. Louisiana Banking 1804-61 (Stanford, Calif., 1972), pp. 10 & 29-30.

The inland factor was also responsible for shipping the cotton to a port and selling it there - it was only on rare occasions that the planter consigned it direct to a Northern or European agent. The inland factor probably sold to a commission merchant or port factor, who was acting on behalf of a Northern cotton shipper. But one must not draw too great a distinction between the two different kinds of factors - often they performed both a buying and a selling function.

There is some evidence that sales were made either to a commission merchant acting on behalf of an English house or the direct representative of an English firm. For example, the Manchester spinners McConnel & Kennedy possessed agents in Charleston and Savannah.[1] But sales were mostly made to a commission merchant acting for a Northerner. The merchant would pay for the cotton by drawing a bill upon the northern party, which could be easily discounted at one of the local banks. The cotton would then be shipped up the coast to the North-East.[2]

Even if the cotton was to be shipped direct to Britain, rather than via New York, payments would still be made by a bill drawn upon the New York buyer, because very little demand for sterling exchange existed in the Southern States. The New York drawee would acquire the funds to pay this bill by selling in the north a bill of exchange upon the English consignee.[3]

In this way the chain of credit financing the cotton cultivation of the United States extended all the way to Britain. However, it should be pointed out that while the American financing was often long-term, lasting over a period of several months in the case of the factor's

1 : Buck, Development, pp. 40 & 63-5; B.H.Tolley, 'The American Trade of Liverpool in the early 19th century and the War of 1812' (Liverpool M.A. thesis, 1967), p. 78.
2: Buck, Development, pp. 80-2 & 84.
3 : J.Killick, 'Bolton, Ogden & Co.: a Case Study in Anglo-American Trade, 1790-1850', Bus. Hist. R., xlviii (1974), 512-3.

advances, the British contribution was limited to the period of shipment from America.[1]

At first the export of cotton from America was conducted overwhelmingly at the risk of American merchants; during the Napoleonic Wars, there were large fluctuations in the market and consequently great profits were made, but at a high degree of risk.[2] After 1815 the cotton trade became more regularised and the Liverpool importing merchants purchased outright to an increasing extent. This trend was boosted by the introduction of steam packets in 1838, which for the first time allowed information to travel faster than goods. This permitted the sale of cotton while it was in transit across the Atlantic and is consistent with the large increase after 1839 in the amount of Liverpool cotton imports consigned to 'order', as opposed to a particular merchant.[3] The advent of the transatlantic cable in 1866 allowed buyers in England to send their orders direct.

The predominance of purchases on American account perhaps explains why the famous 'cotton triangle' - the shipment of cotton from the South to Liverpool, the shipment of British manufactures and emigrants from Liverpool to New York and thirdly, the coastal trade from New York to the South carrying freight and ballast - did not wholly apply between 1820 and 1850, when much of the cotton was shipped to Britain via New York.[4] The Northern merchant preferred if possible to sell on the New York market, the main secondary market in the U.S.A. for cotton, to northern manufacturers; only if the chance existed of a better settlement in Great Britain did he decide to ship to Liverpool. The move to shipping cotton

1 : Bruchey, Cotton, p. 224.
2 : Killick, 'Bolton Ogden', 511-2.
3 : Williams, 'Liverpool Merchants', p. 210.
4 : Bruchey, Cotton, pp. 222-3 & 227-8.

on British account perhaps explains the greater number of shipments to Liverpool direct. But it remained common for bills on cotton shipments to be drawn on the North and then redrawn on Britain, rather than directly.

The importing houses at Liverpool were generally commission merchants. There seems to have been a distinct American mercantile community in Liverpool by the Napoleonic Wars, when the American Chamber of Commerce there was founded. These merchants were specialised in one geographical line of business but they retained the eighteenth century mercantile form, in that they performed many different kinds of services for their clients, the importation of cotton being just one. But the tendency was for such general merchants to diminish in importance and specialise in one area; in the case of the American merchants in Liverpool it was in the importation of cotton on a factor basis. The changes in the organisation of the British export trade to America forced them into this course. This was certainly the case with Bolton, Ogden & Co. and Rathbone's of Liverpool.[1] Unfortunately for them there were no significant barriers to entry in this business and so in the 1830's the safer, more conservative houses lost business because of their reluctance to compete with newcomers, and the more reckless ones did not survive the crises of 1837 and 1839. At the same time the older firms were facing increased competition from the branch houses of the London-based American houses, established in Liverpool for the specific purpose of attracting cotton consignments from America.[2]

The duties of the commission merchant were varied: he paid customs duties on the cotton, saw to its storage and paid the freight and insurance premiums for the voyage from America. He also acted as ship's agent for the ships carrying cotton consigned to them. This activity was

1 : Tolley, 'American Trade', p. 66; Killick, 'Bolton', 510-4.
2 : see pp. 100-1.

maintained despite the shedding of other functions and the appearance of specialist ship's agents - an indication that the performance of this function was closely allied to importing. They did own ships themselves, but these were not engaged in transatlantic commerce which was dominated by American shipping.[1] He deputed the selling of the cotton to a broker.

More importantly, they provided credit for the shipper, who drew a bill upon the Liverpool cotton merchant as soon as the cotton left America.[2] This bill the American could discount at a bank or with a bill-broker and thus procure ready funds at once, rather than wait for the proceeds of the sale to be remitted from Britain - to do this could often take time, since sometimes the cotton was held back fom sale for speculative reasons. Occasionally the same firm in England who had 'authorised' an advance by allowing a bill to be drawn on itself, instructed its American representative to purchase the bill drawn on England: in this case the firm was 'negotiating' an advance. Brown Brothers, with their international organisation were able to undertake this practice.[3] Also the chain of credit was sometimes extended in England when the importer drew a bill upon the broker to whom he had consigned the cotton for sale; he was able to discount this at a Liverpool bank and so place himself in funds before a sale was made.[4] Alternatively, the discount of a broker's acceptance, as such bills were known, could enable the importer to withhold his cotton from the market, if he felt that a speedy sale would prove disadvantageous.

1 : Buck, Development, pp. 43-4.
2 : ibid., pp. 43-4.
3 : E.J.Perkins, Financing Anglo-American Trade. The House of Brown 1800-1880 (Cambridge, Mass., 1975), p. 64.
4 : F.E.Hyde, B.B.Parkinson, & S.Marriner, 'The Cotton Broker and the Rise of the Liverpool Cotton Market', Econ.H.R, viii (1955-6), 75-81; Buck, Development, pp. 55-6.

The bill drawn in America was drawn for between a half and three-quarters of the value of the cargo. The Liverpool importing merchant would have been able to use the proceeds of the sale to pay off the maturing bill upon itself (or if sales had not been made, the funds generated by the discount of a brokers' acceptance), receive its remuneration and with luck have a surplus balance remaining. But if the price at the time of sale in England was lower than at the time of shipment in America, then the risk of an over-advance occurred since the proceeds of the sale would not meet the face value of the bill.[1]

In these circumstances the Liverpool consignee had two choices: either he could pay the bill and incur the over-advance (which he would probably do if the difference was slight) and hope to make up the deficit on the next shipment he received; or he could refuse to pay it, i.e. 'protest' it. An important determinant of his behaviour would be his opinion of the solvency of the American shipper - in the event of the latter's failure, he would subsequently find it difficult and costly to receive back the 'over-advance'.

A dramatic decline in price would cause a large number of over-advances to occur simultaneously; such a decline usually took place during a financial crisis, when the (subjective) probability of being reimbursed for an over-advance seemed small. In this instance there would be many protests and the system of international payments would be severely disrupted.

Figure One of the previous section provides a good approximation of the financing mechanism in the American cotton trade to Britain described so far. However, two points should be made with reference to the particular practices of the 1830's: first, that the bill drawn on the cotton shipment to Britain was more usually drawn upon a Liverpool cotton

1 : Perkins, House of Brown, pp. 8-9.

importing house than a London merchant bank. Secondly, cotton bills were more likely to be drawn on New York initially and thence upon Britain, rather than from the Southern States on Britain direct.

D.M.Williams has described the structure of the Liverpool importing merchants of the first half of the 19th century.[1] He argues for a high and increasing degree of market concentration in this sector, with the top 30 importers taking 40% of total imports in 1820, 53% in 1830 and 58% in 1839. One can dispute his assertion about the high level of concentration in this market, for only two firms took over 5% of total imports in any of the years 1820, 1830, and 1839: Bolton, Ogden & Co. (5.06%) in 1830 and Molyneaux & Wetherby (5.25%) in 1839. Moreover, he neglects the change in the composition of the top ten importers over time: five of the top ten in 1820 remained in that position in 1830, but only one of the leading ten of either 1820 or 1830 (W. & J.Brown & Co.) remained in that group in 1839. Clearly, this was an activity in which entry was easily executed, indicating that although market shares might show a high degree of concentration, the market was in fact highly competitive.

The 1830's was a decade of increasing competition for consignments in the cotton trade and this is reflected by the entry of Anglo-American merchant banks into this activity. It is also seen in the larger proportion of the shipment value drawn for by the American shipper, sometimes 100%, and in declining rates of commission. There was increased speculation on British account. It may well be that innovations in the financing of the export of cotton from America to Britain may have made the transatlantic financial system more fragile and more prone to the disruptive consequences of a rapid fall in the price of cotton, which have

1 : Williams, 'Liverpool Merchants', pp. 182-211.

been briefly raised and will be discussed again. Such a fall was to occur to the extent of 40% in the first six months of 1837 and is one of the most remarkable phenomena of the financial crisis of that year. On the other hand, contemporaries emphasized more the new methods of financing British exports to America as a cause of the crisis in 1837, and so it is appropriate that attention should now be turned to the other side of the balance sheet of Anglo-American trade.

b) British exports - American imports

From 1831 to 1835 the annual average value of U.K. exports to the U.S.A. was £7.9m, which comprised 19% of total British exports and 41% of total American imports.[1] Turning to the composition of this trade, this was not dominated by any one single item, as were British imports from the U.S. by cotton, nor, for the main items exported to America, did the U.S. take so large a share of total British exports as to dominate the market, as was the case with Britain and American cotton. The largest single export category was that of cotton manufactures, averaging £2.1m between 1831 and 1835, but the United States never took more than 11% of total British exports of cotton manufactures, which was the U.K.'s main export good, comprising 47% of total exports in these years. By contrast, in other goods which were less important in total British exports, the American market took a rather larger share: for example, woollen and worsted manufactures comprised 14% of total British exports between 1831 and 1835 and were shipped to the U.S.A. at an annual average rate of £2.1m, the same amount as cotton manufacture exports to the U.S.A. But the U.S. share of total British exports of woollens and worsteds was 36%, compared with the corresponding share of 11% in cottons. Exports of linen manufactures to the U.S. were an average of £0.9m between 1831 and 1835 but the U.S. took 42% of total U.K. exports of this item. In other export

1 : Buck, Development, p.2; Potter, 'Atlantic Economy', p.257.

trades, which were less important in relative terms to Anglo-American trade, the share of U.S. exports in total exports was even higher.[1]

Notwithstanding the greater variety in the composition of the export trade from Britain to the U.S.A. than vice versa, it is fair to talk of an international distribution system which encompassed all these different commodities. The remainder of this section will describe the evolution of that system over time and highlight the financing role played by London merchant banks in the 1830's.

The Napoleonic Wars and their aftermath saw a change in the marketing structure of British exports generally, which is seen to a great degree in the export trade to America. The eighteenth century system of trade was based on two operators, the verleger (the organiser of the putting-out system) and the London merchant. However, it had undergone large modifications by the 1800's, in particular with the emergence of a third figure, the pure financier.

In the late eighteenth century there was considerable blurring of the roles of verleger and merchant.[2] There was considerable forward integration by the verleger into mercantile activities. At the same time, the London general merchants were increasingly bypassed, their place being taken by provincial merchants who may themselves have had an origin in manufacturing. Some verlegers had set up as merchants in London - the Baring and Gibbs families are the best examples of this for both had been

1 : ibid., pp. 253-78.
2 : S.D.Chapman, 'British Marketing Expertise: the Changing Roles of Merchants, Manufacturers and Financiers, 1700-1860', Bus. H. R., liii (1979), 207.

organisers in the Devon serge industry. Provincial merchants began to receive orders directly from abroad. Manufacturers themselves were not hesitant to export directly abroad, although they may have preferred to obtain a financial guarantee from Amsterdam.[1] Merchants remained responsible for most of British imports but they were based in the provinces and not in London; there was a distinct set of American houses in Liverpool by the middle of the Napoleonic Wars, a development associated with the decline of London and the rise of Liverpool as the main centre of Anglo-American trade. By 1808 they relied for finance upon "the London merchants (who), few in number, act almost solely as bankers for the trade generally....paying the drafts of merchants there to the order of our manufacturers....".[2] These provincial merchants often set up houses abroad to further their own marketing projects - so Bolton, Ogden & Co. of Liverpool established Ferguson, Day & Co. in New York.[3]

But from 1815 to some time around 1830, the manufacturers renewed their interest in exporting. By this time there had been a change in the structure of manufacturing industry. Whereas the old practice of London or provincial merchants exporting on their own account was sufficient when industry had largely consisted of putting-out operations controlled by verlegers, such a marketing system was inadequate for the new manufacturers, whose operations were large scale plants based on new techniques. The old exporting merchants now conducted a consignment business on behalf of the manufacturers. Another reason for this change may have been the development of an auction system at New York.[4]

1 : ibid., 207-14 & 216.
2 : A.Baring, An Inquiry into the Causes and Consequences of the Orders in Council and an Examination of the Conduct of Great Britain toward the Neutral Commerce of America (London, 1808).
3 : Killick, 'Bolton, Ogden', 503-4 & 507.
4 : Buck, Development, pp. 121-9 & 135-48.

An important part of this system was the advance received by the manufacturer from the commission merchant in Liverpool. The former would discount a bill accepted by the latter at the local bank and so would place himself in funds almost immediately. It sometimes took longer for the commission merchant to be reimbursed by the proceeds of the sale in America than for the bill to mature, and so he often bore the burden of providing the credit, although he had no interest in the outcome of the transaction. Notice here how the financial system was already prominent in the finance of the North American trade before the advent of the American houses in the 1830's.[1]

Such practice was still common at the beginning of the 1830's. See the evidence of Joshua Bates: the export trade to America "is perhaps as much as it was formerly upon English account; perhaps more so; but by parties who require, I believe, advances which the Americans make; whether with their own means, or by borrowed ones here, I cannot pretend to say". The exporters are the manufacturers, the 'Americans' the consigning merchants.[2]

In the late 1820's there had been a revival in the position of the merchant. To a certain extent he had never refrained from direct purchases when the economic conditions suited, but around this time he seems to have increased his purchases of goods, after a specific order had been received from America.[3] Having paid the manufacturer with trade acceptances, he handed the goods over to a shipper and received bills from the latter for 75% of the value of the cargo which he could then discount at a bank. This method was described by J.R.McCulloch in his Edinburgh Review article of 1837; he thought of it as "a safe and legitimate means

1 : ibid., pp. 1231-5.
2 : P.P. 1833, vi (690), qq. 966.
3 : Buck, Development, pp. 129-31.

"of carrying on trade".[1] It was obviously in the minds of the Select Committee of 1833, who were concerned that a merchant who purchased with acceptances and then received bills from the shipper, could place himself in funds for three months before he had to pay his own acceptance. Timothy Wiggin, a witness, said that such behaviour had been so formerly "...but within the last two or three years my own correspondents have paid cash almost uniformly for their goods without their aid".[2]

To sum up, the trading organisation in Britain in 1830 was neither clearly delineated nor static; both merchants and manufacturers were involved in exporting and a great many of the former had evolved from the latter class, because of the inadequacy of the London merchants to provide the necessary marketing services. These London merchants had already turned to solely financing the trade. This financing role was a foretaste of things to come.

The new system possessed a threefold structure: a) accepting house or merchant bank b) foreign mercantile houses resident here who exported on commission on foreign account c) British commission agents resident abroad. Formerly British merchants had acted in the second role but they either faded away or moved to the third role.[3] The American houses in Liverpool, who were mostly of British origin, ceased consigning exports to their houses in America; the Browns had given up this activity in 1834 because it locked up too much capital in illiquid stocks. Other American houses in Liverpool had turned their attention to cotton-importing much earlier.

1 : 'Enquiry into the Circumstances that have Occasioned the Present Embarrassments between Great Britain and the United States of America', Edinburgh Review, lxxviii no. cxxxv (1837), 229.
2 : P.P. 1833, vi (690), qq. 2011 & 2022.
3 : Chapman, 'British Marketing', 217.

The most distinctive feature of the new system was the influx of foreign merchants to Britain.[1] They first appeared during the Napoleonic Wars: N.M.Rothschild came to London in 1798 and then set up in Manchester in 1799. Some Hamburg houses followed suit, including the first Schroder in 1802. Rothschild's early activities bear some of the hallmarks of the later American importing agent. He paid in cash and although he possessed a large sum of capital, £20,000, this was in the form of credits with Jewish financiers. He sold direct to the Continent, either through his father's house in Frankfurt or through contacts he had made himself. But he was untypical in that he acted as the director of the manufacturing process himself, buying his raw materials from spinning firms and then supplying these and the particular colours and patterns to the dyers and printers respectively. Soon he moved from the second category to the first in our classification.[2]

What is just as striking is the development of large wholesale warehouses specialising in selling export goods to foreign buyers resident here. In London twelve houses were prominent in the 1830's, one of them being Todd, Morrison & Co.. There were similar warehouses in the North.[3]

The Anglo-American trade reflected this general development, but with an important difference, that American buyers were not permanent but temporary residents. Alexander Henry came to Britain in 1804 and he was one of the few to stay permanently. Crafts and Stell were another. After 1815, the tendency was for partners in American firms to come to England on a short-term basis, furnished with a credit from an Anglo-American

1 : S.D.Chapman, 'The International Houses: the Continental Contribution to British Commerce, 1800-1869', J. Eur. Econ. Hist., vi (1977), 5-49.
2 : S.D Chapman, 'The Foundation of the English Rothschilds: N.M.Rothschild as a Textile Merchant, 1799-1811', Textile History, viii (1977), 98-115.
3 : Chapman, 'International Houses', 32.

merchant bank.[1]

The American agent, when he arrived in Britain, would be possessed of very limited funds here and his credit rating would be non-existent. By contrast, the American houses in London had very great means at their disposal and their reputation for integrity was consequently among the highest. Usually they were merchants of one kind or another who had graduated to pure finance but retained their extended knowledge of trading principles and practice. They would probably possess either a partner or several clerks with a thorough experience of the credit worthiness of American firms. They were in an excellent position to lend their own resources to help the American importer finance his purchases in Britain.[2]

The Bank of England agent at Birmingham described the practice as early as 1827:[3]

> "...when they receive orders from abroad, particularly from America, they are furnished with bills on London and Liverpool houses....these bills are generally drawn by the Banks in the United States and generally on the most eminent houses in this country, such as Baring Brothers & Co., Thomas Wilson & Co....".

Technically the American importer paid into the U.S. agent of the English merchant bank 10% or 20% of the value of the credit he wished to obtain.[4] Then as an American writing in the Liverpool Mercury of 1832 described, "...commission merchants who reside in manufacturing towns, and receive orders to purchase on foreign account (are) being furnished with letters of credit on mercantile houses in this country...".[5] These houses are "a few opulent firms of great resources, who accept bills at long dates for their correspondents - the importing merchants - of America, Australasia, of India and China, as well as Africa and Europe...the agents who are called into operation to effect mercantile transactions are changed from

1 : ibid., 30-5; Chapman, 'British Marketing', 225-32; Buck, Development, pp. 154-8.
2 : R.W.Hidy, 'The Organisation and Function of Anglo-American Merchant Bankers 1815-60', J. Econ. Hist., Supplement to Volume I (1941), 53-66; and Section 6.3.
3 : quoted in Chapman, 'British Marketing', 224.
4 : Economist and Joint Stock Bankers' Chronicle, 15 Apr. 1837.
5 : quoted in Buck, Development, p. 151.

"commission merchants to commission bankers...".[1] The importing agent can either pay the manufacturer or warehouseman from whom he bought the goods with an acceptance, which was passable as a medium of exchange, or he himself could discount the bill and pay the seller in cash. Since the seller gave a 5% discount for cash, whenever the interest rate was below 5%, it would benefit the importing agent to pay cash. The bill on the accepting house was usually drawn at three or four month's sight - the merchant bank was obliged to pay cash to whoever presented it three or four months after acceptance. By this time the goods would have been shipped to America, sold there, and a remittance, usually in the form of a cotton bill (bill drawn on cotton shipped to a Liverpool house), would be sent to London; this bill would be discounted by the merchant bank, if it had not already been paid by the time its own acceptance was due to be paid, and the proceeds used to cover the value of the acceptance.

Figure 4.2 gives an adequate graphical description of the mechanism involved in this process. Nevertheless, two points should be made about the picture and the institutional practices of the 1830's: first, the position of the accepting house's agent in the foreign country should be clarified. Often in the 1830's, the shipping documents were transmitted straight from the exporter to the importer, bypassing the agent and reducing his role to ensuring that the importer sent a remittance to the accepting house at the proper time. A second defect of Figure 4.2 is that it does not indicate the financial transaction which was sometimes necessary for the accepting house to place itself in funds. If the remittance was in the form of a bill payable at sight or which matured before the acceptance, the merchant bank would obtain funds from the drawee; but if the bill remittance matured after the payment date of the acceptance, then the merchant bank would have to discount the bill

1 : Circular to Bankers, 2 Sept. 1836.

(and in so doing, would endorse it). If it was unable to discount the bill for some reason, perhaps severe monetary tightness, then the accepting house was in a position of some difficulty. To overcome the possible dangers inherent in relying upon the whims of the discount market, one American house, Baring Brothers, preferred to keep a large cash reserve.

All benefited from this new system: the manufacturer sold for cash in most cases and he did not bear any liability for the outcome of the transaction in America. He was able to charge lower prices than when he shipped to America on a long credit. The American importer also benefited, since without any funds here and despite being quite unknown in Britain, he could obtain the means to make purchases on the best possible terms. The accepting house received a commission when it did not have to advance any funds at all, if the remittance arrived before the acceptance matured: it received income from advancing only its name. The Circular to Bankers believed that "their business as brokers of capital is one of peculiar safety, speedy in its course to maturity, and prompt and completely sure in the settlement of current transactions".[1] They earned much larger profits than those of the ordinary consignment house.

The role of the bill of lading was greatly discussed during the crisis of 1837. This was the receipt given by the ship's captain, which proved that the cargo had been loaded on a ship bound for America. The theory was that these bills would be sent to the accepting house in London, who would then send them onto his agent in the U.S.A.. The latter would only hand them over to the American importing house, when given sufficient funds to pay off the value of the acceptance. The bill of lading gave the accepting house absolute control over the destiny of the goods - they could sell them if they wished but they only did this as a last resort.

1 : Circular to Bankers, 17 Jan. 1836.

But, as McCulloch noted in terms of stern disapproval, "over-confidence and competition were not long in occasioning a departure from this system". Bills of lading went straight to the importers, rather than to the American agent. The merchant bank no longer possessed any 'real' collateral. "This is what is technically called the 'open credit system', and a most dangerous one it undoubtedly is".[1] Contemporaries like McCulloch disapproved of this development because it allowed finance and accommodation bills to be drawn and was open to speculative abuse. It was a departure from the notion of the self-liquidating commercial bill. In fairness to the American houses, it should be pointed out that they did not only relax the role of the bill of lading out of a fear of losing business to less careful competitors. Some, including conservative firms like Baring Brothers, believed that there were more efficient ways of obtaining security.

The most direct cause of this transformation in trading practice was the bankruptcy of mercantile firms in the periodic commercial crises, or the death of heads of houses and the inability of their heirs to carry on with the same degree of success. For example, the Circular to Bankers argued that the crisis of 1825 "greatly affected the operation of the British continental merchants. The vocation, as exporters of manufacturers and produce, of that class of London merchants from whom most of our Bank directors were related, is taken up by men of inferior station...".[2] Another cause was the effect of the Napoleonic Wars, culminating in the Continental Blockade, in centring the foreign trade of many countries around Britain - foreign merchants came to Britain as a result. Many of these new merchants were innovatory in their policies:

1 : McCulloch, 'Enquiry', 229-30.
2 : Circular to Bankers, 9 Mar. 1828.

look at the high turnover/small profit margin policies of N.M.Rothschild or James Morrison.[1] These all reflected at a further stage back the reduction in uncertainty in the economy, due to falls in the level of risk and improvements in the supply of information. In the Anglo-American trade, the Circular to Bankers felt that the stabilisation of the American domestic exchanges after 1820 by the Bank of the United States, and the improved means of communication between the two countries after the introduction of a regular packet service in 1818, was responsible for much of the increase of Anglo-American trade in the 1830's.[2] Such a development would reduce uncertainty for both American importers and English manufacturing or mercantile exporters, but American importers were always likely to play an increasing part in the trade because their knowledge of the American market was so much better. These innovations helped them more than the British exporters.

The introduction of this new system of financing trade was itself a beneficial innovation in that it reduced the element of risk involved in the transatlantic payments mechanism. In the words of the Circular to Bankers, debts have been transferred from the English manufacturers to "the banks in America and their agents in England; or to the merchant bankers engaged in exchange and credit transactions between the two countries".[3] The merchant banks were able to undertake these risk-pooling activities because of their superior knowledge of the credit worthiness of the American traders, and because the confidence bestowed on them as a result of their vast capital resources allowed them to float a very large sum of liabilities, perhaps amounting to £14m at any one time.

1 : Chapman, 'Foundation'; R.Gatty, Portrait of a Merchant Prince, James Morrison 1789-1857 (Northallerton, 1977).
2 : Circular to Bankers, 17 Jan. 1836.
3 : ibid.

So far the organisation and finance of the trades from Britain to America and America to Britain have been discussed as if they were completely separate from one another, when in fact they were intimately related, because the bill drawn on a shipment of cotton to Britain served as a remittance for those who owed money to a London accepting house. It is a defect of the two diagrams of the previous section that they do not adequately describe what happened in America to a cotton bill on Britain. Instead of, as in Figure 4.1, being remitted to England by the discounting American bank, it was usually sent to the North-East and sold to an American importer who wished to make a remittance to England, that is, transaction number six in Figure 4.2. If this remittance matured after the bill drawn by the dry goods importer on the accepting house, then the latter would be forced to discount the remittance to pay off its maturing liability. All three parties, the American bank, the dry goods importer and the London accepting house would have placed their endorsement upon the cotton bill, when they had paid it over to one another, and so in all their balance sheets it would figure as a contingent liability.[1]

The important point to consider is the effect of a large fall in the price of cotton, which would lower the market value of the cotton below the nominal value of the bill drawn upon it and would therefore involve the drawee (the Liverpool importing house) in an **overadvance** if he were to pay the bill at maturity. When the bill matured, its holder, probably a London discount house, would present it for payment to the Liverpool house: if the latter refused to pay it (in technical terms, to protest the bill) or had already failed so that he was unable to pay it, then the holder would have the protest noted by a notary public and present the bill to the last endorser, in this case the merchant banker, for payment of the face value plus an extra protest charge of

1 : see pp. 86-7.

approximately 5%. The merchant bank would then return it along the chain of endorsers until it reached the original drawer, the only difference being that, under American law, the protest charge was much higher, perhaps 25% of the nominal value of the bill. Perkins has summed up the situation nicely: "Many parties, therefore, who quite innocently bought a bill would find themselves drawn into the panic as well".[1] This is one of the features of the crisis of 1837.[2] The fact of these contingent liabilities becoming actual placed a very great strain upon the liquidity of the financial system and sometimes forced houses to suspend their payments, and the effect was worsened by the long distance covered and by the long time necessary to trace the bill back to its original American drawer. As was suggested in the preceding section, the financing of international trade by the bill of exchange system was prone to instability: it worked well enough in stable periods but when it broke down, it was likely to collapse like a house of cards and have damaging effects on parties well-removed from the scene of the original disturbance. What would happen in the Anglo-American economy following a decline in the price of cotton is a good example of this instability.

4.3 : Foreign Exchange Markets in the U.S.A. and Great Britain

Let us now turn our attention to the more financial aspects of Anglo-American economic relations and examine the foreign exchange markets in each country. One of the more remarkable features of the transatlantic economy of the 1830's was the concentration of foreign exchange activities in North America and hardly at all in London. In the United States, the foreign exchange market was synonymous with sterling exchange; in Britain, by contrast, there was no such thing as a dollar exchange market. After

1 : Perkins, House of Brown, p. 9.
2 : P.Temin, Jacksonian Economy, pp. 146, 174 & 177.

describing briefly the institutional details of foreign exchange in the United States, the remainder of this section will be devoted to a discussion of why such a basic institution as a market in dollar bills did not exist in London.

By the 1830's the foreign exchange market of the U.S.A. had acquired a considerable degree of sophistication.[1] The main market was in sterling, although it was not unknown for bills denominated in French francs or Dutch guilders to be negotiated. The market in sterling had gradually evolved from the exporters (creditors of abroad) selling directly to importers (debtors to abroad) through the introduction, at around the turn of the century, of simple broking intermediaries uniting sellers and purchasers of foreign exchange to, in the 1830's, specialised dealers in foreign exchange. The Second Bank of the United States at Philadelphia, aided by its London correspondent Baring Brothers, dominated the U.S. domestic exchanges and also became the leading dealer in foreign exchange, because of its network of branches across the United States. As opposed to earning commission through the sale or purchase of foreign exchange, it always sought to make a profit in its transactions and one example of this was its speculations on seasonal variations in the exchanges.[2] The U.S. trade balance was uneven in character: exports, predominantly cotton, were shipped in the first four months of the year and consequently the foreign exchanges were at their lowest at this time; the importing seasons were in April and May and, to greater extent, in the fall (September and October). The foreign exchanges rose at this time because of the demand for remittances to pay the London accepting houses.

1 : A.H.Cole, 'Evolution of the Foreign Exchange Market of the United States', J. Econ. Bus. Hist., i (1928-9), 384-421; idem, 'Seasonal Variations in Sterling Exchange', J. Econ. Bus. Hist., ii (1929-30), 703-13.

2 : W.B.Smith, Economic Aspects of the Second Bank of the United States (Cambridge, Mass., 1954), pp. 242-4.

There was an obvious opportunity for intermediaries like the Bank of the United States or Brown Brothers to sell foreign exchange when it was demanded at a high rate in the autumn and purchase sterling bills when they were offered at a lower rate during the cotton shipment season, thereby making a tidy capital gain.

It was the habit of the commercial community in general, and of the Bank of England in particular, inasmuch as its policy reflected the value judgements and prejudices of the commercial mind, to distinguish between bills drawn for these purposes, called 'finance' bills, and the self-liquidating commercial bill, based upon real transactions. Often the distinction involved moral condemnation of finance bills as 'speculative', 'fictitious' or 'accommodation' bills. Chapters Seven and Eight will consider whether such criticisms can be justified in the context of the Anglo-American crises of 1837 and 1839. For now, it can be pointed out that in some circumstances, i.e. those of falling prices, a finance bill will be a much safer financial asset than a supposedly 'sound' commercial bill, since the value of goods on which the latter is founded falls between the time of drawing and the time of maturity.[1] Secondly, the use of finance bills often serves the public interest by evening out seasonal fluctuations in exchange, as in the example cited above, or by increasing the mobility of funds between, for example, the Northern and Southern States of the U.S.A.

On the eastern side of the Atlantic, however, no corresponding market for the sale of bills of exchange denominated in dollars and payable in the United States existed. This was unlike the exchanges between London and Paris for in both cities bills on the other could be bought and sold without any difficulty. In London, by contrast, there were not even any attempts, at least before 1837, to sell bills on the

1 : R.G.Hawtrey, The Art of Central Banking (London, 1st edn., 1932), pp. 128-9.

United States. One might suppose that the most simple way for a British creditor to be repaid by his American debtor was for the former to draw a dollar bill on the latter and sell it in the London foreign exchange market to someone who wished to pay a debt in America. But in fact, the only way for the first debt to be liquidated was for the American to make a shipment of either commodities or bullion, or, more conveniently, to remit a bill of exchange payable in London. Relying as he did upon the American debtor, the London creditor was almost impotent.

Since this means of collecting debts due in the United States was so obviously an inefficient one, why did a dollar exchange market not exist in London at that time? Is this an example of market failure or are there any economic reasons for such an absence? Einzig suggests that it was a result of London undertaking the finance of almost all world trade in the nineteenth century.[1] Perkins supports him, arguing that "because the institutional structure was such that the English merchants could insist on transacting all business in sterling or other strong European currencies, there was no dollar market in England corresponding to the sterling markets in the United States".[2] It is certainly correct to argue that the financing by London of British exports to North America did cause payment to manufacturers to be made by sterling bills on London, rather than the _a priori_ solution of the British manufacturer drawing a dollar bill payable in the United States on the American purchaser. This was a mutually convenient arrangement - the manufacturer avoided the twin risks of default and of a poor exchange rate, the American purchaser was provided with cheap credit in Britain.

1 : P.Einzig, _History of the Foreign Exchange Market_ (2nd edn., London, 1970), pp. 178-9 & 182-3.
2 : Perkins, _House of Brown_, pp. 6-7.

But I do not think that this method of financing provides a complete explanation of the absence of a dollar market, for all it means is that the creditor status of the American importer is assumed by the London accepting house which finances the transaction instead of the manufacturer who actually sells the goods. Consider how the accepting house was placed in funds when its own liability matured: it depended on its American correspondent remitting a bill of exchange, which itself would become payable before the acceptance of the merchant bank. This system worked well in times of prosperity and monetary ease but proved extremely inconvenient in times of financial crisis, for example in 1837 when the eastward flow of remittances was at first dishonoured and then completely dried up. Why did the merchant bank not place itself in funds by drawing a bill on the United States and selling it?

Light might be shed on this matter by considering possible purchasers for such bills; after all, for markets to function efficiently, there needs to be a demand as well as a supply. There was little demand from those who wished to remit funds to America, since such remittances could be more economically effected by Americans drawing a bill on England and selling in the extensive foreign exchange markets in North America. Therefore, in order to explain the lack of a dollar market in Britain, it is necessary to explain the economic rationale of the custom of remitting funds to America by Americans drawing bills on England, rather than Englishmen sending dollar exchange from London. One argument might be on grounds of cost - it was cheaper to remit funds by the former than by the latter method - but this only begs the question, why was one form of remittance cheaper than the other? Why was there such a large difference in relative cost that one form of remittance was not used at all?

I think that the answer to this question can be found from the examination of the risk involved in foreign exchange transactions. Suppose that foreign exchange markets existed on both sides of the Atlantic: in these circumstances, arbitrage between the markets, which was quite advanced in the London/Paris foreign exchanges of the 1830's, would ensure that cost discrepancies between different forms of remittances to the United States would not occur, by equalising the rate of exchange in each market, **after allowance had been made for the markets' consideration of the relative risk inherent in each transaction.** I postulate that the market considered that there was a greater risk in buying dollar exchange in Britain than in selling sterling bills in America. This uneven distribution of risk arose from the lack of solid mercantile institutions in the United States, whose reputation in the English money market was such that bills drawn on them were regarded as unacceptable risks by prospective English purchasers of dollar exchange. Since one must consider this conception of risk in relation to that displayed in America towards bills on British mercantile and banking firms, I am arguing that the former was relatively stronger. From this, it follows that one can explain the absence of a dollar exchange market in two ways: **either** the purchasers of dollar bills included such a large allowance for risk in the purchase price (i.e. offered such a poor rate of exchange) that the merchant banks found other methods of liquidating debts due in America to be preferable, despite all their inefficiencies; **or** the risk in purchasing bills drawn on America was considered so great that those who wished to send funds to the United States would not buy them at any price. The second case is an example of market imperfection - however much the price of the bill was altered to compensate the purchaser for risk, those remitting funds would still not buy them. Both cases are market failures:

where markets fail to function as a result of the great uncertainty caused by poor information flows, a symptom that is likely to be common in markets that reach over large spatial barriers characterised by poor communications.[1]

This impression is strengthened by consideration of the parties in America on whom bills might be drawn by the London merchant banks. It might draw direct on its American debtor, but it is very unlikely that the slight capital resources of the American dry-goods importer would render such a bill, in the eyes of prospective purchasers, a safe means of remitting. After all, the purpose of the acceptance credit mechanism of financing exports was for the merchant bank to substitute its own good reputation for the non-existent credit (in the eyes of the London money market) of the American trader. Alternatively, the accepting house could draw on its American agent, since the latter was often charged with the burden of collecting debts in America and providing for their remittance to Britain. While the agent collected the debt, why did not the merchant bank simply draw upon him to place himself in funds? Again, it is unlikely that the market would consider a bill on an American agent as a safe way of sending money to America; one part of the commercial mores of the time was a dislike of bills drawn by agents on principals, because these were not grounded in a commercial transaction and could have been drawn for the purpose of 'accommodation'. Even greater suspicion was cast on bills drawn by principals on agents, for whereas the principal was likely to be possessed of substantial means, the agent was often no more than a salaried official with little capital of his own and therefore was considered likely to be unable to pay such bills at some time in the future.[2]

1 : L.E.Davis & D.C.North, Institutional Change and American Economic Growth (Cambridge, 1971), pp. 22-3.
2 : see the reaction to bills drawn by the Bank of the United States on its London agent - pp. 299-300.

Contrast the standing of possible drawees in America with the reputation of the American houses in London in the 1830's: all were known to possess (by the standards of the time) enormous capital resources and were considered to be of first rate credit. It is not surprising that those who wished to transfer resources to the United States preferred to do so by ordering their American correspondents to draw on London.

Thus it would be true to say that a dollar exchange market would certainly have existed in London, had it not been for market forces imputing a high degree of risk to bills drawn on American mercantile firms, which were considered to be of insufficient strength to serve as the drawee in foreign exchange transactions. The problem was one of an institutional deficiency but this did not result, as Einzig and Perkins suggest, from London's role as the financier of world trade; it is more a reflection of the relative maturity of British and American financial institutions.

But there remains one more question to answer: if such an institutional deficiency existed in transatlantic financial organisation, was there not room for a financial intermediary, based in the U.S. and of such solidity to make bills drawn on it acceptable in London, to make an innovation in institutional arrangements by offering to be drawn upon from England. A first step might be to authorise a London correspondent or specially-established agent to sell drafts upon itself for cash to those who wished to remit funds to the States. The proceeds of sale would be deployed in meeting similar exchange bills drawn in America on Britain. Alternatively, a British creditor, perhaps a London accepting house, might obtain permission to draw a bill on the American institution, simultaneously providing the funds to pay such a bill by ordering its American debtor to transit funds to the drawee before maturity. The first

operation would be 'making a market' where none previously existed because of uncertainty - the American firm would be issuing in London a liability that represented a vastly-improved flow of information reaching London across a very large spatial barrier. The second would reduce the risk of a financial crisis in London caused by a breakdown in the flow of remittances across the Atlantic, since it would insulate the London merchant bank from the consequences of a break in the cotton price.

The Bank of the United States attempted to fill this gap when it established its London agency in 1837, and the Agent began to sell bills on the parent institution in Philadelphia. However, the Bank's subsequent career was unhappy, and although it would be too much to say that its failure in 1841 was caused by these operations, the idea never really caught on, and the establishment of a dollar exchange market in London had to wait until 1870. On the other hand, no attempt seems ever to have been made to perform the second function.

As Davis and North note,[1] the continued existence of market failure and the lack of success of an attempt to correct it are interesting phenomena that require explanation. I suggest that part of the answer may lie in what they call the 'institutional environment', which is defined as the legal, social and economic framework of rules surrounding the economy,[2] but which I will extend in the nineteenth century context to include the <u>mores</u> of the commercial community - the semi-official notions of what was sound and unsound, proper and improper business.

1 : ibid., p. 24.
2 : ibid., p. 6.

4.4 : the American Houses in London

There were seven Anglo-American banks based in London, concerned mainly with the finance of the export trade from Britain to the United States of America; the import trade from the U.S.A. to Britain, on the other hand, was conducted by many Liverpool-based importing houses which were mostly separated from the much larger London firms.[1] This section will describe the business histories and organisation of each American houses and then go on to consider the range of their activities.

The best-known of these firms was Baring Brothers & Co. Originally founded in 1763, by the 1830's it already possessed a long and distinguished history,[2] which included loan-contracting for the British government during the Napoleonic Wars and acting as agents for the Federal administration in the matter of the Louisiana Purchase, but after 1815 it was surpassed in the field of loan-raising for Continental Powers by the newcomer to London, N.M.Rothschild. Increasingly it was turning its attention westward to American and Chinese business. However, it suffered in the 1820's from a lack of suitable management personnel so that, although Barings had "the highest fame for respectability and wealth, for business, however, it did not stand very high".[3] Following reorganisation in 1828 the firm was administered throughout the 1830's by a triumvirate of managing partners:[4] the most important for our purposes, since his main concern was their American business, was Joshua Bates (1788-1864).

1 : for a general view, see Hidy, 'Organisation', 53-66.
2 : R.W.Hidy, House of Baring.
3 : Lady T.Lewis (ed.), Extracts from the Journals and Correspondence of Miss Berry... (2nd edn., London, 1866), ii. 344.
4 : the following is taken from Hidy, House of Baring, pp. 76-85, except where indicated.

A native of Boston, Massachusetts, he had first been employed in an American firm connected with the Far-Eastern trade and then had come to England in 1817 as the agent for an American shipowner.[1] In 1826, he had set up in collaboration with John Baring the firm of Baring and Bates, which took over the Indian and Chinese business of the recently-failed Samuel Williams. This firm had been incorporated into Baring Brothers in 1828, when Bates became the director of routine commercial operations in the counting house and, naturally considering his background, the decision-maker in matters of American business. Despite lacking a knowledge of the theory of political economy, he possessed a wide-ranging understanding of how the commercial system actually worked and was, as shall be seen, remarkably adept at predicting future disturbances in commercial conditions and economic activity.

In charge of most exchange operations and loan flotations was Thomas Baring (1799-1873), who was as famous for his activities outside the House of Baring as within. A Member of Parliament from 1835-7 and 1844-73, a Director of the Bank of England for 14 years between 1848-67 and chairman of Lloyd's from 1850-68, he twice turned down the opportunity of becoming Chancellor of the Exchequer. He also amassed a large collection of paintings. It is likely that he was the first to suggest the desirability of the Bank of England borrowing abroad in 1839 and he played a leading part in both negotiating the agreement with the Banque de France and twelve Parisian houses in July and executing the details of the foreign exchange transactions of August 1839 to April 1840.[2]

1 : P.P. 1833, vi (690), q. 746; see also Hidy, House of Baring, pp. 82-3, for an account of Bates's career.
2 : see 270-1.

The third managing partner was Humphrey St. John Mildmay (1794-1853) who entered the House of Baring through marrying the daughter of Lord Ashburton, formerly Alexander Baring. He was a member of Parliament from 1843-6 and a Director of the Bank of England for 15 years between 1828 and 1849. It is unlikely that he played any special role in the firm but it is evident that when all matters of future policy were discussed, Mildmay was the voice of caution and conservatism among the partners.

In addition to these three, there were two sleeping partners, John Baring, brother of Thomas and Bates's former colleague, who was described as "able but indolent"; and Francis Baring, a son of Lord Ashburton. Both played very little part in the running of the firm. One very important influence, although he had left the partnership in 1830, was the former leading partner, Alexander Baring, Ist Lord Ashburton (1774-1848), who was frequently consulted during the 1830's on matters concerning the future policy of the firm. In particular, he often intervened to settle the numerous disagreements between Bates and Thomas Baring on the one hand, and the cautious Mildmay on the other, which reached their climax at the end of 1835 and which almost led to Bates's resignation from the business.[1]

In 1832 Baring Brothers set up a subsidiary house under the same name in Liverpool, which would enable them to attract cotton consignments from the U.S. and at the same time earn extra income through performing shipping agency and allied functions for exports to the U.S.A., which were already financed by the London house. This branch, though legally a separate partnership, had no capital of its own and was confined to commission business - for example, all bills continued to be drawn on the London house. It was run by an American, Samuel S. Gair, and a Baring relative, Charles Baring Young.[2]

1 : Bates MS., Diary: 25 Apr. 1831, 14 Jun. 1832, 14 Feb. 1833, 25 May, 10 July, 5 & 26 Oct., 1, 4 & 5 Nov. 1835.
2 : Hidy, House of Baring, p. 128; Bates MS., Diary: 11 Apr. & 11 Nov. 1832; Jardine Matheson MSS., B6/10, 774: BB to Jardine Matheson (JM), 1 Oct. 1832.

The capital of Baring Brothers, London, had been £279,000 at the end of 1830 and by 1836 had increased to £777,000, despite the withdrawal of Alexander Baring in the meantime.[1]

A more recent firm, but richer in capital resources and different in its organisation, was the transatlantic partnership of Brown Brothers.[2] This house had been established in Baltimore in the 1790's by Alexander Brown, an Irish immigrant. Separate branches of the same house were set up in Liverpool in 1811 by his eldest son, William, in Philadelphia in 1818 by the third son, John A.Brown, and in New York in 1825 by the fourth son, James. After Alexander's death in 1834, his second son George succeeded to the management of the Baltimore office. The singular thing about the firm was its organisation: instead of one head office employing salaried agents in faraway places to carry on the business of the firm, as was the case with other Anglo-American merchant bankers in the 1830's, the House of Brown was composed of four equal branches in different parts of the globe and styled by different names.[3] The Liverpool house was known as William & James Brown & Co. up to 1839 and thus was the only one of the seven American houses to be situated outside London. This cut it off from direct access to the London capital market but Browns were ably represented by their London agents, the private bankers Denison, Heywood & Kennard & Co., who paid their bills at maturity and in some cases accepted bills drawn upon Browns, since bills on London were more negotiable in foreign countries than bills on Liverpool.[4] The partners of the Liverpool house in the 1830's were William Brown (1784-1864), later to become a Member of Parliament for Liverpool between 1846-59 and was a generous benefactor to the City of Liverpool, and Joseph Shipley (1795-1865), an

1 : capital figures supplied by Baring Brothers & Co. Ltd.; other guesses can be found in Hidy, House of Baring, p. 129; Bates MS., Diary: 5 Nov. 1835; also Morrison Family MSS.: J.Cryder to J.Morrison, 14 Oct. 1836.
2 : J.C.Brown, A Hundred Years of Merchant Banking (New York, 1909).
3 : as pointed out by Perkins, House of Brown.
4 : ibid., p. 267 n. 24.

American who had been employed by Browns since 1825 but was only admitted as a full partner in 1839, when the name of the firm was changed to Brown, Shipley & Co.. The Brown network possessed larger capital resources in total than any other of the American houses - £584,000 in 1830 and £1,216,467 in 1836.[1]

Nothing like so much is known about the remaining five houses, mainly because they had all ceased to exist by the end of the 1830's, so leaving (in the majority of cases) no records at all, or (in one case) records that only recently have come to light. Our information about these firms is for the most part derived from comments about them in the records of the other institutions.

Thomas Wilson & Co. were probably the longest-established. Originally they had been general merchants without any connection at all with America[2] but in the 1820's had become prominent as loan-contractors for foreign powers, among them Holland, Brazil and most importantly Denmark.[3] Their interest in America was largely financial, reflecting their background in European business, and they acted as financial agents for the state of Louisiana and Upper Canada, floating a loan for the latter in the 1830's.[4] They were particularly concerned with the marketing of American state bonds in London and dealing for State Banks. Thomas Wilson was no longer alive, but the firm was carried on by Fletcher and Melvil Wilson, the latter serving as a Director of the Bank between 1829-31, 1832-4 and 1835-7. Like Barings and Browns, the partnership included a native American, Gabriel Shaw, who in the 1840's was to be employed by

1 : ibid., Appendix A; there are higher estimates of £1.3m in Morrison Cryder MSS., Morrison Family MSS. and Bank of England MSS.
2 : P.P. 1812, iii (210), pp. 557 & 562.
3 : Hidy, House of Baring, pp. 64, 93 & 505 n. 7; B.Bramsen & S.Wain, The Hambros 1779-1979 (London, 1979), pp. 192-4.
4 : Langton MSS.: Glyn to Langton, 4 Dec. 1834.

James Morrison. Evidently their loan-raising activities in the 1820's had not been entirely successful, for at the time of Thomas Wilson's death in 1831, they possessed a capital of only £80,000. By 1837, this had risen to £300,000,[1] which provides a good indication of the profits that could be earned by merchant banks in years of prosperity. Like Barings, they had set up a legally distinct branch house in Liverpool, taking over in 1833 the firm of Henry Patry & Co., which was henceforth known as Thomas Wilson & Co. of Liverpool.[2]

Less is known about George Wildes & Co.. George Wildes was an American who had come to Britain at about the same time as Joshua Bates. The fellow partners in his firm were a Mr. Pickersgill, another American, who provided most of the capital in the firm and served as their agent in the U.S.,[3] and Thomas Searle, again an American, who seems to have been in charge of the routine American business. Barings estimated their capital in 1831 as only £30,000, but it had risen to £275,000 by March 1837.[4] Like the others, it had set up a house in Liverpool, known as Wildes, Pickersgill & Co., by amalgamating with the firm of Fielden Brothers.[5]

The third of the three houses that were later to become famous as the 'three W's' was Timothy Wiggin & Co.. Like Bates a Bostonian, Wiggin had lived in Britain from 1799, acting as a buyer of British manufactured goods for export to America,[6] but he had already retired from this line when the financial crisis of 1825 brought down a leading Anglo-American

1 : Hidy, House of Baring, p. 93; Bank of England MSS., CbIb: Bates' Opinion of their position, 17 Mar. 1837; Jardine Matheson MSS., B6/10, 795: J.McVicar to JM, 24 Nov. 1832.
2 : ibid., B6/10, 1092: T.Wilson to JM, 1 Oct. 1833.
3 : Perkins, Brown Brothers, pp. 118 & 283-4 n. 3.
4 : Hidy, House of Baring, pp. 93-4; Bank of England MSS., CBIb: Bates' Opinion, 17 Mar. 1837; however, there is a different estimate in Morrison Family MSS.: Diary (Observations), 25 Feb. 1837, J.Pattison.
5 : Langton MSS.: Glyn to Langton, 12, 17 & 23 Sept. 1836; Hidy, House of Baring, p. 171.
6 : P.P. 1812, iii (210), pp. 321-2; P.P. 1833, vi (690), qq. 1938-9.

merchant, Samuel Williams - Wiggin intervened for the sake of his many friends in New England to honour Williams' unpaid acceptances to the extent of £400,000. Out of this sum, only £500 was never recovered and this induced Wiggin to stay in the business.[1] He was largely concerned with the financing of exports to the U.S.A. and cut himself off from international financial transactions. His capital in 1831 was estimated at £120,000 and this had grown to £385,000 by 1837,[2] not so great a rise as the other two Ws but quite considerable on any reckoning. Unlike other houses, he did not have a branch operating in Liverpool and nor did he have any other partners but his own son, Benjamin, who was admitted in 1835.[3]

Least is known about Francesco de Lizardi & Co.. They were originally known by the name of Zuintana Brothers, indicating an Iberian origin, and one Zuintana remained an active force in the firm of Lizardi & Co. Alexander Gordon was primarily responsible for their American business.[4] It is possible that the organisational structure of this firm was similar to Browns, for there were corresponding branches operating in Paris (Lizardi Hermannos), New Orleans (Manuel de Lazard) and Liverpool.[5] They were financial agents to the government of Mexico and in the 1830's were involved in long negotiations with the latter following the repudiation of interest payments on Mexican debt. In their American business they were primarily orientated to the South of the United States, in particular in shipping cotton to Liverpool and Le Havre, and acting

1 : Jardine Matheson MSS. B6/10, 74: T.Wiggin to Fairlie, Bonham & Co., 27 Oct. 1825; Morrison Family MSS., Diary: 23 Feb. 1833.
2 : Hidy, House of Baring, pp. 93-4; Bank of England MSS., CbIb: Bank Inspectors' Report, 20 March 1837.
3 : Jardine Matheson MSS., B6/10, 1442 & 1589: T.Wiggin to JM, 9 Nov. 1834 & 1 Jan. 1835.
4 : Bank of England MSS., Private Letter Book to Liverpool No. 5 (PLBL5), f. 20: 12 Nov. 1835.
5 : F.Redlich, 'Jacques Lafitte and the Beginnings of Investment Banking in France', Bulletin of the Business Historical Society, xxii (1948), 159.

as correspondent for New Orleans banks.[1] Of their capital funds, almost nothing is known, except that the Governor of the Bank believed in March 1837 that they were worth £1 million;[2] but this is almost certainly an exaggeration since firms were in the habit of inflating their own position when talking to such an influential figure.

The seventh firm was Morrison, Cryder & Co. which only opened for business on 1st Jan. 1836. This was the creation of one of the more remarkable men of the 19th century, James Morrison,[3] who had started out in life at the humblest station but had acquired a massive fortune, partly through chance (he married his employer's daughter and so inherited the running of the firm) but more through skill, building up the business of Todd, Morrison & Co., later to become Morrison, Dillon & Co., which was a textile purchasing warehouse located in the City, purchasing Northern manuactured goods in bulk and selling them to London retailers. Morrison set up Morrison Cryder in collaboration with John Cryder, an American with experience in the South American and Chinese trades, primarily as an outlet for his already large fortune, for he possessed a considerable portfolio of American securities; no doubt the high profits earned in this line of business attracted him. Cryder was to be in charge of the day to day administration, while Morrison was intended at first to be no more than a sleeping partner (he as a radical Member of Parliament and active in circles like the Political Economy Club). The Liverpool firm of Todd, Naylor & Co., run by Morrison's brother-in-law with his capital, would transact the business of Morrison Cryder in that port. The capital employed in the firm by March 1837 (Morrison kept much of his wealth outside) amounted to £350,000.[4]

1 : Bank of England MSS., CTMB22, ff. 121-5: Lizardi & Co. to J.Pattison, 24 Nov. 1836.
2 : Morrison Family MSS., Diary: 3 Mar. 1837.
3 : for his life and career, see Gatty, Portrait.
4 : Morrison Family MSS., Diary (Observations): J.Morrison to R.Alsop, 14 Dec. 1836.

These were the seven major Anglo-American merchant bankers, but in addition there were several smaller firms located in London - for example, Gowan & Marx, Collman & Lambert, A. & G. Ralston, and Bell & Grant. Of greater stature than all of these, but only marginally involved in American business, was N.M.Rothschild & Sons, along with its allied houses in Paris, Frankfurt and Naples. Rothschilds first became associated with American business in 1834 when, by means of large short-term loans from the Bank of England, it built up a large portfolio of U.S. stocks and established correspondence with houses in Boston, New York, Phildelphia and Baltimore. At the beginning of 1835 it succeeded Barings (and in Paris, Hottinguers) as the financial agents in Europe of the U.S. Federal Government. However, up to 1837 it was only to a limited extent concerned with American transactions.[1]

In addition to the finance of Anglo-American trade, described in section 4.2, the American houses in London executed functions in the transatlantic economy that were more financial in nature, the most important being operations in the foreign exchanges and the marketing of American securities in Britain.

Because of the absence of a dollar exchange market in London, all the important foreign exchange transactions took place on the Western side of the Atlantic, with the result that the London merchant banks played a very subsidiary role, providing the permission for such operations but never undertaking the leading part.

The transatlantic organisation of Brown Brothers is the exception to this generalisation, for their unique management structure facilitated speculations in the exchanges, with the result that the Browns were second

1 : B.Gille, Histoire de la Maison Rothschild (Geneva, 1965), i. 283 & 463-8; Langton MSS.: Glyn to Langton, 7 May 1834.

only to the Bank of the United States in the U.S. foreign exchange markets. For example, when the Browns were soliciting cotton consignments to Liverpool, they would sometimes offer to 'negotiate' an advance, which means that, instead of merely 'authorising' a bill to be drawn upon their Liverpool house, they would purchase it for cash as well, thereby saving the shipper the trouble of discounting it at a bank. The bill would be sent to one of Brown's northern branches. The latter would sell another bill on Liverpool at a higher rate than the purchase price of the cotton bill, thereby making an absolute profit in addition to the commission earned on the cotton consigment to Liverpool.[1]

The other American houses were unable to be involved in such business, because of their different organisational structure, but they did authorise other transactions in the foreign exchanges. A London merchant bank often provided credits to its American agent or any mercantile house or commercial bank to undertake speculations in the exchange: the holder of a credit would draw a bill on London, sell it for dollars and then repay the draft before maturity, by purchasing a sterling bill at a lower rate of exchange than he had sold his draft for. Collateral would be given in the form of American shares deposited in London. The merchant bank would receive a commission, the American the absolute profit or loss. Sometimes joint-exchange accounts were operated, where no commissions were charged but the profits (losses) were shared. In the interval between the sale and purchase of the drafts, the funds could be profitably employed in the States in discounting short-term paper. Since it was common for American short-term rates to be higher than English equivalents, there was a second source of profit for this kind of activity.

1 : Perkins, House of Brown, pp. 94 & 108-9.

Turning to the second of the strictly financial activities of the American houses, the marketing of American stocks in London, it should not be imagined that before 1850 British capital was exported to America by means of large scale loan flotations, which were snapped up by a public eager to speculate in such stock. There was no day-to-day market for American securities in London in the 1830's and prices of American stocks were rarely quoted in the newspapers. It was quite difficult for holders of American stocks to effect sales as they wished, simply because it was difficult to find a buyer. This was very different from the market for Spanish and Portugese stocks where large transactions were made daily. American securities "were only to be obtained from the merchants connected with the U.S., who, though they were usually prepared to sell, were not always buyers of the commodity, so that holders who wished to realise were often for weeks without a fair chance of doing so".[1] One reason for this was that most American stocks took the form of registered certificates which required the services of a notary public to change their ownership, as opposed to bearer bonds which were immediately transferable from hand-to-hand.

The bonds were sold to "thoughtful, retired accumulators" who bought them "not for speculation but for the purposes of holding them as a safe and advantageous form of income...",[2] a "more or less permanent investment of their surplus funds...they are seldom bought for speculative purposes".[3] The attraction of American securities was their high yield - between 4 & 5%, rather higher than Consols - and confidence in them was increased by the repayment of the last of the Federal Administration debt in 1834. In addition, many liberals in Britain purchased American State shares because of their sympathy with the democratic basis of the Federal

1 : Times, 29 April 1837.
2 : Circular to Bankers, 25 Aug. 1837.
3 : Huth MSS.: F.Huth & Co. to Goodhue & Co., 6 May 1836.

Government and its constituent State governments, and because of their conviction that democratic governments would not allow repudiation of the debt to take place, by contrast to the tyrannies of the European powers. Such expectations were to be rudely shaken in 1841.[1]

What was the contribution of the merchant bank in selling these securities? It should be said at the outset that they did not act as investment banks, financing an asset portfolio of American securities by issuing liabilities to European savers. Instead, they were only brokers of American stocks, earning a commission according to the amount sold, and they only increased the attractiveness of these securities inasmuch as they paid the half-yearly coupons on the stock (for a commission) in London in sterling, thereby protecting the owner from the transaction cost and exchange risk of collecting the interest in America. In addition, their association with a particular security provided a kind of moral guarantee for its ultimate safety. People reasoned that if one of the rich and safe American houses saw fit to sell such stocks and pay the interest on them, this was an indication that the merchant bank considered the stock a good investment.

Finally, it should be pointed out that the gap between short-term and long-term financial operations was not as wide as might be expected, since the means by which long-term capital was exported to America was through Americans drawing bills of exchange on London. Conversely, interest was paid to shareholders in Britain by the merchant bank after it had received remittances from America, which came in the form of bills drawn on exports to Britain.[2]

1 : Norman MSS., F69: Autobiography, ff. 479-80.
2 : on this topic, see L.H.Jenks, The Migration of British Capital to 1875 (1st edn., New York, 1927), pp. 65-106.

At first sight, the existence of only seven firms in the market for provision of financial services to Anglo-American trade indicates that the market structure was oligopolistic and so bears out the arguments of some historians who believe that merchant banking is an activity characterised by oligopoly.[1] E.J.Perkins has argued that such a structure was a reflection of the nature of the acceptance business: to have a large number of acceptances in circulation at any one time, one must possess an impeccable reputation for safety, and such prestige was hard to acquire. "Under the most favourable circumstances, it usually took several years for a potential competitor to cultivate a reputation for financial integrity that was sufficiently strong to permit an entry into the letter of credit market". In other words, there were significant natural barriers to entry.[2] Professor Landes has written that the very risky nature of international finance led to collusion and a lack of competitive behaviour between merchant banks. An unofficial cartel existed among the market leaders, because success depended upon the goodwill of one's competitors.

However, Perkins's argument for an oligopolistic structure resulting from natural barriers to entry does not hold good for the 1830's. The high profits earned in this sector up to 1837 attracted newcomers to the business, both from the ranks of the lesser Anglo-American merchant banks, who already possessed a moderate credit rating, and from those who had had no previous connection with merchant banking, such as Morrison Cryder. Even after the crisis of 1837, there was no shortage of new recruits willing to step into the shoes of the suspended American houses: some like Fletcher, Alexander & Co. and Frederick Huth &

1 : Perkins, House of Brown, p. 11.
2 : D.S.Landes, 'Vieille Banque et Banque Nouvelle: La Revolution Financiere au Dix-Neuvieme Siecle', Revue d'Histoire Moderne et Contemporaine, iii (1956), 204-22: idem, Bankers and Pashas (London, 1958), chapter one.

Co.[1] were already established in other sectors of world trade (the Far East and South America, in these two cases), others like Holford & Co. or McCalmont & Co. were subsidiary houses in the American trade, but Samuel Jaudon was able to set up in London as the agent for the Bank of the United States and become the market innovator for the succeeding two years, without any previous basis at all in trade.

Nor is Landes' argument for collusive behaviour stemming from the risky nature of the merchant banking profession supported by the evidence of the 1830's. Competitive behaviour among existing merchant banks was strong. Commissions were reduced and other encouragements given, particularly with regard to the promptness with which remittances were sent, to attract business away from competitors. J.R.McCulloch believed that the adoption of the 'open credit system' was a direct result of "over-confidence and competition" on the part of the American houses.[2] Indeed, it is possible that the financial innovations induced by the keen competition in this sector introduced an element of weakness into financial arrangements and was partly responsible for the crisis of 1837. Rather than there being too little competitive behaviour among merchant banks in the 1830's, there may have been **too much.** A good example of this competition is the attitude displayed during the financial crisis of 1837 by the liquid houses towards their more unfortunate competitors: at the commencement of the problems Joshua Bates of Baring Brothers felt that the affected houses should not be supported - "they can't be saved and they ought not to be. an example is wanted. ten years of prosperity has made credit too cheap".[3] His attitude quickly changed when it became apparent

1 : on Huths, see J.R.Freedman, 'A London Merchant Banker in Anglo-American Trade, 1835-50' (London Univ. Ph.D. thesis, 1969), pp. 26-8.
2 : McCulloch, 'Enquiry', p. 229.
3 : Morrison Family MSS., Diary: 25 Feb. 1837.

that if one American house was allowed to fall, all the remainder would be brought down as well. Nothwithstanding this concern that other people's troubles should not spread to themselves, there remains a certain feeling of Schadenfreude in the comments of both Barings and Morrison Cryder during the crisis, as they anticipated themselves reaping the benefits of duopoly when normal times returned.

This conclusion, taken in conjunction with the views on entry expressed above, indicates that the Anglo-American merchant banking sector in the 1830's was freely competitive, particularly if one analyses it not in terms of a static, market structure approach to competition but rather from a dynamic viewpoint, which is concerned with the process of competition. This is best judged by the extent of competitive behaviour between existing firms and the possibility of entry from new ones.

A final point to consider is the reserve policy of merchant banks. Consideration of the bill of exchange system in section 4.1 showed that the balance sheet of the accepting house was perfectly matched, since every one of its liabilities, bills of exchange which it had accepted, was matched by a contingent asset, the money which would be forthcoming from the client at the time of the bill's maturity.[1] In theory, an accepting house did not need to keep a cash reserve to meet liabilities, unlike a commercial bank subject to instant (but predictable) withdrawal of liabilities. Did this apply to the American houses of the 1830's? In practice, no, for two reasons. First, the remittance from the U.S.A. (or contingent asset) may arrive late or not at all, so that the accepting house would come under 'cash advance', for its acceptance had still to be

1 : see p. 86.

paid. Secondly, as was noted in section 4.2, the American house often received as a remittance a bill which matured later than the payment date of its own acceptance. In theory, since the usance of bills drawn to finance exports was 3 or 4 months after acceptance (sight) and the usance of bills drawn on cotton shipments was 60 days (sight), the American dry goods importer should have been able to sell his import, receive payment, buy sterling exchange and remit it to London so that it would mature by the time his own bill on the American house became payable; in practice the system did not work so smoothly as this, and often the latter might be forced to discount the remittance in order to procure funds with which to pay off his liability. Alternatively, the accepting house might choose to keep a cash reserve to cope with such eventualities. Its choice would depend upon its subjective preference for gaining extra liquidity by holding a reserve, as opposed to the loss of income incurred by the possession of a non-income earning asset.

In the 1830's Baring Brothers followed a policy of never discounting a bill of exchange received as a remittance, or asking correspondents to remit bills on themselves (which is similar in its effects), for they preferred to keep a large cash reserve. They realised that this cost them income, but on the other hand it increased their safety and preserved their reputation as the soundest of the American houses.[1] However, they were the most liquid of the seven merchant banks and their competitors did not hesitate to discount remittances before they matured and thereby keep their capital resources free for profitable employment. Such a reliance upon external sources of finance, while not damaging their solvency since the interest charge was borne by the American client, entailed certain risks since they were laying themselves

1 : Baring MSS., Reel 58, 64562: BB to Ward, 6 Feb. 1837.

open to some kind of financial shock which might cut off their outside financing. This was to be the case in February 1837. The other side of the coin is that it brought the merchant banks more under the control of the central bank, inasmuch as the latter's actions influenced the short-term money market on which the less liquid American houses depended.

There is a curious paradox about the the introduction of merchant banking into the Anglo-American sector in the 1830's. Through their acceptance credit business, the American houses decreased the cost of finance to the international trader and improved the quality of the foreign bill of exchange so that it became an acceptable financial asset to the London discount market. Also, through the facilities they gave to the sale of American securities in London, they increased their attractiveness to the English capitalist. Not but what, certain weaknesses remained in the system of financing international trade and these were aggravated to some extent by the behaviour of the American houses.

The first of the systematic weaknesses was the consequence of a fall in the market value of the goods upon which a bill of exchange was drawn. If the fall was large enough, it was likely that the bill of exchange would be unpaid by the drawee. In the context of the 1830's, this weakness is most apparent in the bill of exchange drawn upon cotton shipped from America to Britain.

The second systematic weakness, the lack of a dollar exchange market in London, is related to the first, since at particular periods of the year cotton bills were the main form of remittance to the merchant banks. The London banks not only depended upon their American clients for funds but also could be adversely affected by events in a separate trade.

The third case is the 'house of cards' effect following on the protest of a bill of exchange. In the 1830's this effect would have been particularly strong, because it was likely that a large number of cotton bills would be protested simultaneously and that the long journey of the bill through the chain of endorsers back to the original drawer would cause great uncertainty, in addition to the liquidity problems for the endorsers.

In addition, there were certain weaknesses which resulted not from the inherent characteristics of the system but from the behaviour of its participants. The first of these behavioural weaknesses was the effects of the competition between the American houses. In the cotton trade from America to Britain this led to a rise in the percentage value of a cotton shipment that was given to the American exporter, which, as we have seen, increased the fragility of the system in the event of a fall in the price of cotton. Competition is also held, in the finance of British exports to America, to have resulted in an easing of the conditions of credit and, through the facility in obtaining credit generally for Anglo-American transactions, to have caused 'overtrading' to occur.

A second behavioural weakness was the illiquidity and external finance of the American houses, which exposed them to danger if the external finance was suddenly cut off. As a result of this illiquidity, the Bank of England was able to influence the American houses through affecting their sources of finance but the success of measures executed in this manner was likely to be variable, depending upon the state of the money market and the severity of the restriction.

Thirdly, the flexibility of the bill of exchange system allowed not only trade bills but also finance and accommodation bills - drawn for the purpose of raising money only - to be used. Of course, accommodation bills are just another form of finance bill and are not inherently reprehensible, but their use, as long as they pass current in the money market, did hinder the possibility of control by the central bank. However, as soon as the money market recognised their true nature, the loss of confidence would probably cause their drawers to fail. Thus the use of accommodation bills is another example of the fragility of financial institutions in the 1830's.

The systematic weaknesses have been developed in the last two chapters and the behavioural weaknesses will become more clear in the two chapters to follow. The discussion of both is central to an examination of the financial crisis of 1837.

Chapter Five : the London Financial Crisis of 1837

The narrative account was left off at the end of Chapter Three in the spring of 1836, when there existed in financial circles what is called a mania or state of euphoria. One manifestation of this was a large increase in the flotation of joint-stock companies, among them railways - 64 prospectuses were issued in the first four months of 1836, compared to 46 in the whole of 1835.[1] Another manifestation, and one of the causes of the great prosperity experienced in the manufacturing districts of Lancashire, was a large increase in exports to the United States. These had amounted to £5.5m in 1832, but they reached £10.6m in 1835 and an astonishing £12.4m in 1836.[2] Simultaneously, British imports of raw American cotton increased in value from £5.95m in August 1831-2 to £10m in 1835-6.[3] This was an extraordinary growth and was associated with an large export of long-term capital and the expansion of the Anglo-American financial sector in London. By 1836 the liabilities of the seven American houses amounted at one estimate to £14m at any one time. Morrison Cryder, which had only been established as a firm at the beginning of the year, was already accepting bills to the extent of £260,000 in March and April.[4]

But the prosperity was not to last. A steady bullion drain from the Bank of England set in, which forced it by the end of summer to take measures to preserve gold convertibility. In addition to general measures like raising Bank Rate and selling securities, the Bank took exception to some transactions of the American houses which it believed were responsible for the bullion drain, consequently refusing to discount any bills originating from these transactions.

1 : Matthews, Trade-Cycle History, pp. 159-62.
2 : ibid., p. 251.
3 : Bruchey (ed.), Cotton, Table 3A.
4 : Morrison Family MSS.: Diary, 1836.

But the Bank's position was not improved by these actions. The foreign exchanges remained weak, and some signs of fragility appeared in the domestic joint-stock banking system. Under such pressure divisions in the Bank grew about the best course of action, and when the foreign exchanges weakened again at the end of January 1837, the Bank of England decided to take further measures to protect its bullion stock, even if this endangered the stability of other financial institutions.

Sure enough, some of the American houses, all of whose liquidity positions had been precarious since the previous September, were faced with the prospect of defaulting on their liabilities and appealed to the Bank for help. After some discussion, the Bank of England agreed to bale them out, thereby reversing its previously restrictive policy. But this aid was not sufficient, since a financial crisis in the United States of America, independently generated but certainly worsened by news of financial events in Britain, cut off the supply of remittances on which the London merchant banks depended. The Bank was called upon to advance more sums, which it did, increasingly reluctantly, until the beginning of June when three of the merchant banks, Wilson's, Wildes' and Wiggin's, known as the 'three W's', were allowed to fail.

But as the clouds were at their darkest, so they suddenly scattered. The cotton market in Liverpool recovered its poise, investment in American securities was renewed, and soon the debt owing from America began to be paid off. The flow of bullion into the vaults of the Bank of England, which had begun in February 1837, became a rush, and financial conditions at the end of 1837 were easier than at any time in the preceding two years.

This chapter sets out to provide a detailed narrative account of the financial events of 1836-7. Historians who have written about this crisis have not been precise enough about the particular problems of the American houses, nor the role of the Bank in causing or averting the crisis. This examination of the crisis by Prof. Morgan is typical: the mania

> "turned the exchanges against us, and led to a drain of gold. Then, before the drain had produced great monetary stringency, the boom broke, and prices fell, though not yet at all rapidly. The foreign drain was checked, but there had occurred some failures and loss of confidence, and this produced an internal demand. Too late, the Bank raised interest rates and tried to contract its liabilities. Falling prices and monetary policy thus combined to produce embarrassment, failures and loss of confidence...".[1]

Likewise, Prof. Lévy-Leboyer speaks of "the indecisiveness of the Court (of the Bank), its tardiness in raising Bank Rate to stop the gold outflow, and its tendency to react to the situation by taking discriminating measures".[2] According to him, "it can be stated in fairness that the Bank's delays and uncertainties, far from having helped the market, had deepened the crisis".[3] Nowhere is a precise statement made about the problems of the American houses, beyond some vague comments about "over-extension" and "accommodation paper", nor is there any clear exposition of the mechanism by which restrictive measures on the part of the Bank led to the crisis.

This is what I aim to achieve in this chapter. There are two main themes: first, the policy of the Bank - its examination of where the bullion went to in the summer of 1836, its general policy in response to this drain and, especially, the consequences of its refusal in August 1836 to discount bills on the American houses; secondly, the position of the American houses - their liquidity problems in the autumn of 1836, the dilemma in trying to remove it, the nature of the 'accommodation paper'

1 : Morgan, Central Banking, p. 109.
2 : Lévy-Leboyer, 'Central Banking', p. 80.
3 : ibid.

they were allegedly circulating at this time, and the exact circumstances of their appeal to the Bank of England in the spring of 1837.

I am able to do this because I have used every available source on the crisis. Previous accounts, when they have been based on primary sources, have presented a rather one-sided view of events, biased according to the source they have used.[1] In so far as others have derived their analytical opinions from these accounts, they have been misled.[2] I hope to present a more balanced view of the Anglo-American crisis of 1837.

5.1 : the Outflow of Bullion to America in the Summer of 1836

Already by April 1836 some were casting doubts on how long the prosperity could last. The Circular to Bankers predicted that the existing high prices and great confidence would be replaced by a contraction of confidence and falling prices. It was to be hoped that the transition would prove to be a gradual one, but in the event of a poor harvest or a fall in the Bank of England bullion stock a "serious convulsion of credit" might occur.[3] The Prime Minister and Chancellor of the Exchequer were also worried by the general prosperity: "a simultaneous rise of prices like that which has occurred, would seem to indicate some extended action of the circulation which...may and probably will, at no very remote period, manifest itself by more distinct results", such as a bullion outflow. The Governors of the Bank were equally aware of the

1 : Hidy, House of Baring, pp. 205-9, 215-8 & 220-4; and 'Cushioning a Crisis in the London Money Market', Bull. Bus. Hist. Soc., xx (1946), 131-45. Both are based upon the archives of Baring Brothers located in Canada. Collins, 'Liverpool', pp. 87-92, 104-21 & 126-30, and 'The Langton Papers: Banking and Bank of England Policy in the 1830's', Economica, xxxix (1972), 47-59. Both are derived from the correspondence between the Bank of England and its branch office in Liverpool and from the Langton Papers, which are in the main part letters from G.C.Glyn to the manager of the Bank of Liverpool, Langton. Clapham, Bank of England, ii. 150-4 & 157-61, which is obviously derived from Bank of England records but excluding those mentioned above.

2 : P.Temin, Jacksonian Economy, p. 137 n. 144. He relies on Hidy (see footnote 1).

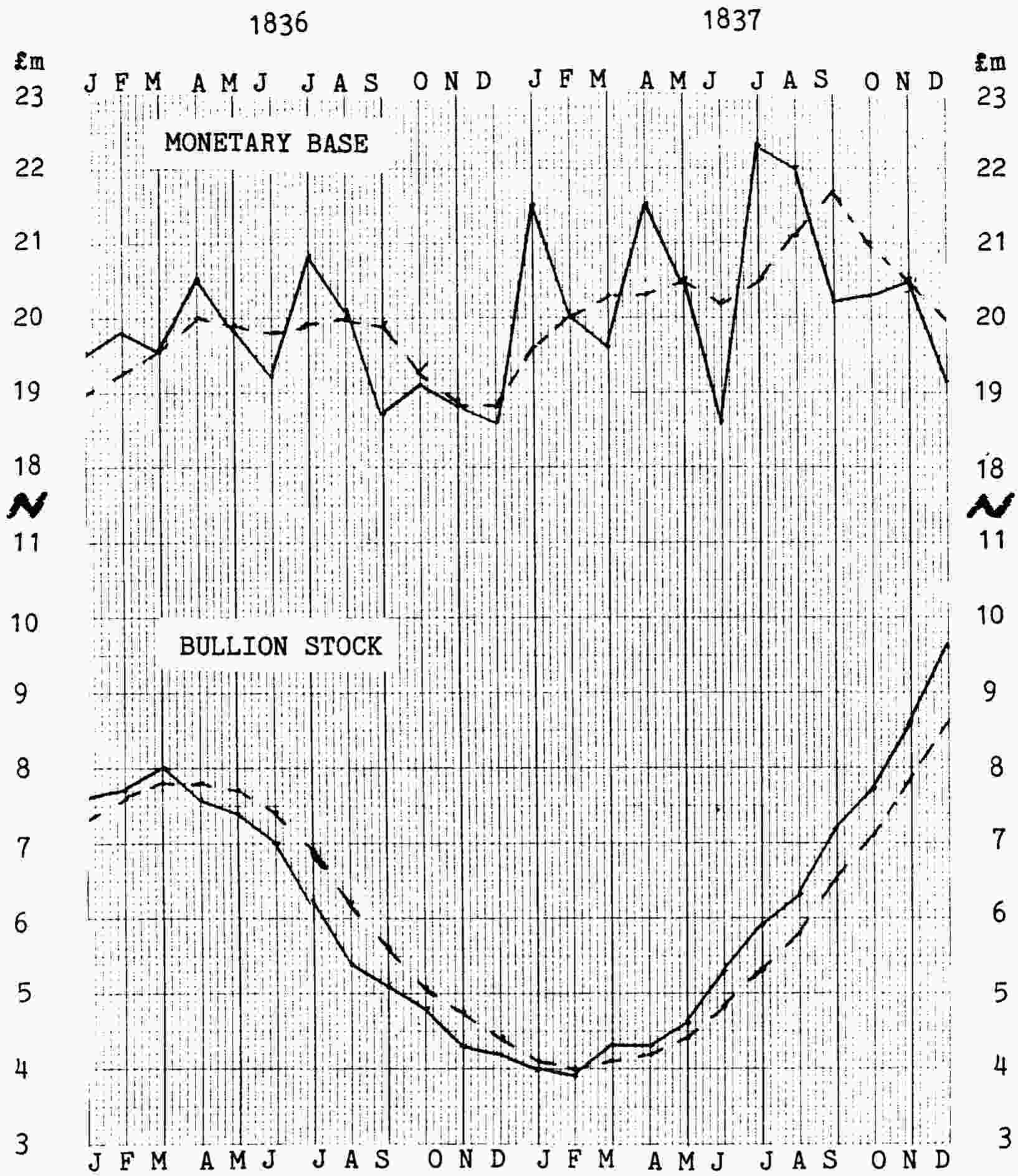
3 : Circular to Bankers, 15 April 1836.

dangers of the current state of affairs and had withdrawn in April the loan facilities on offer since the previous August.[1] It generally became more restrictive, refusing at Liverpool, for example, discount accounts to joint-stock banks within twelve months of foundation.[2]

In the booming Anglo-American economy, Joshua Bates had foreseen a reaction as early as January 1836: "business is very brisk, everything is rising and looks prosperous throughout the country - too much so to last".[3] He saw the import of British capital as the basis of American prosperity, allowing the American banks to expand their issues. But the prospect of war between America and France at the end of 1835 had put an end to the capital export to the U.S.. Bates also forecast a second recessionary influence on the American economy, a fall in the value of their cotton exports. The high price of raw cotton at Liverpool would induce an even larger shipment there, while at the same time the demand for the raw material would decrease; the outcome would be a fall in the price, which would not be compensated by an increase in volume. These two weakening influences would alter the American balance of payments so as to cause a return of bullion from the States to Britain, and a consequent monetary scarcity in the States. Bates interpreted this as a warning to his house to cut down their business.[4]

1 : Bank of England MSS., CHMG2, ff. 329-32: Spring Rice to CoT, 6 Apr. 1836 (also in Monteagle MSS.); & ff. 333-6: Pattison & Curtis to Spring Rice, 14 Apr. 1836; see also Langton MSS.: Glyn to Langton, 14 Apr. 1836; & Brit. Mus., M. 859, Box 15: P.Thomson to Melbourne, 9 Apr. 1836.
2 : Collins, 'Liverpool', p. 108.
3 : Bates MS.: Diary, 5 March 1836.
4 : Baring MSS., LB5D: Bates to Ward, 5 & 29 Jan (ff. 6 & 54) 1836; BB to Ward, 22 & 30 Jan (ff. 31 & 42), 27 Feb & 29 Apr (ff. 92 & 142) 1836.

CHART 5.1 : BANK OF ENGLAND BULLION STOCK AND MONETARY BASE 1836-7

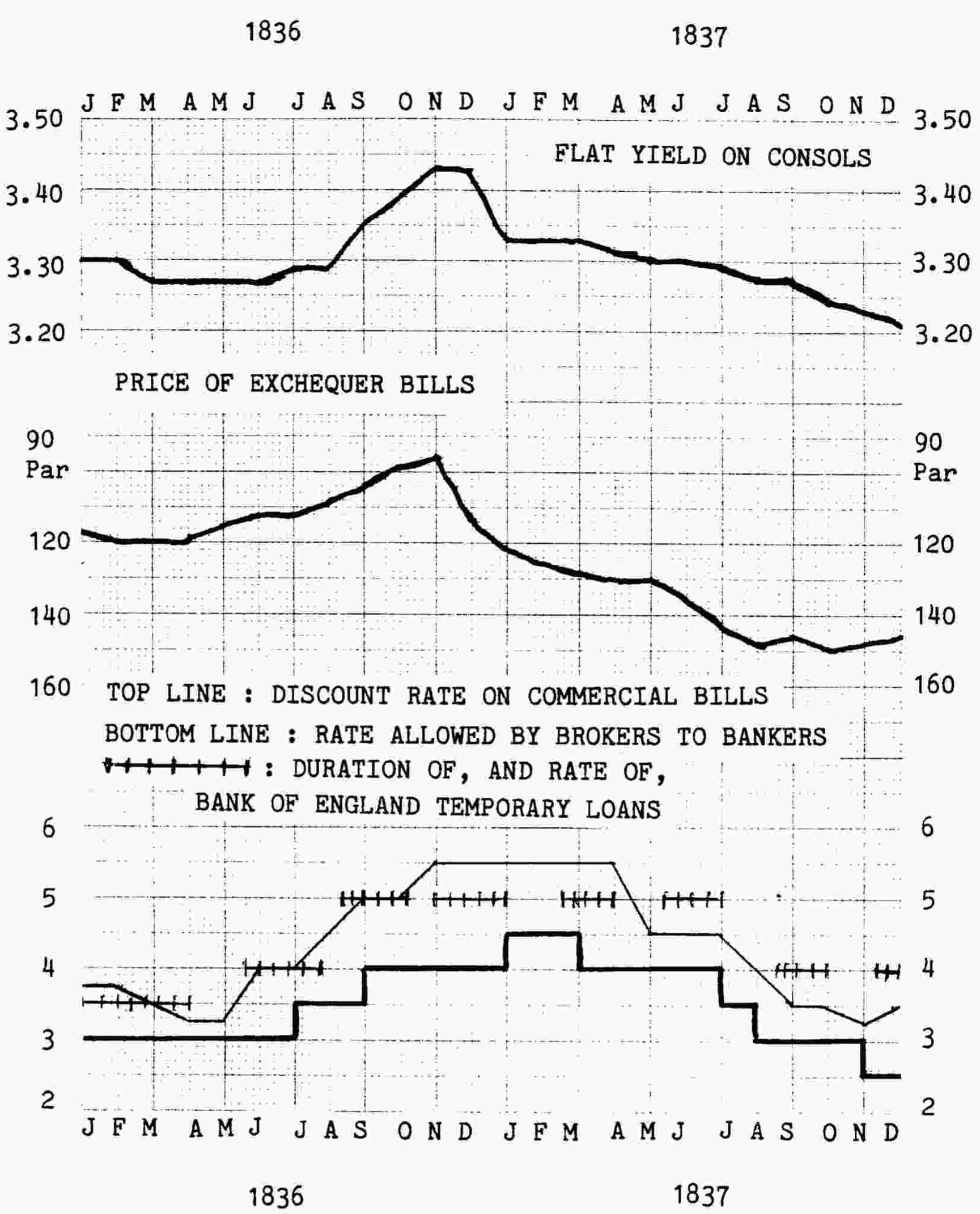


——— = monthly average

------- = average of the preceding three months

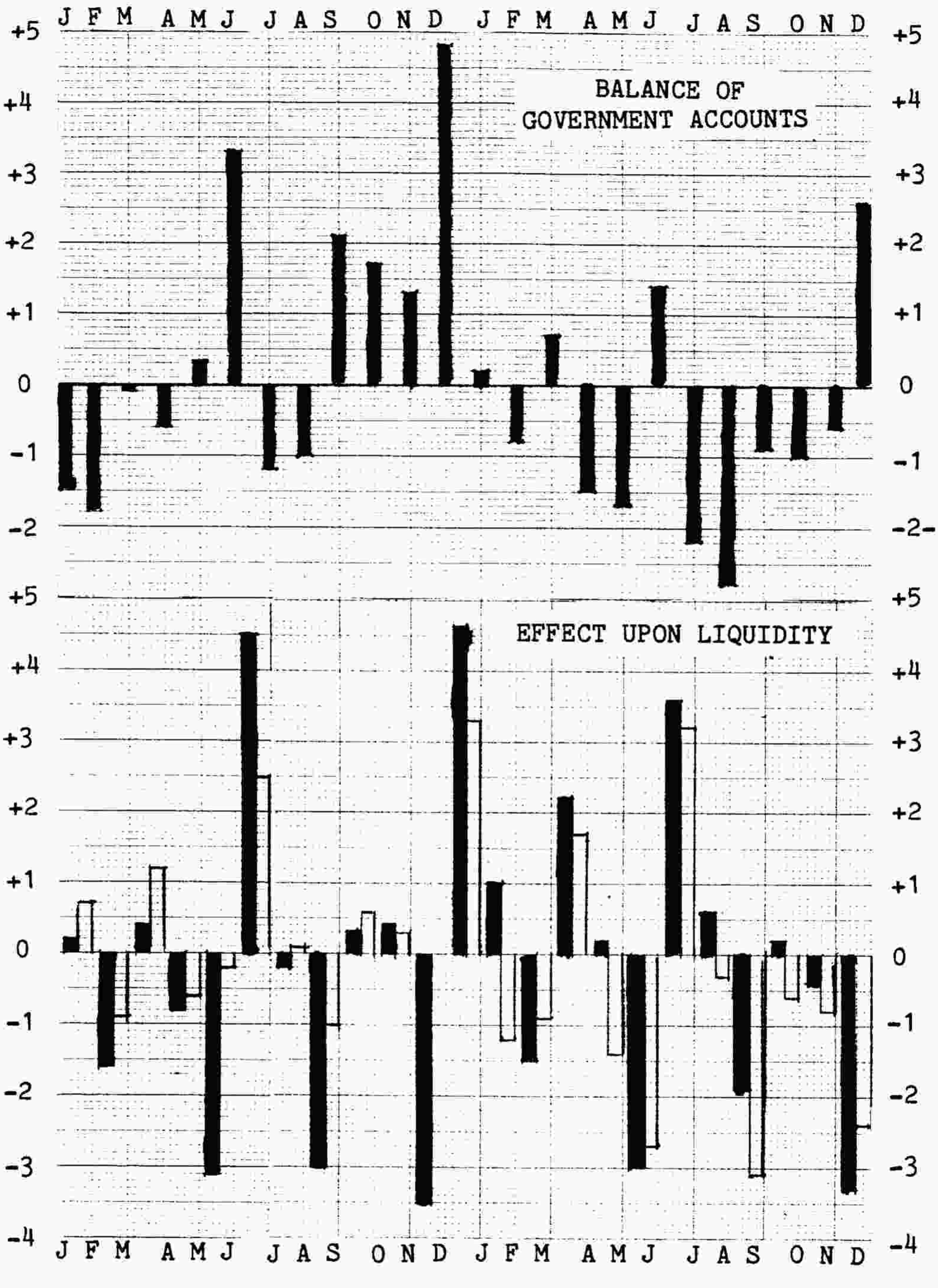
Source: as for Chart 3.1.

CHART 5.2 : MARKET INTEREST RATES 1836-7



Source: as for Chart 3.2.

CHART 5.3 : BANK OF ENGLAND BANKING TRANSACTIONS AND MONEY MARKET LIQUIDITY 1836-7



1836 1837

shows how variations in the Government's position at the Bank increased (+) or decreased (-) the supply of reserves to the money market.

represents the release of liquidity to (+), or absorption from (-), the money market as a result of the Bank of England's total banking transactions.

To the extent that the second column is smaller than the first, the Bank of England was succeeding in counteracting seasonal influences on money market liquidity resulting from fluctuations in the Government's fiscal position.

SOURCE : P.P. 1840, iv (0.53), App. 17.

The event, which the Circular to Bankers had said could so easily disrupt an extended financial system, manifested itself almost immediately. By the 21st April, Glyn reported that "the gold is certainly diminishing". By the end of May he was talking of "an increasing apprehension in the money market of a great scarcity, a circumstance which of itself always tends to produce the effect...". As this scarcity apppeared in the money market, the fever in company promotions "which has been raging for some weeks past is rather subsiding..".[1]

By the beginning of July, the outflow of bullion from the Bank, and the poor state of the foreign exchanges in the face of a favourable balance of trade, had gone far enough to invite comment on the extent and destination of the gold loss. The contemporary view, followed by most historians, was that it had gone to America. But more recently, Prof. Temin has disputed this, claiming that "the gold that the Bank of England lost in 1836 did not go to the United States, but it is not known where it went", although he admits a belief that this was the case may have determined the particular form of the Bank's reaction in August to the specie outflow.[2] Prof. Lévy-Leboyer has recently given his support to Temin's argument on this point.[3]

1 : Langton MSS.: Glyn to Langton, 21 Apr. & 28 May 1836; Baring MSS., HC.3/35/2: BB (Liverpool (Lpl) to BB (Lon)don, 27 Apr. 1836; Circular to Bankers, 29 Apr. 1836.
2 : Temin, Jacksonian Economy, pp. 137 & 146-7.
3 : Lévy-Leboyer, 'Central Banking', 79-80 & 106.

First, what was the extent of the fall in the Bank's bullion reserve? Its holding (an average of the previous three months) was in September 1835 £6.6m; in April 1836 £8.2m; and in September 1836 £5.6m. The fall over the year was c. £1m, not £3.5m as Temin asserts. The fall between April and September 1836 was £2.6m, of which £300,000 had been sold by the Bank, and the remaining £2.3m paid out over the counter in return for Bank notes. It is this latter sum that was presumed to have been exported to the U.S.A.[1]

Secondly, how much bullion did the U.S. import? According to U.S. Treasury figures, $2.314m was imported net from Britain between 1st October 1835 and 1st October 1836 and $4.73m from France in the same period. In addition, there was a small inflow of under $1m from South America.[2] At an exchange rate of $4.87 to £1, the Bank's net loss of £1m would be too great for the direct shipment from Britain to America, but the total flow from Europe was rather larger than the Bank's loss.

However, there is much evidence supporting the idea of bullion flows direct from Britain to the United States. First, the payment by the French of indemnity money for damage done to American ships by the French during the Napoleonic Wars. This amounted to 18,486,666 Francs, roughly £740,000, and combined with smaller indemnities from Naples and Spain, the total was approximately £920,000.[3] The Circular to Bankers recognised the consequences of these payments for the Bank of England: "as the compensation money is remitted to the American government by the firm of Rothschild & Co., who are its appointed agents, they would be able to purchase the requisite amount of gold and silver, wherever it could be

1 : P.P. 1840, iv (602), q. 1262 & App. 16: Palmer, Causes, p. 29; Temin's mistake was pointed out by A.J.Schwartz, in a review of his book, J. Econ. Hist., xxx (1970), pp. 476-9.
2 : Temin, Jacksonian Economy, p. 81; Smith, Economic Aspects, p. 187.
3 : ibid., p. 184.

"purchased on the best terms..", that is, perhaps in London as well as Paris. They estimated that £750,000 in bullion had been sent for this purpose from London and Paris together.[1]

Secondly, the Bank of the United States raised a loan in London and Paris in May 1836 to enable it to repay to the Federal Government the proportion of B.U.S. capital held by the government. The loan was for £1.5m, of which £1m was contracted for by Barings and Overend Gurney in London and the remainder by Hottinguer in Paris. £200,000 of the London share was remitted in bullion; it is not known if any was sent from Paris.[2]

Thirdly, some of the American banks imported gold from Britain. This was well-known at the Bank, whose Governor informed the Chancellor that in May "several of the State banks in order to facilitate the views of the general government took measures for supplying themselves with English sovereigns by obtaining credits with some of the principal American agency houses in London, upon various kinds of American securities deposited for sale in this country...".[3] 200,000 sovereigns had been taken out from the Liverpool Branch Bank in June and July by the Bank of Liverpool on behalf of W. & J.Brown & Co.. The manager of the Bank of Liverpool told the Agent that the 'pet banks' in America were building up gold reserves to curry favour with the President, in the hope that the surplus funds of the Federal Government would be deposited with them.[4] Morrison Cryder, recognised by Glyn as shippers of bullion to the States,

1 : Circular to Bankers, 27 May 1836; also Palmer, Causes, p. 31 & P.P. 1840, iv (602), q. 1262.
2 : Palmer, Causes, p. 32; Baring MSS., LB5C, f. 155: BB to Ward, 19 May 1836; & LB5D: BB to S.Jaudon, 17, 20 & 27 May (ff. 210, 224 & 227) 1836.
3 : Bank of England MSS., CHMG3, ff. 77-8: Pattison to Rice, 6 Aug. 1836.
4 : Bank of England MSS., (PLBLp15), 29 June & 9 July 1836; In-Letters from Liverpool (ILLp1), 27 June & 7 July 1836; CTMB22, ff. 71-2 & 76; Collins, 'Liverpool', p. 118.

had sent 100,000 sovereigns in July to the Bank of America in New York. Earlier in May Baring Brothers had shipped 100,000 sovereigns to the same institution.[1]

Other flows of gold from Britain are mentioned: to Hamburg in May and early July and to the West Indies in April. Joshua Bates suggested these might be connected with the West India Compensation Loan.[2]

But most contemporaries were agreed that the main pressure on the foreign exchanges was derived from movements of capital, particularly between Britain and America. It is another question whether the excess negotiation of bills on London lowered the foreign exchanges to the point where bullion shipments were profitable.

These capital account transactions were of two kinds: the first was the simple 'hot money' transaction - money flowing between financial centres to take advantage of interest rate differentials. A merchant in the States could draw a bill of 60 days' usance on London, sell this for cash and then invest the proceeds in short-term paper for 60 days, at the end of which period he would buy a bill on London to remit to cover the first draft. This operation was obviously profitable in the summer of 1836, when American and British interest rates were 24% and 4% per annum respectively.

Secondly, there was the import of long-term American state securities and their sale on the London capital market. There was a great preference in London for such an investment, because of the high coupon they paid (usually 5%), and since the repayment of the last of the Federal

1 : Langton MSS.: (G)lyn to (L)angton, 16 July 1836; Morrison Cryder MSS., Bank of America to Morrison Cryder; Baring MSS., LB5C: BB to Ward, 29 Apr (f. 142), 14 & 19 May (ff. 150 & 155) 1836.
2 : ibid., Reel 58, 64425: Bates to Pattison, 17 Oct. 1836 (also in Bank of England MSS. CTMB22); LB5C, f. 563: BB to Baguenault, 1 Nov. 1836; HC.9.13: Berenberg Gossler, Hamburg to BB, 14 Oct. 1836; Langton MSS.: G to L, 2 July 1836; Circular to Bankers, 27 May 1836; Times, 25 June 1836.

Debt in 1834, confidence was felt in the ability of the borrower to pay both the interest and the principal. The good reputation of the American houses in London associated with their sale served as a kind of moral guarantee. Low interest rates in Britain since the beginning of 1836 had raised the price of British securities and so increased the attractiveness of American yields, and sales had been boosted by the distribution of the Compensation Funds. It seems that a large proportion of these were invested in American securities.[1] Also, they often served as the collateral for an exchange account with an American house in London: the American would transmit the shares and then draw bills on the merchant banker, in anticipation of their sale. If no remittances had been received from the U.S.A. by the maturity of the bill, then the merchant bank had the option of selling the stock.[2]

Such behaviour would cause pressure on the foreign exchanges. But the vital question is, was the export of capital from Britain so large that it cancelled out the surplus on current account that Britain possessed in her relations with America, and lowered the exchange rate to the specie export point, so that it was cheaper to remit by sending bullion than by the American drawing a bill on London. Anecdotal evidence would suggest not. In September, William Brown submitted to the Bank of England lengthy calculations of the specie points between Britain and America. His conclusion, backed up by both Glyn and the Liverpool Bank agent, was that at no time could gold and silver be exported at a profit. Conversely, it would seem that the exports that did take place were made for extraordinary reasons.[3]

1 : Baring MSS., Reel 58, 64425: Bates to Pattison, 17 Oct. 1836; also in Bank of England MSS., CTMB22.
2 : I find it hard to accept Levy-Leboyer's statement that transactions in American stocks were "sparse" in 1836; Levy-Leboyer, 'Central Banking', p. 104.
3 : Bank of England MSS., CTMB22, f. 73; ILLp1, 2 July & 17 Oct. 1836; Langton MSS., G to L, 2 July 1836.

I have been able to identify a flow of £400,000 directly attributable to the Deposit Act, whereby surplus Federal funds were placed in banks prior to their distribution throughout the United States, and another of £200,000 that was caused by Jackson's hostility towards the Bank of the United States. In addition, about £750,000 was transferred from London and Paris together as a result of the French indemnity. These, admittedly gross, flows give us a figure very near to the total net imports of gold from Europe, $7m, for the fiscal year 1835-6 in the United States, and account for half of the Bank of England's gross bullion loss in the summer of 1836. Temin and Lévy-Leboyer seem to be mistaken on this point.

Moreover, British financiers, and the Bank of England in particular, were convinced that the gold was flowing to the United States and that the weak exchanges were caused by banking operations. Both Palmer and Glyn noted the unusual circumstance that both the Banque de France and the Bank of England were losing gold at the same time, since "generally speaking, one country is the material recipient of the other", and so they concluded that the United States was drawing on both simultaneously. Glyn in mid-July thought that "the amount of American bills is very large...especially...on stock and loan transactions...These operations.....have made the Bank of England very fidgetty".[1] Pattison, its Governor, had weekly from the 14th July been drawing the attention of his Committee of Treasury to the large number of American acceptances that the Bank was holding, for he drew a direct connection between these and the bullion export to America.[2] Barings agreed with his diagnosis: "it is evident large sums have been drawn on houses here against stocks...and that to prevent inconvenience or forced sales, remittances have been made

1 : ibid., G to L, 16 July 1836; Palmer, Causes, p. 31.
2 : Bank of England MSS., CTMB22; Baring MSS., LB5C: BB to Ward, 9 Jul. 1836; Reel 57, 643345: Bates to Jaudon, 22 Jul. 1836.

"at the maturity of the drafts for discount, drafts again issued, and the operation repeated".[1] Pattison told Spring Rice that it was not known to what extent these stocks had been sold "but the extent of the acceptances by American houses which are in circulation would lead to the belief that the amount of securities sent to Europe has been very considerable".[2]

The first response to this state of affairs that the Bank made was to increase its discount rate to 4½% on 21st July. This, as the Circular to Bankers noted, "is more pregnant in its import, than it is material in its direct practical consequences",[3] for it seemed to have very little effect - market rate followed Bank Rate up to 4½%, but money remained plentiful and the foreign exchanges failed to improve. The Bank blamed the note-issuing joint-stock banks for counteracting its measures,[4] but the continuing weakness of the foreign exchanges was more likely due to foreigners selling British securities and repatriating the proceeds.

Evidently the Bank of England felt frustrated by its inability to stop the drain on its reserves and was worried by the rapidity of the drain, at one time expected to be only temporary. Baring Brothers summed up the situation nicely:[5]

> "our Bank Directors are in a pretty considerable fright. Their gold has gone off at a rapid rate, say 3 millions since April, having now only £5,300,000. They hardly know what steps to take as they don't know where the gold has gone to, but they have fixed on the Jackson gold bill as the cause of the drain".

1 : Baring MSS., LB5C: BB to Ward, 14 Jul (f. 200) & 30 Aug (f. 224) 1836; & LB5D: BB to Jaudon, 28 Aug. 1836.
2 : Bank of England MSS., CHMG3, ff. 78-9; also see Circular to Bankers, 26 Aug. 1836, & Times, 24 Aug. 1836.
3 : Circular to Bankers, 23 July 1836.
4 : Bank of England MSS., PLBLp15: 15 Aug. 1836.
5 : Baring MSS., LB5D: BB Lon to BB Lpl, 27 Aug. 1836; ibid., f. 340: BB to Jaudon 28 Aug. 1836; also Lord Ashburton's Memo., Reel 4, 3315 &3319.

The main contribution of this section has been to re-assert the traditional view that the bullion lost by the Bank of England in the summer of 1836 flowed to North America, as a result of the various political measures of President Andrew Jackson. It also demonstrates that bullion movements under the current international monetary system sometimes took place for reasons completely different from the textbook explanation of payments disequilibria between two countries arising from relative price differentials. This latter was of course the supposition on which the Bank of England based its orthodox response to international bullion movements. A study of events in 1836 leads to doubts whether the Bank's response was the most suitable course of action.

It has also stressed the importance of psychology and expectations in the financial sector, where during the upswing rising expectations feed on themselves to produce what has been called a 'financial euphoria' at the peak. Such an euphoria or mania occurred in Britain in the spring of 1836. Once the financial system had expanded to accommodate these euphoric expectations, it became extremely difficult for the central bank to influence it with the aim of restoring normal conditions. Conventional measures of restraint, such as the rise in Bank rate in July 1836, have little effect; what was necessary was an act of policy that would crack the optimistic expectations and replace them with more realistic ones.

5.2 : the Bank of England Rejection of American Bills in August 1836

So in conjunction with its general measures to bring about an improvement in the foreign exchanges by restricting the amount of liquidity and so reducing the British price level, the Bank of England undertook an exercise in qualitative credit control, to attempt to remove those capital account operations that prevented the working of the price-specie-flow mechanism.

Therefore on Saturday, 27th August, 1836, a letter was sent by the Cashier to the Bank Agent at Liverpool, which read:

> "The Governors direct me to apprize you that they are desireous to reduce the amount on the undermentioned American houses. You will please therefore to allow a considerable portion of the bills under discount or advance to run off or be withdrawn, prior to receiving any more of the large bills that have recently appeared".

The eight American houses named were: Baring Brothers, W. & J.Brown, George Wildes, Thomas Wilson, Timothy Wiggin, Morrison Cryder, Lizardi and Wildes Pickersgill (the Liverpool branch of Wildes).[1] This measure had been in consideration for some time, for on the 20th August Timothy Wiggin had been forewarned by "an active and intelligent Director of the Bank" that the Bank would refuse to discount American bills.[2] Baring Brothers had foreseen such a step at the end of July and later offered to take off the Bank any amount of bills on themselves beyond what the Bank desired, so that they could be excluded from the proscription - an offer that was refused.[3]

The letter to Liverpool was unclearly worded and there was a great deal of confusion at first as to the Bank of England's intentions. The Bank of Liverpool, who had discounted a large amount of American bills, immediately resolved to send a deputation to London under its Manager to protest at the Bank's measure. William Brown, the head of the Liverpool firm of W.&.J.Brown & Co., had already seen the Governor on the 29th when the Liverpool deputation met the two Governors, Pattison and Curtis, and Horsley Palmer, on the 30th August. They argued that the Bank should have raised its interest rate to 5%, so stopping the capital export, rather than attack indiscriminately all those connected with North America, be they exchange speculators or legitimate exporters.[4]

1 : Bank of England MSS., PLBLp15, f. 200: 27 Aug. 1836; Baring MSS., LB5C, f. 240: BB to Ward, 30 Aug. 1836; Bates MS., Diary: 17 Sept. 1836.
2 : Times, 10 Sept. 1836.
3 : Baring MSS., LB5C: BB to Ward, 22 July (f. 203) & 6 Sept. (f. 237) 1836; & LB5D, : BB to Hottinguer, 3 Sept. 1836; Lord Ashburton's Memo., Reel 4, 3315.
4 : Bank of England MSS., I-LLp1: 29 Aug. 1836; & CTMB22, f. 70: Brown to Pattison, 4 Sept. 1836; Times, 2 Sept. 1836.

The Bank Directors recognised the strength of this argument and on 1st September raised Bank Rate to 5%. And, while it did not completely withdraw its proscription of American bills, it did modify it. In keeping with its belief that the gold outflow was caused by the export of capital to America, the Bank would henceforth "give every proper facility for merchants in the way of discount but not to assist speculation in produce or other things..." particularly in the foreign exchanges between Britain and America or on the sale of American stocks in London. The Liverpool agent was instructed to use his discretion "in discriminating between bills on those houses, originating in bona fide orders for goods, and those which appeared to be drawn against banking operations...the latter species of bill is that which the Governors are desirous to exclude".[1]

This action comes under the heading of qualitative credit control: it was an attempt by the Bank to distance itself from, and indeed to condemn, a financial activity which it deemed to be a threat to the maintenance of specie convertibility. But of what particular practices did the Bank disapprove, and why? Were its criticisms justified?

As we have seen, the Bank quite swiftly changed from a policy of rejecting all American bills to one of discounting those based on legitimate (i.e. commercial) transactions but throwing out all kinds of finance bills, which it considered "objectionable so far as the Bank of England is concerned in the issue of Bank notes".[2] Finance bills covered a number of sins, chief among which, in the Bank's view, was that of being drawn on account of stock transactions. The Bank equated the bullion outflow of 1836 with the export of capital to the U.S.A. and felt that "it is no point certainly of the business of the Bank to lubricate the

1 : Bank of England MSS., CTMB22, f. 61: 31 Aug. 1836; CBHb: 1 Sept. 1836; PLBLp15, ff. 202 & 211: 29 Aug. & 12 Sept. 1836; Langton MSS.: G to L, 10 Sept. 1836; Baring MSS., LB5D, f.350: BB to Hottinguer, 3 Sept. 1836.
2 : Bank of England MSS., CTMB22, f. 111: 26 Oct. 1836.

"channels by which capital is to leave the country by discounting bills obviously founded on such transactions".[1]

But stock bills were not the only target of Bank criticism: they also refused to discount all bills of six month usance (three or four months was the usual usance, but Wiggin had successfully introduced bills of a longer maturity),[2] and bills drawn on foreign exchange transactions across the Atlantic - this was the fate of many bills drawn from the Southern States on Lizardi[3] and those of the Bank of the United States on Baring Brothers.[4] The Bank of England even went so far as to ask Barings to inform the B.U.S. that[5]

> "the Directors of the Bank of England are of opinion that a Bank should not deal in the foreign exchanges which they believe bankers in no other country but the United States do and suggest that if the B.U.S. continue so to deal, whether it would not be good policy to issue its drafts at 10 days sight or never beyond the balance in the hands of the correspondents".

How far can these views be justified? Obviously a good defence of the use of finance bills in foreign exchange transactions as tending to even out fluctuations in the exchange rate can be made and was done so in letters to the Bank from Barings and Lizardi in October.[6] Bates told S.Jaudon that he was[7]

> "heartily tired of discussing the character of the Bills of your Bank which every Body out of our Bank parlour considers those which the Bank of England ought especially to protect, as they prevent the moving of bullion by spreading the operation of Exchange on your side equally over all periods of the year. The Governor of the Bank does not seem to comprehend it".

1 : Courier, 8 Nov. 1836; cf. Baring MSS., LB5C, f. 232: BB to Ward, 6 Sept. 1836.
2 : Bank of England MSS., PLBLp15, f. 205: 3 Sept. 1836.
3 : ibid., f. 213: 19 Sept. 1836; & f. 223: 6 Oct. 1836; Langton MSS.: G to L, 28 & 30 Sept. 1836.
4 : Bank of England MSS., I-L Lp1, 12 Oct. 1836; Baring MSS., LB5C, f. 232: BB to Ward, 6 Sept. 1836; LB5D, f. 350: BB to Hottinguer, 3 Sept. 1836.
5 : ibid., Reel 58, 64428: BB to N.Biddle, 22 Oct. 1836.
6 : Bank of England MSS., CTMB22, f. 111: 26 Oct. 1836.
7 : Baring MSS., LB5D, f. 478: Bates to Jaudon, 8 Oct. 1836.

Likewise, Glyn thought such transactions "perfectly legitimate".[1] On the question of stock transactions, J.R.McCulloch represented the orthodoxy when he wrote that "if parties engaged in commercial transactions choose also to become stock and canal brokers, and to deal, not to say gamble, in foreign funds...(they) ought to be themselves above the necessity of resorting to any bank".[2] But those involved in the trade took a more reflective view: both Bates and Brown believed that the best way for the Bank to stop the capital export without harming commerce was to raise the interest rate and so to increase the attractiveness of British to American securities.[3]

This episode reveals that in the Bank and in the wider commercial community there existed strongly-held but differing conceptions of unsound and sound commercial practice. The curious thing is that those who opposed the Bank's move did not do so on the grounds that it was impossible for the Bank to justify its action according to any objective basis, since they attacked only the target of the Bank's disapproval, and did not question the appropriateness of the Bank acting in this manner.

For example, although Glyn saw no objection to the discount of foreign exchange bills by the Bank of England, he approved "of the general system acted upon by the Bank, to give every proper mercantile facility in the way of discount but not to assist speculation in the way of produce or other things...the distinction which has been drawn will be properly appreciated by all thinking men".[4] Again, although Barings objected strongly to the vacillation and confusion shown by the Bank - they "found the Bank so very incompetent and unqualified to comprehend what they were about that we shall not be surprised in future at any absurdity they may

1 : Langton MSS.: G to L, 7 Sept. 1836.
2 : Courier, 28 Oct. 1836.
3 : Bank of England MSS., CTMB22, f. 118: 26 Oct. 1836.
4 : Langton MSS.: G to L, 10 Sept. 1836.

"commit"[1] - they did not criticise the principle of attacking the circulation system - "so justly obnoxious to the Bank of England".[2] They mainly objected to the form which the Bank's condemnation took, and in particular to their own inclusion in the list of proscribed parties as the drawees of the finance bills of the B.U.S., a transaction they considered not only legitimate but positively beneficial. Bates wrote that the Bank should have acted against the circulation system "by refusing to discount for or on houses beyond a fixed amount - this course should have been adopted at first in place of the general attack";[3] this would have kept Baring Brothers out of the ensuing discredit but would have afflicted those parties whose activities could with justice be condemned.

What was the effect of the Bank's rejection? The most immediate impact was on those discount houses and banks which held American bills among their assets. The liquidity of their asset portfolio would be immediately reduced, since they would no longer be able to rediscount these bills at the Bank in case of need. It was probably because of such fears that the Bank of Liverpool dispatched a deputation to London.

And, of course, the ability of the merchant banker to pay off his liabilities would be impaired. Customarily, six out of the seven American houses relied on outside sources of finance to discount their bill remittances almost as soon as they were received, so as to provide the cash to pay off maturing acceptances.[4] Barings were the exception, preferring to keep a large cash reserve which allowed them to keep their bill remittances to maturity. Although the American houses did not discount directly with the Bank of England, the Bank indirectly supplied a

1 : Baring MSS., LB5C, f. 232: BB to Ward, 6 Sept. 1836.
2 : ibid., LB5D, f. 730: Bates to Jaudon, 30 Dec. 1836.
3 : ibid., f. 685: Bates to Jaudon, 13 Dec. 1836.
4 : ibid., LB5C, ff. 224 & 237: BB to Ward, 30 Aug. & 6 Sept. 1836.

large amount of credit to enable others to discount American bills: on 31st August, it held £1,623,000 of bills on the seven firms, whose combined liabilities at the time were between £12m and £14m. The Bank's rejection of American bills may well have made banks and discount houses less willing to take them. Since August 29th was a heavy payment day (i.e. with many acceptance maturing on this day), their worries on this score must have been extreme.[1]

The evidence on discounts of American bills by other financial intermediaries is mixed. On the one hand, McCulloch believed that American bills became unmarketable - "the money dealers and discount merchants...unceremoniously rejected the paper for which the moment before they had manifested so great a liking".[2] On the other hand, it was reported on the 6th September that the Bank of Liverpool and other joint-stock banks in Liverpool and Manchester were discounting American acceptances as normal.[3] There is evidence that some American houses received extra funds on loan from wealthy individuals and money dealers in London. This explains the small amount of American bills in the discount market in September and October, and at the same time the great pressure for money there, compared with the Stock Exchange, where loans on the security of stock were easily available. Other, less important, borrowers may well have been crowded out of the short-term money market.[4]

It must be recalled that by the first week in September the Bank had agreed to undertake to discount commercial bills, but not finance bills. Whatever the merits of this distinction, this did reduce the financial problems of the American houses. Those bills rejected, because

1 : Langton MSS.: G to L, 16 July 1836.
2 : McCulloch, 'Enquiry', p. 233.
3 : Times, 10 Sept. 1836.
4 : Circular to Bankers, 21 Oct. 1836.

of their association with capital account movements, "are readily taken by the bill-brokers...we and others have done everything, we are to keep up our supplies to them to prevent them having recourse to the Bank - you need have no apprehension these bills will not go down with the brokers", G.C.Glyn wrote.[1]

The Bank measures were not without effect in the money market. Market rates quickly followed Bank Rate up to 5%. At Liverpool, an *ad valorem* commission of .25% was being added to the interest charge of 5% *per annum* - effectively a 6% interest rate. The discount brokers were charging extra commissions on American bills in particular.[2] On the Stock Exchange there were large falls in the markets for Government and Iberian securities: several sold out their holdings of Government stock to make up for the sources of financial aid cut off by the Bank of England.[3] The fall was so much that the Treasury was forced to increase the interest paid on Exchequer Bills on the 20th September, after months of indecision by the Treasury ministers.[4] The prices of foreign stocks fell as well, and it became almost impossible to sell American securities in London. The export of capital to America was at an end.[5]

Further afield there was a corresponding rise in interest rates in other European financial centres by the fourth week of October. In the opinion of the *Circular to Bankers*, this was caused by London merchant bankers mobilising their resources in Europe and repatriating them.[6] The news was received especially badly in the United States. Stock prices

1 : Langton MSS. : G to L, 8 Oct. 1836.
2 : ibid., 28 Oct. 1836; Collins, 'Liverpool', p. 120.
3 : *Times*, 14 Sept. 1836; Baring MSS., LB5D, f. 416: BB to Jaudon, 22 Sept. 1836.
4 : Langton MSS.: G to L, 20 Sept. 1836.
5 : Matthews, *Trade-Cycle History*, p. 58; Baring MSS., LB5C, ff. 213 & 220: BB to Ward, 13 & 22 Aug. 1836.
6 :*Circular to Bankers*, 21 Oct. 1836 & 17 Feb. 1837; *Times*, 25 Oct 1836 & 15 Feb. 1837.

there fell considerably and interest rates increased to a level of 36% per annum. Confidence was severely shaken and all new investment was brought to a halt. The impression was that the Bank of England's action would cause perversely a further import of bullion, rather than stopping the flow to the U.S.A. or even reversing it.[1]

Looking at the longer term effects of the action, many people believed that it would have harmful or distorting consequences for the British export trade - precisely the opposite of what the Bank wanted to achieve.[2] Manufacturers would be unwilling to take the acceptances of the American houses as payment for goods, because they were not sure they would be able to discount them for cash. The merchant banks themselves would reduce their commitments as much as possible so that their liquidity position would not be put to the test. The lack of finance for exports would work to reduce their volume, particularly to the United States. "I am rather apprehensive that this check upon the system of American credits may stop many other orders for goods from the other side, which will eventually operate against us", Glyn wrote.[3] The reasoning behind this opinion was that the current account with America, at present in Britain's favour, would worsen as exports declined and this, combined with the movements of capital away from Britain, would adversely affect the foreign exchanges. Lord Ashburton expressed this feeling more fully in an undated memorandum on the Bank's position sent to Baring Brothers:[4]

> "If the banks and states of America borrow and checks are interposed on the best mode by which the capital so borrowed may be displaced, that is by shipments of goods, they must by necessity send bullion. By throwing out the paper held by the manufacturers, the Bank injure our best trade and power, instead of checking the export of bullion.

1 : Times, 4, 8 & 10 Nov. 1836.
2 : Circular to Bankers, 21 Oct. 1836 & 3 Feb. 1837; Economist, 15 Apr. 1837; Morning Chronicle, 9 Sept. 1836; Bank of England MSS., CTMB22, ff. 75 & 117: letters of Brown and Bates.
3 : Langton MSS.: G to L, 19 Oct. 1836.
4 : Baring MSS., Reel 4, 3319: Ashburton's Memo.; see also HC.3.35/2: BB Lpl to BB Lon, 2 Sept. 1836.

So, even according to the goals set by the Bank, its policy would be self-defeating.

Similarly, to the extent that falls in the prices of government securities induced foreigners to sell out holdings, the Bank's action would be worsening the very problem which it set out to solve. Glyn believed that "it is this circumstance which prevents the exchanges turning right, mercantile transactions if left to themselves would bring them round, but the stock operations act against the exchanges".[1]

However, the most important consequence of the Bank's action was that it induced a change in the public's expectation of future business prospects and availability of credit. The money market had previously regarded the American houses as being of undoubted credit and safety, but the Bank's proscription changed this: "the effect was like magic. The credit of the American houses that had previously stood so high, was instantly annihilated".[2] The state of euphoria was demolished, and financiers started to re-adjust their business according to their newly-acquired expectation of a decline in business activity. The American houses were as much affected by this psychological transformation as the others: the difficulties (encountered for the first time) in financing from external sources their extended liability structures forced them to return to a more liquid financial position. Barings and Wiggin led the way in cutting back credits to their American customers, and their example was soon followed by their competitors.

The Bank's rejection of American bills, unlike its previous measures had succeeded in altering the behaviour of the rest of the financial system. Prof. Hicks (in different circumstances) has called

1 : Langton MSS.: G to L, 10 Nov. 1836.
2 : McCulloch, 'Enquiry', p. 233; Collins, 'Liverpool', p. 120.

such a consequence "the announcement effect", which he defines as "the change which takes place in people's minds, the change in the prospect which they think to be before them, before there is any change which expresses itself in transactions of any kind".[1] This transformation marked the beginning of the chain of events that would lead, almost inevitably it seems from hindsight, to the illiquidity problems of the American houses in 1837.

Opinion was generally critical of the Bank measure and as its full implications became more apparent after time, became more strongly so. There were a few supporters, but these were to be found in quarters normally associated with support for the Bank. The approval was founded on a combination of the most Ricardian currency theory and a rigid conception of the legitimate sphere of commercial transactions. The Morning Post, rumoured to be the semi-official organ of the Bank itself, supported the Bank's move since nothing else could bring about the achievement of Bank objectives, namely the raising of the value of gold to other commodities by a diminution of issue and a contraction of discounts, "with the chance of so immediate effect as refusing to discount the bills of merchants connected with a country in which gold had become more valuable than merchandise...".[2] The Courier, whose financial articles were written by the economist, J.R.McCulloch, took a different line. "Parties engaged in such stock transactions had no right to look for discounts...if parties engaged in commercial transactions choose also to become stock or canal brokers, and to deal, not to say gamble, in foreign funds, they must expect" that an attempt will be made to discriminate against their bills.[3]

1 : J.R.Hicks, Economic Perspectives. Further Essays in Money and Growth (Oxford, 1977), pp. 129-30.
2 : Morning Post, 5 Nov. 1836.
3 : Courier, 28 Oct. 1836.

The opposition was more varied. Some believed that the Bank should have tried to control the size of the Anglo-American sector by the weapon of 'moral suasion', in much the same way as the Bank of England in the 1960's issued informal lending requests to the clearing banks concerning the size and composition of their lending to the private sector.[1] McCulloch, in his Edinburgh Review article published in July 1837, felt that the "great object" of reducing the amount of American bills but without placing them in discredit would have been best achieved by a process of consultation. The Governors of the Bank should "have gone privately to the leading partners of the houses, and have represented to them their fears as to the consequences that would most probably result from their keeping afloat so large a mass of paper...".[2] This had been Glyn's opinion all along: "it might have been expedient of the Directors to call the attention of the American houses to their large engagements and to check by such discussion the negotiation of American funds in this market".[3]

The most common solution proposed was a further rise in the rate of interest. This was done on two grounds: first, some people thought that the Bank's restriction should not discriminate against any particular section of commerce: "an institution for public accommodation has no right to adopt such an extraordinary resolution which might interfere with the business and probably injure the credit of commercial establishments".[4] The second argument for using the interest rate to protect the bullion reserves, was that since the Bank of England was primarily concerned about the export of capital to America and the bills drawn on such flows, "the

1 : Artis, 'Monetary Policy', pp. 214 & 224-6.
2 : McCulloch, 'Enquiry', p. 232.
3 : Langton MSS.: G to L, 6 Sept. & 12 Oct. 1836.
4 : Baring MSS., LB5D, f. 350: BB to Hottinguer, 3 Sept. 1836.

"attention of the Bank should therefore be to destroy the market for foreign stocks", through increasing the discount rate. If this occurred, William Brown wrote, "many of the loans in this country on American stocks and Bank stocks which are for limited periods, would be redeemed".[1] But it is interesting that no one argued for such a course of action on the grounds that it would attract international flows of short-term capital to London, the common argument for Bank rate rises after 1847.

The Money Market Column of the Times produced a more refined proposal. It believed that the Bank should have struck at the cause rather than the effect. The cause was a flow of capital away from London following the sale of American securities in London, and this would be halted by reducing the liquidity of the Stock Exchange through a sale of the Deadweight or some other government security. This would avoid the damage done to commercial interests by a rise in the discount rate.[2]

It is unlikely that any large-scale open market operation by the Bank of England was possible in the circumstances of 1836. It held a stock of £3,359,000 Exchequer Bills and made sales from this of £350,000 in August.[3] But these sales, and rising interest rates, had caused the price of Exchequer Bills to fall during the summer so that by the end of August they stood at a discount to par.[4] At the same time, the amount of floating debt was unusually large, which also tended to lower the price of these securities. The low price made open market operations by the Bank very difficult and perhaps impossible to accomplish. The solution was either to raise the interest paid on Exchequer Bills, as Pattison proposed to the Government on 2nd September,[5] or to fund some of the floating debt,

1 : Bank of England MSS., CTMB22, ff. 73-4: Brown to Pattison, 5 Sept. 1836.
2 : Times, 6 & 17 Sept. 1836.
3 : P.P. 1840, iv (602), Appendix 18.
4 : see Chart 5.2.
5 : Bank of England MSS., CHMG3, f. 91: 2 Sept. 1836.

so increasing the price of Exchequer Bills and allowing the Bank to make sales.[1] Melbourne expressed his opinion to Russell on 3rd Sept.:[2]

> "The Exchequer Bills are falling fast, and the whole money market is in a feverish and unsettled state. The Governor of the Bank has been with me to press an increase in the interest upon at least a portion of the outstanding Exchequer Bills, which he said would at once stop the decline and raise them to a premium. Baring [the Secretary to the Treasury] is of opinion that there is no immediate necessity for this step, altho' we may be obliged to do it ultimately".

There had been an almost complete breakdown of relations betwen the Bank and the Treasury in the summer of 1836, when the Chancellor, Spring Rice, had retreated to his Irish estates and left in charge his deputy, Francis Thornhill Baring. Baring did not want to increase the interest paid because of the additional expense incurred and the benefit that would accrue to large holders such as the Bank of England.

Thus the Bank of England's room for manoeuvre was rather constrained. Sales of Exchequer Bills were hazardous while they stood at a discount, and because of the Treasury's intransigence, there seemed little chance of them returning to a premium. The Bank also held approximately £11m of the government stock called the Deadweight Annuity[3] but since this stock had failed to attract any buyers from the general public at its flotation in 1823, there seemed little chance that it would be any more successful in the more difficult circumstances of 1836.

A strong argument against the Bank action would have doubted whether it was possible to differentiate between commercial and finance bills, and to refuse the latter without harming the interests of the world of commerce. The Bank Agent at Liverpool found it a problem to distinguish between different kinds of bills:

1 : Baring MSS., LB5D, ff. 386 & 626: BB to Hott, 9 Sept. & 23 Nov. 1836.
2 : Russell MSS., MEL/RU/263.
3 : on the origin of this holding, see p. 4.

> "Mr. Bullin showed to Mr. Fletcher two bills each of a large amount drawn from America by the same party, in favour of the same payee, and on the same house in England, in fact similar in every respect, one of which was drawn against securities to be sold for Bank operations, the other for the bona fide payment of goods transcribed...we could in no possible way be able to distinguish between one and the other".[1]

A more damaging criticism was that, even if it was possible to identify commercial and financial bills of exchange, by refusing to discount finance bills the Bank was harming commercial interests. Bills drawn for finance purposes in the U.S.A. were sold to commercial houses who would use them as a remittance to London. Whoever received this bill in Britain would be harmed by the difficulty in discounting the bill, although they themselves had nothing to do with the banking operation.[2] The Bank of England refused to accept the validity of this argument: "bills drawn against banking and exchange operations do not lose their objectionable character by passing subsequently through the hands of commercial houses".[3]

The Bank in September and October continued to discriminate against bills drawn on account of stock transactions and from 12th Sept. all American bills tendered at the Liverpool branch had to be sent to London before they were discounted. Barings attempted to increase the liquidity of their own acceptances by ticketing them with a notice indicating their readiness to discount the bill themselves at a rate of 5%, effectively making them a liability payable on demand.[4] This raised their reputation for safety and consequently the amount presented for payment was small.[5]

1 : Bank of England MSS., I-LLpl, 8 Oct. 1836; Circular to Bankers, 9 Sept. 1836.
2 : Bank of England MSS., I-LLpl, 8 Oct. 1836.
3 : ibid., PLBLpl5 : 10 Oct. 1836.
4 : Baring MSS., LB5D, ff. 350 & 626: BB to Hott, 3 Sept. & 23 Nov. 1836; LB5C, ff. 232 & 285: BB to Ward, 6 Sept. & 12 Oct. 1836; Times, 15 Sept. 1836; Morning Post, 6 & 14 Sept. 1836.
5 : Baring MSS., LB5C, ff. 244: BB to Ward, 14 Sept. 1836; LB5D, f. 626BB to Hott, 23 Nov. 1836; ibid., f. 419:BB Lon to BB Lpl, 24 Sept. 1836; Economist, 16 Sept. 1837.

Rumours around the 10th Oct. reported that the Bank was about to raise its discount rate further. In fact, the demand on it for credit had rather lessened since it had switched to other financial intermediaries.[1] The amount of American bills held by the Bank declined from £1,736,700 on 24th August to £1,278,000 on 26th Oct.[2] This fall perhaps played a part in changing the Bank of England's attitude towards American bills. Although it still considered the capital account transactions of the American houses as "objectionable", and it reiterated its objections to representatives of six of the seven houses at interviews on the 15th Oct., it was prepared to instruct that all American bills should be discounted normally.[3] As a result of the change of heart on the part of the Bank, Glyn wrote to Liverpool two days later:[4]

> "I am the medium of a communication from the Bank to some of the American houses...informing them that the Bank is ready to take any amount of paper they may like to send in, in conforming to other aspects of their general rules".

This episode is important for two reasons: first, the Bank's rejection of American bills marked the breaking of the boom and the setting in train of forces that would lead to the London liquidity crisis of March 1837 and the American suspension of gold convertibility in May 1837.

Secondly, it affords a new insight into the monetary policy of the Bank of England in the 1830's. Historians have been accustomed to discuss this in terms of the Bank of England's measures of quantitative credit control, in particular its adherence to certain **rules**, like that of fixed securities. But the Bank's measure of August 1836 was different, for it

1 : Langton MSS.: G to L, 12, 13, 14 & 17 Oct. 1836.
2 : Bank of England MSS., CTMB22.
3 :ibid., CTMB22, 18 Oct. 1836; Baring MSS., HC.3.52/1a: Bank of England to BB, 14 Oct. 1836; Langton MSS.: G to L, 22 Oct. 1836.
4 : ibid.: G to L, 24 Oct. 1836; also Baring MSS., LB5C, ff. 323: BB to Ward, 2 Nov. 1836.

was a measure of qualitative credit control, representing a recommmendation by the Bank as to how the private financial system should conduct its business. As such, it was a **discretionary** action. This aspect of Bank policy has been overlooked by most historians, who have been intent on describing the differences between the Currency and Banking Schools over methods of quantitative credit control.

5.3 : The 'Circulation System' of the American Houses and its Breakdown

At the beginning of November appearances in the money market were not very promising. Glyn described the situation in which the Bank found itself:[1]

> "I expect the Bank directors are a good deal perplexed about their line of conduct; the Bank is in a position of great difficulty, knowing full well that the foreign exchanges show no improvement, which should lead them to reduce the circulation. They do not venture to take that course, fearing to create an over-pressure on the commercial community which would lead to a large internal demand for gold, if extensive failures occurred...however, as far as the American houses are concerned, their bills and acceptances are received with every facility".

But the Bank continued to refuse bills which had been endorsed and re-issued by joint-stock banks, and to maintain their normal rules for discounting bills: these stated that bills eligible for discount must bear the names of two British houses in addition to the endorser. Several American bills were rejected by the Bank on the grounds of not possessing enough British securities.

The partners of Baring Brothers were very pessimistic about future prospects. Earlier in the year they had predicted a worsening of the United States payments balance as the import of capital from Britain fell

1 : Langton MSS.: G to L, 11 Nov. 1836; Baring MSS., LB5C, f. 356: BB to Ward, 19 Nov. 1836; Morrison Family MSS.: J.Morrison's Diary, 7 Nov. 1836.

away and the value of American exports declined due to reduced British consumption of American raw cotton. This would cause specie to flow to Britain and so necessitate a monetary contraction in the U.S.. None of the events of the summer of 1836 had caused their analysis to change except to make it more doom-laden. The news of very large supplies of Indian cotton coming to Britain in late 1836 and early 1837 led to Barings to expect "a fall in the cotton price that people little dream of", from 10.75d per lb in September 1836 to 6d or 7d by the end of 1837 - a gradual fall of 40-50%.[1] The scarcity in the London money had not only been so great as to make American stocks unsaleable but the shock to the credit of the American houses had led them to reconsider the size of their liabilities and cut back on their lending to American traders. In addition, the poor corn harvest in Britain in 1836 would cause an import of corn at some stage of the winter and would thus mean a further outflow of bullion. This would tend to increase monetary tightness and lower prices even further.[2]

In particular, the American houses were asking their clients to repay the short-term advances that had been built up over the past few years by slackness on the part of American traders in remitting to cover bills drawn on London - what were termed 'overdue accounts'. The merchant banks had been able to finance these advances by borrowing on the money market in London; but this extremely fragile financial structure had proved unsustainable in the monetary pressure which had followed the Bank's proscription of American bills.

Since the American short term commercial debt could not be repaid (as a whole) by the sales of American stocks in London, as these were

1 : Baring MSS., LB5C, BB to Ward (1836): f. 150 (14 May), f. 155 (19 May), f. 274 (30 Aug.), f. 270 (10 Oct.), f. 296 (22 Oct.) & f. 323 (2 Nov.).
2 : ibid., f. 164 (31 May), f. 182 (30 July) & f. 360 (22 Nov.).

unmarketable, or by exporting more, for the value and volume of cotton exports to Britain was likely to fall, Barings felt that the balance must be repaid in specie. Therefore they proposed that the Bank of the United States should send £200,000 in gold to London.[1] Of course, not all the commercial debt could be balanced by bullion: "it must be evident that if the balance now actually due from individuals were paid, it would require all the specie in the vaults of your banks".[2] But if £1m were repaid in bullion, then the London money market would be so relieved that American stocks could be sold to liquidate the remaining balances due to the American houses.[3] However, the Bank of the United States turned down Barings' proposal and no bullion was sent from the United States in the autumn of 1836. Its shipment was "prevented only by the Americans not paying up. The payment is put off by the system of Exchange accounts creating paper for discount here and shifting the debt from one to the other and never paying".[4] This was the circulation system and should be examined more closely.

How was the individual American trader to repay his short-term loan from the London merchant bank? He might send bullion, but this was very unprofitable in the autumn of 1836 when the exchange rate in the U.S. on London was nowhere near the specie export point. In addition, he may have found it difficult to obtain bullion from the banks, who were anxious to attract the deposits of a Federal Government which was intent upon establishing an all-metallic currency. He might have purchased a cotton bill - but America's main export was dispatched to Britain in the first four months of the year and in the meantime bills on England generated by

1 : ibid., LB5D, f. 394: Bates to Jaudon, 14 Sept. 1836.
2 : ibid., LB5C, f. 323: Bates to Ward, 5 Nov. 1836.
3 : ibid., f. 360 (22 Nov.).
4 : ibid., f. 323 (5 Nov.).

commercial shipments were few and far between. American bonds were no longer acceptable as a remittance.[1] The solution was to buy a finance bill on a London house drawn in America for the purpose of speculating in the foreign exchanges. But while this would close off the individual's account, it would not reduce the amount running on the American houses collectively nor would it repay the export of capital on short-term account made by these houses. This could only be done by the purchase of a cotton bill (since this represented a transfer of real resources from one country to another) and was only possible when the next cotton crop came forward in the spring of 1837. In the autumn of 1836, there seemed little opportunity for the American houses to be repaid their advances to Americans, except through a shipment of bullion, a course which may have been politically impossible and would perhaps have induced some kind of financial reaction in the United States.

It seems that the American houses made it a conscious policy to force 'overdue' clients to remit on time and to cut down on new credits, but at the same time to allow remittance facilities to their clients by keeping exchange accounts at their previous high level. Thereby the debts could be transferred to those in America who used such exchange accounts and who were often agents of the London houses. These funds would be sent to Britain in the spring of 1837 in the form of either cotton bills purchased or cotton itself consigned to Liverpool. Support for this idea is received from the Circular to Bankers: the American houses, it is said, were reassured by the help extended to them in September 1836 by the discount houses and private financiers and so

1 : ibid., LB5D, f. 642: Bates to Jaudon, 29 Nov. 1836.

> "they, with one or two exceptions, recovered their confidence, and determined to preserve their transactions, at all events till the crop of cotton could be brought forward...if the prices at Liverpool could by this means have been sustained long[1] enough to enable the leading merchants to reduce their liabilities",

then they would have succeeded in reducing their business without inflicting harm upon the American economy through a rapid shutting-down of credit. They were enabled to do this because of the help given to them by the discount market.[2] The policy embarked upon by the American houses explains the delay between the first blow to their credit in August 1836 and the crisis of March 1837, and why there was only a small fall in their liabilities in the interim.

It was this circulation system, and its effect of preventing gold from flowing to Britain, that made the Barings most apprehensive. For if the debt was not paid in specie, and therefore the Bank did not recover bullion from America, the only country which owed a balance to Britain, then at some later stage it would be forced to reduce its liabilities further in order to safeguard convertibility. The contraction would of course cause a further fall in the value of cotton imports and so would ultimately worsen America's position.[3] They predicted that such a crisis would come in the spring of 1837, by which time the purchases of foreign corn would have necessitated a further loss of bullion. Indeed, they even contemplated the stoppage of the Bank of England if these corn imports were sufficiently large. "We therefore shall not be surprised to find the Bank three months hence refusing to discount American bills again as it is now very well understood that a great portion are drawn against nothing

1 : Circular to Bankers, 14 & 21 Apr. 1837.
2 : on the 16th Nov. 1836, Overend Gurney had loans of £155,600 and £120,000 out to Thomas Wilson and Baring Brothers respectively. See K.F.Dixon, 'The Development of the London Money Market, 1780-1830' (London Univ., Ph.D. thesis, 1962), p. 196.
3 : Baring MSS., LB5D, f. 685: Bates to Jaudon, 13 Dec. 1836; LB5C, f. 323: BB to Ward, 5 Nov. 1836.

"and only serve to put off the settlement"[1], they wrote in November. Baring Brothers would support such a move, for at the moment the Bank was "powerless" to attract gold, "as the only country indebted to this is the United States whence no bullion it seems can be drawn, and the balance is suspended by the manufacture of paper drawn against nothing".[2]

The Bank's position was made worse by some domestic banking failures: two Irish joint stock banks, the Agricultural and Commercial Bank and the National Bank of Ireland were in imminent danger of failure in November. The Bank of England sent at least £330,000 in gold to Ireland but this did not stop the former from closing its doors.[3] The attempts of these banks to mobilise their assets by selling their holdings of Exchequer Bills had caused the price of these to fall again to a discount. The weakness of this market had allowed the Bank to make only desultory sales of Exchequer Bills since September, and so after this latest fall the Governor urged a further increase in the rate of interest paid on them. Eventually he got his way: the interest was raised to roughly 3.8% <u>per annum</u>[4] on the 21st Nov. and after that the market for them remained firm, allowing the Bank to sell over £2m up to February 1837. It is likely that the renewed buoyancy of this market was not so much due to their relative attractiveness in yield terms to other assets, but to 'flight into quality' arguments which are strong at times of financial crisis. The first mainland financial institution to experience weakness was the Northern & Central Bank, a joint stock bank based around Manchester. After taking the advice of three London bankers, the Bank enabled them to liquidate their affairs in an orderly fashion, despite evidence of considerable irregularities in their accounts.[5]

1 : ibid., LB5D, f. 649: Bates to Jaudon, 29 Nov. 1836; f. 685: eidem, 13 Dec.; LB5C, f. 360: BB to Ward, 22 Nov. 1836.
2 : ibid., f. 364: BB to Ward, 29 Nov. 1836.
3 : Collins, 'Liverpool', p. 126.
4 : <u>Circular to Bankers</u>, 17 Nov. 1836.
5 : Langton MSS.: G to L, 30 Nov. & 26 Dec. 1836; Baring MSS., LB5D, f. 656: BB to Hottinguer, 2 Dec. 1836.

Another sign of financial weakness was the appeal of Timothy Wiggin in December to his competitors for help. This was given in a co-operative effort, which remained secret until January 1837. Each of the six, Barings, Browns, Wilsons, Wildes, Morrison Cryder and Lizardi, agreed to be drawn upon for £30,000, so that Wiggin was able to increase his resources by £180,000.[1] Although this arrangement was certainly judicious, Wiggin had exaggerated the extent of his liquidity problem and did not in fact have need to avail himself of the help offered.[2]

In spite of these alarms, there was a note of optimism at the turn of the year. The foreign exchanges had shown signs of stabilising, probably because the Bank was employing Rothschild's to buy sterling - "private credit was used upon Paris through some merchant's house in London, either Rothschild's or some other house" to the extent of £400,000 or £500,000.[3] The Bank at first intended to send gold 20 franc pieces to Paris and deposit them with the Banque de France. The Banque de France made advances upon deposits of gold at a low rate of interest, and the funds so acquired would have been used to buy up bills on London and strengthen the sterling foreign exchange. Both Melbourne and F.T.Baring, the Secretary to the Treasury, doubted the wisdom of this plan and it was finally vetoed by the Attorney-General.[4] Instead the Bank arranged with Rothschilds' for the latter to import £350,000 in gold sovereigns from Paris (where Rothschilds' held large deposits of gold in the Banque de France)[5] to be paid for by Exchequer Bills at par.[6]

1 : ibid., LB6, f. 46: BB to Ward, 21 Jan. 1837; the actual agreement is in ibid., Reel 4, 3358-60.
2 : Langton MSS.: G to L, 30 Jan. 1837.
3 : P.P. 1847-8, viii (395), q. 1984; P.P. 1840, iv (602), qq. 1445-9.
4 : Monteagle MSS. 13,382/2: Baring to Rice, 26 Oct. & 19 Nov. 1836.
5 : ibid., Baring to Rice, 17 Oct. 1836.
6 : Bank of England MSS., Committee of Treasury Minute Book no. 22 (CTMB22), f. 138; Court Book Hb (CBHb), f. 229.

At the same time the heavy payment days at the beginning and in the middle of December had passed off without any firms defaulting on their liabilities.[1] This was due to the sums extended by banks and discount houses, and indirectly by the Bank of England: its total holding of American bills had increased to £3,682,130 by the 28th. Dec..[2] But Glyn's prediction that "the evil is now over" proved unfounded, for by the middle of January the signs had changed for the worse. On the 19th Jan. James Morrison wrote very despondently to his agent in Philadelphia: his despair arose from the large amount of American bills that were still to appear, and how many of these were renewals.[3] Joshua Bates felt that in the event of a more severe monetary pressure in London, several of the American houses would collapse.[4]

The Bank had become increasingly worried during January about its own position. It had chosen to bale out Esdaile & Co., a London private bank, on the guarantee of ten other London bankers, rather than see it fail; its bullion stock was falling at a level of just over £4m, the securities were still increasing and in the first eighteen days of January the East India Company withdrew its total deposit of £4.7m. Makeshift measures such as the rediscounting of £500,000 bills with Overend, Gurney & Co. provided some, but insufficient respite. The foreign exchanges weakened considerably at the end of the month. Glyn voiced his worries: "I do not like the aspect of things. The Bank is in a very difficult position and takes every possible step to reduce its circulation. I only hope from engagements being lighter that its operations will not produce much pressure".[5] If the Bank wanted to take action to reduce its

1 : ibid.: G to L, 3 & 13 Dec. 1837.
2 : Bank of England MSS., CTMB22, ff. 161 & 3.
3 : Morrison Cryder MSS., 11,720/2: JM to Alsop, 19 Jan. 1837.
4 : Bates MS.: Diary, 20 Jan. 1837; Baring MSS., LB6, f. 46: Bates to Ward, 21 Jan. 1837.
5 : Langton MSS.: G to L, 30 Jan 1837; Baring MSS., LB7, f. 9: BB to Hottinguer, 13 Jan. 1837.

liabilities, in addition to the automatic withdrawal of notes as they were presented to take out bullion, three options were open to it: raising Bank Rate above 5% to previously unrecorded levels, or attempting to sell securities (in this case, long term government stock, its stock of Exchequer Bills having been practically exhausted), or embarking on some form of credit rationing. Glyn thought that the Deadweight should be sold to counter the renewed activity on the Stock Exchange.

However, the Bank of England were seriously divided over the appropriate course of action : some, led by G.W.Norman and including the Governor, James Pattison, believed that the Bank's first duty was to maintain convertibility of its note circulation, irrespective of the fate of other financial institutions. It was this group that had increased Bank Rate to 4½% in July and 5% in September, and refused to discount certain classes of bills at the end of August.

By contrast, others, led by Horsley Palmer, concentrated on examining the nature of the bullion drain and the state of the money market as a guide to policy. Because the 1836 drain was not caused by an excess level of prices and was of a peculiar kind, the gold was likely to return in the foreseeable future; thus Palmer believed that "any extraordinary measures on the part of the Bank were unnecessary"[1] and questioned, at least in hindsight, the desirability of raising Bank Rate, a move which had anyway failed in its purpose of reducing the demand for discounts on the Bank.

The divisions in the Court of Directors came to a head at the end of January 1837. On the 26th, the Governor, at the instigation of Norman, proposed to the Committee of Treasury that Bank Rate be increased to 6%, the first time it had been above 5%. He was defeated, and again in the

1 : Norman MSS., C192: Palmer to Norman, 8 Aug. 1839.

Court of Directors on the following day, when he was told he must first try to sell securities and Exchequer Bills held by the Bank.[1] Since the stock of the latter was almost exhausted, the only government securities available for sale were long term stocks, worth £12.4m.

There was general agreement that the recent drain from the Bank had been internal, and Palmer believed that in these circumstances of 'internal discredit' it was the duty of the Bank to issue notes freely on the backing of securities, to prop up illiquid but solvent financial institutions. There was no harm done to the currency by this as long as there was no export of gold - "unless that be exhibited, the Bank ought not, under circumstances of an unnatural pressure, strictly to enforce the principle laid down"[2] of increasing Bank Rate to choke off the demand for discounts. Therefore Palmer viewed proposals to increase Bank rate or to take liquidity out of the money market by selling securities as positively harmful.[3]

The hardline group in the Court won the immediate battle - the Bank embarked upon a policy of rationing credit by cutting down customers' accounts.[4] The Bank policy was explained in a letter from Timothy Curtis, the Deputy Governor, to Joseph Langton:[5]

> "We wish you to diminish your 5% account...At the market rate the Bank would not refuse to discount - but the market rate is now above the Bank rate - and the Bank under the peculiar circumstances of the country has not chosen to increase its rate - it would have no control of the Circulation and might be called upon to make an inconvertible issue. We therefore wish you to send your bills to the market to attract the money which is already in existence, instead of coming to us to create more for your purposes".

1 : Bank of England MSS., CTMB22, f. 174; CBHb, ff. 345 & 367.
2 : Palmer, Causes, p. 22.
3 : P.P. 1840, iv (602), q. 1282 & 3; for comments made by Palmer to Glyn, see Langton MSS., 7 & 13 Feb. 1837.
4 : Langton MSS.: Curtis to Langton, 8 Feb. 1837.
5 : ibid..

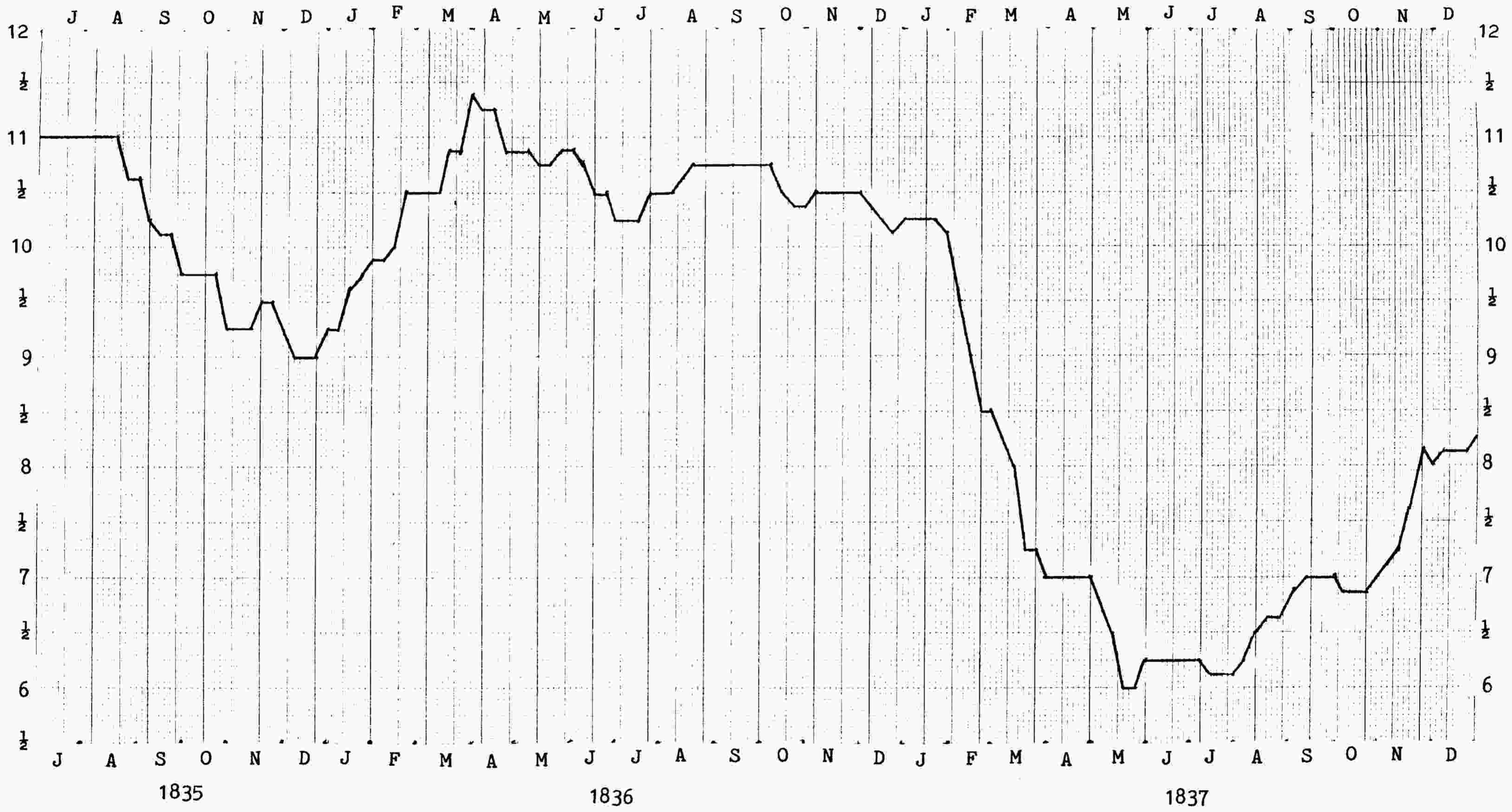
Instead of raising the discount rate, the Bank had chosen a policy of credit rationing. Perhaps more important than their limitation of funds to local banks was their similar treatment of the London discount houses. This caused great inconvenience, especially since no notice was given to those affected. And, of course, through the discount houses, it harmed those who relied upon procuring funds from the discount market.[1]

Increased help from private bankers carried the American houses over the payment day of 13th Feb. but a feeling of unease had been introduced. A letter from the Liverpool Branch Bank to the Bank of Liverpool illustrates the difficulty in getting bills discounted. The Branch Bank was in the habit of giving very short-term loans to those presenting bills - these bills were sent unstamped to the London discount houses, where the money received would pay off the loan made by the Branch Bank. The Bank Agent described the situation: "You have probably heard from London of the very severe pressure in the money market and that Overend & Co. could not find money for your bills". Later that same day he informed Langton that the Bank would probably have to return these and ask for the reimbursement of the funds advanced on them.[1]

Simultaneously, there occurred a large depression in the cotton market which, when combined with the Bank's credit policy, was to pose almost insurmountable problems for the American houses. In the three weeks up to the middle of February the price per lb. of cotton fell from 10.125d to 8½d. Every fall of 1d. per lb in the price of cotton would cause a loss of £2 per bale, so that by 15th Feb. losses of £4 per bale

1 : ibid.: G to L, 9 & 10 Feb. 1837; Times, 13 Feb. 1837. Thus I disagree with Prof. Levy-Leboyer, who maintains that the sharp credit contraction of Feb. 1837 came "at the initiative of the leading discount brokers", 'Central Banking', p. 80.
2 : Langton MSS.: S.Turner to L, 15 Feb. 1837.

Average Weekly Price of 'Best Quality Cotton Fair Cotton' in d. per lb.



SOURCE : compiled from the circulars of Bower & Sons, and included in Bank of England MSS., Letters from Liverpool to London, 25 Feb. 1842.

were being incurred.[1] The significance of this was not only that the net worth of the cotton importers was reduced but also that the nominal or face value of the bills drawn in America on the shipment of cotton was rather larger than the market value of the goods in Liverpool. Were the Liverpool houses to accept these bills and pay them, they would be incurring an 'over-advance' at a time when the prospects of recovering the debt from the U.S. were not good and when there was a premium on maintaining one's liquidity in Britain. The obvious course was to **protest** (not to pay) the bill. This was initially done by some local manufacturing spinners and a few cotton brokers with agents in America, both of whom had been importing a great deal on their own account since 1st Jan.. The consequences for the American houses was not that they were making losses on cotton imports, for they were involved only to a very small extent in this line in 1837, but that their remittances, which often took the form of cotton bills, were no longer good; they certainly could not be used as security for a loan. The fall in the cotton price was more harmful at this time than at any other period of the year, since it occurred at the height of the shipping season to Europe when prices usually rose as European buyers replenished their stocks.[2] Cotton was very much the key asset of the Anglo-American economy, since upon it depended to a very large extent the stability of the international payments mechanism.[3]

The American houses were adopting a very risky strategy when they decided to follow a policy of delaying the American repayment of overdue advances until bills on the cotton crop were available. There were two points of weakness: first, that their sources of external finance might be

1 : Bank of England MSS., I-LLpl, 10 Feb. 1837; Baring MSS., HC. 3.35/3: BB Lpl to BB Lon, 9 Feb. 1837.
2 : Perkins, House of Brown, p. 280 n.48.
3 : Temin, Jacksonian Economy, pp. 139-41 & 146.

cut off before the operation was completed; secondly, that the price of cotton might fall so as to render invalid the remittances that were intended to close the operation. Both these weaknesses had become apparent by the middle of February. In a way the American houses were placed in a 'Catch-22' situation; for inasmuch as they succeeded in preventing shipments of gold from America to Britain in the autumn of 1836, it became all the more likely that the Bank would take action to cut back its liabilities, so exposing their strategy to the weaknesses to which it was so vulnerable.

5.4 : the Bank of England's Attempt to Maintain the Credit of the American Houses

The situation of the American houses was rather grim by mid-February. They still had large engagements to pay off and there was little hope of these being reduced in the immediate future.[1] In Britain they were being pressed on two fronts: on the one hand, the renewed Bank restriction had reduced the ability of local banks and London discount houses to finance their borrowing requirements; on the other, the quality of their remittances had declined rapidly, so that even if the discount houses had been able to supply them with funds, they may have been unwilling to do so because of the discredit created by the fall in the cotton price. It is hard to say which was the stronger influence. The depression in cotton had started before the Bank action, but the feeling in the cotton market was sharply worsened on receiving news of the renewed money pressure in London.[2]

1 : Morrison Family MSS.: M.A.Morrison to C.Morrison, 20 Feb. 1837; Morrison Cryder MSS., 11,720/2: J.Morrison to R.Alsop, 14 Feb. 1837; Baring MSS., LB6, f. 24: Bates to G.Parish, 3 Mar. 1837; & LB7, f. 89: BB Lon to BB Lpl, 15 Feb. 1837.
2 : Bank of England MSS., I-LLpl: 15 Feb. 1837.

The first mercantile firm to buckle under the pressure was the tobacco-importing firm of Warwick & Claggett, who failed on the 8th Feb., after Barings, who held many of their bills, decided they were not worth supporting. They had been involved in considerable tobacco speculations on a falling market and the latest decline proved too much for them. Their failure was a shock to the credit of all the American houses and all American bills, for henceforth the discount houses displayed a considerable reluctance to take them. In Bates' opinion, "the circulation system...has got a blow from the failure of Warwick & Claggett that is likely to prove fatal to it".[1]

George Wildes was the weakest of the seven major American houses. Around the 11th February, the discount brokers refused to supply him with any more funds and he received the same reply from the Bank of England upon applying there. He appealed to Baring Brothers for advice and the latter, in partnership with Overend Gurney, agreed to lend £50,000 for a week while an investigation into Wildes'[2] position could be made. This examination showed that, while Joshua Bates was shocked by the 'overtrading' of Wildes, there was no doubt that the firm was solvent, if it could be allowed to reduce its engagements gradually. To this end Bates recommended extending the same help to Wildes as had been given to Timothy Wiggin the previous December, via a subscription to a co-operative guarantee of £250,000 by 15 merchant houses. This was easily accomplished and the Bank of England announced itself willing to advance the necessary cash upon such security.[3]

1 : ibid., PLBLp15: 8 Feb. 1837; Hidy, 'Cushioning', p. 146; Circular to Bankers, 10 Feb. 1837.
2 : Baring MSS., LB6, f. 30: BB to Hottinguer, 28 Feb. 1837; LB6, f. 32: BB to Hope & Co., 28 Feb. 1837; Reel 57, 64107: Bates to Jaudon, 1 Mar. 1837; Bates MS.: Diary, 11 Feb. 1837.
3 : ibid.: Diary, 4 Mar. 1837; Baring MSS., Reel 57, 64107: Bates to Jaudon, 1 Mar. 1837; LB6, f. 24: BB to Parish, 3 Mar. 1837: Morrison Cryder MSS., 11,720/1: G.Shaw to J.Morrison, 17 Feb. 1837.

But liquidity problems were not confined to just one of the American houses. Before Wildes's arrangement could be completed, Browns revealed that their London bankers, Denisons, had already lent them £750,000 and would go no further. In addition, all the other American houses (except Barings) required substantial discounts and the only place where these could be obtained was the Bank of England.[1] The question had been transformed from a matter of aiding one house to propping up the whole Anglo-American credit structure.

The Bank employed George Carr Glyn as an intermediary to discover the amount of support required by the American houses. Lizardi required £800,000 up to the end of July; Wilson £1m to the end of May; Morrison Cryder £600,000 to the end of April; Wildes £1,450,000 to the end of June; Brown £1.5m to the end of June. Barings and Wiggin did not reply, persumably because they did not yet require help from the Bank.[2]

The reply of Browns is particularly interesting for it elaborates at greater length the problems facing a merchant bank. Their acceptances due in March, April and May were around £500,000 each, a roughly average figure for them. The problem was that since the beginning of the year a larger proportion of the flow of remittances had come in bills, as opposed to bullion, so that Browns needed more discounts than usual. At the same time, American bills had been in discredit since the failure of Warwick & Claggett, which had made it more difficult to discount their usual sums, let alone the increased number of bills that they now received. "Under existing circumstances we are paid from all quarters in Bills; which forces the American houses to press on the London market to such an extent

1 : Baring MSS., Reel 57, 64137: BB to Ward, 22 Feb. 1837; Reel 57, 64162: BB to Ward, 2 Mar. 1837; LB6, f. 32: BB to Hope, 28 Feb. 1837; LB6, f. 24: Bates to Parish, 3 Mar. 1837.
2 : Bank of England MSS., Court Private Minute Book 1795-1844 (CPMB95-44), ff. 203-7.

and thereby weaken confidence in their acceptances". It was not that liabilities were any higher than usual - indeed since March 1836 Browns' acceptances had been falling - but that "a great deal of American paper which was formerly discounted through other channels and excited no remark or uneasiness is now discounted elsewhere".[1]

The Bank of England eventually decided to support all the American houses. Its 'lifeboat operation' took two forms: first, it agreed to lend Wildes £240,000 on the security of the above-mentioned guarantee signed by 16 mercantile and financial houses. The loan would be repayable in four equal portions on 1st July, 1st Sept., 1st Nov. and 1st Dec. 1837. If the Bank was not repaid by Wildes on these three dates it would have recourse to each of the guarantors for their share of the sum lying unpaid. In addition, the Bank directors declared that "should any new case (similar to Wildes) arise, they would treat it on its own merits".[2] Secondly, the Court of Directors authorised the Governor "to discount approved bills for the houses alluded to in the American trade, to the extent of one half of the amount stated to be wanted, so long as the Bankers and Money Dealers continue on their part to support the credit of such houses by discounting the remainder of what may be required". Glyn, Mills & Halifax told the Bank it would continue to discount freely. Overend Gurney and another discount house, Sanderson, each resolved to take £100,000 in March, with the opportunity of rediscounting these bills at the Bank if necessary.[3]

The Bank's willingness to help the American houses prompted Denisons to renew their support of Browns. On the 20th February they had agreed to carry them through for two months. And on the 23rd Feb. the Bank

1 : ibid., ff. 207-13: 2 March 1837.
2 : ibid., CBHb, ff. 397-9: 9 Mar. 1837; Baring MSS., LB6, f. 30: BB to Hottinguer, 28 Feb. 1837; Reel 57, 64162: Bates to Ward, 2 Mar. 1837; Bates MS.: Diary, 4 Mar. 1837.
3 : Bank of England MSS., CBHb, f. 387; CPMB95-44, ff. 214-6.

of Liverpool offered to give Browns discounts of £100,000 per month; however, it was able to rediscount these bills at the Liverpool Branch Bank, if the need arose.[1]

The Bank of England's policy of cutting back its lending to banks and discount houses and then acting as lender of last resort seems rather contradictory and, since the former had led to the applications for help at the end of February, ill-judged. But this can be explained by the divisions that existed in the Court of Directors over policy. Glyn was aware of these and was worried by "the vacillation and sudden alteration in their proceedings" and the practice of "today unsettling the determination of yesterday". He reported that Horsley Palmer, who was "being much counteracted lately", had opposed the Bank's attempts to reduce its liabilities.[2] By the middle of February when the Bank seemed willing to grant the necessary aid to Wildes and to discount for others,[3] Glyn ascribed this change to "Palmer's firmness in the Bank and that his practical knowledge has gained ascendancy over the doctrinaires, by whom our worthy governor is led".[4] However, when the American houses informed the Governor of their discount requirements, the aggregate of over £5m shocked the Directors and doubts reappeared over the desirability of the Bank becoming involved with commercial houses to such an extent. It took two days' discussion for them to come to their decision.[5] Glyn believed that "had it not been for the firmness of Horsley Palmer and the Deputy-Governor, the Governor and his party in the Court would have brought down nearly every American house...I really think the Governor is mad upon this subject...".[6]

1 : ibid., PLBLp15: 23 & 27 Feb. 1837; Morrison Cryder MSS., 11,720/2: Morrison to Alsop, 20 Feb. 1837.
2 : Langton MSS.: G to L, 11 & 18 Feb. 1837.
3 : ibid.: G to L, 25 Feb. 1837; Bates MS.: Diary, 4 Mar. 1837; Baring MSS., Reel 57, 64107: Bates to Jaudon, 1 Mar. 1837.
4 : Langton MSS.: G to L, 18 Feb. 1837.
5 : Bates MS.: Diary, 4 Mar. 1837; Baring MSS, Reel 58, 64591: BB to Ward, 23 Feb. 1837; Reel 57, 64162: BB to Ward, 2 Mar. 1837; Reel 58, 64107: Bates to Jaudon, 1 Mar. 1837.
6 : Langton MSS.: G to L, 6 Mar. 1837.

The object of the Bank's aid was to take measures "as may tend to restore due confidence in the circulation of the regular bills of the American trade".[1] If this could be done, the American houses would acquire funds to pay off their acceptances and this "would materially act to diminish the amount which the Bank might otherwise have been called upon to advance".[2] Underlying the details was "the belief...that altho' the overtrading was inexcusable, yet the debts due to them (the American houses) are in substance sound and will in time come into them, but the relief is to be coupled with the condition that they are progressively to reduce their engagements for business".[3] The loans made to the American houses would enable them to reduce their business gradually without the panic that would ensue from a sudden stoppage. It was the threat of the latter that overcame the Bank's "natural desire" to curtail its issues at a time of low bullion and encouraged it "to give up its proper rules of conduct".[4] There was in fact no conflict between the Bank giving such emergency aid and its duty to maintain specie payments - for it would be during the panic that followed the failure of such an important sector of the financial system that the Bank would be totally drained of its bullion.

Notwithstanding the wisdom of the Bank acting as the lender of last resort at the beginning of March, it can be argued strongly that this role only became necessary because of previous mistakes in policy, as Glyn pointed out: "The evil effects of the proceedings on the part of the Bank towards the bill-brokers are now apparent, and from having crippled them, the directors must now take probably about three times the amount of bills from the merchants themselves".[5]

1 : Bank of England MSS., CBHb, f. 386.
2 : ibid., CPMB95-44, f. 215: Glyn to Pattison.
3 : Baring MSS., LB6, f. 30: BB to Hottinguer, 28 Feb. 1837.
4 : ibid., LB6, f. 28: BB to S.Heine, 28 Feb. 1837.
5 : Langton MSS.: G to L, 21 Feb. 1837.

Although this plan succeeded in the short-term in restoring confidence in American paper,[1] Bates still doubted that it would work because he was pessimistic about how the changes in London monetary conditions would be received in the United States. The means by which America had postponed the payments of her commercial accounts to Britain, the circulation system, had been broken and the Americans would now be under direct pressure to export bullion to pay the debt. Bates feared that this would induce such a financial crisis in America that no remittances would be sent at all, not even the accommodation bills hitherto received.[2] His fears were borne out more quickly than he expected as a complete lack of arrivals from the States between the 6th and 15th March forced the American houses to discount their stock of unmatured remittances till it was exhausted. Wilsons were in the worst position. As rumours about their situation spread, and some failures of Liverpool cotton-importing houses occurred, gloom returned to City circles.[3]

At this point, some parties proposed a more far-reaching solution to the liquidity problems of the American houses, of which Barings had high hopes: "if the arrangement which is now in progress with the Bank of England is completed, we shall hope to see business between the two countries brought into a healthy state again, without any very heavy losses being sustained by anyone".[4] The object of this plan, whose instigator was clearly Horsley Palmer, was the same as the previous scheme, to reduce the engagements of the American houses within the range of their respective capitals, through the help of the Bank of England.

1 : ibid.: G to L, 3 Mar. 1837.
2 : Baring MSS., Reel 58, 64597: BB to Ward, 6 Mar. 1837; Reel 57, 64165: Bates to Jaudon, 6 Mar. 1837.
3 : ibid., Reel 57, 64169: BB to Jaudon, 13 Mar. 1837; Reel 57, 64164 & 64172: BB to Prime, Ward & King (PWK), 6 & 15 Mar. 1837; Bates MS.: Diary, 17 Mar. 1837; Times, 16 Mar. 1837.
4 : Baring MSS., Reel 57, 64175: BB to PWK, 17 Mar. 1837.

This would be achieved by the American houses coming together "to become responsible one for the other", with each contributing £100,000 security, and thereby receiving the right to an uncovered advance of £300,000. If they deposited bills of exchange to cover the sums so loaned, they regained the right to receive a further uncovered advance up to the full amount. This would continue until the American houses' liabilities were reduced to a suitable ratio with their capital. The plan would not only include the three W's, but also Browns, Lizardi and Morrison Cryder. Although Baring Brothers did not need to become involved, Joshua Bates had been active in canvassing support for it.[1]

A second part of the scheme, originally suggested by Barings, was that they should open a £2m credit for the Bank of the United States, so as to provide the wherewithal for American merchants "to make the requested remittances, and to provide against a temporary delay in the cotton shipments on which the bills are to be negotiated", while at the same time asking that half of this amount should be covered by a simultaneous transmission of bullion to Britain. The remainder would be covered in twelve months. The shipment of bullion would strengthen the Bank of England's position and also "prevent a derangement of credit in the United States by too sudden and heavy of export of bullion from there which will tend to defeat the object of getting the necessary amount from America". The Bank took this idea over, asking that the bills should be drawn on itself and not Barings: it also required that the length of advance on security should be six, and not twelve months.[2]

1 : Morrison Cryder MSS., 11,720/1: Copy of the Palmer Plan & Palmer to Brown, 15 Mar. 1837; & ibid.: Shaw to Morrison, 25 Feb. 1837; Bates MS.: Diary, 17 Mar. 1837; Baring MSS., Reel 57, 64175: BB to PWK, 17 Mar. 1837; HC.3.51/9: Palmer to Sands & Smith, 23 Mar. 1837.
2 : ibid., Reel 57, 64178: BB to Ward, 20 Mar. 1837; Reel 58, 64622: BB to Ward, 22 Mar. 1837; Reel 57, 64188: BB to N.Biddle, 22 Mar. 1837; Morrison Cryder MSS., 11,720/1: Morrison to Brown, 15 Mar. 1837.

The first part of this scheme collapsed when James Morrison refused to have anything to do with it. His position was at that time a safe one, and he did not wish his reputation to be sullied by public association with any of the discredited houses. He maintained this argument, in spite of a veiled threat by the Bank to discontinue any further discounts to Morrison Cryder.[1]

Instead, at a meeting of Bank Directors, Government ministers and the various interested parties at the house of James Pattison on 19th March, it was agreed to offer a credit to the Bank of the United States and to grant further accommodation to the American houses. The latter took two forms:[2] first, a Bank investigation into the accounts of the three W's showed that they had been engaged in only very limited speculations, they had not been involved in sending money to the U.S.A. to take advantage of high interest rates there, that all their debts were good and that it was likely that they would not only show a surplus of assets over liabilities but also retain a large capital. Wilsons received £400,000 on security of a guarantee list similar to that prepared for Wildes earlier in the month. Wildes, having only used £100,000 of the credit given to them previously, were given a call fund of £150,000. It was thought that Wiggin would need no more than ordinary discounts, but they were awarded a credit of £200,000 having submitted a guarantee list for that amount.[3] Secondly, the Bank itself asked for additional security to cover the risk involved in the liberal discount of American bills. This "was demanded as a right from all those who offered their paper to be discounted, and large

1 : ibid., Morrison to T.Todd, 20 Mar. 1837; Morrison Family MSS.: 1837 Diary; Baring MSS, Reel 58, 64617 & 64620: 17 & 18 Mar. 1837; LB7: BB Lon to BB Lpl, 18 Mar. 1837.
2 : Bates MS.: Diary, 19 Mar. 1837.
3 : Bank of England MSS., CBHb, ff. 421-4, 451 & 455; Baring MSS., Reel 58, 64191: J.Baring to B.Gott, 23 Mar. 1837.

"contributions were gained from leading houses in the American trade". For example, Browns submitted security to the extent of £150,000.[1]

The Bank's aid at the end of February and March undoubtedly prevented the failure of the three W's and other American houses and the disastrous consequences that would have ensued therefrom. For "in the case of the failure of one, the others would have stopped as their paper was so crossed and mixed up. In that case £12m to £15m of bills of exchange would have become useless as a security and the trade of the country would have been stopped".[2] Even Barings, whose reputation had remained untarnished amid the predicaments of their competitors, might have been forced to stop payment. Yet the Bank's action did not remove distrust completely, since it did not bring the crisis to a definite conclusion. Doubt still remained that the flow of remittances from America would fall away or that the return to America of so many protested bills would create havoc there.[3] The persistence of such feelings diminished the chances of success of the measures undertaken by the Bank.

What was needed was action that would convince public opinion that the crisis was really at an end, and so would cause a recovery of confidence. It is in this light that one should judge the measures of the Bank to end the crisis: although the first plan proved inadequate, its object, to revive confidence in the American houses, was the correct one. The Palmer Plan was more imaginative and since it amounted to a virtual guarantee by the Bank of the payment of the liabilities of all the American houses, might have achieved such an object if it had been executed.

1 : Huth MSS., English Out-Letters 17: F.Huth to J.Goodhue, 14 Apr. 1837; Baring MSS., LB7, f. 155 & Reel 57, 64182: BB to Hottinguer et al., 21 Mar. 1837; Reel 58, 64622: BB to Ward, 22 Mar. 1837; Morrison Cryder MSS., 11,720/1: Brown to Morrison, 22 Mar. 1837; ibid., Brown to Overend Gurney, 22 Mar. 1837; ibid., Overend Gurney to Brown, 22 Mar. 1837; Circular to Bankers, 24 Mar. 1837.
2 : Bates MS.: Diary, 4 Mar. 1837.
3 : Baring MSS., HC.3.35/7: BB Lpl to BB Lon, 21 Mar. 1837; Bank of England MSS., I-LLpl: 22 Mar. 1837; Times, 21 & 31 Mar. 1837.

5.5 : the Failure of the W's and the End of the Crisis

Events were soon to take another turn for the worse, due to persistent easterly winds preventing the arrival of the packet ships at Liverpool - by the 6th April, six ships were overdue. The house which was damaged most by this delay in remittances was Wildes.[1] On the 6th April the Bank received an application from him for help to pay his acceptances of £250,224 up to the 17th April, but he was unable to offer any security but his own personal engagement. The Court of Directors was divided over the appropriate response and so the newly-elected Governors, Timothy Curtis and Sir John Rae Reid, were dispatched to seek the advice of the Chancellor of the Exchequer: "it is understood if they can get anything which can be construed into something like a recommendation of the government that they should interfere, then support will be given", Baring Brothers reported.[2] Spring Rice avoided an answer to the question by repeating his opinion of the relationship between the Government and the Bank of England: the Government would not offer any advice on mercantile matters to the Bank of England, since the Bank possessed far more information on which such a decision should be based, but it would support whatever course the Bank took or judge any particular proposition put before it by the Bank.

After this non-committal reply, a motion was put in the Court that the Bank should not make advances without approved securities. But an amendment saying that under present circumstances this rule of the Bank could be waived, was moved and passed. But further help was only given on the condition that Wildes should wind up their business and that he should

1 : Times, 5 Apr. 1837; Baring MSS., Reel 58, 64637: BB to Ward, 6 Apr. 1837; ibid., 64204: BB to PWK, 6 Apr. 1837; ibid., 64208: BB to Jaudon, 6 Apr. 1837; LB7, f. 172: BB Lon to BB Lpl, 5 Apr. 1837; Bank of England MSS., I-LLpl, 6 Apr. 1837.
2 : Baring MSS., Reel 58, 64202: BB Lon to BB Lpl, 6 Apr 1837.

do so under Bank of England supervision. Henceforth, weekly reports on their position were handed to the Bank.[1]

About the same time a group of Liverpool merchants made a second appeal to the Government to issue Exchequer Bills on the security of produce. An earlier deputation to the Bank of England in the middle of February had been unsuccessful. They presented their case in London on the 10th April but received little encouragement from the Chancellor of the Exchequer who, besides thinking their case "vague and general in its suggestions for relief", said that it was an improper request for the Government to consider and that it was the Government's policy to leave all matters to the better judgement of the Bank of England. The Bank turned their request down because, as Curtis pointed out, the problem in the cotton market was only one of a fluctuation in price, not of complete stagnation; for transactions continued to be made and therefore cotton could be liquidated.[2]

Another solution, proposed by the Bank Agent in Liverpool, was that the Bank should waive its rule of refusing to discount brokers' acceptances. It was the custom for cotton importers at Liverpool to hand over cargoes for sale to a commission broker and to draw a bill upon the latter for the value, which the broker would accept. This would be discounted by a local bank and so the importer would be placed in funds, sometimes before the sale had been made. The Bank of England did not allow local banks to rediscount these bills at the Branch Bank.[3] Turner, the Agent, proposed the relaxation of this rule in February and again in

1 : Bank of England MSS., CBIb, ff. 7-10; also Baring MSS., Reel 58, 64648: BB to Ward, 10 Apr. 1837; LB7, f. 186: BB to G.Agie, 7 Apr. 1837.
2 : ibid., Reel 58, 64220: BB Lon to BB Lpl, 11 Apr. 1837; Bank of England MSS., CBIb, ff. 14-22; CHMG3, ff. 194-6; Morning Post, 11, 13 & 15 Apr. 1837.
3 : Collins, 'Liverpool', pp. 162-3; see p. 44.

mid-April to prevent heavy losses and perhaps failures by the Liverpool cotton importers. The head office in London rejected this proposition, however.[1]

Confidence by the middle of April was declining to a very low ebb. Many of the Liverpool houses were failing, because of the loss sustained on cotton imports, and as a result the proportion of remittances to the American houses that were dishonoured rose. Moreover, several of the London accepting houses started refusing to accept bills drawn from America by doubtful firms: Wildes (on orders from the Bank), Lizardi, Morrison Cryder and Rothschild did this.[2] But the gloom was temporarily lifted upon receipt of the news of the measures taken by the Bank of the United States for avoiding a crisis.

The Bank of England offer to the B.U.S. of a £2m credit arrived too late, after its President, Nicholas Biddle, had already taken his own measures. In any case, it would have been turned down, for the B.U.S. was most unwilling to let any gold leave its vaults.[3] Instead it and several other American banks had decided to sell post-notes in London, bearing 5% or 6% coupon and payable 12 or 18 months hence in Europe. They would provide a very safe means of remittance to all those in America. The B.U.S. issued £1m in sterling, 3.48m in Francs and 1.229m in Guilders, all of which were quickly taken up in the first fortnight of April.[4] They were well received in London and started to sell rapidly on the Stock Exchange. The Bank of England seemed quite happy with the arrangement, since they believed that it resembled "in principle" that suggested by themselves,

1 : Bank of England MSS., I-LLp1: 17 Feb. & 17 Apr. 1837; PLBLp15: 19, 22, 27 & 29 Apr. 1837.
2 : Baring MSS., Reel 58, 64226 & 64230: BB to PWK, 17 & 18 Apr. 1837.
3 : Bank of England MSS., CBIb, ff. 103-4: N.Biddle to Bank of England, 25 Apr. 1837.
4 : Hidy, House of Baring, pp. 219-20.

but they appear to have been worried that what was a temporary expedient might be extended into continuous use and so constitute a threat to their gold reserves.[1] Barings took a less sanguine view of the advent of these bonds: "on the whole we think the public are a little muted by Biddle's bonds, and they think they will make everything right at once".[2] It soon became clear that simply not enough had been issued to constitute a sufficient relief and that they by no means resolved the problems of the American houses.

Wilsons and Wiggin were forced to follow the example of Wildes and apply again to the Bank in April and May. On the 25th April Wilsons asked the Bank for an advance of £80,000 for a fortnight, which was granted. On the 1st May they asked to be supported for the whole of the month but were prepared to liquidate their business under Bank supervision. After some opposition in the Court, the Governor was authorised to lend the necessary funds to the end of May. This decision was based upon the widely-held opinion that they were ultimately solvent, and that therefore no risk attached to the Bank's further help.[3] Wiggin soon found himself in the same position: he applied to the Bank on four occasions in May and received a total of £220,000 more on security of various stocks, personal notes and protested bills of exchange.[4]

What was the situation of the other four American houses? As the Circular to Bankers pointed out, all the American houses received financial help from sources external to the firm, some from the Bank via a guarantee (at this stage the W's), others from different sources "by

1 : Bank of England MSS., PLBLp15: 24 Apr. 1837: Morning Post, 28 Apr. 1837.
2 : Baring MSS., LB7, f. 231: BB Lon to BB Lp1, 28 Apr. 1837; Reel 58, 64240: Bates to Jaudon, 2 May 1837.
3 : ibid., LB7, f.280: BB to Agie, 20 May 1837; Reel 58, 646??: BB to Ward, 2 May 1837; Bank of England MSS., CBIb, ff. 40-1, 60 & 62-5; PLBLp15: 10 May 1837.
4 : ibid., CBIb, ff. 71, 80, 88 & 96.

"depositing the title deeds of opulent partners or connections, or by transferring stock" (at this stage the remaining four).[1] Because of such means, Browns and Morrison Cryder were considered quite at ease during May,[2] but Lizardi were in a weaker position, since on the 6th they were reported to be "in the Stable for decision and discussion at the Bank Parlour today". However, they managed to avert this fate until the 25th May by selling a large amount of American stock.[3] The position of the Barings is unclear: on the one hand, James Morrison felt that "there is a mystery about Barings which time alone can unravel",[4] and Thomas Raikes noted in his Journal on 11th April that "even the house of Baring are in a frightful dilemma; Lord Ashburton has been obliged to support them with £800,000 and that the Bank is called upon them for fresh advances".[5] On the other, Bates boasted that "by foresight on the part of myself and my partners our House had never discounted a bill, and never had aid from the Bank in any way" and he explicitly denied that Lord Ashburton had baled the firm out.[6] There is certainly no record of Barings having been helped by the Bank in either the Baring or the Bank of England archives, but they did rely upon external sources of finance to some extent, borrowing from Overend Gurney and a London bank, Sutton Sons & Gribble.[7] All the American houses were in the same boat in that they had to find exceptional sources of finance, but it obviously made a great difference if this was done by private loans, as opposed to the public humiliation of a subscription list.

1 : Circular to Bankers, 14 Apr 1837.
2 : Baring MSS., LB7, f. 272: BB Lon to BB Lpl, 13 May 1837; Reel 58, 64240: Bates to Jaudon, 2 May 1837.
3 : ibid., Reel 58, 64684: BB to Ward, 6 May 1837; LB6, f. 282: BB to Hope, 16 May 1837; Reel 58, 64240: Bates to Jaudon, 2 May 1837; Bank of England MSS., CbIb, f. 96.
4 : Morrison Cryder MSS., 11,720/2: Morrison to Alsop, 5 May 1837.
5 : Journal of Thomas Raikes, iii. 157.
6 : Bates MS.: Diary, 4 Mar., 15 Apr. & 7 May 1837; Baring MSS., Reel 58, 64740: BB to Ward, 19 June 1837.
7 : Hidy, House of Baring, pp. 223-4.

Confidence continued to decline during May. A reflection of this was the further fall in the cotton price from 7d. to 6d. per lb. In part the deterioration of sentiment was due to the news of the crisis in the American financial system, but there were more than psychological reasons for pessimism, notably the paucity of remittances to the American houses. In these circumstances it had become apparent by the 20th May that the three W's and perhaps others would be obliged to call upon the Bank again. It was estimated Wilsons required £500,000, Wiggin £350,000 and Wildes £300,000.[1]

At first, it seemed virtually assured that aid would be continued. Henry Patry, head of Thomas Wilson in Liverpool, wrote to Langton: "I should think there is no doubt but every assistance which they may require for their reduced engagements in June and July will be afforded them...I am quite sanguine as to a favourable outcome of all difficulties".[2] The one problem was that if the Bank were to carry them through to the end of the year, all its previous advances would be completely unsecured since the guarantee notes expired before then. Glyn wrote that "the Bank however makes the signatures of the letter...a sina qua non and Patry leaves London to obtain these in Liverpool today. I cannot conceive that anyone can demur to the postponement of the claim of the Bank upon them".[3] Very few problems were encountered and by Saturday 27th May all the signatures had been collected.

Joshua Bates, however, had always been pessimistic about the chances of the Bank continuing to prop up the W's, because he expected even worse news to arrive from the United States, which would transform the Bank's thinking on the matter.[4] And as predicted by Bates, the bad news

1 : Baring MSS., Reel 58, 64277: Bates to Jaudon, 22 May 1837.
2 : Langton MSS.: H.Patry to L, 22 May 1837; Collet MSS., UI287.c9.Bundle 4/17: M.Collet to H.Parker, 1 June 1837.
3 : Langton MSS.: G to L, 25 May 1837; Circular to Bankers, 2 June 1837.
4 : Baring MSS., Reel 58, 64261: Bates to Jaudon, 15 May 1837.

arrived on the 27th May when the Roscoe docked at Liverpool. The news it brought was received in London the next day. The latest reports up to the 8th May showed a considerable deterioration in monetary affairs in New York, with many failures taking place and the suspension of specie payments imminent. Bates was moved to make a fresh examination of the W's accounts in the light of the information received, but he still believed that they were solvent and that, consequently, the Bank would be incurring very litle risk by helping them to liquidation. "The general good of the commercial community", he advised the Governor, required that the Bank should prevent them from suddenly stopping payment, however "at variance with the ordinary principles of Banking".[1]

Not but what the receipt of this news caused "three of the oldest Directors"[2] of the Bank to oppose further help at a meeting of the Court of Directors on the 30th May, at which no agreement could be reached: a motion had been put down supporting further help, but an amendment had been added which doubted the solvency of the W's, because of the recent news from the U.S., and therefore opposed further loans.[3] Another meeting on the 31st failed to resolve the issue. At the usual Thursday meeting at 11 a.m. on 1st June, another problem presented itself, for both Browns and Lizardis had applied to the Bank for similar help themselves. This seems to have strengthened the fears of the doubters and at 12.30 the meeting was adjourned for the Governors to visit the Prime Minister and the Chancellor with the purpose of informing them of the doubts existing as to the solvency of the houses. They returned at 3.30 with Melbourne's reply, which repeated the Government's conception of its standing vis à vis the Bank, but Melbourne's references to the favourable foreign exchanges and

1 : Baring MSS., LB6, f. 6: Bates to T.A.Curtis, 29 May 1837.
2 : Circular to Bankers, 2 June 1837.
3 : Bank of England MSS., CBIb, ff. 111-2; Baring MSS., LB6, f. 300: BB to Hope, 30 May 1837.

to the Bank's rising bullion reserve are perhaps indications that he was in favour of continued aid by the Bank.[1]

The Court continued to discuss the matter until 7p.m., the eventual result being that the amendment opposing further help was passed.[2] This was not an united decision: since there were 23 Directors present, and the majority was only one, the voting must have been twelve votes to eleven.[3] Included in the minority were both the Governor and the Deputy-Governor, and Horsley Palmer - it was reported that "the annoyance felt and expressed by Horsley Palmer is not disguised".[4]

The Bank's justification of its decision was that circumstances had changed so much that the solvency of the W's must now be a matter of considerable doubt. There was a limit beyond which they could not go: if "little or no progress had been made by the New York or other commercial houses towards placing their correspondents in funds", then they should be allowed to fail. Rather than the Bank changing course, it was the circumstances of the W's that had changed.[5]

The outcome of their deliberations was awaited with great anxiety. The Bank agent described the effect in Liverpool:[6]

> "it is like that of a striking blow which leaves a very indistinct recollection of what is passing around. No one seemed to know what the evil is or how far it is likely to continue, but there seemed a general alarm and a vague conviction that matters must be a great deal worse".

Concern was felt in Liverpool as to the fate of Browns and doubts were even cast on the ability of Barings to weather the storm. A general worry was that Browns would be treated in a similar fashion to the W's: they

1 : Bank of England MSS., CBIb, ff. 113-21.
2 : Morrison Family MSS.: T.Dighton to J.Cryder, 1 June 1837 (7 p.m.).
3 : Economist, 2 June 1837; Times, 3 June 1837; Langton MSS.: G to L, 3 June 1837.
4 : ibid..
5 : Morning Post, 3 & 12 June 1837; Courier, 2 June 1837.
6 : Bank of England MSS., I-LLpl: 3 June 1837.

would be kept going for a few weeks so that the early bill-holders would be paid off, but would then be let go, leaving the later discounters with very little at all.[1]

The reaction in London was a lot less bad.[2] The failure of the W's on the 2nd June was followed by that of several minor houses - Bell & Grant, Gowan & Marx, Collmann & Lambert and A. & G.Ralston. But Glyn was "glad to find the distress not so great as might have been expected".[3] Obviously the acceptances of the W's had been reduced throughout the period of Bank help and so the effect of their failure at the beginning of June was a great deal less than if they had failed at the beginning of March.[4] Perhaps more importantly, people had become reconciled to the possibility of their failure:[5]

> "though the apparent object, that of supporting the houses in difficulty, has now failed, yet the real and important object of preparing the commercial community for their failure and obviating the disastrous effects which so sudden a shock to credit and confidence might have occasioned, has been in a great measure gained".

Other American houses had found themselves in the same predicament as the W's. Morrison wrote to America that "all those who do not have resources out of business like myself or opulent friends like Barings have gone".[6] Morrison Cryder themselves were in trouble. They tried to obtain a loan from Overend Gurney on the security of Morrison's extensive property deeds but were refused.[7] So on the 5th June he asked the Bank of

1 : ibid.: 1, 5 & 7 June 1837; PLBLp15: 3 June 1837.
2 : ibid., PLBLp15, 5 June 1837; Baring MSS., Reel 58, 64716: BB to Ward, 2 June 1837; LB7, f. 347: BB to Hottinguer, 3 & 8 June 1837; Economist, 10 June 1837.
3 : Langton MSS.: G to L, 3 June 1837.
4 : Morrison Cryder MSS., 11,720/2: Morrison to Alsop, 19 May 1837; ibid.: Morrison to Todd, 5 May 1837.
5 : Baring MSS., LB7, f. 347: BB to Hottinguer, 9 June 1837; Times, 3 June 1837.
6 : Morrison Cryder MSS., 11,720/1: JM to Alsop, 9 June 1837.
7 : ibid.: S.Gurney to Morrison, 5 June 1837.

England if they would give him a loan on the security of mortgage property (mortgages had been a common form of Bank lending before 1823). On the 8th a loan of £325,000 for six to twelve months was approved. This was a "bitter step" for Morrison, but at least he had borrowed money with his own resources and not been "obliged to do what Brown has done, which was but a little better" than the example of the W's.[1] Lizardis were in the same boat and they received £106,000 from the Bank, on the deposit of £226,650 bills of exchange, many of which were protested or irregular. They also received large amounts from private financiers. By the 10th, Glyn wrote that "Lizardis stand like men and speak with perfect confidence of their position".[2]

But the fate of Browns was most important because of the size of their business; their liabilities from June to October totalled £1,372,000. The Bank lent them £650,000 for a week on the 8th June, but this was only a temporary arrangement.[3] Glyn's comment sums up the state of affairs:[4]

> "It is very well to have carried the division today for Browns but it is incomplete and leaves everything in suspense. I fear the result, more especially if made contingent upon a guarantee fund being raised. There must be the greatest difficulty of doing that after recent occurrences".

Matters were left in the balance, when what was needed was an end to uncertainty.

But the prospects for the American houses were shortly to be transformed, with the arrival on the 12th June of the news of the suspension of American specie payments. Glyn's opinion is typical of the

1 : ibid., Morrison to Alsop, 17 July 1837; Bank of England MSS., CTMB22, ff. 210-1; Morrison Family MSS.: Curtis to Morrison, 8 June 1837, A.W.Robarts to Morrison, 3 & 8 June 1837, & Curtis to Robarts, 8 June 1837.
2 : Bank of England MSS., CBIb, ff. 115-6, 132 & 148; Langton MSS.: G to L, 10 June 1837.
3 : Bank of England MSS., CBIb, ff. 113-22 & 126-41; Bates MS.: Diary, 8 June 1837.
4 : Langton MSS.: G to L, 8 June 1837; for the similar opinion of Loyd, see O'Brien, Overstone, i. 228-9.

view taken of the suspension:

> "It must assist the payment of debts to this country and enable the Banks to open the door for facilities to the merchants before impracticable. I certainly must consider it a measure, though forced by a crisis most awful, calculated to facilitate most decidedly the settlement of the accounts between the two countries and to improve the position of the English creditors".[1]

This news had a great effect on thinking inside the Bank Parlour. Glyn thought that "this information can leave no doubt as to the course which the Bank directors will take as to Browns". Indeed, there was a meeting at his house to discuss an appeal to the Bank to take up the three W's again, in the light of the better news from America. Since the decision to let them fail had been taken under the impression of complete insolvency in the States, when in fact the reverse seemed now to be the case, it was thought the Directors might rescind their decision.[2]

The Bank meeting to determine Brown's fate was held on the 14th June. It was decided unanimously to advance up to the 31st Dec., if necessary, £1,950,000 on ordinary securities and £413,346 on a guarantee list of £400,000. In the event, the total advances made to Browns were £1,648,000.[3] On the 22nd June the Court, not unexpectedly, rejected the application of various parties to renew their aid to the W's but passed a motion authorising the Governor to give advances for three months to those who held unpaid bills on suspended American houses. The point of this was to stop the bills going back under protest to the United States immediately and thus "spread embarrassment in all the channels which they have passed through in coming to maturity".[4]

1 : Langton MSS.: G to L, 12 June 1837; see also Baring MSS., Reel 58, 64737: BB to Ward, 14 June 1837; LB7, f. 368: BB to Hottinguer, 12 June 1837; LB6, f.394: BB to Hope, 16 Jun 1837.
2 : Langton MSS.: G to L, 13 June 1837; Circular to Bankers, 15 June 1837.
3 : Bank of England MSS., CBIb, f. 157; American Accounts 1836-42 (AA), ff. 151-2: 5 July 1838.
4 : ibid., CBIb, ff. 174-7; Circular to Bankers, 23 June 1837.

The support for Browns, combined with the Banque de France's aid to Welles, the leading American house in Paris,[1] was enough to lift a deep anxiety from the minds of all in commerce - people began to feel that the crisis was really over.[2] Glyn believed that the Bank's measure on protested bills "would afford much considerable relief, especially among the manufacturing people. The locking up of too much capital and rendering it almost dormant for a lengthened period...(would have added) much to the exacting inconvenience felt in that class".[3]

The best sign of revival can be seen in the cotton market. Around the 20th May, prices rose for the first time since October 1836 and the improvement was maintained. It was attributed to a return of confidence and a feeling that events had gone past their worst, and to the suitability of cotton as an article of speculation because of its low price.[5] The firmness was maintained during the dark days at the beginning of June. "The cotton people appear to buy with spirit, notwithstanding the news from your quarter, and a good deal of money is ready for investment which may tend to keep prices up".[5] Spinners, confident that cotton prices had reached their lowest, returned to the market to rebuild their depleted stocks. This revival at once made cotton a safe and effective remittance to pay off American debts in Britain.

Although the Bank of England had first been called upon to act as a lender of last resort in mid-February, its help proved insufficient and three of the American houses failed over three and a half months later. In the meantime, the American financial crisis had worked its effect upon London, seriously disrupting the flow of remittances to the American

1 : Baring MSS., Hottinguer to BB, 7, 8 & 10 June 1837.
2 : Bank of England MSS., I-LLpl: 16 June 1837.
3 : Langton MSS.: G to L, 15 & 19 June 1837.
4 : Bank of England MSS., I-LLpl: 31 May 1837; Baring MSS., LB7, f. 296: BB Lon to BB Lpl, 27 May 1837; HC.3.35/3: BB Lpl to BB Lon, 27 May 1837.
5 : ibid.: BB Lpl to BB Lon, 3 June 1837.

houses, on which they depended to pay off their maturing acceptances. In turn, the American crisis was made worse by uncertainty over events in London - this increased the remittance problem still further. Americans were afraid to purchase foreign exchange to send to Britain lest by the time the bill arrived in Britain the drawee had already failed, so causing the bill to be sent back under protest to America. The uncertainty affected the cotton market as well - buyers held off from purchasing in expectation of a price fall, but this only worked to increase the number of protested cotton bills, again harming the American houses.

What was needed was action that would be interpreted by markets as meaning the crisis was at an end. Observe the rapid recovery that took place after the failure of the W's in June 1837 when it was commonly felt that affairs could not possibly get any worse. Palmer's proposals of March 1837 assume an added significance when one considers this point. If they had been implemented, it is likely that the recovery which came in June would have occurred in March, as all doubt concerning the American houses would have been removed once the Bank had (effectively) stated it would pay all their liabilities, in case of need.

Chapter Six: the Instability of Credit and Monetary Policy: the case of 1837

The narrative account of the financial crisis of 1837 has restated the contemporary view that America was the recipient of the bullion outlfow from Britain in the summer of 1836; drawn attention to the Bank of England's rejection of American bills in August 1836 as the decisive action which broke the optimistic expectations of the upswing; stressed the difficulties involved for the American houses in returning to a more liquid financial position; and laid the blame on the Bank of England as the proximate determinant of their downfall.

This chapter considers how contemporaries and historians have come to interpret the financial crisis, and in particular the behaviour of the merchant banks at the centre of the crisis. Later writers would see the Anglo-American crisis of 1837 as revealing a system of 'gross overtrading' among the merchant banks trading in the Anglo-American sector. They had by their mismanagement abused the credit system and their failure had followed as an inevitable result of this. As Prof. Temin has pointed out, implicit in this kind of argument "are the assumptions that the expansion of credit was extraordinary and that it made a contraction inevitable".[1]

Often combined with this emphasis upon a deterioration in the quality of credit, was a conceptually different theme concerning the quantity of credit: the Bank of England was ultimately responsible, by reason of its excessively lax monetary policy, for letting the system of overtrading develop. Conversely, when the Bank of England did cut back ('too late'), it brought the crisis to a head by exposing the speculative tendencies of the American houses.

Prof. Lévy-Leboyer represents both these traditions well when he argues that "in the early part of the 1830's....competition between the banks brought a lessening of controls", of those "strict rules" which had been designed to prevent "excess lending".[2] The Bank of England should have acted earlier to control these speculative tendencies and its

1 : P.Temin, 'Comment', p. 113.
2 : Lévy-Leboyer, 'Central Banking', pp. 77-8.

contraction, when it came, was "overdue...it can be stated in fairness that the Bank's delays and uncertainties, far from having helped the market, had deepened the crisis".[1]

This chapter questions more closely some of the arguments behind the customary interpretation. First, it is necessary to discover more precisely what is meant by the term 'overtrading' - what particular management error was committed by Anglo-American merchant banks in the 1830's? Secondly, concerning the generation of the 'unsustainable' credit structure - was the behaviour of the financial system really determined in such a mechanistic fashion by the policy of the central bank? Thirdly, more effort should be given to analysing the turning point of the financial cycle. Contemporaries (and historians) have been quite skilled in describing the processes by which 'overtrading' practices were built into the financial structure or illiquidity spread across the financial system during a financial crisis. However, they have failed to explain the turning point of the cycle other than by analogy with the bursting of a bubble.

When these questions have been dealt with, one is left with a picture of financial behaviour in the 1830's which is typical of nineteenth century experience. Not only are the techniques of finance prone to breakdown, but financial behaviour alters over the cycle so as to make a breakdown more likely. This picture of financial behaviour has important consequences for the correct formation and conduct of monetary policy, and this chapter endeavours to set these out.

All shades of economic opinion in 1837 were united in thinking that real economic activity had been 'excessively' or artificially stimulated during the preceding years by the financial sector, and in condemning the American houses for their mismanagement. From the Banking School, Thomas Tooke spoke of "the extravagance of extent to which credits

1 : ibid., p. 80.

"were granted in America on this country...which led...in the first six months of 1837, to so serious a derangement of commercial intercourse"[1]; on behalf of the Currency School, J.R.McCulloch believed that "the American houses had grossly overtraded, and that it was impossible for them to escape the effects of their folly. This is undoubtedly true"[2]; and in the middle of the Currency/Banking School debate, Horsley Palmer thought the increase in exports to America in the summer of 1836 had been "fostered by undue credits given by considerable American houses in this country, not furnished with adequate means to uphold such extensive engagements if discredited...there was greater credit given than the parties were able to maintain"[3]. That this 'overtrading' was the cause of their liquidity problems is a very clear implication of all three statements. Although they could not agree on the importance of money in causing fluctuations in prices and economic activity, all accepted the validity of the 'overtrading' concept and stressed its importance in the evolution of financial crises.

However, the nineteenth century idea of overtrading is by no means a clear concept since it encompassed several different activities which, albeit associated in practice, were conceptually distinct.[4] Some of the most common practices to which it was applied were: an over-estimate of prospective returns in commercial or industrial ventures, the support of unsound activity (i.e. that not based on real transactions, for example pure speculation or buying for a price rise) or an excessive level of gearing. Occasionally the last of these was translated into a condemnation of all forms of saving and borrowing. Which of these particular sins was committed by the American houses in the 1830's? One line of argument, put forward by Tooke but also implicit in Palmer's evidence quoted above, was that the ease of obtaining credit, itself a

1 : Tooke, Prices, ii. 296.
2 : McCulloch, 'Enquiry', p. 234.
3 : P.P. 1840, iv (602), q. 1273.
4 : R.C.O.Matthews, 'Public Policy and Monetary Expenditure', in T.Wilson & A.S.Skinner (eds.), The Market and the State. Essays in Honour of Adam Smith (Oxford, 1976), p. 336.

result of the 'overcompetition' of the American houses, had fostered an excess importation of British goods into the U.S.A. in 1836 and 1837.

> "The event, however, has shown that the orders from America proceeded upon an exaggerated anticipation (i.e. expectations were disappointed)...the overtrading in imports into the United States...was, doubtless, ministered to by the unbounded credit which was given, by the eminent houses in that branch of the trade in this country, to the importers abroad".[1]

At first sight this is borne out by the failures among the dry goods importers in the United States in 1837 and the consequent problems of the London merchant banks in recovering debts from these parties.

Two points, however, should be made: first, the over-estimate of prospective returns, if one occurred, was not made by the financing house but by the dry goods importer, the initiator of the operation who bore all the risk. The accepting house was solely concerned to earn a commission without the risk of non-payment from its client; so long as it was convinced of the credit worthiness of the latter, there are no grounds on

which to blame it for the mistakes of others.

Secondly, it by no means follows from the difficulties of American importers in 1837 that they had overestimated the prospects for sales when they had made their orders the previous year. This is an example of the weakness of the '<u>ex post</u>' analysis predominant in the kind of views which are being discussed. It is possible that the expectations of importers at the time of ordering were correctly based, but that in the intervening period before the goods were brought to market, an unpredictable event or events, perhaps the increase in money pressure in the U.S.A., transformed sales prospects.

In the example of the American houses what was meant by overtrading was an excessively low ratio of capital to liabilities or, which comes to the same thing, an excessive dependence on outside finance.

1 : Tooke, <u>Prices</u>, ii. 324-5.
2 : <u>Economist</u>, 15 Apr. 1837.

As the examination of the Bank inspectors showed,[1] they had not been involved in speculations on their own account to any great extent, and nor had they been rash enough to make large orders for U.S. cotton in the 1837 season - up to mid-April, only Lizardi out of the seven merchant banks occupied an important position in the ranks of cotton importers. Browns were the 10th largest importer, Barings the 21st. Horsley Palmer summed up their position:[2]

> "their engagements have been almost entirely limited to Banking operations and to the exportation of British manufactures to the U.S., in short that (they have not mismanaged their business) with the exception of their Engagements very much exceeding the command of their respective capitals, which no one can justify, upon the sound principles, by which every merchant's transactions ought to be governed".

The Courier (J.R.McCulloch) commented that if the American houses had not conducted their business with "a most reckless improvidence", then "the business would have been confined within legitimate bounds and four-fifths of the enormous mass of acceptances" would not have come into existence. They suggested that liabilities should not be more than three times the capital of the firm.[3] In fact, Wiggin's capital/liabilities ratio was over 5 to 1 in December 1836, Wildes' almost 9 to 1 in February 1837 and Wilson's 7 to 1 in March 1837.[4]

If it should be asked by comparison with what standard the capital/liabilities ratios of the American houses were judged to be excessive, the answer is that it was according to the purely subjective preferences of nineteenth century commercial mores. The concept of a maximum permissible gearing ratio obviously does not stand up to modern

1 : Bank of England MSS., CBHb, ff. 408-9: 16 Mar. 1837; ff. 420-4: 23 Mar. 1837; & ff. 450-2: 30 Mar. 1837.
2 : Baring MSS., HC.3.51/9: Palmer to Sands & Smith, 23 Mar. 1837.
3 : Courier, 9 Mar., 7 & 10 Apr. 1837.
4 : Baring MSS., Wiggin, LB6, f. 46: Bates to Ward, 21 Jan. 1837; Wiggin & Wildes, LB6, f. 24: Bates to Parish, 3 Mar. 1837; Bank of England MSS., CBHb, f. 409: 21 Mar. 1837.

examination and is harmful in that, when combined with a tendency to judge from an ex post viewpoint, it is likely to lead to conclusions that, for example, the American houses failed because of their excessively high capital/liability ratio. It is also a temptation to indulge in pointless moralising.

However, if the concept of overtrading is divested of its ex post connotations, then it becomes an useful tool with which to analyse changes in financial behaviour over the cycle. A higher gearing ratio may increase the illiquidity of the firm, place it in a more risky or fragile position and even be considered, when the current financial environment is taken into account, 'imprudent', but there is no necessary or inevitable connection by which it leads to a financial crisis, although it certainly increases the possibility of one occurring.

But if the illiquidity or large dependence on external finance is identified as the weakness of the American houses in 1837, it must then be asked what was responsible for their development? Contemporary opinion was divided on this point, some arguing that it was the fault of the American Houses themselves, although they were tempted by the cheap and easy credit facilities offered by the discount market. J.H.Palmer wrote in 1837 that "it is at the same time due to the several Houses to state that the eagerness with which their commercial paper was bought by the money dealers, during the period of abundance of money, ought to be received as some extenuation of the excess".[1]

Others believed, by contrast, that since the Bank itself had been liberally supplying the discount houses with loans, it was to some extent responsible for the illiquid liability structures that grew up in 1835-6. This was the opinion of Baring Brothers:

1 : Baring MSS., HC.3.51/9: Palmer to Sands & Smith, 23 Mar. 1837.

> "it seems to us that the actual evil has been produced in great part by the superabundance of facilities created by our Bank during the period of the English loan for £15 million...the low price of money worked to extend too much the system of credits accorded to foreigners, especially with the U.S.A.".[1]

Among modern historians, R.W.Hidy has taken this view: "Much of the stimulus for the economic conditions in England and America must be attributed to the management of the credit mechanism topped by the Bank of England...the generous lending policy of the Bank...was the fountain head of the easy credit to America".[2] If this side of the case was to be believed, it would be an important indictment of the Bank's efficiency in monetary management.

But which view is an accurate description of events? This involves an examination of Bank policy in 1835-6 and of the nature of the mania that gripped London money markets in the spring of 1836. I shall conclude that although there were errors in Bank management during 1835-6, these were not major enough to cause an artificial boom and that the mania of 1836 should be seen as the culmination of certain trends which had been present throughout the upswing.

The idea that the Bank of England was responsible for the financial boom of 1836 is analogous to the 'central banking' school of financial intermediation,[3] which holds that the size of the commercial banking system is strictly determined by the central bank through alterations in the reserve ratio of the former and variations by the latter of the supply of reserve assets to the financial system. For the mid-1830's it would argue that the Bank, by increasing its lending to the money market and redirecting that lending to operators in the short-term money market, caused a glut of money at the short end of the spectrum of

1 : Baring MSS., LB5D, ff. 563-6: BB to Baguenault, 1 Nov. 1836.
2 : Hidy, House of Baring, pp. 183 & 206.
3 : Green, Old South, p. 137.

interest rates and allowed the American houses to build illiquid liability structures supported largely by short-term external finance.

However, Chapter Three argued that the mismanagement of the West India Loan in the autumn of 1835 caused a severe contraction in the monetary base at a time when bullion was returning to the Bank and the monetary base should have been rising. By the spring of 1836 the stock of reserve assets had returned to a more normal level, but whereas it was still a little below its figure of the previous July, the Bank of England's bullion reserve had risen by over £1.5m.

Certainly, then, the argument that the Bank acted to expand the economy during the winter of 1835-6 falls to the ground, as far as the supply of reserves to the financial system is concerned. But what about the level and structure of interest rates? The argument of Chapter Three was that the mismanagement of the West India Loan contributed to stability in the three month commercial bill rate at 3.75% between September 1835 and February 1836. The question is, was this rate above or below what it would have been in the absence of the Loan transactions? Like all counterfactuals, it is impossible to give a definite answer to this question, but it should be pointed out that the period was one of bullion inflow, which would tend <u>ceteris paribus</u> to reduce money market rates. Consequently, it is quite likely that the Bank of England maintained rates at an unduly high level in 1835-6. The fall in the discount rate to 3.25% in the spring of 1836 may be regarded as the bullion inflow at last working its effect as the transactions caused by the West India Loan were being unwound.[1]

1 : see pp. 79-81.

A close analysis of the evidence does not support the argument that the Bank of England stimulated financial markets to an unusually high level of activity in the spring of 1836. It is necessary to examine more closely what is meant by the terms 'mania' and 'euphoria'.

Some contemporary writers on economic affairs were already beginning to note the importance of the instability of expectations in the generation of the trade cycle. S.J.Loyd went furthest in this regard, when he described a psychological cycle, commencing first "in a state of quiescence, - next improvement, - growing confidence, - prosperity, - excitement, - overtrading, - convulsions,- pressure, - stagnation, - distress,- ending again in quiescence".[1] The upper turning point of the cycle, the 'mania' phase, was defined in terms that implied a collective loss of rationality. Prof. Matthews represents this tradition well when he describes the mania of 1836 as "a sudden improvement in business confidence...a sudden rise in profit expectations and weakening of normal standards of caution unjustified (or not fully justified) by current changes in the objective rate of profit...a spirit of irrational optimism". One of its particular manifestations in 1836, Matthews believes, was "the uncritical readiness with which their acceptances were received in the London discount market". Thus the boom of 1836 was a psychological or "semi-pathological" phenomenon whose proximate cause had

1 : Reflections suggested by a perusal of Mr. J.Horsley Palmer's pamphlet on the Causes and the Consequences of the Pressure on the Money Market (London, 1837, reprinted in Tracts, etc. on Metallic and Paper Currency, London, 1857), pp. 1-40.

been the easing of credit conditions in 1835-6, but for which "the stage had been set...by the continuance of tolerable active and improving trade for several years and by the sudden fillip given by the American demand in 1835".[1]

Although I would agree that financial booms should be examined largely in psychological terms, several qualifications of this traditional argument must be made immediately. First, its conception of what is rational and irrational behaviour is derived from an ex post standpoint: a business is held to have behaved in a rational manner and managed its affairs well, if they have a satisfactory outcome, and vice versa, to be guilty of mismanagement and irrationality if they do not turn out as expected. Such a conclusion may be true but is not necessarily so. Indeed, the consequence of Kindleberger's statement that "irrationality may exist insofar as economic actors choose the wrong model, fail to take account of a particular and crucial bit of information, or go so far as to suppress information that does not conform to the model implicitly adopted"[2] is that the sole criterion of rational behaviour in business is whether the venture has turned out successfully, or not.

In the study of business behaviour, such a method conceals far more than it illuminates, since the objective should be to study decision-making from an ex ante stance: proper evaluation of decision-making cannot be made by a study of the actual outcome of any particular venture alone.

Secondly, one must criticise the implicit conclusion of Matthews and other writers in this tradition that the troubles of business firms in the crisis are an inevitable consequence of their irrational behaviour during the boom. Translating this into macroeconomic terms, the tendency

1 : Matthews, Trade-Cycle History, pp. 207-9.
2 : Kindleberger, Manias, Panics and Crashes. A History of Financial Panics (London, 1978), p. 29.

is to explain the turning point from mania to crisis as the point where the irrational ventures entered into during the boom become unprofitable and break down. This failure to explain the turning point satisfactorily is another consequence of the ex post nature of the analysis.[1]

Therefore, in order to give an adequate description of the 'mania' that were so common in the nineteenth century, it is necessary to remove the ex post bias of contemporary writers. Only by doing this is it possible to make a correct judgement of the behaviour of the principal actors in the crisis.

A key point is to recognise the existence of uncertainty in the nineteenth century economy, and how attitudes towards uncertainty fluctuated over the short term. As confidence improved during the upswing of the cycle, a number of changes took place in the financial system which made it increasingly vulnerable to any disturbance or random shock and to which it would react in a destabilising fashion, thereby causing the financial crisis. A kind of psychological cycle operated in the financial system, which had important consequences for its behaviour and stability.

At the beginning of the process, confidence was at a stable level but during the upswing of the cycle attitudes towards uncertainty changed, either due to an outside event acting as a displacement or more likely as incomes rose during the real 'upswing', in two respects: first, subjective tastes for uncertainty are altered so that firms are more willing to enter into risky ventures; and secondly, expectations of the future improve so that people think a particular operation is more likely to prove successful.[2] The consequence of these changing attitudes is that firms

1 : J.R.T.Hughes & N.Rosenberg, 'The United States Business Cycle before 1860: some Problems of Interpretation', Econ.H.R., xv (1963), 476-80.
2 : H.P.Minsky, 'Private Sector Asset Management and the Effectiveness of Monetary Policy: Theory and Practice', Jour. Fin., xxiv (1969), 227-8; Hicks, 'A Suggestion for Simplifying the Theory of Money', Economica (1935), repr. in Money, Interest and Wages (Oxford, 1982), p. 53.

will enlarge the scale of their operations and that to finance this increased activity, they will borrow short term funds from external sources. This will of course change the balance of their financial portfolio, making it less liquid and and so weakening their position in the event of any disturbance to their income or borrowing flows. Financial units are likewise affected by this improvement in confidence for during the upswing they display a willingness to lend more.[1]

In time, a positive feedback process will develop, when the rise in income caused by the increased activity following the decline in uncertainty will itself engineer a further improvement in confidence and thus induce more "pervasive liquidity-decreasing portfolio transformations".[2] Eventually, a state of financial euphoria will be reached, where expectations of future prospects are very optimistic and firms are not afraid to become involved to a greater extent in risky ventures, following the success they have encountered in previous ones.[3]

Since expectations of the future are an important determinant of the prices of financial assets, a stock market boom is likely to take place, which reflects both the improved prospects of these stocks and the existence of pure speculators buying for a price rise. But the most important thing to note about the upswing is the less liquid or fragile state of portfolios that has evolved during the upswing, which would make the financial system less able to withstand the pressures of a sudden rush for liquidity.

1 : H.P.Minsky, Financial Instability Revisited: the Economics of Disaster, in Fundamental Reappraisal of the Discount Mechanism (offprint, 1970), p. 8.
2 : ibid., p. 10; idem, 'Asset Management', p. 229.
3 : idem, 'The "Crunch" and its Aftermath', Bankers' Magazine, ccv (1968), 79; idem, Financial Instability, pp. 7-8.

Therefore it is better to interpret the mania of late 1835 to spring 1836 as the culmination of processes, generated within the financial system, which had been in evidence for some time, rather than as a state of affairs which was manufactured by the Bank's loan operations in 1835-6. Looking at possible causes of the euphoria, it would seem that expectations and risk-aversion were influenced not so much by the small reduction in interest rates betwen 1835 and 1836, as by some financial events in 1835: the financial system had proved itself resilient enough to withstand in May a crash in the market for Iberian securities and later in the autumn a considerable pressure in the money market caused by commodity price falls. The success, contrary to first expectations, of the West Indian Loan, the first long term government stock issue since 1821, may also have acted as some kind of 'displacement', working through a psychological mechanism to improve confidence in the future.[1]

A second point is that the euphoria or mania should not be examined in terms of its effects upon solvency, as Matthews did in the quotations above,[2] but on liquidity. Thus the significance of the business expansion of the American houses is not that they financed exports to the U.S.A. that were unjustified in profit/loss terms, but that the expansion was financed in most cases by a novel reliance upon external sources of finance. Their liquidity position declined as a result. The difference between the two approaches is summed up by their respective views of the increased export of capital to the U.S. in 1836: Matthews said that the sale of American securities in London could "hardly be regarded as 'maniacal', since at the time of issue these bonds appeared sound enough, even on a sober appraisal, and they had been sold in large quantities for

1 : Kindleberger, Manias, pp. 15-6.
2 : Minsky, Financial Instability, pp. 53-4.

"some while before the mania proper can be deemed to have started".[1] On the other hand, those whose primary concern is with the effects of the boom on the liquidity and not the solvency of the financial system would regard the purchase of American securities as a typical example of financial behaviour under euphoric conditions, since it involved a substitution in the portfolios of savers and financial institutions of less for more liquid assets. The euphoria did not change the solvency of business firms or financial institutions, but led to the evolution of an illiquid and fragile structure of finance, which increased the possibility of disruption to the system.

It follows that the dependence upon external finance of the greater part of the Anglo-American merchant banking sector should be regarded not as a fall from grace in the face of the temptation of cheap and readily available credit, but as a reflection of the improving state of expectations, which is characteristic of the upswing and reaches its culmination in the 'mania' phase. This illiquidity made it easier for them to be placed in a position of financial distress, if for example these outside sources of finance were cut off, but it cannot be said to have necessarily caused the crisis.

Therefore the Bank can be absolved from the charge of having caused the mania of 1836 and hence the 'unsound state of trade' which developed in that period. This 'unsound' structure was rather the result of patterns of behaviour internal to the financial system. Of course, it is easy to argue in hindsight, as Tooke did, that if the Bank did not cause the euphoria, it should have checked it by not lending out the increased deposits: "an earlier manifestation of a tendency to pressure for money, which was felt so severely a few months later, would have

1 : Matthews, Trade-Cycle History, p. 208 n 1.

"restrained the extravagance of extent to which credits were granted in America"[1] on London. However, the exercise of this kind of discretion was faraway from the generally rules-orientated policy of the Bank in the 1830's, and the main problem for the Bank in the autumn of 1835 was to ease the exceptional monetary tightness which had resulted from the mismanagement of the West India Loan. In any case, it is probable that such an attempt to tighten monetary policy would have had little effect in the circumstances of 1835-6, because in periods of rising confidence the demand for credit is unlikely to be affected by small increases in the interest rate. Indeed, while there is a low level of uncertainty about future events, increases in the short-term rate of interest often have the effect of drawing out previously illiquid funds and of increasing money velocity.[2]

This problem, how to restrain a boom in the financial system generated by euphoric expectations, became more apparent later in 1836 when the Bank became alarmed by the rise in prices and signs of bullion export, and began to cut back its liabilities. In a booming economy, it is likely that there will be a tendency for interest rates to rise, reflecting the very strong demand for credit, but that the mounting confidence which drives the demand for finance up will be unaffected by small increases in the cost of finance - the elasticity of demand for outside finance with respect to its cost decreases as the upswing progresses.[3] Since the euphoric expectations will also induce banks to lend more, any attempt by the central bank to control the boom by rationing reserves to the system is likely to be ineffective, as the banks continue lending to satisfy an increased demand for credit, but on a reduced reserve ratio, thus increasing the velocity of money.

1 : Tooke, Prices, ii. 296.
2 : H.P.Minsky, 'Central Banking and Money Market Changes', Q.J.Econ., lxxi (1957), 182-4; J.R.Hicks, Contribution to the Theory of the Trade Cycle (Oxford, 1950), p. 158.
3 : Minsky, Financial Instability, pp. 10 & 43-5.

These considerations explain why Bank measures were so ineffective in the summer of 1836, when at other times they had proved quite successful in controlling the financial system. The Bank ran through all the orthodox instruments of credit control in the summer of 1836: its policy of keeping its securities even so that notes paid to withdraw gold were not re-issued, acted as a primitive form of monetary base control but failed to restrain the growth of the domestic joint-stock banking system. As for open market operations designed to take liquidity out of the money market, the Bank sold £300,000 bullion in the summer and £350,000 Exchequer Bills in August but it is hard to see that these had any effect. At length, the Bank raised its discount rate to 4½% in the latter part of July but this was unsuccessful in its immediate object of checking the demand for discounts, and nor did the increase in market rates stop the export of bullion throughout August.

In an economy buoyed by euphoric expectations, the normal measures undertaken by the central bank for restraining the financial system are superfluous and the only possible method of control is action which will transform the state of expectations responsible for the euphoria, and so lead to a reconsideration of the portfolio preferences of economic units. In order to secure a "sharp revaluation of expectations", "some triggering event that induces a reconsideration of desired balance sheets must occur. A financial crisis or at least some significant amount of financial distress is needed to dampen the euphoria. The fear of financial failure must be credible in order to overcome expectations built upon a long record of success".[1] This is the significance of the Bank of England's proscription of American bills in the summer of 1836: it succeeded where

1 : Minsky, Financial Instability, pp. 23 & 45.

previous, more orthodox measures had failed because, by attacking the American houses through their illiquidity, it transformed the state of expectations that had generated the financial euphoria, in the face of which traditional Bank instruments were impotent.

This kind of reaction is analogous to what has been called the 'confidence effect'[1] of changes in Bank rate, but should be more aptly described as an 'announcement effect'.[2] There were two mechanisms thorugh which it worked, both described by Hawtrey: the first was that[3]

> "When Bank Rate went up from 3 to 4 per cent, a trader would reason that this was intended to have a restrictive effect on markets, and that, if the effect was not brought about, the rate would simply go higher and higher till it was....Those who took that view would restrict their purchases and demand would fall off".

His second mechanism, more important for our concerns, is the reaction of banks to the rise in Bank Rate:[4]

> "A banker would anticipate a condition of monetary stringency by putting pressure on his customers to borrow less...a rise of Bank rate, as soon as the banks believe the restrictive intention of the Bank of England is to be taken seriously, probably leads to a spontaneous limitation of their lending".

Horsley Palmer clearly had this mechanism in mind when he wrote that the Bank's measures in September 1836 created[5]

> "a moral apprehension in all prudent minds that there was mischief abroad...it is not only the contraction of money which constitutes the evil, but the consequence which invariably ensues of timidity on the part of bankers generally, to grant their customary accommodation".

Hicks doubts that such a reaction is a psychological reaction "properly so described", and he prefers to call it "a reminder of the imperfection of the loan market"[6]; but just as banks shared in the growing confidence which

1 : Radcliffe Committee (Cmd 827, 1951), para. 441; A.B.Cramp, Opinion on Bank Rate (London, 1960), pp. 11-6.
2 : Hicks, Perspectives, p. 129.
3 : R.G.Hawtrey, A Century of Bank Rate (1st edn., London, 1938), p. 249.
4 : ibid., pp. 249-50.
5 : Palmer, Causes, pp. 37 & 40.
6 : Hicks, Perspectives, p. 124.

characterised the upswing, so they also shared in the transformation of expectations at the turning point and re-adjusted their portfolios accordingly.[1]

It was the second mechanism that affected the American houses. They had shared in the improving expectations of the upswing, increasing their lending and building up a less liquid financial structure. The Bank's action alerted them to the possibility of their outside sources of finance being cut off and obliged them to reconsider their liquidity position.

The operation of the 'confidence' or 'announcement' effect reinforces two points made earlier about the financial system of the 1830's: the first is the instability of expectations. Expectations should not be seen as data or "autonomous influences that come in from outside" but more "as elements that are moulded in the course of the process that is being analysed".[2] Since expectations are determined by a rational consideration of the evidence available, "An act of policy (if it is...a decisive action) is a significant addition to the data that are available; it should result, and should almost immediately result, in a shift of expectations".[3]

The second point follows on from this - the 'announcement' effect did not operate at all times or following all acts of policy.[4] Where the economy was not dominated by euphoric expectations, the Bank of England could control the financial system in a satisfactory manner by a combination of orthodox measures: in a booming economy, however, the only way for control to be achieved was through the operation of the

1 : Minsky, Financial Instability, p. 28.
2 : Hicks, Perspectives, pp. 126-7.
3 : ibid., p. 130.
4 : Collins, 'Liverpool', p. 276.

'announcement' effect but, as Hicks' quotation above indicates, this could not be obtained by any Bank measure but only by a **decisive** action, one that is unusual or gives the appearance of firmness - [1]

> "there is a world of difference...between action which is determinedly directed to imposing restraint, so that it gives the impression that if not effective in itself, it will be followed by further doses of the same medicine; and identically the same action which does not engender the same expectations".

The proscription of American bills in August 1836 succeeded where previous measures had failed because it gave the appearance of firmness and decisiveness.

The Bank of England's refusal to discount American bills acted as the triggering event for the financial crisis of 1837 by inducing a sharp revaluation of expectations in a financial structure noted for its illiquidity and highly-geared portfolios. However, almost six months were to pass before the American houses were first placed in financial distress in February 1837. What explains this long delay? In other words, what were the processes by which the sharp change of expectations in the autumn of 1836 led, almost inevitably, it seems in retrospect, to the liquidity crisis of 1837?

This is where the importance of the 'circulation' system lies. The Bank's attack alerted the Anglo-American merchant banks to the danger of their sources of external finance drying up and so forced them to cut down their activities. But one characteristic of their balance sheets, in addition to illiquidity, was the large amount of advances on short-term 'overdue account' to American merchants and financiers. This made it risky for the American houses to reduce their business immmediately, for if they were to demand prompt repayment of these advances, it might induce a financial crisis in the U.S.A., because of the latter's poor external

1 : Hicks, Perspectives, p. 127.

position, which would diminish the chances of repayment and perhaps damage their ultimate solvency. Instead the policy of the American houses was to postpone the repayment of the debt via the 'circulation system'[1] until the U.S. ran into a current account surplus in the early months of 1837, when the repayment could be achieved without any pressure on the foreign exchanges or risk of financial crisis. Weighing up the advantages and disadvantages of each approach, it is easy to see why the latter was chosen since, although it meant incurring great risk, the prize was that much more attractive - the return to a liquid position without damage to their capital resources. The drawback was that while postponement of American payment of debt was the rational course for the American houses to follow, it made it all the more likely that the Bank of England would resort to further measures to defend convertibility, in turn jeopardising the strategy adopted by the American houses.

The consequence of the 'circulation system' for the Bank of England was that the imports of gold, which it confidently expected from the U.S.A.,[2] were temporarily delayed; since bullion was certain to be withdrawn to pay for corn imports in the spring of 1837, the Bank was placed in a position of peculiar delicacy at the beginning of the new year. The 'circulation system' provides a good example of the problems experienced by the Bank in controlling other institutions, in this case merchant banks whose international involvement made them especially important to the Bank. As long as the discount market and London banking system were willing to support them, the American houses were almost totally outside the influence of the Bank. As a result, the international monetary system did not work according to the model implicit in the theory on which current monetary policy was based.

1 : see pp. 174-6.
2 : Palmer, Causes, p. 32.

The effect of the circulation system is analogous to the well-known nineteenth century phenomenon of an increasing velocity of money during a period of tight money, due to an increase in the use of bills of exchange.[1] It is only when one considers the difficulties encountered by the Bank in securing its intermediate objective, an improvement in the foreign exchanges and a return of gold to London, and when one sees how monetary tightness induced changes in the financial system that made it more fragile, that one appreciates the wisdom of the analysis of G.C.Glyn in October 1836:[2]

> "the Bank is in a position of great difficulty, knowing full well that the foreign exchanges show no improvement, which should lead them to reduce the circulation. They do not venture to take that course, fearing to create an over-pressure on the commercial community which would lead to a large internal demand for gold, if extensive failures occurred".

The Bank was attempting to achieve a delicate balance of cutting back enough to secure a return of gold to Britain, but not so much as to cause a collapse of commercial credit.[3]

But within the context of the Anglo-American sector in 1836-7 it was not possible to achieve such a balance, at least until the shipment of the American cotton crop had rendered the American houses more liquid, because the twin goals of the return of bullion and support for commerce temporarily conflicted with one another. Since the payment for corn imports would necessitate bullion outflows in 1837, it was likely that at some point the Bank would be forced to choose between them. Just when this time arrived depended on how strong the nerves of the Bank were in

1 : J.R.T.Hughes, Fluctuations in Trade, Industry and Finance. A Study of British Economic Development 1850-60 (Oxford, 1960), pp. 257-63 & 274; Collins, 'Trade Credit', 381-3; idem, 'Liverpool', pp. 114-5 & 263-6; Baring MSS., LB5D, f. 419: BB Lon to BB Lpl, 24 Sept. 1836; HC.3.35/2: BB Lpl to BB Lon, 21 & 27 Sept. & 6 Oct. 1836.
2 : Langton MSS.: G to L, 11 Nov. 1836.
3 : Collins, 'Liverpool', p. 128.

the face of a declining stock of bullion - how far they were willing to let it fall without taking remedial measures. But when it was reached, it was always probable that the Bank would prefer to defend convertibility rather than to prop up commerce, especially since some of the Directors did not recognise the Bank's duty to act as a lender of last resort.[1]

The point at which the Bank decided to take further measures occurred at the end of January, when the Bank tried to reduce its liabilities by a policy of quantitative credit rationing, which led almost immediately to the liquidity problems of the American houses. The irony is that had the Bank's nerve lasted a little longer, more action would have been unnecessary, since bullion began to return to the Bank from the middle of February onwards.

But the cutting-off of outside finance was only half the problem for the American houses in February 1837. Simultaneously with the Bank's credit rationing, there occurred a depression in the cotton market which would place in doubt the value of the remittances being made from the United States to the Anglo-American merchant banks in London.

The cotton market was in a very fragile state at the beginning of 1837, due to a combination of both real and monetary influences, and over the next four months it was to fall into a complete depression, its price declining over 40% in 17 weeks. While the fragility is in part a reflection of the supply and demand positions, it is impossible to explain the rapidity of the fall without reference to monetary and psychological effects. The problem with the Bank's credit rationing in February 1837 was that it turned what might have been a gradual and orderly decline into an almost unstoppable collapse, which had destabilising consequences for the London financial system and indeed the international economy.

1 : Norman MSS., F69: Autobiography, f. 478.

On the supply side, the American cotton crop of 1836, which was shipped to Britain in the first five months of 1837, was slightly larger than its immediate predecessor, 1.424m bales to 1.361m bales in 1835; the imports of American cotton at the main British market, Liverpool, reflect this increase, rising from 712,085 bales in calendar year 1836 to 787,008 in 1837. However, the rise was no larger than that of recent years, when there had been a tendency for the increase in consumption to outstrip the rise in imports - the stock of American cotton at Liverpool, 78,920 bales on 31st Dec. 1836, was at its lowest for some time.

But if supply considerations, as far as American cotton was concerned, were unimportant, this was not true for another source of cotton supply, India, which produced a rather inferior, short staple brand of cotton, around 80,000 bales of which were consumed in Britain in 1836. In the calendar year 1836, Indian cotton imports totalled 219,943 bales, compared to 117,965 in 1835, and since the arrival of Indian cotton was concentrated in the last three months of the year, the vastly-augmented supply of Indian cotton would make a decline in cotton very likely in 1837, at least at the inferior end of the market.

Turning to demand, the apparent increase in cotton consumption in 1837, up to 792,268 bales in Liverpool, hides the fact that demand may have been weak at the beginning of 1837. The rise in wheat prices during 1836-7 reduced the level of real British income, so that the supply of almost 800,000 bales of U.S. cotton at 1836 prices may have been too much for a declining level of demand. In order that cotton should sell, it may have been necessary for prices to drop. This hypothesis is quite consistent with the diminished value of cotton imports - down from over £10m in 1836 to £8m in 1837. A second influence is the temporary cessation

of exports to America in the spring of 1837, which would have reduced the spinners' demand for raw cotton at the beginning of the year.[1]

However, it is necessary to look at monetary developments for a complete explanation of the collapse of the cotton market. One could expect that a period of tight money would induce both sellers and buyers to reduce their stocks as these became more expensive to hold. This was certainly the case with the spinners, who reduced their cotton purchases as a result, but it was not so with the cotton-importing houses at Liverpool. They were reluctant to sell on a falling market, preferring to pay a high interest charge rather than to incur a loss on a cotton transaction by selling in a dull market. Since they had to pay at maturity the bill drawn in America on the cotton shipment, they had to finance the withholding of supplies from the market by borrowing. But if the cotton price was falling, the banks would be unwilling to lend on such security and the importing house would be forced to sell its stock on the market in order to acquire funds to pay its liability, aggravating the existing tendency to a fall in price.

This is one example of how the cotton market was unstable once an initial fall had started. The vicious circle was strengthened by the reaction of purchasers to a fall in price. In the expectation that prices would continue to fall, they stopped buying so that they would secure maximum benefit by purchasing their supplies at the market's lowest point.[2] This expectation was largely self-fulfilling and only increased the difficulties of the importing houses in both borrowing to withhold stock from the market and selling to gain liquidity. Eventually one of the importing houses would be unable to pay its bills and be forced to suspend its payments. This failure would reinforce yet again the unstable tendencies already existing in the market.

1 : Tooke, Prices, ii. 270-2.
2 : ibid., ii. 272.

The depression in the cotton market had important consequences for the American houses in London, since their remittances often took the form of bills drawn on cotton. If these were invalidated by the failure of Liverpool firms, the American houses would begin to experience liquidity problems. The vicious circle rears its head again for as soon as knowledge of these problems became public, depression returned to the cotton market as manufacturers anticipated a further fall in the cotton price and withdrew from purchasing. The depression in cotton had international consequences as well, for the return of protested bills of exchange along the chain of endorsers to their American drawers would cause major liquidity problems and was an important mechanism by which London financial pressure initiated the American panic of 1837.

I have described the fragility of the cotton market in 1837 and the means by which monetary and psychological forces transformed what would have been a gradual decline into a precipitous crash, but what was the triggering event which set these forces in motion? R.W.Hidy believed that the fall spread from Le Havre, where the large early orders made by the importing houses there had flooded the market.[1] Another possible explanation is that some Manchester spinners protested bills of exchange drawn on shipments in which they had been interested and that consequently this cotton was thrown onto the market.[2] Equally possible is that the outside finance on which the importing houses relied to hold their stock off the market was cut off, either as a result of the spontaneous action of Liverpool banks or more likely, an induced response by the local banks to the Bank of England's credit rationing.

1 : Hidy, House of Baring, p. 215; idem, 'Cushioning', 135; see also Baring MSS., Reel 58, 64533: BB to Ward, 31 Jan 1837.
2 : Bank of England MSS., I-LLpl: 17 Apr. 1837.

By the middle of February not only were the American houses beset with problems as a result of the withdrawal of discount market support and the discredit of American bills following the failure of Warwick & Claggett, but a new and more sinister aspect had been introduced, the collapse of confidence as illustrated in the cotton market depression. It was in these circumstances that the Bank of England received requests for aid from some of the American houses. After some deliberation and division in the Court, the Bank decided to act as a lender of last resort, which was almost certainly the right course of action, although it paradoxically resulted in an increase in Bank liabilities shortly after the Bank had taken measures to reduce them. If it had refused help, the whole of the Anglo-American sector in London would have suspended payment, and in turn this might have caused a run for gold on the Bank itself. Thus to talk in terms of the Bank choosing between the maintenance of convertibility and the support of commerce is misleading, since if the Bank had followed the former course to its ultimate extent, it would have been confronted by an internal demand for gold which it would have been powerless to stop.

But however successful the Bank's action was in averting financial collapse in February and March, it did not succeed in bringing the crisis to an end, which only came in June after the failure of the W's and the baling out of W. & J. Brown & Co.. A vicious circle had evolved whereby bad news in one financial centre would cause distress in another, the effect of which would rebound on the first. As news of financial difficulty in London and cotton price falls in Liverpool was received in the United States, confidence fell and failures occurred. As a result, Americans were afraid to remit, not least because of extreme uncertainty whether any bills of exchange they might purchase would be honoured when they arrived in Britain. When the news of American failures was known in

London and few remittances were received, rumours began to circulate about the liquidity of the American houses, rumours which tended to be self-justifying. The lack of confidence was reflected in the cotton market; buyers withheld because they expected a further price fall, and when this took place, it caused Liverpool cotton-importing houses to fail. The vicious circle was repeated again.

What was needed to break this vicious circle was public knowledge that the crisis was definitely at an end, so that the underlying forces ready to provoke a recovery would assert themselves. Such an effect might have been achieved had the Bank allowed Wildes to fail in February. Morrison reported this to be Joshua Bates' position at the time: "he is decided that the Bank of England cannot prevent a blow-up of the W's, that it would be folly to put it off for another month or two, when it must come, that if it is to take place the sooner the better".[1] The reasoning behind this view was that, although the failure would cause initial harm, the 'clearing-up' would assure people the worst was over, that there was nothing more to fear, and recovery would proceed accordingly. It is doubted if this sauve qui peut attitude[2] would have worked in 1837 (Bates changed his mind very rapidly on the desirability of supporting firms in trouble) - the failure of Wildes at this point might have caused a complete lack of confidence in hitherto-untouched domestic financial institutions.

A surer way to restore confidence would have been for the Bank to agree to liquidate the discredited houses - to pay off all their bills, in case of need. But it was prevented from doing this by the Directors' concern for the Bank's solvency and the interest of its shareholders. The manner of their last resort aid was to give limited help to particular

1 : Morrison Cryder MSS., 11,720/1: Morrison to Cryder, 19 Feb. 1837.
2 : C.P.Kindleberger, Manias, p. 138.

institutions, and to review the situation if this proved insufficient. Unfortunately this technique increased uncertainty. Mark Collet, an employee of Thomas Wilson in Liverpool and later a Governor of the Bank (1887-9), explained the position:[1]

> "the great mischief here has been that the sword has been kept hanging over our heads, by the constant fear that the Bank would let G.W(ildes) & Co., T.W(iggin) & Co., T.W(ilson) & Co. drop before their engagements are all discharged; this sort of uncertainty has kept up a source of mistrust which has prevented a return of confidence and a rise of produce".

The Palmer Plan of March 1837 assumes an added significance when this point is considered. If this had been put into operation, it would have had the same effect on the cotton market as the failure of the W's in June. Then, purchasers reasoned that, since things could not get worse once the W's had failed, cotton had reached its lowest point and the time had come for them to resume buying. The cotton market would have resumed its normal operation much earlier and the American houses could have relied upon an uninterupted flow of remittances from the States.

A similar effect would have been produced by the Bank agreeing to discount brokers' acceptances. The customary method for the Liverpool importing houses to raise funds on cotton while withholding it from the market was to entrust it to a broker, on whom a bill could be drawn, which once accepted could be discounted at a bank.[2] The Bank of England's usual rule was that it would not support such unsuitable activities by creating notes to discount such bills, but the Liverpool Bank agent proposed in April a relaxation of this rule. Head office rejected this suggestion on the grounds that cotton sales were not impossible to make in Liverpool, albeit at low prices, and that it was no business of the Bank to shield the Liverpool houses from the losses implied by such low prices.[3] But if it had accepted the suggestion, the Bank would have prevented the protesting of cotton bills and so would have preserved the flow of remittances to the American houses.

1 : Collet MSS., UI287c.9 Bundle 4/17: Collet to Parker, 1 June 1837.
2 : see p. 44.
3 : Bank of England MSS., I-LLp1: 17 & 19 Feb. & 17 Apr. 1837; PLBLp15, f. 421 (22 Apr. 1837), f. 426 (27 Apr.) & f. 428 (29 Apr.).

These thoughts show the need for a lender of last resort not just to prop up a few financial institutions, but to make its influence felt widely throughout the economy in order to dispel the ephemeral lack of confidence which characterises the financial panic.[1] The need for a wide penetration illustrates well the importance of the Bank of England's offer in June to discount any bill drawn on one of the three suspended American houses, which was made as an alternative to taking up the W's again. Such a diffusion is often best achieved by the lender of last resort interfering to stabilise prices in the secondary market of a particular financial asset[2] - in the circumstances of 1837 this would have been most easily accomplished by offering to discount brokers' acceptances drawn on cotton. Nor should the central bank be concerned for its own solvency, for Minsky believes that if it cannot control effectively the financial system during the upswing, then the least it can do "is to act as a lender of last resort and therefore limit the losses due to the financial crisis which follows from the instability induced by the innovation during the boom".[3] In any case, as the example of 1837 shows, it is particularly difficult in a financial crisis for the central bank to judge accurately the solvency of an illiquid institution: the Bank of England's advances to the three W's were not repaid until 1853 and even then a small amount had to be written off as bad debt.

Therefore the 1837 financial crisis should be interpreted as the outcome of the effect produced by a policy-induced liquidity pressure upon a fragile financial system. When monetary policy acts upon an extended or illiquid financial structure, it is not possible for the latter to 'wind down' in an orderly fashion, and as a result business failures are likely

1 : Minsky, 'Central Banking', 186; idem, 'The Crunch', 172.
2 : idem, 'Asset Management', 275.
3 : idem, 'Central Banking', 187.

to occur before a more liquid structure is re-established. If it is borne in mind that what Overstone (S.J.Loyd) meant by "real unsoundness" was in fact illiquidity, the effect is aptly conveyed by his statement that "monetary pressure, it is clear, does not necessarily arrest trading activity, and convert real prosperity into embarrassment and ruin - Such pressure only detects real unsoundness and brings it to a crisis".[1]

The unstable reaction of the financial system to the liquidity pressure and financial distress was really caused by the interaction of two forces, the technical weakness of the credit system and the instability of expectations as manifested, in the crisis, by a complete loss of confidence. When combined, these produced a vicious circle of almost unstoppable dimensions - known to contemporaries as 'commercial discredit' - spreading the original illiquidity right across the economy and drawing in many previously unaffected parties.

As was noted in Chapters Four, the technical fragilities of the 19th century commercial system were many, and this tendency to breakdown magnified the increase in uncertainty that took place after the boom. Loss of confidence is a factor that is present in all economic systems but was especially important in 19th century financial events, when it succeeded in its turn in exposing the instability of the bill of exchange system. Thus we have seen how in 1837 rumours of financial collapse played a key part in the depression of the cotton market through the reaction of the cotton buyers, which, though rational for them, was detrimental to the economy as a whole, since it led to the dishonour of cotton bills of exchange. The latter not only damaged the American houses in London who had received these bills as remittances, but it also transmitted the crisis to America, for the protested bills of exchange were automatically returned to their American drawers. The unanticipated

1 : O'Brien, Overstone, ii. 679, letter 370: Overstone to Norman, 4 Nov. 1856.

return of these bills would cause severe financial pressure in the U.S.A., the news of which would adversely affect sentiment in London when it was received there.

The singularity of the 1837 crisis is that it did not occur after the Bank's action in August 1836. The 'circulation system' postponed the crisis for about six months and provides a good illustration of the enormity of the Bank's difficulties in controlling the rest of the financial system. As long as the American houses were supported by the discount market, there was little that the Bank could do to recover gold from America without causing a financial collapse in London, and probably America as well. However, the 'circulation system' also, by preventing international bullion movements on which the Bank depended, made further Bank action, and thus a crisis, inevitable.

Chapter Seven : 1838-9 - the Second Financial Crisis

At the beginning of 1838 both the Bank of England and the money market were in a comfortable position, the bullion stock standing at just under £10m and interest rates at historically very low levels. In line with this monetary ease, in February the Bank reduced its discount rate to 4% and its rate for temporary advances to 3½%. Monetary conditions were to remain slack as the fall in the Bank's bullion after March was only moderate and even began to be reversed in November and December.

However, a very severe external drain started to appear in January 1839, which was largely caused by payment for corn imports following the deficient British wheat harvest of 1838, and in the next eight months the Bank's stock of bullion was to be reduced by three-quarters. Not surprisingly, this caused scarcity in the money markets, reflected in the fall in the price of Exchequer Bills from January onwards and in the rise in the discount rate for commercial bills from April. By July, the Bank of England's measures to correct the drain had produced a full-blown financial crisis in London, and it was only through the aid of the Banque de France that it managed to maintain specie payments. Nothwithstanding the loan from abroad, great anxiety persisted in the money markets throughout the early autumn as to the state of the 1839 corn harvest; even when all fear on this score had been removed, monetary conditions remained extremely tight up to the end of the year.

The 1839 financial crisis is full of contrasts with its predecessor of two years before. On the one hand, while in 1837 one important part of the financial sector had collapsed and the remainder might have shared its fate had not the Bank of England intervened, few important commercial or financial firms failed in 1839. On the other

hand, the Bank, which was never in serious danger with regard to its bullion stock in 1837, would undoubtedly in 1839 have been forced to seek an Order-in-Council suspending the convertibility of its notes into gold, if the foreign exchanges had not been stabilised in late July onwards through the good offices of the Banque de France. Because it was unable to blame any other parties for causing the crisis, in the way that the American houses had served as the scapegoat in 1837, the Bank of England was considered as being very much the author of its own difficulties; informed opinion took a much more critical line of the Bank, particularly since it had only succeeded in maintaining convertibility through the 'dishonourable' expedient of borrowing from a former enemy.[1]

Thus the 1839 crisis added fuel to the call of the radical Manchester Chamber of Commerce for the abolition of the Bank of England and its replacement by a Ricardian-style 'National Bank';[2] strengthened Loyd's argument that such crises were likely to persist so long as the Bank was governed by the scientifically incorrect Palmer Rule;[3] and appeared to justify Tooke's claim that if the Bank had anticipated the drain of 1839 and acted earlier to protect itself, it "would have obviated the necessity for more stringent measures later on".[4] Indeed, Tooke is typical of many unconnected with the technical arguments of monetary control when he lamented "the almost national humiliation in the

1 : Fetter, Development, p. 175.
2 : (J.B.Smith), Report of the Directors of the Manchester Chamber of Commerce...on the effects of the Administration of the Bank of England on the Commercial and Manufacturing Interests (London, 1839).
3 : S.J.Loyd, Remarks on the Management of the Circulation; and on the Condition and Conduct of the Bank of England and of the Country Issuers, During the Year 1839 (London, 1840); idem, A Letter to J.B.Smith, Esq., President of the Manchester Chamber of Commerce (London, 1840).
4 : Tooke, Prices, iii. 88-90.

"application of the Bank of England for assistance from France"[1]; and in his opinion that if the Bank was to be guided by a rule, the Directors "ought not to be allowed to consider themselves at liberty to depart from the strict rules laid down for regulating it, in consequence of any view which they may entertain of the claims of the mercantile interest to accommodation"[2].

Among modern writers, Prof. Fetter echoes the judgement of contemporaries when he concludes that the expansion of Bank lending in the face of declining reserves in 1839 was "the result of lack of foresight and absence of policy"[3]. Prof. Lévy-Leboyer believes that, just as in previous drains, in 1839 "the Court (of the Bank) did not react firmly to the situation, it waited from three to five months before taking action, and later, when its rates of discount and advances were finally unified and stepped up, the move was made so abruptly that the credit contraction had damaging effects...it caused an impairment of the pound in the foreign exchanges"[4].

Other students, however, have taken a more reflective line of the Bank's conduct. Prof. Matthews is representative when he says that if the Palmer rule of fixed securities was broken in 1839, then it was done so "for good reason"[5]. His one point of criticism, shared by Dr. Collins, is that when the demand for discounts at the Bank rose, there was a persistent delay in raising Bank Rate - "under the Palmer regime this was apparently regarded as an expedient to be avoided if possible, unless a jolt to confidence was felt to be specially desirable"[6]. Instead, the Bank

1 : ibid.
2 : ibid., iii. 112.
3 : Fetter, Development, p. 174.
4 : Lévy-Leboyer, 'Central Banking', p. 68.
5 : Matthews, Trade-Cycle History, p. 174; cf. E.V.Morgan, Central Banking, p. 109.
6 : Matthews, Trade-Cycle History, p. 174; also, Collins, 'Liverpool', pp. 172 & 180.

tried unsuccessfully to offset the rise in discounts by open-market-operations. There was thus a delay between the efflux of bullion and the transmission of stringency to the money market.

Themes which crop up in an analysis of monetary policy for the mid-1830's become doubly important in examining the 1839 crisis. One can only make sense of Bank policy, if one is aware of the divisions in the Court, which had become more pronounced by 1839. Although the Governor from 1839 to 1841, Sir John Rae Reid (described as "a very reasonable man, fully alive to the duties of the Bank and not too much impregnated with political economy doctrines"),[1] was a supporter of Palmer, the Currency School faction in the Bank secured a more important outlet for its views when its leader, George Warde Norman, was elected a member of the Committee of Treasury in May 1839. As the control of the Court of Directors swung between the two groups, so Bank policy oscillated from one course to another, with consequent damage to its strategic position and its reputation thereafter.

Secondly, the reasons for the 1839 crisis, and the Bank's experience in it, cast serious doubt on the rationale behind the monetary policy that was adopted in 1832. The fact that international bullion movements of a 'particular' kind (i.e. those not caused by differences in national price levels) were made on a sufficient scale to endanger convertibility, calls into question the desirability of the Bank's policy that the flow of reserves to the financial system should fluctuate in line with these bullion movements.

A third theme is the continuing importance of events in the Anglo-American sector. Although the American houses were not affected by the

1 : Langton MSS.: G to L, 6 Mar. 1837 - Glyn was not an adherent to Currency School doctrines.

crisis of 1839, the Bank could not remain indifferent to events in the United States, since the repayment of its 1837 advances to the crippled merchant banks depended upon their realising their American assets as quickly as possible. Because of this the Bank of England wished to see the U.S. resume specie payments at the first opportunity. The Bank's position was also affected by the activities of the Bank of the United States agent in London, Samuel Jaudon, who had replaced Barings as the B.U.S. representative at the end of 1837. The B.U.S. intervention in the cotton market in 1839 had major consequences for the Bank of England, and its response to this is an interesting example of its qualitative credit policy.

A second attempt was made to run monetary policy according to the principles of 1832, with effect from the spring of 1838. During the latter half of 1837, bullion had returned to the Bank while its securities were reduced as loans made during the crisis were repaid, so that the Bank's position at the end of March was as in Table 7.1. A new target for

Table 7.1: Bank of England Balance Sheet 31st March 1838
(average of the past three months - £m)

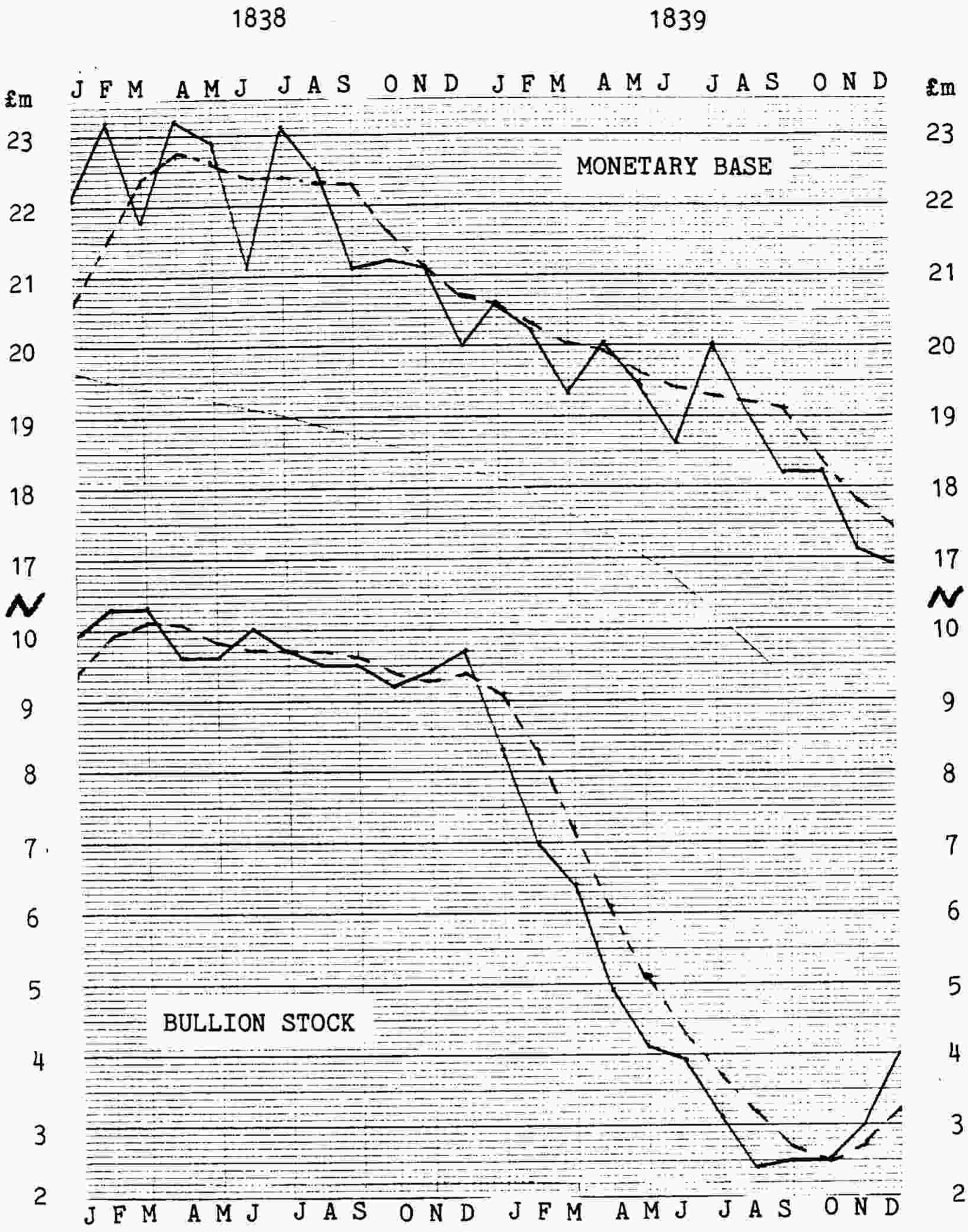
Circulation	-	18.872	Bullion	-	10.125
Deposits	-	11.410	Securities	-	22.865

Source: P.P. 1840, iv (602), App. 16.

securities of £22.5m was taken, a fall from the previous level because of the reduction of government deposits by an average of £1m and the "greater economy in the use of Bank notes", to the extent of £500,000.[1] This figure was adhered to closely for the remainder of 1838, except that at the end of 1838 the holding of securities began to fall some way below the requisite level. This was caused by the unusually small amount of advances required by the Exchequer to pay the autumn dividends on the National Debt.[2] The converse of the high level of government deposits at

1 : P.P. 1840, iv (602), qq. 1322-3.
2 : Ibid.; Monteagle MSS. 13,390/1: Curtis to Rice, 14 Dec. 1838.

CHART 7.1 : BANK OF ENGLAND BULLION STOCK AND MONETARY BASE 1838-9



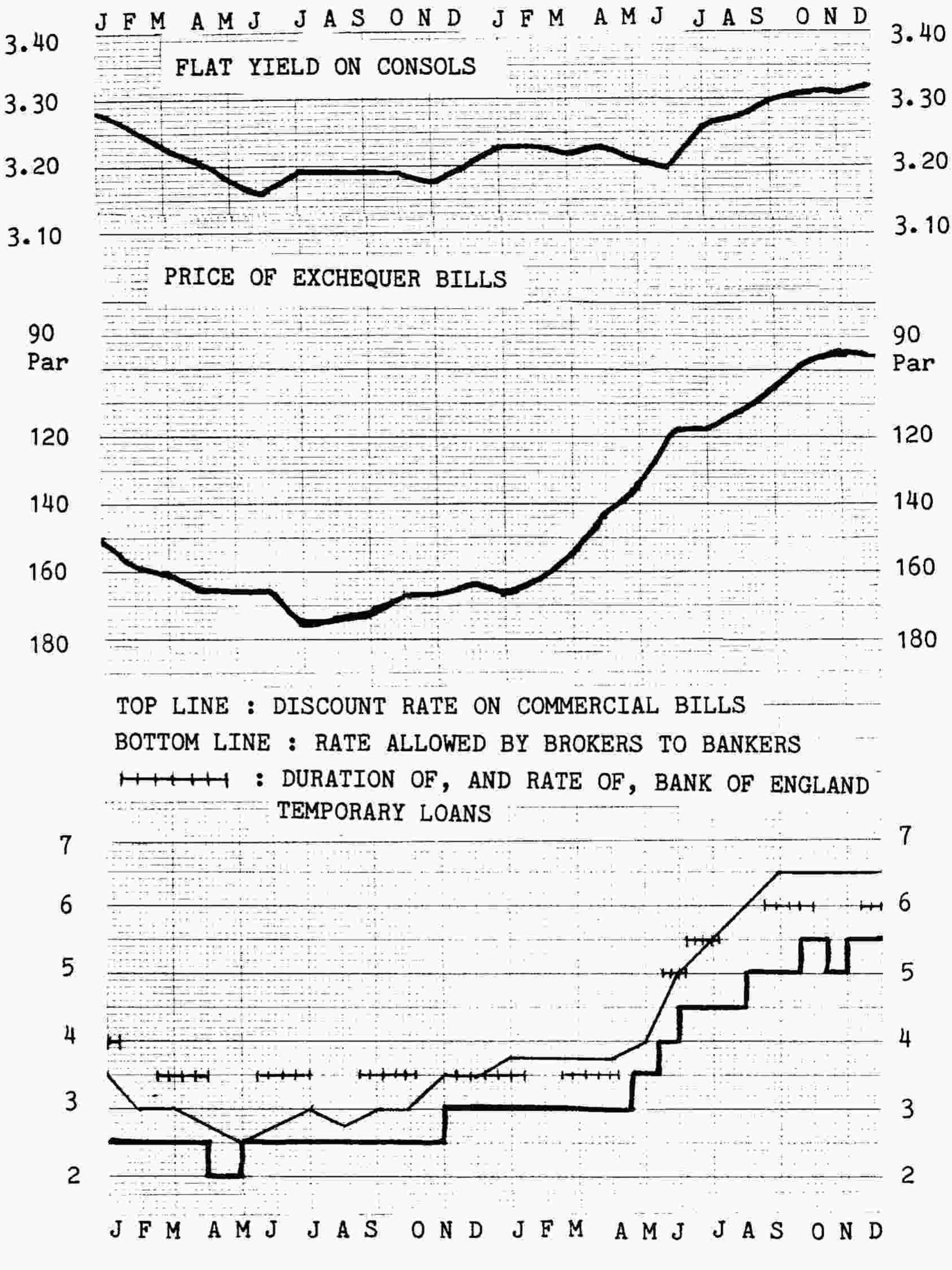
1838 1839

——— = monthly average

------- = average of the preceding three months

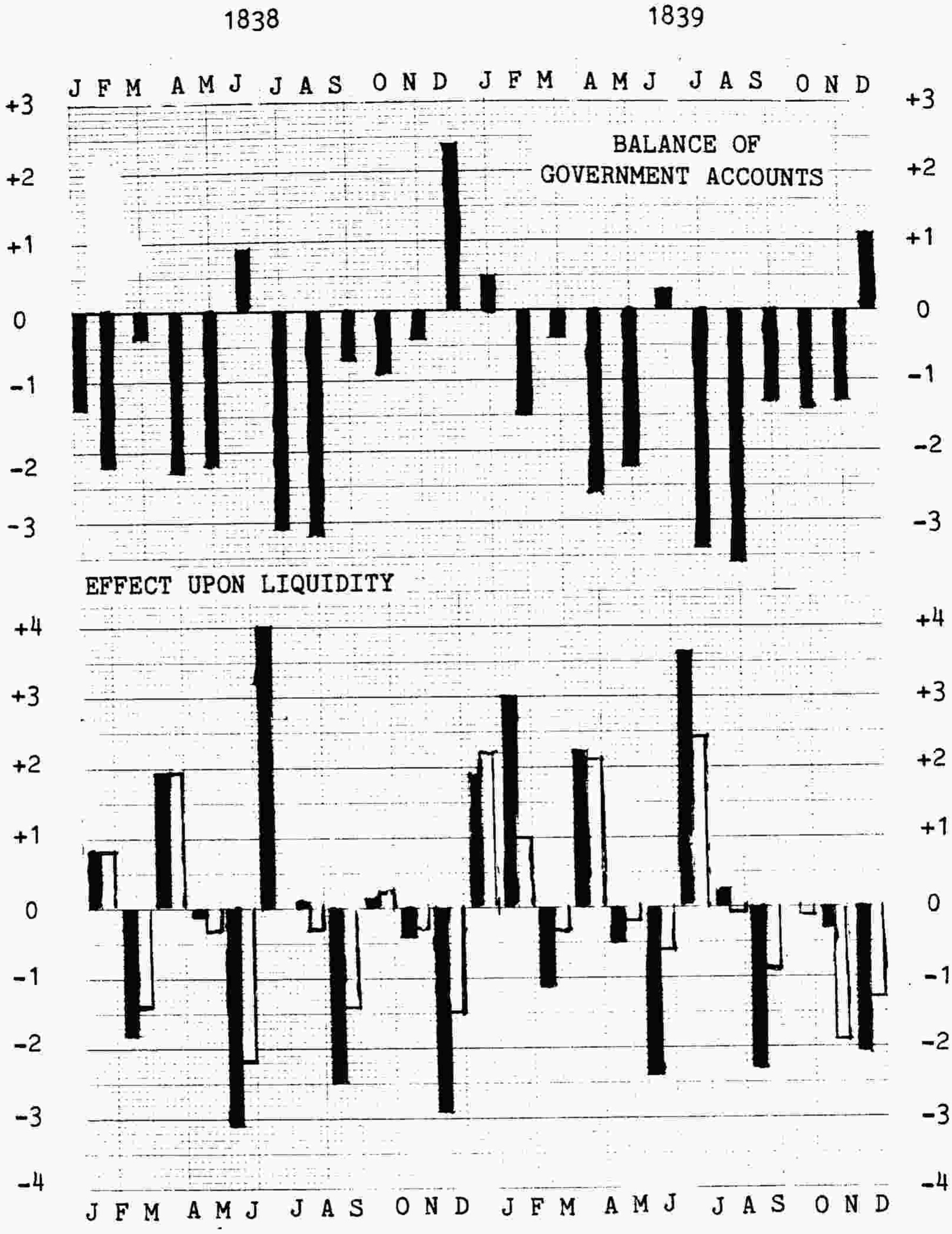
Source: as for Chart 3.1.

CHART 7.2 : MARKET INTEREST RATES 1838-9



Source: as for Chart 3.2.

CHART 7.3 : BANK OF ENGLAND BANKING TRANSACTIONS AND MONEY MARKET LIQUIDITY 1838-9



shows how variations in the Government's position at the Bank increased (+) or decreased (-) the supply of reserves to the money market.

represents the release of liquidity to (+), or absorption from (-), the money market as a result of the Bank of England's total banking transactions.

To the extent that the second column is smaller than the first, the Bank of England was succeeding in counteracting seasonal influences on money market liquidity resulting from fluctuations in the Government's fiscal position.

SOURCE : P.P. 1840, iv (0.53), App. 17.

the Bank was a large demand for the Bank's temporary advances to make up for the liquidity taken out of the market by the buoyant Exchequer revenues - but these were not so great as to offset the fall in lending to the Government.

But this renewed effort to administer monetary policy along the lines suggested by Horsley Palmer in 1832 was not made without opposition in the Court of Directors. In May Norman had written to Timothy Abraham Curtis (Governor 1837-9) describing the Bank as "like a vessel without a rudder to guide it".[1] He proposed, along the lines suggested by his recent pamphlet Remarks upon Currency and Banking, the separation of the Bank into a Circulation Department, concerned with bullion and note-issue, and a Banking Department, administering the deposits and securities, and free to maximise its profits. Norman went to see the Chancellor about these proposals in June, but without eliciting any response,[2] and then unsuccessfully presented tham to the Court in late July.[3] They were to form the staple fare of the Currency School position up to 1844 but were not to be implemented in 1838.

This emphatic rejection of a new approach was confirmed by changes in the mix of total securities during 1838. As the advances made in 1837 to the American houses and other beleaguered institutions were repaid, the Bank reverted to the policy of investing in long-term securities, rather than lending short-term in the form of discounted bills of exchange. It purchased £199,000 Exchequer Bills in December 1837, £306,000 more in August 1838 and an additional £200,000 in October. This policy was confirmed at the end of October when the Committee of Treasury rejected a motion that the Bank should make loans on its temporary advance securities

1 : Norman MSS., F37: Norman to Curtis, 4 May 1838.
2 : Monteagle MSS. 535, f. 115: Rice to Norman, 28 May 1838 & ff. 152-3: Rice to Curtis, 2 June 1838.
3 : Bank of England MSS. CBKb: 26 July 1838.

until January 1839 (well beyond the usual period for such advances); instead they recommended to the Court that £500,000 should be invested in eligible securities. Shortly afterwards, £273,000 of stock and £176,000 of Exchequer Bills were purchased.[1]

1838 was a quiet year for the Bank. One incident that does stand out, however, was the shipment of almost £700,000 in gold by the Bank to New York in March 1838. What was the Bank of England's purpose in doing this?

After its extended aid to the American houses in 1837, the Bank had discovered that a large amount of its resources were 'locked up' in loans to these firms, and would only be repaid as quickly as their American debtors repaid the debts owing to Britain. Therefore the Bank had sent a specially-appointed Agent over to the United States of America in the autumn of 1837 to collaborate with the representatives of the individual merchant banks who were collecting debts there. One problem was that the 10% depreciation of the dollar following the suspension of specie payments in America in May 1837 had made it most costly in terms of American dollars to pay off a debt denominated in sterling.[2] At the same time it was thought that the resumption of convertibility in America would lead to a return of confidence and resumption of normal patterns in Anglo-American trade (British exports to the U.S. had been severely depressed since the beginning of 1837).[3]

Therefore the Bank of England decided in March 1838 to aid the course of American resumption by exporting two million sovereigns to Prime, Ward & King of New York, who were closely connected with Baring Brothers. In fact, only 680,000 sovereigns were sent to America in the

1 : ibid., CTMB23, 24 Oct. 1838; P.P. 1840, iv (602), Appendices 18 & 25.
2 : Temin, Jacksonian Economy, p. 117.
3 : ibid., p. 142.

second half of March.[1] The specie was distributed among the New York Banks, who were able to resume gold convertibility in May, to be followed somewhat reluctantly by the B.U.S. and the other Philadelphia banks in August. Part of the funds acquired by the sale of specie was returned to Britain immediately in the form of bills of exchange;[2] the remainder, about 300,000, was invested in U.S. Treasury notes bearing 6% interest and were not returned until mid-1839.[3]

The Bank of England was no doubt acting out of consideration for its own self-interest in taking this action, since the sooner the Americans repaid their advances to the London merchant bankers, the sooner the Bank's advances to these houses were repaid. Yet it is also a measure that can be defended as restoring stability in international trade and helping the American economy. Palmer admitted in 1840 that it was "a complete departure from the rule of the Bank", but maintained that "it was one of those special cases which might justify a departure from the strict rule".[4]

But reaction outside to the Bank's export of bullion was hostile. Thomas Tooke wrote that "it was no part of the business of the Bank of England to hasten (American resumption)...it is neither more nor less than officious interference, unbottomed on anything like correct principle, and coming properly, therefore, under the designation of mere quackery".[5] The Times argued in a Ricardian fashion that international bullion movements should only be made when they were jusified on profit/loss grounds, as if bullion was an ordinary commodity. If this was the case, then it was up to the ordinary merchant to make them.

1 : Bank of England MSS., CBIb, f. 469: 15 Mar. 1838; f. 475: 22 Mar. 1838; & f. 482: 29 Mar. 1838; Bates MS., Diary: 28 Mar. 1838.
2 : Baring MSS., Reel 58; BB to Ward: 12 Mar. (65093), 16 Mar. (65101), 17 Mar. (65104), 21 Mar. (65105) & 31 Mar. 1838 (65125).
3 : Bank of England MSS., CBKb, 12 July & 20 Sept. 1838; CBLb, 11 Apr. & 6 June 1839.
4 : P.P. 1840, iv (602), qq. 1325-34.
5 : Prices, iii. 80-1.

> "Why should the Bank step in to rob the merchant of this advantage, which strictly belongs to him, and ought not to be interfered with by an overgrown monopoly?....they have thus made merchants of themselves as completely and effectually as though they had received in a direct way a consignment of indigo".[1]

If bullion could not be imported or exported at a profit, then such a movement ought not to be unnaturally or artificially forced by the Bank.

There is a certain irony here, when the Bank of England's rejection of American bills in August 1836 is recalled. Then the Bank had expressed its disapproval of certain activities which the Americans had found to be in their self-interest, and which arguably improved the allocative efficiency of the embryonic international financial system. Now the boot was on the other foot: the Bank itself was being condemned by commercial opinion for shipping bullion to America which would hasten the repayment of their advances to the American houses and which would, by restoring convertibility in the U.S., lay the basis for a revival of Anglo-American trade. In both cases, the grounds for condemnation are the same: in 1836, the Bank said the American houses were undertaking transactions outside the proper scope of a merchant; in 1839, the Bank was ccused of overstepping the bounds of banking activity and of becoming a merchant. Both arguments have little substantive basis and rest upon little more than prejudice.

The Bank's stock of bullion gradually declined through 1838, from an April figure of £10.126m to £9.336m on 8th Jan. 1839, a small amount bearing in mind the American transaction and the Bank's loan to Rothschild of £400,000 in silver dollars in late December "to send to Paris to assist in calming the storm which is blowing in the monetary world in consequence of the stoppage of the Bank of Belgium".[2] But from January on, the

1 : Times, 19 & 21 Mar. 1838; also Collet MSS., U1.287/c.18: Collet to ?, 22 Mar. 1838.
2 : Monteagle MSS. 13,390/1: Curtis to Rice, 27 Dec. 1838; Bank of England MSS. LB9, f. 150: Curtis to Rothschild, 21 Dec. 1838 & f. 152: Curtis to Rothschild, 29 Dec. 1838; P.P. 1840, iv (602), q. 1338; also Banque Rothschild MSS., 1/M/1: I-L N.M.Rothschild, Londres, 21, 24, 26 & 29 Dec. 1838 & 1 Jan. 1839; & 1/M/2: I-L NMR, 16 Aug. 1839.

quarterly average of bullion fell extremely rapidly, to 5.119m on 28th May and to the low point of 2.525m on 15th October. What were the causes of this drain?

Horsley Palmer believed that the drain was due to special causes, and not 'excess in the general currency of the country'. These extraordinary reasons were: first, the above-mentioned discredit in Belgium and its recoil on France. Secondly, the importation of corn to the value of 7m. Thirdly, the short cotton crop in the United States, which prompted a speculation in cotton - prices were forced up so high that spinners refused to buy and eventually the speculation failed. This was "one of the greatest sources of the evil we are suffering", since as a result exports of cotton goods were at a very low level in the first half of 1839. Spinners presumably thought that the high prices they were being forced to pay for the raw material would prevent the finished good being sold abroad. Fourthly, exports had been large in 1838 and consequently foreign markets were overstocked with British goods at the beginning of 1839. Fifthly, the sale of American securities in Britain, to the extent of $20m since January 1838, had led to bullion flows to the U.S.A. Sixthly, an export of silver to the Far East, caused by the foreign exchange transactions of the East India Company.[1]

Palmer's thoughts on this subject were confirmed by some calculations made by Joshua Bates of Baring Brothers in October 1839,[2] and it is interesting to note that G.W.Norman, although he disagreed with Palmer on the policy that the Bank should pursue, did not dispute his analysis of the external drain.[3]

1 : Norman MSS., C192: Palmer to Norman, 27 July 1839.
2 : Baring MSS. HC.1.20.8/2: Bates to (BB), 29 Oct. 1839.
3 : Norman MSS., F37: Norman's Defence of the Bank, Jan. 1840, most easily located in O'Brien, Overstone, i. 268-9.

The Bank at first responded to this drain passively, reducing its liabilities in line with the fall in bullion, although the average level of securities over the three months to April was £22.987m, above the target due to the prolonged advances on Deficiency Bills in the preceding quarter. From the beginning of April, however, the Bank took measures to reduce the level of its securities, but through open market operations rather than an increase in the rate of discount. By the 9th April £149,000 Exchequer Bills and £124,000 stock had been sold and, in the face of a sharp increase in the demand for discounts in mid-April, another £109,000 Exchequer Bills and £370,000 stock had been disposed of by the 16th May. In spite of these measures, the average level of securities was £23.543m at the end of May - increased discounts were responsible for £800,000 of the £1m excess over the norm of £22.5m.[1]

At the beginning of May, the leading lights in the Bank direction again took stock of the situation and decided to undertake a quite radical plan. Palmer described the measure nine years later, before the Lords Committee on Commercial Distress:

> "The Question then arose in the Committee of Treasury of the Bank, whether it was not desirable to make use of Foreign Credit confidentially as a means of making the further Payment, believing that the payment was one limited to provide for the Import of Corn. Under that Conviction, on the Part of the Committee of Treasury a private Understanding was entered into with Messrs. Rothschild to negotiate a Million Sterling on Paris and Hamburgh. That negotiation carried the Bank through the Month of May; and while the Exchange was maintained by those Drafts the Bullion was retained in the Bank, it having been the opinion of those Parties who had then most Influence in the Government of the Bank that the Bullion ought not, if it could be avoided, to be reduced below Four Millions, to secure the Convertibility of the Bank Note".[2]

Palmer anticipated a further drain of £1.5m in the succeeding three months. The Bank would allow another £500,000 to leave its bullion stock (at present £4.5m) and then use the foreign drafts to prevent the export

1 : P.P. 1840, iv (602), Appendices 18 & 25 & qq. 1358-61.
2 : P.P. 1847-8, viii, pt. iii, (565), q. 838.

of the remaining 1m.[1] At the same time it continued its measures for contracting the circulation at home, raising the discount rate to 5% on the 16th May and selling 297,000 Exchequer Bills and 284,000 stock in the next month. Rothschild's negotiation of approximately 300,000 bills on Paris, in addition to stabilising the foreign exchanges, also took liquidity out of the money market.[2] The Bank stock of bullion fell by another 500,000 but then stabilised at a level of approximately 3.9m for the four weeks from 21st May to 18th June.

The reasoning behind this operation sprang from the discussion, whether the drain of gold was due to "an <u>existing</u> redundant currency, or one of a temporary payment to be made to foreign countries".[3] Palmer, as is clear from his analysis of the causes of the drain, believed it was the latter. In time "the most advantageous mode of liquidating such an account is obviously by the general export trade",[4] therefore the Bank should adopt a 'temporising' system, so as to provide for the foreign payment and give time for the export trade to recover. In three months' time when the bills matured, the foreign exchanges should have recovered sufficiently for the purchase of foreign bills to pay off the earlier drafts. In this case, Rothschilds owed the Bank 400,000 for the silver they had borrowed in December - the sale of bills on Paris was a convenient form of repayment for the Bank. If the exchanges had not improved by the time the bills matured, Palmer considered it legitimate to take stronger measures to defend convertibility.[5]

1 : Norman MSS., C192: Palmer to Norman, 27 July 1839.
2 : Banque Rothschild MSS., 1/M/2: I-L NMR. The amount notified to the Paris house of James Rothschild tallies with the amount drawn by Barings in August and September to pay off Rothschilds.
3 : Norman MSS., C192: Palmer to Norman, 15 Oct. 1839.
4 : Bank of England MSS. CBLb, 24 Oct. 1839: amendment put forward by Palmer.
5 : In addition to the above, for Palmer's views see, Norman MSS., C192: Palmer to Norman, 8 Aug. & 12 Oct. 1839; and his comments on Norman's Defence of the Bank, Jan. 1840, Norman MSS., F37, and O'Brien, <u>Overstone</u>, i. 252-74.

However, the success of this plan was short-lived:

"In the Beginning of June a Rumour prevailed that the Bank were drawing on Paris as a Means of maintaining the Exchange, and it became a Subject of Conversation among the Directors of the Bank who were not parties to the Measure. At last the Question was distinctly put, whether the Rumour was true? It was accordingly admitted. Upon which some Gentlemen advocated the Opinion that the Measure was contrary to Principle, and that the correct Principle was to raise the Rate of Interest, by which the Price of Commodities would be lowered; in short, to make Money dear and Commodities cheap, by which the Foreign Payment would be accomplished. Upon that Determination....a Resolution passed the Court that the Negotiation upon the Exchange should be suspended.....".[1]

It was obviously the Currency School group in the Court which had overturned Palmer's 'availing measure' and substituted for it a policy more in accordance with 'sound principle'. They believed that the Bank had not acted soon enough to defend convertibility and in particular had criticised the low rate of interest - 3½% per annum - charged upon the quarterly advances from February to April.[2] Their proposal to increase both Bank Rate and the temporary loan rate to 5% at the end of March had, however, been rebuffed.[3] The Rothschild exchange operation was considered useless in that it did not help exports by reducing prices, and harmful since the Bank was incurring extra liabilities payable in bullion. Because it was "not appearing likely to answer the intended purpose, (it was) speedily discontinued",[4] and measures more likely to achieve this aim were executed: on the 20th June, Bank Rate and temporary loan rate were

1 : P.P. 1847-8, viii, pt. iii, (565), q. 838.
2 : Bank of England MSS. CBLb: 21 Nov. 1839.
3 : ibid.: CBKb, 28 March 1838.
4 : Norman's Defence, Norman MSS., F37, or O'Brien, Overstone, i. 259.

increased to 5½%, the first time in the history of the Bank it had charged over 5%. Since the Usury Laws prohibited interest of more than 5% being charged upon any security other than bills of exchange with less than twelve months to run, a consequence of the rise was the reluctant refusal by the Bank to lend further on Exchequer Bills or East India bonds.[1]

But if this section of opinion thought the rise in interest rates would stem the outflow of bullion, their expectations were to be quickly disappointed.[2] The discontinuance of the negotiation

> "occasioned an immediate Fall in the Exchanges in London of Twenty Cents, I think, upon the Day when the Authority for drawing was withheld from Messrs. Rothschild, and which caused a considerable Apprehension and Alarm in the City of London and Paris as to what could be the Cause of that great Fluctuation. The Cause soon became known that it was the Suspension of the Operation sanctioned by the Bank".

Almost immediately a panic, analogous to an internal discredit, developed among foreign holders of sterling from[3]

> "the doubt existing upon the Continent, after May and June 1839, of the ability of the Bank to maintain specie payment, the consequence of such apprehension being the transmisssion of all long-dated bills upon this country, for immediate discount, and return of their values, and the withdrawal of monies to a considerable amount deposited in this country for foreign account".

The renewal of the loss of bullion far outweighed any beneficial effects that a reduction of prices in England may have had on British exports. The bullion stock, which was 3.903m on 18th June, fell to 3.676m within a fortnight and to 2.787m by 23rd July. It is clear that within a very short time the Bank "would have been drained of nearly every sovereign within its walls".[4]

1 : ibid.
2 : P.P. 1847-8, viii, pt. iii, (565), q. 838.
3 : P.P. 1840, iv (602), q. 1362; cf. Circular to Bankers, 12 & 19 July & 27 Dec. 1839.
4 : Bank of England MSS. CBLb: 20 June & 11 July 1839.

The Bank's response was one of almost complete confusion. On the 11th July, having rejected an increase in Bank rate to 6%, the reduction in the échéance of bills discounted to less than 65 days and the sale of 500,000 bills of exchange, the Court decided to put up its only remaining government security, the Deadweight Annuity, for sale (it had already exhausted its holding of government stock and retained only 10,000 Exchequer Bills). But the sale of the Deadweight was bungled, for the bids were below the price regarded as acceptable by the Committee of Treasury, and so no sales were made.[1] Tooke claimed that the Committee did not believe in the efficacy of this measure and was happy to see it fail.[2]

Palmer certainly doubted that a sale of the Deadweight would be of any use. Most importantly, he felt it would not provide the means of paying for the excess imports and thus do nothing to stop the drain of gold. Internally, the withdrawal of notes effected by its sale would only cause an even greater demand for discounts on the Bank.[3] A rise in Bank rate to make up for this, although strictly in accordance with the rules of monetary policy, would not hold back the growth of discounts but, in so far as it tended to introduce a feeling of alarm, "with that alarm to occasion the probable further increase of issues".[4] Such had been the effect of raising Bank Rate above 5% at the end of June. Palmer judged the situation to be of "an unusual character....a rigid adherence to the principle of endeavouring to keep the securities even",[5] either by a sale of securities or an increase in Bank Rate or some form of rationing of advances, would have caused a financial crisis.[6]

1 : Ibid., CTMB23: 17 July 1839; P.P. 1840, iv (602), Appendix 27; Norman's Defence, Jan. 1840, in Norman MSS, F37, & O'Brien, Overstone, 1. 260-1.
2 : Tooke, Prices, iii. 88.
3 : Norman MSS., C192: Palmer to Norman, 8 Aug. 1839.
4 : P.P. 1840, iv (602), q. 1423-4.
5 : ibid., q. 1427.
6 : ibid., q. 1475.

An escape route for the Bank from almost certain suspension of specie payments was provided by the Governor of the Banque de France, Comte D'Argout, whose presence in England on holiday Palmer described as "a God-send".[1] He offered the resources of the Banque de France to its counterpart in London, which was only too eager to grasp at the opportunity of safeguarding its bullion by borrowing abroad - in effect, a repeat of the earlier operation which, Palmer remarked, would have been unnecessary had not the latter been cut off in its prime. Because the Charter of the Banque de France prohibited it lending on foreign securities, a private operation was undertaken between Baring Brothers and several Parisian mercantile and banking houses, with the Banque undertaking to discount, if necessary, the bills drawn (to a maximum of £2m) by Baring Brothers on Paris. The Bank of England guaranteed to the Banque de France the debts incurred by the Barings and as security transferred portions of the Deadweight as the drafts were made.[2]

The Court of Directors debated the £2m credit with the Banque de France on the 20th July. The Resolution, proposed by Palmer, was passed, but not without opposition from James Morris and Thomson Hankey, Governors of the Bank in 1847-9 and 1851-3 respectively.[3]

Despite the large majority in favour of the French credit, divisions in the Bank remained. The majority of Directors only accepted a replica foreign credit little more than a month after the Rothschild operation had been stopped as an act of necessity; indeed, some originally envisaged the credit in a very different light from the earlier transaction. Alfred Latham, a Currency School supporter and Governor from

1 : Norman MSS., C192: Palmer to Norman, 27 July 1839.
2 : for the technical details of the transaction, see Chapter Eight.
3 : Norman MSS., C176: Latham to Norman, 20 July 1839.

1859 to 1861, thought it would entail a purchase or transfer of bullion from Paris, which would increase the strength of the Bank in withstanding an internal panic: "as an availing measure it is very useful, inasmuch as it affords an....addition to the Bank's treasure".[1] In its actual form, it was disliked since it destroyed the usefulness of the foreign exchange as an indicator of the state of the currency. Most importantly, the foreign credit was a policy adopted "not as a substitute for, but as auxiliary to others of a more strictly defensible character"[2] - in particular, the increase in Bank Rate, but also the sale of securities and the shortening of the échéance on bills eligible for discount. It was only by use of these instruments that prices would be lowered, the balance of payments corrected and the foreign exchanges improved. Norman was prepared to see Bank Rate go as high as 10% to secure this objective, and to accept many failures in the commercial sector, if by these means the convertibility of the note could be preserved.[3]

In fact, the foreign credit was used by Baring Brothers to prevent the foreign exchanges falling below a rate set by the Governor of the Bank, persumably the specie export point. But this did not stop the Bank from taking more restrictive measures in line with Currency School thinking. On 1st August, Bank Rate was raised to 6%. They purchased £750,000 Exchequer Bills from the East India Company, agreeing to pay at the beginning of 1840 with part of the Deadweight serving as security in the interim: £230,000 of these were sold in August and another £500,000 were funded into Consols, in the hope that these would prove more saleable.[4]

1 : ibid.: Latham to Norman, 16 July 1839.
2 : Bank of England MSS., CBLb: 21 Nov. 1839.
3 : Norman MSS., C176: Norman to Latham, 17 July 1839; Latham to Norman, 19 & 20 July 1839.
4 : Bank of England MSS., CTMB23: 14, 15, 21, 23 & 31 July 1839; J.C.Hobhouse, Recollections of a Long Life (London, 1911), v. 10 Aug. 1839.

Another problem for the Bank at this time was the state of the cotton market in Liverpool. American cotton production declined from 1.801m bales in the year 31st Aug. 1837 to 31st Aug. 1838 to 1.361m bales in 1838-9, giving rise to a hope of an improvement in the price of the commodity. American cotton importers into Liverpool, encouraged by the ease of credit facilties there, decided to withdraw their stocks from sale, in the hope of benefiting from this anticipated rise. The price of cotton per lb., helped by some speculative buying in the autumn of 1838, rose from 6.625d. in July 1838 to 9.375d. in March 1839.

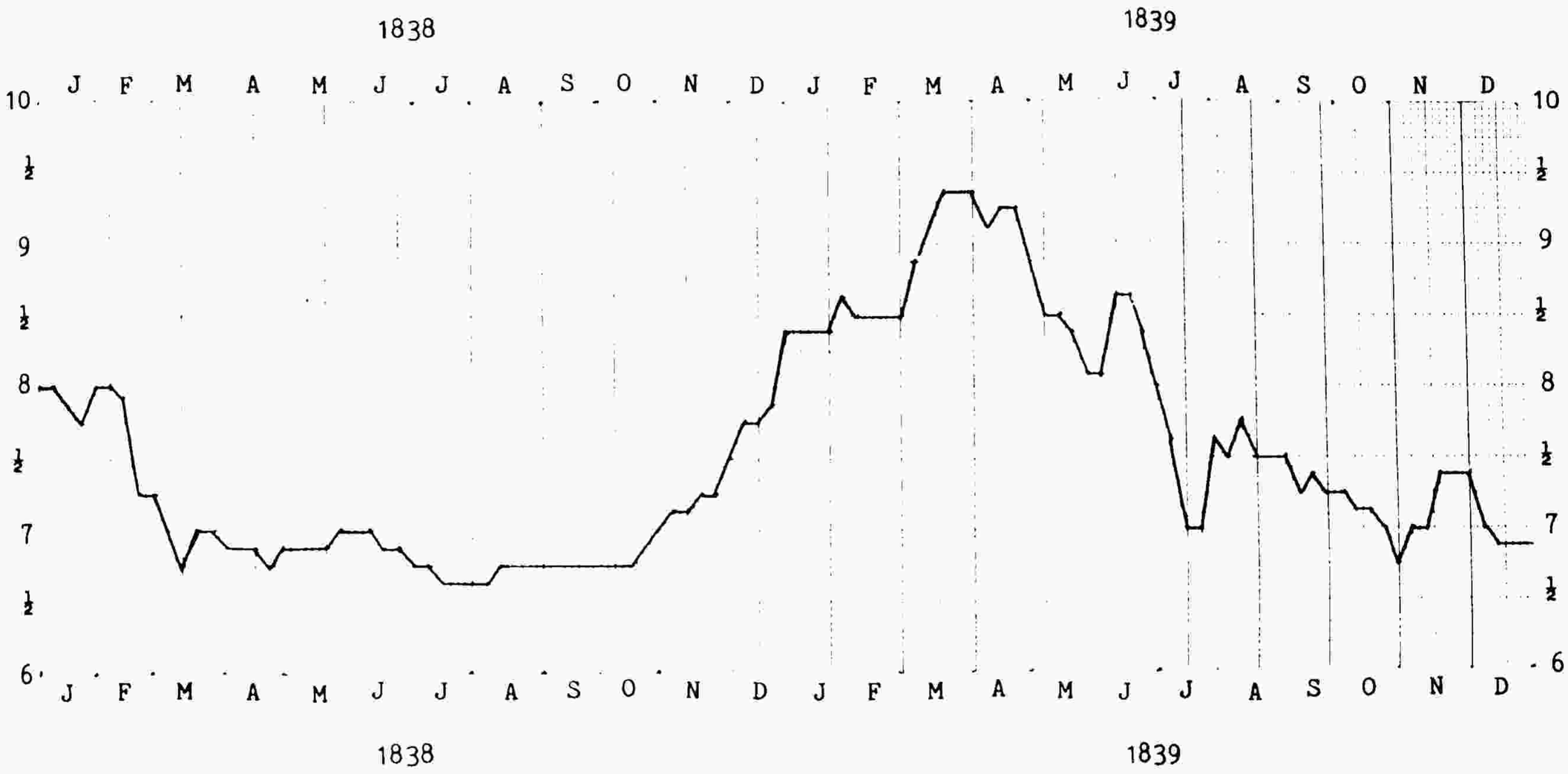
But the anticipated demand at these higher prices did not materialise. Cotton spinners had rebuilt their stocks in 1837-8, taking advantage of cheap and plentiful supplies of cotton, and therefore had no wish to increase their inventories still further.[1] A large stock holding was combined with a sharply-decreased fall in the level of demand for their products. Several contemporaries allege that the high price of the raw material caused by the American price speculation had made British cotton manufactures uncompetitive abroad in the spring of 1839, so leading to a fall in exports of manufactures; inasmuch as this affected the balance of payments the Bank of England would be keenly concerned in such a price speculation.[2] Perhaps more important as an explanation for the fall in demand, however, was a fall in real income following widespread harvest failure across Europe in the autumn of 1838.[3]

Nevertheless, the fall in demand for raw cotton from the Manchester spinners did not result in a precipitous collapse in the cotton market, such as had occurred in 1837. In order to avoid selling cotton imported at high prices at a loss, importers preferred to borrow more to

1 : Baring MSS., HC.3.35/5: BB Lon to BB Lpl, 4 Jan. 1839.
2 : Norman MSS., C192: Palmer to Norman, 27 July 1839; also Tooke, Prices, iii. 74; and see pp.
3 : Temin, Jacksonian Economy, pp. 152-3.

CHART 7.4 : PRICE OF COTTON AT LIVERPOOL, 1838-1839

Average Weekly Price of 'Best Quality Cotton Fair Cotton' in d. per lb.



SOURCE : as for Chart 5.4

keep their stocks off the market, in the hope of meeting better prices later on.[1] The Liverpool Bank Agent wrote in mid-May that[2]

> "at the present time it is quite clear that there is a kind of battle for control going on between the Importers on one hand and the Manufacturers on the other, one striving to keep up the price of cotton which has been perhaps **unnaturally** puffed up, and the other abstaining from coming freely onto the market because they can't work except at a loss from the high price of the raw material".

Consequently, transactions dwindled in the cotton market - average weekly consumption in the first six months of 1839 was approximately 14,000 bales, compared with about 27,000 for the same period in 1838 - while prices did not decline by much.

Of course, the maintenance of large stocks of cotton required financing and this was acquired by the use of brokers' acceptances. The imported cotton was entrusted to a broker for 'sale', but at unrealisable limits, a bill would be drawn on the broker and this would be discounted at a local bank. When this matured, the operation would be repeated. As long as the local banks were able and willing to discount these, cotton could be withheld from sale at the market rate.

The Bank of England could not remain indifferent to such practices, especially if it believed that the damage done to exports by the high price of cotton was responsible in part for the loss of bullion from its vaults. In the words of the Liverpool Agent, to withhold cotton from sale "with the money already in existence may be both legitimate and right, but it is a very different question whether the Bank of England should increase the circulation by fresh issues for any such purpose".[3]

The response of the Head Office was identical to that of 1837.[4] Bank discounts "shall represent <u>bona fide</u> transactions, and be founded, if not

1 : Collins, 'Liverpool', p. 162.
2 : Bank of England MSS., I-L Lpl, 16 May 1839.
3 : Bank of England MSS., I-L Lpl, 16 May 1839.
4 : see p. 235.

"upon a sale actually effected, at least upon goods lodged for immediate sale".[1] Eventually the Agent agreed with this policy:[2]

> "it would never do in such a contest as is now going on between the Importers and the Manufacturers of cotton that the Bank should work with the Importers to advance fresh money in order to increase prices on the credit of bills drawn as you so well express it, to prevent sales?"

He appreciated that a consequence of a collapse of the cotton market might be extensive commercial failures in Liverpool but

> "this is nothing compared with having many of our Manufacturers working only short hours, the families of the operators in great distress in consequence, and this state of things brought about more from the **unnatural** advance in the price of cotton arising from the speculation at the close of the last year, than from any other course".[3]

Some of the assumptions that are contained in this argument are highly debatable, of course. It must be doubted that a fall in the price of cotton would really have increased exports of manufactures of cotton so rapidly, especially in view of the damage that would be done to business sentiment by failures of commercial houses. But the important point to note about Bank policy towards cotton in 1839 was that it condemned any 'unnatural' (the adjective is indicative of their feelings) activity, such as speculation, which disturbed the price of cotton from its market-clearing, i.e. natural, level. The free market price is assumed to be the one that is most beneficial for economic acivity. It is also the one that is necessary for the international monetary system to function in the orthodox fashion.

1 : Bank of England MSS., PLB Lpl 6, f. 278: 17 May 1839.
2 : ibid., I-L Lpl, 3 June 1839.
3 : ibid., 16 May 1839 (my emphasis).

The French credit proved successful in preventing the further export of gold, and the stock of bullion fell gently to a low of £2.406m on 3rd Sept., and thereafter rose slowly. But the transaction turned out to be more complicated than was originally intended and had to be renewed after the original three months expired at the end of October. The whole debt was not paid off until well into 1840. The other measures taken to contract the circulation were largely unsuccessful in controlling the growth of discounts, for the average of securities went as high as £25.936m in September. Exports increased, but not as a result of price falls, for commodity prices remained stable or even rose slightly.

Considerable anxiety about the prospects for the Bank were felt throughout the autumn, due to worries about the state of the harvest. Spring Rice informed the Cabinet on the 10th August that if there were a second successive poor harvest, "we should be obliged to have recourse to a Bank Restriction Act".[1] In fact, the harvest was not so bad as expected; retrospectively, although money was to remain exceptionally tight until the New Year, the troubles of the Bank in 1839 were at an end once the credit with the Banque de France had been completed.

Although an outflow of gold as rapid as that of 1839 would have troubled any central bank with liabilities payable in gold, there can be little doubt that the most severe problems suffered by the Bank of England were self-inflicted. This was certainly the opinion of Horsley Palmer, who believed that the "principle (of fixed securities) would <u>very very nearly</u>[2] have worked thro' 1839" had not the Rothschild stabilisation of the exchange rate been cancelled. Its stoppage caused a renewal of the drain

1 : Hobhouse, <u>Recollections</u>, v. 10 Aug. 1839; also, Brit. Mus. M. 859 (Melbourne MSS.), Box 1/33: F.T.Baring to Melbourne, 19 Sept. 1839.
2 : Palmer's note in Norman's Defence, Jan. 1840, Norman MSS., F37, & O'Brien, <u>Overstone</u>, 1. 270.

of bullion but in such a form as to make it more difficult to stem. The counterpart measure of the stoppage, the increase in Bank Rate to over 5%, was completely unsuccessful in checking the rise for discounts, which in fact increased owing to the general uncertainty existing in the financial system.

Palmer was undoubtedly right in his diagnosis that the actions of the Currency School faction in the Court of Directors were completely inappropriate in the circumstances of June 1839. But can any criticism be levelled at the Bank while it was acting under the control of the more enlightened section of its Directors? The one most commonly made, by all sections of economic opinion, was that stringent measures were only made necessary by the failure of the Bank to act sufficiently early or sufficiently strongly to control its circulation. In particular, it should have taken the opportunity to raise interest rates during the February-April quarterly advances. This is essentially the same criticism as that made by Matthews, Collins and Lévy-Leboyer, and its truth was admitted, secretly within the Bank, by the Currency School faction in November 1839 and publicly before the Commons Select Committee in May 1840 by G.W.Norman.[1]

In the Bank's defence it must be said that it was their custom to follow the market rate of interest and not to use the quarterly loans as a means of engineering a higher rate of interest. Also, it appeared to the Bank that "extraordinary measures did not then seem necessary", for they believed that the drain of bullion would be limited. In December the then Governor, Curtis, told the Chancellor that, despite the weakening exchanges, "as far as regards the Bank we have nothing to fear...I do not believe the quantity of corn which can be obtained from abroad will be[2]

1 : Bank of England MSS. CBLb: 21 Nov. 1839; P.P. 1840, iv (602), q. 1892.
2 : Norman's Defence, Jan. 1840, in Norman MSS. & O'Brien, Overstone, i. 258.

"excessive - and therefore the position of the Bank is one of safety".[1] In hindsight, he can be criticised for being complacent about the threat to the bullion stock; but it should be pointed out that many others made this same mistake, and that the Bank's measures in the first half of 1839 were received at the time with praise from the commercial community. For example, the Circular to Bankers, which was to condemn the Bank so strongly at the end of the year,[2] in March thought the Bank's conduct "judicious" and "unexceptionable".[3]

Ironically, Palmer in 1830 had been keenly aware of the necessity for raising Bank rate at the earliest signs of a drain. In the situation in which the Bank was placed at the beginning of 1830[4]

> "the only wholesome regulation to be applied is the advance in the rate of interest...It is only by thus early acting upon the value of money, that the exchanges can be corrected. If a delay takes place until the Bank finds its stock of bullion diminished, than arises the urgent necessity of the Bank acting upon the money market...and the attempt frightens the Public out of their senses".

But eight years later Palmer was arguing that Bank Rate was an inappropriate instrument to use in the defence of convertibility in the circumstances of 1839, bringing no certain benefit and probably inflicting much harm on commerce: in particular, the export trade was affected because "it was carried on by credit of four, six and twelve months, nearly the whole of which is crippled...in periods of high rates of interest".[5] Looking back in 1840 on the events of the previous year, he conceded that it might have been wiser to make an earlier contraction, if the course of events after May 1839 could have been predicted. But it is significant that he doubted if this would have been of much help, because

1 : Monteagle MSS. 13,390/1: Curtis to Rice, 14 Dec. 1838.
2 : see the quotation on p. 10.
3 : Circular to Bankers, 29 Mar. & 12 Apr. 1839.
4 : Bank of England MSS., LB6, ff. 188-9: Palmer to Nicholls, 17 Nov. 1830.
5 : Norman MSS., C192: Palmer to Norman, 8 Aug. 1839; for his later opinion on the use of Bank Rate see, P.P. 1847-8, viii (395), q. 2102-3 & 2206; and P.P. 1847-8, viii, pt. iii, (565), qq. 735 & 1018.

the causes of the external drain of bullion were so peculiar.[1]

The modification in Palmer's views on the utility of Bank Rate as a monetary instrument reflects a wider change of emphasis in his thinking on monetary policy in general, which was a result of the problems experienced by the Bank in the 1830s. For while 'the principles of 1832' were probably more successful in achieving the objectives of monetary policy than some others would have been, the Bank's new approach had not succeeded in removing instability from the financial system.

1 : P.P. 1840, iv (602), q. 1594.

Chapter Eight: the Bank of England foreign exchange stabilisation of 1839

Very little has been discovered about the mechanism of the foreign exchange transaction undertaken by the Bank of England with the Banque de France in 1839. From the answers given to the 1840 Commons Select Committee by Palmer and Norman,[1] it is known that a credit of £2m was drawn on Paris through the agency of Baring Brothers and that another £800,000 was drawn on Hamburg. Clapham was able to supply some details of the Paris transaction from a study of the Bank of England archives,[2] "but details of the (Hamburg) transaction are not known".[3] However, a very thorough account of the affair can be given from the archives of Baring Brothers, and from a sample of these Hidy has written an incomplete but neglected description of the events.[4] In fact, as this chapter will show, the exchange operation of 1839 was a good deal more complicated than the 1840 Select Committee evidence suggests, requiring a great deal of skill and complexity to execute it successfully.

From a wider angle, the episode is significant because it represents an increasing awareness on the part of the Bank of England that the foreign exchanges were of such importance to the success of monetary policy that they could not be allowed at crucial junctures to remain in their natural state - that is, left to be determined by market forces. Instead, the Bank realised that the end of monetary policy was better served if occasionally it intervened to stabilise the foreign exchange markets.

The Bank of England was not unused by 1839 to involvement in transactions which disturbed the free market international distribution of specie. Convertibility of the note issue had only been maintained in 1825

1 : P.P. 1840, iv (602), qq. 1368-88, 1436-71 & 1896-1902.
2 : Clapham, Bank of England, ii. 168-70.
3 : Fetter, Development, p. 175, n. 16 & 17.
4 : Hidy, House of Baring, pp. 275-6.

through the good offices of Nathan Rothschild in attracting gold from abroad, especially Paris.[1] In 1831 the Bank had authorised Messrs. Heath & Co. to maintain the foreign exchanges at its own risk, and in the following year it had sent £1m of bar silver to Paris for sale, at a cost to itself of some £60,000.[2] In the winter of 1836-7 it again used N.M.Rothschild & Sons to procure gold from Paris.[3] In March 1837 it offered to the Bank of the United States a £2m credit for drafts from America on the Bank of England. Half would be covered by the simultaneous transmission of bullion, the remainder would be paid off in six months, with American stocks serving as security in the interim.[4] The following year, the Bank transmitted £750,000 of gold to the U.S.A. for the purpose of aiding the resumption of specie payments there.[5]

In addition, other proposals had been made to the Bank concerning the possibility of intervening in foreign exchange markets. In November 1836, Baring Brothers asked the Bank for a short term loan of £100,000 Exchequer Bills, with acceptances on themselves serving as security. Barings intended to transfer these to a Paris banker, Delessert, as security for £100,000 bills drawn on him and sold in London. These sales of foreign exchange would strengthen the exchanges and help to prevent the further export of gold, at the same time as the sums procured by Baring Brothers would relieve them of the need to borrow in the money market.[6] Nothing seems to have come of this idea, however.

1 : B.Hilton, Corn, Cash and Commerce, pp. 216-7; Fetter, Development, pp. 117-8; Clapham, Bank of England, ii. 101; Norman MSS., F59: Autobiography, f. 358.
2 : see pp. 36-7.
3 : see p. 178; references to the foreign exchanges being supported by the Rothschilds can be found in Baring MSS., LB5D, ff. 650 & 685: Bates to Jaudon, 1 & 13 Dec. 1836; LB7, f. 29: BB to Hottinguer, 20 Jan. 1837; & LB6, f. 24: Bates to Parish, 3 Mar. 1837.
4 : see pp. 192-3 & 197-8.
5 : see pp. 248-9.
6 : Baring MSS., LB5D, f. 572: BB to (Hott)inguer, 4 Nov. 1836; HC.7.1/71C: Hott to BB, 7 Nov. 1836; Reel 4, 3672: Bates to BB, 13 Nov. 1836.

In March 1837, Hottinguers of Paris suggested to Barings that it would be mutually beneficial if the Bank of England were to borrow 10mF of gold from the Banque de France, which possessed excess bullion reserves. The Bank chose not to take up this offer and when it was repeated at the end of June, the Court of Directors again refused, since they felt certain of receiving more gold at the normal price in the near future.[1]

So the prospect of managing the foreign exchanges to the Bank's own advantage was not a novel one for the Directors in May 1839, when they again enlisted the help of Rothschilds.[2] The idea of attracting gold from Paris had also occurred to other market participants. In the middle of June, the Banque de France, perhaps at the instigation of Henri Hottinguer, actually discussed the possibility of aiding the Bank of England, but could see no way around the restriction in its Charter that they could not accept assets payable in a foreign country as security for a loan.[3]

But as the Bank of England's strategic position continued to decline through the summer of 1839, contact was re-established with the Banque de France. It is likely that Comte D'Argout, the Governor of the Banque, who was on holiday in Britain, took the first initiative. Negotiations had been under way for four days, when Joshua Bates wrote on the 20th July that

> "the Bank applied to my house yesterday to assist them in negotiating a loan from the Bank of France, which Tom Baring and I tho't there could be no hesitation about entering in, but Mildmay (the third executive partner) was violently opposed to. I went to the House of Lords to see Lord Ashburton and get his opinion, which was the same as Tom and myself".[4]

1 : ibid., 3454: Bates to BB, 27 Mar. 1837; LB7, ff. 165 & 426: BB to Hott, 25 Mar. & 30 June, 1837; HC.7.1/75: Hott to BB, 23 Mar. 1837; HC.7.1/77: Hott to BB., 27 June 1837; Hidy, House of Baring, pp. 532-3.
2 : see pp. 252-4.
3 : Baring MSS., HC.7.1/104: Hott to BB., 24 June 1839; LB9, f. 164: BB to Hott, 28 June 1839; for an earlier proposal of Hottinguer, see Reel 55, 61297: Hott to BB, 15 May 1839; cf. Circular to Bankers, 31 May 1839.
4 : Bates MS.: Diary, 20 July 1839.

Humphrey Mildmay's reaction is odd, since he had been a Director of the Bank since 1828, and in 1839 was serving his year by rotation out of the Court. The Court of Directors approved of the £2m credit on the 20th July.[1]

Doubts had arisen in the Bank about what form the loan would take. Hottinguer and Delessert thought the Bank of England should sell on the Continent promissory notes of three months' maturity, similar to the post bills of the Bank of the United States issued in 1837, which would be sold easily if the Banque de France was willing to discount them. The snag was that the Banque could only make loans on the security of financial assets payable in France. In addition, the Bank of England was unwilling to put its name to openly-marketed bills of exchange.[2] Opinion swung round to the idea of employing a mercantile house as agent, who would draw on their correspondents in Paris to the appropriate amount, so creating three months' bills discountable at the Banque de France. Baring Brothers were chosen for this role, since the Bank of England could hardly re-apply to Rothschilds whose services it had so recently spurned. Barings would have complete discretion over the management of the operation, whose object was "not to produce any forced or violent rise in the exchange, but to keep it steadily, both here and at Paris at such a rate as will prevent a profitable export of bullion from this country".[3]

However, several problems were to appear at the French end. Timothy Curtis, the Bank's Governor from 1837 to 1839, Comte D'Argout and Thomas Baring left for Paris on the 23rd July. At several meetings on the 25th, it was confirmed that there would be no direct operation between the two institutions, but a new problem emerged when Hottinguer and Delessert

1 : see p. 254.
2 : Baring MSS., LB9, f. 189: BB to T.Baring, 23 July 1839; HC.7.1/104: Hott to BB., 24 June & 22 July 1839; Norman MSS., C176: Latham to Norman, 16 July 1839.
3 : ibid., Latham to Norman, 19 July 1839; Baring MSS., HC.3.52/1b: BB to B of E, 22 July 1839; ibid., Sir John Rae Reid to BB, 22 July 1839; LB9, f. 179: BB to Hott, 19 July 1839.

said that £2m was too large an amount for them to act as intermediaries alone. The remainder of the day was spent collecting the names of houses who would be prepared to come into the agreement if the Bank of England gave its guarantee, and as a result twelve firms met at Henri Hottinguer's house on the 16th July. Ten of these agreed to the transaction for 4mF each and only two, Rougemont and Rothschild, backed down. Although only ten had signed for a total amount of 40mF, Hottinguer did not anticipate any trouble in finding a further two.[1] The Conseil-General of the Banque de France agreed on the 27th to discount for the general public bills to the extent of 4mF on each of the ten firms, thus assuring prospective purchasers of foreign exchange in London that these bills would be perfectly liquid when remitted to Paris.

But another hitch occurred at this point: Mallet Freres "upturned the apple cart" by reducing their subscription to 2mF. Others followed their example and the whole arrangement was placed in jeopardy for a time. However, Thomas Baring, left in charge after Curtis returned to London late on the 17th, managed to solve all the problems and the contract was finally signed on the 30th July, in time for news to reach the Court of Directors in London at their weekly meeting on Thursday, 1st August.[2]

If the Paris bankers had withdrawn, it is likely that the Bank of England would have asked Rothschilds to step into their place, possibly in collaboration with Barings. Thomas Baring described James Rothschild as "very angry and says the Bank of England has lowered itself" by negotiating with a consortium. He claimed his house could have carried out the whole transaction itself, without the need for a guarantee on the part of the Bank.[3]

1 : ibid., HC.1.20.4/1: T.Baring to BB, 27 July 1839; Bank of England MSS., CBLb: Curtis' Report, 1 Aug. 1839.
2 : Baring MSS., HC.1.20.4/1: T.Baring to BB, 27 & 28 July 1839; HC.7.1/104: Hott to Barings, 30 July 1839.
3 : ibid., HC.1.20.4/1: T.Baring to BB, 27 July 1839; LB9, f. 201: BB to T.Baring, 30 July 1839.

The technical arrangements were as follows. The total credit was for 48mF, to be spread over three months and with no more than 3mF being drawn at each of the sixteen post days to Paris in August, September and October. Among the original houses, eight subscribed for 4mF: Andre & Cottier, Baguenault, D'Eichthal, Hottinguer, Lefebvre and Pillet Will. Two subscribed for 2mF: Mallet Freres and Perier Freres. Five other firms later joined, one for 4mF, Lafitte, and the remainder for 2mF: Blanc, Colin et Cie., G.Odier, Aguirrivengoa & Uribarren and Hagermann. They would receive a commission of ½% on all amounts drawn; the agreement could be renewed at the expiry date of 30th October for another three months, earning an additional commission of .33%. As soon as the drafts were drawn (payable in Paris three months later), the Cashier of the Bank would transfer some amount of the Deadweight Annuity into the names of F.M.Delessert, J.H.Hottinguer and T.Baring, who would act as Trustees for the security. But they did not receive security for the total amount of drafts drawn - only £120,000 in all was transferred. Once the transfer was received in Paris, the Banque would discount the drafts for any holders who wanted immediate cash.[1]

The transaction was made more sophisticated by Barings being able to draw short bills on Paris (less than 4 days' us ance), having previously sent unnegotiated three months' bills to the Parisian house. The point of this was to ensure that the short rate of exchange did not fall below the specie export point. The Parisian house would acquire the funds for paying the short date bill by discounting the longer date remittance at the Banque de France. He would earn an additional .25% commission for this service. Alternatively, Barings might instruct him to buy up (in Paris) bills on London, so keeping the Paris foreign exchanges in equilibrium with the rates in London. A commission of .125% and brokerage fee of .125% would be given for this.[2]

1 : ibid., LB6, f. 175: BB to Hott, 6 Aug. 1839; HC.1.20.4/1: T.Baring to BB, 27 July 1839.
2 : ibid.

These three kinds of transactions were almost equally important: approximately £487,000 was drawn at three months' date, around £475,000 at short dates, and almost £468,000 was remitted from Paris.[1]

Up to the 27th August, a total of £389,650 of the Paris credit had been used, made up of £189,376 foreign exchange sold in London, £176,400 in remittances from Paris and £23,872, the proceeds of which had been used to pay off the Bank's debt to Rothschild for his May drafts. The credit had been litle used up to this point.[2] But Barings had not considered these Paris operations on their own adequate to stop the outflow of gold. Before the signing of the contract with the French houses, they had been selling exchange on Berenberg, Gossler of Hamburg, Hope of Amsterdam and Grant, Balfour of Leghorn, Trieste and Genoa. On the 24th July, they made a formal approach to Salomon Heine of Hamburg for his co-operation, which was willingly given; during the next month almost £100,000 was drawn on Heine, the proceeds of which were all paid into the Bank of England, but he did not receive portions of the Deadweight Annuity as security for his liabilities - the Bank only gave its word to pay the bills when they matured.[5]

Despite the little business that had been required by the end of August, Barings felt that the operation was not achieving its stated objective. Therefore they wrote to Sir John Rae Reid, the Governor of the Bank, that

> "to stop the export of gold, it is necessary to make the Paris operation available to Hamburg to a considerable extent. This can be done by opening credits for our Hamburg friends on Amsterdam, Vienna and Paris - this will give them funds to take bills on London. It would help if our friends at Vienna could obtain funds by drawing on Paris, so as to take bills on London".

1 : ibid., HC.3.52/1b: Bank of England file.
2 : ibid., Reid to BB, 2 Aug. 1839; LB6, ff. 169 & 210: BB to Reid, 3 & 27 Aug. 1839; Reel 59, 65761: BB to Reid: 6 Aug. 1839.
3 : ibid., BB to Heine, 24 (Reel 59, 65754) & 30 July (LB9, f. 199), 6 (LB6, f. 177) & 23 Aug. (Reel 59, 65783) 1839; HC.9.10: Heine to BB, 30 July 1839; HC.3.52/1b: Reid to BB, 27 Aug. 1839.

The Governors approved of these proposals.[1] The latter part had been suggested by an occasional contact of Barings in Vienna, M.Suzzman, who argued that the aims of the Bank would be aided by the purchase in Vienna of bills on London, without a corresponding demand for foreign exchange in London. The two firms were employed were Arnstein & Eskeles and S.G.Sina, who remitted £180,659 and £125,624 respectively to London. In addition Heine was given a credit of 100,000 florins (just over £10,000) on the former to reimburse himself and Hope & Co. of Amsterdam a credit for the same amount on Sina. Approximately £116,000 was remitted to cover them in the form of bills on Paris; the remainder was covered by the purchase of drafts on Hamburg and Vienna, which were remitted to Austria so that their accounts were covered by the end of the year.[2]

Simultaneously the Hamburg transactions were increased in intensity. Heine had suggested from the beginning that it would be helpful to correct the foreign exchange on London in Hamburg, by his purchasing bills on London with silver remitted from Britain.[3] By the end of August, both Barings and the Bank had accepted the propriety of this suggestion and they now believed that the Hamburg exchange was "the one on which the chief action of the Bank operation must be brought to bear".[4] At first, they tried to provide funds for Heine by selling bills on Paris and Vienna but these devices proved insufficient, so that the Bank sent £31,000 in silver themselves from London and ordered another £50,000 to be remitted from Paris.[5] In all, Heine remitted £183,921 to London in bills of exchange. A further £778,000 was drawn on him in addition to the £100,000 before, making £878,000 in total. To some extent the French

1 : ibid., LB6, f. 210: BB to Reid, 27 Aug. 1839; HC.3.52/1b: Reid to BB, 27 Aug. 1839.
2 : ibid., HC.9.12: Suzzman to BB, 16 Aug. 1839; HC.3.52/1b: Bank of England File.
3 : ibid., HC.9.10: Heine to BB, 30 July, 3, 16 & 20 Aug.1839.
4 : ibid., Reel 59, 65783: BB to Heine, 23 Aug. 1839.
5 : ibid., LB6, f. 216: BB to Hott., 30 Aug. 1839; BB to Heine, 30 Aug. 1839; Reel 59, 65836: BB to Hagermann, 30 Aug. 1839; HC.3.52/1b: Reid to BB, 3 Sept. 1839.

credit was used to cover this, with £22,000 bills on Hamburg being purchased in Paris and £140,000 bills on Parisian bankers being remitted from London. But the greater part of the Heine transaction was not financed by the French credit and was an independent operation.[1]

During September and October the Paris credit was used more thoroughly. This was due partly to poor weather inducing worries over the state of the harvest, partly to the Bank of England setting too high a rate for Baring's drafts and partly to the opposition of the Rothschilds. The Bank had incurred liabilities of almost £291,000 for the Rothschild exchange operation of May, but the latter had borrowed £400,000 in silver at the end of 1838 which was due to be repaid at the end of June. Rothschild proposed that this debt should be repaid gradually, by the Bank not paying him as his drafts on their account became due. The Bank rejected this and asked Rothschild to repay in cash, so that their circulation would be reduced, in spite of Rothschild's warning that this "would be extremely injurious to the foreign exchanges and partly counteract the good effects now beginning to be produced by our operations in drawing bills".[2] Horsley Palmer concurred in Rothschild's criticism, thinking it would be better to use his debt for foreign payment, which was the effective consequence of Rothschild's proposal.

It seems that the Bank's liability to Rothschild was liquidated by use of the Banque de France credit. From the proceeds of Baring's drafts upon Paris, £24,000 was handed over to Rothschild at the beginning of August, followed by a further £267,000 at the beginning of September.[3]

It was evidently pique at being superseded by the Barings as the Bank's agent in foreign exchange matters and annoyance that their proposal for repayment had been turned down that led the Rothschilds to attempt to prevent the Bank from attaining their object of stabilising the foreign

1 : ibid., B of E File.
2 : Bank of England MSS., CTMB23, 2 Jan. 1839; CBLb, 20 June 1839.
3 : Baring MSS., HC.3.52/1b: Reid to BB, 2 Aug. 1839, & B of E file; LB6, f. 216: BB to Hott, 30 Aug. 1839; P.P. 1840, iv (602), q. 1376.

exchanges. At first, their opposition took the form of using funds obtained by discounts at the Bank of England to buy the drafts on Paris which the Barings were selling - employing Bank resources to defeat the object for which the Bank had intervened in the foreign exchanges.[1] Later they drew three months' bills on London abroad, which would be purchased by Barings' agents in Paris, Hamburg or Vienna. At length the latter were instructed not to buy paper from Rothschilds or indeed any paper of more than one month to maturity, since this was equivalent to an increased discount by the Bank and was liable to lead to an export of gold from London. Barings perceived that Rothschild's bills were not drawn for the purpose of withdrawing funds from London but solely to damage the Barings' efforts and "we do not wish to encourage the creation of paper for circulation or exchange purposes".[2] The ultimate aim of the Rothschilds, Barings thought, was to force the Bank to apply to them for gold to be sent from Paris, where 21mF of gold was deposited on their account in the Banque de France.[3] As the agreement with the French bankers drew nearer to its close at the end of October, Rothschild's counteractive efforts increased in intensity.

This opposition was defeated by the negotiation of further credits of £100,000 each with Hottinguer, Baguenault, Andre & Cottier and another Paris banker not involved in the original agreement, Greffulhe. These were all secret, since their instigator, Joshua Bates of Barings, believed that the publicity given to the Banque de France credit had considerably diminished its effectiveness. Hottinguer reported that James Rothschild was "much intrigued" by these further drafts when they appeared at the

1 : Norman MSS., C176: Latham to Norman, 25 & 27 Aug. 1839.
2 : Baring MSS., LB6, f. 272: BB to Andre & Cottier (A & C), 24 Sept. 1839; Reel 59, 65836: BB to D'Eichthal, 24 Sept. 1839; LB6, f. 343: BB to Heine, 18 & 22 Oct. 1839; BB to Suzzman, 18 (Reel 59, 65894), 22 & 25 Oct. (LB9, ff. 231 & 237) 1839.
3 : ibid., Reel 55, 61372: Hott to BB, 26 Sept. 1839; LB6, f. 296: BB to Hott, 28 Sept. 1839.

beginning of November. Simultaneously the Bank refused to discount for Rothschild in London, so forcing him to borrow at very high rates of interest on the stock exchange.[1]

At this point Rothschild threw in the towel, and offered to transfer from Paris the sovereigns deposited at the Banque de France on his behalf, which was declined. He also proposed on behalf of the Prussian Government, to loan to the Bank for six or twelve months £1m at 4% interest and 1% commission. The Barings considered this loan unnecessary but advised its acceptance on the grounds that it would necessitate the Rothschilds co-operating with the Bank to raise the foreign exchanges.[2] But it seems that they were acting without the authority of the Bank of Berlin or the Prussian Government, since the terms demanded were subsequently changed to 6% interest, which the Bank was not prepared to pay for a loan they did not really need, and the transaction came to nothing.[3] The only consequence was that in November the Rothschilds supported the foreign exchanges by buying bills in continental centres.

Problems also arose over how quickly and in what form the foreign credits were to be paid off. The agreement with the French houses had been unanimously renewed at the end of October, thereby extending the date of repayment to the beginning of March. But the Bank were keen to pay the debt before this, since a majority of the Court would not allow a reduction of the discount rate until this had been done. The shipment

1 : ibid., HC.3.52/1b: Reid to BB, 5 Nov. 1839; HC.1.20.8/2: Bates to BB, 28 & 31 Oct. 1839; LB9, f. 248: BB to A & C, 1 Nov. 1839; HC.7.16: A & C to BB, 3 Nov. 1839; HC.7.6: Baguenault to BB, 29 Oct. & 4 Nov. 1839; LB9, f. 250: BB to Baguenault, 1 Nov 1839; HC.7.1.104: Hott to BB, 4 Nov 1839; LB9, f. 253: BB to Hott, 5 Nov. 1839; LB9, f. 252: BB to Heine, 5 Nov. 1839.

2 : ibid., LB9, f. 253: BB to Hott, 5 Nov. 1839; LB9, f. 252: BB to Heine, 5 Nov. 1839; BB to Suzzman, 8 Nov. 1839.

3 : ibid., HC.9.12: Suzzman to BB, 19 & 30 Nov. 1839; BB to Suzzman, 19 Nov. 1839; LB9, f. 281: BB to Heine, 19 Nov. 1839; HC.9.10: Heine to BB, 26 Nov. & 3 Dec. 1839; LB9, f. 309: Bates to Oppenheimer, 29 Nov. 1839; LB9, f. 283: BB to Hott, 19 Nov. 1839.

could either be made by shipments of silver or by large scale purchases of foreign exchange.[1] Barings, however, were opposed to this sudden repayment: "if the debts can be gradually paid off by a surplus of bills on change every post day, it is undoubtedly the duty of the Bank to take these bills and thus gradually increase the circulation as it pays off the debt".[2] Their suggestion was acted upon: either silver was sent to pay off the bills as they matured, or the Bank asked either Rothschild (back in favour again) or Barings to purchase foreign exchange. The whole credit was paid off by the middle of April 1840 when the Deadweight Annuity which had performed the function of security was returned to London.[3]

Table 8.1: Means of Repayment of the French Credit

Gold shipped to Paris	20,225,000 Francs
Silver likewise	14,790,000
Bills from Rothschild	2,658,845
Bills sent to Paris	10,326,155
Total	48,000,000

Source: Baring MSS., HC.3.52/1b. Rothschild gave the bills to the Bank as payment for a purchase of silver from them.

Although the interference in the foreign exchange market was successful in its objective, the prevention of the further export of gold and thus the maintenance of specie payments by the Bank of England, it was not without blemish. Considerable difficulties were encountered at the beginning in negotiating with twelve houses, in frustating the Rothschild's opposition and in bringing the matter to a satisfactory conclusion, which prompted some to consider alternative methods of achieving the same object. Curtis in his Report to the Court of Directors commended the helpfulness of the Banque de France and suggested that the Bank should consider entering into permanent correspondence with it, which would relieve the Court "from the necessity of applying to individuals in

1 : ibid., LB9, f. 319: BB to Hott, 2 Dec. 1839; HC.7.104: Hott to BB, 16 Nov. 1839; Reel 59, 65976: BB to Suzzman, 6 Dec. 1839.
2 : ibid., LB9, f. 371: Bates to Pelly, 30 Nov. 1839.
3 : ibid., LB9, ff. 323 & 330: BB to Hott, 6 & 7 Dec. 1839; LB9, f. 333, BB to S. Heine, 6 & 10 Dec. 1839; LB10,: BB to Reid, 4 Feb., 23 & 31 Mar. & 11 May 1840.

"business when it may be desirable to operate on the foreign exchange".[1] Palmer argued that if the leading banks in various countries opened accounts with one another, "and could carry out their payments through negotiations on those respective bodies, the exchange could be more easily adjusted than by the transmission of bullion".[2]

The Bank of England was coming to appreciate that it was better on occasions to manage the international monetary system by co-operation between central banks in leading financial centres, rather than to leave it to its own devices. This might distort the international distribution of bullion from the 'equilibrium position' that would have been produced by free market forces, but paradoxically such intervention increased the chances that specie convertibility in individual countries would be maintained.

1 : Bank of England MSS., CBLb: I Aug. 1839.
2 : P.P. 1847-8, viii (395), q. 2018.

Chapter Nine: Conclusion

Once it had been accepted that the objective of monetary policy was convertibility of bank notes into gold at a fixed rate, which meant aiming at an exchange rate target set by the specie export and import points if other countries also adopted a bullion standard, the focus of disagreement and debate in monetary matters became the most effective means of securing specie convertibility. In 1832 the Bank of England had put forward one solution and it began to adopt this as its policy from 1833. In the light of the monetary history of the subsequent years, what conclusions can be drawn about the policy chosen by the Bank of England in 1832, and indeed for the formation of monetary policy generally?

The main lesson is that an appropriate monetary policy can only be constructed in the light of current financial arrangements; in this definition are included not only what has been traditionally known as the 'monetary system' but also the wider financial system - all those institutional mechanisms which distribute and allocate financial resources. The ideal monetary policy should recognise three important characteristics of financial arrangements: first, their vulnerability in the face of any unexpected shock; secondly, the short-run behaviour of the financial system over the trade cycle which increases the likelihood of institutional collapse; thirdly, the probability that the financial system will evolve over time so as to make any pre-determined plan of control increasingly difficult to accomplish.

These three characteristics can be clearly identified in the monetary history of the 1830's.

All financial systems contain elements of instability, in that if any borrower defaults on his debt, the lender's net worth and liquidity are immediately reduced. His misfortune will damage his own creditors and the harmful effects may spread right across the economy. But it is fair to say that the bill of exchange system which had evolved by the mid-nineteenth century was more prone to collapse than most, notwithstanding

the safety supposedly conferred on every bill of exchange if it was based on a 'real' transaction and accompanied by a bill of lading, representing control over the goods on which the bill of exchange was drawn. Such bills were always liable to be dishonoured by the drawee if the value of the goods on which they were drawn suffered a sharp decline in between the time of drawing and the date of maturity. But perhaps more important in producing instability was the legal custom of making all endorsers of the bill contingently liable to pay it. Bills of exchange, as negotiable instruments, were frequently sold to banks in order to raise cash, or were accepted as media of exchange in private sector transactions. Any bank which bought a bill of exchange and then sold it on to another financial intermediary would endorse the bill, accepting his liability to pay it in the event of the drawee failing to do so at maturity. Thus, during a financial crisis, an endorser might well be enveloped in the general turmoil, despite his being completely unconnected with the source of the original disturbance.[1] In the Anglo-American sector of the 1830's, the weakness of the bill of exchange system was particularly marked: bills drawn on one part of transatlantic trade, the shipment of cotton from the Southern States to Britain, were used to pay off the London financial institutions which had financed the export of British goods to America. The latter were liable to be dragged down by any upheaval in the cotton trade which led to the dishonouring of the bills of exchange drawn on the cotton shipment, even if they had already discounted the bill at a discount house.[2] Communications problems between the two countries (it often took seven weeks for a sailing ship to make the westward crossing to the States, and never less than four) meant that a consequence of such an eventuality would be extremely serious.

Secondly, it must be recognised that the structure of the financial system will alter in the short run, so as to decrease the

1 : see pp. 86-8.
2 : see pp 112-3.

liquidity and increase the likelihood of an institutional collapse. This tendency to instability in the course of the trade cycle is basically a result of the instability of expectations. Expectations about future events are formed by all economic operators in the light of the information available, and in the absence of perfect foresight are influenced by uncertainty. A certain amount of risk is inherent in all undertakings. But peoples' anticipations of risk are by no means constant. As economic activity rises in the upswing of the 'real' trade cycle, the success of engagements previously entered into will cause operators to alter their anticipations of risk, in two ways: first, they will be more inclined to enter into risky transactions; secondly, their expectation of the likely outcome of any one transaction will become more optimistic. They will thus increase the scale of their business activities, an increase which will tend to be self-justifying. The success of these operations will, in time, lead to further improvements in confidence concerning future prospects. The rise in confidence will feed on itself so that at the highest point the economy will reach a state of euphoria, where expectations of the future are very optimistic.[1]

The significance of the instability of expectations is not that at some stage people will enter into transactions that are irrational, or are unwarranted by the state of the 'real' economy. It lies in the changes in the financial structure which are necessary to accommodate a higher level of activity. Borrowers are willing to emit less favourable liabilities, of a type which involves refinancing at frequent intervals. On the other hand, savers, or those who lend out financial resources, will be willing to accumulate less marketable assets. For both parties, the uncertainty reflected in the cost of the additional refinancing (for the borrower) or in the greater risk of default and loss of liquidity (for the lender) has declined. Therefore for the borrower the cost of finance has fallen,

1 : see pp. 218-9.

despite the less liquid structure of liabilities; and for the lender, the net yield has risen, despite the presence in his portfolio of assets hitherto regarded as unacceptable. The rise in economic activity is financed by "pervasive liquidity-decreasing portfolio transformations"[1] which leave the financial system more open to the risk of financial collapse.

The best examples in the 1830's of this phenomenon are the increasing proportion of the value of a cotton shipment given in an advance to the American cotton shipper. Competition between the Liverpool cotton importing houses had the result that on occasions the American shipper might draw for as much as 100% of the value of the crop, as opposed to the usual 75%. This increased the risk that, in the event of a rapid fall in the price of cotton, the Liverpool houses would be forced to protest the cotton bills drawn on themselves, thus placing in difficulties the London firms to whose these bills were sent as remittances.[2] A second example of the growing illquidity of the financial system was the reliance upon external finance of the American houses based in London. As soon as they received remittances from the U.S.A., rather than hold these to maturity, many discounted them in the discount market to obtain ready funds to pay off maturing acceptances. If these external sources of finance were unexpectedly cut off, they would find themselves in a tricky spot.[3]

The third major characteristic of the financial system is that in the long run its role in the allocation of resources undergoes considerable change, as it makes innovations in response to profitable opportunities which improve its efficiency as an intermediary but possibly increase the instability of the whole system. The two important financial innovations of the 1830's were the new joint stock banking system and the Anglo-American merchant banking sector. How did these change the nature of British financial institutions?

1 : Minsky, Financial Instability, p. 10.
2 : see pp. 100-1.
3 : see pp. 136-8.

Joint stock banks had been first legalised in 1826, only outside the capital, but only a few had been created by 1833 when the Bank Charter Act removed the prohibition against their establishment in London. There was a steady increase in their foundation from this time, culminating in 1836 when 59 joint stock banks were promoted and 26 private banks were absorbed by amalgamation with joint stock banks. Whether this increase was due to the direct influence of the Bank Charter Act is doubtful since most of the new foundations were located in London. How can their impact be measured? In the absence of detailed balance sheets, figures for their note circulation must suffice. These show a total of £1.3m notes issued by joint stock banks to have been circulating in the last quarter of 1833, rising to £4.3m in 1836, and falling thereafter - a large rise, perhaps, but still small by comparison with the average note issue in the 1830's of over £8m by private banks and £18m by the Bank of England.

In any case, it must be doubted whether the total of notes in circulation is the appropriate criterion for judging the effects of joint stock banking. No London joint stock banks were allowed to issue their own notes, and in Lancashire, where many of the larger joint stock banks were situated, all banks, whether private or joint stock, which issued notes were regarded with suspicion. In this part of the world, Bank of England notes and commercial bills of exchange served as the media of exchange.

In the absence of complete statistics covering joint stock bank activities, what did contemporaries think of this innovation? One practice which was particularly noted was that of re-discounting or re-issuing bills of exchange already purchased by the joint stock bank. A bank, once it had discounted a bill of exchange, had the option of holding it to maturity or disposing of it. The latter could be done in two ways: either it might re-issue the bill to a customer as part of a loan (in

preference to issuing a further deposit liability of its own) or it might re-discount the bill with the local Branch Bank or in the London money market. "There is an obvious difficulty in assessing the growth of re-discounts in the supply of money".[1] All that can be definitely said is that the endorsement they placed on every bill of exchange that left their bank made it a safer financial instrument for local merchants to use as a medium of exchange and for London financial institutions to hold as an asset. This endorsement enabled "loans to be made to local manufacturers and traders on security that was acceptable in other parts of the country"[2] and so facilitated the inter-regional transfer of funds. Thus the efficiency of the financial system as an allocative mechanism was improved. But at the same time as it achieved this, the financial system became more vulnerable to any crisis which might affect one of its constituent parts. Dr.M. Collins' conclusion seems a just one: joint stock banking "extended the range of banking practice, and so widened the effect of the financial boom and the slump which followed it. Their stimulation of the discount market particularly increased the sensitivity of the credit system to any general lack of confidence and, incidentally, enhanced the influence of the Bank of England".[3]

Similar difficulties are encountered in assessing the economic impact of the second important financial innovation of the 1830's, the Anglo-American merchant banking sector based in London. Even more so than the liabilities of joint stock banks, it is hard to classify the acceptances of merchant banks as 'money' and to view their increasing use in the 1830's, up to a level of 12-14m in the euphoria of 1836, as an addition to the 'supply of money'. The contribution of this group of

1 : Collins, 'Liverpool', p. 101.
2 : Matthews, Trade-Cycle History, p. 197.
3 : Collins, 'Liverpool', p. 102.

London financial institutions was to open up a whole new field of investment opportunities for the funds mobilised by the retail banking sector in Britain. They were able to do this because as wholesale intermediaries they economised on the costs of search and information involved in lending abroad. Like the joint stock banks, they improved the allocative efficiency of the British financial system and in addition provided the channel for savings by which American investment in capital projects could be financed. Their contribution is thus an example of the growing international focus of the London capital market, a movement which had begun after 1815 with loans to European governments, but which in the 1830's was beginning to acquire more substance with loans being made to finance real investment in the United States.[1]

Such were the characteristics of the British financial system in the 1830's. Against this background, how does the monetary policy executed by the Bank of England stand up to examination?

The Bank of England sought to maintain a sizeable reserve of bullion within its vaults with which to meet any demand upon it to pay its notes in coin. Against one threat to its reserves, an internal drain, it admitted it had no ultimate defence. But it believed that it could prevent the conditions conducive to such an eventuality from arising if it lent freely at times of monetary pressure.

Another threat to its bullion stock occurred when the foreign exchanges weakened so much that it became profitable to export bullion. The Bank of England believed that, in most cases, the weakening of the foreign exchanges and loss of gold was a result of international price differentials. It attempted to correct these by reducing the amount of its liabilities, which served as reserve assets for the rest of the financial system, in line with the fall in bullion. Those responsible for the direction of the Bank thought that it was possible, if the correct

1 : see pp. 92 & 132-3.

means were chosen, for the stock of reserve assets to move in line with the Bank of England bullion stock - for the pressure on the Bank caused by the external bullion drain to be transmitted to the rest of the financial system. One policy which it was necessary to adopt if this objective was to be achieved was a strictly non-interventionist line to the functioning of individual markets, be it the discount, the foreign exchange or a commodity market. The assumption was that free market forces, if left alone, would automatically bring markets to their equilibrium or 'natural' level.[1]

Thirdly, the Bank adopted a policy of qualitative credit control or 'financial repression', discriminating against those particular business transactions which were considered unsound according to the principles of current commercial mores, or likely to inhibit the effectiveness of monetary policy.[2]

There is much that can be applauded in the management of the Bank of England in the 1830's. Men such as Horsley Palmer had recognised that the Bank was unlike any other financial institution and that it had a special responsibility for managing the monetary system. In particular, the Bank's acceptance of the role of lender of last resort must be praised. It was, perhaps, its readiness to exercise this facility in the crises of 1837 and 1839, which prevented those episodes becoming more severe than they were. In this respect, at least, Bank policy in the 1830's was far more enlightened than that followed in the succeeding years. Bagehot's famous argument for the lender of last resort, in Lombard Street (published in the 1870's), was not original, for Horsley Palmer had expounded this doctrine as early as 1832.

Yet if the Bank of England's measures to avert financial collapse can be complimented, it is all the more desirable that the circumstances in which a lender of last resort is necessary do not arise. Here the Bank

1 : see pp. 53-4.
2 : see pp. 158-60, 248-50 & 259-62.

of England can justly be accused of failure, because it had not succeeded in preventing financial instability from occurring. This failure was not due to inability on the part of the Bank to adhere to the prescribed policy, for this thesis has argued that central bank actions were fundamentally in keeping with the spirit of the policy chosen in 1832. Doubts are raised about Bank of England policy in three specific areas.

9.1 : the Response to External Drains

The Bank of England, as explained above, by its rule of fixed securities attempted to ensure that any pressure on its bullion stock was automatically transmitted to domestic financial markets. Should the Bank have allowed the domestic financial system to be influenced by external developments and so have tried, as the jargon of the time put it, to make a paper currency fluctuate exactly as a metallic currency would?

As will be recalled,[1] as early as 1832 Palmer had distinguished between different kinds of external drains: some, caused by a level of prices relatively higher than the rest of the world (a 'derangement of prices'), should be treated in the conventional manner, with a reduction in circulation and increase in market rates of interest acting to lower the British price level, and thereby to correct the trade imbalance and the foreign exchanges; others were due to various kinds of special causes, like foreign lending and extraordinary corn imports, and demanded a different response. The Bank should not take the usual measures to correct a weak foreign exchange since, while these would work after a time, they would unnecessarily harm commerce; instead, while keeping its securities even (and so letting bullion flows affect money market liquidity), it should act either to stabilise the foreign exchanges or provide for the foreign payment. The emphasis given by Palmer to each response in 1832 shows that he regarded the former kind of drain as the more likely threat.

1 : see pp. 35-8.

But during the following decade the major drains, in 1834-5, 1836 and 1839, were all caused by special causes rather than relative price changes, so that Palmer was led to admit in 1839 that "judging from the past, it does appear to me that nine times out of ten the drain is likely to be caused by events of a temporary character".[1] One special reason, the necessity to import corn following a British harvest failure, was completely unpredictable, though not unlikely to occur. Its significance for the Bank of England was increased, as Prof. Matthews has pointed out, by the sliding scale of the old Corn Law, which had the effect of amplifying the fluctuations in the value of corn imports and thus in the balance of payments.[2] Another special factor, the export of capital away from London, had been common to all three drains of the 1830's and was likely to become more important in future as international financial techniques became more elaborate and capital flows across national frontiers increased. Thus it was a mistake for Palmer in 1832 to regard as the more usual threat to the Bank a drain caused by a 'derangement of prices' rather than by the special reasons mentioned above.

In addition, it seems logically inconsistent that the Bank, if it was going to make a distinction between 'temporary' and 'permanent' drains, should aim to maintain the rule of fixed securities in both cases. By doing so, it automatically reduced the level of liquidity in the money market, when the point of it adopting a 'temporising' system in the case of a temporary drain was to prevent the harm done to commercial interests by measures of a more activist kind. The Bank's policy would have been more coherent had it immunised the domestic financial system from these international influences by expanding its lending to keep the flow of reserves to the money market even.

1 : Norman MSS., C192: Palmer to Norman, 8 Aug. 1839.
2 : in Kindleberger & Laffargue, Financial Crises, p. 111.

On a wider level, the fact that the international monetary system was governed by something more than the typical Hume price-specie-flow mechanism casts doubt on the desirability of the Bank's preferred method of monetary control. Its aim was to make the paper currency fluctuate exactly as if it were metallic, by letting bullion flows have a one-for-one effect on the supply of Bank reserves to the financial system. If the conditions necessary for the textbook model of the international gold standard were no longer operative, does it make sense to run domestic monetary policy in a manner that pretends they still were?

This was, of course, the question to which supporters of the Currency School replied in the affirmative. It was their belief that if action was taken to reduce the circulation at the first sign of a bullion drain, from no matter what cause it arose, then prices would be lowered, exports increased and the foreign exchanges corrected before the drain of bullion proceeded too far.[1] One of the defects of the Palmer Rule, and indeed of any system which placed some kind of discretion in the hands of the central bank, was that it delayed too long before taking the measures necessary to guard convertibility.[2] According to this view, it was thus irrelevant from what cause, be it extraordinary corn import or general trade imbalance, the drain resulted.

This argument can only be proved or refuted empirically, by reference to the response of the monetary system when such policies were implemented. The evidence of 1839 is that prices were not lowered and exports not increased, but indeed that the harsh measures to defend convertibility taken by the Currency School faction in the Court of Directors produced a perverse reaction in financial markets. Some contemporaries argued that they actually reduced the level of exports, not increased them, by creating a climate of uncertainty surrounding the

1 : P.P. 1840, iv (602), q. 1927 (Norman).
2 : ibid., q. 2184 (Norman); cf. Loyd, Remarks, pp. 38-9.

future. This, if anything, left the Bank substantially worse off than before the measures were taken. There is no evidence to suggest that, had measures to contract been taken earlier, the outcome would have been any other than what actually occurred.

In the 1830's it can be seen that international bullion flows were the result of causes other than international price differentials, and in particular that movements of capital across national frontiers were assuming increasing importance. Inevitably this leads to the conclusion that the Bank of England should not have been governed by a rule which automatically transmits international pressures to domestic financial markets, but should be free to determine the cause of the drain and the approximate length of its duration, and should use its discretion to take offsetting measures, if necessary.

9.2 : the Possibility of Internal Control

Even if the Bank of England wished to make a paper currency behave identically to a metallic one, as the rule of fixed securities was intended to effect, was it in a position to enforce this principle? The spokesmen for the Currency School said that as long as the 'unscientific' Palmer Rule was in force, it was impossible to do so - a drain of bullion might well lead to a reduction of deposits, and not circulation, and thus have no effect on prices.[1] Palmer's reply to this charge was that the Bank since 1832 had kept its bullion reserve against all liabilities payable on demand, because it considered some of the deposits as equivalent to circulation.[2]

But this does not mean that movements in the Bank's total liabilities are a good indicator of the effect of its operations on liquidity in the money market. It was argued in Chapter Three that a

1 : see Norman's Defence of the Bank, Jan. 1840, in Norman MSS., F37, and D.P.O'Brien (ed.), Overstone, i. 254-5; also George Grote's question to Palmer in the 1840 Select Committee hearings, P.P. 1840, iv (602), q. 1641.
2 : ibid., qq. 1644 & 1553.

measure comprising both notes in circulation and reserve deposits at the Bank - in modern parlance the monetary base - provided a truer indication of the effectiveness of monetary policy.

Charts 3.1, 5.1 and 7.1 plot movements in the Bank's bullion stock and the monetary base. For monetary policy to have been implemented faithfully, the lines should have moved in tandem, taking an average of the preceding three months. There does seem to be some correlation in their movement. But in the short run there are periods when the monetary base moves in a completely opposite direction to that of bullion: for instance, between September and December 1835 and 1837, and between October and December 1839. Over the medium term, the monetary base does not fluctuate as widely as the bullion stock - neither when bullion is increasing, as in late 1837 and 1838, nor when it is falling, as in 1836 or, more spectacularly, 1839.

At first sight, the claim of the Currency School, that under the Palmer Rule the liquidity pressure that should have been created by international bullion flows was not transmitted to domestic money markets, seems to be upheld. This is particularly true of 1839, when the main reason for the slower fall in the monetary base than in bullion was a decline in one category of the non-reserve deposits, those belonging to the public sector.[1]

However, matters are more complicated than this. After all, it is most unlikely that the Government would withdraw their deposits in the form of bullion, which is, on the face of it, what the figures for 1839 imply. It is necessary to examine a little more closely the relationship between the Bank of England and the Exchequer. This has important consequences for any policy by which the Bank of England attempted to remain aloof from active intervention in the money market.

1 : P.P. 1840, iv (602), q. 1656.

The quarterly dividends were paid out in the days following the 8th of January, April and July, and the 13th of October. It should be noted that in the 1830's the payments in January and July were rather larger than those in April or October.[1] The Exchequer would of course use any available revenue to make these payments, but the collection of the revenue throughout the year was also uneven, being particularly concentrated in the autumn months. It follows that the net position of the Exchequer was likely to be in substantial surplus at the end of the year (not only because of buoyant revenues, but also the small October dividends) and in a smaller surplus in June (the small dividends in April); to be in large deficit in late summer, when the dividend payments were large and the revenue not yet collected, and in April. Since the Bank was obliged to advance to the Bank on Deficiency Bills[2] the difference between the dividend payments and the Government balance, there was likely to be, even after allowing for monthly fluctuations, an increase in the flow of reserves to the money market in January and July, and to a smaller extent in April; conversely, there was likely to be a large absorption of liquidity from the money market in the autumn. Hence the large reductions in the three monthly average of the monetary base at the end of 1835, 1836 and 1837, and the steepening of the fall in the curve in late 1838 and 1839; and also the large increases in the monetary base at the beginning of 1837 and 1838, and its stable and gently falling level respectively during the summer drains of 1836 and 1839.

Just as seasonal variations in Government revenue and expenditure had consequences for movements in the monetary base, so did variations in the Government fiscal position over longer periods affect the Bank. In a

1 : Wood, Central Banking Control, p. 65 n. 26.
2 : ibid., pp. 62-3.

poor year for revenue the Government customarily increased its sale of Exchequer Bills to the public; but it also possessed the option of borrowing from the Bank in the form of Ways and Means Bills,[1] which differed from Deficiency Bills in that they were repayable in the quarter after they were issued, while Deficiency Bills were repayable in the same quarter. In line with the low level of economic activity, 1838 and 1839 were poor years for government revenue, and the Government was obliged to borrow from the Bank in this form in the spring and early summer of both years. Thus the Bank always lived under the threat that in a year of poor Government revenue it would have to enlarge the amount of reserves in the financial system by increasing its advances to the Government.

Thus in 1839 the less rapid fall in the monetary base than in the bullion stock in the first few months of the year can partly be explained by reference to the usual seasonal increase in liquidity at this period of the year. As the year went on, however, and the government's fiscal position, from whatever cause, declined, the level and length of the Bank's advances to the Exchequer increased by comparision with previous years.

The criticism of monetary policy that can be drawn from the above analysis is not that the Palmer Rule was unscientific because a drain of bullion could be matched by a fall in the deposits; but the Bank was unable to ensure that fluctuations in the monetary base would correspond to those in its bullion stock, because it was not in a position to control influences on liquidity resulting from its banking transactions. Seasonally, these would exert an independent effect upon the stock of reserves available to financial markets; over a longer period, they might well prevent the Bank from enforcing its cherished principle. In current

1 : ibid., p. 63.

parlance, the Bank had no control over the level of its own securities.

The Bank had adopted a policy of low discounts in the 1830's in the hope that, by keeping out of the discount market, it would be able to control the flow of reserves to the money markets. But the significance of the above arguments is that the low discount rule was rather irrelevant when the market was able to procure reserves from the Bank via Exchequer transactions.[1] In the words of Wood,

> "one entry (the discount window)...was used relatively little because another...opened so readily....the release of funds by the Bank via the Treasury is to be viewed as alternative to their release through advances to the market and through discounts....The fundamental fact was that in both periods (before and after 1844) the market could ordinarily adjust its position without its being necessary for the discount houses or traders with prime bills to go to the Bank for discounts".

Nevertheless, it should not be concluded that bullion movements had no effect upon domestic liquidity conditions. All of the figures for Bank bullion, securities and liabilities are ex post so that the figures for the monetary base cannot be taken as an indicator of the ex ante stance of monetary policy. Therefore it would be quite consistent with the argument of the previous paragraphs to suggest that additions to the monetary base resulting from the Bank's banking transactions are a symptom of the tightened liquidity caused by a bullion drain, and not the unconscious or automatic action of the Bank to offset it.

The mechanism might work like this. Let us suppose the withdrawal of bullion from the Bank and the matching cancellation of notes or reserve deposits automatically reduces liquidity. As money market conditions tighten, it will become more difficult for the Chancellor to sell Exchequer Bills to the Public and as a result he may well increase his demands on the Bank for Deficiency and Ways and Means advances - thus increasing the monetary base.[2] An alternative mechanism might be through the depressive effect caused by high interest rates upon economic

1 : ibid., pp. 6, 68 & 104.
2 : ibid., p. 67.

activity: as the volume of business declines, so will the flow of revenue into the Exchequer. This will cause the Chancellor to sell more Exchequer Bills to the public or, more probably for the reasons outlined above, to have more recourse to the Bank for advances. This is what happened in late 1837 and early 1838, and from the spring of 1839.

Therefore it should not be supposed that because the monetary base did not move exactly in line with bullion, the Bank of England's banking transactions prevented bullion flows from influencing domestic monetary conditions. It is probably correct that the Bank had little control over the seasonal variations in the monetary base due to variations in government revenue and expenditure. But the relatively smaller amplitude of fluctuations in bullion over longer periods reflects the fact that as financial conditions tightened, the market relied more upon the Bank to make up the reserves withdrawn by the bullion drain, and vice versa when an inflow of bullion led to an easing in money market conditions. In ordinary times, the market secured reserves by an elaborate mechanism through changes in the Exchequer balance at the Bank, but when liquidity was exceptionally squeezed, it was in a more basic form through an increased discount issue by the Bank. The Bank could not prevent the monetary base from expanding in these circumstances (except by shutting its discount window - a step fraught with danger) but it could alter the rate at which it gave the increased discounts.

Consequently, the monetary base should not be regarded as being exogenously determined by the Bank of England; the movement of this figure should not necessarily be taken at face value as an indicator of the thrust of monetary policy. Rather, it reflects the fact that, even at this early stage of financial development, financial markets, if they desired, would always be able to obtain reserves from the central bank in some way or other. Thus the monetary base was to some extent demand-determined.

All this goes to show that Horsley Palmer's hope of 1832 that the Bank could keep a fixed level of securities, was misguided: the automatic variations in the Bank's securities and non-reserve deposits ensured that "there was no question of the Bank controlling securities at some pre-determined level...What the market wanted it was in a position to take, and what it did not want it was usually in a position to return....the announced plan of control could not of course be carried out".[1] But because these banking transactions involved substantial releases and absorptions of funds between the money market and the Bank of England, the latter "had an effective procedure for governing the terms of credit in the market....(an) ability to set the conditions under which money is created....the Bank's role lay in determining the effective terms of credit".[2] The Bank of England may not have been able to control the amount of its own lending to the money market or, which comes to the same thing, the level of the monetary base; but it did possess the means to determine the level of interest rates in the money market - if it chose to do so.

That the Bank did not grasp this opportunity to set the course of interest rates was a result of its reluctance to intervene in the money market, a disposition which was ultimately derived from the Ricardian position that conditions in the capital market should be determined by market forces. By these were meant primarily 'real' factors such as the flow of savings and the demand for investment funds. The Bank still maintained this position in the 1830's; hence they made the quarterly advances at what they considered to be the 'natural' rate of interest - the equilibrium rate of interest which would have been set by free market forces acting on their own - and did not use them as a lever to set an 'appropriate' level of interest rates.

1 : ibid., pp. 92 & 104.
2 : ibid., pp. 8, 24 & 92; see also R.G.Hawtrey, The Art of Central Banking (Ist edn., London, 1932), pp. 150-5.

9.3 : the Policy of Qualitative Credit Control

The third area where Bank policy must be questioned closely is its policy of qualitative credit control. Although little was said on this subject before the 1832 Bank Charter Committee, the Bank of England was prepared to place a public stamp of disapproval upon certain trading and commercial practices of other financial intermediaries. In doing this it received a certain measure of support from the commercial community. But great doubts must be expressed about the propriety and effectiveness of this policy.

Take the example of one important determinant of the foreign exchanges, international movements of capital. The Bank of England definitely disapproved of international short term capital flows. One of its chief complaints in 1836 against bills drawn on the American houses was that some were created for the purpose of taking advantage of higher American interest rates.[1] There is some evidence that their attitude to long term capital flows was hostile as well. Horsley Palmer in 1837, for example, proposed that time bargains in foreign stocks should be discontinued and that transactions in foreign securities should be subject to stamp duty like all other transfers of financial and real property.[2] The trouble with this policy of financial repression was that the Bank was discriminating against a practice which was profitable for the financial institutions concerned and increased the rate of return available for savings mobilised in Britain. In the long run, it would find such an unofficial ban increasingly difficult to enforce.

Evidently, one response to persistent capital outflows, as put forward by many in the autumn of 1836, the raising of interest rates in London relative to those in other financial centres, did not appear palatable to the Bank, although it was quite in accordance with Ricardian

1 : see pp. 158-60.
2 : Palmer, Causes, p. 50.

thinking, as the following quotation from Salomons makes clear. "Whenever the interest of money becomes reduced to a low rate in this country, some individuals will then look to foreign funds, as a mode of investment paying a higher rate of interest, than can be obtained at home...But after all this ought to be regarded only as a symptom of an overflowing currency".[1] According to this view, international bullion movements would be impossible to make at a profit if international interest rates as well as national price levels were in equilibrium.

The Bank's attitude to international capital flows was rather confused. It realised that they disturbed the price-specie-flow mechanism and was to some extent hostile to them because of this, but it did not make a concerted attempt to remove them from the London capital market. On the other hand, it did not adopt a coherent strategy of responding to persistent capital outflows by increasing interest rates. The irony is that later in the nineteenth century the Bank was able to correct persistently weak foreign exchanges by raising Bank Rate in order to attract flows of 'hot money' from abroad, a transaction it had resolutely set its face against in the 1830's.

Similar issues are raised by the Bank of England's attitude towards particular classes of bills of exchange in its discount policy. A good example is its reaction towards the London Agency of the Bank of the United States, set up by Samuel Jaudon in November 1837. One object of this Agency was to create a foreign exchange market in London for dollar bills on the United States, where none had previously existed. The Bank of England took an extremely poor view of this venture, however. Glyn told Langton that "the Bank directors have taken a determined position against the principle on which Mr. Jaudon establishes himself" and later the Head Office informed the Liverpool Agent that bills drawn on Jaudon were not to be discounted at the Branch Bank.[2]

1 : Salomons, Joint-Stock Banks, pp. 12-3.
2 : Bank of England MSS., PLBLp15, f. 584: 23 Nov. 1837; Langton MSS.: G to L: 20, 25 & 30 Nov. 1837.

What did the Bank find so objectionable about this venture? It told its Liverpool Agent that it could not accept "the principle of any Bank drawing on its own appointed Agent".[1] The Agent replied by describing bills on Jaudon as "a most irregular and unprecedented species of circulation" and supporting the Bank's action as being "consistent with that straightforward policy which discountenances any attempt to put into circulation any paper which however secure in itself is not bottomed on right mercantile principles".[2] Bills drawn by agents on principals had always been considered doubtful because they were taken usually to be not based on real transactions. Barings, for example, did not allow its American agent, T.W.Ward, to draw upon itself, and at times of stringency gave instructions to its correspondents that it would not accept as remittances bills drawn on its competitors by their agents. The disfavour attached to bills drawn by principals upon agents was that much greater because of the lack of resources of the drawee. Barings felt that "if the agency was not used to make money", then the drafts on Jaudon, made for the purpose of transferring funds from London, should be at ten days/sight (payable ten days after acceptance in London); but if bills were drawn "as a means of circulation or creating funds, the Drawee must have abundant wealth to fulfil his engagements, whatever may befall the Bank".[3]

In holding these notions and implementing them in its discount policy, the Bank of England represented the views of the wider financial community towards the B.U.S. venture. The Circular to Bankers believed that the B.U.S. involvement, through its subsidiary, Humphreys and Biddle of Liverpool, in shipping cotton across the Atlantic was

1 : Bank of England MSS., PLB Lp15, f. 584: 23 Nov. 1837.
2 : ibid., I-L Lp1, 24 Nov. 1837,
3 : Baring MSS., Reel 58, 65163: BB to Ward, 28 Apr. 1838; cf. Times, 9 Mar. 1838 & Bank of England MSS., I-L Lp1, 19 Sept. 1838.

> "an injurious encroachment on the province of legitimate trustworthy merchants...a banker has no right in that quantity, according to Banking principle and commercial usage, to be employed as a commission merchant or consignor of produce...their proper function is to assist commerce by providing for the people the ready means of interchanging commodities".[1]

Even Horsley Palmer, one of the more enlightened Bank Directors of the 1830's, was just as insistent upon a distinction between banking and mercantile functions. He opposed the establishment of a joint stock bank in India, which would concern itself with foreign as well as domestic transactions. "The direct business of the Bank ought to be to facilitate the transmission of money through the Company's territory in India".[2] To become involved in foreign exchange transactions and to hold assets payable in foreign countries (which would have been acquired by the purchase of bills drawn on exports) would be "entirely at variance with every principle by which a Bank ought to be governed".[3] These latter transactions are "the appropriate business of private merchants".[4]

What substantive basis was there for the dislike of finance bills and the widely-held distinction between the legitimate scopes of mercantile and banking business? Very little, on the face of it: just as the use of finance bills in foreign exchange speculation could smooth out seasonal fluctuations in the U.S. foreign exchanges, the involvement of largely capitalised and shareholder accountable joint stock banks reduced the amount of risk involved in purchasing foreign exchange payable abroad. Ultimately, all that lies behind the commercial mores of the 1830's were subjective prejudices concerning legitimate business roles and correct financial techniques.

1 : Circular to Bankers, 25 Aug., 9 Feb. & 15 June 1838.
2 : J.H.Palmer, Reasons Against the Proposed Indian Joint-Stock Bank. A Letter to G.G.deH.Larpent (London, 1836), p. 14.
3 : ibid., p. 9.
4 : ibid., p. 3.

Even if one agreed with these value judgements, there still appear to be significant weaknesses in the Bank of England's policy of qualitative credit control. By discriminating against certain trading practices, it was attempting to prevent what financial intermediaries found it in their self-interest to do and, unless the Bank of England was a better judge of their best interest than the institutions concerned, it was harming the efficiency of the financial system as an allocative mechanism. In the long run, the use of 'moral suasion', and the practice of refusing to discount certain bills as a mark of censure against them, would become more and more ineffective. As William Brown told the Governor of the Bank in September 1836, "no power of the Bank will or can check an open trade which merchants inidividually find advantageous - it is impossible".[1] Most damning of all the criticisms which can be levelled at this part of the Bank's policy, in certain cases like the shipment of bullion to America in March 1838 and the manipulation of the foreign exchanges in the latter half of 1839, the Bank found it in its own self interest to take part in the kind of transactions which were so strongly condemned by commercial orthodoxy.

This study suggests that the Bank of England should have possessed much more discretion in the administration of monetary policy. In particular, the Directors of the Bank should have debated more closely whether the pressure on the Bank's bullion stock caused by bullion exports should be transmitted to the reserve of the domestic financial system. They should have intervened more actively in foreign exchange markets to prevent potentially destabilising flows of bullion from taking place (one thinks of the very doubtful desirability of forcing bullion to leave America in the winter of 1836-7). Domestically, the emphasis should have

1 : Bank of England MSS., CTMB22, f. 75: 5 Sept. 1836.

been on the control of interest rates as the means by which the financial system may be controlled. But the difficulties of controlling the financial system, even at this early stage in its development, must not be underestimated. In boom conditions, Bank policy would rely for its effectiveness not on increases in the cost of finance working to make transactions at the margin unprofitable, so decreasing the demand for credit, but on a 'shock' mechanism: as Latham wrote to Norman, the rise in Bank Rate to the historical record of 6% in July 1839 worked because "it is an uncommon event - people have not been accustomed to it".[1] At times of financial euphoria, for monetary policy to have any influence at all in restraining the financial system, it must succeed in breaking the very optimistic expectations which generate the boom and are responsible for the thinning-out of liquidity all across the financial system. To continue to achieve this effect in the long run would mean increasing Bank Rate to higher and higher levels - as was to be the case in crises throughout the nineteenth century. An alternative means of restoring stability to euphoric financial markets might be to take some kind of qualitative action against a financial practice which was at the centre of the boom. This provides some justification for the Bank of England's proscription of American bills in August 1836, although it does not acquit the Bank of the charge of incompetence in the particular manner by which it made its views known in this particular instance.

9.4 ; the Bank Charter Act, 1844, and after

Most contemporary criticism was not on these lines. It was instead considering whether the policy of the Bank in the 1830's was appropriate to securing "a properly constituted paper money", the definition of which, in the words of J.R.McCulloch, was "that it should vary in amount and in value exactly as the currency would do, were it metallic".[2] In addition, much discussion centred upon whether note-

1 : Norman MSS., C176: Latham to Norman, 25 Aug. 1839.
2 : 'The Bank of England and the Country Banks', Edinburgh Review, lxxvii no. cxxxiv (1837), p. 63.

issuing banks were compatible with a properly-ordered currency.

Within the Bank of England, a debate took place on its own conduct in 1839 and its future attitude to the discount of bills drawn on note-issuing banks. The Currency School faction within the Court of Directors won the day, for it was resolved to refuse henceforth all bills drawn on note-issuing banks. At the same time, a committee of Henry Pelly (Governor 1841-3), William Cotton (Governor 1843-5) and Norman was appointed to investigate the possibility of the affairs of the Bank being divided into Issue and Deposit Accounts, dealing with the Circulation and Banking sides of the Bank respectively. In March 1840, they presented their Report in favour of such a division for the internal purposes of the Bank only, and although this suggestion was defeated, the climate within the Bank was becoming increasingly favourable to change along Currency School lines.

Peel's Bank Charter Act of 1844 formally changed the constitution of the Bank and clarified its role within the London money markets. This Act split the Bank of England into two Departments: first, the Circulation Department, concerned with the issue of notes. Other than a fixed issue of £14m notes matched by income-earning securities (the Fixed Fiduciary Issue), all the liabilities of this Department were to be made against bullion deposited in the Bank; the other part, the Banking Department, would deal with the Bank of England's strictly banking business, investing the deposits entrusted to it in a mixture of advances, discounts and government securities. It would issue no notes, nor would it hold any bullion, for its reserve would be composed of notes issued by the Circulation Department. It would be free to compete in the attraction of deposits and the giving of loans, just like any other commercial bank.

The second important part of the Act placed a quantitative limit on the number of bank notes that might be issued by all existing banking institutions. In addition, the Joint Stock Banking Act of 1844 made the creation of new banking institutions extremely difficult.

Contemporaries hoped that these provisions, by making paper money behave like the metallic money it replaced, would prevent the recurrence of periodic commercial crises. Their expectations were to be rapidly disappointed. Monetary conditions had been easy in the early 1840's and the Bank of England strengthened this tendency by lowering its discount rate to 2½% on the day after the Bank Charter Act became law - 5th Sept. 1844. This was the first time it had ever been below 4% and it was now below even the market rate for three month commercial bills. The following year was characterised, in the words of one historian of the period, by "an orgy of speculative activity that surpassed the excesses of 1824-5".[1] Two good examples of this phenomenon are the boom in railway investment, with its concomitant financial manifestations like flotations on the Stock Exchange, and an expansion in Anglo-American trade. But the wheat harvests of 1845 and 1846 failed, and this led to an outflow of bullion, particularly in 1847. Monetary conditions progressively tightened and prices generally fell throughout 1847. Pressure on the Bank for advances increased, and Bank measures to lessen this demand, like raising Bank Rate, had little effect. Indeed as Bank action became more desparate, rumours began to circulate that the Banking Department's reserve of Bank notes was running low and that shortly it would have to curtail all new advances altogether. These kinds of worries only worsened the Bank's position.

1 : C.N. Ward-Perkins, 'The Commercial Crisis of 1847', Oxford Economic Papers, ii (1950), 76-7.

Eventually the pressure became too great to bear and on 25th October 1847, when the Banking Department's reserve of Bank notes had shrunk to 2.5m or 14% of its liabilities, a letter of Indemnity was issued, allowing the Circulation Department to break the Fixed Fiduciary and issue an increased amount of notes in the form of discounts.

There is an obvious similarity with the experiences of the 1820's and 1830's. The upswing of the 1840's trade cycle saw a vast expansion of financial activity, which suddenly collapsed at an advanced stage. What part did the new institutional background to monetary policy play in causing the expansion, and in precipitating the crisis? Contemporaries and historians have been only too ready to blame the Bank Charter Act for fostering 'speculative activity' - "wise heads might well question whether any bank should have expanded credit the way the Banking Department had done in 1845 and 1846", in the words of Prof. Fetter.[1] Although the financial boom of the 1840's was probably the result of deep-seated forces - like the boom of the 1830's - there is little reason to doubt that the newly-acquired freedom of the Bank to compete with other banks pushed market rates below what otherwise would have been their level.

A key point to note is that under the Bank Charter Act monetary pressure was not felt in the Bank's bullion stock, as in the 1830's, but in the Banking Department's reserve of Bank notes. Bullion in the Bank reached a maximum level of 17m in May 1845 and fell by only 8m to its minimum in October 1847 - well above the October 1839 level of 2m. By contrast, the reserve of notes in the Banking Department fell from a maximum of 13m in August 1846 to 2.5m in October 1847. By allowing the Banking Department to behave like a commercial bank, the Bank Charter Act was responsible for easier financial conditions; by placing attention on the Banking Department's reserve of Bank notes and removing flexibility from Bank policy, it had made a financial crisis more likely. As Prof.

1 : Fetter, Development, p. 203.

Fetter has written, "it was not so much the low reserve of the Banking Department that brought on the troubles of 1847, but the knowledge of the large reserve in the Issue Department that could not be used".[1]

The Bank Charter Act had been manifestly unsuccessful in the aim of ensuring stable economic development. An increasingly illiquid structure of finance had evolved, without any 'rational expectations' effect operating to induce a note of caution among financial operators; at a certain stage this would clash with the Bank of England's obligation to pay its notes in gold.

A very similar story can be told for the 1850's, although the Bank of England had after 1847 given up the idea of running its Banking Department as if it were an ordinary commercial bank. Bullion in the Bank reached its highest point of approximately 20m in July 1852, from which point it fell continuously throughout the 1850's as rising national income led to a worsening of the visible trade deficit and an increase in the demand for gold for circulation purposes. If this pressure had been felt in the Circulation Department, there would have been no problem - notes would have been reduced as they were paid into to withdraw bullion. But there was a trend in the 1850's for Bank of England deposits to decline; as the notes were withdrawn from the Banking Department to pay for the withdrawal of deposits, the net effect was for the aggregate note circulation of the Bank to fall, the 'active' note circulation (in the hands of the public) to remain the same and the reserve of the Banking Department to fall. The theory behind the Bank Charter Act was that Bank Rate and the amount of Bank lending should vary inversely with the level of the bullion reserve and the Banking Department reserve. But looking at the years up to 1857, the trend was for Bank lending (the amount of securities held by the Banking Department) to increase, notwithstanding

1 : Fetter, Development, p. 209.
2 : J.R.T.Hughes, Trade, Industry and Finance, p 241.

the increase in Bank Rate.[1] The result of this increase in advances and fall in deposits was a fall in the bullion/liabilities ratio from 50% in 1852 to 22% in 1857 and, more importantly, a pressure on the Banking Department's reserve of Bank notes.[2]

What was happening in other parts of the financial system? Although new bank creation was difficult and increased note issue impossible, this did not stop the financial system from expanding. "After the strict limits on the note-issuing powers of country banks,...the monetary system provided its own substitute for notes in the economic expansion which followed by deposit creation and by an increase in the volume of bills of exchange created".[3] The creation of bills of exchange was not dampened by, but was oblivious to rises in the level of interest rates, and was driven up by ever-improving expectations of the future. The amount of ultimate liquidity in the economy declined. For example, the London and Westminster Bank's cash/deposits ratio fell from a maximum of 21% at the end of 1848 to 6.9% on 30th June 1857. In Hughes' words,

> "The period 1852-7 which was, in crude terms, one long contraction by the central bank, was...one long expansion of bank deposits and credit...The ultimate liquidity of the credit structure depended upon the availability of notes and coin, so that the functioning of the system depended upon that confidence which would enable the holders of most of the bills to wait for the maturity of the bills for payment".[4]

When the collapse of confidence came in the autumn of 1857, probably sparked off by news of a financial crisis in America,[5] the demand for discounts on the Banking Department of the Bank of England reached such uncontrollable proportions, in spite of successive rises in Bank Rate, that the Department's reserve of Bank notes fell to just 581,000 on

1 : ibid., pp. 237-9.
2 : ibid., p. 279.
3 : ibid., p. 257.
4 : ibid., pp. 261-2 & 269; cf. p. 274.
5 : J.R.T.Hughes, 'The Commercial Crisis of 1857', O. E. P., viii (1956), 206.

the 12th November.[1] The Government issued a second Order-in-Council allowing an increase in the Fiduciary Issue.

Another crisis occurred in 1866, which featured the downfall of the major discount house, Overend Gurney & Co.; but the latter part of the 19th and the early 20th centuries were remarkable for the relative absence of financial crises, a complete contrast to the period before 1866. The Bank Charter Act of 1844 was still in force, but the tranquillity of the later nineteenth century should not be put down to financial operators at last having learnt to live with its provisions. Rather, the domestic and international financial systems within which Peel's Act was operating had been completely transformed. The number of inland bills of exchange circulating in Britain declined dramatically after the 1860's,[2] and the amalgamation movement strengthened the structure of English retail banking.

There was an even greater change in international financial arrangements. By the 1860's London was increasingly acting as the clearing centre for international payments (a role it had begun to assume in the 1830's), and this had the effect of placing all other foreign money markets under the heel of London. At the first sign of a serious bullion drain, money rates in London would rise and, although this rise might be matched in continental centres, it would not be enough to offset a flow of capital into sterling. International adjustment took place by changing the direction of capital flows, not the level of prices in different countries. The international monetary system did not function according to the 'rules of the game', but was in effect managed by the Bank of England.[3]

1 : Hughes, Trade, Industry and Finance, p. 218.
2 : S.Nishimura, The Decline of Bills of Exchange in the London Money Market, 1855-1913 (Cambridge, 1971).
3 : W.E.Beach, International Gold Movements and Banking Policies, 1881-1913 (Cambridge, Mass., 1935).

9.5 : the Inherent Instability of Credit[1]

In the first seventy years of the nineteenth century, the British financial system suffered from periodic bouts of instability and breakdown, the most spectacular examples being 1825, and 1847 and 1857. The 1830's provides a very clear, if less dramatic, example of this instability. Most contemporary economists, confronted with the uneveness of economic and financial development, looked back nostalgically to a supposedly stable era where commodities, and not paper, had served as the medium of exchange - if only paper money were made to behave as if it were a commodity money, they argued, then the fluctuations of the trade cycle might be avoided.

This is where their error lay, for they ignored the fundamental change which the basis of the monetary unit had undergone in the process by which the liabilities of banks were substituted for commodity money: whereas before it had been the fairly constant value of the commodity which had served as the medium of exchange, the basis was now confidence - confidence in the ability of the institution emitting liabilities to repay its debt, either in the form of another's promise to pay or in some kind of hard money or legal tender, if any existed. One of Henry Thornton's achievements was to spot this transformation:[2]

> "commercial confidence may be defined to be that confidence which subsists among commercial men in respect to their mercantile affairs...This commercial credit is the foundation of paper credit; paper credit serving to express that confidence which is in the mind".

Under these conditions, the scope of economic analysis must go beyond what is conventionally known as 'the monetary sector' and include all those mechanisms which distribute financial resources across the economy.

1 : the term is Hawtrey's; Currency and Credit (London, 1st edn., 1919), p. 124.
2 : H.Thornton, Paper Credit, pp. 75-6.

"Credit money is just a part of a whole credit structure that extends outside money; it is closely interwoven with a whole system of debts and credits, of claims and obligations, some of which are money, some of which are not, and some of which are on the edge of being money..the development of a financial system...has taken the form of the form of the growth of financial institutions, not just banks, but other 'financial intermediaries' as well...In the course of these changes there has been a change in the whole character of the monetary system. In a world of banks and insurance companies, money markets and stock exchanges, money is quite a different thing from what it was before these institutions came into being".[1]

This has important consequences for the determination of the stock of money. In a closed economy, the amount of commodity money is determined exogenously; the velocity of circulation may vary, due to changes in hoarding patterns, but the total quantity of money cannot be altered - all that can be changed is its distribution among different sections of the public. It is like the 'hot potato' of the children's party - it may be passed from hand to hand, but the group as a whole can neither destroy nor create it. In a system of paper financial assets, by contrast, the liabilities of monetary and other intermediaries are determined endogenously, within the economy, by a combination of the demand for investment funds and the public's preferences for monetary and other assets.[2] In equilibrium, the balance sheets of commercial banks will be at the point where the return on additional loans is equal to the cost of obtaining funds. Thus the "quantity of money as conventionally defined is not an autonomous variable but an 'endogenous' or 'inside' quantity reflecting the economic behaviour of bankers and other private economic units".[3]

1 : Hicks, Critical Essays in Monetary Theory (Oxford, 1967), p. 157-8.
2 : Thomas Tooke is the only economist of the classical era who came anywhere near to recognising this essential concept. See D.E.W.Laidler, 'Thomas Tooke on Monetary Reform', in M.Peston & B.A.Corry (eds.), Essays in Honour of Lord Robbins (London, 1973), pp. 173-4.
3 : Tobin, 'Commercial Banks as Creators of "Money"', D.D.Hester & J.Tobin (eds.), Financial Markets and Economic Activity (New York, 1966), viii & p. 7.

Therefore, under conditions of a credit economy where public preferences play a large part in determining the structure of the financial system, the most important concept for analysis is the balance sheet. Monetary theory then becomes an analysis of the influences which shape the distribution of the individual's, and thence the economy's, balance sheet between different kinds of financial assets.[1]

It is important to remember that the influences which shape the composition of portfolios are by no means constant in their strength, even over the quite short run. Take one influence which is likely to be important in the construction of balance sheets, the anticipation of risk. A rise in the anticipation of risk, in the form of either an increased subjective reluctance to bear risk or an upwards revaluation of the objective risks pertaining to different assets, will cause a movement in the portfolio towards safer but lesser-yielding assets. Conversely, a fall in the anticipation of risk will lead to a shift away from assets of an immediately disposable form (like bank deposits) to higher-yielding but more uncertain investments.[2] It is important to remember that changes in the anticipation of risk affect not only the assets side of portfolios but also the liability side; an increase in confidence will make firms more willing to finance themselves by short-term means, which makes their portfolio more illiquid.

This transformation of portfolios is the kind of financial behaviour which can be observed in almost every upswing of early nineteenth century trade cycles. As expectation of future prospects change, balance sheets are transformed in such a manner as to make the possibility of financial collapse greater. It should be pointed out that this destabilising behaviour is spontaneously generated within the

1 : J.R.Hicks, 'Simplifying', p. 57-9.
2 : Hicks, 'Equilibrium and the Cycle', in Money, pp. 35-6.

financial system, and not necessarily the result of some policy action on the part of the central bank. In Prof. Hicks's words, "it is a psychological instability, not a mechanical, which is in question".[1]

What kind of monetary policy should be adopted to counteract what Simons called "the perverse flexibility in the total turnover...of credit"?[2] The difficulties of achieving a satisfactory degree of control should not be underestimated and it is wise to be sceptical of any simple plan which promises a monetary panacea. When monetary regulations are "introduced as a means of checking, or moderating, the instability,...one can see that they must be imperfect safeguards against instability, and are themselves liable to be affected by it.....It cannot be remedied by the application of a formula, as so many...have been tempted to suppose".[2] In particular, the efficacy should be doubted of any plan which attempted to make credit money behave as if it was equivalent to commodity money, either by placing a quantitative limit upon any one financial asset, or by creating a substitute 'hard money' and endeavouring to make it the controlling base of the monetary system through the operation of reserve ratios. Leaving aside the problem of identifying a suitable measure to attempt to control, it is likely that the usefulness of a reserve ratio system will quickly decline. Just as the need to economise had led the market to adopt paper money instead of commodity money as the means of exchange, "the creation of a substitute 'hard money' by control over the quantity of some sort (or sorts) of money is continually defeated by human ingenuity in the invention of other sorts".[3] Even at the beginning of the

1 : Money, preface, p. 9.
2 : Simons, 'Rules Versus Authorities', p. 165.
3 : Hicks, Money, preface, p. 9.
4 : J.R.Hicks, Perspectives, p. 120; cf. Sayers, 'The Theoretical Basis of Central Banking', in Central Banking After Bagehot (Oxford, 1956), pp. 5-6, & 'Monetary Thought and Monetary Policy in England', Economic Journal, lxx (1960), 714.

19th century Henry Thornton considered the idea that the Bank of England, which he regarded as the central bank supplying reserves to the financial system, should vary its notes in line with bullion as "merely theoretic" albeit "very natural".[1]

Instead "it is necessary to be eclectic in the kind of management, and the means of management, that are to be used in each particular situation".[2] This is because monetary policy acts upon a financial system of chameleon-like character. The financial system "rests upon confidence and trust; when trust is absent it can just shrivel up".[3] In these circumstances of 'commercial discredit', the central bank is required to intervene to prevent a collapse of financial institutions, as Thornton argued as early as 1802.[4] Conversely, the credit system can be "unstable in the other direction too; when there is too much 'confidence' or 'optimism', it can explode in bursts of speculation".[5] The central bank may well find itself bound to take action to restrain the financial system at this level of activity. But this task is by no means easy - the optimistic expectations of the boom period may be unaffected by any rise in interest rates. In such circumstances, monetary policy should not only be concerned with the macro-economic consequences of financial behaviour, but also with micro-economic and qualitative aspects - the ultimate destination of bank lending or the particular method in which it is made, for example.[6]

In hindsight, it can be seen that most attempts in the nineteenth century to construct an optimal monetary policy, the 1830's included, were barking up the wrong tree when they tried to make paper money fluctuate as

1 : Thornton, Paper Credit, p. 116.
2 : Hicks, Critical Essays, pp. viii, 169.
3 : ibid., p. 158.
4 : Thornton, Paper Credit, pp. 99 & 122-3.
5 : Hicks, Critical Essays, p. 158.
6 : R.C.O.Matthews, 'Public Policy', pp. 336-8.

if it were metallic money. The irony is that stability was only achieved under the Bank Charter Act of 1844 when the Bank of England was managing the international monetary system in a manner completely alien to the philosophy on which that Act was based.

It is easy to see some similarity between the Currency School spokesmen of the mid-nineteenth century and the modern monetarists who advocate a target for the growth of the money supply. The details of policy recommendations may have changed - for instance, Currency School adherents were always aiming at an exchange rate target, while most Friedmanite monetarists adhere to freely-floating exchange rates - but there is a sympathy in temperament between the two schools of thought. This can be seen in their reluctance to afford discretion to the monetary authorities to set, for example, an appropriate level of interest rates: just as the Bank of England in the early nineteenth century sought to restore market interest rates to what they were before any disturbance, so the point of the new money market arrangements in operation since 1981 has been to give market forces more of a hand in the determination of interest rates.

And just as the attempt to make a paper money fluctuate like a commodity money was frustrated by the increasing sophistication of the nineteenth century financial system, so the selection of a money supply target in modern Britain has the effect of divesting it of any economic significance it previously possessed, as operators by pass it and turn to deregulated sources of finance.

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