# Becoming a central bank: the development of the Bank of England's private sector lending policies during the Restriction

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First Draft: June 18, 2018 This Draft: June 28, 2021

## Abstract:

This paper studies in detail the changes that took place in the Bank of England's Restriction era policies governing private sector lending. We find that the Bank was adapting to novel monetary circumstances, created both by the evolution of the English financial system and by the Restriction itself, and that, although the process was far from smooth, the Bank was learning to act as a central bank: during this period the Bank transformed its internal operating procedures to put regulation-based constraints on its private-sector lending, established regular reviews of its policies and their effects on the money market, and adopted a distinct crisis-oriented lending policy. In addition to establishing that these core central bank activities developed over this period, we also find that for 18 months starting in 1809 the Bank's policies that took place in mid-1810. Overall, this paper finds that the 1810 crisis was a turning point in the Bank's understanding of its role in the economy: the Bank directors both acknowledged privately the Bank's duty to the public, and restructured its discount policies with a view to promoting financial and monetary stability.

Key words: Bank of England, financial stability, banking, discount market, real bills, bullionist controversy, central banking

JEL codes: E58, N13, N23

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<sup>\*</sup> I thank Charles Goodhart, Mina Ishizu, Patrick O'Brien, Nuno Palma, John Turner, participants in the Understanding State Capacity Conference at the University of Manchester, and three anonymous referees for very helpful comments. All errors are of course my own.

#### I. Introduction

The Restriction of payments in England is an early example of an economy operating well, even flourishing for more than a decade, under a non-convertible, fiat money regime. Despite this success, the Bank of England's policies during this era are controversial: viewed as destabilizing by some or approved as 'prudent' by others.<sup>1</sup> This paper explores in detail the Bank's private sector lending policies through the first 15 years of the Restriction and finds support for both views. Overall, we will see that the Bank was adapting to novel monetary circumstances, created both by the evolution of the English financial system and by the Restriction itself, and that, although the process was far from smooth, the Bank was learning to act as a central bank: during this period the Bank transformed its internal operating procedures to put regulation-based constraints on its private-sector lending, established regular reviews of its policies and their effects on the money market, and adopted a distinct crisis-oriented lending policy. Even though the end result of this process can be characterized as prudent, we also find that for 18 months starting in 1809 the Bank's policies were indeed destabilizing, and that the Bullion Committee likely played a role in a shift in Bank lending policies that took place in mid-1810.

This study of the Bank's private sector lending policies during the Restriction relies on the Bank's Court of Directors' meeting minutes to document the Bank's transformation into a nascent central bank.<sup>2</sup> Following the approaches of Ugolini and Bindseil,<sup>3</sup> this paper seeks to go beyond theoretic discussions of central banking and monetary policy and to focus on a more pragmatic, functional question: What did the central bank do? To address this question, it is essential to understand the environment in which the Bank was operating: for this the paper pulls together primary and secondary sources, including legal decisions, to detail the institutional environment, putting particular emphasis on the close relationship between bills of exchange and the banking system in the early 19<sup>th</sup> century. Bi-annual data from the Bank's minutes, monthly data from secondary sources, and quarterly data drawn from Parliamentary papers provide essential background for the analysis of the policy discussions taking place in the Bank minutes during this era of transformation.

We find that by the start of the Restriction the payments system had largely matured away from tradesmen's credit to a reliance on intermediaries to provide financing, and that with this shift the

<sup>3</sup> Ugolini 'Evolution,' Bindseil 'Central banking.'

<sup>&</sup>lt;sup>1</sup> Contrast Hendrickson 'Bullionist controversy' with O'Brien and Palma 'Old Lady.'

<sup>&</sup>lt;sup>2</sup> This builds upon Duffy's 'Discount policy' and 'Bankruptcy and insolvency.' Note that Fetter 'Development' p. 59 writes: 'The Bank's responsibility to the banking and business community in times of crisis, as distinct from its responsibility to furnish funds to the government to finance the war, was really not tested in the years 1797-1815.' This claim, which as is demonstrated here was erroneous, has arguably influenced a generation of scholars, see e.g. Laidler 'Highlights', Eichengreen 'Globalizing capital' p. 31 n51.

circulating bill supply began to include bills, such as bankers' acceptances, that were drawn to give clients access to their funds and were unrelated to any specific commercial transaction. The combination of the maturing financial market and the Restriction of payments facilitated growth in the money supply which took place in two stages: an initial period from 1797 to 1804 and a second episode from 1809 to 1810. Bankers' acceptances would play a key role in the second episode and in the destabilizing dynamics leading up to the 1810 crisis.

We find that in the months preceding the 1810 crisis, the directors of the Bank reached a consensus about their obligation to support financial and monetary stability in the London money market, but were then deadlocked by a classic division between hawks and doves on the question of whether a restrictive or an accommodating policy was the best way to do so. In this environment the Bullion Committee report was timed to influence the debate amongst the directors – in support of the hawks. Indeed, this may be the only case where a government investigation into mismanagement of the money supply takes place before, not after, the crisis. Ultimately, the Restriction and the 1810 crisis led to a transformation of the Bank's policies regarding access to credit both in normal times and in crisis.

This paper contributes to three strands of the literature: the role of bills of exchange in the English financial system, the evolution of the Bank of England into a central bank, and the Bullionist controversy. The detailed study here of a specific, transformational period can help scholars distinguish this period from very different environments such as the mid-18<sup>th</sup> century use of bills in England or continental practices in the use of bills.<sup>4</sup> Indeed, over the course of the 18th century both the law and practical use of bills in England separated in important ways from those of the continent, creating not only acceptance banking, but also the law of negotiable paper.<sup>5</sup> In addition, we use quarterly data to show how the development of acceptance banking both helps explain the O'Brien and Palma result that the Suspension marks a permanent shift to a paper-based monetary system, and also provides additional evidence for Palma's argument that growth in the money supply stimulated economic activity.<sup>6</sup>

As for the literature on central banking, this paper follows Ugolini in establishing that the Bank of England acknowledged public responsibilities at a date that is significantly earlier than others have claimed,<sup>7</sup> and provides specific detail on the policies the Bank adopted during the Restriction to meet those responsibilities. Indeed, we show that the 'elaborate system of reporting [that] enabled [the Bank] to control its exposure to both discounters and acceptors,' which was found by Flandreau and Ugolini in

<sup>&</sup>lt;sup>4</sup> Borner and Hatfield 'Design of debt-clearing markets'; De Roover 'L'evolution'; Santarosa 'Financing long distance trade.'

<sup>&</sup>lt;sup>5</sup> See generally Rogers 'Early History'; Chalmers 'Digest'; Holdsworth 'Origins'; Street 'Foundations' pp. 382-83. <sup>6</sup> O'Brien and Palma 'Old Lady', Palma 'Money and modernization', Palma 'Reconstruction'.

<sup>&</sup>lt;sup>7</sup> Compare's Ugolini's 'Evolution' to Goodhart's 'Evolution' pp. 45-6 and to Arnon 'Monetary theory' p. 176.

1860s data,<sup>8</sup> was explicitly designed to address the early 19<sup>th</sup> century problem that the Bank was discounting too many accommodation bills. We are also able to establish that the expansion of last resort lending in the first decade of the 19<sup>th</sup> century was indeed associated with an increase in losses to the Bank, contrary to the claims made for later years by Bignon et al. and Ugolini.<sup>9</sup>

The literature on the Bullionist Controversy typically presents the Bullion Committee and the Bank on opposing sides,<sup>10</sup> whereas this paper emphasizes the deadlock *within* the Bank and is consistent with Feaveryear who argues that the Bullion Committee was formed in order to forestall an *assignat*-like crisis.<sup>11</sup> A further literature on the Bullionist Controversy focuses on theoretic issues and in particular on critiques of the 'real bills doctrine,' as propounded by the Governor and Deputy Governor of the Bank, who were 'doves' in the debate amongst the Bank directors.<sup>12</sup> Ugolini provides an excellent review of the theoretic literature on the 'real bills doctrine' and concludes that the practitioners' consensus in favour of the doctrine prior to the 1930s was well-founded and is being rediscovered subsequent to the 2008 crisis.<sup>13</sup> This paper emphasizes practice rather than theory, and discusses both real bills and those bills that are not real, known to contemporaries as 'accommodation bills,' only in the context of early 19<sup>th</sup> century banking practice.

Section II presents the environment in which the Bank of England was operating during the Restriction. Section III discusses the years from 1797 to 1808 and how the Suspension transformed the Bank's discount policy. Section IV discusses the monetary growth in 1809-10 and the Bank's crisis response. Section V concludes.

## II. The bill of exchange in Restriction era England

#### A. Bills of exchange and promissory notes

<sup>&</sup>lt;sup>8</sup> 'Where it all began'

<sup>&</sup>lt;sup>9</sup> Bignon et al. 'Bagehot for beginners,' Ugolini 'Evolutions' p. 138.

<sup>&</sup>lt;sup>10</sup> Laidler 'Highlights' p. 14; Hendrickson 'Bullionist controversy' p. 208; Ugolini 'Evolution' p. 235; O'Brien and Palma 'Old Lady' p. 17.

<sup>&</sup>lt;sup>11</sup> Feaveryear 'Pound Sterling'; see also Duffy 'Discount policy' pp. 72-73

<sup>&</sup>lt;sup>12</sup> The Governors claimed that as long as the only bills monetized by the banking system are 'real bills' then bank credit will grow in concert with the economy and cannot be a cause of inflation or financial instability, Report from the Select Committee on the High Price of Gold Bullion (P.P 1810, III) p. 50. See also Goodhart 'Changing role'; Arnon 'Monetary theory'; Sissoko 'How to stabilize'. There are two well-established addenda to this claim that have been explored at length elsewhere: first in order for the real bills doctrine to hold there must be a monetary anchor in the form, for example, of the gold standard, Laidler 'Misconceptions'; Glasner 'Real bills' p. 875; see also S.C. on price of bullion (P.P 1810, III) pp. 53-5; and second the doctrine can be a solution to the problem created by the 'law of reflux' – or the market-driven reduction in bank liabilities that occurs whenever a bank errs by issuing 'excess' liabilities that the public does not wish to hold – because it ensures that the banks hold short-term assets and can respond easily to these market forces by reducing assets, Glasner 'Real bills'.

<sup>&</sup>lt;sup>13</sup> Ugolini 'Evolution' pp. 216-18.

Under English law a bill of exchange is a payment instrument, similar to a cheque,<sup>14</sup> that instructs a party with whom the signatory on the bill has a pre-existing agreement to make payment to a third party.<sup>15</sup> (See Appendix for the formal legal definition.) Each bill of exchange has three names on it: the drawer, who creates and signs the bill, the drawee, and the payee. A payee<sup>16</sup> may endorse the right to payment over to another party.

Liability on the bill works as follows: the drawee is the one to whom the bill is addressed and who, when he accepts the obligation to pay the bill by signing the face of it, becomes the acceptor.<sup>17</sup> The acceptor has primary liability on the bill. If the drawee refuses to accept the bill or, if an acceptor fails to pay the bill when it is due, it is the obligation of the drawer and any parties who endorsed the bill.<sup>18</sup> The liability of these parties is 'joint' so the holder of an unpaid bill has the right to demand payment in full from any one of the endorsers or from the drawer.

Thus, the basic characteristic of an accepted bill is that there are least two parties who are liable to pay it, the acceptor and the drawer. A promissory note is different: it is a promise from one person to a payee. (See Appendix for the formal legal definition.) Only one party is liable on a promissory note.

Bills and notes are, however, very closely related instruments. Under English Law a promissory note that has been endorsed is treated as a bill of exchange.<sup>19</sup> Similarly, if the drawer and the drawee on a bill are the same party – because, for example, they are in partnership together – the instrument is only guaranteed by single entity, and the bill may be deemed to be a promissory note.<sup>20</sup>

## B. The rise of acceptance finance

The bill of exchange is not just a means of payment, but also a credit instrument, because it is not payable until maturity. Although bills are often associated with trade credit, by the early 19<sup>th</sup> century in England it had become more common to rely on acceptance credit, where the loan is made by a professional financier such as a factor, a bank, or an acceptance house.<sup>21</sup> The terms of the acceptance credit were

<sup>&</sup>lt;sup>14</sup> In fact, as a matter of law a cheque is 'a bill of exchange drawn on a banker payable on demand' Chalmers 'Digest' p. 245.

<sup>&</sup>lt;sup>15</sup> Smith v. Brown 1815. This section is specific to the English law of negotiable paper (or, in other words, of bills and notes) as it developed under common law in the 18<sup>th</sup> and 19<sup>th</sup> centuries.

<sup>&</sup>lt;sup>16</sup> The payee may be the same as the drawer or drawee, Chalmers p. 17.

<sup>&</sup>lt;sup>17</sup> Chalmers 'Digest', p. 183

<sup>&</sup>lt;sup>18</sup> Chalmers 'Digest', p. 185-7

<sup>&</sup>lt;sup>19</sup> Heylyn v. Adamson 1758; Rogers 'Early History': 217-18. In this case the maker of the note corresponds to the acceptor of a bill and the first endorser corresponds to the drawer of a bill.

<sup>&</sup>lt;sup>20</sup> Chalmers 'Digest', p.17.

<sup>&</sup>lt;sup>21</sup> Zinck v. Walker 1777; Leatham 'Letters': 44; Tooke 'Inquiry': 27; Report of the Select Committee on Manufactures, Commerce, and Shipping (P.P 1833, VI) pp.126-7, 283, 320; Hudson 'Genesis': 156-58, 165-67, 170,

negotiated before any bills were drawn,<sup>22</sup> just as a credit line with a bank is negotiated by businesses today.

To illustrate the difference between trade and acceptance credit, consider a small clothier. In the mideighteenth century he was likely to sell his wool cloth by drawing a bill on the purchaser payable to himself, thereby extending trade credit to the purchaser using an accepted bill that he could then turn into cash by discounting it at a local bank.<sup>23</sup> By contrast, in the early years of the nineteenth century, the clothier was likely to sell to a merchant who would draw a bill on a professional financier, such as a bank, broker or local finance house, payable to the clothier.<sup>24</sup>

London banks played a crucial role in the operation of the acceptance credit system. By the early 19<sup>th</sup> century bills payable in London – known as 'bills on London' – were typically made payable at a London bank. In 1805 the Bank of England embraced this industry norm as a requirement for any bills discounted at the Bank.<sup>25</sup> By this date bills on London were being processed through a bank clearinghouse located in the City.<sup>26</sup>

In the country towns banks were equally important to the bill system, because the recipient of the bill would typically endorse the bill and then deposit it in his bank account. A deposit of a bill was clearly distinguished from the discount of the bill with the bank. The bill-holder had the right to the full value of the bill at maturity if it was deposited in his account, whereas interest was deducted from the face value of the bill if he discounted the bill.

In the industrial heartland of England it became the norm for the bank to credit the depositor's account in full at the time of deposit, endorse the bill, and put it out for circulation to another customer.<sup>27</sup> Since

<sup>188;</sup> Hawtrey 'Currency and Credit': 103; Horsefield 'British Banking Practices': 319. See also Ashton 'Bill of Exchange': 30

<sup>&</sup>lt;sup>22</sup> Smith v. Brown 1815; Report from the Select Committee of the House of Lords on the state of the British wool trade (P.P. 1828, VIII) p. 679 ; Chalmers 'Digest': 181; Gillett Bros 'Bill on London'. See also Pressnell 'Country Banking': 402-03, 408-10; Hudson 'Genesis': 157, 220-23

<sup>&</sup>lt;sup>23</sup> See Hudson 'Genesis': 159

<sup>&</sup>lt;sup>24</sup> See Hudson 'Genesis': 165

<sup>&</sup>lt;sup>25</sup> Bank of England Court of Directors Meeting Minutes 29-11-1804, 310; 7-11-1805, 344 (henceforth abbreviated C.D.); Wild v. Rennards 1806

<sup>&</sup>lt;sup>26</sup> Holland 'London bankers clearing house': 270; Horsefield 'Banking practices': 315; Robson v. Bennet 1810. Note that only City bankers, who specialized in bills, in providing services to country banks, and in the finance of merchant activities, participated in the clearinghouse. The West End banks, such as Childs and Hoares, which were the heirs to goldsmith banking (Withers 'English banking system': 51) and specialized in providing services to the wealthy, did not participate in the clearinghouse until 1895 (Holland 'London bankers clearing house': 271; Sykes 'English banking organizations': 265. See also S.C. on price of bullion (P.P 1810, III) p. 148.

<sup>&</sup>lt;sup>27</sup> Ashton 'Bill': 30-31; Collins v. Martin 1797; Giles v. Perkins 1807; Thompson v. Giles 1824; Report from the Lords committees on the state of circulation of promissory notes under the value of £5 in Scotland and Ireland (P.P. 1826, VI) p. 571; Horsefield 'banking practices': 316. See also Boyd 'Letter': 93; Thornton 'Enquiry': 175; S.C. on

country banks were willing to credit the value of a bill to an account-holder immediately, payment in bills with two months to run was considered by many to be 'ready money' or 'cash payment' and was often preferred, particularly when the counterparty was well-known or a regular customer of the payee.<sup>28</sup> This practice differed from that of the London banks, which did not require that deposited bills be endorsed and which would physically hold a bill that had been deposited until it matured and was paid, at which point the funds were credited to the account.

Both country and London banks also handled the presentation of bills that had matured to the acceptor or the acceptor's bank for payment. For country banks that handled most of the local bill traffic, this could often mean simply deducting the value of the mature bill from the acceptor's account.<sup>29</sup>

The payment system thus had three tiers. At the core of the system was the Bank of England and the Bank note. The next tier were the London banks and the 'bills on London.' The third tier were the country banks, country bills, and country bank notes (used for local wage and retail payments). These tiers were closely related: the Bank of England operated a standing facility where 'bills on London' with a London acceptance or endorsement and 65 days or less to run could be discounted and converted into Bank notes. The country banks had accounts and acceptance credit lines with their London bank correspondents.<sup>30</sup> A country banker could accept a bill payable in London at its correspondent bank,<sup>31</sup> or the country banker could draw a bill on the London correspondent bank – a banker's acceptance.<sup>32</sup> While both of these were 'bills on London,' only the latter – with its London acceptance – would become directly eligible for discount at the Bank of England once its maturity was reduced to 65 days or less. In order to be eligible for discount at the Bank of England the acceptance of a country banker would have to be endorsed by a London merchant or bank. In this period there were bill brokers that could obtain such endorsements.<sup>33</sup>

In order to access the Bank of England's standing facility it was necessary to open a discount account at the Bank. There was, however, a rapid increase in discount accounts in this period (section III below).

<sup>28</sup> Minutes of evidence taken before the Committee appointed to consider the state of woolen manufacture in England. (P.P. 1806, III) p. 660; Second Report of the Secret Committee on the Expediency of resuming cash payments (P.P 1819, III) pp.448-49; S.C. of H.L. on wool trade (P.P. 1828, VIII) p. 678; Robinson 'Country banks': 737. See also Thornton 'Enquiry': 92-94, 101; Wood 'Theories': 23; Tooke 'Inquiry': 33-36

<sup>29</sup> Ashton 'bill': 30. See also Thornton 'enquiry': 175-76; Hawtrey 'currency and credit': 4.

<sup>30</sup> Thornton 'enquiry': 94n. See also King 'history': 175

Manufactures (P.P 1833, VI) p. 26; Report from the Select Committee on Promissory Notes in Scotland and Ireland (P.P. 1826, III) p. 473; Robinson 'Country banks': 737; Wood 'English theories': 17n41

<sup>&</sup>lt;sup>31</sup> Robinson 'country banks': 737

<sup>&</sup>lt;sup>32</sup> The bills in Gorton's data, 'Private money' p. 21, that date between 1800 and 1830 are mostly bankers' acceptances.

<sup>&</sup>lt;sup>33</sup> King 'history': 13; Pressnell 'country banking': 99-102. Note the distinction between a bill payable by a London bank and a bill accepted by a London bank. In the first case, the London bank can decline to pay at maturity on the grounds that there are insufficient funds in the acceptor's account, whereas in the latter case, the London bank cannot because it is itself liable on the acceptance.

Thus, the London business community treated eligible bills as convertible into Bank notes, and therefore as liquid or reserve assets.<sup>34</sup>

Observe that the transition from trade credit to a system of acceptance finance anchored by the Bank of England in London was accompanied by clear evidence of growth in credit in the early 19<sup>th</sup> century.<sup>35</sup> These findings resonate with the conclusion of O'Brien and Palma based on time series of narrow and broad money that the Restriction 'caused a permanent shift to a paper-based monetary system'.<sup>36</sup> Indeed, O'Brien and Palma's empirical results would not have been possible without the transformation of the financial system and the rise of acceptance banking documented here.

#### C. Accommodation paper: the problem of bankers' acceptances

Around the same time that trade finance grew into acceptance banking, a distinction began to be drawn between two types of credit, the real bill, which was created in a genuine commercial transaction, and the accommodation bill, which was not 'sanctioned by the circumstance of having been drawn in an actual sale of goods'.<sup>37</sup> Note that Thornton's and the Bullion Committee's definition of a real bill ties it to the existence of a commercial transaction, ensuring that delivery has taken place and every real bill has necessarily been 'earned' in accounting terms by the seller of the goods in question.<sup>38</sup> As a result, the value of every real bill is reportable as revenue for some firm in the economy. That is, in 19<sup>th</sup> century Britain a real bill was defined by the existence of 'earned' revenue about which there is no uncertainty except for the risk of the counterparty's default.<sup>39</sup> Bills drawn on individuals who were not engaged in trade, such as landowners, were accommodation paper, but so were bills drawn on tradesmen or merchants that were not drawn for the purpose of making payment on a specific actual transaction. For example, if goods do not sell quickly and the means to cover the original bill that was used as payment have not been delivered to the acceptor by the time the bill is due and if a manufacturer then draws a new bill as a means of extending the time to pay on the original shipment of inputs, then the new bill is an

<sup>&</sup>lt;sup>34</sup> Wood 'theories' pp. 8, 23, 90-91.

<sup>&</sup>lt;sup>35</sup> Committee on woolen manufacture (P.P. 1806, III) pp. 660, 776, 1040-1; Newsom v. Thornton 1805: 1199-1200; Report of the Select Committee on the Law relating to Merchants, Agents, or Factors; etc (P.P. 1823, IV) p. 408; Lords committee on notes in Scotland (P.P. 1826, VI) p. 574; Burgess 'letter': 40-42; Pressnell 'country banking': 89; Hudson 'genesis': 199; Duffy 'bankruptcy': 310.

<sup>&</sup>lt;sup>36</sup> 'Old Lady' p. 16

<sup>&</sup>lt;sup>37</sup> Thornton 'enquiry': 85; S.C. on price of bullion (P.P 1810, III) pp. 50, 52, 123; Pressnell 'country banking': 293. See also Lords committee on notes in Scotland (P.P. 1826, VI) p. 485; S.C. on Manufactures (P.P. 1833 VI) p. 29; Hudson 'genesis': 204. While the use of bills to create a loan unrelated to trade has a long history, it is notable is that in this era a specific vocabulary was developed to distinguish between the two different uses of the bills. <sup>38</sup> Sissoko 'How to stabilize the banking system'

<sup>&</sup>lt;sup>39</sup> Contrast this usage with Mints 'History of banking theory' p. 9 where a real bill includes any loan made for short-term commercial purposes.

accommodation bill.<sup>40</sup> While only the two parties to the transaction will know that the second bill is an accommodation bill, when the bills drawn by the manufacturer on the acceptor are deposited in the manufacturer's bank account, the banker may be able to distinguish changes in the pattern of drawing bills that will allow the banker to determine with a great deal of accuracy whether the bills are real or accommodation bills.<sup>41</sup> Since accommodation bills are 'presumptively less safe' because the person who draws them is necessarily 'a more adventurous speculator than he who carefully abstains from them,' it is the 'general practice of banks ... above all, to discourage bills of accommodation'.<sup>42</sup>

This distinction between real and accommodation bills was sufficiently clear to 19<sup>th</sup> century businessmen that common law, statutory law, and Bank of England records all explicitly refer to 'accommodation bills.'<sup>43</sup> Indeed, one of the significant innovations of the English law of negotiable paper was to treat circulating accommodation bills as claims that were enforceable at law.<sup>44</sup> In 1812 the Bank of England adopted a new cross-referencing-based method of keeping the record books on discounts for the explicit purpose of identifying accommodation bills.<sup>45</sup>

In practice, many accommodation bills, such as banker's acceptances, were openly bills of accommodation and there was no confusion about the fact that these bills did not originate in trade.<sup>46</sup> Banker's acceptances were created when the bank drew a bill on its London correspondent to pay out to the account holder.<sup>47</sup> By 1826 the banker's acceptance was a standard means of non-cash withdrawal giving bank account holders access to their funds in a form that was liquid, easily transported, and safe from theft; these circulated via endorsement and could end up with more than a hundred endorsements.<sup>48</sup>

Bankers' acceptances generated a great deal of debate within the Bank. At this time many country banks were in partnership with London banks.<sup>49</sup> At the Bank of England concerns had been raised in 1807 regarding such London partners that issue bills that are 'not drawn at the places where they are dated, but fabricated by the resident partner in London'.<sup>50</sup> This has the effect of reducing the security on the bill because, instead of having three guarantees of payment – the drawer, the acceptor, and the discounter –

<sup>&</sup>lt;sup>40</sup> Sayers 'Bank of England': 277. See also Lords committee on notes in Scotland (P.P. 1826, VI) p. 574.

 <sup>&</sup>lt;sup>41</sup> See, e.g., Lords committee on notes in Scotland (P.P. 1826, VI) p. 563; S.C. on Manufactures (P.P. 1833 VI) p. 28
 <sup>42</sup> Thornton 'enquiry' pp. 87, 176

<sup>&</sup>lt;sup>43</sup> Fentum v Pocock 1813; Simpson v Clarke 1835: 149; Chalmers 'digest': 87; C.D. 25-1-1810, 28-2-1811, 20-2-

<sup>1812, 18-3-1813, 9-2-1815.</sup> See also Rogers 'early history': 241; Horsefield 'Gibson and Johnson': 236.

<sup>&</sup>lt;sup>44</sup> Rogers 'early history' Ch. 10; Chalmers 'digest' p. lvii

<sup>&</sup>lt;sup>45</sup> C.D. 18-7-1812, 64

<sup>&</sup>lt;sup>46</sup> Thornton 'enquiry': 87

<sup>&</sup>lt;sup>47</sup> Thornton 'enquiry': 94n; Second Report of S.C. on resuming payments (P.P 1819, III) p. 448

<sup>&</sup>lt;sup>48</sup> Lords committee on notes in Scotland (P.P. 1826, VI) pp. 518, 562

<sup>&</sup>lt;sup>49</sup> Horsefield 'British banking practices' pp. 317-18

<sup>&</sup>lt;sup>50</sup> C.D. 25-6-1807

there are only two, the drawer and the discounter being the same firm. These concerns were not, however, addressed effectively by any Bank policy.<sup>51</sup>

Recall that by 1810 the City bankers were processing the settlement of almost all London bills through a clearinghouse. The Bank of England was not, however, a member of the clearinghouse, and as a result each private bank had to settle on a daily basis with the Bank of England by providing Bank notes or Bank deposit balances to cover any bill balances payable on that day. An exchange during a Bullion Committee hearing establishes that settlement with the Bank had been moved from the morning to the late afternoon. Henry Thornton observes – and gets confirmation from the bill-broker witness – that when a bank's clients discount bills at the Bank of England in the morning, the bills are paid out in Bank notes which are promptly deposited by the clients in the bank, providing the bank with notes that can then be used by the bank in the afternoon to settle its obligations on bills at the Bank of England.<sup>52</sup>

In short, it appears that a London banker could draw a bill in the name of his country partner on the London bank and then make the funds payable to a client of the London bank. This bill could represent a drawing down of the client's account balance or an outright loan to the client. If the client then discounts the bill at the Bank of England in the morning and deposits the proceeds in his account with the London bank, the banker has effectively converted a customer bank balance or loan into a Bank of England liability – in exchange for the London bank's liability to the Bank of England. These claims on the Bank of England are then available to settle balances due that day to the Bank. In short, to the degree that the Bank of England stands ready to discount a banker's acceptances, the need for a bank to hold reserves falls dramatically – because the bank can simply draw up an acceptance that gives it access to high-powered money on demand.<sup>53</sup> That such a system could have destabilizing effects – even in an environment where bankers had unlimited liability – seems obvious.<sup>54</sup>

This then is the setting in which the Bank of England's Restriction era discount policy was implemented: the payments system had largely matured from trade finance into acceptance banking which meant that there was a growing reliance on intermediaries to provide financing in the form of both advances and

<sup>&</sup>lt;sup>51</sup> A proposal to require 'three distinct securities, viz. drawer, acceptor and discounter' does not pass. The policy that passes states: 'That no Bill of Exchange ought to be discounted where there is good ground to suspect that it was not actually drawn at the place where it was dated' (C.D. 25-6-1807). How the busy clerks in the Discount Office are to establish 'good ground to suspect' that a bill was fictitiously drawn outside London is not explained.

 <sup>&</sup>lt;sup>52</sup> S.C. on price of bullion (P.P. 1810, III) p. 148. See also First Report of the Secret Committee on the Expediency of resuming cash payments (P.P. 1819, III) p. 225; Holland 'London bankers clearing house': 271
 <sup>53</sup> See also S.C. on price of bullion (P.P. 1810, III) p. 64

<sup>&</sup>lt;sup>54</sup> Observe that this mechanism responds directly to claims that a 'law of reflux' will operate forcing banks to reduce their liabilities because the public redeems them in exchange for Bank of England notes, Thompson 'Theory of money'; Glasner 'reinterpretation'; Glasner 'real bills.' This will not hold if there is a flaw, such as the one presented here, in the mechanism by which private banks settled their liabilities to the central bank.

discounts. At the same time that this transition was taking place, a new category of bills, 'accommodation bills' had recently been given legal recognition. And in 1810 one category of accommodation bills, the bankers' acceptance, was found by the Bullion Committee to give London banks access Bank of England notes on demand prior to settlement of daily balances with the Bank, thereby reducing the need for reserves. Thus, it is hardly surprising that we will find that there was a dramatic growth in banker's acceptances between 1804 and 1810.



Figure 1. Bank of England discounts of commercial paper, amounts outstanding (£), quarterly data, 1797 – 1817

*Note:* by comparison with Report from Committee of Secrecy on the Bank of England Charter (P.P. 1832, VI) App. 59 it is confirmed that for this period, these discounts are all of commercial paper, with the exception of the year 1800 in which 0.1% of the discounts are not classified as commercial paper.

Source: Report from Committee of Secrecy on the Bank of England Charter (P.P. 1832, VI) Apps. 56 and 58.

#### III. The initial Restriction-era growth in discounts: A back-office problem that generates losses

Almost immediately after the Restriction was put in place, the discount business of the Bank of England grew dramatically:<sup>55</sup> Figure 1 shows that from 1798 to 1804, the business doubled, and by 1810 had doubled again. At first the Bank allowed discounts to grow in order to support public confidence in the Restriction.<sup>56</sup> This policy was met by strong demand for discounts that has been attributed to the arbitrage opportunity created by a fixed 5% discount rate at the Bank of England while consol yields were higher.<sup>57</sup> Observe that the growth in Bank discounts is not explained by the Bank offering more advantageous terms than the market, as Figures 1 and 2 indicate that the fastest growth took place in the periods 1798-1804 and 1808-1810 when the market rate was below 5%.



Figure 2. Monthly interest rates in London, 1797 to 1815

*Note*: For almost all of this period the values for the first series, the market short-term rate, are interpolated based on annual April data. *Sources*: Market short-term rate: Spliced series for discount rate on prime short-term paper 1718-2005, Thomas and Dimsdale 'Millennium'; Consols: Neal 'Rise of Financial Capitalism'.

<sup>&</sup>lt;sup>55</sup> Duffy 'Bankruptcy'; O'Brien and Palma 'Old Lady'

<sup>&</sup>lt;sup>56</sup> Clapham 'Bank of England', p. 12.

<sup>&</sup>lt;sup>57</sup> Clapham 'Bank of England' p. 15.

The first issue created by the growth of discounting at the Bank was a serious back-office problem, as the Bank found itself straining to deal with the business that was being brought in. In response, the internal structure of the bank was completely overhauled.

Initially the Bank's day-to-day executive functions had been handled by two Committees: the standing Committee of Treasury and the rotating Committee in Daily Waiting (or Committee in Waiting). The Committee in Daily Waiting had supported the Governors in evaluating bills for discount since the founding of the Bank and was a rotating committee: the Court of Directors was divided into three sets according to seniority with a director serving in rotation from each set.<sup>58</sup> With the growth of business, four new standing committees that reported directly to the Court and one new rotating committee were created.<sup>59</sup> Table 1 presents the different committees of the Bank that were active in the early 19<sup>th</sup> century and their functions.

<sup>&</sup>lt;sup>58</sup> C.D. 27-10-1803

<sup>&</sup>lt;sup>59</sup> C.D. 4-9-1800, 324

Committee	Created	Туре	Meetings	Duties after 1800
Committee in	July 1694*	Rotating	Daily	Makes decisions regarding the Bank's
(Daily) Waiting	•	C C	-	discounts of individual commercial bills.
Committee for	February	Standing	Twice a	Handles core executive functions.
Treasury	1695	-	week	Supervises the Secretary, the Chief
				Accountant, the Chief Cashier's Office,
				and the Bullion Office.
Committee for	February	Standing		Supervises the Bank's financial
Accounts	1695			statements.
Committee for	May 1695	Standing		Handles the on-going maintenance of the
House and				facility and human resources.
Servants				
Committee for	1730s	Standing		Handles construction projects.
Building				
Notes Committee	February	Rotating	Weekly	Makes decisions regarding the Bank's
	1800			discounts of individual commercial
				notes.
Committee for	September	Standing	Monthly	Reports quarterly to the Court.
Inspection of the	1800			Supervises the offices managing Bank
Stock Offices				stock, Consols, Irish debt and 4% debt.
Committee for	September	Standing	Monthly	Reports quarterly to the Court.
Inspection of the	1800			Supervises the Printing Office, Bank
Printing Office,				Note Office, Signers of notes under £5,
etc.				Pay clerks, In tellers income office, Out
				tellers, Clearers, Cash books, Inspectors,
				and Specie.
Committee for	September	Standing	Monthly	Reports quarterly the Court. Supervises
Inspection of the	1800			the Drawing Office, Seven days sight
Drawing Office,				notes-discounts-chancery-cheque
etc.				Drawing Office, Bill Office, Post Bill
				Office, Dividend warrant office,
				Discount Office, General cash book
				office, and Land tax office.
Committee for	June 1802	Standing		Manages prosecutions. After 1808
Lawsuits				reports on unpaid bills prior to the
				declaration of dividends.
Discount	February	Annual		Annual report on the discounts and on
Committee	1810			any recommended policy changes.

Table 1: Bank of England committees regularly active in the early 19<sup>th</sup> century

Sources: C.D. 13-2-1695, 27-2-1695, 2-5-1695, 2-7-1713, 6-2-1800, 4-9-1800, 24-6-1802; Clapham 'Bank of England' pp. 109-10

\* Initially the Committee in Waiting was known as the 'Sub-Committee for the Week.' By July 2, 1713 it is being called the Committee in Waiting.

Within the first year after the Restriction, the Court gave the Committee in Waiting a separate room to work in and assigned two clerks to do a first inspection of the bills.<sup>60</sup> In February 1800 a Notes Committee was created to deal specifically with promissory notes which were discounted only on Wednesday. The Committee had six directors appointed in rotation and met only on Wednesdays.<sup>61</sup> For this new Committee punctual attendance was an ongoing problem and in 1804 a committee was appointed to address it.<sup>62</sup> Only in 1809 however did the Court impose a one guinea fine on any Director who failed to attend or arrange for a substitute Director to attend.<sup>63</sup>

Clerks also posed a staffing problem. This was first addressed by reallocating some of them from the Accounting Office which was less busy.<sup>64</sup> In November 1804 the pay of the clerks in the Discount Office was also increased. The mechanism by which this increase took place is interesting: the committee appointed to address the problem of timely attendance by the directors at the Wednesday's Notes Committee reports instead – that is, without even touching upon their assignment – that 'money and presents to a very considerable amount have been received from the Discounters of Bills and Notes by the Head of the Office, and by him distributed to the Clerks in such proportions as he has thought proper. This practice your Committee think not only disgraceful and corrupt in itself, but as having a direct tendency to operate most injuriously to the interest of the Bank.' The committee recommends that an immediate stop be put to this practice on pain of immediate dismissal, but also observes that 'in consideration of the great labor of the business in the Discount Office, and the late hours the Clerks are obliged to attend,' gratuities are appropriate.<sup>65</sup> From this date up to 1822 gratuities to clerks in the Discount Office 'in lieu of emoluments' becomes an annual entry in the business of the Court. To summarize, it appears that it was a long-standing tradition that clerks in the Discount Office receive a portion of their income in the form of tips – and that the committee appointed to find a way to discipline their fellow directors chose instead to make a scandal of this tradition, apparently in order to avoid dealing with their actual assignment.

In the early years of the Restriction efforts were made to control the growth in discount accounts at the Bank, first admonishing the directors to inquire carefully into the 'solidity' of applicants, then requiring a document vouching for new account holders.<sup>66</sup> These were apparently, however, not entirely successful

<sup>&</sup>lt;sup>60</sup> C.D. 22-3-1798

<sup>&</sup>lt;sup>61</sup> C.D. 6-2-1800

<sup>&</sup>lt;sup>62</sup> C.D. 29-9-1803 & 27-10-1803; C.D. 27-9-1804

<sup>&</sup>lt;sup>63</sup> C.D. 23-3-1809

<sup>&</sup>lt;sup>64</sup> C.D. 8-3-1804 & 22-3-1804

<sup>&</sup>lt;sup>65</sup> C.D. 8-11-1804, 295-96

<sup>&</sup>lt;sup>66</sup> C.D. 20-1-1800, 19-5-1803

and 245 new accounts were added from 1800 on with the number of accounts peaking at 1429 in January 1810.<sup>67</sup>

On December 22, 1803 so many promissory notes were discounted that the job could not be done with appropriate care and the Court appointed a committee 'to examine into the present state of the discounts.'<sup>68</sup> The Committee found that the excessive growth of promissory notes was an underlying cause of the ever-increasing discounts.<sup>69</sup> To address the situation, the account-keeping for promissory notes was separated from that for bills and maximum levels for the accounts were set. The Court of Directors carefully drew a distinction between credit granted to a House as a discounter, the accounts 'with,' and the credit granted against the acceptances of a House, the accounts 'upon.' (Recall that both parties are liable on the bill, so each bill will appear both in the accounts 'with' and the accounts 'upon.') £30,000 is set as the cap on discounts and £60,000 for bills accepted. These caps are however adopted subject to the caveat that the Committee in Waiting has the discretion to exceed them and report doing so to the Court. Furthermore, and this is emphasized by underlining '*the Committees in Waiting are desired to be very cautious in their endeavours to bring down any of the Accounts to this limit. This ought to be done very gradually*'.<sup>70</sup>

While Duffy reports that promissory notes discounted dropped down for a few years after these policies are adopted,<sup>71</sup> by 1808 both the number and the share of promissory notes discounted had increased again. After 1808, promissory notes never fall below 37% of discounts, and indeed after 1820 they comprise, more often than not, more than 50% of discounts.

The formation of the Committee for Lawsuits in 1802 'for the purpose of managing prosecutions' is an early indicator that the growth of discounts is accompanied by an unprecedented problem of unpaid bills.<sup>72</sup> This problem continues to grow and in 1808 a write off is take on unpaid bills. (The last time a write off had been taken was in 1796.) The Bank adopts a new policy of biannual write offs prior to the declaration of dividends and the Committee for Lawsuits is tasked with determining what portion of the unpaid bills should be written off.<sup>73</sup>

<sup>&</sup>lt;sup>67</sup> C.D. 12-01-1804: 114; 25-01-1810: 200.

<sup>&</sup>lt;sup>68</sup> C.D. 2-2-1804, 123-24. The one-day figure was a full 10% of the average of bills and notes under discount for the quarter ending December 31, 1803, see Committee of Secrecy (P.P. 1832, VI) App. 58.

<sup>&</sup>lt;sup>69</sup> Later analysis of the data confirms this view: at the turn of the century promissory notes comprised only about 17% of discounts, but in December 1803 they made up 37% of them. Duffy 'Bankruptcy' p. 71; Clapham 'Bank of England' pp. 204-05

<sup>&</sup>lt;sup>70</sup> C.D. 16-2-1804, 134-35

<sup>&</sup>lt;sup>71</sup> Duffy 'Bankruptcy' p. 70.

<sup>&</sup>lt;sup>72</sup> C.D. 24-6-1802, 217

<sup>&</sup>lt;sup>73</sup> C.D. 24-3-1808, 233

Note that in order for a bill to be classified by the Bank of England as 'unpaid', not only has the acceptor refused to pay (at which point the bill is 'noted'),<sup>74</sup> but also the discounter has been asked to make payment on the bill and has not done so. Thus, unpaid bills reflect discount accounts that have stopped payment. Unpaid bills also may reflect broader commercial distress since the discounter is not the primary individual liable on the bill.

		Bills		Notes		Bills and Notes	
		Quantity	% unpaid	Quantity	% unpaid	Quantity	% unpaid
1788-1804 -	Total discounted					£462,000,000*	
	Amount unpaid					£119,093	0.026%
1805-1808	Total discounted	£167,580,000*		£126,420,000*		£294,000,000*	
	Number unpaid	26		224			
	Amount unpaid	£13,526	0.008%	£125,876	0.100%	£139,402	0.047%
	less recoveries through Feb 1809	£7614	0.005%	£85,862	0.068%	£93,476	0.032%
1809-1811	Total discounted	£197,306,675		£149,795,752		£347,102,428	
	Number unpaid	307		735			
	Amount unpaid	£225,988	0.115%	£674,610	0.450%	£900,598	0.259%
	less recoveries through Feb 1812	£154,899	0.079%	£434,357	0.290%	£589,256	0.170%
Aug 1810- July 1811	Total discounted					£114,633,000**	
	Amount unpaid					£676,476	0.590%
	less recoveries through Feb 1817					£252,813	0.221%

Table 2. Bank of England unpaid discounts, 1788-1811

#### Notes:

\*Amount is estimated using this formula: total discounted = income from discounts \* 12/2 \*1/0.05 reflecting that the interest rate charged on discounts was five percent and the maximum length of a bill was two months. This estimate will tend to be a low estimate, because the average length of bills discounted was almost certainly lower than two months. The breakdown of amounts of bills and notes for 1805 - 1808 are estimated by treating the fraction of notes in 1808, 43%, as representative of the fraction of notes for the whole period.

\*\* Amount is estimated by first estimating for January 1810 through December 1811 the average maturity in months = 12\*income from discounts/(0.05\*total discounts) = 12\*1495.83/(0.05\* 234892.712) = 1.53 months. The total bills discounted is then estimated based on the income from discounts for Aug 1810 through July 1811, 5% interest and an average maturity of 1.53 months.

*Sources*: 1788 – 1804 Total discounts: author's calculation using Clapham 'Bank of England' v. 1 App. E and v. 2 App. C Income from the discounts; 1788-1804 Amount unpaid: author's calculation for the period from 1788-1808 using unpaid bills reports (C.D. 24-03-1808: 231-35 and 09-02-1809: 467-72) minus the amount reported unpaid for 1805-1808 in the 1809 discount committee report (C.D. 09-02-1809: 446). 1805-1808 Total discounts: author's

<sup>&</sup>lt;sup>74</sup> The process for a domestic bill is different from the process for an international bill of exchange. A domestic bill need only be 'noted,' whereas an international bill must be formally 'protested.'

calculation using Clapham 'Bank of England' v. 2 App. C Income from the discounts. 1805-1808 Amounts unpaid and recoveries: 1809 discount committee report (C.D. 09-02-1809: 446). 1809-1811 Total discounts: author's calculation using discount committee reports (C.D. 25-1-1810, 14-2-1811, 20-2-1812). 1809-1811 Amounts unpaid and recoveries: 1812 discount committee report (C.D. 20-02-1812: 267). Aug 1810 – July 1811: Total discounts: author's calculation using Clapham 'Bank of England' v. 2 App. C Income from the discounts and discount committee reports (C.D. 14-2-1811, 20-2-1812); Amount unpaid: author's calculation using unpaid bills reports (C.D. 21-02-1811: 512, 29-08-1811: 147); Amount unpaid less recoveries: author's calculation using unpaid bill reports through 1817.

Table 2 reports the percent of bills and notes that went unpaid. Note that the figures for 1788 - 1804 and 1805 - 1808 are estimates that give an upper bound on the percent of unpaid discounts. We find that from 1788 through 1804 only 0.026% of the total bills and notes discounted went unpaid. By contrast the estimate for the period from 1805 to 1808 is 0.047%.

Promissory notes are once again the problem. The 1809 discount committee report finds that from 1805 through 1808, only 0.008% of bills went unpaid, falling to 0.005% after recoveries. By contrast 0.10% of notes went unpaid, 0.068% after recoveries. Overall, even though promissory notes made up less than half of the discounts over the four years in question, they accounted for more than 90% of the losses on discount.<sup>75</sup> The Committee observes that these losses on notes of 0.1% are not of much importance to the Bank. The losses are of concern instead because the easy credit the bank is granting 'to persons hitherto unaccustomed to such extensive concerns' is likely to result in bankruptcies and economic distress.<sup>76</sup>

This report leads to reform of the Wednesday's Notes Committee. Policies include: a Director when putting someone up for a discount account is required to submit an appropriate credit limit for that individual. Account-keeping books are redesigned to make it easy for the Committee to track the credit granted to each discounter alongside the discounter's recommended line of credit. Accounts with combined discounts and acceptances in excess of £100,000 are to be reported to the Court each week. The record-keeping and process followed by the Notes Committee are also reformed.<sup>77</sup> The setting of individualized credit limits for all discounters is proposed, but not adopted.<sup>78</sup> One apparent consequence of the attention paid to promissory notes by the Bank's directors is, however, that questionable practices begin to show up in the bills that were discounted.<sup>79</sup>

<sup>&</sup>lt;sup>75</sup> C.D. 9-2-1809

<sup>&</sup>lt;sup>76</sup> C.D. 9-2-1809

<sup>77</sup> C.D. 23-3-1809

<sup>&</sup>lt;sup>78</sup> C.D. 9-2-1809

<sup>&</sup>lt;sup>79</sup> Clapham 'Bank of England' p. 31



Figure 3. Bank of England average notes in circulation, quarterly, 1796 - 1817

Source: Report from Committee of Secrecy on the Bank of England Charter (P.P. 1832, VI) App. 82.

#### IV. The 1810 crisis and the transformation of the Bank of England

#### A. Accommodation paper and the monetary growth of 1809 and 1810

The eighteen-month period from the first quarter of 1809 through the second quarter of 1810 was marked by particularly rapid growth in the Bank of England's discounts by almost £7 million or 52%. Over the same 18 month period the Bank's note issues increased by almost £4 million or 23% (see Figure 3).<sup>80 81</sup> Note also that precisely at the start of the pre-crisis monetary expansion early in 1809 Antipa documents the onset of a decline in the *agio* between the mint price and the spot rate for gold and establishes a break

<sup>&</sup>lt;sup>80</sup> O'Brien and Palma 'Old Lady.' Regarding other money supply components: a £350,000 increase in Bank of England deposits from 1809 to 1810 is entirely accounted for by public deposits, see Committee of Secrecy (P.P. 1832, VI) Apps. 24 and 31. Palma 'reconstruction' p. 380 and O'Brien and Palma 'Old Lady' estimate a decline in the coin supply of more than 2% per annum from 1797 through 1813. The 1809-11 decline is not however sufficient to offset the growth in notes, and furthermore there is some uncertainty regarding the precise timing of the decline in the coin supply, Palma 'reconstruction' pp. 384, 388.

<sup>&</sup>lt;sup>81</sup> Note that Antipa and Chamley 'regimes' does not find a significant expansion of the monetary base from 1809 to mid-1810 in part because they exclude 'small notes' which increased over these months by £2.9 million or more than 15% of the total notes in circulation in February 1809, Second Report of S.C. on resuming payments (P.P 1819, III) App B.1.



date in the data.<sup>82</sup> Crisis broke out in July 1810 and there was a third quarter, crisis-related expansion of discounts and of Bank note issues at rates of 5% and 13% respectively.83

Figure 4a. Bank of England liabilities: Change over previous year as a fraction of total assets, 1797 to 1817

Note: Based on end of February data for each year.

Source: Bank of England Balance Sheet

<sup>&</sup>lt;sup>82</sup> 'How fiscal policy affects prices' pp. 1049-50, 1062
<sup>83</sup> Committee of Secrecy (P.P. 1832, VI) Apps. 58, 82



Figure 4b. Bank of England Assets: Change over previous year as a fraction of total assets, 1797 to 1817

Note: Based on end of February data for each year.

Source: Bank of England balance sheet

The Bank of England balance sheet gives more detail on what drove the increase in Bank notes. The line in figure 4a and in figure 4b displays the percent change in total assets from year to year, while the stacked bars present the changes in each element of the Bank's balance sheet as a fraction (expressed as a percentage) of total assets. Figure 4a shows the Bank's liabilities and the two-year increase in both Bank notes and the Bank balance sheet from February 1809 through February 1811. On the asset side of the balance sheet Figure 4b shows that the asset growth from February 1809 to February 1810 is more than accounted for by the increase in private debt (or discounts). Indeed, Figure 4b shows that during this year the Bank's lending to government dropped significantly as did its gold reserve and that these changes

helped accommodate a massive growth of discounts on the balance sheet. By contrast, the asset growth from 1810 to 1811 is accounted for by a large increase in lending to government.<sup>84</sup>

This analysis raises the question of what drove the unusual growth of discounts from 1809 to 1810, and the associated increase in Bank notes over the same period. Fortunately, the Bank has records that address this question. As the Bank had noticed a change in the discount market from the fourth quarter 1808 to the first quarter 1809,<sup>85</sup> a Discount Committee was formed in January 1809, the first Discount Committee to be formed after the 1804 Committee. The 1809 Committee reports that the recommended maxima for discount accounts that had been set in 1804 are being breached – due in large part to the growth of bankers' acceptances. On January 1 1804 bankers' acceptances accounted for only 11% of total discounts. By January 1 1809 they accounted for 21% of total discounts – and for 82% of the increase in discounts. Thus, this committee draws attention to bankers' accounts that are consistently in excess of £100,000 'with and upon,' well above the limits agreed in 1804.<sup>86</sup> A year later the 1810 discount committee also calls out the impropriety 'of advancing to an unlimited extent' on bankers' acceptances and finds that these discounts grew from January 1809 to January 1810 by £990,000 or 32%.<sup>87</sup> A motion to limit any one banker's acceptances to £150,000 fails to pass.<sup>88</sup> Over the following six months they grow another 15% to the highest figure that would be reported, £4.7 million on July 1, 1810, immediately preceding the outbreak of the crisis.<sup>89</sup>

There is another category of bills which are considered by the 1810 discount committee to have played an important role in the 37% rise in discounts from January 1809 to January 1810. Foreign trade accounts for a large percentage of the increase. While the committee acknowledges the role played by high wartime expenses in the import business, it finds that the largest borrowers are newly established houses and that the paper discounted is not following the regular course of trade, that is 'from the importer to the middleman or manufacturer,' but instead is 'frequently between two importers or between two large

<sup>85</sup> The 1810 Discount Committee found that the increase in discounts from 1808 to 1809 was 20% (C.D. 25-1-1810).
<sup>86</sup> C.D. 9-2-1809. In other words, for these accounts the sum of the discounts (or accounts 'with,' nominally limited to £30,000) and of the acceptances (or accounts 'upon,' nominally limited to £60,000) in fact typically exceed £100,000.

<sup>87</sup> C.D. 25-1-1810, 202-04. The senior members of the 1809 Discount Committee were William Manning junior, George Dorrien and Sir Charles Pole and the junior members of the 1809 Committee were Henry Davidson, John Staniforth and James Campbell (C.D. 5-1-1809, 425). In January 1810 three of these directors had rotated out of the directorship and could not serve, and William Manning jr. did not serve. Thus the 1810 Discount Committee was composed of George Dorrien and Ebenezer Maitland as senior members and John Baker Richards, Samuel Drewe and James Campbell as junior members (C.D. 18-1-1810, 195).

<sup>&</sup>lt;sup>84</sup> Antipa and Chamley, 'Regimes.'

<sup>&</sup>lt;sup>88</sup> C.D. 15-2-1810, 220.

<sup>&</sup>lt;sup>89</sup> C.D. 28-2-1811.

wholesale dealers, which has the appearance of mutual consent to support the price of an article to the prejudice of the public'.<sup>90</sup> The committee continues:

The same remark applies to the Home Trade likewise, and Notes are frequently seen between two warehousemen of the same class, which affords ground for suspicion that if a Sale should actually have taken place, the Transaction is for the purpose of speculation upon an expected rise in the article purchased such as Cotton Goods, Woollens or other Manufactures, to the injury of the Consumer.<sup>91</sup>

The Committee explicitly associates this type of financing with the maintenance of prices above the level at which they would be in the absence of the use of such financing. In fact, wholesale prices, which had risen by 21% over the course of 1808, saw an 8% decline in the spring of 1809, but by January 1810, the month of the report, had risen once again back to their January 1809 level.<sup>92</sup> The 1810 Discount Committee states explicitly that reason for concern over the heightened level of prices is the cost that this imposes on consumers.<sup>93</sup>

In short, the 1810 Discount Committee makes it very clear that some directors of the Bank are concerned about an expansion in Bank credit that is being used to finance the wrong kind of bills and notes: both banker's acceptances and the use of bills to finance the carry of inventory are explicitly discussed. While the Discount Committee does not use the term, both of these types of bills fall under the accommodation bill category.

## B. The birth of a monetary policy role for the Bank

The Discount Committee Reports of 1809 and 1810 are part of a robust debate amongst the directors over Bank policy. This debate is closely related to the classic central banker's question of whether or not it is time to start taking away the punchbowl: some directors argue that the 21% increase in prices that took place over the course of 1808 will result in financial instability if the Bank does not control the growth of credit, while others argue that financial stability requires the Bank to continue its accommodative stance. Because in this era the Bank's interest rate was fixed at 5%, the maximum rate permitted by law, the only option for the Bank when it sought to slow the growth of credit was to impose limits on the quantity of discounts. Thus, the debate centers on the question of what categories of bills, if any, need to face restrictions when brought for discount.

Early signs of division among the directors who make up the Court are clear in the discussion of the 1809 discount committee report, which drew attention to the dramatic rise in prices that had been observed over

<sup>&</sup>lt;sup>90</sup> C.D. 25-1-1810

<sup>&</sup>lt;sup>91</sup> C.D. 25-1-1810, 202-03

<sup>&</sup>lt;sup>92</sup> Gayer et al. 'Growth and fluctuation' Domestic and imported commodity price index, monthly.

<sup>&</sup>lt;sup>93</sup> See also Duffy 'Bankruptcy' p. 210; Crouzet 'L'economie britannique' p. 551.

the past year and proposed substantial reform of discount policies and practices (discussed in section III). This report concludes with a recommendation that the Bank's credit policies be reviewed annually:

Your Committee ... being themselves impressed with the importance of the subject, as it concerns the welfare of the Bank, as it concerns the prosperity and good regulation of the Trade of the Country, and as it concerns the character of the individuals entrusted with the direction of this great and opulent Corporation, they take the liberty of recommending an annual revision of the matter now brought before the Court, by a special committee for considering the Discounts.<sup>94</sup>

Observe that a responsibility of the Bank to the public is already implicit here.

In general, it was common for a committee to have its recommendations either accepted by the whole Court without further comment or accepted after allowing two weeks 'for consideration.' The recommendations offered by the 1809 discount committee are made, then left for consideration a fortnight hence, and reviewed by the Court in detail on March 16. Significantly amended resolutions are adopted on March 23, and these only incorporate some of the recommendations. The delay and the amendments are clear signs that it was not an easy task to draft policies that could pass when a vote of the Court was taken. Indeed, as we see in Figure 1, the policies that were adopted in March 1809 were only very briefly effective in slowing the growth of discounts.

Some emphasis should be placed on the fact that the 1809 committee was concerned not just with monetary stability and the fact that prices were rising at a rate of 20% per annum, but also with financial stability. In this era, the two were viewed as closely connected, because the committee simply assumed that over time prices would return to their 'natural level' after rising as they had in 1808. When this happened, the committee anticipated that bankruptcies would result from the 'large accommodation' granted by the Bank to traders who were 'hitherto unaccustomed to such extensive concerns', and would ultimately 'give the public cause to lament' the liberality of the Bank. The committee makes it clear that the issues they raise concern 'the prosperity and good regulation of the Trade of the Country'.<sup>95</sup>

Over the course of 1809 the ongoing division between different factions on the Court is repeatedly made clear. On July 13, when discounts are at their highest ever and rising, a motion to have a committee consider the state of the discounts was made, seconded, and then rejected on the basis that a report had recently been made and regulations adopted. On November 30, a motion was made and seconded to 'limit the amount of any Promissory Note between two parties for Discount, to the sum of £10,000'.<sup>96</sup> But the

<sup>&</sup>lt;sup>94</sup> C.D. 9-2-1809 450-51.

<sup>&</sup>lt;sup>95</sup> C.D. 9-2-1809

<sup>&</sup>lt;sup>96</sup> C.D. 30-11-1809.

motion did not pass, even though the 1809 discount committee report indicated that the average value of a promissory note discounted at the Bank was about £600.

As has already been noted, the directors on the 1810 discount committee are firmly of the opinion that too many of the Bank's discounts do not arise from 'the regular course of trade' and that the Bank is not just discounting too much for individual accounts, but in particular the Bank needs to restrict its discounts of banker's acceptances.<sup>97</sup> The report continues to observe that the resolutions adopted subsequent to the 1809 report are not in fact being followed, in particular, 'the check endeavored to be put upon too indiscriminate liberality in Discount as well as upon the acceptances of Bankers by reporting the high accounts weekly to the Court has fallen into disuse,' and reproves the Court that if a resolution is impractical for a reason such as the press of business, it should be amended rather than simply ignored.<sup>98</sup> The report concludes by reiterating the recommendation of the 1809 committee that an annual discount committee should be established.<sup>99</sup> Discussion of the report is postponed for a fortnight, which is a fairly common event. What is not common is that 'the debate' rather than 'consideration of the report' is postponed.<sup>100</sup>

Immediately after the decision to postpone debate on the report, it is moved and seconded 'that it is the opinion of this Court that the amount of the discounts which has for some time past been progressively, but rapidly increasing ought to be reduced with the least possible inconvenience or embarrassment to the Public or Individuals.' The motion does not pass.<sup>101</sup>

When the report is discussed on February 15, elements of the debate are recorded in the minutes. It opens with a salvo from the directors who want to restrict the discounts. They put forward a motion to refuse to discount all promissory notes that do not state the transaction for which the note was drawn. This motion is answered with a lengthy 'amendment' which opens with data citing the recent seasonal fall in the discounts and the previous years' decline in the discount of government paper to rebut the positions taken by the Discount Committee on the state of the discounts. Although the 'amendment' concludes that it is not 'expedient' to take 'extraordinary measures' to reduce the discounts, it also singles out bankers' acceptances for the 'particular attention' of the Committee in Waiting.<sup>102</sup>

<sup>&</sup>lt;sup>97</sup> C.D. 25-1-1810, 203-04. As the recommendation of the 1809 discount committee that a discount committee be appointed every year had not been adopted by the Court, the appointment of the 1810 committee was an independent decision.

<sup>&</sup>lt;sup>98</sup> C.D. 25-1-1810, 204-05.

<sup>&</sup>lt;sup>99</sup> C.D. 25-1-1810, 205

<sup>&</sup>lt;sup>100</sup> C.D. 25-1-1810, 206

<sup>&</sup>lt;sup>101</sup> C.D. 25-1-1810, 206

<sup>&</sup>lt;sup>102</sup> C.D. 15-2-1810, 219

Both the amendment and the original motion fail to pass. There follows a motion that no banker's acceptances should total more than £150,000 and 'that the Committee of Daily Waiting be instructed to reduce gradually all accounts above such sums.' This too fails to pass.<sup>103</sup> The session closes with two resolutions: that a committee be appointed annually to inspect the discounts and that the Court proffers its thanks to the directors who prepared the report. Observe that the inauguration of an annual discount committee was itself an acknowledgment by the Bank of the need for policy-making with respect to the system of money and credit.

Overall, it is clear that a segment of the Court of Directors is not just opposed to the discount committee's interpretation of recent events, but is successful in preventing the committee's policies from being implemented. The most generous explanation for their approach is that they believed it to be the Bank's duty to support commercial activity by discounting liberally upon demand: this view is represented by the testimony of the Governor and Deputy Governor to the Bullion Committee in 1810. Observe, however, that less charitable explanations may apply to some of the directors: some may have been focused on the booming business and short-term profits of the Bank, leaving the long-term, big picture to take care of itself; and some perhaps were not disinterested, but in fact profiting personally from the boom and the easy terms of credit provided by the Bank.<sup>104</sup>

Bank of England Governor Whitmore and Deputy Governor Pearse explained to the Bullion Committee the reasoning underlying their advocacy of a liberal discount policy. Their goal is to serve the public.<sup>105</sup> They believe that a liberal discount policy is the best means to do so based on lessons drawn from the Bank's experience of restricting discounts in 1796 and 1797 – which ended in the Restriction: if the Bank 'had persisted in diminishing their discounts to a greater degree than they did, they would have brought on ruin to the mercantile part of the community.' Indeed, 'many of the Bank Directors repented of the measure'.<sup>106</sup> In fact, in 1796-7 the combination of both a standard internal drain generated by country bank failures and elevated demand for gold due to fear of invasion forced the Bank to reduce discounts even though it was clear that the support of commerce called for a more liberal policy: both Bank officials manifestly understand the monetary forces that were at play and find that the Bank, by allowing the outstanding notes to shrink with the Bank's gold reserve, caused 'much of the public and commercial distress which arose' during this period.<sup>107</sup> It is Deputy Governor Pearse who draws from this the clearest

<sup>&</sup>lt;sup>103</sup> C.D. 15-2-1810, 220

<sup>&</sup>lt;sup>104</sup> The 1812 discount committee report raises the concern that a quarter of the 'notes are done by a single Director with the assistance of the Head of the Discount Office,' and proposes changes to the process for evaluating notes that will ensure that three directors are always present when notes are being evaluated (C.D. 20-2-1812). <sup>105</sup> S.C. on price of bullion (P.P. 1810, III) p. 89

<sup>&</sup>lt;sup>106</sup> S.C. on price of bullion (P.P. 1810, III) p. 110

<sup>&</sup>lt;sup>107</sup> S.C. on price of bullion (P.P. 1810, III) p. 110

lesson: 'From our experience, and in my view of it, I can see no positive inconvenience likely to result from [the Restriction becoming] a permanent measure.' It is only because 'the feelings of the public would not be satisfied, unless it had in expectation the lifting of the Restriction,' that Pearse recognizes the necessity of restoring convertibility.<sup>108</sup>

Overall, in 1810 the directors of the Bank of England were debating the question of whether the economy was overheating due to the Bank's accommodative discount policy. One side argued that monetary stability was not a concern and that financial stability was best served by an expansive policy,<sup>109</sup> the other side was concerned about the financial stability effects of prices that remained elevated after rising through 1808 and sought to restrict discounts of certain classes of bills. Notably both factions agreed that banker's acceptances were a problem that needed control. Ultimately, however, all policies restricting discounts were successfully blocked, and by February 1810 it was clear that the Bank directorship was not going to adopt a policy constraining either the growth of discounts or the associated growth in the monetary base.

During this debate over Bank policy directors on both sides of the monetary policy debate acknowledged that the Bank had public responsibilities. As was noted above, the February 1809 discount committee already implicitly acknowledged a public role for the Bank. That summer Ricardo set off a public debate over the Bank's role in the economy and in the recent inflation.<sup>110</sup> Thus, it is unsurprising that we find in the 1810 discount committee report a much clearer discussion of the public responsibilities of the Bank. The 1810 Committee explains that the Bank's support of paper that did not arise from 'the regular course of trade' but instead 'has the appearance of mutual consent to support the price' is of concern because it has the effect of raising prices 'to the prejudice of the public' and 'the injury of the consumer.' The Report continues to state explicitly:

Your Committee have pointed out the above particulars, not only as they concern the Bank, respecting the sufficiency of the Parties, but also upon a more extended view of the subject, with regard to the Community.

<sup>&</sup>lt;sup>108</sup> S.C. on price of bullion (P.P. 1810, III) p. 112; see also 119-20. This view then leads Pearse to the immoderate and much criticized conclusion that there is virtually no risk of inappropriate liquidity provision by the Bank, S.C. on price of bullion (P.P. 1810, III) p. 127; see also pp. 97, 112. This testimony has gone down in history as 'answers that have become almost classical by their nonsense,' Bagehot 'Lombard street' p. 86.

<sup>&</sup>lt;sup>109</sup> In fact, as the testimony of Whitmore and Pearse makes clear, the motivation for the approach taken by the two Bank officials is directly comparable to the motivation that underlay US regulators' approach to 2008 crisis (see 'Timothy Geithner' in *Wall Street Journal* 4 June 2014).

<sup>&</sup>lt;sup>110</sup> Ricardo 'High price of bullion.'

The Charter which the Legislature has granted to the Bank, was no doubt given for the general Benefit, and those who are entrusted with the Direction of such extraordinary privileges, ought to keep in view the good of the community as well as the Profits of the Corporation.<sup>111</sup>

In short, the 1810 discount committee argues directly that the Bank has an obligation to look beyond its own profits and to take the public welfare into account. Indeed, the last paragraph reads as if the authors are pre-empting an argument that they expect to hear: that the Bank's primary duty is to its own profits and to its shareholders. The committee relates the Bank's public duties to the fact that the Bank is a chartered company that can continue to exist only so long as Parliament chooses to renew the Bank's charter. This status necessarily involves some attention to the 'general Benefit.' In short, this is an argument that a simple focus on the Bank's profits would be short-sighted and that the Bank must take public welfare into account because in 1812 it will need to seek a renewal of its charter.

The need to renew the charter may explain why it is not just the directors who are in favor of restricting discounts that argue that the Bank has public responsibilities. The directors who believe that the Bank has a duty to provide ample credit to the economy propose the following resolution:

That altho' the Discount Accounts of some individual Houses may appear upon comparison to be unusually high it does not seem expedient to have recourse to any extraordinary measures to reduce the total amount of Discounts. That the Acceptances of Bankers have much increased of late years, and that it be recommended to the Committee of Waiting to pay particular attention to the state of those accounts. That this Corporation, being particularly interested in the Prosperity of the Commerce of this Country, is peculiarly called upon to give every possible assistance and Support to the Commerce and Credit of the City of London.<sup>112</sup>

Overall, by 1810 the Court of Directors' minutes make it abundantly clear that the directorship of the Bank has wholly embraced the view that the Bank has public responsibilities. This consensus – that the Bank has public duties and that the objective of the Court is to determine how best to meet those responsibilities – underlies the discount committee reports and the related discussions for the next two decades.<sup>113</sup>

On the other hand, the debate amongst the directors of the Bank precluded any consensus on *how* to best serve the public interest. Thus, the timing of the government's Bullion Committee Report in relation to the policy debate within the Bank is of particular interest. The 1810 discount committee gave its report on January 25 and, as was clear on that day, it was going to be hard if not impossible to come to a consensus

<sup>&</sup>lt;sup>111</sup> C.D. 25-1-1810, 203-04

<sup>&</sup>lt;sup>112</sup> C.D. 15-2-1810, 219

<sup>&</sup>lt;sup>113</sup> This conclusion contrasts with that of Frank Fetter 'Development' pp. 58-60 for reasons that are unclear. Presumably these early discount committee reports did not draw Fetter's attention.

about the report. On February 1 Francis Horner, an MP with economic expertise, presented a motion in Parliament to investigate 'the present state of the circulating medium and the bullion trade' and called for data on the Bank's note issues.<sup>114</sup> While it is not obvious that Horner himself would have had knowledge of the dysfunction in the Bank's directorship, William Manning was both an MP and the Bank director who had chaired the 1809 discount committee, and both Alexander Baring and Samuel Thornton also served as MPs and Bank directors. Manning and Thornton were present at the January 25 meeting of the Court. Furthermore, Henry Thornton, the brother of Samuel, was also an MP and a prominent economic theorist. In short, several members of Parliament were aware that the Bank directors who sought to put strict limits on the paper discounted at the Bank were losing the internal policy debate. William Manning, Samuel Thornton, and Alexander Baring all attended the February 15 meeting when the Court of Directors' failure to restrict discounts was finalized. And then on February 19 the Bullion Committee was appointed. William Manning, Alexander Baring, and Henry Thornton were all appointed to the Committee, although of the three only Thornton had a hand in drafting the final report.<sup>115</sup>

The Bullion Committee Report explains that the liberal discount policy advocated by the current Governor and Deputy Governor 'with utmost confidence' is built upon a fallacy, because they fail to realize that, in the absence of convertibility, every discount becomes an addition to the supply of money which causes prices to rise, which in turn increases the demand for discounts, etc., setting off a vicious cycle of inflation that may progress indefinitely.<sup>116</sup> Furthermore, the Report concludes that 'these opinions of the Bank must be regarded as in a great measure the operative cause of the continuance of the present state of things [i.e. the depreciation of banknotes]'.<sup>117</sup> Even so, the Report finds the Bank is not blameworthy for its actions, but that this situation was created by the Suspension and reflects the extraordinary difficulty of managing monetary policy in the absence of convertibility.<sup>118</sup>

The Report ultimately advocates repeal of the law suspending payments in two years – whether or not the war is over – while at the same time concluding that the delicacy of the operation means that 'the particular mode of gradually effecting the resumption of cash payments ought therefore, in the opinion of Your Committee, to be left to a great measure to the discretion of the Bank'.<sup>119</sup>

The new information presented here on the monetary policy debate taking place within the Bank and the closely associated timing of the appointment of the Bullion Committee provides support for Feaveryear's

<sup>&</sup>lt;sup>114</sup> Feaveryear 'Pound sterling' p. 182

<sup>&</sup>lt;sup>115</sup> Cannan 'paper pound' pp. xxi-xxii, xlii.

<sup>&</sup>lt;sup>116</sup> S.C. on price of bullion (P.P. 1810, III) p. 54-56

<sup>&</sup>lt;sup>117</sup> S.C. on price of bullion (P.P. 1810, III) p. 59

<sup>&</sup>lt;sup>118</sup> S.C. on price of bullion (P.P. 1810, III) p. 54, 58

<sup>&</sup>lt;sup>119</sup> S.C. on price of bullion (P.P. 1810, III) p. 76-77

view that the recent collapse of the *assignats* and its social consequences in France caused MPs with financial and macroeconomic expertise to take a pre-emptive approach to the – admittedly minor – depreciation of the Bank note.<sup>120</sup> Four MPs who were appointed to the Committee, Thornton, Parnell, Huskisson, and Horner, had between them witnessed the collapse of the *assignats* and its social consequences in France, the fall and recovery of the Irish currency, and the vicissitudes of country banking in England. Three of them had written extensively on the topic of managing the currency.<sup>121</sup> In short, Parliament in 1810 had a remarkable measure of macroeconomic expertise upon which to draw.

The timing of the report and the fact that the report came out too late for Parliament to vote on its recommended policy is evidence that the purpose of the Bullion Committee was to affect the outcome of the Bank's internal struggle, whether directly by influencing the directors or indirectly by its effect on the public, or both. The chronology of events is clear. The Bullion Committee Report was published on 8 June 1810. By 6 July a crisis was breaking out.<sup>122</sup> Over the third quarter of 1810 the yield on consols rose by 48 basis points as bankers and merchants sold government bonds in order to maintain their liquidity (see Figure 2). At the same time, the discount window was used as another essential source of liquidity, and the Bank's note issues increased alongside its discounts (see Figures 1 and 3). By the fourth quarter of 1810, discounts had dropped dramatically: from their July 1 all-time peak of £22.5 million, discounts had declined on January 1 1811 by £4.6 million or 21%.<sup>123</sup> 35% of the decline was due to the decline in banker's acceptances. While note issues did not decline from their crisis high, this is explained by the Bank's extensive support of government borrowing on Exchequer Bills from 1810 through 1812 (see Figure 4b).<sup>124</sup> Figure 2 give some clues as to the challenges of government finance in this period, since from June 1810 when the Bullion Report was issued through 1812 the yield on consols rises.

Observe that in February 1810 the directors were in agreement that the discount of banker's acceptances needed to be controlled (see above), but that these acceptances continued to grow through June. The publication of the Bullion Committee report would seem to be the best explanation for what might have changed in the summer of 1810 to cause banker's acceptances to decline. There are two possible mechanisms and both of them may have acted together. The knowledge that the Resumption was coming and might be coming very soon could easily have caused the bankers to become more cautious in taking

<sup>&</sup>lt;sup>120</sup> Feaveryear 'pound sterling' p. 182

<sup>&</sup>lt;sup>121</sup> Sussman 'William Huskisson' discusses Huskisson's role on the Committee. See also Feaveryear 'pound sterling' p. 182.

<sup>&</sup>lt;sup>122</sup> Duffy 'Bankruptcy and insolvency' p. 223; Clapham 'Bank of England' v. 2 p. 29; Pressnell 'Country banking' pp. 466-67

 $<sup>^{123}</sup>$  C.D. 28-2-1811. Discounts over the course of the year 1810 totaled more than £138 million. This too would be an all-time high.

<sup>&</sup>lt;sup>124</sup> Clapham 'Bank of England' v. 2 p. 33, Antipa and Chamley 'Regimes'.

on liabilities and therefore to restrict the drawing of acceptances.<sup>125</sup> It is also possible that the Bullion Report's public denunciation of the argument in favour of the Bank's accommodating approach had the effect of supporting the position of William Manning, who had just in April been appointed Deputy Governor of the Bank, against John Pearse who had at the same time been promoted from Deputy Governor to Governor.

Support for the latter mechanism is found in Duffy's analysis of weekly discounts from June through December 1810. Duffy shows that the failures that set off the 1810 crisis in early July took place when the Bank's discounts were at their highest level, but also that the week after these failures, the Bank's discounts dropped significantly, before rising again the next week<sup>126</sup> – and Duffy argues that after the onset of the crisis the remarkable fluctuation of the Bank's weekly discounts between £1.7 million and £4.2 million through the end of the year is inconsistent with a well-defined crisis lending policy on the part of the Bank.<sup>127</sup> It is, however, consistent with the view that there were two factions in the Bank and that the rotating three-person Committee in Waiting was sometimes dominated by one and sometimes by another.<sup>128</sup> If this analysis is correct, then the uncertainty regarding a bank's ability to get its acceptances discounted in the morning prior to settling bill obligations with the Bank in the afternoon would likely lead to a decline in the London banks' reliance on this mechanism and lead to retrenchment on the part of the London banks – with knock-on effects for the mercantile community. This analysis also explains the sudden increase in Consol yields (see Figure 2) – as disappointed bankers and merchants turned to Consols for liquidity.

Duffy also establishes that in early 1810 the Bank had been discounting accommodation paper and only in July started rejecting bills that were evidently accommodation bills.<sup>129</sup> This policy was then also adopted by a major London bank.

In fact, we find that by January 1, 1811, the quantity of bankers' acceptances discounted had fallen from the high 6 months earlier by more than one third or  $\pounds 1.6$  million.<sup>130</sup> A year later they had fallen by another third, and the Discount Committee reported that 'of 65 bankers named in the list, the Bank did not hold any of the acceptances of 32. 30 had under  $\pounds 100,000$  each, 2 had under  $\pounds 130,000$  each, and 1 had under

<sup>130</sup> C.D. 28-2-1811.

<sup>&</sup>lt;sup>125</sup> See Clapham 'Bank of England' v. 2 p. 29.

<sup>&</sup>lt;sup>126</sup> Duffy, 'Bankruptcy and insolvency' Table 6.6.

<sup>&</sup>lt;sup>127</sup> id: 223, 300.

<sup>&</sup>lt;sup>128</sup> See id. p. 226. In fact, Duffy argues that it is possible that the directors of the Bank were sufficiently conflicted about the conundrum of accommodation vs stringency in the crisis to explain these fluctuations even in the absence of specific factions.

<sup>&</sup>lt;sup>129</sup> Duffy, 'Bankruptcy and insolvency' pp. 281-82, 298

£205,000<sup>°,131</sup> In short, by February 1812 bankers' acceptances were coming close to compliance with the Bank's established principles on credit limits. Through the remaining years of the war banker's acceptances would hover between £2 and £2.4 million, jumping to £2.8 million in 1816. After this, they declined faster than discounts more generally, so that by 1824 only £112,000 were outstanding and they amounted to only 4% of discounts.<sup>132</sup> The decline in bank credit was accompanied by a somewhat smaller decline in discounts more generally, which made it much easier and less internally controversial for the Bank to adopt controls on credit.

Additional evidence of the Bullion Committee Report's persuasive effect on the Bank directorship is that the Bank immediately began to control the growth of accounts: Just six weeks after the Report's publication, two requests for discount accounts were rejected by the Court, and a month later the Court declined to renew an account.<sup>133</sup>

#### C. Defaults, losses, and the overhaul of Bank discount policy in response to the crisis of 1810

The unprecedent level of defaults associated with the crisis also promoted the development of new Bank policies. The 1812 Discount Committee Report details the consequences of the crisis, comparing the data on unpaid bills for the years 1809 to 1811 to the same data for the years 1805 to 1808 that had been presented by the 1809 Discount Committee (see Table 2). The default rate on bills, which had been less than 7 bills per year, increased by 15 to 22 times depending on whether one evaluates the number or the value, respectively. Furthermore, the rate of recovery on them fell from 44% to 31%. Unpaid promissory notes, which already had a default rate of over 50 bills per year in the earlier period, quadruple, and the value of unpaid promissory notes increases more than sevenfold. Recoveries on notes rise from 32% to 36%.<sup>134</sup> The net effect is that notes from 1809 to 1811 comprise 75% of unpaid securities and 74% once recoveries are taken into account. The authors of the report conclude that the crisis 'unhappily verif[ies] the apprehensions expressed by your committee in 1809, "that large accommodation afforded to persons unaccustomed to extensive concerns was likely to cause speculations which must in the end prove injurious."<sup>135</sup>

In the fiscal year after the Bullion Committee Report's mid-1810 publication the Bank saw more discounters suspend payments and incurred greater losses on discounts than it had in any prior year or

<sup>&</sup>lt;sup>131</sup> C.D. 20-2-1812.

<sup>&</sup>lt;sup>132</sup> C.D. 29-1-1824.

<sup>&</sup>lt;sup>133</sup> C.D. 26-7-1810, 23-8-1810.

<sup>&</sup>lt;sup>134</sup> The 1812 discount committee explains the disproportionate increase in losses due to bills (as compared to promissory notes) by observing that when, subsequent to the 1809 report raising the alarm over unpaid notes, some discounters found their notes rejected, they apparently had 'bills drawn, or purporting to be drawn in the Country by servants, and other persons who were not possessed of any real property' (C.D. 20-2-1812, 268-69).
<sup>135</sup> C.D. 20-2-1812, 268.

would in any subsequent year (see Figure 5). Calculating a rate of loss on the discounts for the fiscal year from August 1810 through July 1811, we find 0.59% of discounts became unpaid over the course of the year (see Table 2). After seven years of slowly gathering payment on these bills and notes the total write offs that the Bank would take amounted to 0.22% of the fiscal year's discounts. When this figure is compared with the 0.047% average losses from a few years earlier or with the 0.026% average losses of the previous decade, it is clear that the crisis lending of 1810 was associated with higher costs to the Bank, in contrast to the findings of Bignon et al. for a later period.<sup>136</sup>



Figure 5. Bank of England losses on bills: amount of unpaid bills, amounts written off, and discounters who stopped payment, bi-annual data, 1809H2 to 1831H1

Source: Unpaid Bills Reports, Bank of England Court of Directors' meeting minutes.

<sup>&</sup>lt;sup>136</sup> Bignon et al. 'Bagehot for beginners'

We have already observed that while the crisis was building up in February 1810, the Bank adopted the policy of having an annual discount committee review its private sector lending policies – effectively recognizing the need to take a more active role in monetary policy-making. The unprecedented scale of defaults during the crisis also drove the Bank to adopt policies to address the significant problem of unpaid accounts.

In September 1810 the Bank for the first time adopted a policy regarding discount accounts of individuals who have suspended payment: these accounts 'shall be considered as closed'.<sup>137</sup> In January the rule was extended to apply to acceptors, issuers and endorsers who failed to pay within 30 days of being called upon to do so by the Bank.<sup>138</sup> Furthermore, until the obligation was paid such firms could not re-open their accounts and, even then, the firm would have to apply again for an account.<sup>139</sup> Then, in 1812 the Bank established much stricter rules for new discount accounts.<sup>140</sup> These policies explain the decline in discount accounts that took place from 1810.

Furthermore, during this crisis the Bank went beyond standard discount window policy and in February 1811 adopted a new regulation for issuing 'special loans' that typically were six months or more in length and were designed to support illiquid firms and not those that 'have failed': Two or more independent inspectors must present the firm's accounts to the Bank, certify the size of the loan is adequate for the firm to continue in business, and guarantee a fraction of the loan. The whole of the loan must be protected by third party guarantees, and in the unlikely event that the firm fails despite the Bank loan, the guarantors 'are to understand that they will be called upon to take up their notes, the object of the loan being defeated'.<sup>141</sup> Observe that this extraordinary lending policy was carefully structured to identify firms that were illiquid, but not insolvent, using a 'skin in the game' requirement: the inspectors who certified the solvency of a firm had to guarantee a portion of the loan, and could not be pre-existing creditors of the firm.

## V. Conclusion

<sup>&</sup>lt;sup>137</sup> C.D. 27-9-1810.

<sup>&</sup>lt;sup>138</sup> On August 12 1812 the minutes observe explicitly that two discounters' accounts are closed when an acceptor fails and they cannot pay up.

<sup>&</sup>lt;sup>139</sup> C.D. 31-1-1811.

<sup>&</sup>lt;sup>140</sup> C.D. 19-3-1812, 17-12-1812. Remarking on the numerous applications in recent years 'from persons whose responsibility cannot be known to the Directors,' in 1812 the Court establishes a minimum requirement of two years in wholesale trade for new accounts, carefully excluding existing accounts from falling under the new rule (C.D. 19-3-1812). Several months later the Court resolves that a Director must attest based on his own knowledge to the solidity and respectability of an individual before a new discount account may be opened (C.D. 17-12-1812). Duffy 'Bankruptcy and insolvency' p. 227 views this shift in policy as an indication that the Bank had granted accommodation to 'marginal traders' in 1809 and 1810.

<sup>141</sup> C.D. 28-2-1811; Sissoko and Ishizu 'West India trade.'

The 1810 crisis was the first crisis to take place after the financial system had been transformed: credit was mostly provided by specialized financiers and the use of accommodation paper had become common. This crisis forced the Bank to recognize the role that its private sector lending played in the monetary system and in the broader economy.

Whether the actions of the Bank made the 1810 crisis worse or stabilized the financial system is beyond the scope of this paper. Certain facts are, however, clear: the post-crisis decline in discounts and bankers' acceptances (Figure 1 and Section IV), the stabilization of the quantity of Bank notes for the subsequent three years (Figure 3), the leveling off after 1811 of the steady growth in commercial bankruptcies that had been taking place since the mid-18<sup>th</sup> century,<sup>142</sup> and that the 1810-11 bankruptcies, though many, were mostly of small traders.<sup>143</sup> In fact, in Turner's analysis of British banking instability from 1800 to the present, the crisis of 1810 with its bank failure rate of 1.6% doesn't qualify as a banking crisis, much less a systemic crisis.<sup>144</sup>

Due to the 1810 crisis and its aftermath, the Bank brought banker's acceptances under control (see Section IV), adopted a new form of book-keeping designed to make it easier to identify accommodation paper (see Section II.C), overhauled its discount regulations to address the problem of default (see Section IV.C), established an annual committee to review its private sector lending policies (see Section IV.A), and put in place its first extraordinary lending facility providing longer term loans of six months or more (see Section IV.C). These policies were so successful that for more than a century the Bank would not experience defaults and losses that were as severe as those experienced in 1810.

<sup>&</sup>lt;sup>142</sup> Duffy 'Bankruptcy and insolvency' pp. 168-69

<sup>&</sup>lt;sup>143</sup> Duffy 'Bankruptcy and insolvency' p. 195

<sup>&</sup>lt;sup>144</sup> Turner 'Banking in crisis' pp. 52-54.

## Appendix 1

Bill of ExchangeLiverpoolMarch 31, 1814At three months after sight (6) pay (1) to the order of T.H. Cotter (8)the sum of £370 (7) value receivedTo: Glyn Mills & Co. (3, 5)35 Hunt LaneLondon[Signature] (4)

The legal definition of the bill of exchange is (Chalmers 'Digest' p. 8; Gillett Brothers 'Bill on London'):

- (1) An unconditional order in writing
- (2) Addressed by one person [the Drawer]
- (3) To another [*the Drawee*]
- (4) Signed by the person giving it [*the Drawer*]
- (5) Requiring the person to whom it is addressed [*NB: when the Drawee signs the bill, he becomes the Acceptor*]
- (6) To pay on demand or at a fixed and determinable future time
- (7) A sum certain in money
- (8) To, or to the order of, a specified person, or to bearer [the Payee].

Promissory Note London June 30, 1814 Three months after date (6a) I promise to pay (1) to A.M. George (3a, 8) the sum of £240 (7) value received

T.H. Cotter (2a)

# [*Signature*] (4)

The legal definition of a promissory note is (Chalmers 'Digest' p. 261):

(1) An unconditional order in writing

(2a) Made by one person [*the Maker*]

(3a) To another

(4) Signed by the maker

(6a) Engaging to pay on demand or at a fixed and determinable future time

(7) A sum certain in money

(8) To, or to the order of, a specified person, or to bearer [the Payee].

Note that a promissory note is incomplete until it is delivered to the Payee.

## **References (Secondary sources)**

Accominotti, O., Lucena, D., and Ugolini, S. (2019) 'The Origination and Distribution of Money Market Instruments: Sterling Bills of Exchange during the First Globalization', CEPR Discussion Paper 14058. Antipa P. (2016). 'How Fiscal Policy Affects Prices: Britain's First Experience with Paper Money' The Journal of Economic History, Vol. 76, No. 4, pp. 1044-77.

Antipa, P., and Chamley, C. (2019) 'Regimes of Monetary and Fiscal Policy in England during the French Wars 1793-1821', Working paper.

Arnon, Arie (2007). The early round of the bullionist debate 1800-1802: Boyd, Baring, and Thornton's innovative ideas. (Monaster Center for Economic Research, Ben-Gurion University Discussion Paper no 07-14.)

Arnon, Arie (2011). Monetary Theory and Policy from Hume and Smith to Wicksell. Cambridge U Press.

Ashton, T.S. (1945). The Bill of Exchange and Private Banks in Lancashire, 1790-1830. The Economic History Review, Vol. 15, No. 1/2 (1945), pp. 25-35.

Bagehot, Walter (1873). Lombard Street: A Description of the Money Market. New York: Wiley (1999 reprint).

Vincent Bignon, Marc Flandreau, & Stefano Ugolini (2012). Bagehot for beginners: the making of lender-of-last-resort operations in the mid-nineteenth century, *Economic History Review*, 65(2), pp. 580-608.

Ulrich Bindseil (2019). Central Banking before 1800: A Rehabilitation. Oxford University Press.

Lars Borner and John Hatfield (2017). The Design of Debt-Clearing Markets: Clearinghouse Mechanisms in Preindustrial Europe. Journal of Political Economy 125(6), 1991-2037.

Broadberry, S, Campbell, B, Klein, A, Overton, M and van Leeuwen, B, (2015), British Economic Growth, 1270-1870, Cambridge University Press.

Cannan, Edwin (1919). The paper pound of 1797-1821 Introduction. London: PS King & Son.

Chalmers, M.D. (1896). A Digest of the Law of Bills of Exchange. London: Stevens and Sons, Ltd.

Clapham, John (1945). The Bank of England: A History, vol II. Cambridge U Press: Cambridge.

William D. Craighead, 2010. "Across Time And Regimes: 212 Years Of The Us-Uk Real Exchange Rate," Economic Inquiry, Western Economic Association International, vol. 48(4), pages 951-964, October.

F. Crouzet (1958). L' Economie Britannique et le Blocus Continental (1806-1813), (Paris, 1958), ii, 539-40.

De Roover (1953). L'Évolution de la Lettre de Change: XIVe-XVIIIe Siècles. Paris: Armand Colin.

Duffy, I. (1982). The Discount Policy of the Bank of England during the Suspension of Cash Payments, 1797-1821. *Economic History Review*, 35, pp. 67-82.

Ian P. Duffy (1985). Bankruptcy and insolvency in London during the industrial revolution. Routledge

Barry Eichengreen (1996). Globalizing Capital A History of the International Monetary System. Princeton University Press.

A.E. Feaveryear 1931. The Pound Sterling: A History of English Money. Oxford: Oxford at the Clarendon Press.

Fetter, Frank (1965). Development of British Monetary Orthodoxy 1797-1875. Cambridge, MA: Harvard University Press.

Marc Flandreau and Stefano Ugolini (2013). "Where It All Began: Lending of Last Resort and Bank of England Monitoring during the Overend-Gurney Panic of 1866", in Michael Bordo and William Roberds ed. A Return to Jekyll Island: The Origins, History, and Future of the Federal Reserve 113-165.

Gayer, Arthur, W.W. Rostow & Anna Schwartz (1953). The Growth and Fluctuation of the British Economy 1790-1850, Oxford Clarenden Press.

Gillett Brothers (1952). The Bill on London: Or, the Finance of Trade by Bills of Exchange, London: Chapman & Hall.

Glasner, David. 1985. "A Reinterpretation of Classical Monetary Theory." Southern Economic Journal. 52(1) 46-67.

Glasner, David. 1992. "The Real Bills Doctrine in Light of the Law of Reflux." History of Political Economy, 24 (4): 867–894.

C.A.E. Goodhart (1988). Evolution of Central Banks. MIT Press.

C.A.E. Goodhart (2011). 'The Changing Role of Central Banks' Financial History Review 18(2) 135-54.

Gary Gorton (2020). Private Money Production without Banks. NBER Working Paper No. 26663.

Hawtrey, Ralph (1919). Currency and Credit. London: Longmans, Green and Co.

Hendrickson, Joshua (2018). 'The bullionist controversy: Theory and new evidence.' Journal of money, credit and banking 50(1), 203-41.

Robert Holland 1910. The London Bankers Clearing House, in The English Banking System (Washington, DC: National Monetary Commission, Doc. No. 492), 267–294.

W.S. Holdsworth (1916). "Origins and Early History of Negotiable Instruments IV," Law Quarterly Review 32(1), pp. 20-37

J.K Horsefield 1943. Gibson and Johnson: A Forgotten Cause Celébre. Economica, New Series, 10(39), 233-237.

J.K Horsefield 1952. British Banking Practices, 1750-1850: Some Legal Sidelights. Economica, New Series, 19(75), 308-21.

Hudson, Pat (1986). The Genesis of Industrial Capital: A Study in the West Riding Wool Textile Industry 1750-1850. Cambridge University Press.

Geoffrey Ingham (2004). Nature of Money. Polity Press: Cambridge.

Charles Kindleberger (1984). "Financial Institutions and Economic Development: A Comparison of Great Britain and France in the Eighteenth and Nineteenth Centuries." Explorations in Economic History 21(2), p. 103-124.

W.T.C. King (1972). History of the London Discount Market. London: Cass.

David Laidler (1984). 'Misconceptions about the Real Bills Doctrine' Journal of Political Economy 92(1) pp. 149-55

David Laidler, 2000. "Highlights of the Bullionist Controversy," UWO Department of Economics Working Papers 20002, University of Western Ontario, Department of Economics.

Mankiw, Gregory (2018). Learning the Right Lessons from the Financial Crisis, NY Times, July 27 2018, https://www.nytimes.com/2018/07/27/business/lessons-from-the-financial-crisis.html

Marcuzzo, Maria Cristina & Annalisa Rosselli (1991). Ricardo and the Gold Standard. Joan Hall translation. Macmillan: London.

Hyman Minsky 1995. Financial Factors in the Economics of Capitalism. Journal of Financial Services Research 9, 197-208.

Lloyd Mints 1945. A History of Banking Theory. University of Chicago Press.

Nachane, D. and Hatekar, N. (1995). The bullionist controversy: An empirical reappraisal. The Manchester School 63:4, 412-25.

Larry Neal (1990) The Rise of Financial Capitalism, Cambridge University Press, Cambridge

Shizuya Nishimura 1971. The decline of inland bills of exchange in the London Money Market, 1855-1913, Cambridge University Press, Cambridge.

O'Brien, Patrick & Nuno Palma (2019). Danger to the Old Lady of Threadneedle Street? The Bank Restriction Act and the regime shift to paper money, 1797-1821. European Review of Economic History, hez008, https://doi.org/10.1093/ereh/hez008.

Officer, Lawrence (2000). The bullionist controversy: A time series analysis. International Journal of Finance and Economics, 5, 197-209.

Palma, Nuno (2018a). Money and modernization in early modern England. Financial History Review 25(3), 231-61.

Palma, Nuno (2018b). Reconstruction of money supply over the long-run: the case of England, 1270–1870. Economic History Review 71(2), 373–92.

L.S. Pressnell (1956). Country Banking in the Industrial Revolution. Clarendon Press.

Rogers, J. (1995). Early History of the Law of Bills and Notes. Cambridge: Cambridge University Press.

Veronica Santarosa (2015). Financing Long-Distance Trade: The Joint Liability Rule and Bills of Exchange in Eighteenth-Century France. Journal of Economic History 75(3). 690-719.

R.S. Sayers 1976. The Bank of England 1891-1944. Cambridge University Press.

David Sheppard (1971). The Growth and Role of U.K. Financial Institutions 1880 – 1962. Methuen & Co. Ltd: London.

Sissoko, Carolyn (2016). How to stabilize the banking system: Lessons from the pre-1914 London money market. Financial History Review 23(1), 1 - 20.

Carolyn Sissoko and Mina Ishizu (2021). How the West India Trade fostered last resort lending by the Bank of England. London School of Economics Economic History working paper no. 318.

Thomas Atkins Street (1906). The Foundations of Legal Liability, vol. II. Edward Thompson Company: Northport, NY.

Sussman, Nathan (1997). William Huskisson and the bullion controversy, 1810. European Journal of the History of Economic Thought 4:2, 237-57.

Ernest Sykes 1910. English Banking Organizations, in The English Banking System (Washington, DC: National Monetary Commission, Doc. No. 492), 262-66.

Taylor, John (2010). Getting back on track: Macroeconomic lessons from the financial crisis. Federal Reserve Bank of St. Louis Review, May/June, 165-76.

Thomas, R and Dimsdale, N (2017) "A Millennium of UK Data", Bank of England OBRA dataset, http://www.bankofengland.co.uk/research/Pages/onebank/threecenturies.aspx

Thompson, Earl. 1974. "The Theory of Money and Income Consistent with Orthodox Value Theory" in Trade, stability, and macroeconomics : essays in honor of Lloyd A. Metzler, George Horwich and Paul Samuelson, eds. New York, New York ; London, England : Academic Press, Inc. pp. 427-53.

Thornton, Henry (1802). An Enquiry into the Nature and Effects of the Paper Credit of Great Britain. New York: Kelley (1965 reprint).

Turner, John (2014). Banking in Crisis. Cambridge: Cambridge University Press.

Stefano Ugolini (2017). The Evolution of Central Banking: Theory and History. Palgrave Macmillan.

Wessel, David (2014). Timothy Geithner: After the Financial Crisis. Wall Street Journal. June 4 2014.

Hartley Withers 1910. The English Banking System, in The English Banking System (Washington, DC: National Monetary Commission, Doc. No. 492), 3-132

Elmer Wood (1939). English Theories of Central Banking Control 1819-1858. Harvard University Press.

#### **Primary Sources**

Bank of England Court of Directors Meeting Minutes (C.D.). cited by date.

Walter Boyd (1801). Letter to William Pitt. J. Wright: London.

Henry Burgess (1826). A letter to Right. Hon. George Canning. Harvey and Darton: London.

Minutes of evidence taken before the Committee appointed to consider the state of woolen manufacture in England. (P.P. 1806, III).

Report from the Select Committee on the High Price of Gold Bullion (P.P 1810, III).

First Report of the Secret Committee on the Expediency of resuming cash payments (P.P. 1819, III).

Second Report of the Secret Committee on the Expediency of resuming cash payments (P.P 1819, III).

Report of the Select Committee on the Law relating to Merchants, Agents, or Factors; etc (P.P. 1823, IV).

Report from the Select Committee on Promissory Notes in Scotland and Ireland (P.P. 1826, III).

Report from the Lords committees appointed a select committee to inquire into the state of circulation of promissory notes under the value of £5 in Scotland and Ireland, and to report to the House (P.P. 1826, VI).

Report from the Select Committee of the House of Lords, appointed to take into consideration the state of the British wool trade, and to report to the House (P.P. 1828, VIII).

Report from Committee of Secrecy on the Bank of England Charter (P.P. 1832, VI).

Report of the Select Committee on Manufactures, Commerce, and Shipping (P.P 1833, VI).

Willam Leatham 1840. Letters on the Currency addressed to Charles Wood. Pelham Richardson: London.

David Ricardo 1809. High Price of bullion.

Daniel Robinson 1827. The Country Banks and the Bank of England, Blackwood's Edinburgh Magazine, XXII, pp. 734-54.

Thomas Tooke 1844. An Inquiry into the Currency Principle. Longman, Brown, Greene and Longmans: London.

Collins v. Martin, 126 Eng. Rep. 1113, C.C.P. 1797

Fentum v Pocock 128 Eng. Rep. 660 CCP 1813

Giles v. Perkins, 103 Eng. Rep. 477, K.B. 1807;

Heylyn v. Adamson, 97 Eng. Rep. 503 K.B. 1758

Newsom v. Thornton 102 E.R. 1189, 1199-1200 (1805)

Robson v. Bennet, 127 Eng. Rep. 1128, C.C.P. 1810

Simpson v Clarke 150 Eng. Rep. 148, 149 Exch. 1835

Smith v. Brown, 128 Eng. Rep. 1066, C.C.P. 1815

Thompson v. Giles 107 Eng. Rep. 441, K.B. 1824

Wild v. Rennards (1806) discussed in 170 Eng. Rep. 1008n (1808)

Zinck v. Walker, 96 Eng. Rep. 681, K.B. 1777