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The Credit Needs of the African Trade and the Development of the Credit Economy in England*

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The paper is premised on the fact that credit institutions made important contributions to the growth of output in manufacturing and commerce in the decades preceding, and during, the Industrial Revolution. It is argued that the development of the credit economy depended on the size of the market for credit transactions in England. Before the second half of the 17th century, that market was not large enough to justify the establishment of credit institutions. The growth of the slave-based Atlantic system in the 17th and 18th centuries (with its peculiar financial requirements), the capture by the British of a predominant share of the trade and commodity production connected with the system after 1660, and the financial needs of the British state arising from the military struggles by which this share was wrested from European rivals, all expanded the market for credit several times over, while at the same time providing much of the funds for the establishment of credit institutions. © 1990 Academic Press, Inc.

The Industrial Revolution in England is perhaps the most studied subject in economic history. The various economic, social, and political processes that culminated in this major structural, organizational, and technological transformation have been examined repeatedly over the years. Efforts have been made to assemble and analyze various statistics relating to the subject.[1] While all these have considerably increased our

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[1] Deane and Cole (1962); Floud and McCloskey (1981); Mitchell and Deane (1971); Mitchell and Jones (1971); Davis (1962); various reprints in W. E. Minchinton (1969); Davis (1979); Wrigley and Schofield (1981).

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understanding of the subject, much still remains to be done in the area of the changing conditions and pressures under which merchants traded and manufacturers manufactured. Institutional development was an important aspect of the overall process that produced the Industrial Revolution. Of these, the credit institutions were crucially important for the growth of trade and industry in the 18th century and beyond. One writer, with some element of exaggeration, has even suggested that "The dominant factor explaining why the rate and scope of capital investment was capable of being stepped-up and enlarged as the occasions demanded is the rise of a credit economy prior to the Industrial Revolution."[2]

The contribution of credit institutions to fixed capital investment in manufacturing is often questioned on the grounds that the fixed capital needs of manufacturing firms during the period were modest and easily met through the ploughing back of profits. Be this as it may, the critical factor in the growth and maintenance of output in manufacturing and commerce during the decades of the Industrial Revolution in England was not fixed capital. The critical factor was the availability of working capital (circulating capital). This has been ably documented for the principal industry of the Industrial Revolution—the cotton textile industry. As Chapman puts it,

> The fixed capital of the northern and midland textile industries before 1815 has been shown to be modest, probably of the order that could readily be obtained by converting or adapting existing buildings and leaving the profits in the business, but the working capital requirements were already three times as much.[3]

It is shown that "In the recurrent commercial crises of the period, the problem was frequently one of liquidity rather than lack of assets, so that even the largest firms were not immune from disaster."[4] As late as the second quarter of the 19th century, the working capital of the larger firms continued to be much greater than their fixed capital. On the basis of the evidence, it is concluded that "The principal constraint on the growth of cotton firms, taking the century 1760–1860 as a whole was clearly the difficulties and cost of marketing."[5]

Here lies the importance of the financial institutions that were brought into being during the period. The credit economy that existed in England in the late 18th and early 19th centuries may not as yet have developed to perfection to be able to meet the financial needs of industry and commerce without difficulties. Yet it performed a crucial function without which the growth of industrial capitalism would have been held back by

[2] Anderson (1966, p. 206).
[3] Chapman (1979, p. 52).
[4] Chapman (1979, p. 54).
[5] Chapman (1979, p. 66).

inadequate supply of working capital. Under the pressure of demand, the credit institutions perfected the performance of their functions continuously from the mid-18th century. Later in the 19th century, the international activities of the highly developed financial institutions of England generated considerable invisible exports that helped to finance the import of raw materials and contributed to the export surplus which built up over time British foreign investment.[6] It is, therefore, pertinent to identify the main sources of pressure the creative response to which brought about the development of these credit institutions.

The thesis whose details are presented in the paper is that the prime mover in the historical process that produced the financial institutions in England in the 18th and 19th centuries was located in the Atlantic economic system of the time. This Atlantic economic system was dependent on the use of African slave labor supplied through the trans-Atlantic slave trade, usually referred to by contemporaries as the African trade. The expansion of the Atlantic system caused a major shift in English foreign trade away from nearby Europe to western Africa and the Americas. The peculiar credit needs of the British slave trade, and the economics of slavery in the Americas, generated considerable demand for credit that produced profitable opportunities for the creation of credit institutions—opportunities that were greater and more attractive than were ever offered by the preexisting domestic trade and trade with Europe. Interstate struggles in Europe over the control of the Atlantic economic system also compelled public borrowing which, in England, further stimulated the development of financial institutions.

Contrary to Say's law that supply creates its own demand, the analysis in the paper is premised on the theoretical assumption that the development of the credit economy in England depended on the growth of demand for credit, and the availability of investible funds much of which may have been hitherto squandered in excess consumption. The growth of demand for credit is viewed in terms of the volume of credit instruments in circulation in which investors had sufficient confidence. The volume of such instruments in circulation at any given moment provided a measure of the extent of effective demand for credit to which hard calculating entrepreneurs responded by creating credit institutions that profited from the supply of credit. The complex structure through which funds were mobilized by credit institutions and made available to those in need of credit for productive investment constituted the credit economy. In the England of the Industrial Revolution, the credit economy was structured by the operation of banking houses, discount houses, insurance houses, and the stock exchange. The discussion presented in

[6] For the contribution of trade in business services to British trade balance, 1851–1913, see Kuznets 1966, Table 6.5B, pp. 322 and 323).

the paper is intended to shed some light on the factors that explain the development of these credit institutions. The insurance houses are not treated in the paper. That is the subject of another work in progress.

In some way, the paper constitutes a contribution to the debate on the Williams thesis. For decades that debate was limited to the abolition of slavery and the profits of the slave trade. In recent years contributors to the debate have challenged the rationale for so restricting the interpretation of the Williams thesis and have sought to adopt an interpretation that fully covers all the issues raised by Williams.[7] The present paper contributes in the latter direction, for the stimulus offered by the slave trade from Africa and New World slavery to the development of financial institutions in England was one of the many issues raised by Williams. Williams did not have the kind of information that a detailed treatment of the subject requires. In the over 40 years since he wrote, such evidence has been produced.[8] Some of the evidence is presented and analyzed here, on the basis of which we have made some tentative pronouncement on the subject.

The paper is divided into five sections. A general overview of the development of the credit economy in England is offered in Section I for purposes of presenting essential background information against which the role of the African trade and the slave economy of the Atlantic system can be assessed. Essential to the discussion in the section is the timing of the establishment of credit institutions in England, and the origin of the instruments whose circulation constituted the market for credit. The factors that determined the nature and level of credit in the African trade, relative to other branches of British trade at the time, are examined in Section II. The discussion in Section III centers on how the credit requirements of the African trade were met in England, and the financial problems which this provision of credit generated. Section IV deals with the institutional response that led to the creation of financial institutions. The conclusion which flows from the evidence and the analyses in the four sections is presented in Section V.

I

Before we proceed to the African trade in the 18th century, which is the subject of the paper, some general observation on the development of the credit economy in England is necessary. The first point to note is the timing of the establishment of credit institutions in England, and

[7] Williams (1944). There is an excellent review of the literature on the debate by Bailey (1986, pp. 1–91). See also the papers in Solow and Engerman (1987). Some of the issues have been reexamined in a recent seminar: The Atlantic Slave Trade: Who Gained and Who Lost?, University of Rochester, Rochester, New York, October 21–23, 1988. The proceedings of that conference are now being prepared for publication.

[8] See Inikori (1973); Price (1980).

what this timing indicates in terms of the key factors explaining the initial development of the credit economy in that country.

In the England of 1760, according to Arnold Toynbee,

> Ready cash was essential [for the home trade], for banking was very little developed. The Bank of England existed, but before 1759 issued no notes of less value than £20. By a law of 1709 no other bank of more than six partners was allowed; and in 1750, according to Burke, there were not more than "twelve bankers' shops out of London." The Clearing House was not established till 1775.[9]

On the same subject, Paul Mantoux wrote,

> It is surprising to note how late credit institutions developed in England. In the City of London, in the small area where today [1906] the most powerful financial associations in Europe are crowded together and where capital collects from the ends of the earth, there was not a single banking house until the middle of the seventeenth century. It was during the Civil War that merchants first began to entrust their capital to the goldsmiths of the Lombard Street. These men, from mere treasurers, soon came to fill the place of bankers, and their notes took the place of cash in ordinary City transactions. . . . It is to Italy and Holland that England owes the idea of a national bank.[10]

That credit institutions took this long to be established in England must be seen as an important measure of the relative contribution of the home trade and overseas trade (in particular, extra-European trade) to the development of the credit economy in England. It must be noted that by the 17th century, the home trade and English trade with Europe had had several centuries of considerable growth. What the evidence cited above demonstrates is that the growth of the home trade and the trade with Europe up to the second half of the 17th century did not generate sufficient credit pressure and a large enough credit market to call forth the establishment of credit institutions. Conversely, the evidence indicates that it was the extraordinary expansion of English trade to non-European territories from the second half of the 17th century[11] that provided the spark. This is understandable, considering distance and the peculiarities of the non-European trade, a discussion of some of which features later in the paper.

Unambiguous evidence on the sources of stimulus for the development of credit institutions in England is provided by the origin of the instruments whose circulation created the market for credit. These instruments

[9] Toynbee (1884, p. 32).

[10] Mantoux (1929, p. 97).

[11] See Davis, "English Foreign Trade, 1660–1700," and Davis, "English Foreign Trade, 1700–1774," both in Minchinton (Ed.), *The Growth of English Overseas Trade,* pp. 78–120.

were bills of exchange, company bonds, and government securities. The contribution of these three instruments differed in the different parts of England. The circulation of company bonds and government securities made important contributions in London, but not in the provinces. Country institutions owed their origin virtually to the circulation of bills of exchange which were also important in London. Now what were the sources of these instruments?

The Liverpool slave trader and banker, Benjamin Arthur Heywood, wrote in 1812 that as of 1636, foreign bills of exchange were the only bills in circulation in England.[12] And as late as 1761, according to the authority on country banking in the 18th century, L. S. Pressnell, inland bills were still very scarce, "too scarce for them to become regular investments on any scale for country people. There were instead bills that had arisen in the course of overseas trade."[13] Yet bill discounting constituted the bulk of the credit business in the provincial cities in the 18th century, providing a powerful stimulus for the growth of banking in those cities. In the major trading counties, the bills formed an important part of the means of exchange. In Lancashire in particular, "they for many years formed by far the greater part—in Lewis Loyd's opinion, at least 90 percent—of the circulation, and such was the preference for them that local bankers refrained from issuing notes."[14]

Bill discounting was also an important part of the credit market in London. And the discount market there, like the rest of the country, was dependent on overseas trade. As King put it, "The discount market lived upon the international bill on London and it was its real *raison d'etre*."[15] In the capital city, however, the bonds of joint-stock companies and government securities provided important investment opportunities for credit institutions.

The joint-stock companies whose bonds dominated the market were the East India Company, the South Sea Company, and the Royal African Company—all companies in non-European overseas trade. The Royal African Company made extensive use of bond finance from the 1670s, while the bond debt of the East India Company began well before 1688. The South Sea Company, which exported slaves to Spanish America, issued its first bonds in 1712. The combined bonds of the East India Company and the South Sea Company in the early 1720s was over £7 million.[16] By 1717, the total share capital of joint-stock companies was

[12] Heywood (1812, p. 27).

[13] Pressnell (1956, p. 435).

[14] King (1936, p. 31).

[15] King (1936, p. viii).

[16] Dickson (1967, pp. 406–407). According to Dickson, the combined volume of the two companies' bonds at its peak in the early 1720s (over £7 m.) was equal to the combined

running at over £20 million; of this amount, the South Sea Company had £10 million, the Bank of England £5,559,995, and the East India Company £3,194,000.[17] Thus, bond finance by overseas trading companies doing business outside Europe made immense contributions to the size of the market for credit in London in the early years of the development of the credit economy in England.

An equally important factor in the growth of the credit market in London in the 18th century is the establishment of the permanent national debt in the 1690s. The costly wars of the 17th and 18th centuries, provoked largely by the struggle over the acquisition of overseas colonies and the control of seaborne commerce, led to unprecedented government borrowing. The permanent national debt started with the loan of £1 million in 1693,[18] followed by the establishment of the Bank of England in 1694. By 1721, the national debt had risen to over £50 million; the War of Austrian Succession raised it to £71 million; the Seven Years War increased it to £128 million; the War of American Independence almost doubled it to £238 million; and by the end of the great war with revolutionary France, the national debt stood at over £700 million.[19] The seven wars fought by England between 1688 and 1815 cost the government approximately £1,143,000,000, 73% of which was accounted for by the war with revolutionary France, 1793–1815.[20]

The significance of public debt in the development of capitalist institutions was recognized by Karl Marx. Thus he wrote,

> The system of public credit, i.e. of national debts, whose origin we discover in Genoa and Venice as early as the middle ages, took possession of Europe generally during the manufacturing period. The colonial system with its maritime trade and commercial wars served as a forcing-house for it. Thus it first took root in Holland. National debts, i.e., the alienation of the state—whether despotic, constitutional or republican—marked with its stamp the capitalistic era. . . . the national debt has given rise to joint-stock companies, to dealings in negotiable effects of all kinds, and to agiotage, in a word to stock-exchange gambling and the modern bankocracy.[21]

In England, government long-term borrowing was financed mainly by the mercantile bourgeoisie in London and its environs.[22] Hence, the

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volume of government short-term tallies, Exchequer bills, Navy and Victualling bills, and the Bank of England note issue (p. 407).

[17] Morgan and Thomas (1962, p. 30). For a further discussion of the history of financial institutions, see Neal (forthcoming) and Neal (1988).

[18] Morgan and Thomas (1962, p. 19).

[19] Morgan and Thomas (1962, p. 43).

[20] Computed from Dowell (1884, p. 402).

[21] Marx (1926, p. 827).

[22] Dickson (1967, pp. 258–260 and pp. 300–302).

operation of the national debt contributed, along with the bonds of the overseas trading joint-stock companies, to the development of the stock-exchange market in London.

The foregoing brief survey provides a general framework within which the contribution of the slave trade from Africa to the development of the credit economy in England can be discussed.

II

What made credit an important requirement in British overseas trade in the 17th and 18th centuries was the expansion of British trade beyond Europe. The increased distance involved meant that remittance for the sale of goods outside Europe took a long time to reach the merchant exporters in Britain. This called for a large amount of capital investment in trade that was beyond the personal resources of the traders. To some extent, the need for credit in the African trade arose from a somewhat similar circumstance. But there were important elements peculiar to the African trade that made its credit needs relatively greater and more problematic than those of other branches of British extra-European trade. These elements were connected with the conditions under which the trade was carried on in Africa and in the New World.

Only a tiny proportion of the British African trade in the 18th century was made up of direct trade between Britain and Africa. In the second half of the century when the trade reached its greatest volume, over 90% of it involved the purchase and shipment of slaves to the New World. The collection of a shipload of slaves took several months to complete in Africa. The shipping of the slaves across the Atlantic and their sale in the New World took some months more. All this added to the time it took for the merchants to receive the returns on their investment and, therefore, to the amount of capital needed to keep the trade going. But, in Africa what considerably enlarged the amounts of capital invested in the trade by the merchants was the need to finance the building of extensive trading posts or "factories," and the extension of credit to traders resident on the African coast.

Not all the traders had fixed establishments on the coast. The large firms were the ones that made this kind of investment, and the sums involved were quite large. In 1799 John Dawson of Liverpool stated that his fixed investment in the vicinity of Sierra Leone was worth over £30,000.[23] John Anderson and Alexander Anderson, African traders in London, also indicated that their fixed investment in Bance Island and Sierra Leone was worth considerable sums. They stated that an invasion by American and French subjects in 1794 caused damages in these es-

[23] *House of Commons Journals*, Vol. LIV, 19 March 1799, Petition of John Dawson of Liverpool.

tablishments to the tune of £20,000 sterling.[24] As these amounts were stated by the traders in their petitions against a proposed bill to abolish the slave trade in the northern parts of West Africa, one may suspect the possibility of some exaggeration. However, an oil painting of one of these private trading posts by a slave ship captain is available.[25] This is the trading post at Isles de Los, called Factory Point, owned by Messrs. John and Thomas Hodgson of Liverpool. The size of this establishment as indicated by this painting suggests that the amounts stated by the traders may not have seriously exaggerated what they actually invested in erecting those establishments. For the large-scale traders who found this kind of investment necessary, the amount involved was thus a significant addition to the capital requirements of the trade.

A further addition to the capital requirements of the trade, as far as the African end of it was concerned, was imposed by the need to extend fairly long credits to European traders resident on the coast. To a lesser extent, credit was also extended to the African middlemen on the coast. The private records of the British traders suggest that the amounts involved were quite large and posed serious problems to the merchants. The private letters of Robert Bostock of Liverpool are particularly instructive. He traded mostly alone, and the credits he extended to traders in Africa strained his limited capital. In January 1790, he wrote to one of these resident European traders, "I hope you will take it into consideration how I am circumstanced in regard of having so much money lock'd up as it is in your power to relieve me."[26] A few months later he wrote again,

> I am sorry to inform you I am much distressed for want of money at present that I can scarce keep my credit up, having so much property in your hands. I hope you will take it into consideration and releave me from these difficulties as soon as possible as I know you have it in your power. The creditors will not be put off here. I often wish I was with you clear of these Philistines.[27]

The letter of June 1790 shows the extent of pressure on Robert Bostock. He wrote pathetically that he has been unhappy for several months, having no rest night and day, and pleaded:

[24] *House of Commons Journals*, Vol. LIII, 25 May 1798, p. 624.

[25] See LOG/M/21, MS 53/035 (National Maritime Museum, Greenwich), Journal of a Voyage from London to Africa on board the *Sandown*, by Samuel Gamble, Commander, 1793–1794.

[26] Liverpool Record Office, 387 MD 55, pp. 67–69, Robert Bostock to Cleveland, 20 January 1790. James Cleveland was a British trader who resided on the Upper Guinea Coast where he had considerable trade with merchants from Britain. He died on the coast in 1791.

[27] Liverpool Record Office, 387 MD 55, p. 88, Robert Bostock to Cleveland, 6 May 1790.

> Consider my situation, 5 small children and another a coming, and release me from these difficulties as I hope you are not without feeling, and it has always and shall be my study to do the best for your interest which I believe you will acknowledge, and you know I have no partners, if there was it would not be so heavy if there was three or four, but it lies a heavy burden upon one.[28]

His letter of September shows that he was finding it difficult to pay his debts to the tradesmen in England, as he says, "The tradesmen in this part will either have money or body."[29] At the time of James Cleveland's death on the coast in 1791, credit from Bostock still remaining in his hands amounted to £1237:3-sterling.[30] Other letters show that another resident merchant, Charles Wilkinson, was also indebted to Robert Bostock.

Robert Bostock was not alone in this situation. In 1791 Captain William Roper wrote to James Rogers of Bristol that on his arrival on the Guinea coast he advanced some goods to a gentleman called John Ormond, "a man of large property," for 90 slaves, for which he could not be paid on account of the man's death.[31] There was a sizable number of such resident European traders on the coast in the 18th century. The credits extended to them in this way, and occasionally to African middlemen as well, must have added a no mean amount to the capital requirements of the trade.

But by far the most important factor responsible for the extraordinary credit needs of the British African trade in the 18th century was the large amount of credit which the slave traders had to extend to the employers of slave labor in the New World. For all practical purposes, the purchase of a slave by a planter in the New World in the 18th century was like the purchase of modern capital goods by 20th century producers. Because modern capital goods cost a lot of money and yield a stream of income over many years, their purchasers frequently employ credit finance. It is not uncommon to find the exporter being forced to provide the needed credit. This has often been the case in Britain in the present century. Hence, the shift in British domestic exports from consumer goods to capital goods after 1944 precipitated export finance problems leading to the creation of the Export Credit Guarantee Department

[28] Liverpool Record Office, 387 MD 55, Robert Bostock to Cleveland, 9 June 1790.

[29] Liverpool Record Office, 387 MD 55, Robert Bostock to Cleveland, p. 109, 6 September 1790.

[30] Liverpool Record Office, Bostock to Wm. Cleveland, 16 August 1791. Apparently William Cleveland was the brother of James Cleveland, as the former is said to "have taken possession of all his effects." James Cleveland was also indebted to a number of other British traders at the time of his death.

[31] 4PRO, C.107/5, Capt. William Roper to James Rogers, Isles de Los, 22 September 1791.

(ECGD).[32] The financial problems of the employers of slave labor in the New World in the 18th century were precisely the same. A lot of money was needed to pay for slaves employed in production, and these yielded streams of income to their purchasers over several years, about 15 on the average. And just as British exporters of capital goods in the 20th century have been forced to extend credit to their overseas customers, the British slave exporters of the 18th century were forced to grant large credits to the employers of slave labor in the New World.

The planters' inventories show clearly that investment in the purchase of slaves formed a large proportion of their total investments. For example, the total investment in a medium-sized sugar plantation in Jamaica in 1774 was £13,026, excluding the value of land. Of this amount the value of the slaves employed was £7140, being 54.8% of the total. When the value of land is included (£6,001) the proportion comes to 37.5 percent.[33] In this way, the expansion of staple production in the New World imposed considerable financial burdens on the British slave suppliers.

This extension of credit to the planters was probably the most serious problem that the slave traders had to contend with throughout the 18th century. Writing to Lord Hawkesbury in 1788, John Tarleton, one of the principal slave traders in Liverpool, enumerated the several risks to which the slave traders were "peculiarly exposed." What he considered the most serious of them all was that "the whole expectation of the enterprise, the whole security of the capital, and return of commerce, are in a great degree, at the mercy of the planter, to whom an unexampled credit is extended by the persons who are to be aggrieved by the depending Bill."[34]

Over the years much of the traders' trading capital came to be made up of revolving credits to the planters. Even with the meager business that the Royal African Company had in slave trading during its existence, it still had large sums of money accumulated in the West Indies in this way. The company was the largest single creditor in the British West Indian colonies in the last quarter of the 17th century. Its credits in the colonies on various dates stood as follows[35]:

1681	£120,000 (sterling)
1685	136,000

[32] See Sayers (1967, pp. 192–195).

[33] Sheridan (1965, Table 7, p. 302).

[34] British Museum, Add. MSS. 38,416, folios 103–106, John Tarleton to Lord Hawkesbury, 9 June 1788. John Tarleton is here referring to the bill to regulate the number of slaves to be loaded per ton by British vessels in the slave trade. The persons to be aggrieved by the bill were, of course, the British slave traders.

[35] Davies (1952, p. 97). These figures were obtained by Davies from the annual statements of the assets of the Company, in P.R.O., T.70/101. Davies is of the view that "the floating debt must at times have made the total outstanding very much larger" (n. 1, p. 97).

1690	170,000
1694	128,000
1696	140,000

The slave trade of the company was smaller in volume than that of any one single firm among the larger firms in Liverpool, Bristol, and London in the second half of the 18th century. Adding the much higher slave prices of the later period, we can see why the sums involved must have been considerable in the last half of the century. Here, the account of the capital of John Dawson of Liverpool, the largest slave trader in all Europe in the late 18th century, may be used as an illustration. In April 1792, he stated the composition of his capital employed in the slave trade as follows[36]:

Value of ships employed	£58,000
Value of warehouses, floating factories and factories and goods contained therein	70,000
Value of cargoes now on float	89,000
Outstanding property in the spanish islands, viz., Trinidada, Carracas, Carthagena, the Havannah, and Mississippi	183,000
Outstanding property in the British and French islands	45,000
India goods and other property prepared and now on hand intended to be exported to Africa	64,000

From this account it can be seen that of the total capital of £509,000 employed in the slave trade by John Dawson in 1792, £228,000 was made up of accumulated debts in the New World, being approximately 45% of his total capital. The value of fixed establishments (part of the £70,000 in the account) also formed a sizable proportion of the total. Dawson's account does not show the amount of credit extended to traders on the African coast. This is likely to form part of the £70,000 for fixed establishments and trade goods contained in them. The evidence thus makes it clear that the cost of fixed establishments on the African coast, together with the amount of credit extended to traders in Africa, and to the employers of slave labor in the New World, made up more than half of the total capital requirements of the trade. Hence, the total amount of capital employed in the trade by the merchants at any point in time was

[36] *House of Commons Journals,* Vol. XLVII, 27 April 1792, pp. 742–743.

far in excess of the annual value of the trade as shown by the value of exports to Africa. In fact, if we regard the £89,000, shown against "value of cargoes now on float" in Dawson's account, as representing an approximate ratio of capital employed to the annual value of exports, this comes to 5.7:1. This means that the annual value of exports to Africa was about 17.5% of the amount of capital employed by the merchants. It is not clear whether the large-scale traders employed more capital per unit of export. The fact that the small traders did not own fixed establishments in Africa seems to point in that direction. But the evidence also suggests that the large-scale traders exported more goods per unit of shipping investment.[37] However, it is possible that the actual overall ratio of capital employed to the annual value of exports to Africa was less than what Dawson's account suggests. But the evidence makes it clear that the ratio must have been quite high, higher than what obtained in other branches of British overseas trade during the period. This conclusion is in general agreement with the view of the well known authority on English foreign trade in the 17th and 18th centuries, the late Ralph Davis. Davis stated that during the period, 1660–1701, although the total volume of English foreign trade did not grow exceptionally fast, yet English capital investment in commerce, when compared with investment in industry, "was abnormally high." According to him, this phenomenon was due to the revolutionary development of trade in re-exports, and the geographical reorientation of English foreign trade away from Europe and the Mediterranean to western Africa and the New World. As he put it,

> Apart from the East India trade, with its own peculiar finances, nearly all trade early in the century [the 17th century] had been with Europe; and though voyages to the Mediterranean or the Baltic were longer than those to Holland or Hamburg, remittances for goods sold or freight earned could be, and were, sent by overland routes long before the ships carrying the goods returned home. After the Restoration [1660], trade with the Americas flourished; a trade at the end of long ocean routes, and in which, if exports were relatively small, imports were commonly given credit for in advance. The new long voyage had to be financed from its beginning to its end—and beyond—and investment was continuing in English trading stations abroad.[38]

It can easily be seen that in the "new long voyage" of English trade to the Americas, that portion connected with the trans-Atlantic slave trade and the slave economy of the Americas was relatively the largest user of capital per unit of export for the very reasons alluded to by Davis, the details of which have been worked out in this section of the

[37] In general the large-scale traders employed larger ships and loaded far more slaves per ship, and in many cases, also more slaves per ton.

[38] Davis, "English Foreign Trade, 1660–1700," pp. 93 and 94.

paper. Jacob Price has also shown that the slave-based economy of southern British North America utilized large amounts of trade credit granted by British traders.[39] To finance this extraordinary need for capital an elaborate credit system was required.

III

In the first instance the export producers were called upon to ease the credit problems of the British slave traders by allowing them some reasonable length of credit on the goods they exported to Africa. This export credit became an essential aspect of the African trade. The evidence we have for the last half of the 18th century makes this clear. This evidence is presented in Appendix I, showing the amounts for credit and cash payments in the outward cost of 115 ventures made on various dates. The list is heavily weighted by the ventures of some small traders centered around William Davenport of Liverpool. As the individual ventures of the small traders were usually much smaller than those of the larger firms that dominated the trade at this time, the ventures in the list are not representative of the typical ventures in the trade in terms of size. But the list may be sufficiently representative of the proportion of credit needed for the outward cost of African ventures during the period.

For the 115 ventures in the list, the total outward cost was £574,504. Of this amount, £318,593 was on credit, being 55.5% of the total, while £255,911 was paid cash. It is important to note that much of the cash payment was made for the cost of ship and outfit. The proportion of export goods purchased on credit is greater than the 55.5% for the whole outward cost. This may be illustrated with the venture of the ship *Dobson* in 1770, shown on the list. The total amount of the cargo for this venture was £4820, of which £3267 was on credit and £1553 was paid cash. The cost of ship and outfit was £2084. Of this amount, only £364 was on credit, £1720 being paid cash. This means that 67.8% of the export goods was on credit, whereas only 52.6% of the total outward cost was on credit.[40]

A summary of the information in Appendix I is presented in Table 1. The summary is organized in a way that may indicate some of the main factors that determined the nature and level of trade credits in the Atlantic economic system. The periods in the table are according to war years and periods of peace in the Atlantic system. The theoretical assumption that the table may confirm or disprove is that the level and length of credit offered by the slave traders to the users of slave labor in the Americas depended on supply and demand conditions in the Atlantic

[39] Price, (1980, in particular pp. 17–19).

[40] for a large number of the ventures in Appendix I, the merchants' accounts show the cost of ship and outfit and the cost of cargo separately. But this is not so for all of them.

TABLE 1
Changes in the Level of Export Credit in the African Trade over Time

Period	Number of ventures	Total cost outward (£ sterling)	Credit (£ sterling)	Percentage
1757–1763	7	26,684	17,838	66.8
1764–1775	79	337,416	189,904	56.3
1776–1783	19	105,988	54,196	51.0
1784–1792	9	94,026	52,271	55.6
1793–1807	1	10,390	4,384	42.2
	115	574,504	318,593	55.5

economic system. Increased demand and higher prices for slave-produced commodities led to increased demand for slaves. Rising demand for slaves strengthened the bargaining power of the slave traders at the same time that higher prices of slave-produced commodities placed more funds in the hands of slave users in the Americas. Both factors would tend to reduce the level and length of credit offered by the slave traders to the New World slave users. Sooner or later, however, rising prices of slaves and slave-produced commodities led to oversupply and, therefore, to fall in prices of both. This weakened the bargaining power of the slave traders and the financial strength of the slave users in the Americas. In turn, both elements led to rising levels of credit granted by the slave traders to the slave users. War time conditions that reduced the supply of slaves more drastically than the reduction in the demand for slave-produced commodities tended generally to reduce the level of credits in the sale of slaves in the New World. The use of high discount rates by the export suppliers in England to induce cash purchases by the slave traders acted as the mechanism through which the conditions in the slave economy of the Atlantic system were transmitted to the credit relations between the slave traders and the export suppliers in England: slave traders with ready cash, following higher slave prices and reduced credit sales in the Americas, would maximize their profits by paying cash and taking the discount that could be as high as 17%. But when slave prices fell and credit sale of slaves increased, the slave traders had no choice but to take more export goods on credit.

The extent to which Table 1 is indicative of the main operating forces in the credit relations of the Atlantic system is not altogether clear. In particular, the distribution of the ventures among the specified periods is extremely uneven: the first period has only seven ventures and the last, just one. However, changes in the level of credit shown by the table are basically consistent with our theoretical assumptions stated earlier. The table shows that relatively less credit was involved in the

trade of the Atlantic system during war years than in times of peace. The only exception to this is the period of the Seven Years War. This itself is understandable. Unlike other war periods in the 18th century, the volume of the British slave trade was not seriously affected by the war. On the whole, both the theoretical assumptions and the indications in Table 1 are supported generally by the evidence of the planters themselves. The Jamaican House of Assembly stated in 1792 that

> though the price of slaves, of lumber, salted beef, pork, and herrings, is considerably increased, and the taxes much higher, yet the neat [net] price of sugars to the planter having risen from 18s: 4 1/2d to 32s: 2d per cwt., they have begun to pay their debts, and, in consequence of such payments, have got into better credit. . . . This increase in the value of sugars has been occasioned, not so much by an increase of consumption in Great Britain and Ireland, as by a greater demand for foreign markets.[41]

The length of time for the credit granted by the export producers varied from industry to industry, and over time. In June 1787, William and Samuel Rawlinson, a large cotton manufacturing firm in Manchester producing African goods, wrote to Messrs. Richard Fydell & Co. of Bristol:

> The credit of this place is generally 12 months but the payment for African goods has been extended much longer even to 18 months by some Houses. We allow £10 percent on an early remittance say in course of a month and a Bill agreeable to what you mention. No House whatever can serve you more to satisfaction than ours, dealing very extensively in that Branch, and being always acquainted with the patterns which have a preference at the different parts of the coast.[42]

The success of the British traders in capturing a large share of the African trade in the 18th century was often attributed by the traders to this generous extension of credit by the export producers. Giving evidence before a Privy Council Committee in 1788, Robert Norris, who knew a lot about the trade, stated that Britain had a larger share of the African trade because of "the credit which the British merchant has with

[41] Public Record Office, England, C.O. 137/91: Proceedings of the House of Assembly of Jamaica on the sugar and slave trade, in a session which began 23 October 1792 (printed). A somewhat similar view is presented in Price (1988). An interesting point in this paper is that colonial laws in British America (including the Caribbean) favored the slave traders, relative to the planters, and encouraged the use of bills of exchange. On the other hand, colonial laws in French America favored the planters, and largely discouraged the use of bills of exchange. This must have acted to reduce the effects of the Atlantic system on the development of credit institutions in France.

[42] PRO, C.107/7, Part I, William and Samuel Rawlinson to Messrs. Richard Fydell & Co., Manchester, 11 June 1787. Richard Fydell & Co. were slave traders in Bristol.

the manufacturers, which no other merchant in Europe enjoys. . . ."[43] James Penny also told the same committee that one of the main reasons for British success in the African trade was the longer credit that British merchants had from the manufacturers: "Our manufacturers give eighteen months credit, and the French only six."[44]

But the provision of this credit posed serious financial problems for the manufacturers. The firm of William and Samuel Rawlinson that had boasted of their ability to serve the African merchants to their satisfaction[45] soon ran into credit problems with these merchants. In December 1790, one of the Liverpool African traders, Joseph Caton, wrote to James Rogers of Bristol:

> Rawlinson is a curious fellow as I have ever met with. He says he has wrote you that he would rather discount his bills as he can turn his money over to greater advantage, and that Mr. Taylor will take all his goods and allow 10 percent profit on them which is better than selling them to the merchant. Beside he said a man should never have too many eggs in one basquett. I told him I understand he was in cash in a month for the Rodney's cargo last voyage, and if a man was to pay ready money for all his cargoes he must either have three capitals or let his ships lay up two years out of three, for a ship was one year out and the Remittance Two years. This is just their ways and method of doing business.[46]

This letter spells out some of the problems in the granting of export credits in the African trade in the late 18th century. The Rawlinsons seem to have been wise in their decision not to accumulate too large credits in the hands of Rogers & Co., for three years later, Rogers & Co. became bankrupt. Of the firm's various creditors, suppliers of export goods appear to have predominated. The petition of a London firm dealing in Indian piece goods shows that for five ventures by Rogers & Co. in 1792, the London firm supplied goods on credit to the tune of £15,356:7/-.[47]

[43] PRO, BT.6/9, Evidence of Robert Norris, one of the delegates from Liverpool to the enquiry on the state of the African trade, 1788, p. 231.

[44] PRO, BT.6/9, Evidence of James Penny, one of Liverpool's delegates, 8 March 1788, pp. 356–357.

[45] See quotation above, n. 2, p. 17.

[46] PRO, C.107/13, Joseph Caton to James Rogers, Liverpool, 2 December 1790. Joseph Caton assisted Rogers of Bristol in fitting out some of the latter's vessels to Africa from Liverpool, and in purchasing needed goods from Manchester. The *Rodney* mentioned in the quote was one of James Rogers' slave ships. Mr. Taylor, also mentioned in the quote, is Samuel Taylor, one of the largest producers of African goods in Manchester in the late 18th century.

[47] PRO, C.107/4, Petition of Edmund Higginson, Daniel Barnard and Charles John Wheler, of New Court, Swithins Lane, London, Merchants, to the Lord High Chancellor of Great Britain (1795). There are other similar petitions.

The records of Farmer & Galton, a gun manufacturing firm in Birmingham that produced large quantities of firearms for the African trade, are particularly informative on the financial problems that manufacturers of African goods encountered in the 18th century. Writing to one of their agents in Liverpool in 1754, Samuel Galton said:

> On revising the list of outstanding debts we find about £1,600 due more than 12 months or say since last July and before, all which we want and much more and had we not urgent reason for not being from home would have been at Liverpool ere now to insist on the immediate payment. Our stated credit is 8 months and when 12 months are taken there is no room for excuse of payment. As to Mr. Lownds beg you'l write to him not only for the former but last debt on Elijah and not wait his coming home. Pray be earnest with the rest that are due and not solicit orders unless can be better pay'd or ever take them when there is the least doubt of being punctually pay'd for when due, at whatever price. . . .[48]

In September, 1755, Galton wrote again:

> I am at times a good deal distressed for want of regular remittances and besides what is necessary for the circulation of my business I am obliged shortly to advance nigh £3,000 which obliges me to write in a more pressing manner than otherwise I should. . . .[49]

The firm's inventory taken on 31 March, 1772, shows the importance of export credit in its finances[50]:

Unsold stock	£17,653:14:10d
Debts due to the company	22,228: 6: 7
	£39,882: 1: 5d
Debts owed by the company to sundry people	905: 9:10

From the inventory it can be seen that debts due to the firm, evidently arising from credits to African traders, formed a large proportion of its circulating capital. In fact, this item must have formed a large proportion of the firm's total capital at any point in time.

As the difficulties of the manufacturers increased they were forced to use high discount rates for cash payment to induce the merchants to make early payments. Whereas Samuel Galton could argue in 1752 that a discount of "7 percent for ready money and 3 percent for 6 months" was too much,[51] by 1771 the general discount for cash payment on guns

[48] Birmingham Reference Library, Galt. 405/1, Samuel Galton to Mr. Parr, 13 July 1754.
[49] Galt. 405/2, Samuel Galton to Mr. Parr, 27 September 1755.
[50] Galt. 548.
[51] Galt. 405/1, Samuel Galton to Mr. Farmer, 18 April 1752.

for the African trade was 17½%.[52] The discount for cash payment on Manchester cottons for the African trade in the early 19th century was about 15%.[53] Thus, a banker manufacturer able to grant credit comfortably on the strength of his customers' deposits must have made a handsome profit by retaining the discount.

The high discount rates for cash payment notwithstanding, the producers of African goods continued to be compelled to extend export credits to the traders throughout the century. It is clear from the evidence that this export credit created a major problem of circulating capital for the manufacturers. To finance the large amount of working capital that the export credit necessitated, the manufacturers themselves had to look for ways of raising capital. They resorted to bill finance. The manufacturers got bills of exchange from the African traders. The former sent these bills to their bankers to be discounted, and got cash for their business. This may be illustrated with Samuel Galton's letter to one of his agents in Liverpool in 1755:

> I shall be obliged to raise a large sum of money to discharge what Debts we owe as well as support my future trade with ready money. Now let me entreat you to send me as large a sum in Remittance as you possibly can. You know there's a large sum due and if you can't get bills at a short date do as well as you can by getting bills as I can then send them into my bankers hands and if accepted draw for the value.[54]

In using bill discounting as a way of raising credit, the manufacturers of African goods were, in fact, following the footsteps of the slave traders who had been using it as their main source of credit right from the early years of the century. The credit provided by the suppliers of export goods, generous as it was, fell far short of the credit needs of the traders. The discounting of bills of exchange received for the slaves sold in the New World was their main source of credit. This produced an immense amount of business in bill discounting activity in Liverpool, London, and Bristol. As the suppliers of African goods began to adopt this system of raising credit, the total amount of bill discounting business in the trading and manufacturing centers connected with the African trade expanded considerably in the last half of the 18th century.

[52] PRO, C.109/401. For the ventures made by Samuel Sandys & Co. of Liverpool in 1771, Thomas Falkner of Liverpool supplied guns to the tune of £2,657:18:4.d The total discount allowed for cash payment was £465. Farmer & Galton, Joseph Adams (both of Birmingham), and John Parr of Liverpool, also supplied Sandys & Co. with guns, all allowing a discount of 17½% for cash payment.

[53] See the invoice of goods for Thomas Leyland's ventures in the Liverpool Record Office, 387 MD 42 and 43.

[54] Galt. 405/1, Samuel Galton to Mr. N. Atkinson, Birmingham, 22 March, 1755. On the same day a letter similarly worded was sent to John Parr, another agent of Farmer & Galton at Liverpool.

IV

The growth of banking in the trading and manufacturing centers connected with the African trade was largely influenced by the opportunities that the expansion of bill discounting business offered. It is important to note that the banks that grew up in many of these centers in the second half of the 18th century, particularly in Lancashire, were primarily, if not entirely, bill-discounting banks. The records of one of the most important of these banks, Arthur Heywood, Sons & Co., of Liverpool, show this clearly.[55] Bill discounting occupied a dominant place in the intentions of the partners as declared in their agreement signed on 26 August, 1776. The first article of the agreement states that the bank's business

> shall consist in exchanging cash for Bills or Notes, in Discounting Bills or notes, exchanging bills, advancing money on negotiable security, buying of gold or silver, Negotiations in money or Bills with the Kingdom of Ireland, receiving Lodgments or keeping the cash accounts of merchants or others in Liverpool or the places adjacent thereto, Hypothecation of goods, and such other legal transactions in cash, Bills or other Negotiations as can be undertaken with good and sufficient security, that is such security as may with ease be reconverted into cash. But it shall not be permitted to lend money on Mortgage, on Bond, or on any single personal security except in cases where there are running accounts and then only when exigencies require.[56]

The balance books of the bank show clearly that during its existence in the 18th century the primary business on which its revenue depended was bill discounting. This is made clear by the structure of the bank's assets and liabilities drawn up yearly from 1787 to 1790 and from 1801 to 1807 and is presented in Appendix II. As can be seen from these accounts, bills held in Liverpool and those sent to the partner bank of Joseph Denison & Co. in London regularly made up over 90% of the bank's income yielding assets. Similarly, the main business of the bank of the Heywood brothers in Manchester at this time was the discounting of bills presented by the manufacturers of cotton goods in that city.[57] In the Bristol area, the bank of Cross, Baylys & Co., of Bath had a good

[55] I am indebted to the late Professor F. E. Hyde who made it possible for me to get access to these records. I also express my gratitude to the manager and staff of the Heywoods Branch of the Barclays Bank (formerly Martins Bank, Heywoods Branch), in Liverpool, where these records are kept, for their cooperation and kindness during a week's work in their strong room.

[56] Records of the Heywoods Bank of Liverpool in Barclays Bank, Heywoods Branch, Liverpool: Articles of Agreement for carrying on the bank with Joseph Denison & Co., dated in Liverpool, 26 August 1776.

[57] Pressnell (1956, p. 336). This bank was established by Benjamin Heywood and his sons. Benjamin Heywood was the brother of Arthur Heywood of the Heywoods bank in Liverpool.

amount of business in discounting bills for the Bristol slave-trading firm of James Rogers & Co.[58]

On the whole, the evidence shows strongly that the growth of banking in Lancashire and other regions connected with the African trade was much influenced by the pressures and opportunities generated by the credit needs of the trade. Quite often when the growth of banking in some parts of England in the 18th century is related to the African trade, the profits from the trade are what is stressed. This, of course, is quite important. Traders like the Heywood brothers who made fortunes in the African trade were prominent among bankers in Lancashire. But an equally important, if not more important, relationship between the African trade and the development of banking in the 18th century was the pressure and opportunities that its credit needs generated. The creative response of entrepreneurs to those pressures and opportunities forms an important aspect of the process through which banking facilities developed and expanded in the centers concerned. One of the reasons many merchants who made fortunes in the African trade established banking houses in the 18th century could be that they were more aware than others of the pressures and opportunities, being themselves involved in the activities that generated them. The same thing is true of suppliers of African goods who became bankers. The opportunity of financing their credit to the traders from their customers' deposits must have been an attractive proposition to them. It is interesting to note that in 1804, Samuel Galton (Junior) established a banking firm that became the bank to his gun manufacturing firm.[59]

While the African trade of London declined in the second half of the 18th century, the city continued to play a major role in the discounting of bills connected directly or indirectly with the trade.[60] London operated as a clearing house of a sort. The close connection between the slave factors in the New World and London financial houses meant that a large proportion of the slave bills were drawn on London houses. The bills were accepted by the London financial houses upon which they were drawn, and endorsed by the slave traders who received the bills in payment for their slaves. London banks were thus in a good position to determine the financial soundness of the London houses upon which the bills were drawn and accepted. Where the London banks were not directly involved in the discounting they often offered advice to the provincial banks on the quality of the bills. This partly explains why the

[58] PRO, C.107/4, Extracts from the Account of Rogers, Blake & Co. with Cross, Baylys & Co.

[59] Smith (1967, pp. 146–147).

[60] The role of London in the discounting of slave bills has been masterly treated by Sheridan (1958).

provincial banks often had branches in London or maintained special relationships with London banks. Joseph Denison & Co. of London operated in this way with the Heywoods Bank of Liverpool. The analyses by Sheridan and Pressnell, taken together with the available evidence, suggest that the discounting of bills connected with the African trade made some contribution to the rise of the bill broker in London in the last years of the 18th century and ultimately to the development of the London discount market.[61]

V

In conclusion, we would like to suggest that studies of the Industrial Revolution should give more place to the pressures and opportunities whose operation over long time periods determined the development of essential institutions and technologies. We have attempted in this paper to examine some aspects of institutional development—the credit institutions.

The contribution of these institutions to the Industrial Revolution is usually appreciated. While the financial needs of industries for fixed capital investment during the Industrial Revolution were relatively modest, and these were met largely through the ploughing back of profits, both manufacturers and traders needed large credits to maintain their circulating capital. It was here that the developing credit system performed a major function. It is to be expected that the factors which explain the early development of the credit economy would differ from one part of England to another.

In general, it was the growth of the market for credit that called forth the establishment of credit institutions by hard calculating entrepreneurs who made profits by providing credits on the basis of other people's savings. The provincial credit market that provided business for the credit institutions was dominated up to the third quarter of the 18th century by bills of exchange originating from overseas trade. Similar bills also dominated the discount market in the capital city London. The credit market in London, however, received additional boost from two sources—the bonds of joint-stock overseas trading companies doing business outside Europe and government securities. As public borrowing was financed almost entirely by the bourgeoisie (largely the merchants) in London and its environs, the contribution of government securities was limited virtually to the London credit market. As large as government borrowing in wartime was, it would seem, on the average, that annual dealings in mercantile instruments (bills of exchange and company bonds) by the credit institutions in London were greater than their dealings in government securities in the 18th century.

[61] Pressnell (1956, pp. 94–101) and Sheridan (1958, p. 261).

The bulk of the bills of exchange that circulated in the provincial trading and manufacturing centers and in London, as well as the company bonds, originated directly and indirectly from the African trade, and the trade centered on the products of African slave labor in the New World. It will be difficult, though not altogether impossible, to estimate with some degree of accuracy the total magnitude of these instruments at any given moment. It has been calculated that British trade with the tobacco plantation colonies of Virginia, Maryland, and North Carolina in 1774 involved a commercial credit to the tune of £2 million (sterling):

> For the entire North American—West Indian—West African trading complex in 1774, the figure may have been as high as £9 million. These calculations are anything but certain, but they do suggest that commercial credit made a far from minor contribution to the financing of British overseas trade before the American Revolution.[62]

British trade with Virginia, Maryland, and North Carolina was a very small fraction of the British trade based on the slave economy of the whole Atlantic in the 18th century. With the peculiar requirements of the slave trade and the sugar economy detailed in the paper, the figure of £9 million suggested for the entire slave-based British trade in 1774 would seem to be a considerable underestimate. All the same, it indicates an order of magnitude that points to the important contribution of the African trade to the growth of the credit market, and so the development of the credit economy, in England before the Industrial Revolution.[63]

[62] Price (1980, pp. 122–123).

[63] While foreign trade generated the instruments whose circulation stimulated the establishment of credit institutions, overseas trade also provided much of the funds with which the development of these institutions was financed. The activities of the London merchants in this respect are well known. The merchants of the provincial ports also contributed greatly. In all this, profits accumulated from the African trade and from the slave economy of the Americas played a crucial role.

APPENDIX I

The Outward Cost of Individual Ventures Analyzed to Show the Proportion of Cash and Credit

Source reference	Year of voyage	Vessel's name	Credit (£)	Cash (£)	Total cost outward (£)
Liverpool Museum	1757	*Chesterfield*	3499	1098	4597
Liverpool Museum	1758	*Calveley*	425	1157	1582
Liverpool Museum	1759	*Chesterfield*	3582	1024	4606
Liverpool Museum	1760	*Eadith*	2263	946	3209
Liverpool Museum	1761	*Eadith*	1800	811	2611
Liverpool Museum	1771	*Aston*	2184	1362	3546
Davenport Papers	1773	*Favourite*	2307	3852	6159
Davenport Papers	1774	*Favourite*	1299	3545	4844
Davenport Papers	1775	*Favourite*	1561	4013	5574
Davenport Papers	1773	*King of Prussia*	873	2734	3607
Davenport Papers	1774	*King of Prussia*	1038	2682	3720
Davenport Papers	1776	*King of Prussia*	1364	3854	5218
Davenport Papers	1775	*Sam*	2081	4312	6393
Davenport Papers	1761	*Tyrrell*	3575	2702	6277
Davenport Papers	1764	*Little Britain*	1282	951	2233
Davenport Papers	1762	*Plumper*	2694	1108	3802
Davenport Papers	1768	*Plumper*	2979	2854	5833
Davenport Papers	1769	*Plumper*	2263	3453	5716
Davenport Papers	1771	*Plumper*	4283	2397	6680

Davenport Papers	1768	*Dalrymple*	2767	1906	4673
Davenport Papers	1768	*Neptune*	746	643	1389
Davenport Papers	1770	*Dalrymple*	2782	1931	4713
Davenport Papers	1770	*Swift*	735	791	1526
Davenport Papers	1771	*Dalrymple*	3223	3606	6829
Davenport Papers	1771	*Swift*	1144	1221	2365
Davenport Papers	1772	*Swift*	1776	868	2644
Davenport Papers	1772	*Dalrymple*	3538	2156	5694
Davenport Papers	1772	*Dreadnaught*	2377	1414	3791
Davenport Papers	1773	*Dalrymple*	3936	3631	7567
Davenport Papers	1773	*Swift*	1641	745	2386
Davenport Papers	1774	*Dreadnaught*	2365	1587	3952
Davenport Papers	1775	*Dalrymple*	3931	2418	6349
Davenport Papers	1775	*Swift*	1568	737	2305
Davenport Papers	1777	*Dalrymple*	3429	2064	5493
Davenport Papers	1779	*Hawke*	4437	1726	6163
Davenport Papers	1780	*Hawke*	3367	1605	4972
Davenport Papers	1781	*Hawke*	2811	3688	6499
Davenport Papers	1780	*Preston*	2337	1647	3984
Davenport Papers	1781	*Preston*	1920	2749	4669
Davenport Papers	1783	*Preston*	4032	3561	7593
Davenport Papers	1771	*Lord Cassells*	2881	3273	6154
Davenport Papers	1771	*May*	1186	896	2082
Davenport Papers	1772	*May*	2331	2259	4590
Davenport Papers	1774	*Lord Cassells*	3416	1763	5179
Davenport Papers	1774	*May*	1632	1615	3247
Davenport Papers	1776	*Dreadnaught*	1760	1665	3425

Source reference	Year of voyage	Vessel's name	Credit (£)	Cash (£)	Total cost outward (£)
Davenport Papers	1770	*True Blue*	5299	3783	9082
Davenport Papers	1772	*Badger*	1439	2748	4187
Davenport Papers	1774	*Badger*	1668	2991	4659
Davenport Papers	1775	*Badger*	1249	3764	5013
Davenport Papers	1776	*Badger*	3405	7243	10648
Davenport Papers	1783	*Quixote*	4053	3088	7141
Davenport Papers	1784	*Quixote*	2628	2001	4629
Davenport Papers	1764	*William*	1534	747	2281
Davenport Papers	1765	*Henry*	619	1622	2241
Davenport Papers	1766	*William*	384	1785	2169
Davenport Papers	1768	*William*	614	1535	2149
Davenport Papers	1769	*William*	349	1793	2142
Davenport Papers	1769	*Henry*	1353	1124	2477
Davenport Papers	1764	*Sisters*	423	4879	5302
Davenport Papers	1767	*Henry*	691	909	1600
Davenport Papers	1767	*King of Prussia*	1080	2529	3609
Davenport Papers	1769	*King of Prussia*	1374	2275	3649
Davenport Papers	1771	*King of Prussia*	1478	1824	3302
Davenport Papers	1772	*King of Prussia*	1366	1855	3221
Davenport Papers	1769	*Hector*	2924	2273	5197
Davenport Papers	1769	*Andromache*	707	728	1435
Davenport Papers	1771	*Hector*	2965	2176	5141

Davenport Papers	1771	*Andromache*	853	694	1547
Davenport Papers	1773	*Hector*	3887	2346	6233
Davenport Papers	1773	*Andromache*	2315	1849	4164
Davenport Papers	1776	*Hector*	4407	2783	7190
Davenport Papers	1776	*Swift*	1614	674	2288
Davenport Papers	1769	*Dobson*	3755	2153	5908
Davenport Papers	1769	*Fox*	697	985	1682
Davenport Papers	1770	*Fox*	802	830	1632
Davenport Papers	1770	*Dobson*	3631	3273	6904
387 MD 127	1765	*Knight*	854	290	1144
387 MD 127	1768	*Knight*	5531	1030	6561
387 MD 127	1768	*Lively*	1920	676	2596
387 MD 127	1769	*Aston*	1607	948	2555
387 MD 127	1769	*Knight*	5340	1087	6427
387 MD 127	1769	*Lively*	2263	503	2766
387 MD 127	1770	*Aston*	2518	738	3256
387 MD 127	1770	*Knight*	5884	711	6595
387 MD 127	1770	*Austin*	3850	2966	6816
387 MD 127	1771	*Lively*	2575	1649	4224
387 MD 127	1771	*Nanny*	6595	1526	8121
387 MD 127	1771	*Austin*	4643	1106	5749
387 MD 127	1773	*Lively*	2498	1655	4153
380 TUO. 4/4	1771	*Corsican Hero*	5036	1712	6748
380 TUO. 4/4	1771	*Tom*	2495	1457	3952
380 TUO. 4/7	1774	*Nancy*	2222	1218	3440
380 TUO. 4/9	1782	*Blayds*	7455	6615	14070
380 TUO. 4/10	1784	*Ingram*	7081	4566	11647

Source reference	Year of voyage	Vessel's name	Credit (£)	Cash (£)	Total cost outward (£)
380 TUO. 3/6	1770	*Ranger*	3412	1410	4822
380 TUO. 3/9	1775	*Nelly*	1528	588	2116
380 TUO. 3/9	1774	*Hope*	1760	848	2608
380 TUO. 3/9	1776	*Unicorn*	901	943	1844
380 TUO. 3/9	1777	*Unicorn*	233	304	537
380 TUO. 3/9	1777	*Edward*	626	886	1512
380 TUO. 3/9	1778	*Kitty*	1914	3401	5315
380 TUO. 3/9	1779	*Nancy*	4131	3296	7427
380 TUO. 3/12	1786	*Blayds*	7652	8596	16248
380 TUO. 3/12	1786	*Elliot*	14714	9117	23831
380 TUO. 3/12	1785	*Mary*	626	2578	3204
380 TUO. 3/12	1786	*Ingram*	6653	6232	12885
380 TUO. 3/1	1765	*Ranger*	4076	932	5008
380 TUO. 3/1	1766	*Sam*	2953	1057	4010
380 TUO. 3/1	1767	*Sally & Sam*	6624	2497	9121
380 TUO. 3/1	1768	*Sally*	4139	1823	5962
C.107/59	1787	*Pearl*	5026	4831	9857
C.107/59	1789	*Sarah*	2996	3139	6135
AE.52	1789	*Kitty*	4895	695	5590
AE.52	1797	*Earl of Liverpool*	4384	6006	10390
Total			318,593	255,911	574,504

Note. The Davenport Papers are in the University of Keele Library, Keele. The reference bearing 387 MD and 380 TUO are to be found in Liverpool Record Office. Those bearing AE.52 are Midland Bank Records, London.

APPENDIX II

Transcripts from the Balance Books of Arthur Heywood, Sons & Co., of Liverpool, Showing the Structure of the Bank's Assets and Liabilities, from 1787 to 1790 and from 1801 to 1807

		£	s	d
1787	**Assets**	**£**	**s**	**d**
	Cash	10,040	15	5
	Bills Receivable	112,896	19	2
	Four percent	3,800	=	=
	Joseph Denison & Co.	70,800	=	=
		£197,537	15	2
1788	**Assets**	**£**	**s**	**d**
	Cash	9,808	5	10
	Bills Receivable	86,576	14	=
	Four percent	3,800	=	=
	Error 31 December '86	=	6	=
		£100,185	5	10
1789	**Assets**	**£**	**s**	**d**
	Cash	8,139	18	5
	Bills Receivable	148,136	1	10
	Four percent	3,800	=	=
	Joseph Denison & Co.	37,509	15	9
		£197,585	15	=
1790	**Assets**	**£**	**s**	**d**
	Cash	2,697	16	9
	Bills	145,638	1	10
	India Stock	3,125	5	=
	Ditto	339	5	=
	Three percent	2,028	7	6
	Four percent	3,800	=	=
	Denison & Co.	21,236	18	10
		£188,865	14	11

31 December 1801			
Assets	**£**	**s**	**d**
Amount from Balance Book	431,354	12	9
Cash	10,449	15	6
Bills on Hand	616,023	10	8
Bills Remitted	260,065	7	2
Denison & Co.	130,386	5	8
	£1,448,279	11	9

31 December 1802			
Assets	**£**	**s**	**d**
Amount from Balance Book	452,811	9	2
Cash	6,722	5	5
Bills on Hand	626,626	3	4
Bills Remitted	263,406	13	=
Denison & Co.	16,654	12	10
	£1,366,221	3	9

31 December 1803			
Assets	**£**	**s**	**d**
Amount from Balance Book	336,392	11	5
Cash	10,497	4	4
Bills on Hand	571,631	13	7
Bills Remitted	210,062	4	11
Denison & Co.	22,653	16	1
	£1,151,237	10	4

31 December 1804			
Assets	**£**	**s**	**d**
Amount from Balance Book	410,292	2	11
Cash	7,255	18	6
Bills on Hand	1,000,629	7	=
Bills Remitted	186,084	19	4
	£1,604,260	7	9

Liabilities	**£**	**s**	**d**
Amount from Balance Book	1,071,288	=	3
Bills Payable	297,090	12	3
Bills Outstanding	447	2	8
Interest	15,000	=	=
Stock	64,453	16	7
	£1,448,279	11	9

Liabilities	**£**	**s**	**d**
Amount from Balance Book	993,053	19	10
Bills Payable	301,197	9	11
Bills Outstanding	336	17	8
Interest	18,000	=	=
Stock	53,632	16	4
	£1,366,221	3	9

Liabilities	**£**	**s**	**d**
Amount from Balance Book	850,311	13	4
Bills Payable	209,553	12	5
Bills Outstanding	313	16	8
Interest	15,000	=	=
Stock	76,057	7	11
Error	1	=	=
	£1,151,237	10	4

Liabilities	**£**	**s**	**d**
Amount from Balance Book	1,179,753	2	9
Bills Payable	29,173	14	9
Bills Outstanding	314	10	5
Denison & Co.	293,236	5	2
Interest	15,000	=	=
Stock	86,781	4	8
Error	1	10	=
	£1,604,260	7	9

31 December 1805			
Assets	**£**	**s**	**d**
Amount from Balance Book	368,674	8	6
Cash	20,460	11	1
Bills on Hand	851,107	=	9
Bills Remitted	248,455	3	6
	£1,488,697	3	10

31 December 1806			
Assets	**£**	**s**	**d**
Amount from Balance Book	389,749	4	8
Cash	9,232	5	6
Bills on Hand	933,354	17	2
Bills Remitted Denison & Co.	269,618	10	4
Error 31 Dec. 1802 £2 Notes £50:8:4	52	8	4
	£1,602,007	6	=

31 December 1807			
Assets	**£**	**s**	**d**
Amount from Balance Book	348,872	14	10
Cash in Hand	21,419	11	1
Bills on Hand	1,098,035	19	6
Bills Remitted Denison & Co.	251,615	19	9
Error 31 Dec. 1806 £2: = : = Dr. 31 Dec. 1807 = : = : 2 Dr. 31 Dec. 1803 1: = : = Cr.	1	=	2
	£1,719,945	5	4

Liabilities	**£**	**s**	**d**
Amount from Balance Book	1,045,778	4	1
Bills Payable	234,642	15	1
Bills Outstanding	335	16	8
Denison & Co.	73,715	3	5
Interest	15,000	=	=
Stock	119,223	14	7
Errors	1	10	=
	£1,488,697	3	10

Liabilities	**£**	**s**	**d**
Amount from Balance Book	1,094,562	15	11
Bills Payable	257,382	1	=
Bills Outstanding	545	2	2
Denison & Co.	80,607	14	=
Interest	15,000	=	=
Stock Old Concern	119,223	14	7
Stock New Concern	34,684	18	4
Error in Balance 31 December 1803	1		=
	£1,602,007	6	=

Liabilities	**£**	**s**	**d**
Amount from Balance Book	1,217,195	15	1
Bills Payable	237,893	15	3
Bills Outstanding	522	8	8
Interest	15,000	=	=
Denison & Co.	96,905	18	3
Ar. Heywood & Sam Thompson	108,549	13	2
Stock	43,877	14	11
	£1,719,945	5	4

Source: Records of the Heywoods Bank of Liverpool in Barclays Bank, Heywoods Branch, Liverpool.

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