

Networks of information, markets, and institutions in the rise of London as a financial centre, 1660–1720

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International market integration during the late seventeenth century required an ability to take advantage of favourable exchange rate differentials with regard to geographic location and types of payment. London-based bankers acquired this ability by using a network of merchants and bankers that spanned nations, religions and trade specialisations. This business web was more diverse than the kin groups, religious connections or guilds that had supported the rise of international trade since the Middle Ages. Rather, its constituent members were bound by financial interaction revolving around the hub of banking in London. By using bills of exchange written between a banker and his agent, merchants became stakeholders in the monitoring and enforcement of agency relationships. However, the network's efficacy varied with the nature of various nations' legal systems. The autocratic tendencies of France diminished agents' credibility, while the commitment of the Dutch and English to international commercial law strengthened overseas enforcement.

With information flows criss-crossing northern Europe, London-based bankers could successfully specialise in the supply of international finance. Merchants secured the system for the bankers and, in turn, benefited from bankers' services. Essential to the character of London's emerging financial system was the lack of a singular institution to coordinate information. A substantial network was in place as early as 1670. By the time the Bank of England was founded in 1694, London finance did not require a Dutch-style exchange bank to support the system of international payments. Instead, the Bank of England was designed along the lines of the other fractional reserve banks that already comprised a hub in London. At the turn of the century, no single bank in London dominated the bill market. Rather, deepening channels of finance enmeshed the bankers of Lombard Street with agents in various ports and the many merchants who connected them.

An examination of the late seventeenth-century ledgers of Edward Backwell, a pre-eminent goldsmith-banker, shows that he relied on the existing network of foreign merchants for connecting himself to overseas agents. The goldsmith made merchants his stakeholding partners in the processes of moving funds and monitoring the behaviour of his primary agents with whom he held covering balances in foreign currencies. With his arrangement of primary agents and multiple monitors, Backwell, and other London bankers, were by 1670 supplying bills, offering discounts and arranging bullion shipments. Although London had not yet become the dominant hub of international finance, its constituents were creating a new style of banking and a payment system that would form an integral part of the 'financial revolution'. The English system was oriented to an active market in bills of foreign exchange, which was unregulated but disciplined by English law, itself based upon the existing law merchant for dealings in goods. Even after the establishment of the Bank of England, this payment system continued to flourish, albeit focused increasingly upon Amsterdam and Hamburg rather than Paris or Madrid. In the merchant-controlled cities of Amsterdam, Hamburg and London, the law merchant governed the settlement of disputes arising from protested bills of exchange. By contrast, in the royal cities of Paris and Madrid, the often arbitrary law of the monarch could disrupt the web of credit that supported Western Europe's prospering trade.

The practices of arbitrage in foreign exchange – making foreign payments that took advantage of minor fluctuations in cross-exchange rates from mint par ratios – were already emerging in Restoration London and so well before the post-1688 revolution in public finance. The evidence arises again from the complex payments arranged by Backwell among his agents in Cadiz and Amsterdam. By the mid-eighteenth century, Postlethwayt's *Universal Dictionary of Trade and Commerce* could devote many pages to describing these payment alternatives taken by London merchants. That this system survived the systemic shocks of several major wars and the financial crisis of 1720 testifies to the inherent durability of trade networks when credit and payment networks sustain them. We conclude that it was the credit nexus established during the seventeenth century, more than the preceding webs arising from kinship, or religion or politics, which sustained the long-run development of trade relationships in northern Europe.

Finally, we examine in detail how enforcement procedures in case of credit default could be invoked in the London-Amsterdam nexus in contrast to the arbitrary rules set in Paris. The evidence derives from the systemic crisis that affected all of Europe with the collapse of both the Mississippi bubble in France and the South Sea bubble in England. During the general breakdown of the European payments system, a diamond merchant in Amsterdam tried to force payment on bills drawn by a local merchant banker on a goldsmith-banker in London. At the same time, the Amsterdam diamond merchant had to deal with the default of a merchant banker in London. The different procedures followed in the two cases of default, and the different outcomes that emerged in London and Amsterdam, demonstrate the long-run viability of the merchant-oriented legal system. The 'bubbles'

episode was a defining moment for the competing systems of London and Paris. Thereafter during the eighteenth century, financial relationships flourished between London and Amsterdam, with spillovers to Hamburg and the Baltic, while French and Mediterranean connections languished.

I

With the development of networks of European trade centred upon Amsterdam, the supply of bills of exchange became a viable commercial specialisation, not only in Amsterdam but also at each of the outlying nodes. Bills were orders to pay in a foreign port in a foreign currency at some time in the future. They were similar to modern travellers cheques and were the dominant means of international payment during the early modern era. Instead of merchants arranging all the elements required for a bill, third-party intermediaries supplied credit or other services. This innovation in financial intermediation liberated individual traders from the costs arising from maintaining foreign contacts, settling their offsetting accounts, acquiring credit information on foreign traders and other burdensome activities. As the number of European merchants dealing with foreign markets increased, the greater became the value added by the suppliers of financial intermediation. In London, at least, these services became concentrated in the hands of bankers. From the mid-seventeenth century, such economic actors were transforming themselves from being goldsmiths to undertaking purely financial business.

The supply of international services required agents in foreign ports. The principal-agent problem faced by London-based bankers was of particular importance because the City was developing into a new kind of hub for international finance – one without an exchange bank. An exchange bank, like that at Amsterdam, held specie deposits upon which bills of exchange could be written.¹ Such banks brought many advantages to suppliers of bills. Transaction costs for settling bills were reduced by the clearing of accounts within the bank (in *banco*). Risk was also reduced because default meant expulsion from the exchange bank. Both of these features – the reduction of transaction costs and the reduction of default-risk – enjoyed increasing returns as increasing numbers of merchants participated in an exchange bank. Since the exchange bank acted as a clearing house for international payments, it both centralised information on default and orchestrated the ostracism of the defaulter. The Amsterdam municipal authorities required all bills of exchange for more than 300 guilders to be processed through the city's exchange bank, so network economies of scope were enjoyed.² Indeed, funds on deposit at the Wisselbank enjoyed a persistent premium (*agio*) over circulating coins.³

¹ J. G. van Dillen, 'The Bank of Amsterdam', in idem (ed.), *History of the Principal Public Banks* (The Hague, 1934).

² W. D. H. Assar, 'Bills of exchange and agency in the 18th century law of Holland and Zeeland', in idem, *The Courts and the Development of Commercial Law* (Berlin, 1987).

³ J. McCusker, *Money and Exchange in Europe and America, 1600–1775: A Handbook* (Chapel Hill, 1978), pp. 46–51.

The differences between London and Amsterdam were translated into divergent paths of development. Founded in 1609, the Amsterdam Exchange Bank (Wisselbank) replaced the paper notes then being issued by cashiers and money changers.⁴ As a result, the development of Amsterdam's private banking system appears to have been constrained for a century.⁵ In the absence of an exchange bank, London witnessed the development of a strong banking industry. Individual bankers supplied deposits, means of payment, lending and money changing.⁶ As a group, they offered mutual acceptance and systemic monitoring.⁷ In order to offer overseas services, London bankers had to arrange a network of international monitoring without the benefit of a centralised institution. A measure of success in this regard is that the Bank of England was founded in 1694 as a fractional reserve, note-issuing institution, modelled on existing banks. The City's financial system had developed to the point that, when the new corporate bank was established, it was not created to dominate the bill market or act as a clearing house.

Individual London bankers could handle their respective foreign contacts in a variety of ways. The most secure was to send an employee abroad. However, such staff were expensive to maintain and, consequently, were limited to primary markets.⁸ An alternative was to retain correspondents on a for-fee basis. This reduced costs relative to maintaining employees. For an individual banker in London, the cost of placing staff in numerous continental cities was prohibitive. As goldsmiths ran shops with only a few apprentices or clerks, the agent-based system was adopted.

The archetypal principal-agent relationship was based upon merchants who agreed to accept each other's bills for a fee and then settle the balance by creating an offsetting bill.⁹ 'In such cases, Amsterdam merchants accepted bills drawn on them for the account of others and covered themselves by redrawing.'¹⁰ Transaction costs were kept low because offsetting bills meant that there was no need for specie to be transported. However, vesting overseas agents with fiduciary power created the risk of misbehaviour. Kinship or religious ties were often insufficient to cover the wide network of commerce that had then developed. The creation of reputation effects by repeated business was another important tool. Agents with much to gain from future business were less likely to cheat. When the goldsmith-banker Edward Backwell developed a web of foreign agents, he usually concentrated his foreign business on only one correspondent per city. In this way, the banker generated

⁴ P. W. N. M. Dehing and M. C. 't Hart, 'Linking the fortunes: currency and banking, 1550–1800', in 't Hart, J. Jonker and L. van Zanden (eds), *A Financial History of the Netherlands* (New York, 1997), p. 43.

⁵ *ibid.*, pp. 43–4.

⁶ R. D. Richards, *The Early History of Banking in England* (New York, 1927), pp. 23–4.

⁷ S. Quinn, 'Goldsmith-banking: mutual acceptance and interbanker clearing in Restoration London', *Explorations in Economic History*, 34 (1997), p. 412.

⁸ J. Price, 'Transaction costs: a note on merchant credit and the organization of private trade', in J. D. Tracy (ed.), *The Political Economy of Merchant Empires* (Cambridge, 1991), p. 279.

⁹ L. Neal, *The Rise of Financial Capitalism* (New York, 1990), pp. 5–9.

¹⁰ Price, 'Transaction costs', p. 28.

considerable business with a trusted agent. Building this reputation was a service that Backwell supplied to customers who could not manage such levels of activity on their own.

Concentrated business, however, still left risk for the banker. The London banker had to be aware of business troubles before the punishment of the perpetrator could be pursued. The arrangement would be more effective if news of malfeasance could be spread to damage the agent's reputation with other principals. London-based bankers needed to generate a flow of information sufficient to extend reputation effects to a network of bankers and merchants. In this way, a default to one member became known and punished by the whole. By the mid-eighteenth century, such reputation effects were well established.

The conduits for this information were merchants. Seventeenth-century merchants constantly passed information between ports and one family firm was subsequently found to have saved 10,500 letters between 1668 and 1680.¹¹ Merchants' correspondence brimmed with all manner of information. News of market conditions, war, exchange rates, bankruptcies and anything else of interest was routinely shared. The letters were kept because they formed a record of advice given, orders received and actions taken. If a merchant had to explain why a shipment was lost, or why a venture was unprofitable or why he could not pay his bills, the letters could clear his good name. Published price currents complemented this effort by providing a third-party record.¹² Even though Amsterdam was clearly then the hub for distributing commercial information,¹³ London-based merchants were able to exploit effectively the information channels that existed in northern Europe.

The financial side of this correspondence was the bill of exchange. Merchants saved copies of bills for the same reasons they kept letters. Unlike letters, bills represented payments and merchants named in the bills became stakeholders in the payment process. A default, like a bounced cheque, affected all named parties. Individuals, added by their respective endorsements after the bill had been drawn, were also dragged into any failed performance because, if the bill was not redeemed, everyone else who had endorsed it became liable for its payment. The Dutch developed transfer by endorsement during the sixteenth century specifically as a means to involve merchants in the quality of the bills that they passed. The English adopted this system.¹⁴

By using merchants to pass funds to agents abroad, bankers like Edward Backwell took advantage of the incentives bills created. When the banker accepted or wrote

¹¹ H. Roseveare, *Markets and Merchants of the Late Seventeenth Century* (Oxford, 1987), p. 14.

¹² C. Gravestéijn and J. J. McCusker, *The Beginnings of Commercial and Financial Journalism* (Amsterdam, 1991), pp. 43–53.

¹³ W. D. Smith, 'The functions of commercial centers in the modernization of European capitalism: Amsterdam as an information exchange in the seventeenth century', *Journal of Economic History*, 44 (1984); and M. Morineau, *Incroyables Gazettes et Fabuleux Metaux* (Cambridge, 1985).

¹⁴ J. Rogers, *The Early History of the Law of Bills and Notes* (Cambridge, 1995) and J. M. Holden, *The History of Negotiable Instruments in English Law* (London, 1955).

bills involving his foreign agents, his ledger clearly named the merchants concerned. For example, on 28 March 1670, Backwell drew a bill of exchange ordering Henry and Charles Gerard to pay William Jarret 2,080 guilders.¹⁵ The Gerards were Backwell's agents in Amsterdam. Should the Gerards have failed to pay as ordered, Jarret would become a party to the dispute. Similarly, any merchant to whom Jarret had transferred the bill would also become involved. Jarret had a clear incentive to know that the bill was honoured and settled. Endorsing merchants had a stake in monitoring Backwell's agent and would spread word of default on the bill to their colleagues.

London bankers and their agents employed a large number of different merchants at each port to send and receive bills. Although a banker might want to transfer large sums overseas, individual merchants preferred small bills in line with their less significant transactions. Thus a number of merchants were used which thickened the credit nexus and created multiple monitors for each agent. The arising effect was strengthened through integrating different religious and geographic communities. Each added its particular internal system of monitoring and reputation to the whole. For example, on 15 October 1669, Backwell paid Abraham Doportos for a bill drawn and sold by the Gerards in Amsterdam to Simon Nunes Enriques & Simon Soares of Hamburg.¹⁶ Comparably, on 23 August of the same year, Backwell had paid Jo. Patters for a bill drawn by the Gerards on Jo. Vandercloet of Rotterdam.¹⁷ Furthermore, George and Robert Shaw of Antwerp drew bills on Backwell by way of Engeld Muyhuk, Albertus Lunden and Barnardo Bree, all of Brussels, and Bartholomew van Berchen of Bruges.¹⁸ Backwell had a wide range of merchants also moving between London and Middelburg, Hamburg, Cadiz, Seville and Paris.

The problem with a diverse body of merchants was passing news of default on to others and organising collective action. Here London banks helped solve the problem. In Amsterdam, the Exchange Bank monitored and enforced all bills clearing through the city. In London, the system of individual banks mimicked that role. Word of an agent's behaviour would pass back to the banker through the injured merchant and protested bill. The banker then spread the word to the numerous other merchants who held accounts in London. The banker also had a regular channel to other bankers in the City via regular, bilateral clearing arrangements.¹⁹ The web tightened further because merchants banked with more than one shop. For example, on 13 July 1669, Backwell paid Sir John Frederick & Co. for a bill drawn by the Gerards in Amsterdam after it had passed through the shop of another

¹⁵ Royal Bank of Scotland, Archive, London [hereafter RBS]: Backwell Ledger, S 1670–71, folio 41.

¹⁶ RBS: Backwell Ledger, R 1669–70, folio 481.

¹⁷ RBS: Backwell Ledger, R 1669–70, folio 63.

¹⁸ RBS: Backwell Ledger, S 1670–1, folios 76, 328.

¹⁹ Quinn, 'Goldsmith-banking', pp. 418–24.

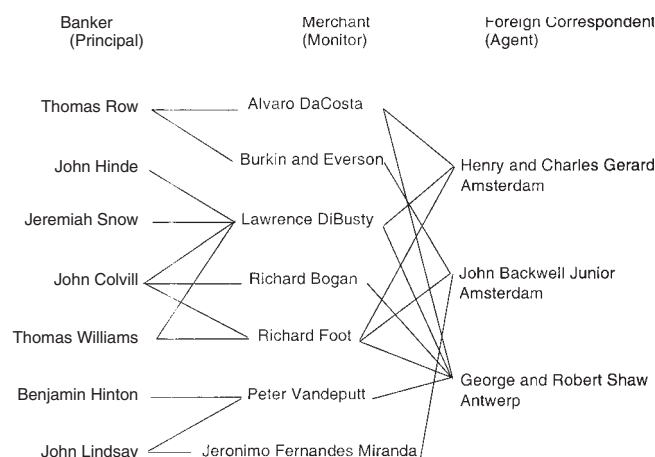


Figure 1. *Examples of connections between bankers, merchants and foreign agents in Edward Backwell's 1670 ledger*

goldsmith-banker, John Lindsay.²⁰ A number of other London bankers also appear in the process of moving bills to Backwell.

Use of multiple merchants per banker and of multiple bankers per merchant expanded the network's ability to spread information. For example, the Gerards of Amsterdam received bills from Backwell from over 20 different merchants during the 12 months from March 1670 to March 1671. Any default by the Gerards would have spread to a large number of merchants, which would extend the scope of damage to the Gerards' reputation. In addition, these merchants often banked with more than one goldsmith in London. Again, these contacts would disseminate knowledge of improper behaviour. Figure 1 connects seven merchants that presented bills from the Low Countries to Backwell in London and then transferred their resulting credit on the banker's ledger to other goldsmith-bankers. These examples are very exclusive because they do not consider the many merchants who presented bills to Backwell but did not bank with him. Such bills would have been settled in cash, by note or by some other form of payment rather than by ledger credit. Furthermore, the examples in Figure 1 do not include merchant transactions with goldsmiths other than Backwell (listed in Backwell's ledger), who were not directly associated with a bill of exchange. Merchants banking with Backwell regularly transferred funds to other bankers. Even under these restrictive terms, a substantial number of goldsmith-merchant-agent connections existed in 1670.

The British East India Company also used the same arrangements. When engaged in continental bullion purchases in 1675, the Company used the same agents as Backwell, namely: Gerards in Amsterdam; Banks in Hamburg; Rowland Dee in

²⁰ RBS: Backwell Ledger, R. 1669–70, folio 62.

Cadiz; and Benjamin Bathurst in Seville.²¹ Moreover, the Company used numerous prominent merchants and London goldsmith-bankers to pass the funds.²² The strong similarities between the banker and the East India Company in their respective payments procedures suggest that this was common practice in late seventeenth-century London.

Another common element between the East India Company and the goldsmith-banker was the covering balances with agents. In contrast to a correspondent relationship premised on credit, both the Company and the banker regularly built up balances with their respective agents in advance of drawing bills payable by those agents. This was an expensive arrangement because neither operation earned interest on funds placed abroad. However, when the Company or Edward Backwell sent a bill, the agent already owed that amount. Covering balances made an agent's failure to honour a bill a failure to retire debt rather than a failure to extend credit. One benefit was that the agent would not have to create an offsetting bill, so the likelihood of acceptance would increase. A second benefit was that not honouring an order to pay backed by a debt was a more serious matter than failing to extend credit. By analogy, today a credit card has more latitude in denying funds than a demand deposit. The law regarding debt was well advanced by the seventeenth century, while that binding agents to credit-granting commitments was less clear.²³

The potential problem of establishing that an agent in Amsterdam actually owed a principal in London was mitigated by the use of merchants to transfer funds. Merchants witnessed the transfer of funds and had incentives to see that those transfers were honoured and remembered. Merchants formed the spokes and bankers the hub of the London network. The flow of information was necessary for London-based bankers to conduct overseas finance.

II

The incentive for bankers and merchants to cooperate in operating the web of credit and information lay in the profits to be earned, and shared, in the arbitrage of foreign exchange. For example, bankers could offer bills between pairs of ports to capture favourable exchange rate differences. By increasing demand for bills denominated in weaker currencies and increasing the supply of bills denominated in stronger currencies, banker networks created a flow of funds that narrowed exchange rate differentials. While the integration of eighteenth-century exchange markets has been quantitatively established, data to perform similar tests for the seventeenth century are not available.²⁴ In place of market data on exchange rates, we have used the accounts of leading banking firms to show that bankers and

²¹ India Record Office, London [hereafter IRO]: East India Company Ledger, 1673–5, L/AG/1/1/6.

²² *ibid.*

²³ Assar, 'Bills of exchange and agency'; and Rogers, *Early History of Law*.

²⁴ E. Schubert, 'Arbitrage in the foreign exchange markets of London and Amsterdam during the 18th century', *Explorations in Economic History*, 26 (1989); and Neal, *Rise of Financial Capitalism*.

merchants took advantage of differences between direct rates and cross-rates throughout the network of leading European ports well before 1700. This, incidentally, shows that the origins of international market integration arose well before 1700 and before the revolution in English public finance during the 1690s.

A network of agents was necessary for taking advantage of exchange rate and cross-exchange rate opportunities. Moreover, such networks could provide spatial economies of scale. The marginal effect of adding one more information node to a network increased geometrically with the increased size of the network. Adding Hamburg to a London–Amsterdam network added two cross-connections: Hamburg–London and Hamburg–Amsterdam. Adding Paris to the Hamburg–London–Amsterdam network would add three links and so on. Each new link expanded the returns from the fixed investment embodied in existing nodes and opened new cross-market opportunities. The profits to be shared among participants engaged in effective arbitrage maintained the credit network's cohesion as it expanded.

With regular correspondence, dealers in bills of exchange would know when differences in rates developed between ports. 'When such local disequilibria occurred it was natural for the more adventurous dealers to practice arbitrage – dealing with a third centre whenever rates on a second centre might prove more advantageous.'²⁵ Henry Roseveare found that the London merchant Jacob David moved his funds from Amsterdam to Antwerp to take advantage of cross-rate imbalances in 1676.²⁶ Moreover, David did this on the advice received by letter from his underwriter Claude Hays. At other times, David routed funds to Hamburg via Amsterdam and Venice.²⁷

Edward Backwell engaged in similar arbitrage behaviour and at an even earlier date. Much of Backwell's foreign transactions involved supplying funding for the English fleet provisioned out of Cadiz. Backwell provided banking services to the famous diarist Samuel Pepys and other purchasing agents for the Royal Navy.²⁸ For example, on 9 February 1671, Backwell drew bills due on Rowland Dee, Jr, of Cadiz for 15,000 pieces of eight (£3,375). Dee's account with Backwell recorded payment of the bill to Sir Hugh Cholmely at 20 days sight, value of Samuel Pepys. Because of his various agents, the banker could also supply bills directly between Spain and the Low Countries. After supplying the Royal Navy with silver and honouring bills drawn in London by Backwell, Rowland Dee balanced his accounts with the banker by drawing bills both on London and on Backwell's agents in Amsterdam. Over the 12 months from March 1670, Dee drew bills totalling £6,000 directly on London. The Cadiz agent drew an additional £3,769 worth of bills on

²⁵ Roseveare, *Markets and Merchants*, p. 53.

²⁶ *ibid.*, p. 593.

²⁷ *ibid.*

²⁸ Richards, *Early History of Banking*, pp. 74–5.



Figure 2. *Arbitrage between Cadiz and London via Amsterdam in 1670*

Source: See note 34

the banker's agents in Amsterdam and £4,474 on the goldsmith's agents in Antwerp.²⁹

The timing of Dee's bills, however, was most important. He switched from drawing bills on London to only drawing bills on the Low Countries in autumn 1670. This would have benefited Backwell in London. During summer 1670, Dee had drawn bills on London at a rate of 48.5 pence/peso (two-month bills). When Dee switched to Amsterdam and Antwerp in September and October, the Dutch schellingen had already depreciated against the pound by 2.5 per cent since May (34.6 Sch/£ in May to 35.5 in September). When the Dutch schellingen reached 36 to the English pound in October 1670, Dee's pesos-via-Holland were only costing Backwell 47 English pence a piece as opposed to 48.5 during the summer.³⁰ That was a three per cent gain. Over winter 1670–71, the Dutch rate strengthened relative to Spain as well, so the cross-rate differential favouring the Low Countries was eliminated. In February 1671, Rowland Dee resumed drawing bills directly on London. Figure 2 has presented a schematic of Backwell's arbitrage behaviour.

The ability to switch financial channels was evident. Merchants and bankers had the means to capture favourable cross-rates. Moreover, the information the network provided would have been essential for the successful manipulation of exchange rate differentials. Eric Schubert has described arbitrage between markets for bills as uncertain.³¹ From the perspective of pricing bills, uncertainty entered into the demand for bills. Consider a market for bills in London. Information regarding the supply of pounds would be apparent to all parties in London. The demand side, however, was composed of agents for merchants in Amsterdam, and other cities,

²⁹ RBS: Backwell Ledger, S 1670–71 with Dee in Cadiz, folios 300, 320, 593, 595; Gerard in Amsterdam, folios 41, 443, 444; and Shaws in Antwerp, folios 76, 328, 573.

³⁰ The calculation was $(117 \text{ grooten/ducata})(0.72533 \text{ ducata/peso})(0.08333 \text{ schellingen/grooten})[1/(36 \text{ schellingen/£})](240 \text{ pence/£}) = 47.15 \text{ pence/peso}$. Denominational relationships from McCusker, *Money and Exchange*, pp. 44, 61, 99–100, 107.

³¹ Schubert, 'Arbitrage'.

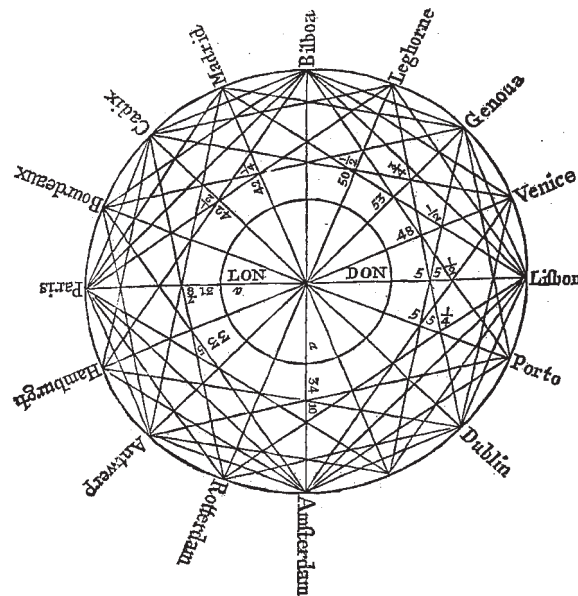


Figure 3. *The opportunities for arbitrage profits in the exchange network of Europe*
 Source: M. Postlethwayt, *The Universal Dictionary of Trade and Commerce*, 4th ed.
 (London, 1774; reprinted New York, 1971), vol. I, *Arbitrage*

wanting to buy pounds with their schellingen, pesos, etc. For those trying to price a bill in London, information on actual demand would be as old as the most recent vessels crossing the channel. Expectations of demand arriving from foreign ports would play a discriminating role. A supplier of bills in London with better information about conditions in Amsterdam would have an advantage. 'Good manners, if not explicit instructions, required merchants in most European centres to keep their customers informed of the current rates of exchange.'³² The better the information, the faster markets would tighten the weave of cross-rates. The same information was also essential for financial speculation as well. The implicit rate of return on bills was speculative because it relied on re-exchange.³³ Returns to 'dry exchange' – rolling over the value of a bill into a bill due back at the initial port – depended upon the exchange rate at the foreign port when the first bill fell due. Information from abroad reduced the risk of speculation by improving estimates of where foreign exchange markets were moving.

The network also aided the flow of bullion (Figure 3). In late 1669, Backwell drew down some of his account with the Gerards of Amsterdam by having them buy bullion and coin. On the banker's behalf, the Gerards acquired Spanish pistols

³² Roseveare, *Markets and Merchants*, p. 592.

³³ R. DeRoover, 'What is dry exchange? A contribution to the study of English mercantilism', in idem, *Business, Banking, and Economic Thought* (Chicago, 1974).

and pieces of eight, French crowns, Venetian ducats and Dutch rixdollars, along with ingots and bars of silver and gold.³⁴ Market-integrating arbitrage between bills and bullion required both access to, and knowledge of, foreign markets, with Amsterdam being the key market.³⁵ Thus the network of bankers and merchants provided the means to connect the many European markets for bills of exchange, gold and silver. One question remains. How could this credit network survive repeated shocks inflicted upon it by the succession of wars, revolutions, and financial crises that characterised both the closing decades of the seventeenth century and the eighteenth century?

III

A detailed example of enforcement in action is provided by the surviving correspondence of an Amsterdam diamond merchant, Bernard van der Grift, with his principal client in London, Lord Londonderry (Thomas Pitt, Jr), 1720–25.³⁶

Van der Grift was trying to collect sums owed to Londonderry by John Law, arising from Law's spectacular loss through speculating against stocks traded on the London stock market.³⁷ From Paris, Law had instructed his agent in London, the goldsmith-banker George Middleton, to pay Londonderry in Amsterdam. To make this payment, Law told Middleton to draw five bills on his Amsterdam agent, Abraham Mouchard, the representative of the French *Compagnie des Indes*. Middleton drew the bills and tendered them to Londonderry as partial payment of Law's debts to Londonderry. Londonderry then endorsed the bills to his agent in Amsterdam, the diamond dealer Bernard van der Grift.

Middleton had asked Mouchard on each bill to pay a stated sum in Dutch bank money to Londonderry, based upon value received from John Law. Londonderry, in turn, endorsed every bill to his agent in Amsterdam, van der Grift, so that van der Grift could receive the sum and credit it to Londonderry's account with him. Middleton would write a letter of advice to Mouchard, explaining the source of funds from Law that Mouchard should use in making the payment, while Londonderry wrote to van der Grift explaining how, and when, he wanted the funds used for his account. Mouchard was expected to accept each bill when

³⁴ RBS: Backwell Ledger, R. 1669–70, folios 64, 481–2.

³⁵ S. Quinn, 'Gold, silver, and the Glorious Revolution: arbitrage between bills of exchange and bullion', *Economic History Review*, 49 (1996), pp. 474–82.

³⁶ This correspondence is contained in a bundle of letters in Chancery Masters Exhibits at the Public Record Office, Kew, London [hereafter PRO]: C108/420. All dates on van der Grift's letters are Gregorian calendar, New Style, and correspond to 11 days earlier in Britain, still on the Julian calendar, Old Style.

³⁷ Details of this episode are in L. Neal, 'George Middleton: John Law's goldsmith-banker, 1727–1729', in Paul Klep and Eddy van Cauwenberghe (eds), *Entrepreneurship and the Transformation of the Economy (10th–20th Centuries)* (Leuven, 1994); and L. Neal, '"For God's sake, remitt me": the adventures of John Law's goldsmith-banker in London, 1712–1729', *Business and Economic History*, 23 (1994), pp. 27–60.

presented to him by van der Grift. After signing his acceptance, the bill would become a negotiable instrument in Amsterdam so that van der Grift could either discount it for immediate cash or hold it for the two months usance allowed to Mouchard to raise the sums and pay off the bill. Londonderry had made the acquaintance of van der Grift while acting as the overseas agent for his father, Thomas Pitt, Sr – Governor Pitt – perhaps the wealthiest diamond merchant in London. One of the largest capital transfers of the time ultimately had to be made through the credit network previously established by traders – in this case diamond merchants in London and Amsterdam.

Earlier in 1720, Londonderry had sent van der Grift five bills drawn on Mouchard by John Lambert, another goldsmith-banker. In a letter of 14 June to Londonderry, van der Grift explained that Mouchard had not accepted the bills for payment. Instead of protesting the bills with a notary public in Amsterdam as the first step in pursuing legal remedies against Mouchard, van der Grift returned the bills as unpaid and unaccepted to Londonderry. Here he was simply following Londonderry's instructions, who had suspected the bills might not be covered by funds Lambert had on account with Mouchard.

When van der Grift received the new set of bills drawn on Mouchard, this time by Middleton, he was naturally concerned for his client Londonderry. Despite his reservations about the ability of both Middleton and Mouchard to carry on payments in this manner, van der Grift promised to pay the bills Londonderry drew on him 'on account of the value, and credit I have for your Lordship (and I assure your Lordship on no other accounts)'.³⁸ Wanting to retain the business of Londonderry, his principal in London, van der Grift was volunteering to pay out his own cash to Londonderry's creditors whether or not he received cash from Mouchard. All he asked was that the bills drawn by Middleton on Mouchard be dated payable before those that Londonderry drew on van der Grift, a reasonable precaution in the uncertain circumstances of the time. Van der Grift intended to cover his payments on Londonderry's behalf by drawing on money owed him in London by a Lewis Johnson and to have this remitted to him via bills of exchange. It would be in Londonderry's interest to assist van der Grift in collecting the sums Johnson owed him, if any difficulty arose in completing that contract.

As matters developed, van der Grift found in October 1720 that his speculations on South Sea stock with his agent in London, Lewis Johnson, had come to nothing. Johnson stopped payments on bills drawn on him. Nevertheless, van der Grift insisted that he could continue to meet Londonderry's drafts on him through other balances he had owing to him in London. But now Londonderry became van der Grift's agent in London to help resolve his claims on Lewis Johnson. Meanwhile, van der Grift continued to pay off Londonderry's partners in Amsterdam by accepting bills drawn on him by Londonderry, as Mouchard had accepted the bills drawn on him by Middleton. Both sets of accepted bills were negotiable instruments

³⁸ PRO: Chancery Masters Exhibits, Pitt v. Cholmondeley, C108/420, letter of 24 Sep. 1720.

but van der Grift was retaining the bills accepted by Mouchard. Due to the general knowledge within Amsterdam of the payments difficulties that Mouchard was facing as his source of funds in Paris dried up, any discount of one of Mouchard's acceptances would have incurred a heavy risk premium. There would also be a hefty interest charge, given the then general shortage of credit in Amsterdam.

So far, all that required appeal to enforcement mechanisms, whether formal or informal, was van der Grift's claim on Lewis Johnson, which he wished to use for making payments to Londonderry in London. To initiate proceedings against Johnson while still maintaining a flow of payments to Londonderry, van der Grift suggested that Londonderry return the protested bills of van der Grift on Johnson and sell £1,000 of South Sea stock that van der Grift had bought earlier through Londonderry. In order to maintain Londonderry's business, van der Grift had previously sent him funds to buy stock of the South Sea Company, which had then been rapidly rising on the London market, and these were still being held by Londonderry on van der Grift's account. The Dutchman subsequently assured Londonderry that, even if he was not inclined to sell the South Sea stock due to its now low and continually falling price, he would remit him immediately against it, in effect pledging the stock as collateral for whatever payments Londonderry made on his behalf, 'for his honour'.³⁹

In a letter of 29 October, van der Grift gave Londonderry his first hint of future troubles with Mouchard. He noted, first, that Mouchard was only obtaining means to make payment on the bills drawn on him through gold continually sent from France in monthly shipments, which he had pawned immediately at the Wisselbank. Neither silver nor any other form of exchange with France was being transferred, either to, or from, Amsterdam. While Mouchard had considerable amounts of coffee and indigo in his warehouse, it was being held on account of the French Compagnie and consequently was not available for sale or to be pawned on his account. The bills, that he had accepted earlier and was supposed to pay the day before, had not yet been paid.⁴⁰ All this information on Mouchard's affairs was readily available to all concerned bankers and merchants in Amsterdam and could be easily confirmed by Londonderry from London.

In the next letter of 1 November 1720, van der Grift enclosed his protests on three of the bills on Mouchard that he had accepted but not paid when due. While van der Grift considered Mouchard to be an honest man, if the Compagnie in France did not continue to support him, he would be unable to pay the large amount of bills he had already accepted. A week later, van der Grift was informed by Mouchard that the gold he had received from the Compagnie was much less in amount than he needed and expected. There were hundreds of bills running on him so, if he failed, there

³⁹ PRO: Chancery Masters Exhibits, C108/420, letter of 22 Oct. 1720.

⁴⁰ PRO: Chancery Masters Exhibits, C108/420, letter of 29 Oct. 1720.

would be serious trouble in Amsterdam since two of the very best houses in the Dutch city had already stopped payments on their accepted bills.⁴¹

To give some assurance about Mouchard to Londonderry, van der Grift persuaded Mouchard to give him some bills due to Mouchard over the coming month. Even though van der Grift was apprehensive over whether these bills would, in turn, be paid, he felt it was 'better security than none at all'. His 12 November letter was largely taken up with his reasoning over how to deal with his defaulter in London, Lewis Johnson, and giving instructions to Londonderry about how to act as his attorney in resolving that matter. Van der Grift proposed to pay cash out to Londonderry's creditors in Amsterdam but then have them return to London the accepted, but unpaid, bills drawn on Lewis Johnson with a counter-protest. As van der Grift would have by then paid off the obligation of Lewis Johnson, he would become Johnson's creditor in London and have legal standing to sue him in London courts and possibly force him to be declared a bankrupt. It was more the threat of bankruptcy and imprisonment, rather than the practice, that van der Grift desired. In this way, he could force Johnson to make a full account of what he could pay.⁴²

As conditions worsened in France, especially for the personal circumstances of John Law, van der Grift found himself in the middle of yet another transaction between Londonderry and his father. This time, Law had directed Middleton to draw bills on his agent in Hamburg, Alexander Bruquier, and give them to Governor Pitt as payment for his share in the wager. The Governor, in turn, sent them to his trusted agent in Amsterdam, van der Grift, to collect on his behalf. Bruquier had informed Middleton by letter that he had accepted the bills for payment but van der Grift knew that actually Law's Hamburg agent had only accepted them when they were presented to him a second time. There was then no negotiation of bills between Hamburg and Amsterdam due to the systemic financial crisis enveloping all of Europe. Consequently, there was a problem of how to get the payment back to Governor Pitt's account with van der Grift in Amsterdam even if Bruquier paid in Hamburg. Van der Grift proposed in a letter of 26 November to send the bills accepted by Bruquier to a friend of his in Hamburg, Lucas Backman, whose character he vouched for, for re-exchange back to van der Grift in Amsterdam. In this way, Backman would end up being paid by Bruquier in Hamburg, Governor Pitt would be paid by van der Grift in Amsterdam, after the completion of intermediate steps involving van der Grift creating a claim on Backman and Backman then, in turn, discharging it with a bill drawn on van der Grift. The contract between the principals, Pitt and Bruquier, was to be fulfilled by Bruquier paying out in Hamburg and Pitt receiving payment in Amsterdam. The intermediaries involved – van der Grift and Backman – would receive commissions for their services and some interest derived from the exchange rate spreads in

⁴¹ PRO: Chancery Masters Exhibits, C108/420, letter of 8 Nov. 1720.

⁴² PRO: Chancery Masters Exhibits, C108/420, letter of 12 Nov. 1720.

Amsterdam and Hamburg. In short, van der Grift was recommending that Governor Pitt should rely on the proven network of merchant credit built up over the years instead of trusting the new network of agents established by John Law on behalf of the French Compagnie des Indes.

Regardless of this side play, Londonderry still needed to pay off his father and his powerful partners in Amsterdam for their part in the wager with Law. He evidently proposed that van der Grift pawn some of his merchandise that lay unsold in Amsterdam to pay the bills Londonderry had drawn, in turn, on van der Grift. Van der Grift dismissed this, noting that prices of such goods had fallen dramatically and, therefore, their sale or pawn would not begin to cover the sums required to honour the bills drawn by Middleton on Mouchard. Rather, he recommended that Londonderry return the protested bills on Mouchard to Middleton, who would then be obliged to reimburse Londonderry, just as van der Grift had reimbursed the Amsterdam partners of Londonderry when Lewis Johnson had defaulted in London.⁴³ Van der Grift had not evidently perceived that Middleton was, in turn, about to fail at nearly the same time Londonderry would have received his letter.

Middleton's desperate situation in London, reflecting that of John Law in Paris, became clear when the next post brought a batch of bills drawn by Middleton on Law's agent in Genoa, M. Chavigny. Van der Grift agreed to send the first bills to Genoa to have them accepted but asked Londonderry to send the seconds endorsed to van der Grift. These the Dutchman would hold until their usance was nearly up before then sending them to Genoa. This way, van der Grift would get the shortest dated bills possible, which would be the most secure for payment back in Amsterdam.

Meanwhile, it became ever clearer that Mouchard would be unable to pay the bills that he had accepted. As van der Grift was growing tired of his procrastination and repetitive excuses, he finally recommended initiating legal action. As earlier with Lewis Johnson in London, this was intended to frighten Mouchard to exert himself more seriously to make payment if at all possible. Otherwise, Mouchard could be made bankrupt and imprisoned.⁴⁴

Before accepting van der Grift's advice, Londonderry had to cope with the shock of Middleton's stoppage of payments on 13 December in London (but 24 December, Christmas Eve, in Paris and Amsterdam). Middleton himself wrote to van der Grift, to explain that the dismissal of John Law in Paris had made it impossible for him to cover any of Law's bills in expectation that Law could eventually reimburse him.⁴⁵ From Paris, Londonderry sent van der Grift a power of attorney that enabled the Dutchman to put Londonderry's name to the unendorsed bills that Londonderry had already sent to Amsterdam. Van der Grift noted that this unusual method, apparently recommended to Londonderry in Paris, was not lawful

⁴³ PRO: Chancery Masters Exhibits, C108/420, letter of 3 Dec. 1720.

⁴⁴ PRO: Chancery Masters Exhibits, C108/420, letter of 20 Dec. 1720.

⁴⁵ Coutts & Co., Archives, London: Letter Book 'O-14', Foreign Letters 1720, f. 509.

in Amsterdam. Therefore, he suggested that Londonderry endorse the second copies of the bills and send them to him in Amsterdam. Even so, these bills would be no good if Mouchard still lacked funds on account for John Law.⁴⁶

The next ploy by Mouchard was to suggest to van der Grift and Londonderry that he draw bills on Compagnie des Indes in Paris payable to Londonderry's agent in Paris, Sir John Drummond. However, French law required such bills always to state clearly that 'value was received' by the drawer of the bill. A bill of exchange drawn on Paris could be declared null and void if the drawer could not provide proof that he had received value corresponding to the amount being drawn. This was the assurance provided in French law that the ultimate drawer would always be responsible for the amount paid out on his credit. English law was more flexible, requiring only that the original drawer be responsible ultimately for payment, without needing to demonstrate that value had been received for each bill. If van der Grift gave Mouchard either the bills drawn by van der Grift directly on Mouchard or bills drawn to Londonderry and endorsed to van der Grift, he would lose legal leverage on Mouchard under Dutch law in Amsterdam. In any case, he did not trust Compagnie des Indes to pay since the concern had not been providing Mouchard with the necessary means to meet his obligations to date in Amsterdam.⁴⁷

Meanwhile, van der Grift had received payment for the bills drawn by Middleton on Bruquier in Hamburg, and he was remitting the proceeds directly to Governor Pitt. The well-established merchant lines of credit were being sustained to at least this extent in the midst of the financial meltdown of international capital markets during 1720. Ironically, one of the bills sent by van der Grift was drawn on Robert Knight, treasurer of the South Sea Company. Knight was under close investigation by a Secret Committee of Parliament enquiring into the collapse of the South Sea Company and about to abscond to Brussels!

During the next month, van der Grift continued to enquire at least each post day at Mouchard's office to sustain the pressure on him while his protested bills were in process of being sent to Londonderry. Londonderry then obtained a contra-protest on the bills from Middleton, who could rightly claim that he had been informed by his principal, John Law, that provision had been placed with Mouchard for payment of the bills. By mid-February, the contra-protested bills had been received back in Amsterdam by van der Grift, who was now ready to proceed with legal action against Mouchard. Using the contra-protested bills – endorsed originally by Londonderry to van der Grift and then accepted by Mouchard, protested by van der Grift and sent to Londonderry, who had them contra-protested by Middleton and sent them back to van der Grift – Van der Grift's lawyer obtained a *prise de corps* authorisation from the Amsterdam magistrates. Once in effect, the *prise de corps* meant that van der Grift could, at his pleasure, have Mouchard arrested and put in prison. For the *prise de corps* to take effect, Mouchard had to be summoned three

⁴⁶ PRO: Chancery Masters Exhibits, C108/420, letter of 14 Jan. 1721.

⁴⁷ PRO: Chancery Masters Exhibits, C108/420, letter of 17 Jan. 1721.

times before the magistrate. Within a week this was carried out and van der Grift now had the full force of Dutch law at his disposal to be used against Mouchard on behalf of Londonderry.

Nevertheless, it seemed to van der Grift that the wisest course of action was to keep the threat of imprisonment as an option, rather than to exercise the *prise de corps*.⁴⁸ This recommendation by van der Grift was taken and appears to have had the desired effect of terrifying Mouchard. Van der Grift reported that Mouchard was no longer to be found in his office but was hiding in his home. Moreover, he had shown bad faith by first depositing some French bank bills with the notary who was holding the *prise de corps* and then taking the bills back. Despite this show of desperation by Mouchard, van der Grift still counselled patience. Mouchard repaid this kindness by hiding out in a friend's house, which caused van der Grift to recommend declaring him bankrupt and having him arrested. This way he and Londonderry could seize what little effects remained in Mouchard's possession before he had a chance to dispose of them.⁴⁹ In the event, another creditor also obtained a *prise de corps* against Mouchard and took out a statute of bankruptcy against him.⁵⁰ That creditor turned out to be Londonderry himself, no doubt somewhat to van der Grift's surprise. Londonderry then allowed Mouchard three months' liberty to try to put his affairs in order and Mouchard gratefully accepted. Van der Grift noted that after Londonderry's liberty period expired, his original *prise de corps* would again be in force, so the ultimate threat of imprisonment would remain.

Over the following several years, Mouchard's name only appeared every three months in the weekly letters from van der Grift to Londonderry – upon the renewed extensions of the liberty he allowed to Mouchard from the *prise de corps* still outstanding against him. The *prise de corps*, never being exercised, legally lapsed one year and six weeks after its issue but *sauf conduits* were then issued repeatedly to protect Mouchard from the statute of bankruptcy. The affair ended in March 1724 as Law and Londonderry had come to a separate conclusion of Law's huge debt, after intensive negotiations between the two principals in London.

At the close of 1723, it had appeared that Law would be recalled to France by the Duc d'Orléans, chief adviser to Louis XV then in his teens, and allowed to regain possession of his estates and financial assets. In turn, Law pledged his 3,000 shares in Compagnie des Indes towards payment of his final debt of £92,000 to Londonderry and associates. Law then released all of his agents – in Amsterdam, Genoa, Hamburg and London – of their obligations to pay bills of exchange drawn on them. However, with the death of the Duc d'Orléans in late 1723, the new French ministers turned against Law; they induced his brother also to turn against him and apparently seduced his wife to stay in Paris while Law languished in Venice. But that is another, unhappy

⁴⁸ PRO: Chancery Masters Exhibits, C108/420, letter of 14 Feb. 1721.

⁴⁹ PRO: Chancery Masters Exhibits, C108/420, letter of 4 Mar. 1721.

⁵⁰ PRO: Chancery Masters Exhibits, C108/420, letter of 7 Mar. 1721.

tale of the lack of honour among statesmen and aristocrats. It has no more bearing on our story of the network of credit established among the mercantile community of early modern Europe and the legal apparatus supporting it.

The legal procedures of protest and contra-protest on bills that were either not accepted or, if accepted, were not paid, provided documentary evidence of breach of payment. All parties to a bill also had to supply and preserve the supporting letters of advice with instructions from principals to agents and confirmation of actions taken sent back by agents to their principals. In the case study just presented, Londonderry was both principal and agent to van der Grift. It is unfortunate that Londonderry's letter book for the period is missing but van der Grift was clearly the instructor in the relationship, patiently tutoring his new client in the ways of the mercantile world. Thanks to his expositions, we have been able to reconstruct the legal machinery available and used by merchants during the early eighteenth century. It was also clearly in operation by the mid-seventeenth century.

IV

To become an international financial centre, seventeenth-century London had to overcome at least one comparative disadvantage – the lack of a public bank, a central institution that processed bills of exchange. Such banks were essentially clearing houses for payments by foreigners using bills of exchange drawn on correspondents. Amsterdam's Wisselbank, established in 1609, was the most envied foreign example.⁵¹ Despite considering many schemes to emulate the Wisselbank, London bankers and merchants never created such an institution. Before 1688, the reason no doubt lay in merchants' reluctance to put their specie assets at the potential disposal of a capricious monarch capable of seizing them for reasons of state. Only city-states governed by republican forms of government dominated by merchant interests, such as Venice, Genoa or Hamburg, established such exchange banks in Europe. After the Glorious Revolution of 1688 in England, the Protestant monarch was more tightly constrained by the legislative power of Parliament.⁵² Even then, it took the duress of war finance to persuade Parliament to establish a peculiarly British version of a public bank in 1694 – the Bank of England. Unlike the Bank of Amsterdam, the Bank of London (as the Bank of England was popularly, and correctly, known during the eighteenth century) did not dominate the local bill market, it did not act as large-scale clearing house, and no bills were required to pass through it.⁵³ Instead, the Bank was a fractional reserve, note-issuing bank, committed to serving the British Treasury. In place of a centralised institution such as the Wisselbank, London bankers had to arrange an informal network of

⁵¹ J. K. Horsefield, *British Monetary Experiments 1650–1710* (New York, 1983), p. 94.

⁵² D. North and B. Weingast, 'Constitutions and commitment: the evolution of institutions governing public choice in seventeenth-century England', *Journal of Economic History*, 49 (1989).

⁵³ H. V. Bowen, 'Bank of England 1694–1820', in R. Roberts and D. Kynaston (eds), *The Bank of England, Money, Power and Influence 1694–1994* (Oxford, 1995), pp. 14–16.

mutual monitors operating through the foreign-exchange markets to maintain a viable payments system. This was necessary to support England's growing overseas commerce and public expenditure.

Rather than clear all bills through an exchange bank, London bankers' bills were settled, along with notes and cheques, via bilateral clearing between bankers.⁵⁴ The benefit for London's financial development was that the specie deposited in fractional reserve banks was recycled into market lending. In contrast, an exchange bank was required to maintain 100 per cent backing for its deposits. Recycling deposits buttressed a resilient, market-oriented, domestic banking system in London. The cost, however, was that bills drawn on London lacked the firmer backing offered by bills drawn on Amsterdam. Further, because all bill traffic in Amsterdam was directed through the Wisselbank, any default there was immediately observed by all participants and met by universal withdrawal of business from the defaulter. Defaulted bills in London, by contrast, required legal action to be initiated by the aggrieved individual, while the defaulter could continue to do business with other clients.

London bankers reduced their risks in dealing with international bills of exchange by creating a network of responsible agents overseas, each of whom owed a substantial part of his business to the respective London banking house and, therefore, had every incentive to maintain his reputation for fair and prompt dealing with London. Overseas agents, in turn, were constantly monitored by a large number of diverse merchants, both British and foreign, who remitted bills of exchange between London and abroad in part to finance their trading activities. Confronted by a classic principal-agent problem, bankers in Lombard Street focused on establishing accounts with proven and reputable associates in Amsterdam, Paris or Cadiz. As they widened their networks of trade and credit, they rapidly outgrew the possibility of their foreign agents' sanctioning opportunistic behaviour by religious or family ostracism, or by organising collective action with other merchants in a foreign port against an expropriating prince or a mercenary merchant.⁵⁵ Both London bankers and their foreign agents were only subject to the domestic law at each port. To enforce contracts across the resulting legal boundaries required the creation of enforcement mechanisms that were both informal and novel.

⁵⁴ Quinn, 'Goldsmith-banking'.

⁵⁵ A. Greif, 'Reputation and coalitions in medieval trade: evidence on the Maghribi traders', *Journal of Economic History*, 49 (1989); idem, 'Contract enforceability and economic institutions in early trade: the Maghribi traders coalition', *American Economic Review*, 83 (1993); and P. Milgrom, D. North and B. Weingast, 'The role of institutions in the revival of trade: the medieval law merchant, private judges, and the champagne fairs', *Economics and Politics*, 2 (1990).