The Bristol Shipping Industry in the Sixteenth Century

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Declaration

I have composed this thesis myself, on the basis of my own work.

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Abstract

As the title of this thesis indicates, it is concerned with Bristol's sixteenth century shipping industry. The bulk of the study, however, is concerned with an intensive examination of the period 1539-46. It begins by examining the economic conditions of the industry in the mid-sixteenth century and the costs, risks and returns involved in entering the shipping market. It reveals that engagement in the industry, and particularly in the servicing of the Continental trades, involved high costs and considerable risks. Since mechanisms to spread risk, such as insurance or shared ownership, were either unavailable or rarely adopted, engagement in the industry was in practice limited to the city's wealthiest merchants. Yet, although this may have limited aggregate investment, the small size of Bristol's shipowning community facilitated the creation of collective arrangements that aimed to further their mutual interests.

The second chapter examines the size and nature of the city's shipping market. It reveals that the market for commercial shipping was split into two sectors – one serving the Continental trade to Biscay and Southern Iberia, the other the lesser Irish trade. The primary focus of the chapter is the Continental shipping market. Its most significant and original conclusion is that while the demand for import shipping greatly exceeded the demand for export shipping in the city's declared trade, shipowners could rectify this imbalance if they were prepared to service the extensive illicit trades in grain and leather exports. Although this chapter focuses on the commercial demand for shipping, consideration is also given to the nature and timing of demand for shipping from non-commercial sources, such as privateers and the Crown.

The third and fourth chapters examine how Bristol's shipowners maximised their returns during the years under study. Chapter three considers the years of peace from 1539 to February 1543. It reflects on the potential ways in which shipowners could increase their profits and considers the viability of these approaches. It is suggested that the two most important strategies they adopted were the operation of a cartel to raise prices and the servicing of the illicit trade, which allowed them to substantially increase the use of their ships at almost no extra cost. The fourth chapter considers how Bristol's shipowners reacted to the outbreak of war against France in 1543. It shows that although the market for commercial shipping did not diminish during the war, Bristol's shipowners redirected their resources towards Crown service and privateering at this time. Although they had little option in serving the Crown, it is suggested that their approach to military adventures was pro-active, the intent and result being the acquisition of Royal patronage, both for themselves as individuals and for Bristol as a whole. Perhaps the most important general conclusion of chapters three and four is that, although Bristol's shipowners rarely entered formal partnerships with each other, their success depended in large part on collective decision-making and their willingness to adopt strategies that might conflict with their short term individual interests.

The conclusion of the thesis sums up what has been learned from this study and considers how much of it can be applied to England's sixteenth century shipping industry as a whole – both in Bristol and beyond.

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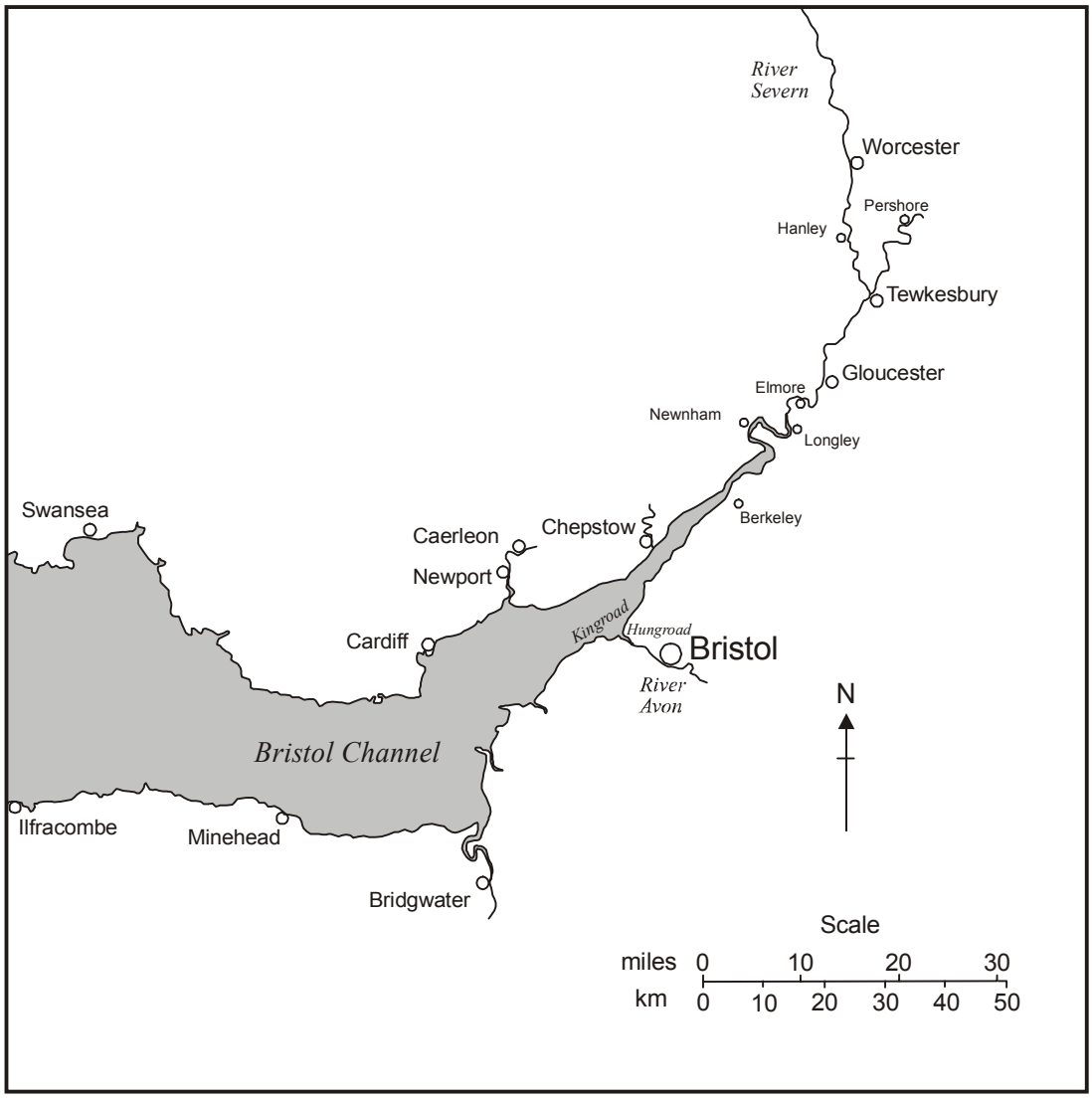
Abbreviations

A.P.C.	*Acts of the Privy Council*
App.	Appendix
B.R.S.	Bristol Record Society
H.C.A.	High Court of Admiralty
L&P	*Letters and Papers, Foreign and Domestic of the Reign of Henry VIII*
P.R.O.	Public Record Office
Smyth's Ledger	*The Ledger of John Smythe 1538-1550,* ed. J. Vanes
S.P.	State Papers

Glossary

Bushel	Eight gallons of grain
Capemerchant	Supercargo
Clearaboard	The cost of goods on board ship, i.e. after payment of all charges, custom, etc.
Cocket	A receipt given for money received by a customs officer
Dicker	Ten hides
Factor	A merchant's agent or representative aboard
Hogshead	A quarter tun – 63 gallons
Hungroad	The last mile of the River Avon
Kingroad	The point where the River Avon meets the Severn Estuary
Pipe	Half a tun – 126 gallons
Quarter	Eight bushels of wheat
Ton	Applied to shipping space - 2,240 lbs. or 40 cubic foot of capacity
Wey	Six quarters of wheat / forty-eight bushels

Bristol and its Region



Introduction

The development of the English shipping industry was a crucial factor in the expansion of England's overseas commerce and naval power from the sixteenth century to the nineteenth century. The rise of a large indigenous industry created employment for huge numbers of people, provided an outlet for a large proportion of the nation's industrial capital and furnished the shipping and men needed to fight the wars the Empire was built on.[1] Yet, while studies abound of naval history, maritime technology and exploration, merchant shipping, which accounted for by far the greatest part of man's activity upon the seas, has attracted little scholarly attention.[2] This is particularly true for the period before the 1760s, which has been studied in depth by only three historians. These are Dorothy Burwash, for her pioneering study of the late medieval industry, Dr. Scammell for his scattered contributions on the fifteenth to seventeenth centuries, and Ralph Davis for his detailed analysis of the industry's growth in seventeenth and eighteenth centuries.[3] Apart from these, a number of other historians have written on aspects of the shipping industry but, while valuable, these have all been highly circumscribed studies, which are generally based on one source and are only concerned with one particular issue.[4]

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[1] Davis estimated that by the late seventeenth century as much as ten per cent of England's fixed capital was invested in the shipping industry and that between ten and twenty percent of the country's non-agricultural workforce were employed building, servicing and victualling the industry: R. Davis, 'Merchant shipping in the economy of the late 17th century', *Economic History Review,* IX (1956), p. 71. Based on rather more anecdotal evidence, Scammell has argued that it was of similar importance to the English economy of the sixteenth and early seventeenth century: G. V. Scammell, 'Shipowning in the economy and politics of early modern England', *The Historical Journal,* XV (1972). Until the mid-seventeenth century the larger merchant ships were regularly hired into the navy during crises and even after that time the ships often served in a support capacity: V. Barbour, 'Dutch and English merchant shipping in the seventeenth century', *Economic History Review,* II (1930), pp. 261-64. England's merchantmen provided the pool of skilled mariners needed to operate the navy's ships throughout the early modern period: N. A. M. Rodger, *The Safeguard of the Sea: A Naval History of Britain*, Vol. I, 660-1649 (London, 1997), pp. 313-16.

[2] R. Davis, 'Maritime History: Progress and Problems' in S. Marriner, (ed.), *Business and Businessmen: Studies in Business, Economic and Accounting History* (Liverpool, 1978), p. 169.

[3] D. Burwash, *English Merchant Shipping, 1460-1540* (Toronto, 1947); G. V. Scammell, 'English merchant shipping at the end of the middle ages; some east coast evidence', *Economic History Review* Vol. XIII (1961); G. V. Scamell, 'Shipowning in England c.1450-1550', *Transactions of the Royal Historical Society,* XII (1962); G. V. Scammell, 'Manning the English merchant service in the sixteenth century', *Mariner's Mirror,* LVI (1970); G. V. Scammell, 'Shipowning in the economy and politics of early modern England', *The Historical Journal,* XV (1972); G. V. Scammell, 'The sinews of war: manning and provisioning English fighting ships c.1550-1650', *Mariner's Mirror,* LXXIII (1987); R. Davis, *The Rise of the Shipping Industry in the Seventeenth & Eighteenth Centuries* (1962).

[4] Since Davis's historiographical review of the subject in 1978, 'Maritime History: Progress and Problems', the most significant contributions have been: W. R. Childs, *Anglo-Castilian Trade in the Later Middle Ages* (Manchester, 1978), pp. 149-77; W. R. Childs, *The Trade and Shipping of Hull* (East Yorkshire Local History Society, 1990); W. R. Childs, 'The commercial shipping of south-western England in the later fifteenth-century', *Mariner's Mirror* LXXXIII (1997); P. Croft, 'English

Of the research carried out on the pre-modern English shipping industry, by far the most sophisticated and interesting is Ralph Davis's account of the industry in the seventeenth and eighteenth centuries. In part this is because Davis had far better sources to draw on than those working on earlier periods.[5] However, it is also because he went further in his analysis of the available sources. Most other studies have been confined to either the physical aspects of shipping, such as the size of the marine, its manning requirements, the routes operated and the technology employed, or they have been concerned with the law and institutions governing the industry. This includes the rules governing freighting practices, the remuneration of seamen and the legal status of ships. Although Davis also considered such matters, he went further by carrying out an in depth analysis of the shipping market, the finance of the industry and its operation, management and profitability. By doing this, he was able to achieve what no other historian has done, which is to understand how the industry worked from the inside. Nevertheless, while Davis's study stands out as by far the best and most thorough analysis of the pre-modern English industry, it constitutes only one study, that is based largely on London and is heavily biased towards the later seventeenth and the eighteenth centuries. So, while invaluable, it remains a partial study and the conclusions drawn from it cannot necessarily be applied to earlier centuries, or even to all of the English industry in the eighteenth century. Given this, as Davis himself accepted, much work remains to be done in this field.[6] Since the English shipping industry was as important as any for the establishment of Britain as the world's richest, most powerful and most economically developed nation, and the history of this industry has been little studied, further investigation of this subject requires no further justification.

Following the approach taken by Davis, this thesis will carry out an in-depth analysis of the Bristol shipping industry during the years 1539-1546. The study focuses on this period because it provides the best conjunction of sources for the shipping industry in the whole century. Of particular value is the survival of a major merchant's ledger, three hundred

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mariners trading to Spain and Portugal, 1558-1625', *Mariner's Mirror*, LXIX (1983); B. Dietz, 'The royal bounty and English merchant shipping in the sixteenth and seventeenth centuries', *Mariner's Mirror,* LXXVII (1991); A. Hanham, *The Celys and their World: An English Merchant Family of the Fifteenth Century* (Cambridge, 1985), pp. 361-97; D. Woodward, 'Ships, masters and shipowners of the Wirral 1550-1650', *Mariner's Mirror,* LXIII (1977); D. Woodward, 'Sixteenth-century shipping: the charter party of the Grace of Neston, 1572', *Irish Economic & Social History,* V (1978).

[5] The most valuable of these were the 'Instance Papers' in the High Court of Admiralty. This series starts in the 1630s and includes a large number of commercial records. These include nearly two hundred ships' accounts, which were submitted to the court as evidence and not subsequently reclaimed: Davis, *The Rise of the Shipping Industry,* pp. 408-10.

[6] Davis, 'Maritime History: Progress and Problems', p. 169.

folios long, which belonged to John Smyth, one of Bristol's greatest merchant-shipowners of the sixteenth century.[7] This is a double-entry account that contains both Smyth's trading accounts and the personal credit accounts he kept with his customers and suppliers. Although Smyth maintained this ledger from 1538-1550, the current study only covers the eight years from 1539-1546. It excludes 1538 because Smyth did not entirely change over from his old book to the surviving ledger until the spring of 1539. The study terminates in 1546 because Smyth sold his own ship, the *Trinity*, in that year and because many of his trading accounts for the later 1540s are incomplete.[8]

Apart from Smyth's ledger the study of Bristol's shipping industry during the period 1539-1546 is facilitated by the survival of four of the city's customs accounts from this period. These record all of the port's international trade for a given accounting year, which ran from the end of September.[9] Since Bristol was the only official port for the eastern end of the Bristol Channel, the accounts list all the declared international trade for Bristol Channel and its tributaries east of Bridgwater. All goods were meant to be declared at the customs house in Bristol, where the officer recorded the name of the ship, the port it came from, the name of the ship's master and the date the ship entered or left port. They then listed the goods laded on a ship, the names of the merchants who owned the goods and the amount of customs charged on them. These accounts are extremely useful because they help to set the information received from Smyth's ledger in a broader context and make it possible to determine the size and nature of Bristol's international shipping market.

The customs accounts and John Smyth's ledger provide the two main sources on which this thesis is based. However, a number of other sources, such as the surviving commercial accounts of the Tyndall brothers (1544-45) and various state papers from this period also provide valuable additional information about the city's shipping industry.[10] When combined and linked together, these sources make it possible to conduct an analysis of the Bristol industry that is more sophisticated than is possible for any other decade or other English port during the sixteenth century. Since this thesis is concerned primarily with one

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[7] J. Vanes (ed.), *The Ledger of John Smythe 1538-1550* (London, 1974).
[8] App. 5, *Trinity* of Bristol, 20 March 1546; *Smyth's Ledger*, fos. 261, 272, 276, 282, 290.
[9] These accounts cover the years 1541/2, 1542/3, 1543/4 and 1545/6: P.R.O. E122 21/10, 199/4, 21/12, 21/15. All of the accounts have survived in good conditon, except that for 1543/4, which is heavily damaged.
[10] For the accounts of the Tyndall brothers, see: J. Vanes (ed.), *Documents Illustrating the Overseas Trade of Bristol in the Sixteenth Century* (B.R.S. Publications, XXXI, 1979), pp. 118-21.

port during a short period of time, it will not be suggested that everything that can be learnt from this study will be applicable to the rest of the English industry during the sixteenth century. However, it will provide significant new insights into the nature of England's shipping market and its shipping industry at this time. For those whose interest is primarily concerned with trade, rather than shipping, it should be noted that although chapter 2 and Appendix 5 provide information about Bristol's trade during these years, the city's commerce is only studied in so far as it helps to illuminate the nature and scale of the city's shipping industry. This thesis will not therefore concern itself with any of the more general debates about Bristol's commerce during this century, such as whether the decline of the cloth trade was impoverishing the city or whether the balance of the city's legally declared trade was shifting towards imports.[11] Although such long-term changes would have been important to Bristol's merchants, they provide few clues as what was happening to the shipping market, for what mattered to the shipping industry was not the value of trade but the tonnage of the goods shipped and the distance they had to be carried. Since it was perfectly possible for the demand for shipping to rise at the same time as the value of trade was falling, statistics relating to the value of trade, or the previous discussion of these statistics by historians, are of little relevance to the current study.[12]

The thesis will proceed by examining the economic conditions and characteristics of the Bristol shipping industry in the mid-sixteenth century. It will then carry out a detailed analysis of the city's shipping market during the period 1539-46. The last two chapters are concerned with the strategies Bristol's shipowners adopted to maximise the returns on their shipping concerns. Chapter 3 deals with the commercial strategies adopted by Bristol's shipowners during the period 1539 to February 1543. Chapter 4 is concerned with the deployment and operation of Bristol's ships during the 1543-46 war with France. It also examines how Bristol's shipowners maximised the benefits they received from ship ownership at this time. The conclusion sums up what has been learnt and considers relevance of the discoveries made in this thesis to the understanding of the English shipping industry of this era.

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[11] J. Vanes (ed*.), Documents Illustrating the Overseas Trade of Bristol in the Sixteenth Century* (B.R.S. Publications, Vol. XXXI, Kendal, 1979), pp. 25-27; D. H. Sacks, *The Widening Gate: Bristol and the Atlantic Economy, 1450-1700* (Berkeley, 1991), pp. 24-41.

[12] For instance, during the years 1539-46 the poor profitablility of the export trade in cloth encouraged merchants to redirect at least part of their working capital into grain and lead. Since these goods were much bulkier than cloth, the demand for export freight space increased despite the poor condition of the cloth trade, which was, in terms of value, the mainstay of Bristol's export trade: see chapter 2.

Chapter 1: The Economics of Shipping in Mid-Sixteenth Century Bristol

This chapter will examine the nature of the costs, risks and returns of the Bristol shipping industry during the 1530s and 40s. The purpose of the examination will be to reveal the business environment in which Bristol's shipowners operated and thus the key problems that they had to address in making a success of their shipping concerns.

ventures could be examined. Many such accounts have survived from later centuries and some shipping accounts survive for the period under study, other records throw light on the basic economic conditions of the industry. Of these by far the most useful is *The Ledger of John Smythe*, which details the activities of one of Bristol's merchant-shipowners during the late 1530s and 1540s.[1] His ledger records some of the charges he faced in maintaining his ship and it provides a great deal of information about how freight space was sold, how much it cost and how it was paid for. Besides Smyth's ledger, a number of other sources, such as surviving charter parties, customs accounts and state papers provide additional information about the costs, risks and returns of shipping. These aspects of the industry will all be studied in the following sections, in order to gain as complete a picture as possible of the economics of shipping at this time.

The Costs of Shipping

In general, the documents that have survived provide little information about expenditure on shipping. This is because the only people who were interested in such matters were shipowners and in the case of Smyth's ledger, the cost of goods or services purchased for his ship were only noted if he bought them from someone with whom he maintained a

[1] J. Vanes (ed.), *The Ledger of John Smythe 1538-1550* (London, 1974). Use was also made of the computerised version of the ledger produced by Ian Blanchard and Jenny Newman for the E.S.R.C. financed project 'The Anglo-Netherlands Bill Market and English Export Finance 1440-1740' (8205/1-B 23/2), University of Edinburgh, 1982-5.

personal credit account.[2] So, any payments made in cash, or by way of a direct exchange, are not recorded in the ledger. This includes crew pay, maintenance charges in foreign ports and the provision of victuals other than biscuit and beer. Although it is not possible to determine Smyth's total level of costs, or to make an exact breakdown of his expenditure on his shipping ventures, some insight can nevertheless be gained into where the balance of shipping costs lay. It is also possible to determine the level of financial commitment required to enter the Continental shipping market.

Cost structure – Sea vs. Port costs

When a ship was at sea a shipowner was subject to a number of charges. These included running costs such as crew pay, victuals and repairs, and fixed costs such as the interest on the capital invested, depreciation and insurance.[3] When a ship was in port, the costs to which a shipowner was subject depended on whether the ship was at home or abroad. If the ship was at home, shipowners could substantially reduce their outlay by laying-off most of their crew.[4] While in a home port there would also be little risk of the ship being lost and the ship would deteriorate more slowly than it would at sea. However, even at home the interest on the capital, depreciation and some repairs would still need to be covered, while if a ship were in a foreign port the crew would have to be fed and paid.

Although it is not possible to provide a break-down of expenditure on shipping from the records available at Bristol, it is possible to illuminate the extent to which a shipowner's overall costs were the result of keeping a ship at sea. The key to this determination lies in the relationship between the price of freight and the length of a journey. This is because if a shipowner's expenditure were dominated by the cost of running a ship at sea, then the price of freight should be proportional to the length of the journey – for doubling the length of a

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[2] App. 6, 'The *Trinity* of Bristol'.

[3] These are the categories that Davis applied. Although insurance was rarely, if ever, taken out on ships in the period under study, the percentage risk of loss per annum can be considered a fixed cost: Davis, *The Rise of the English Shipping Industry,* pp. 87, 365.

[4] Crews were normally hired by the voyage and were then either paid by the month, or more frequently, at an agreed initial rate for the complete voyage: D. Burwash, *English Merchant Shipping* (Toronto, 1947), p. 48; P. Croft, 'English mariners trading to Spain and Portugal, 1558-1625', *Mariner's Mirror,* LXIX (1983), p. 253. Davis's study of the 17th century industry and Hanham's study of the *Margaret Cely* in the late 15th century suggest that crew pay and victuals accounted for as much as half of total expenditure: Davis, *The Rise of the English Shipping Industry,* p. 371; Hanham, *The Celys and their World*, pp. 389-93.

journey would double the costs. However, if port-time costs predominated, the cost of freight per ton/mile should fall as the length of journey increased. To determine which predominated, the following paragraphs will examine how the price of transporting particular goods varied as the length of journeys increased. This will involve an examination of freight rates at both Bristol and London.

The document that throws most light on freight rates at Bristol is John Smyth's ledger. This contains numerous references to the price of freight on his own ship and to that bought on other ships. Unfortunately, the ledger contains almost no information about the cost of freight on journeys from Bristol to the Continent and it does not deal with the Irish trade. Nevertheless, it does contain about seventy references to the cost of transporting goods from the Continent to Bristol over the years 1539-45. For the present study, the most valuable references are those that deal with the transport of wine from Bordeaux and Southern Iberia during the years 1539-43. This data is useful because it enables a direct comparison to be made of the cost of transporting the same good at the same time on two journeys of radically different length. The formation of a comparison for this period is aided by the fact that during these years the price of freight was fairly stable. Indeed, until the outbreak of maritime hostilities against France in February 1543, the price of wine freight on Bristol ships was generally fixed at 20s. per tun for Bordeaux and 25s. per tun for Andalusia / Southern Portugal. For the non-Bristol ships the rates were not fixed and the price of freight was generally lower. However, the differential between the cost of wine freight is roughly the same for the two routes, as the average of the prices on non-Bristol ships comes to 16s. 3d. for Bordeaux wine and 21s. 7d. for South Iberian wine. These results are summarised below.

Table 1.1 – Freight Prices for Wine Transported to Bristol, Based on John Smyth's Ledger: 1539-1542

Ref.*	Date	Ship	Sailing from	Rate/ton
App. 6	4 December 1539	*Trinity* of Bristol	Bordeaux	20s.
App. 6	December 1540	*Primrose* of Bristol	Bordeaux	20s.
App. 6	6 November 1540	*Trinity* of Bristol	Bordeaux	20s.
App. 6	15 November 1540	*Primrose* of Bristol	Bordeaux	20s.
App. 6	14 November 1541	*Margaret* of Bristol	Bordeaux	20s.
App. 6	25 November 1539	*Mary Bride* of Bristol	S. Iberia	25s.
App. 6	23 December 1539	*Mary Christopher* of Bristol	S. Iberia	25s.
App. 6	19 January 1540	*Saviour* of Bristol	S. Iberia	25s.
App. 6	November 1540	*Briton* of Bristol	S. Iberia	15s.
App. 6	24 November 1540	*Margaret* of Bristol	S. Iberia	25s.
App. 6	December 1540	*Harry* of Bristol	S. Iberia	25s.
App. 6	4 December 1540	*Jesus* of Bristol	S. Iberia	25s.
App. 6	20 December 1540	*Mary Christopher* of Bristol	S. Iberia	25s.
App. 6	22 November 1541	*Trinity* of Bristol	S. Iberia	25s.
App. 6	5 December 1541	*Mary Bonaventure* of Bristol	S. Iberia	25s.
App. 6	12 December 1541	*Harry* of Bristol	S. Iberia	25s.
S.108	15 December 1540	*Christopher* of Dartmouth	Bordeaux	13s. 4d.
S.108	15 December 1540	*Jesus* of Torres	Bordeaux	13s.
S.108	15 November 1541	*Margaret Bonaventure* of Plymouth	Bordeaux	15s.
App. 6	16 November 1541	*Mary Fortune* of Gloucester	Bordeaux	20s.
S.144	6 December 1541	*Ann* of London	Bordeaux	20s.
S.96	4 February 1540	*Margaret of Minehead*	S. Iberia	22s.
S.79	14 February 1540	*Katherine* of Barnstaple	S. Iberia	21s.
S.114	15 November 1540	*Jesus* of Bideford	S. Iberia	25s.
App. 6	28 November 1541	*Trinity* of Caerleon	S. Iberia	25s.
S.145	7 December 1541	*Mary* of Penmarch	S. Iberia	15s.

* 'S.' refers to *Smyth's Ledger*; 'App. 6' refers to the Ship's Histories, Appendix 6.

The key feature of this table is that regardless of whether Bristol or foreign ships were employed, the price of transporting wine from South Iberia was only about 25-30% higher than the price of transporting wine from Bordeaux. This was despite the fact that Andalusia was more than twice the distance and contemporary documents indicate that, while the

journey from SE Biscay to Bristol could be achieved in not much more than a week, that from Andalusia took about three weeks.[5]

Turning from Bristol to London, information on freight rates can be obtained from the 1540 Act for the maintenance of the Navy.[6] This Act included provisions for fixing an upper limit on freight rates for English ships sailing to or from London. This was done because the statute gave English shipowners a virtual monopoly over English trade and thereby the potential to exploit the limited supply of shipping by raising their freight rates. Since the Act aimed to prevent such price increases, it seems probable that the very complex system of freight rates specified in the statute merely served to formalise pre-existing charging practices. For the current study, the interesting thing about the specified rates is that, as at Bristol, the cost per mile of freight fell as the length of journeys increased. For instance while the cost of transporting a tun of wine from Bordeaux to London was set at 18s., the cost from Seville was 23s.

The pattern of freight charging was thus similar for the English vessels sailing to or from London and for English and foreign vessels that sailed to Bristol. In all instances it appears that the amount charged per ton/mile fell dramatically as the length of journeys increased. Taking the prices charged by Bristol ships as an example, it has been noted that the freight of a tun of wine was 20s. from Bordeaux and 25s. from Andalusia. Since it was more than twice the distance from Andalusia to Bristol than from Bordeaux to Bristol, the low differential between the price of the journeys indicates that the expense of sailing the extra distance was not very high. Indeed, it would appear that the costs involved in sailing a ship the additional distance was not more than 5s. per tun. This implies that the cost of actually sailing the ship all the way from Andalusia to Bristol was not more than 10s. In other words, the sailing cost accounted for a maximum of 40% of the freight charge. Yet, in

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[5] The journey from Biscay to Plymouth could be covered in less than a week: G. Connell-Smith, *Forerunners of Drake: A study of English trade with Spain in the early Tudor period* (Plymouth, 1954), p. 11. Anecdotal accounts from this period seem to indicate that the journey to Bristol took a little longer. On 20 November 1536 the *Primrose* took on a crew at Bordeaux. It was customed in Bristol on 2 December, indicating a journey of not more than twelve days. On 27 July 1537 the *Mary Bride* left Renteria with a cargo of iron. It was customed in Bristol on 7 August, so the voyage could not have taken more than eleven days. By contrast, a model account of a voyage from Bristol to Andalusia in the later 16th century gives a sailing time of twenty-one days from the Kingsroad (the mouth of the Avon) to San Lucar: App. 6; John Brown, *The Marchants Avizo*, (London, 1589).

[6] *Statutes of the Realm* Vol. III (London, 1817), Ch. XIV 'An Act for the maintenance of the Navy of England' pp. 760-63.

reality the sailing cost was likely to have been considerably less than this, for the additional cost of the Andalusian voyages must be partly attributed to the longer time ships seem to have spent in foreign ports when engaged in the Andalusia trade.[7]

That the shipowners spent more money on keeping a ship in port than in sailing it should not be surprising, since even the most efficiently run Bristol ships made only two or three voyages a year and would rarely have spent more than eighty days a year under sail.[8] In charging for freight shipowners thus had to make sure they covered the costs of buying and maintaining a vessel that spent more time in port than at sea. They also had to pay the costs of keeping a crew who would have spent more time awaiting cargoes in foreign ports than in actually sailing their vessel on any given voyage. This domination of 'port' costs is significant for the current study, because it meant that success in the industry would have depended on either reducing the turn-around times in port, so that more voyages could be made in a year, or on maximising the returns on particular voyages.

The Level of Costs in the Continental trade

Having examined the structure of shipping costs, attention needs to be given to the level of expenditure involved in shipping and in particular the cost of entry into the shipping market. For Bristol in the period under study there are two inventories of Bristol ships that provide fairly reliable indicators of the cost of buying a ship. The first of these is an inventory and

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[7] The 'Ship's Histories' detail eleven voyages of Bristol ships where the dates of departure and arrival are provided by the customs accounts and where it is possible to be certain about the destination of the ship. The average length of the five Biscay voyages was 97 days and that of the six southern Iberian voyages 153 days. Since the extra sailing time for the round-trip voyage to Andalusia was only about 20 days more than for the Biscay trade, much of the extra time must have been spent in acquiring cargoes in Iberian ports. The departure dates, destinations and durations of the voyages are as follows: *Mary Conception*, 13 February 1542 (Lisbon, 154 days), 30 September 1542 (Andalusia, 139 days), 7 January 1544 (Andalusia, 184 days); *Mary James*, 2 October 1542 (Lisbon, 136 days), 8 January 1544 (Lisbon, 162 days); *Primrose*, 28 November 1541 (Biscay, 161 days); *Trinity*, 1 June 1537 (Biscay, 67 days), 13 January 1542 (Biscay, 80 days), 19 May 1542 (Biscay, 97 days), 22 September 1542 (Andalusia, 144 days), 5 January 1544 (Biscay, 78 days): App. 6.

[8] Bristol ships never made more than three Continental voyages a year, with three voyages to Biscay or two to Andalusia being the best achievement: App. 6, The *Trinity* of Bristol in 1539-1540; The *Mary Bonaventure of Bristol*, 1542. Given twenty days sailing time for a voyage to Biscay and forty to Andalusia, this would suggest a total sailing time of less than three months in the year. That two or three voyages was the best that could be expected of a Continental merchantman, is confirmed from a petition made c.1543. This bemoaned the decline of Bristol's shipping from a golden age in which 'our great shippis used to make ii or iii viages in the yere': J. Vanes (ed.), *Documents Illustrating the Overseas Trade of Bristol in the Sixteenth Century* (B.R.S. Publications, XXXI, 1979), p. 31.

valuation of John Smyth's ship, the *Trinity* of Bristol. Smyth conducted the inventory in 1539 and the valuation was entered in his own ledger. Since this inventory was for Smyth's personal use it seems likely that it would be accurate. In his ledger Smyth values the fully equipped *Trinity* at £250.[9] This was for a vessel of about 115 tons burden. The second inventory is of the *Great Nicholas* of Bristol. Crown agents conducted this when they considered its purchase in 1539. Although these agents had reservations about the amount of water the ship drew, they suggested that it was worth £700.[10] From its price and their description of the vessel it can be deduced that it must have been a very large ship.

The valuations of these two vessels indicate that a fully equipped ship could cost a considerable amount of money. Even the cheaper *Trinity* cost the equivalent of a naval mariner's pay for 80 years.[11] The purchase of such a ship thus required a large capital commitment. Nevertheless, what needs to be determined is how typical such a ship was of those operating at Bristol and whether such a large-scale expenditure was required to enter the shipping market. In the absence of accurate figures relating to the cost of other Bristol ships, the first step towards doing this is to compare the *Trinity* with the other ships engaged in Bristol's shipping market.

During the 1530s and 40s information is available on fifteen voyages made by the *Trinity* of Bristol.[12] All of these were to either Biscay or Southern Iberia. Since there is no evidence that it ever sailed into the Mediterranean or Ireland, it can be described as a specialised Continental trader. To assess whether the *Trinity* was typical of a Bristol vessel engaged in such activities, the following table will rank vessels by estimated capacity in tons burden and note the trades in which they were involved.[13]

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[9] App. 6, *Trinity* of Bristol, 1539.
[10] App. 6, *Great Nicholas* of Bristol, 5 September 1539.
[11] Until 1545 naval mariners were paid 5s. per month, after that their wages were raised to 6s.8d. per month: P. L. Hughes and J. F. Larkin (eds.), *Tudor Royal Proclamations,* I, (Yale, 1964), pp. 347-48.
[12] App. 6, *Trinity* of Bristol.
[13] The size of merchantmen was normally determined by their 'tons burden' i.e. the number of tuns of Bordeaux wine that could be laded on them: Burwash, *English Merchant Shipping,* pp. 89-90. For details of how the size of ships was determined, see the introduction to App. 6.

Table 1.2: Size Ranking of Bristol Vessels operating 1539-1546 *

Name	Size (tons burden)	Market area (no. of voyages) **
Saviour of Bristol	255	Continent (2), Levant (?)
Harry of Bristol	135	Continent (7)
Margaret (1) of Bristol	135	Continent (5)
Mary Bride of Bristol	120	Continent (3)
Jesus of Bristol	115	Continent (4)
Trinity of Bristol	115	Continent (12)
Mary James of Bristol	105	Continent (3)
Mary Conception of Bristol	105	Continent (8), Ireland (1)
Mary Bonaventure of Bristol	90	Continent (3)
Primrose of Bristol	75	Continent (8)
Julian of Bristol	60	Continent (3)
Magdalen of Bristol	55	Continent (4)
Little Trinity of Bristol	45	Continent (2), Ireland (2)
Trinity More of Bristol	40	Continent (3), Ireland (6)
Jesus (2) of Bristol	35	Continent (2), Ireland (2)
Trinity Gorney of Bristol	30	Continent (2)
Michael of Bristol	30	Continent (3), Ireland (2)
Mary George (1) of Bristol	25	Ireland (6)
Trinity George of Bristol	20	Ireland (4)
Margaret (2) of Bristol	20	Ireland (3)
Sunday of Bristol	15	Continent (1), Ireland (18)
Nicholas (2) of Bristol	15	Ireland (8)

* This table only includes those Bristol ships which made at least two voyages during this years and where sufficient data exists to estimate the size of a ship. Only commercial voyages conducted during this period are included.
** For full details of these voyages see, Appendix 6.

Table 1.2 illustrates that there was a very direct correlation between the sizes of ships and the routes on which they were employed. The largest vessel, the 255 ton *Saviour*, was employed in the long distance trade to Andalusia and the even longer distance trade to the Levant. After this were twelve vessels of 55-135 tons burden that were engaged full time in

the Continental trade.[14] The *Trinity* was one of these vessels and appears to have been of a typical size for a ship engaged full time in the Continental trade. Below these ships were four vessels of 30-45 tons that serviced both the Continental and the Irish trade. Lastly there were five vessels of 15-25 tons that were almost entirely engaged in the Irish trade, although the *Sunday* did make one atypical voyage to Biscay.

The association of vessels of particular sizes with different trades suggests that there was a relationship between the size of vessels and their level of competitive advantage in different trades. That contemporaries recognised such competitive advantages existed can be illustrated by a document relating to the *Saviour* of Bristol. As has been noted, the *Saviour* was by far the largest vessel in the Bristol marine and was the only one that was known to operate in the very long distance trade to the Levant. Yet, what is interesting about this ship is that its owner, Nicholas Thorn, actually submitted a petition to Henry VIII about the trades in which his ship was involved. In the petition he noted that the *Saviour* was 'of to gret portage to trad to Bordyas [Bordeaux] or to the mor port of the partys of andolesya in Spayne' and because of this he had been forced to charter his ship out to merchants involved in the Levantine trade.[15] For Thorn at least, it was apparent that a relationship existed between the size of a ship and its suitability for a particular trade.

The most obvious explanation for the correlation at Bristol between the length of routes and the size of ships employed to service them is that economies of scale favoured ships of particular sizes in particular trades. Although Davis has argued that until the mid-eighteenth century 'the larger ship was in many trades operated at a cost hardly less per ton than a smaller one' he accepted that in the European trades costs rose sharply for ships of below 50 tons burden.[16] His estimate of minimum efficiency tallies with the evidence provided above that 50 tons marks the division at Bristol between those engaged full time in the Continental trade and those engaged, at least partly, in the Irish trade. It is also supported by the evidence of Wirral shipping in the sixteenth century, where the ships, which were generally of 20-30 tons burden, specialised on the Irish trade and very rarely ventured into the

[14] The only exception to this is the *Mary Conception's* voyage to Ireland on 18 March 1546: App. 6.
[15] App. 6, *Saviour* of Bristol, c.1535.
[16] Davis, *The Rise of the English Shipping Industry,* p. 73.

Continental trade.[17] The Wirral evidence is particularly interesting because when ships did venture into the Continental trade they had to take on such a large crew that their tons per man ratio could fall to 3:1. Such a ratio is much lower than the 5:1 ratio that was said by the Elizabethan shipwright Matthew Baker to be normal for most merchantmen and thus appears to confirm Davis's view that small ships were not efficient in the Continental trades.[18]

The above discussion goes some way to explaining why larger ships were favoured in the long distance trade to the Continent. However, it does not explain why most of Bristol's specialised Continental merchantmen were much larger than the 50 ton minimum margin of efficiency. This is an important issue to address, since large ships were more expensive to build than small ones and by building one large ship of 120 tons, rather than two of 60 tons, a shipowner was forgoing the opportunity of diversifying risks.[19] To understand why larger ships were favoured will require an examination of three issues: defensibility, the provision of royal bounties and prisage.

In explaining the prevalence of very large ships in the later middle ages Braudel has argued that before the advances in naval artillery in the sixteenth century the high sides of the great ships meant that these 'floating fortresses spelt security'.[20] Although he accepts that the average size of ships shrank after 1450, it is still likely that until the late sixteenth century large ships were considered more defensible than small ones. This may help to explain why so many of Bristol's Continental ships were over 100 tons and why the 250 ton *Trinity* was considered particularly suitable for the dangerous sea-lanes of the Levantine trade.

Royal bounties were a significant factor in the commissioning of large ships because, from the fifteenth century, the Crown tried to encourage English shipowners to build ships that could be employed for naval service in time of war. Such bounties were generally provided to ships of over 100 tons burden and consisted of a set payment per ton of capacity. In the latter years of Henry VIII's reign a number were handed out to English shipowners,

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[17] D. Woodward, 'Ships, masters and shipowners of the Wirral 1550-1650', *Mariner's Mirror,* LXIII (1977), pp. 235-6.
[18] W. Salisbury, 'Early tonnage measurement in England', *Mariner's Mirror,* LII (1966), p. 46.
[19] R. Davis 'Earnings of capital in the English Shipping Industry, 1670-1730', *Journal of Economic History*, XVII (1957), p. 410.
[20] F. Braudel, *The Mediterranean and the Mediterranean World*, Vol. I (London, 1972), p. 298.

including those from Bristol.[21] Since these bounties could cover as much as 10% of the building costs of a ship, they must have provided some incentive to build large ships.[22] However, until the late sixteenth century the granting of bounties was a very *ad hoc* affair and since only twenty bounties are known to have been granted in the reign of Henry VIII, it is unlikely that many of the owners of Bristol's larger ships benefited from them.

The last and probably most important factor behind the decision to build large ships related to operation of prisage. Prisage is the term used for the right of the Crown to take wine from ships entering England in return for an established price. At Bristol, the Crown was permitted to take one tun of wine from any ship that entered with more than ten tuns of wine on board and two tuns from any ship with more than twenty tuns. Compensation of 15s. per tun was paid by the Crown.[23] By the early 1540s French wine cost about £5 per tun in Bristol and Spanish wine £7 per tun so, in effect, prisage amounted to a tax of between £8 10s. and £12 10s. on any vessel entering port with more than twenty tuns of wine.[24] This directly affected shipowners since Smyth's ledger indicates that they had to compensate merchants for any wine lost.[25] In the Spanish trades this compensation would amount to about 50% of gross freight receipts from a ship of 20 tons, 20% from one of 50 tons and 10% from one of 100 tons.[26] This would have given the owners of Bristol's larger ships a considerable advantage in a trade that was responsible for almost half of all freight imported from the Continent.[27]

For the current analysis, the conclusion of the foregoing examination of the sizes of ships employed on different routes is that full-time engagement in the Continental shipping

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[21] At least two Bristol ships, the *Saviour* (1535-7) and the *Mary Bride* (1536) received crown subsidies connected with their construction or reconstruction: App. 6.
[22] B. Dietz 'The royal bounty and English merchant shipping in the Sixteenth and seventeenth centuries', *Mariner's Mirror,* LXXVII (1991), p. 9.
[23] N. S. B. Gras, *The Early English Customs System* (Harvard University Press, 1918), p. 41.
[24] Vanes (ed.), *The Ledger of John Smythe*, p. 324.
[25] For instance, when Smyth freighted wine on the *Mary Conception* in 1546 he recorded the wine lost to prise as a sale. This was because the shipowner, Thomas Harris, paid for the wine. Similarly, when Smyth freighted wine on the *Hart* in 1549, he credited its owner, George Wynter, for the freight of 33.5 tuns, but then debited him for the cost of a butt (half-a-tun) of wine taken to prise*: Smyth's Ledger,* fos. 67, 189, 255.
[26] Based on a ship importing wine valued at £7 per tun and receiving freight receipts of 25s. per tun. The loss in the French trades would be slightly less, amounting to 8.5% of freight receipts from a ship carrying 100 tuns and receiving 20s. per tun for freight.
[27] See Table 2.18.

market appears to have required a ship of at least 50 tons burden and those who bought larger ships would have operated to considerable advantage in the all important wine trade. In theory shipowners could have saved money by buying a lower quality ship or by equipping it less lavishly than the *Trinity* or *Great Nicholas*. For instance, shipowners could have made considerable savings if they spent less money on armament.[28] However, if a ship were not seaworthy or defensible, it would be unlikely that any merchant would have considered putting a valuable cargo on it. This would have been especially true in an age when it was uncommon for merchants to insure their goods. As a result it seems likely that engagement in the Continental trade, which generally involved high value produce, would have required the purchase of a ship that was not only large, but also sea and battle worthy.

Conclusion on the costs of shipping

The above discussion has demonstrated that shipowners spent more on keeping their ships in port than they spent on sailing them. For this reason, the maximisation of profits would have depended on minimising port times or achieving the highest possible returns from individual voyages. Since the specific conditions of Bristol's Continental trade meant that large ships operated at considerable advantage over small ones, entrance into the Continental shipping market required a considerable capital outlay. Having established the factors that influenced entry into the Continental shipping market and mercantile decision making in the choice and management of their vessels, the following section will consider the risks involved in the shipping industry and the implication of these risks for participation in that industry.

[28] In the 1539 inventory of the *Trinity* of Bristol, Smyth noted that on his ship, were 19 pieces of ordnance, in addition to bows and hand-arms. The *Great Nicholas* carried 21 guns: App. 6.

The Risks of Shipping

A study of risk in the shipping industry needs to take account of two factors – the risk to the ships themselves and the extent to which capital invested in the industry could be protected.

Risks to Ships

In the period under study there were many dangers involved in shipping. Ships could be lost to storms, piracy, privateering, seizure by hostile governments and impounding by judiciaries in foreign ports. Such dangers were a general feature of shipping until recent times and even in the second quarter of the nineteenth century, 4-5% of ships were lost each year to such hazards.[29] However, during the politically turbulent years covered by this thesis there were some particularly large scale losses of English shipping resulting from piracy, privateering and government seizure. The loss rate at this time may therefore have been as high as it was at Bristol between 1610-20, when a high incidence of piracy drove the loss rates up to about 10% pa.[30] The greatest seizures of shipping were events of note in the state politics of the time. As a result of their political significance, the events and circumstances pertaining to some seizures were well documented and these records have been preserved.[31] However, the failure to keep systematic records of the loss of all shipping means that, in many other cases, the capture or sinking of a ship has only been recorded because a legal dispute resulted from the damage or because a chance surviving document refers to the loss.

The absence of complete records of losses, or precise estimates of the risks faced by shipping, unfortunately makes it impossible to quantify the risk that a Bristol ship faced when it left port. Nevertheless, the anecdotal references to ship losses in this period indicate that Bristol's ships were not immune to the general conditions of their times. John Smyth's ledger records the loss of both the *Jesus* of Bristol and the *Briton* of Bristol in 1541.[32] Since the *Jesus* was sunk at Byttbay and the *Briton* at Barnstaple it seems likely that storms were

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[29] Davis, *The Rise of the English Shipping Industry,* p. 87.
[30] Between 1610 and c.1620 Bristol lost forty-four ships – fourteen to wreck, one to fire and the rest to piracy. Since a survey of 1626 indicated that the fleet consisted of forty-two ships, the loss rate of the second decade was probably in the region of 10% per annum: P. V. McGrath, 'Merchant venturers and Bristol shipping in the early seventeenth century', *Mariner's Mirror,* XXXVI (1950), pp. 79-81.
[31] For instance: *L&P,* XVIII, i, no. 91.
[32] App. 6, *Jesus* (1) of Bristol, 20 December 1541; *Briton* of Bristol, November 1541.

responsible for their destruction. At least two Bristol ships were captured or severely damaged by acts of piracy / privateering in this period. A legal case at the High Court of Admiralty records that in 1539 Spanish pirates attacked the *Margaret* and the *Matthew* of Bristol off La Rochelle and did damage to the *Margaret* amounting to £300.[33] Smyth's ledger records the capture of the *Trinity Gorney* of Bristol by Scottish pirates in 1548.[34] Apart from such acts of piracy, ships could also be lost to government seizure. There were two major examples of this in the period under study. In February 1543 all English ships in French waters were seized by France and effectively became the first casualties of the Anglo-French war and in 1545/6 there were also some large-scale arrests of English shipping by the Empire.[35] It is not clear whether any Bristol ships were lost from the French seizure, but at least one Bristol privateer was seized at San Sebastian during 1545.[36] On the basis of these, almost certainly incomplete, accounts of losses it is at least apparent that Bristol's shipping was not a risk free business during this period and shipowners would have had to accept that there was a reasonable chance that they could lose their ships on any given voyage. This would have been true especially during periods of political instability, for the high fixed costs involved in shipping would have made it impractical for shipowners to reduce their risk by laying their ships up during crises.[37] However, for shipowners the really important issue was not one of how much risk there was of ships being lost, but how much money they would actually lose if a ship was seized or sunk. A consideration of risk in Bristol's shipping industry thus needs to consider the extent to which capital invested in shipping was protected.

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[33] App. 6, Margaret (1) of Bristol, Spring 1539; *Matthew* of Bristol, Spring 1539.
[34] App. 6, *Trinity Gorney*, 18 April 1548.
[35] The stay on English shipping was issued in France on 4 February 1543. The English followed suit two days later: *L&P,* XVIII, i, nos. 114, 122. The arrest in the Low Countries was on all English goods, ships and merchants. It was imposed in response to acts of piracy committed by Englishmen against Imperial vessels and lasted from 5 January 1545 (*L&P,* XX, i, no. 21) to 6 April: *L&P,* XX, i, no. 494. The arrests in Spain were confined to Andalusia and were aimed at getting restitution for Imperial treasure seized by the English privateer, Robert Renegar. Thes arrests began on 31 March 1545 (*L&P,* XX, i, no. 459) and lasted till 8 November 1546: *L&P,* XXI, ii, no. 371.
[36] *A.P.C.,* I, 26 November 1545, p. 275.
[37] The high fixed costs of shipping and the expense of laying a ship up during a war are noted by Davis, *The Rise of the English Shipping Industry,* pp. 329-30, 379. During the sixteenth century the deterioration that ships underwent while laid-up was most often noted in the case of Crown vessels. For instance an 'Account of the State of the King's ships' in November 1526 noted the severe decline in the fleet in the year it had been laid up and suggested that at least some of them be hired out as merchant ships: *L&P,* IV, ii, no. 2635.

Risks to Capital

There were potentially two ways in which shipowners could protect their capital. The first was to take out insurance; the second to diversify their risk by buying shares in a number of ships rather than investing all their capital in a single one. By taking out insurance, the risk involved in shipping could be spread. However, although marine insurance became available from Italian merchants in London from the fifteenth century, English underwriters did not engage in the practice before the mid-sixteenth century. Even after this time, the marine insurance market in England was very much an *ad hoc* affair until the development of Lloyds in the eighteenth century, so that even in the seventeenth century it was unusual for shipowners to insure their vessels.[38] Since the English market did not develop until after the period under consideration, and even then was focused on the insurance of merchandise rather than ships, it is not surprising that there is no evidence that Bristol shipowners insured their ships in the period under examination.[39]

Given that shipping insurance was not available, it might be expected that shipowners would at least have tried to diversify their risk by spreading their investment over a number of vessels. This was a strategy adopted by some English shipowners in the medieval and early modern period and by the mid-seventeenth most shipowners spread their risk by buying small shares in a large number of ships.[40] However, although risk diversification was possible in earlier centuries, in practice ownership appears to have been much more concentrated before the seventeenth century, with few ships being divided into shares smaller than a half or quarter and many being the property of individual owners.[41] Of the

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[38] G. Clayton, *British Insurance* (London, 1971), pp. 51-57; Davis, *The Rise of the English Shipping Industry,* p. 87.

[39] Smyth did occasionally take out insurance on his merchandise in Spain: *Smyth's Ledger*, fos. 50, 52, 222, 232, 234.

[40] V. Barbour, 'Marine risks and insurance in the seventeenth century', *Journal of Economic and Business History*, I (1928-29).

[41] G. V. Scammell, 'Shipowning in England c.1450-1550', *Transactions of the Royal Historical Society*, XII (1962), p. 114. The prevalence of sole ownership at Bristol and the concentration of shipping ownership among the city's merchant elite appears to have lasted from at least the fifteenth to the early seventeenth century. In the 1470s William Canynges was the sole owner of a fleet of ten ships and in 1486, six years after Canynges' death, it was reported that Thomas Strange owned twelve of Bristol's ships and several more belonged to one John Goodman: E. M. Carus Wilson, 'The Overseas Trade of Bristol' in E. Power & M. M. Postan (eds.), *Studies in English Trade in the Fifteenth Century* (London, 1933), pp. 238-41. A survey of 1513 indicated that of Bristol's eighteen ships, ten had one owner, two had two owners, four had three owners, and two had four owners: P.R.O. S.P.1 3 fo. 87. Official documents concerning twenty-six Bristol vessels operating in the Spanish war of 1585-1604 indicate that twelve had sole owners and eight had two owners: J. W. D.

Bristol ships operating between 1539-46, it is possible to identify the owners, with some certainty, in sixteen cases. Of these ships, twelve had just one owner, two had two owners, and two had three owners.[42] Apart from the Bristol registered ships, it is also possible to determine that two other ships, which were owned by Bristol merchants or by men who had close connections to the city's commercial community, also appear to have had just one owner.[43] Although it is possible that some of the owners of the above ships did possess other ships that have not been noted here, the pattern of ownership that has been observed offers little indication that Bristol's shipowners sought to diversify their risks during this period. The most likely explanation for this is that the city's shipowners were more concerned about maintaining a tight control over their vessels than they were in spreading risks. The reason it was important for them to maintain a close control over their ships will become clear in Chapter 3.

Conclusion

Shipping, and particularly long distance shipping, was an expensive and high-risk activity. The combination of high costs, lack of insurance and the apparent unwillingness of Bristol men to spread risk through shared ownership, in practice restricted investment in shipping to Bristol's wealthiest merchants. Such individuals could afford to enter the shipping market, not just because they could afford to buy a ship outright, but because they could survive financially if a ship was lost. Yet, if shipowning was a high-cost and high-risk activity, the returns on shipping must also have been considerable to make its pursuit worthwhile. The last section of this chapter will thus consider what the potential benefits of shipowning were.

Powell, *Bristol Privateers and Ships of War* (Bristol, 1930), pp. 40-48. By 1626, shared ownership had become more common but, even then, nineteen of Bristol's forty-four ships had just one owner and the vast majority of the shipping was in the hands of a small group of the city's merchants: P. V. McGrath, 'Merchant venturers and Bristol shipping in the early seventeenth century', *Mariner's Mirror*, XXXVI (1950), pp. 74-75, 80.

[42] The ships with one owner were the *Briton*, *Great Nicholas, Hart*, *Jesus* (1), *Margaret* (1), *Mary Bonaventure, Mary Bride, Mary Conception, Mary George, Primrose, Saviour* and *Trinity.* The ships with two owners were the *John Baptist* and *Little Trinity*. The ships with three owners were the *Harry* and *Mary James*. See the introduction to App. 6 and the individual histories.

[43] App. 6, *Mary Fortune* of Gloucester and the *Trinity* of Caerleon.

The Benefits of Shipowning

The types and levels of benefit that were achieved from shipowning depended on the way ships were deployed. As will be seen in the following chapters, although the principal activity of Bristol's great ships was commerce, during the period under study they were also involved in crown service and privateering. This was because ships at this time were not highly specialised and all those used in the Continental trade were suitable for naval as well as commercial purposes. Over the following paragraphs the benefits that could be achieved by engagement in these different activities will be considered.

When ships were involved in commercial activities their owners could benefit from them in three basic ways: they could retain control of the ship and sell freight space to individual merchants; they could charter out the whole ship to an individual or group for an agreed sum; or they could use the ship for carrying their own merchandise. From both John Smyth's ledger and the surviving charter parties of the period it appears that the most common practice was for charter parties to be drawn-up for specified legs of particular voyages. These agreements were registered just before a journey was to begin and detailed the journey that was to be undertaken, the level of the freight charged and the time of payment.[44] They also listed the merchants who were lading on the ship and what each was sending. This level of detail was necessary because the merchants were individually, rather than collectively, responsible to the owner for payment.[45] Such contracts ensured that Bristol's shipowners maintained a great deal of control over the running of their ships. In order to protect their interests, the merchants buying freight were able to nominate a capemerchant, or supercargo, to accompany the ship and ensure that the cargo was looked after and delivered as quickly as possible.

Apart from selling freight space shipowners could of course also benefit from using their ships to carry their own goods. All of Bristol's sixteenth century shipowners were also

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[44] For a full transcription of one of the *Trinity* of Bristol's charter parties and details of a number of other charter parties of this period see, Vanes, *Overseas Trade,* pp. 82-84

[45] Smyth's ledger makes it clear that he always paid individual shipowners, rather than a charterer, for freight dues and that individual merchants likewise paid freight dues for the *Trinity* directly to him. Smyth occasionally makes reference to the breaking of his seal from a charter party after his payment had been made. This suggests that each merchant attached their seal to the charter party and thus accepted individual responsibility for payment: App. 6, *Mary Bonaventure* of Bristol (5 December 1541), *Mary George* of Bristol (28 March 1548).

merchants in their own right and by employing their own ship they could cut down on transaction costs and increase their level of control over their merchandise. As will be seen in chapter 3, the vertical integration of merchandising and transportation appears to have been particularly advantageous when engaged in illegal trading activities. However, when involved in legal trading, shipowners frequently decided to split their cargoes and lade a large portion of their goods on other people's ships. This appears to have been done to diversify risk, suggesting that they normally preferred to protect their investments by splitting their cargoes rather than by splitting the ownership of their vessels.

When ships were engaged in crown service, the most direct benefit the shipowners received came in the form of a payment by the Crown of 1s. per ton of capacity for each month a ship was employed.[46] Beside this the Crown also paid for any repairs that were necessary while the ships were in service and provided compensation to the owners if a ship was lost.[47] These payments and guarantees would no doubt have been important to shipowners, yet when ships were employed in crown service, shipowners could also benefit in less tangible ways. As will be seen in Chapter 4, during the 1543-46 war with France, the city's shipowners could also become the recipients of royal patronage, by being co-operative and indeed pro-active in their pursuit of the Crown's interests.

The last major form of activity in which Bristol's shipowners were involved in was privateering. When engaged in privateering shipowners customarily received a third of any prizes taken. If they also provided supplies for a venture, they would receive two-thirds of all prizes.[48] Like crown service, privateering could also win shipowners political patronage from the Crown if they acted in a way that furthered the interests of the Crown or its representatives.

From the above, it should be clear that Bristol ships were involved in a number of different activities during the period under study and the rewards for them were not just financial. Although the activities and benefits that have been mentioned above have been dealt with separately, it was also sometimes possible to combine activities, for instance by engaging in

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[46] *L&P,* XIX, i, nos. 477, 643.
[47] For references to compensation for ships lost in the 1543-46 war see: *L&P*, XX, ii, no. 69; XXI, i, no. 352.
[48] K. R. Andrews, *Elizabethan Privateering* (Cambridge University, 1964), p. 46.

privateering during an essentially commercial voyage.[49] Vessels engaged in such activity are defined by David Starkey as 'armed trading vessels' in his studies of eighteenth century privateering and Andrews suggests that this sort of combined activity was probably the most profitable form of privateering in the late sixteenth century.[50]

Conclusion

This chapter has attempted to illuminate the basic economic conditions of the Bristol shipping industry. It has been shown that it was more expensive for shipowners to keep their ships in port than at sea and therefore success in shipowning depended on the maximisation of returns from voyages and the minimisation of port times. For this reason chapters 3 and 4 of this thesis will concentrate on the strategies Bristol's shipowners adopted to address these issues. Since a major component of a shipowner's costs throughout the medieval and early modern period were the high fixed costs of the industry, it was expensive to lay ships up for any period of time. As a result it was incumbent on shipowners to try and ensure that their ship was in regular, if not constant, employment. The analysis of the costs of shipping further indicated that only large, and consequently expensive ships, were able to compete effectively in the Continental shipping market.

The section on the risks of shipping revealed that ships were frequently lost through natural disasters or political upheavals and that if this happened shipowners normally had to bear the cost themselves, for shipping insurance was not available. Although it might appear desirable to diversify risk through shared ownership, Bristol shippers clearly did not view this as a viable option and preferred to hedge their bets by dividing their cargoes over a number of ships. Since ships were expensive items, this meant that only Bristol's richest merchants engaged in the Continental shipping market. This may have limited aggregate investment but, as will be seen, it had important implications for the ability of Bristol's shipowners to organise collectively to achieve their mutual interests.

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[49] Such a combined venture was made by the Bristol shipowner, John Wynter, in 1537. For one voyage to La Rochelle Wynter placed 50 soldiers on board his ship in the hope of their being able to capture any of the Bretton pirates that were troubling the Bristol trade: *L&P*, XII, ii, no. 208.

[50] D. Starkey, *British Privateering and Enterprise in the Eighteenth Century*, (Exeter, 1990), pp. 51-52; Andrews, *Elizabethan Privateering,* p. 135.

Finally, consideration was given to the returns for engagement in this high-cost and high-risk activity. It was noted that Bristol's ships could be used for military as well as commercial purposes. Given that the high fixed costs of shipping made it expensive to lay ships up during war, the military activity of Bristol ships, and the political and financial rewards that could accrue from such activity, will have to be considered to achieve a complete understanding of the industry.

On the basis of the foregoing analysis it will be possible to examine and interpret the strategies Bristol's shipowners employed to maximise the return on their investments. However, since their behaviour can only be understood in the context of a thorough understanding of the market environment in which they were operating, it will first be necessary to undertake a detailed examination of the nature and development of Bristol's shipping market during the years under study.

Chapter 2: Bristol's International Shipping Market, 1539-1546

Demand for Bristol's shipping came from three sources: commerce, the Crown and privateers. Since they all had calls on Bristol's marine during the period under study, a complete examination of the shipping market will need to consider the level and timing of demand from all of these sources. However, since commerce was the mainstay of the industry, the analysis will concentrate on the demand for shipping generated by Bristol's own trade. Fortunately, it is not necessary to consider the demand for shipping at other English ports for, although Bristol's greatest ship, the *Saviour*, was sometimes chartered out to the London-Levant trade, it appears to have been unusual for Bristol ships to service the trade of other ports.[1] The market for Bristol's shipping was thus effectively the same as Bristol's shipping market.

The examination of the demand for commercial shipping will begin by considering the trades that the shipping industry serviced and the background of the merchants who bought the freight space. Once this has been completed an analysis will be made of the structure and scale of Bristol's shipping market in the different branches of the city's trade.

[1] Apart from Bristol there were four other port-authorities in the west of England / Wales for the collection of Crown customs. With the exception of Bristol, all had sub-ports where customs could also be collected. The ports and sub-ports were: Bridgwater (sub-port Minehead), Plymouth (sub-ports Looe, Fowey, Truro, Penryn, Mount's Bay, Saint Ives, Padstow), Exeter (sub-ports: Dartmouth, Barnstaple and Ilfracombe) and Poole (sub-ports: Lulworth, Weymouth, Lyme). Yet in the thirteen customs accounts surviving from Plymouth, Exeter and Poole for the years 1539-46, there are only two references to Bristol ships. These are the *Mary Fortune*, which left Plymouth on 7 September 1540, and the *Nicholas* which entered Ilfracombe on 15 January 1543: P.R.O. E122 206/9, 116/11, 116/13, 116/16, 201/10, 201/11, 43/14, 43/15, 43/17, 43/19, 207/4, 207/5, 207/6. The nearest port to Bristol was Bridgwater, from which five accounts (1538/39, 1540/41, 1541/42, 1544/45, 1545/46) survive for the period under study: P.R.O. E122 200/2, 27/15, 27/18, 27/21, 27/24. Of these, three (1540/41, 1544/5 and 1545/6) contain no references to Bristol ships. The remaining two (1538/39 and 1540/41) contain a total of seventeen references to Bristol ships – most of which deal with the export of beans: App. 6, *Magdalen*, *Mary Bu'ke*, *Mary George* (1), *Nicholas* (2), *Trinity More*, *Primrose*, *Sunday*. These entries demonstrate that there was nothing to stop Bristol ships from servicing other English ports. Nevertheless, while the five accounts indicate that the total value of Bridgwater's trade carried by Bristol ships was £161, the value of the Bristol's trade conducted by Bristol ships in the three surviving accounts of the 1540s was £16,665. Bristol's shipping thus had a very limited involvement in the trade of other western ports. For the reference to the chartering of the *Saviour*, see Appendix 6.

The Overseas Trade of Bristol

The most useful sources for the study of Bristol's overseas trade are the customs accounts – three of which survive intact from the 1540s. The accounts detail all the declared international trade of the eastern end of the Bristol Channel, for any goods entering or leaving England from this region were meant to pass through, and be recorded at, the customs house in Bristol. The surviving accounts run from October to September and cover the year's 1541/2, 1542/3 and 1545/6.[2] The data from these accounts was fed into a computerised data-base and all the statistical analysis of the customs accounts is derived from this. Nevertheless, although the customs accounts constitute an invaluable source, they do not tell the whole story, for not all of Bristol's trade was legally declared. The examination of Bristol's overseas trade will therefore also consider the nature and significance of city's illicit trading activities.

During the sixteenth century, Bristol's international trade focussed almost exclusively on three areas: Biscay, south-west Iberia and Ireland.[3] For practical purposes these can be divided into the Continental trade and the Irish trade. This makes a natural division, for while there was a considerable overlap between the commodities, shipping and personnel involved in the trades to Biscay and southern Iberia, the Irish trade involved a distinct set of commodities, smaller ships and a generally separate set of merchants. Since the division between these trades was marked, it is possible to determine from the customs accounts whether a ship was engaged in the Continental or Irish trade - even though the customs accounts of this period do not specifically state where a ship was sailing to or from. The method by which the journeys were identified as Irish or Continental is described in Appendix 4 and the division provides the basis for much of the following analysis of both Bristol's trade and its shipping market.

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[2] P.R.O. E122 21/10, 199/4, 21/15. An additional account, covering the period 1543/4, also survives: E122 21/12. However, since it is badly damaged, it can only be examined under direct supervised access and is in too poor a condition to be microfilmed, it was not possible to add the information in it to the main data-base.

[3] Vanes, *Overseas Trade,* pp. 13-25.

The Declared Trades

As stated, Bristol's Continental trade focused on two areas: Biscay and south-west Iberia. Imports from Biscay consisted of wine from Gascony, woad and salt from south-west France and iron from Guipuzcoa in northern Spain. Imports from southern Portugal and Andalusia consisted largely of wines, oil, soap, Azores woad and fruit. In return, Bristol exported cloth, lead, and leather. The composition and value of this trade, as represented by the customs accounts, is provided below.[4] The tables indicate the value of all items that accounted for at least one per cent of total trade during this period. The full tables are provided in Appendix 5.

Table 2.1 – Imports from the Continent to Bristol, in £ Sterling: 1541/2, 1542/3, 1545/6

Summary Table	*1541/2 £*	*1542/3 £*	*1545/6 £*		Total £ for 3 years	% Total for 3 years
Wine	6222	4230	7929		18381	56
Iron	2096	1390	1753		5239	16
Woad	2115	281	668		3064	9
Olive Oil	855	140	1194		2189	7
Fruit	315	364	313		992	3
Salt	160	84	414		658	2
Soap	263	128	243		634	2
Newfoundland Fish	414	1	0		415	1
Miscellaneous	400	164	624		1188	4
Total Value	12840	6781	13138		32758	100

[4] The customs accounts provide nominal valuations for all goods except wine, tanned hides and woollen cloth paying custom. However, since the nominal values of goods had been set in the 15th century, inflation meant that by the early 1540s the real value of trade was probably at least twice that indicated by the customs accounts. For instance, while imported iron was valued at £2 10s. per ton, Smyth was selling it in Bristol for around £6 per ton, while olive oil, valued at £5 per tun, was being sold for £12-15 per ton: *Smyth's Ledger*, fos. 53, 84, 127, 178. Exports were also generally more expensive – for instance calf-skins, valued at 3s. 4d. per dozen, cost Smyth around 6s. per dozen in the early 1540s: *ibid*., fos. 6, 31. In order to provide an impression of the relative importance of wine and woollen cloth in Bristol's import and export trades, these commodities have been allocated nominal values of £4 per tun for wine and £2 per cloth of assize. These nominal values are the same as those adopted by Wendy Childs in her study of the Bristol-Ireland trade of the late 15th century: W. R. Childs, 'Ireland's trade with England in the later middle ages', *Irish Economic and Social History*, IX (1982), pp. 18 n.17, 21. In reality Smyth sold wine for around £5-7 per tun in Bristol and broadcloths cost him £3-4 each: *Smyth's Ledger*, fos. 4, 38, 144, 145. Tanned hides are valued at £1 per dicker. This seems appropriate given that hides normally cost Smyth around 40-50s. per dicker: *ibid*. fos. 6, 31.

Table 2.2 – Exports from Bristol to the Continent, in £ Sterling: 1541/2, 1542/3, 1545/6

Summary Table	1541/2 £	1542/3 £	1545/6 £		Total £ for 3 years	% Total for 3 years
Cloth paying custom	3466	2844	5139		11449	54
Cloth paying poundage	358	505	1878		2742	13
Lead	1018	478	3773		5270	25
Hides	124	183	925		1234	6
Calf Skins	19	141	275		435	2
Misc.	52	55	90		197	1
Total Value	5037	4207	12080		21323	100

There was nothing particularly innovative about this pattern of trade, which, in its essentials, was similar to that described by Carus-Wilson in her studies of Bristol's late medieval trade.[5]

The Irish trade during the 1540s also appears to have been following a pattern that was typical for its century. Commerce was conducted primarily with Ireland's southern ports such as Waterford, Ross and Youghal. Imports from Ireland consisted almost exclusively of a cheap frieze cloth called Check, in addition to fish, animal skins and Irish mantles. In return Bristol sent Ireland a wide range of both English goods and Continental re-exports. Although the 1541/2 customs account also records some significant exports of arable produce (hereafter referred to as grain), this was atypical and appears to have been prompted by the high demands for foodstuffs created by England's campaign in Ireland.[6] As with the Continental trade, the tables 2.3 and 2.4 indicate those items that accounted for at least one percent of the total import or export trade. The full tables are provided in Appendix 5.

[5] E. M. Carus Wilson, 'The overseas trade of Bristol' in E. Power and M. M. Postan (eds.), *Studies in English Trade in the Fifteenth Century* (London, 1933), pp. 183-246

[6] During this year just over half the grain exported (worth £83 10s.) was exported tax exempt under the name of Sir Anthony St. Ledger, the Governor of Ireland: P.R.O. E122 21/10.

Table 2.3 – Imports from Ireland to Bristol, in £ Sterling: 1541/2, 1542/3, 1545/6

Summary Table	1541/2 £	1542/3 £	1545/6 £		Total £ for 3 years	% Total for 3 years
Check Cloth	2084	1187	891		4161	42
Other Cloth	110	6	36		152	2
Mantles	238	211	284		733	7
Hake	317	382	296		995	10
Herring	509	234	352		1094	11
Salmon	419	54	273		746	7
Other Fish	100	39	32		171	2
Sheep Skins	325	211	291		827	8
Lamb Skins	103	180	218		500	5
Salted Skins	11	102	5		119	1
Other Skins	37	28	82		147	1
Wine	35	67	0		102	1
Misc.	61	43	113		217	2
Total Value	4348	2742	2872		9962	100

Table 2.4 – Exports from Bristol to Ireland, in £ Sterling: 1541/2, 1542/3, 1545/6

Summary Table	1541/2 £	1542/3 £	1545/6 £		Total £ for 3 years	% Total for 3 years
Cloth Paying Custom	685	478	479		1642	28
Cloth Paying Poundage	15	6	9		30	1
Silk	340	243	302		885	15
Clothing	25	13	26		63	1
Points	83	60	81		224	4
Coloured Skins	43	22	23		88	1
Pillions	29	13	26		69	1
Aniseed	17	71	61		149	3
Saffron	271	269	417		957	16
Other Spices	18	19	27		64	1
Beans, Malt & Wheat	166	21	0		187	3
Hops	26	8	64		98	2
Wine	2	6	132		140	2
Corrupt Wine	40	23	47		110	2
Salt	0	75	43		118	2
Iron	41	91	139		271	5
Knives	141	95	119		356	6
Millstones	0	27	61		88	1
Misc.	115	86	129		330	6
Total Value	2058	1625	2186		5869	100

Of the two branches of Bristol's trade, the Continental was the most important, accounting for 74% of total trade in 1541/2, 72% in 1542/3 and 84% in 1545/6. In both the Irish and the Continental trades the customs accounts suggest the value of imports exceeded that of exports - in the Continental by 54%, in the Irish by 70%.

Turning from the goods traded to the merchants who bought the freight space, it may be noted that one of the long-standing features of Bristol's Continental trade was the extent to which it was dominated by English merchants in general and Bristol merchants in particular.[7] The table and graph below illustrate the level of control exerted over the Continental trade over the three years for which complete customs accounts survive.[8]

Table 2.5 – Control of the Continental Trade by Bristol, Other Indigenous and Alien Merchants: 1541/2, 1542/3, 1545/6 [9]

Year & Month	Bristol £	Other £	Alien £	Year & Month	Bristol £	Other £	Alien £	Year & Month	Bristol £	Other £	Alien £
1541/10	356	10	268	1542/10	234	49	67	1545/10	331	25	3361
1541/11	3242	296	31	1542/11	0	2	0	1545/11	750	80	1390
1541/12	2461	394	44	1542/12	174	0	0	1545/12	691	5	745
1542/1	403	61	8	1543/1	336	99	0	1546/1	822	266	262
1542/2	1818	13	3	1543/2	4098	385	249	1546/2	1494	246	1745
1542/3	599	4	110	1543/3	231	1	94	1546/3	2900	1058	1391
1542/4	884	186	26	1543/4	106	60	2	1546/4	440	129	28
1542/5	1012	35	69	1543/5	0	68	0	1546/5	771	69	787
1542/6	1273	133	227	1543/6	0	19	0	1546/6	331	32	89
1542/7	1142	75	262	1543/7	1641	76	361	1546/7	617	27	468
1542/8	883	281	250	1543/8	0	2	0	1546/8	730	188	637
1542/9	2634	77	593	1543/9	182	0	166	1546/9	1492	380	441

[7] Carus Wilson, 'The overseas trade of Bristol' p. 183; G. Connell-Smith, *Forerunners of Drake: A Study of English Trade with Spain in the early Tudor Period* (London, 1954), p. 9

[8] Since the customs accounting year started on 28 September and several Bristol ships left Bristol on 30 September 1542, carrying goods worth £2,287, the total recorded trade for the twelve month period October-September 1541/2 and 1542/3, does not match the earlier tables 2.1 and 2.2.

[9] Merchants were identified as being from Bristol if their names either matched those identified as Bristol men in John Smyth's ledger or if their names appear in a list, included with the ledger, which suggests merchants who should be admitted to Bristol's Society of Merchant Venturers. This was established in 1552: *Smyth's Ledger*. Since the list was compiled some years after the customs accounts under examination, and it seems improbable that Smyth would have mentioned every Bristol merchant involved in international trade in his ledger, some of the individuals included as 'other indigenous' were probably also from Bristol.

Figure 2.1 - Control of the Continental Trade by Bristol, Other Indigenous and Alien Merchants: 1541/2, 1542/3, 1545/6

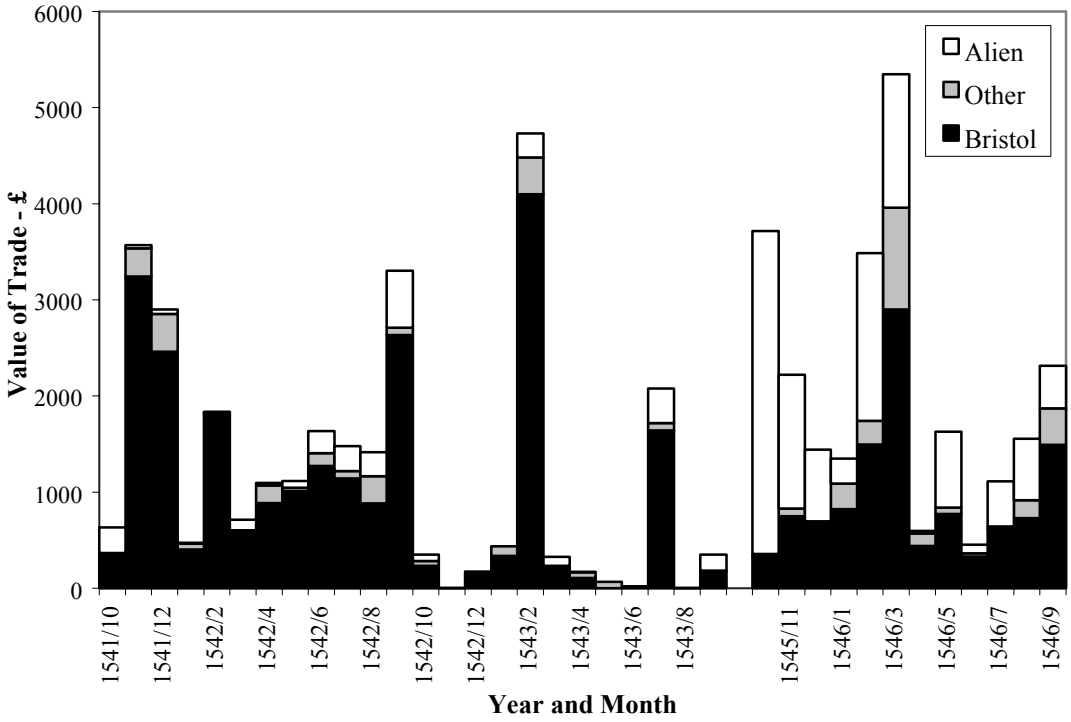

Table 2.5 and figure 2.1 indicate that the vast majority of Bristol's Continental trade was in the hands of Bristol merchants during the years 1541/2 and 1542/3. This was significant for Bristol's shipowners because, as will be seen in chapter 3, there were reasons why Bristol merchants should favour the use of Bristol owned ships. By 1545/6 the percentage of trade in the hands of foreign merchants had grown, since piracy in the English Channel, associated with England's war with France, meant that it became safer for Imperial merchants to dispatch their goods by way of the Bristol Channel. However, the greater control of Bristol's trade by alien merchants was of little significance to Bristol shipowners for, as will be seen in chapter 4, until June 1546 Bristol ships had little involvement in Continental commerce.

Like the Continental trade, the Irish trade was almost entirely in the hands of indigenous merchants in the period 1541-1543. Yet, unlike the Continental trade, foreign merchants did not increase their share of the Bristol-Ireland trade during 1545/6. The almost absolute control by indigenous merchants during the 1540s is illustrated by Table 2.6, which records the amount of customs paid by indigenous and foreign merchants.

Table 2.6 – Control of the Irish Trade by Bristol, Other Indigenous and Alien Merchants: 1541/2, 1542/3, 1545/6

Year	Bristol £	Other £	Alien £	Total £
Annual Total:1541-2	938	5467	0	6405
Annual Total:1542-3	459	3901	8	4368
Annual Total:1545-6	780	4276	2	5058
Total £ for 3 years	2176	13645	10	15831
% Total for 3 years	13.75	86.19	0.06	100

Although the customs accounts indicate that the Irish trade was almost entirely controlled by indigenous merchants it is difficult to ascertain where in the British Isles they came from. As the Table 2.6 indicates, at least part of the Irish trade was in the hands of Bristol merchants and, indeed, the two merchants who maintained the largest individual trades to Ireland were the Bristol men William Appowell and Nicholas Thorn.[10] Nevertheless, the bulk of the trade was carried by individuals who cannot be identified as Bristol merchants from either Smyth's ledger or the 1552 list of those to be admitted to the Society of Merchant Venturers, which should have included all those actively engaged in overseas trade at that time.[11] Given this, it seems likely that the majority of the trade was in the hands of merchants from either Ireland or other ports in the Bristol Channel. Although it is difficult to determine which is the case, since many of the merchants on the Irish vessels had typical Irish names, and Irish vessels carried 75% of the trade during the three years, it seems probable that a large proportion of the Bristol-Ireland trade of the 1540s was in the hands of Irish merchants.[12]

The pattern of declared trade during the late 1530s and 1540s was thus fairly typical for its century. Bristol's Continental trade was focussed on Biscay and south-west Iberia. It was largely in the hands of Bristol merchants and was rooted in the import and export of a limited range of well-established products.[13] The Irish trade was focussed on Ireland's south

[10] William Appowell, or William Appowell and associates, traded goods worth £678 over the three years. Nicholas Thorn, or Nicholas Thorn and associates, traded goods worth £293. These were the only merchants, or merchants with associates, to conduct more than £200 worth of trade in this period: E122 21/10, 199/4, 21/15.
[11] P. McGrath, *Records Relating to the Society of Merchant Venturers of the City of Bristol in the Seventeenth Century* (B.R.S. Publications, XVII, Bristol, 1952), p. xii.
[12] The value and percentage of the Irish trade carried by ships of different Irish ports is as follows: Waterford - £9115 (58%), Ross - £884 (6%), Youghal - £618 (4%), Cork - £492 (3%), Wexford - £397 (3%), Dungarvan - £280 (2%), Dublin - £31 (<1%): App. 3.
[13] Vanes, *Overseas Trade of Bristol*, pp. 17-25.

coast ports. The goods traded between Bristol and Ireland were similar to those traded in the late 15th and early 16th century, although imports of check cloth had grown markedly in the intervening period.[14]

The Illicit Trade

The extent of illicit trade has always been a difficult matter for historians to determine, for official records only record the activities of those who were caught. However, for Bristol in the period under study, the survival of two separate merchant's accounts, which implicate a fair portion of Bristol's commercial elite in illicit trading activities, provide a window on the city's illicit commerce. By employing these accounts, and linking them to customs accounts, it is possible to determine the nature and extent of Bristol's illicit trade to the Continent.

Since Bristol's illicit trade consisted of everything that was not recorded in the customs accounts, a useful first step to examining the nature and scale of the illicit trade is to assess the accuracy of these accounts. This can be done by comparing the customs accounts to the independently generated commercial records of the merchants of Bristol; the purpose being to reveal any differences between what was declared and what was actually laded.

For the import trades it is possible in seven cases to make a direct comparison between the total lading of a ship as indicated by the customs accounts and a total shipment given in a charter party or Smyth's ledger. Although the full details are given in Appendix 6, the summary comparisons of five of these journeys are also reproduced below.[15]

[14] Childs 'Ireland's Trade with England in the Later Middle Ages' pp. 17-20; A. K. Longman, *Anglo-Irish Trade in the Sixteenth Century* (London, 1929), pp. 213-19.
[15] App. 6, *Primrose* of Bristol, 20 November 1536; *Trinity* of Bristol, 22 December 1536; 22 November 1541; 13 April 1542; 14 August 1542; 13 February 1543; 24 March 1544.

Table 2.7 - *Trinity* of Bristol, 13 April 1542

Ledger	*Tons*	**Customs Account**	*Tons*
All merchants	129.0 iron	John Smythe & assoc.	125.0 iron

Table 2.8 - *Trinity* of Bristol, 14 August 1542

Ledger	*Tons*	**Customs Account**	*Tons*
All merchants	118.2 iron	Thomas White & assoc.	122.0 iron

Table 2.9 - *Trinity* of Bristol, 24 March 1544

Ledger	**Tons**	**Customs Account**	*Tons*
All merchants	122.0 iron	John Smyth & assoc.	119.75 iron

Table 2.10 – *Primrose* of Bristol, 20 November 1536

Charter Party	*Tuns*	**Customs Account**	*Tuns*
John Smythe	14.125	John Smythe	10.5
William Shipman	4.125		
William Shipman & Cutte	4.0		
John Court	0.5		
Francis Codrington	11.125	Francis Codryngton	8.5
John Gorney	4.5	John Gurney	3.5
William Sprat	7.0	William Sprat & Teson	7.75
Thomas Tizon	2.125		
John Branthon	7.5	John Brampton	6.5
William Cox	5.5	William Cockys	4.0
William Ballard	2.0	William Balard & Pryen	3.5
Richard Prynn	3.0		
Edward Prynn	2.5	Edward Pryn & Typton	5.5
Owen Thurston	4.5		
TOTAL	68.5 tuns	TOTAL	53.75 tuns

Table 2.11 – *Trinity* of Bristol - 13 February 1543

Smyth's Ledger	*Tuns*	**Customs Account**	*Tuns*
John Smith	19.5 wine	Nicholas Thorn & Smith	20.5 wine
Nicholas Thorn	4.5 wine		
John Smith	2.0 oil	Nicholas Thorn & Smith	2.0 oil
John Smith	1.0 soap	Nicholas Thorn & Smith	0.75 soap
John Smith	0.35 alum	Nicholas Thorn & Smith	0.3 alum
William Sprat	2.5 wine	William Rowley & Sprat	5.0 wine
William Rowley	4.0 ton		
John Gorney	3.0 wine	John Gurney & Tyson	6.75 wine
Thomas Tyson	5.0 wine		
Edward Prin	2.0 wine	Edward Pryn & Cox	6.0 wine
William Cockes	5.0 wine		
John Cutt	5.0 wine	John Cutt & Gyttens	8.25 wine
Robert Guytton	5.0 wine		
Robert Guytton	1.0 oil	John Cutt & Gyttens	1.0 oil
Arthur Smith	3.0 wine	Arthur Smyth & Pressy	5.5 wine
Robert Pressy	4.0 wine		
Thomas Harrys	5.0 oil	Thomas Harrys & Hyll	6.25 oil
Alan Hill	1.5 oil		
Alan Hill	3.0 wine	Thomas Harrys & Hyll	2.5 wine
Richard Sawnders	6.0 wine	Giles White & Sawnders	7.0 wine
		Giles White & Sawnders	0.5 oil
Mathew Kent	5.0 wine	Mathew Kent & Tyson	6.0 wine
Nicholas Tison	1.0 ton		
Alice Smith	1.0 oil	Alice Smith & assoc	1.875 oil
Thomas Hicks	1.0 wine	Alice Smthe & assoc	1.75 wine
Nicholas Gay	2.0 wine		
TOTAL	78.5 wine	TOTAL	69.25 wine
	10.5 oil		11.625 oil
	1.0 soap		0.75 soap
	0.35 alum		0.3 alum

These tables indicate that the goods listed in the customs accounts were the ones the ships were actually carrying and that the quantities listed in the customs accounts are reasonably accurate. Although there are some discrepancies between the two sources, these are minor and not necessarily the result of illegal action. In particular, the discrepancies recorded between wine shipped and wine customed can largely be attributed to the Crown's right of prisage, which would also lower the quantities customed by two tuns for any ship carrying over 20 tuns of wine, and ullage (leakage) aboard ship, which could account for as much as

10% of a ship's lading.[16] The above tables thus provide no evidence that a large-scale illicit trade existed in the import trades of wine, iron, oil and soap – which together accounted for 81% of Bristol's declared trade. Since the comparisons between accounts of complete ladings, provided above and in the Appendix, do not deal with all the major import trades, it is possible that evasions occurred in the import of woad, fruit or salt. However, on the basis of John Smyth's own practices, it appears that he at least paid his dues when engaged in the fruit and woad trades.[17]

Turning to the export trades it may be noted that, since Smyth did not record the freights owed him on outbound cargoes and since no charter parties have survived from outbound ships, it has not been possible to reconstruct the entire ladings of individual ships. However, it is at least possible to compare the private records of Smyth, and on one occasion the Tyndall brothers, to the customs accounts. The following tables provide these comparisons for cloth, lead, leather and grain, which were responsible for the vast majority of export tonnage shipped to the Continent.

Table 2.12 – Comparison of John Smyth's Lead Exports Between the Ledger and the Customs Accounts

Smyth's Ledger *(folio, date & ship)*	*tons*	**Customs Account**	*tons*
f.136, 15 October 1542, *Trinity* of Bristol	7.05	22 September 1542	6.0
f.173, 31 January 1542, *Trinity* of Bristol	12.2	13 January 1542	10.0
f.173, 20 June 1542, *Trinity* of Bristol	10.15	19 May 1542	8.0
f.196, 8 January 1544, *Trinity* of Bristol	2.05	5 January 1544	2.0
f.196, 4 April 1544, *John Baptist* of Renteria	10.1	10 March 1544	10.0
f.196, 12 April 1544, *Peter* of the Pasajes	6.15	11-20 April 1544	5.5
f.254, 20 Sept. 1546, *Mary* Conception	21.04	9 August 1546	20.0
f.254, 20 Sept. 1546, *Marieta* of Fuenterrabia	19.1	8 September 1546	15.0

[16] A 1528 account dealing with the cost of shipping wine from Bordeaux to London suggests that a merchant should expect to lose one tun in ten to 'lecage and oylage': Vanes, *Overseas Trade,* p. 85. However, this was probably an exaggeration, since Smyth's worst losses to ullage never amounted to more than 8% of his cargo. For instance, a Gascon wine accounts of 1540 notes that of 33.25 tuns shipped he had lost 1.83 tuns had been lost to ullage, while an Andalusian account of 1542 notes that he had lost 3.75 tuns to ullage of the 44.5 tuns wine laded that year: *Smyth's Ledger*, fos. 108, 180.

[17] On those occasions when Smyth imported figs or raisins his accounts indicate that he paid the correct amount (2 s. per ton) for fruit: *Smyth's Ledger,* fo. 146, 195. Two of Smyth's accounts throw light on the customs he paid on woad imports. On 19 June 1540 Smyth imported 6.8 tons of Azores woad on the *Jesus* of Bristol. After reaching the Quay this was subject to aggregated costs of 6s. 8d. per ton. Since petty charges for haulage etc. never cost Smyth more than a few pence per ton, most of the charge would have been custom. As Azores woad paid custom of 6s. 8d. per ton in Bristol, the consignment must have been recorded fairly accurately: *Ibid*, fo. 101. On 6 November 1541 Smyth received 24 half-bales woad from the *Anne* of London, for which he paid 14s. custom, suggesting that the officials treated the consignment as 28 half-bales by their measure: *Ibid*. fo. 52.

Table 2.13 – Comparison of John Smyth's Cloth Exports Between in the Ledger and the Customs Accounts

Smyth's Ledger *(folio, date & ship)*		**Customs Account**	
f.136, 15 Oct. 42, *Trinity* of Bristol	0 cloths	9 Aug. 42	18 cloths
f.136, 15 Oct. 42, *Mary James*	10 cloths 1 Bristol frieze 34 Manchester	2 Oct. 42	64 Manchester
f.136, 15 Oct. 42, *Mary Conception*	64 Manchester	30 Sept. 42	60 Manchester
f.173, 31 Jan. 42, *Trinity* of Bristol	40 penny hewes	13 Jan. 42	33 cloths 4 white kerseys
f.173, 20 June 42, *Trinity* of Bristol	50 penny hewes	19 May 42	45 cloths
f.174, 11 Apr. 43, *San John* of Renteria	30 cloths 1 Bristol frieze 2 Manchester	29 Mar. 43	8 cloths
and *John* of Pasajes		27 Mar. 43	9 cloths
f.174, 30 July 43, *St. Maria* of Renteria	20 cloths	7 July 43	18 cloths 3 yellow lining
f.174, 30 July 43, *San John* of Pasajes	10 cloths	7 July 43	9 cloths 2 yellow lining
f.195, 15 Jan. 44, *Mary Conception*	10 cloths 37 Manchester	7 Jan. 44	10 cloths 30 Manchester
f.195, 15 Jan. 44, *Margaret*	10 cloths 37 Manchester	7 Jan. 44	10 cloths 30 Manchester
f.195, 15 Jan. 44, *Mary James*	10 cloths 37 Manchester	8 Jan. 44	10 cloths 30 Manchester 7 Bristol frieze
f.196, 4 Apr. 44, *John Baptist* of Renteria	30 cloths	10 Mar. 44	30 cloths 3 north. cottons
f.221, 9 Aug. 44, Two ships called	30 cloths		59 cloths
San Johannes of Renteria	6 truckers 10 white kerseys 150 Manchester	28 July 44	36 cloths
f.254, 20 Aug. 46, *Mary Conception*	1 hewling 100 Manchester	28 Aug. 45	40 tavestocks 120 Manchest.
f.254, 20 Sept. 46, *Marieta* of Fuenterrabia	7 friezes 3 truckers	8 Sept. 46	6 friezes 3.5 cloths 40 Manchester

Table 2.14 - Comparison of John Smyth's Grain Exports Between the Ledger and the Customs Accounts

Ledger (folio, date & ship)	quarters	**Customs**	quarters
f.173, 31 Jan. 42, *Trinity* of Bristol	19.125 peas	13 Jan. 42	0
f.136, 1 Feb. 42, *Mary Fortune* of Glouc.	125.875 wheat	12 Dec. 41	0
f.173, 20 June 42, *Trinity* of Bristol	12 wheat	19 May 42	0
f.136,15 Oct. 42, *Trinity* of Bristol	138 wheat	22 Sept. 42	48 wheat
f.174,11 Apr. 43, *Clement* of Framilode	120 wheat	4 April 43	30 wheat

Table 2.15 - Comparison of John Smyth's Leather Exports Between the Ledger and the Customs Accounts

Ledger (folio, date and ship)	(goods)	**Customs**	(goods)
f.173, 31 Jan.42, *Trinity* of Bristol	10 dick. ox 30 dick. cow & steer 152 doz. calf	13/1/42	18 dick. hides
f.173, 20 June 42, *Trinity* of Bristol	3 dick. ox 20.2 dick. cow & steer 67 doz. calf	19 May 42	5 dick. hides
f.174, 11 Apr. 43, *Clement* of Framilode	17 dick. cow & steer 100 doz calf	4 Apr. 43	3 dick. hides 10 doz calf
f.174, 30 Jul. 43, *Santa Maria* of Renteria and *San John* of Pasajes	5 dick. ox 3 dick. cow & steer 80 doz calf 110 doz calf	7 July 43 7 July 43	5 dick. hides 100 doz calf 80 doz calf
f.196, 8 Jan. 44, *Trinity* of Bristol	12 dick. ox 26.6 dick. cow & steer 168 doz calf 13.75 cwt. tallow	5 Jan. 44	70 doz calf
f.221, 9 Aug. 44, Two ships called the *San Johannes* of Renteria	8 dick. ox 54 dick. cow & steer 59.5 doz calf	28 July 44[18]	10 dick. hides 20 doz calf

Note – 1 dicker = 10 hides. For licence purposes 10 dozen calf skins = 1 dicker hides.[19]

Table 2.16 - Comparison of William & Robert Tyndall's Leather Exports Between their Ledger and the Customs Accounts [20]

Account (date, ship)	(goods)	**Customs**	(goods)
12 Aug. 44, *Saynt John* of Renteria	38.5 dick. cow & steer 6 dick. ox 12 doz. calf	28 July 44	16 dick. hides

The above tables provide no indication that Smyth carried out any significant evasions when he was engaged in the export of lead or cloth. Although the lead exports recorded by the customs accounts were slightly lower than his own figures, the discrepancy can be largely accounted for by the use of different measures, for John Smyth's iron accounts suggest that

[18] This entry is heavily mutilated. The account lists the two ships sequentially. The first entry is clear and records the departure of the *Saint John* of Renteria. John Smyth exported 5 dicker hides on the ship. The name of the following ship is badly damaged and only legible under ultra violet light. However it records the departure of the 'Le *Seint Jo*...' John Smyth was reported to have exported 5 dicker hides and 20 doz calf skins on the ship: P.R.O. E122 21/12.
[19] *L&P*, XVII no. 443/7.
[20] Vanes (ed.), *Overseas Trade of Bristol*, pp. 118-19; P.R.O. E122 21/12.

the custom's ton was heavier than his own.[21] Similarly, although the cloth exports recorded by the customs account do not exactly match Smyth's records, this was because, while Smyth recorded the actual cloths he exported, the customs officers often recorded cloth exports in terms of nominal cloths of assize. However, in the leather and grain trades there are major discrepancies between what the customs accounts indicate Smyth was exporting and what his own records state he laded. Since there is no constant, or even near constant, relationship between the two sets of figures, the discrepancies cannot be explained by the use of different measures by the customs officers. They also cannot be due to the goods being laded under the names of other merchants, since Smyth's own ladings were often greater than the entire lading of the ship. Given this, it is difficult to come to any conclusion other than that Smyth was exporting a large portion of his cargoes of leather and grain illicitly. The entry relating to the Tyndall brothers' export of leather suggests that they too were exporting leather illegally and their account confirms the illegality of their practices by noting that some of the leather was laded at Kingroad, at the mouth of the Avon, and that a payment of £3 10s. was made to two Bristol customs officers 'for ther gentlenes shewed in the ladyng of the seid lether.'

The reason Smyth and the Tyndall brothers might have desired to avoid customs payments on these goods and not on others becomes obvious when the extent of the dues they had to pay is examined. Until the late 16th century the basic customs dues that merchants had to pay on most products was very low. The standard tax of poundage consisted of a tax of 5% on the nominal value of goods imported or exported. However, even before the currency debasements of the later 1540s, inflation had caused real values to rise above nominal values to the extent that most goods only paid tax worth in the region of 2-4% of their real

[21] When Smyth imported iron he always recorded the quantity at least twice – giving the weight in Spanish tons and the weight by his own measures. On the twenty-one occasions he makes the conversion, the ratio between his own ton and the Spanish ton was almost constant – his own ton equalling between 0.91 and 0.93 Spanish tons. From the nine occasions when Smyth also recorded the weight as customed, it is clear that the customs officials were less precise in their measurements. According to their measures Smyth's ton varied between 0.79 and 0.91 customs tons. Yet, although the customs officials may not have been exact in their estimates, it is clear that their ton was somewhat heavier than that employed by Smyth: *Smyth's Ledger*, fo. 53, 127, 153, 176, 198, 234, 272, 282.

cost.[22] Similarly the payments of tonnage on wine and custom on English woollen cloth only amounted to a few percent of the value of these commodities.[23]

The situation with leather and grain exports was, however, completely different. Dealing first with customs dues, it may be noted that although grain formally only paid poundage, leather exports were required to pay a group of taxes that amounted to 4s. per dicker - a dicker being a standard measure of ten hides. Since Smyth commonly bought leather at a price of 40-50s. per dicker, these taxes added about 8-10% to his costs.[24] Yet, much more important than this was the requirement to obtain licences to export leather and grain. Although the export of these goods was normally banned, the Crown did in practice grant export licences to senior courtiers and other favourites in return for their services. The recipients of these licences typically sold them on to merchants, who might in turn break them up and sell shares on to lesser merchants at a higher price. Nonetheless, even if a merchant were to buy a licence direct from the original recipient, the cost was so high that it could add up to 60% to the purchase cost of the goods. For instance, when Smyth bought a licence to export leather in February 1540 it cost him 13s. 4d. per dicker at a time when he was buying hides at 44s. per dicker and when he bought a licence to export grain in February 1541, it cost him 5s. per quarter for grain he had bought for 8s. per quarter.[25] Since such charges, added in the case of leather to the already substantial customs dues, bit heavily into potential profit margins there was a very strong motive to export leather and grain illicitly.

Thus far, it has been established that at least two of Bristol's major merchants were apparently involved in the evasion of customs and licence dues in the leather and grain trades. However, the extent of this illicit trade within the merchant community, and the way in which it was conducted, has yet to be established. To address these issues, the two surviving merchant's accounts of the period will have to be examined in more detail.

Evidence of fraud within the merchant account books has been found on three levels. First, John Smyth's ledger contains some accounts that deal explicitly with his purchase, employment and sale of licences which, when compared to his export accounts, indicate that

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[22] See this chapter, footnote 4.
[23] Broadcloth's, worth c. £4, paid 14d. per cloth custom. Wine, worth £5-8 per tun, paid 3s. per tun custom: see this chapter, footnote 4.
[24] *Smyth's Ledger,* fos. 6, 31.
[25] *Smyth's Ledger,* fos. 20, 71 119.

he and other Bristol men were involved in illicit exports over the whole period covered by ledger. Second, in instances where licences are not explicitly mentioned, it is sometimes possible to establish the existence of fraud, by cross-referencing between accounts that deal with the buying of leather or grain in England and those that deal with the export of the same consignments. Where this can be done, it is sometimes possible to establish that Smyth was not paying the full dues, for the difference between the purchase cost of a consignment in England and its 'clearaboard' cost on board ship is too small for it to have been possible for all the official dues to have been paid on the consignment. Thirdly, both Smyth's ledger and the Tyndall accounts contain references to lading practices that were strictly illegal and to unofficial payments to customs officials that can be connected directly to fraudulent exports. Details of all the identified frauds are provided below and many are discussed in 'The Ships' Histories' in Appendix 6, but to demonstrate the practical application of the methodology described, the entries relating to one particularly well documented case will be described below. This concerns the sailing of Smyth's ship, the *Trinity* of Bristol, in February 1541.

This example is particularly clear because to cover the export, Smyth purchased a single licence from the king's secretary, Sir William Paget, and then proceeded to record all his other payments and receipts associated with the export of the consignment of grain on his ship.

Account in Smith's ledger of costs accruing to a cargo of wheat laded on the Trinity [26]

anno 1540

Lycens for wheat owith the 12 day of December £25 paide for the lycens of won C qr. to Alvaro de Astodillo Spanyard at 5s the quarter for horse hire	£25		
& Hamondes cost*es* 2 tymes to London 30s 4d	£1	10s	4d
for £3 6s 8d to Stanebanck for a gowne of damaskyn	£3	6s	8d
for a Cordavan skuyn to the s*er*cher of Gloucester 4s	4s		
for £3 pd. the 4 day of February to Tristan & his fellow	£3		
for 7 dozen 1/2 mattes to J*oh*n Methwey 30s	£1	10s	
for 2 bulkhedes 4s & fagottes 2s 8d	6s	8d	
for costom & the cocquett 17s 4d	17s	4d	
Total	£35	15s	

anno 1540

lycence per contra is dewe to have the 10 day of February £20 8s for so myche I make 51 weyes laden in the Trynte for my accowmpt debitor of	£20	8s	
Itm. the same dey £14 9s 10d that is for so myche I do make Frances Codryngton debitor fo. 60 for the lycens costom & costes of 30 weyes wheat in the Trynte at 8s per wey & of 15s 2d for Hamondes cost*es* & of 33s 4d to Stonebagg & of 16d for 4 matt*es* d'd to the Harry	£14	9s	10d
Itm. 17s 2d for the lycens & cost*es* of 3 weyes which the m*aster* lade at the wey as it may apere to hym in debito fo. 65	17s 2d		
Total	£35	15s	

Note: 1 wey = 6 quarters

In the above account, Smyth first lists all the costs involved in the export of the grain on his ship. This includes the cost of acquiring the licence to export 100 quarters wheat and the cost of preparing the ship to take the grain by fitting bulkheads and mats. It also includes the cost of custom and cocket. Since the custom on 100 quarters was 16s. 8d. and since 8d. was a typical price for a cocket, it appears that the amount customed was also the amount licensed.[27] However, the most interesting entries in the account are the ones relating to payments in cash or kind to four individuals. One of these is identified as the customs searcher of Gloucester. Stanebanck and Tristan can be identified as Anthony Stanbank and

[26] *Smyth's Ledger*, fo. 71.
[27] Wheat was valued at 3s. 4d. per quarter in the customs accounts and therefore paid 2d. per quarter in custom: P.R.O. E122 21/10.

Tristan Lecknor, who were both customs searchers at Bristol. Since Tristan was a searcher it seems probable that his 'fellow' was also one. In her thesis on Bristol's sixteenth century trade, Jean Vanes noted these payments and suggested they demonstrated that 'Even with a licence the export of wheat seems to have involved the distribution of gifts to the customs men at Gloucester and Bristol.'[28] However, if the two sides of the account are compared, it becomes apparent that while the full ship's lading was covered by custom and licence for 100 quarters, it was actually carrying considerably more than this. Smyth laded 306 quarters, Frances Codrington 180 quarters, and the ship's master, John Darby, 18 quarters. Since this made a total of 504 quarters, less than 20% of the consignment was legally covered. In the light of this, it would appear that the payments to the customs officials were actually bribes to make sure that they did not search the ship after it had left the customs house in Bristol, for the function of the 'searchers' was to check that ships did not lade goods after leaving customs.

This account illustrates that several other merchants, mariners and customs officials were involved in illicit exports along with Smyth. However, from the formalised way in which the account is detailed, with shares in the fraud actually being sold by Smyth for a slight profit, it appears that fraud was a regularised activity at this time. However, what is particularly interesting about this voyage is that apart from lading grain, Smyth also laded leather on the ship. The export account which deals with this and the accounts which deal with Smyth's purchase of the said leather are provided below:

Smyth's Export Account for February 1541[29]

Viages to Biscay in este Spayne...
Itm. the 15 day of February anno 1540 lode in my ship the
Trynte, master under God John Darby...
7 dicker ox lether & 10 dicker & 1 hide cow &
stere which cost clere abord £41 1s 8d as it may apere fo.
119. More 127 dozens of calve skuns which cost clere
abord £41 4s 9d as it may apere fo. 119.

[28] Vanes, 'The Overseas Trade of Bristol in the Sixteenth Century' (PhD thesis), pp. 96-97.
[29] *Smyth's Ledger,* fo. 69. Smyth gives the year as 'anno 1540' because he took Lady Day (25 March) as the start of the year.

Smyth's Hides Account for December 1540 [30]

Hides owith for my owne acowmpt the 16 day of December 43s 4d for so myche pd. to Lawrence Hancot for won dickar of cow & stere, montith	£2	3s	4d
Itm. the same day 9 dicker & 1 hide cowe & stere bowght of Machyn at 40s 40d the dicer & 7 dicker ox lether at 53s 4d the dicker, montith £38 3s 4d	£38	3s	4d
Itm. for bryngyng it abord the Trynte 15s		15s	
	£41	1s	8d

Smyth's Calf Skins Account for November-December 1540 [31]

Calve skuyns for my owne acowmpt owith the 10 daye of November £16 16s 8d that is for 6 dozens bowght at Wursettor of Thomas Aberley for 43s 4d & at Glocester for 15 dozens bowght of Luyes tanner & 20 dozens of Edmond Allen at 6s 8d the dozen & ffor 12 dozens bowght of Richard Allen at 5s the dozen, montith	£16	16s	8d
Itm. the 16 day of December £13 19s 9d for 44 dozens bowght of Lawrence Hanckot for the same somm	£13	19s	9d
Itm. the seid day £9 which is for 30 dozens calve skuyns r. of Thomas Machyn at 6s the dozen montith	£9		
Itm. for costes & charges to ride for to by them & to lade them		13s	4d
Itm. for bryngyng them abord the Trynte 15s		15s	
	£41	4s	9d

Smyth's account for that voyage indicates that he laded 70 ox hides, 101 cow and steer hides and 127 dozen calf skins on the ship. The cost of the hides was listed as £41 1s. 8d. clearaboard. The cost of the calf skins was £41 4s. 9d. clearaboard. The origin of all this leather is indicated in a leather account. This notes the cost of buying the leather from up-country merchants. A total of 30s. was added for bringing the leather directly aboard the *Trinity* and 13s. 4d. was added for the costs of riding to fetch the leather. The total costs indicated in the leather accounts exactly match the clearaboard cost. This means that none of the leather could have been licensed or customed and that Smyth did not even bother to bribe any customs officials in this case. He presumably considered it safe to do this because, since he had already bribed them to overlook his grain exports, they were not likely

[30] *Smyth's Ledger,* fo. 119.
[31] *Smyth's Ledger,* fo. 119.

to investigate his ship to check on his leather exports. This account also reveals the mechanism by which it was possible to avoid the customs house in its reference to the bringing of the leather directly aboard the ship. This was in itself an illegal practice, for all goods destined for export were meant to pass through the customs house at Bristol. Since Smyth could hardly have laded his ship from the boat while it was sitting in the middle of the harbour at Bristol, the lading of the ship with uncustomed goods almost certainly took place in the Bristol Channel. That this did happen in practice is indicated by various other references in his ledger to the lading of leather or grain in the Kingroad, Hungroad or Chareston Pool - which lay in the Bristol Channel.[32] This appears to have been the normal way of evading customs for in 1543 an Act of Parliament was passed with the specific intent of preventing ships from dumping ballast in the Kingroad and Hungroad prior to lading illicit cargoes of grain from river boats.[33]

Although there is not always sufficient data to make a judgement about whether or not Smyth or Tyndall were engaged in illicit exports of grain or leather, in every case where sufficient information exists to make a judgement, they failed to declare at least part of their cargoes. In all, the commercial records of these two merchants indicate the involvement of at least five customs officials and thirty-two merchants, ship's masters and suppliers from Bristol, Gloucester, Caerleon and the upper reaches of the Severn Estuary. Like Smyth, many of the merchants involved were major figures in Bristol's commercial community and senior members of the Bristol establishment, holding political office up to the rank of sheriff, mayor or M.P. A summary of the evidence relating to these individuals is given below.

[32] *Smyth's Ledger,* fos. 25, 47, 87, 120, 128.
[33] 'An Acte for the preservacon of the Ryver Severne', *Statutes of the Realm*, Vol. III, pp. 906-7.

Table 2.17 – List of those Involved in the Illicit Export Trade, 1539-1550

Name	Home town	Involvement	High Office [34]
Edward Butler [35]	Bristol	shipping	
William Carr [36]	Bristol	shipping, trading	Sheriff / Mayor / M.P.
Francis Codrington [37]	Bristol	shipping, trading	Sheriff
John Cutt [38]	Bristol	shipping	Sheriff / Mayor
Francis Fowler [39]	Bristol	trading	
Thomas Harris [40]	Bristol	shipping	Sheriff
Thomas Hicks [41]	Bristol	shipping	Chamberlain
Edward Pryn [42]	Bristol	shipping, trading	Sheriff
John Smyth [43]	Bristol	shipping, trading	Sheriff / Mayor
William Sprat [44]	Bristol	shipping	Sheriff
Nicholas Thorn [45]	Bristol	shipping	Sheriff / Mayor / M.P.
Robert Tyndall [46]	Bristol	shipping, trading	
William Tyndall [47]	Bristol	shipping, trading	Sheriff / M.P.
George Winter [48]	Bristol	shipping	
William Young [49]	Bristol	trading	Sheriff / Mayor
William Jones [50]	Caerleon	shipping, trading	
Robert Pole [51]	Gloucester	shipping, trading	
John Boshar [52]	Bristol	ship's master	
John Derby [53]	Bristol	trading, ship's master	
Bastian Millior [54]	unknown	ship's master	
Anthony Piggot [55]	Bristol	ship's master	
Robert Thomas [56]	Bristol	ship's master	

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[34] W. Barrett, *The History and Antiquities of the City of Bristol* (1789) pp. 117, 155-56, 684-85.
[35] App. 6, *Margaret* of Bristol (1541).
[36] *Smyth's Ledger,* fo. 71; App. 6, *Harry* of Bristol (26 February 1541).
[37] *Smyth's Ledger,* fo. 71; App. 6, *Harry* of Bristol (26 February 1541).
[38] App. 6, *Magdalen* of Bristol (1540).
[39] App. 6, *Jesus* of Bristol (8 March 1540).
[40] App. 6, *Mary Conception* of Bristol (19 September 1549).
[41] App. 6, *Harry* of Bristol (26 February 1540).
[42] App. 6, *Margaret* of Bristol (1541).
[43] See discussion in this chapter, pp. 44-52.
[44] App. 6, *Jesus* of Bristol (8 March 1540).
[45] App. 6, *Mary Conception* (March 1540).
[46] Vanes, *Overseas Trade*, pp. 46, 119, 137; P.R.O. E122 21/12.
[47] Vanes, *Overseas Trade*, pp. 46, 119, 137; P.R.O. E122 21/12: App. 6, *Trinity* of Bristol (15 February 1541).
[48] App. 6, *Hart* of Bristol (5 April 1549).
[49] App. 6, *Magdalen* of Bristol (1540).
[50] App. 6, *Trinity of Wales* of Caerleon (16 October 1540).
[51] App. 6, *Mary Fortune* of Gloucester (12 December 1541).
[52] App. 6, *Mary Conception* of Bristol (19 September 1549).
[53] App. 6, *Trinity* of Bristol (15 February 1541).
[54] App. 6, *Trinity of Wales* of Caerleon (16 October 1540).
[55] *Smyth's Ledger,* fo. 87.
[56] App. 6, *Jesus* of Bristol (8 March 1540).

Thomas Webb [57]	Bristol	trading, ship's master	
Nicholas Weysford [58]	unknown	ship's master	
William Bullock [59]	Elmore	illegal lading	
John Laughton [60]	Hanley	illegal lading	
Thomas Machet [61]	Berkeley	illegal lading	
John Russel [62]	Longney	illegal lading	
John Spark [63]	Newnham	illegal lading	Mayor of Newnam
William Taylor [64]	Tewkesbury	illegal lading	
William Trawnter [65]	Longney	illegal lading	
Giles Dane [66]	Bristol	customs searcher	
William Hill [67]	Bristol	customs searcher	
Tristram Lecknor [68]	Bristol	customs searcher	
Anthony Stanbank [69]	Bristol	customs searcher	Sheriff / Mayor
Unknown [70]	Bristol	customs searcher	
Unknown [71]	Gloucester	customs searcher	

The reason why so many Bristol merchants engaged in the illicit trade becomes clear when the profit margins on the leather and grain trade are compared to those achievable in the other export trades. Although the layout of Smyth's export accounts often means that it is impossible to estimate the profit margins on individual consignments, those cases where this can be done indicate that Smyth's highest profits were achieved in the grain and leather trades. For instance over the period 1539-41, Smyth's net profits on grain exports were generally between 50% and 150%, while his net profits on leather could be as high as 84%.[72]

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[57] App. 6, *Trinity* of Bristol (13 January 1541, 19 May 1542, 22 September 1542).
[58] Master of the *Clement* of Framilode: *Smyth's Ledger,* fo. 174; P.R.O. E122 199/4.
[59] *Smyth's Ledger,* fo. 87.
[60] *Smyth's Ledger,* fo. 119 (reproduced on p. 48); App. 6, *Trinity* of Bristol (15 February 1541).
[61] *Smyth's Ledger,* fo. 128.
[62] *Smyth's Ledger,* fo. 120.
[63] *Smyth's Ledger,* fos. 186, 264.
[64] *Smyth's Ledger,* fo. 25.
[65] *Smyth's Ledger,* fo. 47.
[66] Vanes, *Overseas Trade*, p. 119.
[67] Vanes, *Overseas Trade*, p. 119.
[68] See discussion this chapter, pp. 48-49.
[69] See discussion this chapter, pp. 48-49.
[70] See discussion this chapter, pp. 48-49.
[71] See discussion this chapter, pp. 48-49.
[72] Smyth's net profit margin over buying costs on grain exports can be determined for seven voyages made between 1539 and 1541. These were: *Trinity* of Bristol / Anton de Astecu's ship (July 1539) 191.875 quarters wheat, 71.0625 quarters beans – clearaboard £117 10d., net sale £197 1d., profit 68%; *Jesus* of Bristol (8 March 1540) 14.5 quarters wheat – clearaboard £6 19s. 1d., net sale £10 10s. 6d, profit 51%; *Margaret* of Bristol / *Harry* of Bristol (August 1540) 99 quarters wheat – clearaboard £40, net sale £99 9s. 5d., profit 149%; *Trinity* of Wales (October 1540) 80 quarters wheat – clearaboard £24, net sale £50, profit 108%; *Trinity* of Bristol / *Anthony* of the Porte (15 February

By contrast Smyth rarely made more than 10% net profit on cloth and he sometimes had to sell it at a loss.[73] After 1541 the profitability of the grain trade collapsed as prices rose in England and fell in Iberia. As a result, two of the four consignments Smyth dispatched in 1542-3 were sold at a loss, and two of the consignments were only sold after two years.[74] Although profits on leather also appear to have declined after 1541, respectable profits were still achievable. For instance, a consignment dispatched in 1542 was sold for a net profit of 13% and a 1545 consignment was sold for a net profit of 21%.[75] As the profits grain and leather declined, Smyth, along with the rest of Bristol's merchant community, began to

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1541) 472 quarters wheat, 248 quarters beans – clearaboard £218 17s. 8d., net sale £255 6s. 7d., profit 17%; *Harry* of Bristol (2 March 1541) 248 quarters wheat – clearaboard £85 10s. 10d., net sale £147 1s. 11d, profit 72%; *Trinity* of Bristol (17 August 1541) 323.125 quarters wheat – clearaboard £171, net sale £270 12s. 9d., profit 58%: *Smyth's Ledger*, fos. 55, 56, 103, 136. Smyth's profits on leather can be calculated for two voyages in this period: *Trinity* of Bristol / Anton de Astecu's ship (July 1539) 30 dicker hides, 1.33 doz calf skins – clearaboard £65 3s. 4d. (assumes the cost of wheat and beans on Astecu's ship, which is aggregated with the leather, was the same as that laded on the *Trinity*), net sale £119 19s, 3d., profit 84%; *Trinity* of Bristol (15 February 1541) 17.1 dicker hides, 127 doz calf skins – clearaboard £82 6s. 5d., net sale £134 16s. 1d., profit 64%: *ibid*, fos. 55, 69.

[73] For example: *Jesus* of Bristol / *Mary Christopher* of Bristol / *Trinity* of Wales (8 March 1540 / 6 April 1540) 20 cloths, 18 truckers – clearaboard £128, net sale £124 1s. 3d., loss 3%; *Trinity* of Bristol / *Primrose* of Bristol / *Anthony* of the Porte (15 February 1541 / 20 March 1541) 17 coarse truckers, 3 kerseys, 2 Aurbgeynes, 20 London cloths – clearaboard £127 5s., net sale £131 6s. 8d., profit 3%; *Mary James* of Bristol / *Mary Conception* of Bristol (15 October 1542) 10 cloths, 98 manchester cottons, 1 Bristol frieze – clearabord £114 10s., net sale £123, profit 7%; *San John* of Renteria / *San John* of Pasajes (11 April 1543) 30 cloths, 1 Bristol frieze, 1 manchester cotton – clearaboard £122 10s., net sale £138 5s. 2d, profit 13%; *Mary Conception* of Bristol / *Margaret* of Bristol / *Mary James* of Bristol (15 January 1544) 30 cloths, 111 manchesters – clearaboard £203 9s. 6d., net sale £207 10s. 4d., profit 2%; *Mary Conception* of Bristol / *Marieta* of Fuenterrabia (20 September 1546) 1 cloth, 3 truckers, 150 manchesters, 7 Bristol friezes – clearaboard £133 13s. 4d, net sale £131 4s., loss 2%: *Smyth's Ledger,* fos. 56, 69, 136, 174, 195, 254.

[74] *Trinity* of Bristol (31 January 1542) 19.125 quarters peas – clearaboard £17 13s., net sale (sold 26 November 1543) £13 5s. 10d., profit 74%; *Mary Fortune* of Gloucester (February 1542) 125.875 quarters wheat – clearaboard £75 17s. 11d., net sale £72 18s. 2d., loss 2%; *Trinity* of Bristol (15 October 1542) 184 quarters wheat – clearaboard £81, net sale £100 5s. 10d., profit 24%; *Clement* of Framilode (11 April 1543) 160 quarters wheat – clearaboard £67 15s., net sale (sold 12 May 1545) £62 11s. 8d., loss 8%: *Smyth's Ledger,* fos. 136, 174, 221.

[75] On 29 December 1542, Smyth valued 4.1 dicker hides and 27 dozen calf skins in San Sebastian at £21 5s. On 26 November 1543 he records their net sale for £23 19s. 8d., making 13% profit: *Smyth's Ledger,* fo.174. On 19 June 1544 Smyth records that he has 1.2 dicker hides and 213 dozen calf skins left in Guipuzcoa. This is valued, along with a consignment of wheat, at £150 10s.: *ibid*, fo. 221. The wheat, when it was laded on the *Clement* of Framilode in April 1543, had cost £67 15s. clearaboard: *ibid*, fos. 174, 196, 221. Smyth must therefore have been valuing the leather at £82 15s. On 9 August 1544, Smyth dispatched a further consignment of 62 dicker hides and 59.5 dozen calf skins, which cost clearaboard £169 6s. 8d. On 12 May 1545 he recorded the sale of all the above leather for £287 11d. 1f., 21% profit.: *ibid*, fo. 221.

export lead. However, his profits on lead between 1542-46 never exceeded 15% net and some consignments were sold at a loss.[76]

Given the high profits achievable on the grain and leather trades it is understandable why Smyth, in common with many other merchants, engaged in the export of grain until 1541 and why Bristol merchants continued to export leather thereafter. Although these goods could have been exported legally, the attraction of illicit trading was that it was much cheaper for the direct costs of legal export outweighed the cost of bribes by as much as 20:1.[77] This meant that the only disincentive to engaging in the trade was the danger of being caught, since this would result in the confiscation of the goods. However, if the customs searchers could be bribed, this would only occur if an informer made an official complaint about an illegal export, which forced the customs officials to act. Yet, even when this happened, the customs officers could aid the merchant by warning them of the planned search and assisting them afterwards if they were forced to seize the vessel. An excellent example of this is provided by Jean Vanes, in her examination of corrupt and illegitimate practices at Bristol. This concerns an illegal shipment of grain in 1558 by the aforementioned William and Robert Tyndall. In a letter before the seizure Robert is warned by William to depart with William's pinnace since:

> 'I have hadd much talke with the Custumer and Comptroller, who be honest men but yott (beyng enformed) must nedes doo what they wold nat willyngly. And therefore I pray God send tyme for that pynnas that she may depart, otherwise I feare me the officers must nedes cumm aboord and for ther owne discharge doo harme'[78]

In the event Robert did not get away in time and the ship, the *Margaret* of Elmore, was seized with 40 quarters of undeclared wheat. Nevertheless, the customs searcher, William

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[76] *Trinity* of Bristol (15 October 1542) 7.05 tons lead – clearaboard £33 17s. 6d., net sale £38 5s. 10d., profit 13%; *Trinity* of Bristol (8 January 1544) 2.05 tons lead – clearaboard £10, net sale £9 4s. 6d, loss 8%; *John Baptist* of Renteria / *Peter* of Pasajes (4 April 1544 / 12 April 1544) 16.25 tons lead – clearaboard £71 10s., net sale (on 13 May 1545) £72 18s. 2d., profit 2%; *Marieta* of Fuenterrabia / *Mary Conception* of Bristol / *Trinity* of Wales (20 September 1546) 50.518 tons lead – clearaboard £269 8s. 7d, net sale £310 10s. 4d., 15% profit.: *Smyth's Ledger,* fos. 136, 196, 221, 254.

[77] For instance, as noted earlier in this chapter, when the *Trinity* left Bristol in February 1541 it was carrying at least 404 quarters wheat, 17.1 dicker hides and 127 dozen calf skins uncustomed. The cost of legally exporting this cargo would have been £104 7s. 4d for the wheat and £24 8s. 4d. for the leather - assuming a licence cost 13s. 4d per dicker. The legal dues would thus have equalled £128 15s. 4d. while the cost of the bribes Smyth paid came to £6 10s. 8d.

[78] Vanes, *Overseas Trade*, p. 46.

Harvest, valued the ship at only £10 and, although an Act of 1554 stated that vessels carrying illicit goods should also be confiscated, Robert Tyndall was able to redeem the ship by making an official payment of £2 2s. 4d. and an unofficial payment of £3 to Harvest.[79]

For their part there was also a strong incentive for potential informers to keep quiet, for if they did inform on a merchant, they could be made to suffer for it. Such an instance is illustrated in another case noted by Vanes, in which a man called Tegge Plowman reported Edward Pryn for illegally exporting grain in 1541. However, as Vanes writes 'he soon found that he was provoked into a quarrel; whereupon half the Town Council including Pryn with the Mayor and Recorder apparently came armed to seize him and put him in the pillory.'[80]

The above study has indicated that the illicit export trade was a widespread, efficiently organised and often highly profitable activity. It was possible to prosecute it at Bristol in the knowledge that the customs searchers could be bribed and the city's council was dominated by a merchant elite who were themselves engaged in the illicit trade. However, this does not necessarily mean that all merchants had equal access to the illicit trade, for success clearly depended on maintaining close relations with both the local customs officials and the city's elite. This point is illustrated by the case of a Bordeaux merchant who sought to export grain from the area in 1518.[81] In a later complaint to the French authorities, the merchant noted that, having obtained a licence to export 228 quarters corn and 210 quarters beans, he laded his cargo in a Breton ship and sailed to Charston's Pool to prepare his voyage. He claimed that he then sent a boat to Bristol to buy victuals but the boat was subsequently seized by a shipload of armed men and the crew imprisoned at Bristol, presumably on the grounds that the victuals they were carrying represented an illicit export. The merchant complained that, although he was not found guilty of any offence, it had cost him a great deal of time and money to secure the release of his crew and he lost his voyage as a result. His experience in dealing with the authorities thus provides a marked contrast to those of John Smyth, Edward Pryn, or the Tyndall brothers, and illustrates the means by which Bristol's commercial elite could have used their political power to exclude foreign competitors from the illicit trade.

[79] Vanes, 'The Overseas Trade of Bristol in the Sixteenth Century' (PhD thesis), pp. 110-11.
[80] Vanes, ibid., pp. 99-100.
[81] Vanes, *Overseas Trade*, p. 79.

Apart from the advantages of maintaining close contacts with city officials, engagement in the illicit trade also appears to have been facilitated by the maintenance of a close network of suppliers and the possession of warehouses up the Severn Estuary. John Smyth's main suppliers of leather and wheat all came from small towns along the River Severn and the Severn Estuary. These men are listed in Table 2.17 as 'illegal laders'. Sometimes these agents delivered Smyth's illicit cargoes directly to ships in the Bristol Channel. At other times their goods were collected at the house of his agent, John Spark, in Newnham, where they could be stored away from prying eyes until required.[82] Without the political and commercial contacts that Bristol merchants enjoyed, the costs and risks of the illicit trade must have been much greater. Given this, it seems likely that, Bristol's merchants, who already dominated the city's declared trade, probably had a virtual monopoly of the illicit trade. Yet, even among them, not all would have been equally well placed to conduct this trade. This was because not all of them were shipowners and, as will be seen in chapter 3, there appear to have been advantages to merchants owning their own ships if they were engaged in the illicit trade. So, while the basic cost differentials that fuelled the illicit trade were equally attractive to all, not all merchants were equally well placed to exploit it.

While all the evidence that has been presented here relates to illicit exports to the Continent, there was almost certainly also an illicit trade in grain to Ireland. The existence of such a trade seems a certainty, since licences were required to export grain to Ireland and a number of such licences were granted between June 1539 and April 1542.[83] These were granted in order to relieve food shortages in the English territories and the provision of licences at this time explains why such large quantities of grain were exported from Bristol to Ireland in 1541/2. However, since licences were required, it seems highly likely that more, possibly much more, was exported illegally. On the other hand, it is unlikely that any leather would have been illicitly exported to Ireland, since Ireland itself was a significant exporter of hides and skins.

Having outlined the main features of Bristol's declared and illicit trades it is possible to examine the level of demand for shipping generated by Bristol's trade.

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[82] *Smyth's Ledger,* fos. 186, 264.
[83] *L&P*, XIV, i, no. 1192/37; ii, no. 113/26; XV, no. 611/14; XVI, no. 220/32, 1056/80; XVII, nos. 71/16, 285/19.

The Commercial Shipping Market

As with the study of Bristol's trade, the structure and extent of shipping demand generated by Bristol's declared trade will be examined through the three surviving customs accounts of the 1540s. To develop a sophisticated account of shipping demand requires the customs records of goods shipped to be translated into an estimate of tonnages shipped. At first sight this might appear to present an insurmountable problem, for although the notion of a ton of cargo capacity had become well established by the 1540s, the weight or volume of many goods appearing in the customs accounts is unknown.[84] However, for the Continental shipping market, it was possible to produce an estimate of tonnages shipped from the customs accounts. This was because the vast majority of shipping demand in this branch of Bristol's trade came from a small number of goods, which are recorded in the customs accounts either according to their tonnage or in a form that can readily be translated into tonnage. This means that, even if major errors were made in the estimated weight of some of the minor items that appear in this trade, these errors would have little impact on the overall pattern of shipping demand. Unfortunately, the highly varied nature of the Irish trade and the difficulty of determining the tonnage of goods shipped to and from Ireland, meant that it was not possible to estimate tonnages shipped in this branch of the city's trade. The analysis of shipping demand generated by the Irish trade is therefore less sophisticated. Nevertheless, it is still possible to determine some of the basic features of Irish shipping demand by examining trade statistics and shipping movements.

Continental Shipping Demand

As noted earlier, Bristol's import trade from the Continent was dominated by a small group of products. Since these commodities were all quite bulky relative to their weight, the most important trade items, like wine, oil and iron, also accounted for the bulk of shipping demand. Tables 2.7 and 2.8 and their accompanying graphs, Figures 2.2 and 2.3 illustrate the gross monthly tonnage of goods shipped between Bristol and the Continent and indicate which commodities were responsible for most of the shipping demand. Full details of how the tonnage of the different commodities was calculated are provided in Appendix 1.

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[84] The cargo ton, used by all English merchant-shipowners from the fifteenth century until modern times, was based originally on the tun of Bordeaux wine, which weighed 2,240 lbs. and took-up 40 cubic feet of capacity: D. Burwash, *English Merchant Shipping 1460-1540*, pp. 91-95.

Table 2.18 – Tons Imported: Continent to Bristol: 1541/2, 1542/3, 1545/6

Year & Month	Wine Tons	Iron Tons	Salt Tons	Oil Tons	Fruit Tons	Woad Tons	Misc. Tons	Total Tons
1541/10	0	0	0	0	0	57	0	57
1541/11	813	38	0	2	15	4	9	881
1541/12	581	0	0	12	133	12	12	750
1542/1	36	0	0	0	0	0	0	36
1542/2	2	0	0	0	0	0	0	2
1542/3	45	57	0	0	2	10	4	118
1542/4	34	353	41	4	0	0	9	441
1542/5	2	81	28	0	0	46	1	157
1542/6	50	38	104	14	13	173	5	397
1542/7	8	59	52	182	0	0	132	432
1542/8	2	213	96	0	0	0	6	317
1542/9	0	0	0	0	0	10	85	95
1542/10	7	0	0	0	33	0	0	40
1542/11	0	0	0	0	0	0	0	0
1542/12	0	70	0	0	0	0	0	70
1543/1	59	0	0	0	58	10	1	128
1543/2	951	151	10	35	53	17	18	1235
1543/3	0	30	0	0	0	0	0	30
1543/4	17	0	0	0	38	2	0	56
1543/5	2	0	0	0	0	9	0	11
1543/6	0	0	38	0	0	0	0	38
1543/7	12	250	120	0	0	1	17	399
1543/8	1	0	0	0	0	0	0	1
1543/9	15	56	0	0	0	2	0	72
1545/10	63	0	21	0	0	0	2	86
1545/11	487	127	55	0	20	5	12	706
1545/12	204	35	17	0	62	0	6	324
1546/1	260	0	2	43	19	0	9	334
1546/2	425	128	93	65	54	0	33	797
1546/3	449	71	77	51	16	0	16	681
1546/4	0	0	6	0	0	0	0	6
1546/5	113	178	20	47	1	3	40	403
1546/6	24	0	22	2	0	0	1	49
1546/7	16	5	8	91	0	5	0	125
1546/8	32	2	181	0	0	33	5	252
1546/9	106	155	327	0	1	26	5	619
Total for 3 Years	4811	2095	1317	547	518	424	432	10145

Table 2.19 – Tons Exported: Bristol to Continent: 1541/2, 1542/3, 1545/6

Year & Month	Lead	Coal	Cloth	Leather	Misc.	Total Tons
1541/10	8	0	9	2	0	19
1541/11	0	0	6	0	0	6
1541/12	0	6	2	0	12	20
1542/1	15	0	10	9	0	34
1542/2	76	0	68	1	0	144
1542/3	2	4	13	0	6	25
1542/4	0	18	1	0	2	22
1542/5	45	34	15	5	2	102
1542/6	0	22	0	0	0	22
1542/7	4	0	9	3	2	17
1542/8	24	0	33	1	0	57
1542/9	68	0	109	25	21	223
1542/10	12	46	9	0	0	67
1542/11	0	0	0	0	0	0
1542/12	0	0	0	0	0	0
1543/1	0	0	0	0	0	0
1543/2	0	0	0	0	0	0
1543/3	0	0	11	1	1	13
1543/4	0	0	0	1	6	7
1543/5	0	0	0	0	0	0
1543/6	0	0	0	0	0	0
1543/7	36	0	44	20	2	102
1543/8	0	0	0	0	0	0
1543/9	10	0	2	5	0	17
1545/10	278	0	91	16	5	390
1545/11	13	0	1	4	0	17
1545/12	8	80	17	22	0	127
1546/1	0	0	0	9	0	9
1546/2	8	40	27	40	2	117
1546/3	132	24	120	38	1	316
1546/4	13	0	28	4	0	45
1546/5	10	0	9	20	0	39
1546/6	32	28	5	10	1	76
1546/7	135	0	3	1	0	138
1546/8	69	49	28	16	2	164
1546/9	97	34	42	15	0	187
Total for 3 Years	1093	385	710	267	67	2522

Figure 2.2 - Tons Imported: Continent to Bristol: 1541/2, 1542/3, 1545/6

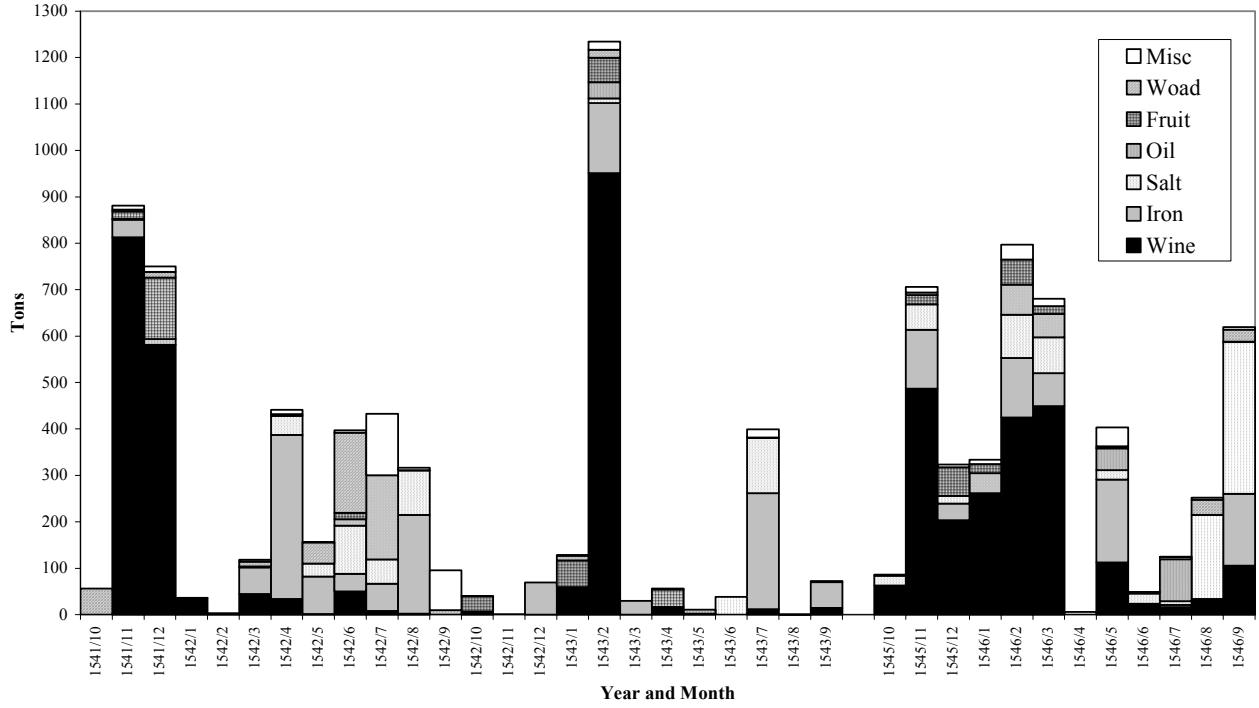


Figure 2.3 - Tons Exported: Bristol to Continent: 1541/2, 1542/3, 1545/6

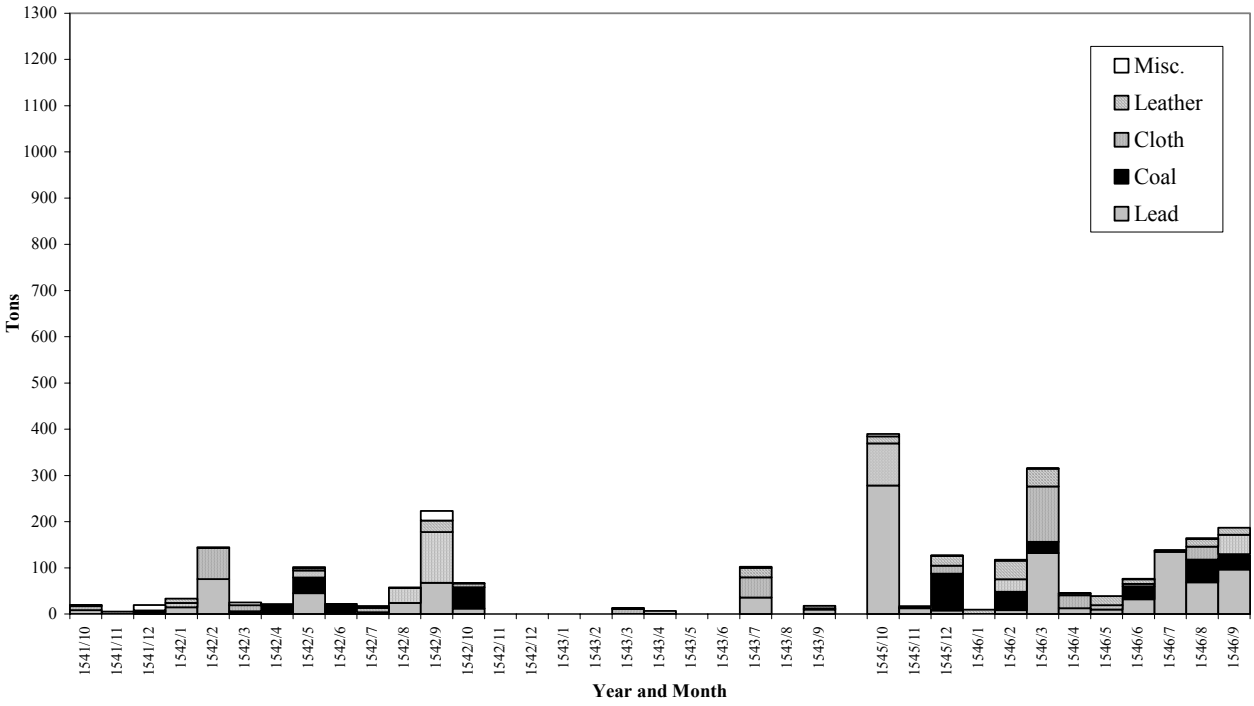


Table 2.18 and Figure 2.2 illustrate that the annual demand for freight services was not even throughout the year. In all three years examined, the highest demand for shipping was associated with the winter wine trade from France and Iberia. The needs of this trade meant that during a very short period of time a great deal of shipping was required.[85] Since most mercantile capital was invested in the wine trade at this time of year, few other goods were shipped during the winter. However, during the spring and summer merchants directed their capital into alternative commodities such as salt and Spanish iron. The above figures also indicate that the gross level of shipping demand could vary considerably from year to year. For instance, the gross level of tonnage shipped in 1545/6 was more than twice that shipped in 1542/3.

Turning from imports to exports, Table 2.19 and Figure 2.3 illustrate that cloth, leather, lead and grain dominated exports to the Continent. The most striking feature of this graph is that the tonnage of goods exported from Bristol was only a quarter of that imported. The main reason for this is that cloth and leather dominated English exports. Since these were of much higher value relative to their weight than the main imports, export shipping demand would still have been lower than import shipping demand, even if the value of Bristol's exports had exceeded that of imports. The above figures thus indicate that the secular imbalance between England's import and export shipping demand, which existed in the seventeenth and eighteenth centuries, was also a feature of Bristol's mid-sixteenth century trade.[86] This imbalance would have had enormous implications for shipowners engaged in Bristol's Continental trade, since their vessels would have been under-utilised on the Bristol to the Continent leg of their voyages. As a result shipowners, who depended entirely on the declared trade, would have had to charge a high price for freighting goods from the Continent to Bristol, since their costs would have to be covered primarily by this part of their voyages. However, in the study of Bristol's overseas trade it has already been demonstrated that not all of Bristol's export trade was declared. Since the illicit trade involved exports, its demand for shipping services must have helped to rectify the secular imbalance that existed between the demand for import and export shipping generated by Bristol's declared trades. To evaluate the potential importance of shipping demand

[85] Indeed, in reality the total level of demand associated with the wine trade was actually higher than suggested by the table, since the loss of wine during voyages, called ullage, meant that the amounts laded were typically 5-10% higher than that customed in Bristol.
[86] R. Davis, *The Rise of the English Shipping Industry*, pp.185-87.

generated by the illicit trades, John Smyth's call on shipping services during the years under study will be examined.

Table 2.20 - Smyth's Imports from the Continent 1539-46, in Tons

Year & Month	Wine	Iron	Oil	Misc.	Year & Month	Wine	Iron	Oil	Misc.
1539/1	0.0	0.0	0.0	0.0	1542/12	0.0	0.0	0.0	0.0
1539/2	0.0	0.0	0.0	0.0	1543/1	0.0	0.0	0.0	0.0
1539/3	0.0	0.0	0.0	0.0	1543/2	29.5	0.0	5.0	1.2
1539/4	0.0	46.7	0.0	0.0	1543/3	10.0	0.0	0.0	0.0
1539/5	0.0	13.0	0.0	0.0	1543/4	0.0	0.0	0.0	0.0
1539/6	0.0	0.0	0.0	0.0	1543/5	0.0	0.0	0.0	0.0
1539/7	0.0	0.0	0.0	0.0	1543/6	0.0	0.0	0.0	0.0
1539/8	0.0	0.0	0.0	0.0	1543/7	0.0	46.3	0.0	0.0
1539/9	0.0	0.0	0.0	0.0	1543/8	0.0	0.0	0.0	0.0
1539/10	0.0	50.0	0.0	0.0	1543/9	0.0	0.0	0.0	0.0
1539/11	5.0	0.0	0.0	0.0	1543/10	0.0	0.0	0.0	0.0
1539/12	50.8	0.0	0.0	0.0	1543/11	0.0	0.0	0.0	0.0
1540/1	2.0	0.0	5.0	0.0	1543/12	0.0	20.0	0.0	0.0
1540/2	10.0	0.0	0.0	0.0	1544/1	0.0	0.0	0.0	0.0
1540/3	0.0	0.0	0.0	0.0	1544/2	66.0	0.0	0.0	5.0
1540/4	0.0	48.1	0.0	0.0	1544/3	0.0	50.0	0.0	0.0
1540/5	0.0	0.0	0.0	0.0	1544/4	0.0	0.0	0.0	0.0
1540/6	0.0	0.0	0.0	6.8	1544/5	27.3	4.0	0.0	0.0
1540/7	0.0	0.0	6.0	10.7	1544/6	0.0	0.0	9.5	0.0
1540/8	0.0	57.0	6.3	0.0	1544/7	14.0	45.2	8.5	0.0
1540/9	0.0	0.0	0.0	0.0	1544/8	0.0	0.0	0.0	0.0
1540/10	0.0	0.0	0.0	0.0	1544/9	0.0	0.0	0.0	0.0
1540/11	26.5	0.0	0.0	0.7	1544/10	0.0	20.0	0.0	0.0
1540/12	48.3	0.0	0.0	0.0	1544/11	0.0	0.0	0.0	0.0
1541/1	0.0	0.0	0.0	0.0	1544/12	0.0	0.0	0.0	0.0
1541/2	0.0	0.0	0.0	0.0	1545/1	0.0	0.0	0.0	0.0
1541/3	0.0	0.0	0.0	0.0	1545/2	6.0	0.0	0.0	0.0
1541/4	0.0	50.0	0.0	0.0	1545/3	0.0	0.0	0.0	0.0
1541/5	0.0	0.0	0.0	0.0	1545/4	0.0	0.0	0.0	0.0
1541/6	0.0	0.0	0.0	0.0	1545/5	0.0	46.6	0.0	0.0
1541/7	0.0	0.0	0.0	0.0	1545/6	0.0	0.0	0.0	0.0
1541/8	0.0	0.0	40.0	0.0	1545/7	0.0	0.0	0.0	0.0
1541/9	0.0	0.0	0.0	0.0	1545/8	0.0	0.0	0.0	0.0
1541/10	0.0	10.0	0.0	0.0	1545/9	0.0	0.0	0.0	0.0
1541/11	66.0	0.0	0.0	1.8	1545/10	0.0	0.0	0.0	0.0
1541/12	38.8	0.0	0.0	0.0	1545/11	38.6	0.0	0.0	0.0
1542/1	0.0	0.0	0.0	3.8	1545/12	0.0	0.0	0.0	0.0
1542/2	0.0	0.0	0.0	0.0	1546/1	0.0	0.0	0.0	0.0
1542/3	0.0	0.0	0.0	0.0	1546/2	0.0	0.0	0.0	0.0
1542/4	0.0	89.0	0.0	0.0	1546/3	0.0	0.0	0.0	0.0
1542/5	0.0	8.1	0.0	0.0	1546/4	0.0	0.0	0.0	0.0
1542/6	0.0	0.0	0.0	0.0	1546/5	0.0	0.0	0.0	0.0
1542/7	0.0	0.0	3.0	0.0	1546/6	0.0	0.0	0.0	0.0
1542/8	0.0	63.0	0.0	0.0	1546/7	0.0	0.0	0.0	0.0
1542/9	0.0	0.0	0.0	0.0	1546/8	0.0	0.0	0.0	0.0
1542/10	0.0	0.0	0.0	0.0	1546/9	0.0	0.0	0.0	0.0
1542/11	0.0	0.0	0.0	0.0	Total	438.6	666.9	83.3	29.9

Table 2.21 - Smyth's Exports to the Continent 1539-46, in Tons

Year & Month	Grain	Lead	Cloth	Leather	Misc.	Year & Month	Grain	Lead	Cloth	Leather	Misc.
1539/1	0.0	0.0	0.0	0.0	0.0	1542/12	0.0	0.0	0.0	0.0	0.0
1539/2	0.0	0.0	0.4	0.5	0.0	1543/1	0.0	0.0	0.0	0.0	0.0
1539/3	53.3	0.0	3.2	0.8	0.0	1543/2	0.0	0.0	0.0	0.0	0.0
1539/4	0.0	0.0	0.0	0.0	0.0	1543/3	0.0	0.0	0.0	0.0	0.0
1539/5	0.0	0.0	0.0	0.0	0.0	1543/4	24.0	0.0	2.8	4.8	0.0
1539/6	0.0	0.0	2.4	0.0	0.0	1543/5	0.0	0.0	0.0	0.0	0.0
1539/7	4.3	0.0	0.0	1.8	0.0	1543/6	0.0	0.0	0.0	0.0	0.0
1539/8	48.3	0.0	4.9	3.6	0.0	1543/7	0.0	0.0	2.9	5.2	0.0
1539/9	0.0	0.0	0.0	0.0	0.0	1543/8	0.0	0.0	0.0	0.0	0.0
1539/10	0.0	0.0	0.0	0.0	2.0	1543/9	0.0	0.0	0.0	0.0	0.0
1539/11	0.0	0.0	0.0	0.0	0.0	1543/10	0.0	0.0	1.9	0.0	0.0
1539/12	0.0	0.0	0.0	0.0	0.0	1543/11	0.0	0.0	0.0	0.0	0.0
1540/1	0.0	0.0	0.0	0.0	0.0	1543/12	0.0	0.0	0.0	0.0	0.0
1540/2	0.0	0.0	0.0	0.0	0.0	1544/1	0.0	2.1	8.5	12.3	0.2
1540/3	40.1	0.0	2.4	10.3	0.0	1544/2	0.0	0.0	0.0	0.0	0.0
1540/4	0.0	0.0	0.1	0.0	0.0	1544/3	0.0	0.0	0.0	0.0	0.0
1540/5	0.0	0.0	0.0	0.0	0.0	1544/4	0.0	16.3	2.8	0.0	0.0
1540/6	49.8	0.0	1.8	1.3	0.0	1544/5	0.0	0.0	0.0	0.0	0.0
1540/7	16.8	0.0	0.1	0.0	0.0	1544/6	0.0	0.0	0.0	0.0	0.0
1540/8	19.8	0.0	3.6	0.0	2.0	1544/7	0.0	0.0	0.0	0.0	0.0
1540/9	0.0	0.0	0.0	0.0	0.0	1544/8	0.0	0.0	8.7	12.1	0.0
1540/10	12.0	0.0	0.0	0.0	0.0	1544/9	0.0	0.0	0.0	0.0	0.0
1540/11	0.0	0.0	0.0	0.0	0.0	1544/10	0.0	0.0	0.0	0.0	0.0
1540/12	0.0	0.0	0.0	0.0	0.0	1544/11	0.0	0.0	0.0	0.0	0.0
1541/1	0.0	0.0	0.0	0.0	0.0	1544/12	0.0	0.0	0.0	0.0	0.0
1541/2	57.6	0.0	2.8	5.3	0.0	1545/1	0.0	0.0	0.0	0.0	0.0
1541/3	87.6	0.0	2.9	0.0	0.0	1545/2	0.0	0.0	0.0	0.0	0.0
1541/4	0.0	0.0	0.0	0.0	0.0	1545/3	0.0	0.0	0.0	0.0	0.0
1541/5	0.0	0.0	0.0	0.0	0.0	1545/4	0.0	0.0	5.0	0.0	0.0
1541/6	0.0	0.0	2.6	0.0	0.0	1545/5	0.0	0.0	0.0	0.0	0.0
1541/7	0.0	0.0	0.0	0.0	0.0	1545/6	0.0	0.0	4.2	11.1	0.0
1541/8	64.6	10.6	4.2	5.4	0.0	1545/7	0.0	0.0	0.0	0.0	0.0
1541/9	0.0	0.0	1.6	0.0	2.0	1545/8	0.0	0.0	0.1	0.0	0.0
1541/10	0.0	0.0	0.1	0.0	0.0	1545/9	0.0	0.0	0.0	0.0	0.0
1541/11	0.0	0.0	1.3	0.0	0.0	1545/10	0.0	0.0	0.0	0.0	0.0
1541/12	25.3	0.0	0.0	0.0	0.0	1545/11	0.0	0.0	0.0	0.0	0.0
1542/1	3.8	12.2	3.7	9.9	0.0	1545/12	0.0	0.0	0.0	0.0	0.0
1542/2	0.0	0.0	1.1	0.0	0.0	1546/1	0.0	0.0	0.0	0.0	0.0
1542/3	0.0	0.0	0.0	0.0	0.0	1546/2	0.0	0.0	0.0	0.0	0.0
1542/4	0.0	0.0	0.0	0.0	0.0	1546/3	0.0	0.0	0.0	0.0	0.0
1542/5	2.4	10.2	4.5	5.3	0.0	1546/4	0.0	0.0	0.0	0.0	0.0
1542/6	0.0	0.0	0.0	0.0	0.0	1546/5	0.0	0.0	0.0	0.0	0.0
1542/7	0.0	0.0	0.0	0.0	0.0	1546/6	0.0	0.0	0.0	0.0	0.0
1542/8	0.0	0.0	0.0	0.0	0.0	1546/7	0.0	0.0	0.0	0.0	0.0
1542/9	27.6	7.1	0.0	0.0	0.0	1546/8	0.0	0.0	0.0	0.0	0.0
1542/10	0.0	0.0	4.2	0.0	0.0	1546/9	0.0	50.5	5.4	0.0	0.0
1542/11	0.0	0.0	0.0	0.0	0.0	Total	537.4	108.8	90.2	89.7	6.2

Figure 2.4 - Smyth's Imports from the Continent 1539-46, in Tons

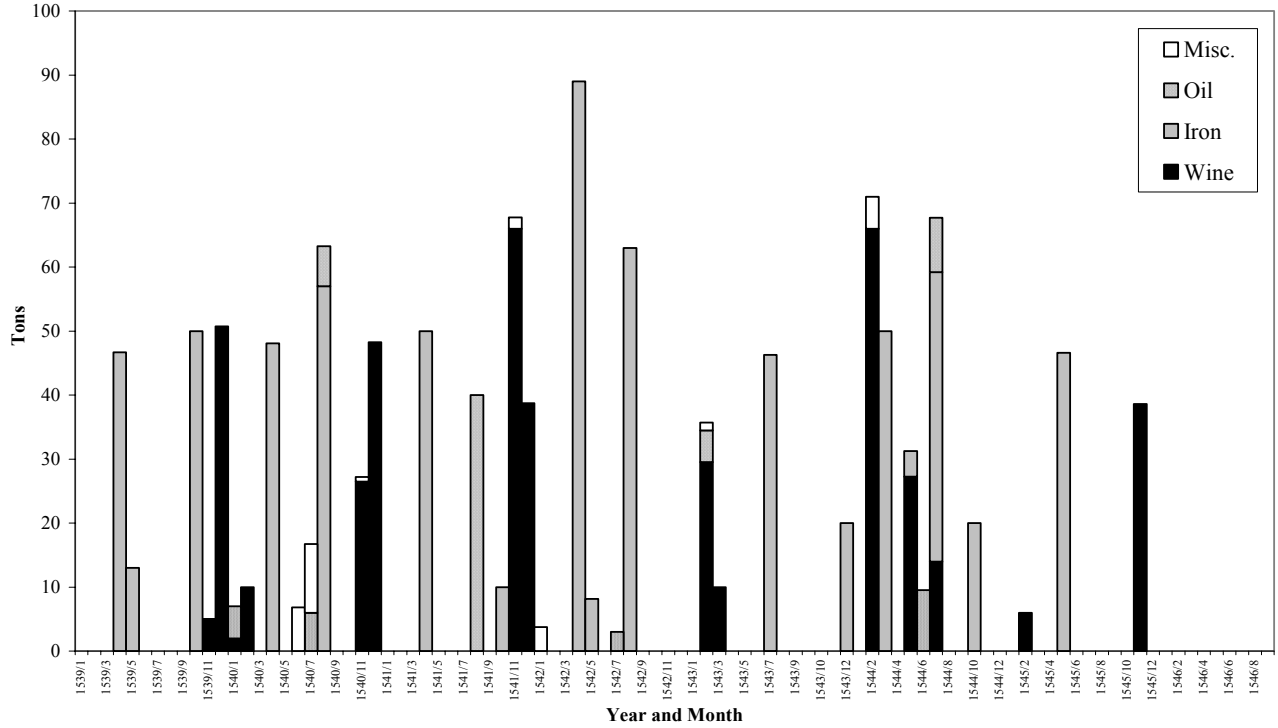
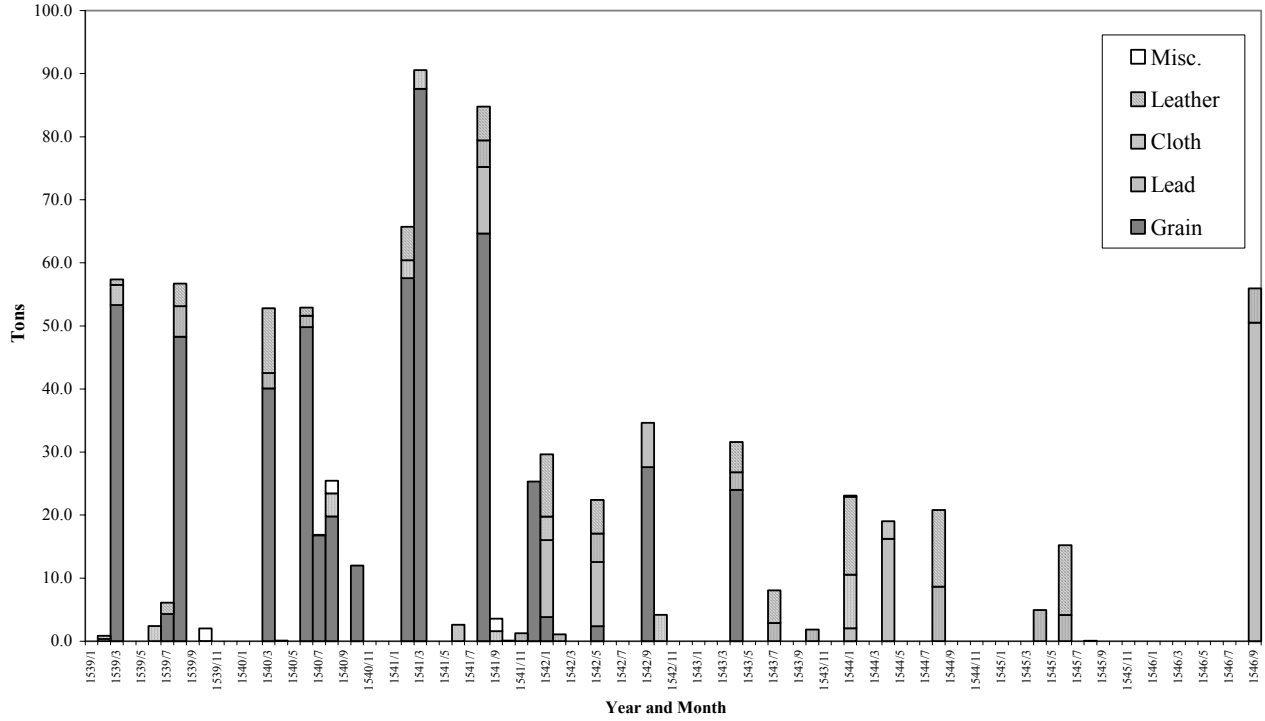


Figure 2.5 - Smyth's Exports to the Continent 1539-46, in Tons



The above tables and graphs illustrate that Smyth's import activities were fairly typical of a merchant engaged in the Continental trade. Like the rest of the merchant community his largest calls on freight services were associated with the winter wine trades and the iron trade, which he conducted primarily between March and September. However, when his export activities are reviewed, striking differences may be noted between his call on export freight and that revealed by the earlier study of the customs accounts. During the period 1539-41 Smyth's vigorous engagement in the grain trade meant that his demand for export freight space was 93% of his demand for import freight space.[87] After 1541, Smyth reduced his exports of grain as the profitability of the trade declined. However, in the period covered by the customs accounts from October 1541 - September 1543, his illegal exports of grain and leather still continued to such an extent that his illicit trading activities continued to generate as high a demand for export freight space as his legal demand.[88]

Smyth's activities thus suggest that the illicit trade had the potential to be of enormous significance to shipowners, since it could provide a significant market for under-utilised export freight space. Smyth's records indicate that ships, which would otherwise have sailed out almost empty, could be filled with illicit cargoes of grain. This meant that a shipowner who was willing and able to carry illicit goods could significantly increase the use of a vessel at almost no extra cost. That many did take advantage of this opportunity is suggested by an Act of Parliament passed in 1543 'for the preservacon of the Ryver of Severne'.[89] This noted that so many ships had been dumping their ballast at the mouth of the River Avon, in order to create room for illicitly laded grain cargoes, that the passage into the Bristol Channel was in danger of becoming blocked. Various measures were proposed to remedy the situation, including a provision that anyone caught dumping ballast here could automatically be fined £5.

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[87] His imports amounted to 599 tons and his exports 560 tons: Tables 2.20 and 2.21.
[88] From October 1541-September 1543 Smyth's imported 375 tons and exported 158 tons. His exports included 108 tons grain and leather. However Tables 2.14 and 2.15 indicate he only declared 16 tons grain (78 quarters) and 9 tons leather (31 dicker hides and 190 dozen calf skins) during this period. So 83 tons, just over half of his export tonnage, would have been exported illicitly.
[89] *Statutes of the Realm*, Vol. III, pp. 906-7.

Irish Shipping Demand

As with the Continental shipping market, the customs accounts are the most useful source for assessing the demand for shipping in the Bristol-Ireland trade. Yet, since the Irish trade involved a large number of commodities, and the weight and volume of many of these commodities is unknown, no attempt was made to estimate the tonnage of goods shipped between Bristol and Ireland. Nevertheless, it is still possible to gain some insight into the nature and timing of shipping demand generated by the Irish trade. In particular, it is possible to determine the rough balance between import and export shipping demand and to throw some light on the timing of shipping demand during the year.

The study of Continental shipping demand revealed that a secular imbalance existed between the demand for import and export shipping in Bristol's declared trade, with import demand greatly exceeding export demand. It seems likely that this was also true of the Bristol-Ireland trade, for while the Bristol customs accounts of the 1540s contain 279 references to ships entering Bristol from Ireland, they contain only 170 references to ships leaving Bristol for Ireland. This means that many of the ships engaged in the Bristol-Ireland trade must have left Bristol in ballast. However, whether this meant that the ships sailed back to Ireland empty is less certain, for it is possible that ships found additional cargoes at other ports in the Bristol Channel. Since this has been suggested as a possibility for the late 15th century, it is worth examining whether it might have happened in the 1540s.

In her study of Anglo-Irish trade in the 15th century, Wendy Childs has proposed that the trade imbalance, that existed between Bristol and Ireland at that time, might have been rectified by the other ports of the Bristol Channel. She noted that in the 15th century, as in the 1540s, the value of Irish imports to Bristol exceeded the value of exports. However, at the end of the 15th century the value of Bridgwater's exports to Ireland exceeded the value of imports during most years. Since Childs was able to identify cases in which ships entered Bristol with a cargo from Ireland, took on a part lading, and then proceeded to Bridgwater to acquire additional goods, she proposed that Anglo-Irish trade may have been less imbalanced than the Bristol customs accounts imply. If she were right, the supposed imbalance in shipping demand between England and Ireland in the 1540s may also have been less than the Bristol accounts imply.

To determine whether other Bristol Channel ports made up for the imbalance in shipping demand generated by the Bristol-Ireland trade of the 1540s, the Bridgwater accounts of 1538/9, 1540/41, 1541/2, 1544/45 and 1545/6 were examined.[90] Since the present analysis is concerned with shipping, it is sufficient to examine the movements of vessels that were clearly engaged in Bridgwater's Anglo-Irish trade. As there is very little evidence that Irish ships were ever involved in the Anglo-Continental trade, it was assumed that any Irish ships appearing in the Bridgwater accounts were engaged in the Irish trade. On the basis of the detailed study that has been carried-out on the Bristol marine of this period, it appears that thirteen out of the seventeen Bristol ships which appear in these accounts were also engaged in the Anglo-Irish trade.[91] The table below indicates the number of entrance and exits of Bristol and Irish ships in the Bristol and Bridgwater accounts.

Table 2.22 - Ship Movements of Vessels Engaged in Bristol-Ireland Trade: 1538-1546

	1538/9	1540/1	1541/2	1542/3	1544/5	1545/6
Irish Ships : Entrances	n/a	n/a	48	32	n/a	29
Irish Ships: Exits	n/a	n/a	43	33	n/a	29
Bristol Ships: Entrances	n/a	n/a	17	14	n/a	8
Bristol Ships: Exits	n/a	n/a	12	8	n/a	11

Table 2.23 - Ship Movements of Vessels Engaged in Bridgwater-Ireland Trade: 1538-1546

	1538/9	1540/1	1541/2	1542/3	1544/5	1545/6
Irish Ships : Entrances	52	25	24	n/a	18	11
Irish Ships: Exits	65	30	53	n/a	20	9
Bristol Ships: Entrances	1	0	1	n/a	0	0
Bristol Ships: Exits	4	0	7	n/a	0	0

It may be noted from these tables that Irish ships appear frequently in the Bridgwater accounts and that in four of the five years the number exiting the port with cargoes exceeded the number entering it. This suggests that the port's export demand for shipping exceeded

[90] P.R.O. E122 200/2, 27/15, 27/18, 27/21, 27/24.
[91] App. 6, *Magdalen*, *Mary Bu'ke*, *Mary George* (1), *Nicholas* (2), *Trinity More*, *Primrose*, *Sunday.*

import demand. However, a heavy excess of export over import demand is only apparent in 1541/2, when more than twice the number of Irish ships exported goods from Bridgwater as imported. This was due to the heavy trade in grain to Ireland in this year. However, in other years there is no evidence that a major imbalance occurred which would help to rectify the supposed imbalance in shipping demand at Bristol. This position can be further justified by the absence of Bristol ships in Bridgwater, except during 1538/9 and 1541/2, when Bridgwater was visited by a number of ships, to acquire additional cargoes of grain for Ireland. Since Bristol ships did not visit Bridgwater on a regular basis, it appears that although Bridgwater may sometimes have helped to rectify the proposed imbalance of shipping demand between Bristol and Ireland, this would have only been true when the price of grain was high in Ireland.

Apart from being able to gain some insight into the balance of shipping demand between Bristol and Ireland, shipping movements can also throw light on both the pattern of seasonal requirements for shipping and on the changes that occurred in the level of demand on a year to year basis. This can be done by examining monthly shipping movements and trade flows during the three years under study.

Table 2.24 - Bristol-Ireland Trade and Shipping Movements: 1541/2, 1542/3, 1545/6

Year & Month	Import £	Ship Entrances	Export £	Ship Exits	Total £	Total Ship Movements
1541/10	683	13	0	0	683	13
1541/11	188	11	339	3	527	14
1541/12	55	7	11	4	66	11
1542/1	632	17	19	1	651	18
1542/2	360	17	289	14	649	31
1542/3	111	18	335	14	446	32
1542/4	113	6	117	5	230	11
1542/5	190	8	2	1	192	9
1542/6	31	2	168	6	199	8
1542/7	1515	18	674	10	2189	28
1542/8	260	6	71	5	331	11
1542/9	209	4	31	1	239	5
1542/10	598	14	202	3	800	17
1542/11	22	4	159	3	181	7
1542/12	9	2	5	1	14	3
1543/1	490	22	47	2	537	24
1543/2	413	17	313	23	726	40
1543/3	52	4	167	4	219	8
1543/4	92	6	8	2	100	8
1543/5	138	4	151	7	289	11
1543/6	159	4	75	2	234	6
1543/7	693	10	167	4	860	14
1543/8	30	5	318	6	348	11
1543/9	45	1	14	2	59	3
1545/10	602	7	34	1	637	8
1545/11	154	9	380	6	534	15
1545/12	58	1	23	2	81	3
1546/1	11	1	109	2	120	3
1546/2	74	2	0	0	74	2
1546/3	929	22	600	14	1529	36
1546/4	127	3	173	5	300	8
1546/5	45	3	125	1	170	4
1546/6	96	3	52	5	148	8
1546/7	774	7	74	5	848	12
1546/8	2	1	615	6	617	7
1546/9	0	0	0	0	0	0
Total for 3 Years	9962	279	5869	170	15831	449

Figure 2.6: Imports: Ireland to Bristol and Recorded Shipping Arrivals from Ireland to Bristol: 1541/2, 1542/3, 1545/6

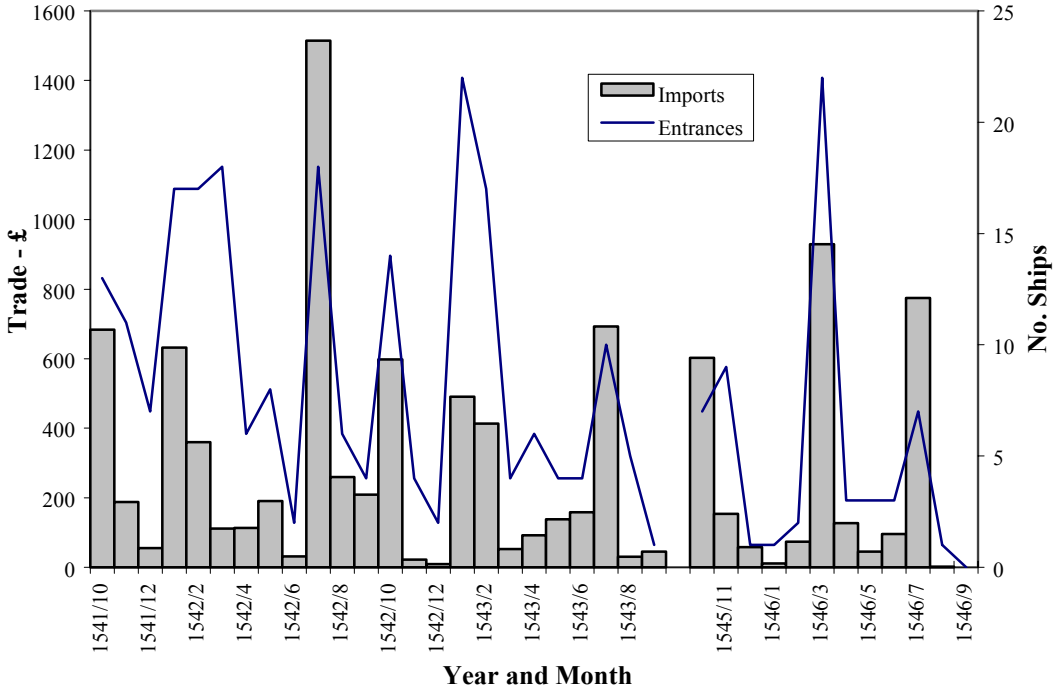
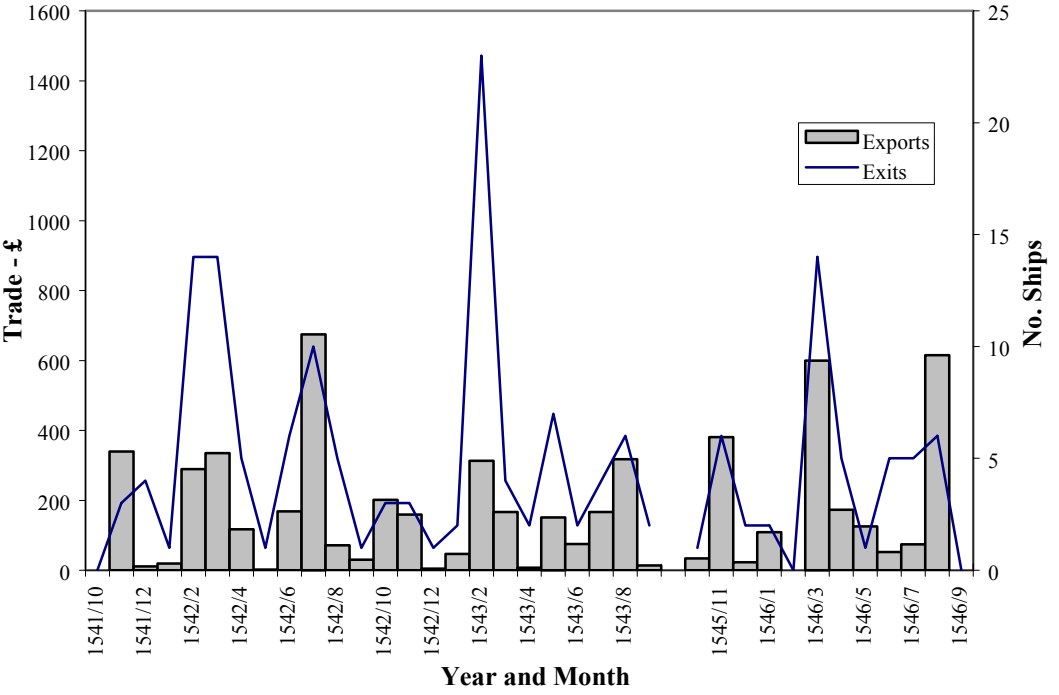


Figure 2.7 : Exports: Bristol-Ireland and Recorded Shipping Departures from Bristol to Ireland: 1541/2, 1542/3, 1545/6



These tables and graphs indicate that some correlation existed between the periods of high trading activity and the movements of shipping. They reveal that although Bristol's absolute levels of shipping and trade with Ireland did not vary significantly between the years under study, shipping and trading activity was not even throughout the year. A major reason for this appears to have been the clustering of commercial activity around the time of Bristol's two great fairs. These were the St James Fair, held after 25 July, and the Candlemas fair, which was held, until its banning in 1543, from 2-9 February.[92] The influence of these fairs on Irish commerce becomes more apparent when the movement of ships and goods from Ireland is examined more closely. For instance, in February 1542, 12 ships arrived from Ireland in the ten days prior to the Candlemas fair and 11 left for Ireland within 10 days of its completion.[93] Apart from the fairs, another reason for the rather spasmodic nature of shipping demand in the Bristol-Ireland trade was that some of the individual trades were highly seasonal in character. For instance during the three years for which complete customs accounts survive, 69% of the herring was imported in October-November and 84% of hake was imported in January-March.[94]

The study of the Irish shipping market has concentrated on demand from the declared trade. However, it was suggested earlier that, as with the Continental trade, grain was almost certainly exported there illicitly when prices were high in Ireland. Since this appears to have been the case between at least 1539-42 the apparent imbalance in shipping demand in the declared trade was probably offset by illicit exports of grain.

Crown Service & Privateering

Thus far this chapter had dealt with the demand for shipping generated by Bristol's trade. The following section will consider the level and timing of demand generated by the Crown and privateers. Since the demand from these sources was irregular, and depended entirely on the nature of Crown policy and England's foreign relations, this issue is best addressed by examining the period on a strictly chronological basis.

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[92] R. C. Latham (ed.), *Bristol Charters 1509-1899* (B.R.S. Publications, XII, 1947), pp. 66-67.
[93] P.R.O. E122 21/10.
[94] P.R.O. E122 21/10, 199/4, 21/15.

The period under study was marked by two great crises in English foreign relations. The first was the threatened Franco-Spanish invasion of 1539, the second the Anglo-French war of 1543-6 - which reached its peak with the attempted invasion of England by the French in August 1545. Although the first crisis was the most dangerous to England's security, it lasted for only a short time and at no point were letters of marque issued to privateers. As a result, the non-commercial demand for English shipping was limited to the creation of a great fleet at Portsmouth during the Spring of 1539. This was maintained from April to June and included eight Bristol ships.[95] So, although the Crown's call on shipping was intense, it lasted only a few months.

The relative tranquillity of the next few years meant the Crown had no call on private shipping and open letters of marque were not issued. However, following the outbreak of maritime hostilities with France this situation changed. When hostilities broke out in February 1543, one of Henry VIII's first actions was to have four Bristol ships dispatched to serve in the Irish Sea between Holyhead and Dublin.[96] The intent of this was to prevent his enemies in Scotland from receiving arms, money and political support from France. The royal accounts of this period only mention disbursements for these four ships, but at least ten Bristol ships were serving the Crown that summer by blockading Glasgow and trying to prevent French support from reaching the Scots by way of the western seas.[97] As the Crown began to issue open letters of marque, the opportunities for privateering would certainly have increased.[98]

During 1544, the Crown also had a major call on West-Country shipping, for in July an expeditionary force was gathered at Bristol to sail to the west coast of Scotland with Lord Lennox. This fleet, which was reported to have consisted of eighteen ships, left Bristol on 5 August and did not return until the end of September.[99] Besides such official service it

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[95] A letter of 28 April reported that four Bristol ships had joined the fleet at Portsmouth and that four more, including the *Savyor* and *Gret Nicholas*, had yet to arrive. A naval list of 10 June includes the *Savyor*, *Nicholas*, *Jesus* and *John Baptiste* of Bristol. At least two other ships in the list, the *Mary Concepcyon* and *Mary Christopher*, match the names of Bristol ships of that time: *L&P*, XIV, i, no. 880, 1097; App. 6.
[96] *L&P,* XVIII, ii, no. 231.
[97] *L&P*, XVIII, i, nos. 810, 952, 966; ii, no. 44, 231; Bain, *The Hamilton Papers*, pp. 159-160.
[98] The first open letters of marque against French shipping were issued in March-April 1543: *L&P,* XVIII, i, no. 346/58, 346/59, 474/22, 474/23, 476/21.
[99] *L&P,* XIX, ii, no. 39, 187, 312; *State Papers,* Vol. I, (1830), p. 770.

appears that privateers from the West-Country also had a high call on shipping during this year for in November 1544 the Privy Council reported to Lord Shrewsbury that:

> 'ther ar att the lest, of the west partes xii or xvi shippes of warre abord att there own aventures, who have goten this yere amones them (as it is credibly reported) nott so lytel as x^{ml} li'.[100]

The highest level of demand for ships, from both the Crown and privateers, came in 1545. The level of demand from the Crown was high because early that year it became apparent that the French were raising a fleet to attack England. In response Henry VIII assembled a rival force. The first merchant ships were hired in May and by early June, Lord Lisle had 160 ships at sea.[101] This fleet was maintained until the end of August but was quickly disbanded once news reached England that the French fleet was being laid-up. By 11 September only the rump of the English navy remained in service.[102]

English privateering reached its highest level during 1545 because Henry, incensed by the separate peace the Empire had concluded with France the previous September, relaxed restrictions on English privateers. His first step in this direction was a proclamation of December 1544 that abolished the need for prospective privateers to take out an explicit letter of marque, suspended the Lord Admiral's right to take a portion of privateering shares and declared that privateers need make no account of their actions to any court or authority.[103] Since the proclamation also ordered that officers of the Crown should not hinder any privateer by requisitioning men or munitions for their own service, the incentive to engage in privateering was greatly increased. However, the result was that the number of illegal seizures of neutral vessels increased to the point that the Empire was forced to retaliate by first arresting English ships in the Low Countries early in 1545 and then by placing a stay on English shipping in Spain.[104]

At the beginning of 1546, it appeared that the previous year's pattern might be repeated again. Yet, by late April it was apparent that the French were not assembling a great naval

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[100] J. Bain (ed.), *The Hamilton Papers: Letters and Papers Illustrationg the Political Relations of England and Scotland in the XVIth Century*, Vol. II, (Edinburgh 1880-1892), p. 335.
[101] D. Loades, *The Tudor Navy,* pp. 31-34.
[102] *L&P,* XX, ii, no. 346.
[103] P. L. Hughes & J. F. Larkin (eds.), *Tudor Royal Proclamations* Vol I (Yale, 1964) pp. 345-6.
[104] G. Connell-Smith, *Forerunners of Drake*, pp. 127-173.

force and the Lord Admiral of England was instructed to scale down the navy.[105] On 13 April a general stay on privateering was also ordered by the Crown and ships at sea were ordered to return to port.[106] All potential demand for shipping from the Crown or from privateers ceased with the declaration of peace in June.

Conclusion

The purpose of this chapter has been to set the market framework in which Bristol's shipowners operated during the period 1539-46. The main points that can be drawn from this study are as follows.

Bristol's international shipping market was based on the servicing of two distinct trades, the Continental and the Irish. The declared component of the Continental trade was marked by a secular imbalance between the demand for import shipping and the demand for export shipping. However, this imbalance was partially rectified by the illicit export trade, especially during the years 1539-41. It was also noted that the Continental trade was seasonal in nature and this created a regular seasonal pattern of shipping demand. The key component of this was the wine trade, the demands of which were so high that each year a great quantity of shipping was called on during a short space of time.

The study of the pattern of shipping demand generated by the Irish trade was necessarily much less detailed than the study of the Continental trade. Nevertheless, it was suggested that, as in the Continental trade, the demand for import shipping would normally have exceeded the demand for export shipping. However, when grain prices were high in Ireland this long-term imbalance may well have been rectified, or even reversed. Since licences were required to export grain to Ireland, much of this trade probably went undeclared. Like the Continental trade, the pattern of demand for shipping in the Irish trade was seasonal in nature. The heaviest demand for shipping was associated with the concentration of trade at the time of Bristol's two great fairs. Other peaks in demand may be associated with the trades in seasonally available commodities, such as herring and hake.

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[105] P.R.O. S.P.1, 216, fo. 88.
[106] *A.P.C.,* p. 380.

After examining the pattern of commercial demand for shipping, the second area which was considered was the level of demand generated by the Crown and privateers. This study indicated that, while there were long periods when there would have been no non-commercial demands on Bristol's shipping, at other times the demands from the Crown were great and unavoidable.

Turning from general patterns to the specific conditions of the years under study, it was noted that the period started with a major international crisis that caused Henry VIII to assemble a great fleet in Portsmouth. This included eight Bristol ships, which served from April to June 1539. However, there were no opportunities for privateering at this time and once the ships were released they rapidly returned to commercial activities. Commercial shipping was probably highly profitable at this time because the boom in the illicit export trade would have greatly increased the demand for export shipping. Since the profits achievable by exporting grain to Iberia remained high until the end of 1541, and the Crown continued to issue licences to export grain to Ireland until April 1542, this period must have been a prosperous time for shipowners engaged in the illicit trade.

Although hostilities began between France and England in February 1543, the tonnage of goods imported into Bristol increased during the war. This was probably because it was safer to send goods up the Bristol Channel than along the English Channel. The war also led to an increase in non-commercial demands for shipping. A large proportion of the Bristol marine served the Crown during the summers of 1543, 1544 and 1545. From the Spring of 1543 till early 1546 large numbers of English ships were engaged as privateers. However, in 1546 the level of non-commercial demand for English ships decreased as it became clear that the French were not raising another great fleet and English privateers were recalled.

Chapter 3: The Commercial Strategies of Bristol's shipowners 1539-1543

Having examined the economic conditions and market framework in which Bristol's shipowners operated, the following two chapters will assess how the city's shipowners adapted to these conditions to maximise the returns on their shipping concerns. Chapter 3 focuses on the period 1539 to February 1543, when peacetime conditions ensured that most opportunities for shipowners were commercial. Chapter 4 examines how Bristol's shipowners deployed their vessels once war broke out between England and France in 1543. Each chapter will be divided into two parts. The first parts will consider the level of control Bristol's shipowners exerted over the Continental shipping market and how the owners of Bristol's great Continental trading ships employed their vessels to best effect. The second parts will examine the extent to which Bristol's shipowners involved themselves in the Irish shipping market and how those who possessed vessels suitable for this market deployed their ships.

The Exploitation of the Continental Shipping Market

In Chapter 2 it was shown that the main opportunities of the period 1539 to February 1543 were commercial, demand for shipping services between Bristol and the Continent being generated by both the declared trades and the illicit export trades in grain and leather. The extent to which Bristol shipowner's were able to control the declared import and export trades during the last seventeen months of the period is examined in Tables 3.1 and 3.2 and their corresponding graphs, Figures 3.1 and 3.2.

Table 3.1 – Imports from the Continent to Bristol, by Ship's Origin, in Tons: October 1541 – February 1543

Year & Month	Bristol	England & Wales	Empire & Portugal	France	Unknown / Other	Total Tons
1541/10	57	0	0	0	0	57
1541/11	192	625	28	28	8	881
1541/12	394	248	0	58	50	750
1542/1	36	0	0	0	0	36
1542/2	0	2	0	0	0	2
1542/3	0	61	29	29	0	118
1542/4	282	110	0	41	8	441
1542/5	93	64	0	0	0	157
1542/6	222	137	13	25	0	397
1542/7	152	139	27	0	114	432
1542/8	204	22	91	0	0	317
1542/9	0	10	0	61	24	95
1542/10	40	0	0	0	0	40
1542/11	0	0	0	0	0	0
1542/12	70	0	0	0	0	70
1543/1	0	128	0	0	0	128
1543/2	605	410	152	0	68	1235
Tot. Tons	2347	1957	340	241	270	5156
% Total	46	38	7	5	5	100

Table 3.2 – Exports from Bristol to the Continent, by Ship's Origin, in Tons: October 1541 – February 1543

Year & Month	Bristol	England & Wales	Empire & Portugal	France	Unknown / Other	Total
1541/10	5	0	14	0	0	19
1541/11	6	0	0	0	0	6
1541/12	0	12	2	6	0	20
1542/1	30	0	0	4	0	34
1542/2	94	50	0	0	0	144
1542/3	14	11	0	0	0	25
1542/4	0	0	0	22	0	22
1542/5	94	1	0	6	0	102
1542/6	0	14	0	8	0	22
1542/7	6	7	2	1	0	17
1542/8	42	15	1	0	0	57
1542/9	159	41	23	0	0	223
1542/10	12	0	0	37	18	67
1542/11	0	0	0	0	0	0
1542/12	0	0	0	0	0	0
1543/1	0	0	0	0	0	0
1543/2	0	0	0	0	0	0
Tot. Tons	462	151	42	84	18	758
% Total	61	20	6	11	2	100

Figure 3.1 – Imports from the Continent to Bristol, by Ship's Origin, in Tons: October 1541 – February 1543

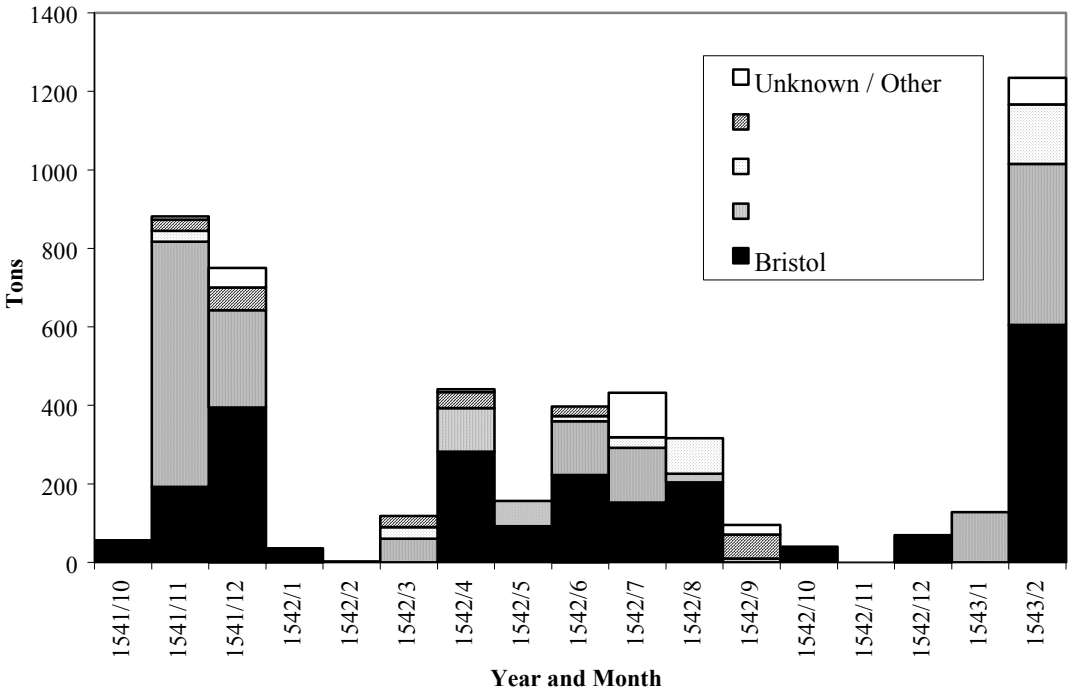
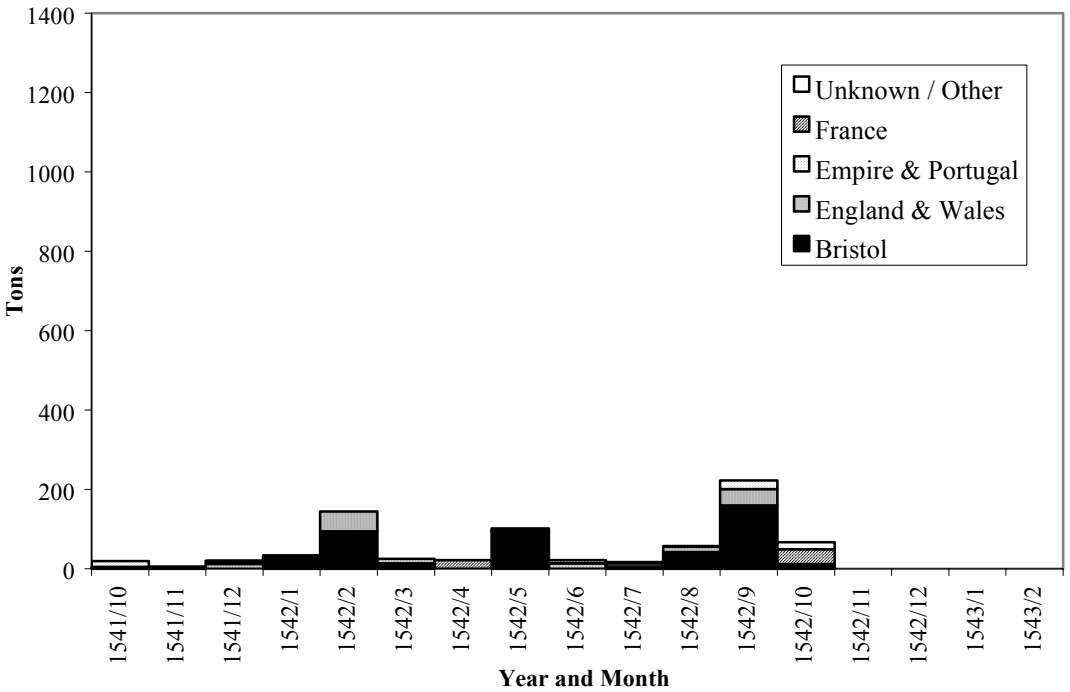


Figure 3.2 – Exports from Bristol to the Continent, by Ship's Origin, in Tons: October 1541 – February 1543



These reveal that English ships dominated the Continental market, Bristol ships carrying 47% of the total tonnage and ships registered at other ports in England and Wales carrying a further 36%. Since Bristol merchants conducted at least 83% of Bristol's declared Continental trade during this period, the comparatively low level of control by Bristol ships may seem unimpressive.[1] Yet, as will be seen, success in the shipping market should not be measured simply by tonnages shipped and certainly not by tonnages shipped in the declared trade.

The strategies Bristol shipowners could adopt to improve the profitability of their commercial shipping interests depended on the economic characteristics of the industry. In Chapter 1 it was noted that the shipping industry was characterised by high fixed costs. These fixed costs, along with many other elements of a shipowner's total inputs, such as labour costs, were relatively inflexible given the nature of existing ship technology and the importance of employing large crews both to work and defend ships. Since there were few obvious ways by which shipowners could reduce their costs, the improvement in the profitability of shipping concerns would have depended on raising freight receipts. There were three main ways by which this could be achieved: the maximisation of freight charges per ton carried, the increase in vessel utilisation on any given voyage, and the expansion of the number of voyages made per year. The following sections will consider how successful Bristol's shipowners were at realising these possibilities.

Maximising Freight Rates

If Bristol's shipowners were to maximise their freight charges, the most obvious way of doing so was for them to establish a cartel that could limit competition and raise the price of freight. Yet, at first sight it appears that Bristol's shipowners were poorly placed to do this for, although they carried about half the total tonnage transported in the Continental trade, they did not monopolise the market. The problem for Bristol's shipowners was that too many people, in too many places, had access to the city's shipping market for it to be possible to create enforceable agreements to which everyone would adhere. Since shipping markets were, for obvious reasons, generally quite accessible, by at least the seventeenth and eighteenth centuries most of England's international shipping operated in what were, for

[1] Bristol merchants conducted £21,546 worth of the total Continental trade (£25,854) between October 1541 and February 1543: Chapter 2, Table 2.5.

English shipowners at least, free markets. The result was that freight prices on given routes fluctuated rapidly in response to changes in supply and demand.[2] However, when the freight rates charged at Bristol are examined for the years 1539 to 1543, it becomes clear that the rates on Bristol ships were not only higher than on those of their competitors, but they were fixed at a higher rate. This can be seen from Table 3.3, which records the freight rates that John Smyth charged, or was charged, for shipping wine and iron from the Continent to Bristol.

[2] Davis, *The Rise of the English Shipping Industry*, pp. 239-40.

Table 3.3 – Freight Rates Charged from the Continent to Bristol per Ton: 1539 – February 1543

Ref.*	Date	Ship	Registration	Sailing from	Goods	Rate
App. 6	4 December 1539	*Trinity*	Bristol	Bordeaux	wine	20s.
App. 6	December 1540	*Primrose*	Bristol	Bordeaux	wine	20s.
App. 6	6 November 1540	*Trinity*	Bristol	Bordeaux	wine	20s.
App. 6	15 November 1540	*Primrose*	Bristol	Bordeaux	wine	20s.
App. 6	14 November 1541	*Margaret*	Bristol	Bordeaux	wine	20s.
S.108	15 December 1540	*Christopher*	Dartmouth	Bordeaux	wine	13s. 4d.
S.108	15 December 1540	*Jesus*	Torres	Bordeaux	wine	13s.
S.144	15 November 1541	*Margaret Bonav.*	Plymouth	Bordeaux	wine	15s.
App. 6	16 November 1541	*Mary Fortune*	Gloucester	Bordeaux	wine	20s.
S.144	6 December 1541	*Ann*	London	Bordeaux	wine	20s.
App. 6	25 November 1539	*Mary Bride*	Bristol	S. Iberia	wine	25s.
App. 6	23 December 1539	*Mary Christopher*	Bristol	S. Iberia	wine	25s.
App. 6	19 January 1540	*Saviour*	Bristol	S. Iberia	wine	25s.
App. 6	November 1540	*Briton*	Britol	S. Iberia	wine	15s.
App. 6	24 November 1540	*Margaret*	Bristol	S. Iberia	wine	25s.
App. 6	December 1540	*Harry*	Bristol	S. Iberia	wine	25s.
App. 6	4 December 1540	*Jesus*	Bristol	S. Iberia	wine	25s.
App. 6	20 December 1540	*Mary Christopher*	Bristol	S. Iberia	wine	25s.
App. 6	22 November 1541	*Trinity*	Bristol	S. Iberia	wine	25s.
App. 6	5 December 1541	*Mary Bonaventure*	Bristol	S. Iberia	wine	25s.
App. 6	12 December 1541	*Harry*	Bristol	S. Iberia	wine	25s.
App. 6	13 February 1543	*Trinity*	Bristol	S. Iberia	wine	30s.
App. 6	16 February 1543	*Mary Conception*	Bristol	S. Iberia	wine	30s.
S.96	4 February 1540	*Margaret*	Minehead	S. Iberia	wine	22s.
S.79	14 February 1540	*Katherine*	Barnstaple	S. Iberia	wine	21s.
S.114	15 November 1540	*Jesus*	Bideford	S. Iberia	wine	25s.
App. 6	28 November 1541	*Trinity*	Carleon	S. Iberia	wine	25s.
S.145	7 December 1541	*Mary*	Penmarch	S. Iberia	wine	15s.
App. 6	April 1539	*Trinity*	Bristol	Guipuzcoa	iron	15s.
App. 6	10 October 1539	*Trinity*	Bristol	Guipuzcoa	iron	15s.
App. 6	29 April 1540	*Trinity*	Bristol	Guipuzcoa	iron	13s. 4d.
App. 6	19 August 1540	*Trinity*	Bristol	Guipuzcoa	iron	13s. 4d.
App. 6	26 April 1541	*Trinity*	Bristol	Guipuzcoa	iron	13s. 4d.
App. 6	13 April 1542	*Trinity*	Bristol	Guipuzcoa	iron	13s. 4d.
App. 6	8 May 1542	*Primrose*	Bristol	Guipuzcoa	iron	13s. 4d.
App. 6	14 August 1542	*Trinity*	Bristol	Guipuzcoa	iron	13s. 4d.
S.127	4 October 1541	*John Baptist*	Renteria	Guipuzcoa	iron	10s.
S.153	5 April 1542	*Andrew*	Plymouth	Guipuzcoa	iron	10s.

* ‘App. 6’ refers to the Ship’s Histories, Appendix 6, ‘S.’ refers to *Smyth’s Ledger.*

Table 3.3 illustrates that during most of the period 1539 to February 1543, Bristol ships charged 20s. per ton for transporting wine from Bordeaux, 25s. per ton for wine from Southern Iberia and 13s. 4d. per ton for iron from Guipuzcoa in Northern Spain.[3] By contrast, non-Bristol ships charged a variety of rates that were never higher than Bristol ships and were often considerably lower. The reason Bristol ships were able to charge higher rates becomes apparent when the payment terms for freight dues are examined. While shipowners outside Bristol had to ensure that freight fees would be paid within a few weeks of the delivery of their goods, Bristol shipowners were able to offer credit to Bristol merchants so that they could delay payment for some months.[4] These credit terms were specified in the charterparties and are detailed in Smyth's ledger. The most common credit terms were that payment would be made half in hand and half in three months, all in three months, or half in three months and the remainder three months thereafter.[5] It is fairly obvious why merchants should have found these agreements attractive. If merchants had to pay for freight within a few weeks of a ship's arrival, they would need to reserve a portion of their working capital to cover this cost, thereby limiting the amount that could be invested in merchandise. However, if they could defer payment for a few months they would be able to pay for the freight out of the proceeds received from the sale of their goods. The credit agreement was thus in effect a short-term unsecured loan, the extra cost representing the interest on the loan. This allowed shipowners to act as temporary financiers to the merchant community without contravening the usury laws.[6] From the point of view of the shipowners these arrangements had two advantages. First, the effective rate of interest was extremely high, for the credit-based freight rate could be 30-40% higher than the rate without credit. Second, by offering credit Bristol shipowners created a sub-market over which they enjoyed an effective monopoly. This was because only shipowners who were closely connected to Bristol's

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[3] There are three exceptions to this rule. In April and October 1539 Smyth charged a higher rate for transporting iron from Guipuzcoa and in February 1543, the *Trinity* and *Mary Conception* charged a higher rate for transporting wine from Southern Iberia. However, since these shipments were carried during political crises, the higher rates were almost certainly due to the increased risks that shipping faced at these times. The only other time when a Bristol ship charged a different fee from the standard one was in November 1540, when Smyth was charged 15s. per ton for transporting wine from Southern Iberia on the *Briton* of Bristol. This shipment is discussed below.

[4] Freight agreements for foreign ships generally specified that the freight dues should be paid to the ship's master or purser within three weeks of a ship's arrival: Vanes, *Overseas Trade*, pp. 77-78. This period of grace appears to have been a customary one, that was also applied to the Ireland-France trade in the late fifteenth to early sixteenth century: J. Bernard, 'The maritime intercourse between Bordeaux and Ireland c. 1450-1520', *Irish Economic and Social History,* VII (1980), p. 17.

[5] See Table 3.4. The times at which Smyth actually received his freight payments suggest that the 'half to be paid in hand' implied only that the merchant was expected to pay within a few weeks, rather than that this payment had to be made on delivery: App. 6, *Trinity* of Bristol.

[6] The lending of money at interest only became legal in 1545 and then only at a maximum rate of 10% per annum: *Statutes of the Realm*, III, pp. 996-97.

merchant community were in a position to judge the credit-worthiness of individual merchants and, if necessary, force payment from merchants who failed to meet their obligations.[7] The possession of such a monopoly was an advantage to Bristol's shipowners since it created the conditions in which price-fixing arrangements could work. It was thus possible for them to create a cartel to inflate the credit-based shipping rates.

While price fixing clearly occurred at Bristol, for prices in a shipping market do not stay static for long periods of their own accord, the link between price fixing and the offering of credit can be demonstrated in two ways. First, the owner of the only Bristol ship (the *Briton*) ever to charge a below-standard rate did not offer Smyth credit when he did so. This was despite the fact that Smyth had an established personal credit account with the owner, John Gorney, and Gorney was in debt to Smyth at the time.[8] Given this, Smyth's immediate payment only makes sense if the *Briton's* charterparty had specifically stated that the freight dues would be paid on delivery, so forcing Smyth to pay cash to a man who owed him money. Second, and more significantly, the link between price fixing and the offering of credit can be made by examining the credit terms offered, which can be seen in Table 3.4.

[7] Bristol's merchant-shipowners were certainly not above sending a man to gaol for debt. For instance, at one point John Smyth sent one of his customers, John Williams, to Newgate Prison for debt and only released him once his friends offered surety for him: *Smyth's Ledger*, fo. 75.

[8] At the time of the *Briton's* arrival in November 1540 Gorney owed Smyth £2 10s. for a freight due on the *Trinity* that should have been paid on 25 March 1540. In the same month that the *Briton* arrived from Andalusia, the *Trinity* arrived with 5 tuns of Gorney's wine from Bordeaux. Yet, while Smyth clearly paid his freight dues in cash, Gorney took advantage of the credit terms Smyth offered by delaying his own freight payments: *Smyth's Ledger,* fo. 88; App. 6, The *Briton* of Bristol, November / December 1540; The *Trinity* of Bristol, 4 December 1539, 6 November 1540.

Table 3.4 – Payment Plans for Freight Detailed in Smyth's Ledger, 1539 – February 1543 [9]

Bordeaux Wine

Date	Ship	Payment Plans
4 December 1539	*Trinity* of Bristol	'to pay hallf in hand & thother ½ Owr Lady Day'
January 1540	*Primrose* of Bristol	Half paid in hand, rest paid on 26 March
6 November 1540	*Trinity* of Bristol	'to pay it in hallfes at 3 monthes & 3 monthes'
15 November 1540	*Primrose* of Bristol	'to pay at 3 monthes & 3 monthes'
14 November 1541	*Margaret* of Bristol	Details of payment not given
16 November 1541	*Mary Fortune* of Glouc.	Payment redeems debt

South Iberian Wine

Date	Ship	Payment Plan
25 November 1539	*Mary Bride* of Bristol	'to pay hallf in hand', rest paid in freight
23 December 1539	*Mary Christ.* of Bristol	payment redeems debt
19 January 1540	*Saviour* of Bristol	payment redeems debt
24 November 1540	*Margaret* of Bristol	payment redeems debt
December 1540	*Harry* of Bristol	payment redeems debt
4 December 1540	*Jesus* of Bristol	'to pay ½ in hand & half at thend 3 monthes'
20 December 1540	*Mary Christ.* of Bristol	Paid half, to pay the rest 'at thend of 3 monthes'
22 November 1541	*Trinity* of Bristol	'to pay ½ in hand and ½ at thend of 3 months'
28 November 1541	*Trinity* of Carleon	Paid half, to pay rest 'at the end of 3 monthes'
5 December 1541	*Mary Bonav.* of Bristol	Paid half, rest paid on 3 April
12 December 1541	*Harry* of Bristol	Details of payment not given
13 February 1543	*Trinity* of Bristol	'to pay hallf in hand & hallf 3 monthes next after'
16 February 1543	*Mary Concep.* of Bristol	'to paye hallf in hand & thother hallf at monthes'

Guipuzcoan Iron

Date	Ship	Payment Plan
April 1539	*Trinity* of Bristol	'to pay ½ in hand & thother ½ 3 monthes after'
10 October 1539	*Trinity* of Bristol	'to be pd. at all tymes' but credit extended
29 April 1540	*Trinity* of Bristol	'payable at thend of 3 monthes next commyng'
19 August 1540	*Trinity* of Bristol	Plan not mentioned, but credit extended
26 April 1541	*Trinity* of Bristol	'to pay ½ in hand & ½ at end of 3 monthes'
13 April 1542	*Trinity* of Bristol	'to pay at 3 monthes & 3 monthes'
8 May 1542	*Primrose* of Bristol	Payment redeems debt
14 August 1542	*Trinity* of Bristol	Plan not mentioned, but credit extended

[9] For references, to the particular shipments see Table 3.3. Although Smyth does not always record the credit terms in his ledger, this is usually because he was buying freight space from a shipowner who owed him money. In such a situation, the specification of credit terms would be irrelevant and the purchase of freight space was, in effect, a way of redeeming an outstanding debt.

The above table indicates that, for a given voyage at a given time, the terms of credit were the same for all ships in the credit-based group. For instance, at the end of 1539 the credit terms for shipping wine from Bordeaux was that payment would be made half on the arrival of the ship and the remainder on Lady Day (25 March). By the following year the terms of credit for the same voyage had lengthened to half-payment after three months and the other half after six months. However, at the same time the credit terms from Southern Iberia were that payment would be made half on arrival of the ship and the remainder three months thereafter. The correspondence in the credit-terms offered for a given voyage at a given time indicates that shipowners collectively agreed to the credit terms that would be offered as well as their headline freight rates. By these means any price competition between those offering the credit-based service would have been eliminated.

The above analysis has suggested that Bristol's shipowners and those closely connected to them, consorted to set rates and terms of credit in a sub-market over which they enjoyed an effective monopoly. Given this, it seems highly improbable that they would not have elected to set their rates at the highest level the market would bear. In other words they appear to have created a cartel to maximise freight returns in their specialist market. This is, of course, not the only explanation for the higher rates charged, since the service the shipowners were offering was also more expensive to provide. In charging for the service they would have had to take account of the greater debt burden to which they were subject, their increased transaction costs and the risk of merchants defaulting on their debts. Determining the extent to which the higher rates charged was the result of the higher costs involved and how much they were the result of the price-fixing agreements is difficult. However, it may be noted that, although the merchants who bought freight space from John Smyth were sometimes a little slow to settle, over 99% of the *Trinity's* freight dues were accounted for in the end.[10] This suggests that the risk of non-payment, which would have been the main drawback to offering the credit-based service, was low. Given this, it seems probable that rates charged were well above what would have been charged in a free-market, for it is difficult to believe that a competitive market would have produced an effective interest rate of 30% for a three month loan.

[10] Smyth's accounts for the ten voyages made by the *Trinity* between 10 October 1539 and 13 February 1543 indicate that the total freight receipts collected from return journeys from the Continent to Bristol amounted to £945 6s. 6d. 2f. Of this all but £6 9d. was eventually paid: App. 6, *Trinity* of Bristol.

Increasing the Utilisation of Freight Space

In Chapter 2 it was noted that the legally-generated demand for shipping from the Continent to Bristol was much higher than that from Bristol to the Continent. This meant that, while it was relatively easy to acquire full cargoes while abroad, ships were left with a great deal of spare capacity when sailing out of Bristol. The key to increasing the utilisation of ships on particular voyages thus lay in improving lading levels on outbound voyages. There were two possible ways by which Bristol's shipowners could achieve this. One was to acquire a higher proportion of the declared outbound cargoes than their competitors. The other was to service the illicit export trade to the Continent. In practice, they appear to have done both.

During the period October 1541 to February 1543, Bristol ships carried 46% of the Continental import tonnage and 61% of the export tonnage. Bristol's shipowners were probably able to capture a greater proportion of the declared export market because their ships spent longer in Bristol than those from other ports. They did this because shipowners normally refitted vessels when they were at home, since the crew could be laid-off and the shipowner could use known suppliers and craftsmen to repair and refit the ship.[11] By contrast, foreign ships, burdened by higher crew costs and with little prospect of acquiring a really good cargo in Bristol, rarely stayed for more than two weeks.[12] It seems probable that Bristol's shipowners would have benefited from the greater time their ships spent in the city because local merchants with outbound cargoes would have known, well beforehand, where and when a Bristol ship was sailing. By choosing a Bristol ship, merchants could therefore plan their commercial ventures well in advance and would not have to rely on chance to bring them a ship that was sailing to the right place at the right time. However, while Bristol shipowners were able to capture a larger portion of the declared export market than their competitors, the real benefit was small. This was because the total demand generated by the declared export trade was so limited that even if Bristol's shipowners had captured the entire export market their ships would have sailed out two-thirds empty. As it was, their rather more modest success in the export market meant the tonnage exported on Bristol ships was

[11] Bristol ships normally spent over a month at home between voyages. For instance, the *Trinity* spent 52 days at home at the end of 1541, 36 days in April/May 1542 and 39 days in August / September 1542; the *Julian* spent 33 days at home in January / February 1542 and 102 days in Bristol between June and October 1542; the *Mary Bonaventure* spent 77 days at home over the winter of 1541/2 and 48 days there between August-October 1542: App. 6.

[12] Typical examples of the length of time foreign ships spent in Bristol are as follows: *Bonaventure* of Penmarch, 16 November - 3 December 1541; *James* of Mindake, 5 December - 23 December 1541;

20% of what they imported, while the tonnage exported on non-Bristol ships was 11% of what they imported.[13]

If the potential of the declared export trade was limited, that of the illicit trade offered far greater opportunities. In Chapter 2 it was noted that many of Bristol merchants were engaged in the illicit export trades and that during the years 1539-41 John Smyth's demand for export freight space almost equalled his demand for import freight space. Although it cannot be established whether his level of demand was typical of those engaged in the Continental trade, Smyth's involvement in the illicit trade clearly helped him to fill ships with illicit cargoes. For example, when his own ship left Bristol on 15 February 1541 the *Trinity* was carrying at least 100.8 tons wheat belonging to him and other merchants, 5.3 tons of his own leather and 0.7 tons of his cloth. If this was all the ship carried it would have been filled to 93% of its estimated 115 ton capacity.[14] Yet, in reality, the ship was probably carrying more than this, since Smyth did not normally record what other merchants laded on his ship - presumably because the collection of freight for outbound voyages was left to his foreign factors. Because Smyth failed to record all the goods exported on his ship, the total lading levels of the *Trinity* is even less certain for other voyages. Nevertheless, it is apparent that the *Trinity* often sailed with a larger cargo than any ship would have carried if it were engaged purely in the declared trade. In March 1539, it sailed with at least 54.1 tons of grain and leather goods belonging to Smyth. In August it left with 3.6 tons of Smyth's leather and 96.6 tons grain belonging to Smyth and other Bristol merchants, indicating that it was filled to at least 87% of its capacity. On 8 March 1540 the *Trinity* departed with 45.3 tons of Smyth's leather and grain, on 9 June 1540 Smyth exported 51.1 tons of grain and leather on the ship, and on 17 August 1541 it carried at least 64.6 tons of Smyth's wheat. Beside these references to the *Trinity*, Smyth's ledger also contains some evidence to suggest that other ships could also be laded with considerable export cargoes if they engaged in the illicit trade. For instance, when the *Mary Fortune* of Gloucester left for Lisbon during the winter of 1541 it was carrying 50.4 tons wheat belonging to Smyth and the ship's owner, Robert Pole. Since the ship appears to have been of about 65 tons burden, on this occasion four-fifths of

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John of Pasajes, 23 March – 4 April 1542; *John* of Conquet, 27 April - 9 May 1542 and 16 June - 3 July 1542, *Mary* of Renteria, 2 July – 7 July 1543: P.R.O. E122 21/10, 199/4.

[13] Bristol ships imported 2347 tons and exported 462 tons. Non Bristol ships imported 2809 tons and exported 296 tons: see Tables 3.1 and 3.2.

[14] App. 6, The *Trinity* of Bristol.

its cargo space must have been occupied by wheat, of which less than a third had been declared.[15]

Although it is impossible to determine the exact tonnage of illicitly laded cargoes carried by Bristol's ships, the above figures indicate that during the years 1539-41 it was possible to compensate for the secular imbalance in legally generated import and export shipping demand by illicitly lading grain and leather. From those cases in which evidence has survived for the complete grain consignments laded it is clear that these consignments alone could occupy 80-90% of the estimated capacity of particular ships. Yet, since such vessels were probably also carrying both illegally laded leather and a declared cargo of cloth, in reality they would almost certainly have been fully loaded. At its height the illicit trade would therefore have increased the total tonnage laded on round-trip voyages by about two-thirds.[16] After 1541 the decline in the grain trade severely reduced the level of shipping demand generated by the illicit trade. However, if Smyth's levels of cargo demand are anything to go by, the tonnage of goods exported illicitly between 1542 and February 1543 could still have been as great as those which were legally declared.

As at least some ships were clearly being fully loaded with illicit cargoes during the period 1539-41, it might be assumed that all shipowners engaged in Bristol's trade could have benefited. However, this is not necessarily true. In Chapter 2 it was noted that Bristol merchants dominated the city's declared trade to the Continent and they were likely to have enjoyed an even greater level of control over the illicit export trade. This seemed probable given that the efficient operation of the trade required contacts among customs officials, support from the city's political elite and an established network of upcountry suppliers who could buy and store illicit cargoes prior to shipment. Although Bristol merchants who were engaged in the illicit trade could in theory lade on any ship, and foreign ships were certainly used on occasion, there were sound reasons why a local merchant would prefer to use their own ship, or, failing that, the vessel of someone they trusted. The most obvious reason for doing this was that a legally binding charter party could not cover illicitly laded goods. So, if the goods were damaged while on the ship, or even stolen by the shipowner, the merchant had no legal redress. Apart from this, a merchant might also have preferred to use their own

[15] App. 6, The *Mary Fortune* of Gloucester.
[16] This assumes that ships entered Bristol fully laden with a declared cargo and exited with a declared cargo that occupied 20% of their capacity. If they then filled-up with illicit goods their total lading for a round-trip voyage would be increased by 66%.

ship because they would then have total control over the illegal operation and could make sure that all the relevant officials had been bribed and briefed about the operation. That merchants did prefer to use their own ships when engaged in the illicit trade can be demonstrated in the case of John Smyth. From 1539 to 1541, when the illicit trade was at its height, Smyth exported 70% of his leather and 65% of his grain on his own ship but only 25% of his cloth.[17] By lading in this way Smyth would have been able to maintain a tight control over his illicit trade, while to some extent diversifying his overall risks by lading most of his cloth on ships belonging to other merchants.

The above analysis has suggested that although the extent of shipping demand generated by the illicit export trade varied enormously, it would have been an important factor in improving lading levels on round-trip voyages. Bristol's shipowners were likely to have been the main beneficiaries from the illicit trade, particularly if they used their ships for carrying their own illicit cargoes. The advantages of the illicit export trade were clearly substantial, since it could generate a two-thirds increase in freight uptake at almost no extra cost to the shipowner. If this had happened in an open shipping market, the rise in profits would have resulted in increased competition and a consequent fall in freight rates. However, since the freight rates on Bristol's ships were fixed, this did not happen. The shipowners would therefore have received the full benefit of their illicit shipping activities.

Increasing the Number of Voyages Made Each Year

In Chapter 1 it was noted that Bristol's Continental ships spent only a short period at sea each year. This was because most of their time was taken up in being refitted for voyages or in acquiring cargoes in either Bristol or foreign ports. Given this, the key to increasing the number of voyages made each year would have lain in reducing turn-around time in port. That this was the case should not really be surprising, since even in the seventeenth and eighteenth centuries most increases in the speed of round-trip voyages were the result of faster turn-around times rather than increased ship speed.[18] If Bristol's shipowners had been able to turn their ships round faster they might have been able to increase the number of voyages made each year. By doing this they would have been able to spread their substantial

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[17] During these years Smyth exported 479.5 tons grain, of which 310.8 tons was sent on the *Trinity,* and 29 tons leather, of which 20.4 tons were sent on his ship. He also exported 34.5 tons cloth, of which 8.5 tons was laded on the *Trinity*: App. 2.

[18] D. C. North, 'Sources of productivity change in ocean shipping, 1600-1850', *Journal of Political Economy* LXXVI (1968) pp. 961-63.

fixed costs over a larger number of commercial enterprises. An additional advantage to reducing the length of time in foreign ports was that labour costs would also have been cut. The following section will therefore consider how realistic it was for Bristol's shipowners to reduce the time their ships spent in port and whether, if this was possible, it would necessarily have led to an increase in the number of voyages made each year.

In order to reduce the time their ships spent in port, and especially foreign ports, Bristol's shipowners would have had to speed-up the process of acquiring cargoes, for this was the most time consuming aspect of the shipping business. If the market for Bristol's shipping in foreign ports had been large and predictable, it might have been possible to adopt strategies to reduce the time ships took to turn-around in port. For instance, if cargoes had been inventoried and collected by foreign factors before ships even arrived, the cargoes could have been loaded from wharf-side warehouses as soon as a newly arrived ship had discharged its old cargo. Such strategies helped to reduce port-times for Glasgow ships employed in the eighteenth century tobacco trade, while at Newcastle the collection of coal in wharf-side staiths helped reduce the turnaround time of East Coast colliers from the early 1700s.[19] However, although Bristol factors were certainly employed in the main ports the city's ships visited, it is not clear whether they played a role in the collection or allocation of cargoes.[20]

In the absence of concrete information about how Bristol's ships were laded while abroad, it is only possible to speculate on the strategies that Bristol's shipowners might have employed to reduce port-times. Nevertheless, it may be noted that even if it had been possible to reduce voyage times, this would not necessarily have allowed ships to make more voyages each year. This is because the demand for shipping generated by the declared Continental shipping market had a definite annual structure. When this market was examined in Chapter 2, it was noted that each year the heaviest demand for shipping was associated with the annual wine trade. During the autumn most of Bristol's mercantile capital was directed into the wine trade and, as wine was a fairly bulky product relative to its value, a great deal of

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[19] J. F. Shepherd & G. M. Walton, *Shipping, Maritime Trade and the Economic Development of Colonial North America* (Cambrdige, 1972) p. 78; S. Ville, 'Total factor productivity in the English shipping industry: The north-east coal trade, 1700-1850', *Economic History Review*, XXXIX (1986), p. 362.

[20] Smyth's foreign factors, such as Robert Tyndall who was described as his 'prentis resydent at S.S. [San Sebastian] in Spain' in 1539, or Giles White who was serving in Lisbon in 1541, are frequently mentioned in his voyage accounts: Smyth's Ledger, fos. 8, 136.

shipping was required to carry it. Since the wine trade produced a heavy demand for shipping services and since there was little other demand for shipping at this time of year, it would have been important for Bristol shipowners to have their vessels available for servicing the trade. In consequence, shipowners would only have been able to achieve significant advantages from faster voyage times if it enabled them to fit a whole extra voyage into their annual calendar. To assess whether this was possible requires a review of the pattern of voyages made by Bristol ships in this period and how it compares to earlier and later patterns of shipping deployment.

During the period under study, none of Bristol's great Continental trading ships ever managed to fit more than three Biscay voyages, or two Southern Iberian voyages, into a single year and this appears to have been as much as Bristol's shipowners even hoped to achieve.[21] The voyage patterns of Bristol's ships almost invariably included one autumn voyage to either Bordeaux or Southern Iberia to service the wine trade.[22] Other voyages could include visits to Biscay to acquire cargoes of salt or iron, or additional visits to Andalusia to acquire dried fruit, oil or rack-vintage wines. Although it is possible that Bristol's shipowners employed special strategies to reduce turn-around times in foreign ports, they do not appear to have been able to make more voyages than was typical for English ships engaged in the Continental trade from the fifteenth to seventeenth centuries. For instance, Bristol's fifteenth century shipowners were certainly able to schedule their vessels to make a voyage to Bordeaux and a voyage to Iceland in a single year, while in the seventeenth century, a typical London ship engaged in the Malaga trade could expect to make two voyages per year to Southern Iberia.[23] So, although there is no certainty in this matter, there is no reason to believe that Bristol's shipowners were able to make more voyages each year than was normal for the Continental trade.

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[21] For instance, a petion made by the city in 1543 bemoaned the decline of their shipping from a time in which 'our great shippis used to make ii or iii viages in the yere': Vanes, *Overseas Trade,* p. 31

[22] See any of the 'Ship's Histories', especially for the periods 1536-7 or 1541-43, when the customs accounts give an accurate indication of when ships arrived and departed. If Smyth does not state where the ship was bound for, the commodities the ships carried usually indicate whether the ship had sailed to Biscay or Southern Iberia: App. 6.

[23] E. M. Carus-Wilson, 'The Iceland Trade' in E. Power & M. M. Postan, *Studies in English Trade in the Fifteenth Century,* (London, 1933), p. 176; Davis, *The Rise of the English Shipping Industry*, p. 371.

Conclusion

During the period under study, Bristol's shipowners maximised the returns on their shipping concerns by operating a cartel to increase freight rates in a sector of the shipping market over which they enjoyed a monopoly. They were also able to increase their lading levels on voyages from Bristol to the Continent by servicing the illicit trade. It is not clear whether they employed special strategies to reduce the length of their ships' voyages. However, there is no evidence to suggest that, even if they were able to reduce voyage times, this would have allowed them to make more voyages each year.

The Exploitation of the Irish Shipping Market

During the period 1539 to February 1543, it appears that the only opportunities for shipping engaged in the Irish trade were commercial, for although there was a crisis in early 1539, there is no evidence that any of the Bristol ships hired by the Crown were those involved in the Irish trade.[24] This was almost certainly because all the ships engaged in the Irish trade were small and the Crown favoured large ships for naval operations.[25] Although it is not possible to estimate the precise tonnages carried in the Irish trade, the extent to which Bristol ships were involved in this market can be determined by examining the value of trade carried by ships of different origin. Since all the ships engaged in the Irish trade appear to have carried the same sort of commodities, this should reflect the extent of control over the shipping market. Tables 3.5 and 3.6 and their corresponding graphs 3.3 and 3.4 illustrate the level of this control for the period October 1541 to February 1543.

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[24] *L&P,* XIV, i, no. 1097.

[25] The largest Bristol ship to be involved in the Irish trade was the *Little Trinity*, of 45 tons burden: App. 6. This appears to have been well below what was considered an appropriate size for a general purpose warship. For instance, when Bristol was ordered in 1513 to make a list of what shipping they had available for the navy, they failed to give the full details of the ships below 60 tons burden since they were 'small vessels which ys not redy to do service': P.R.O. S.P. 1/3 fo. 87.

Table 3.5 – Value of Imports from Ireland to Bristol, by Ship's Origin, in £ Sterling: October 1541 – February 1543

Year & Month	Bristol	England & Wales	Ireland	Unknown	Total
1541/10	102	159	423	0	683
1541/11	68	92	28	0	188
1541/12	0	45	10	0	55
1542/1	7	16	609	0	632
1542/2	39	27	293	2	360
1542/3	12	43	39	18	111
1542/4	0	11	101	1	113
1542/5	9	59	122	0	190
1542/6	24	0	7	0	31
1542/7	14	155	1345	1	1515
1542/8	188	62	10	0	260
1542/9	0	184	25	0	209
1542/10	138	83	372	5	598
1542/11	0	17	0	6	22
1542/12	0	9	0	0	9
1543/1	34	98	359	0	490
1543/2	0	90	304	18	413
Total £	633	1151	4047	50	5881
% Total	11	20	69	1	100

Table 3.6 – Value of Exports from Bristol to Irleand, by Ship's Origin, in £ Sterling: October 1541 – February 1543

Year & Month	Bristol	England & Wales	Ireland	Unknown	Total
1541/10	0	0	0	0	0
1541/11	0	0	339	0	339
1541/12	5	0	6	0	11
1542/1	19	0	0	0	19
1542/2	0	0	289	0	289
1542/3	83	107	141	3	335
1542/4	0	7	108	3	117
1542/5	0	2	0	0	2
1542/6	19	0	149	0	168
1542/7	23	4	648	0	674
1542/8	30	0	42	0	71
1542/9	0	31	0	0	31
1542/10	0	0	202	0	202
1542/11	10	0	149	0	159
1542/12	0	5	0	0	5
1543/1	11	0	0	36	47
1543/2	7	53	254	0	313
Total £	206	208	2328	41	2783
% Total	7	7	84	1	100

Figure 3.3 – Value of Imports from Ireland to Bristol, by Ship's Origin, in £ Sterling: October 1541 – February 1543

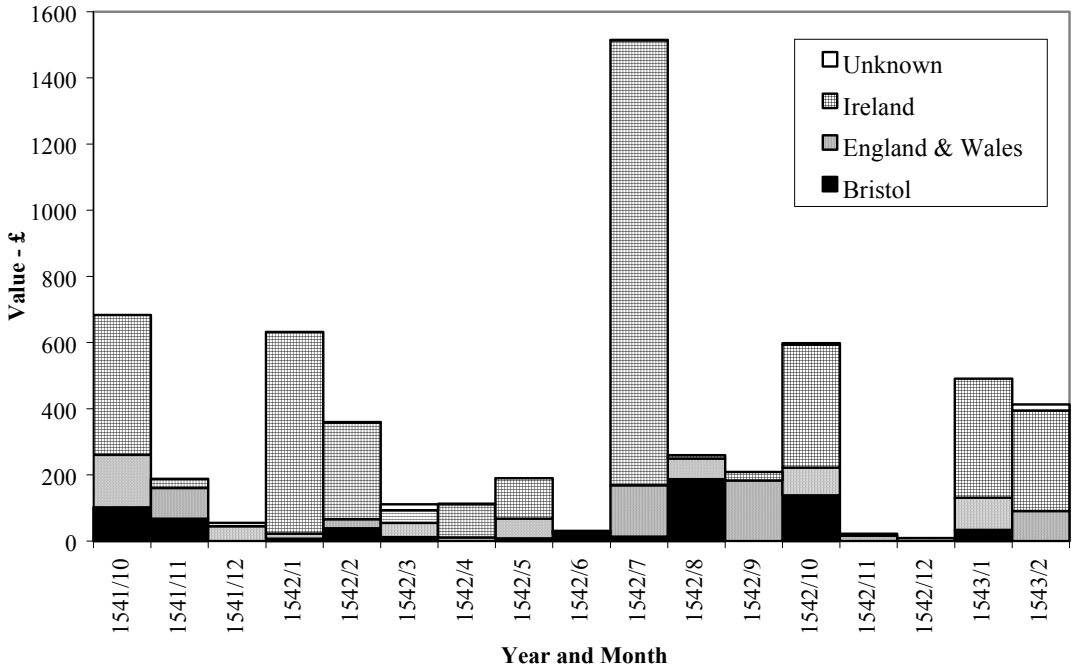
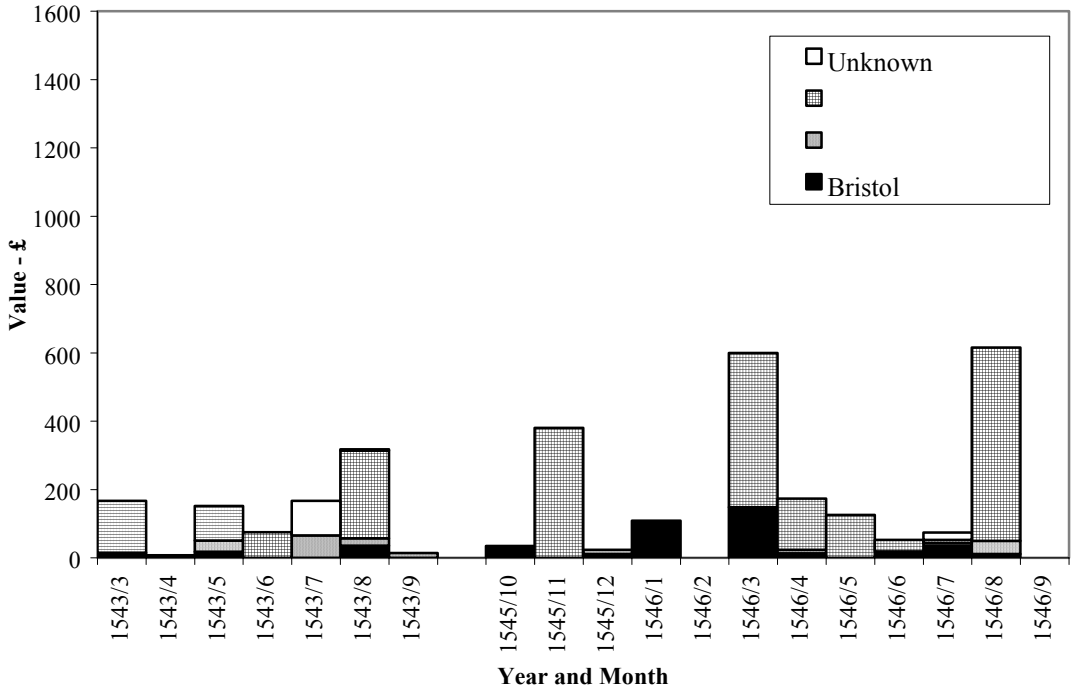


Figure 3.4 – Value of Exports from Bristol to Ireland, by Ship's Origin, in £ Sterling: October 1541 – February 1543



The above tables and graphs indicate that Bristol ships had a low level of involvement in the Irish trade. Of the total trade conducted between Bristol and Ireland, just 10% was carried by Bristol vessels.[26] In part, this appears to have been due to the low level of involvement in Ireland's trade by Bristol merchants, for although only 14% of the Bristol-Ireland trade was in the hands of known Bristol merchants during this period, 61% of the trade sent on Bristol ships belonged to these merchants.[27] It might therefore be reasoned that if Bristol's merchants had controlled a larger share of the trade, more would have been laded on Bristol ships. The clear association between the origin of merchants and the ships they used suggests that there was a particular advantage to Bristol merchants using Bristol ships. What this advantage was is not clear, but it may well be that Bristol's shipowners serving the Irish trade offered credit to Bristol merchants in the same way that Bristol shipowners serving the Continental trade did. Since Bristol's shipowners could not safely offer credit to Irish merchants, it might even have been the case that Irish shipping dominated the Bristol-Ireland shipping market because Irish shipowners made similar arrangements with merchants from their own towns. Yet, whatever the reasons, since Bristol's shipowners clearly had a low level of involvement in the Irish trade, it was not a very significant part of Bristol's overall shipping interests.

Since the Irish trade was of little importance to Bristol's shipping industry, it will not be considered in detail here. However, it is worth noting that for owners of the *Michael*, the *Little Trinity*, the *Trinity More* and the *Jesus* (2) of Bristol, which were all of 30-45 tons burden, the Irish trade does seem to have played a useful part in their overall pattern of shipping deployment.[28] Although these ships were too small to be ideal for the wine trade, and were certainly larger than those employed full time in the Irish trade, they were flexible enough to service both the Continental and the Irish shipping market as demand suited. So, although very few Bristol shipowners depended entirely on the Irish shipping market, it may have provided a welcome alternative source of demand, which helped sustain a minor class of Bristol shipping that might not have survived without it.

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[26] Bristol ships carried £839 worth of a trade totalling £8664 during this period: Tables 3.5 and 3.6.
[27] Bristol merchants controlled £1174 worth of trade totalling £8664 in this period. Of the £839 worth of trade carried by Bristol ships, £512 belonged to Bristol merchants: E122 21/10, 199/4.
[28] App. 6.

Chapter 4: Bristol Shipowners at War: 1543-1546

This chapter will examine how Bristol's shipowners employed their ships during Henry VIII's last great war with France. Although war was not formally declared until August 1543, maritime hostilities began in early February, when both England and France arrested each other's shipping and started to issue open letters of marque to privateers.[1] Between 1543 and 1544, England and the Holy Roman Empire combined against France. In September 1544 the Empire made peace with France but war continued between England and France until 11 June 1546.[2] Although this study will concentrate on the deployment of Bristol's ships during the war, it will also consider the three-and-a-half month period following the proclamation of peace. The terminal point for the study will be the end of September 1546, when the Bristol customs accounts for 1545/6 finishes.

As in Chapter 3, the study will be divided into two parts. The first part will examine the deployment of the Bristol ships used to service the Continental trade. This section will include a detailed study of how Bristol's ships were employed during the war. It will then consider how the city's shipowners maximised benefits they received from ship ownership over this period. The second, much shorter, part of the chapter will consider the deployment of those Bristol ships that served the Irish trade.

The Deployment of Bristol's Continental Shipping

In Chapter 2 it was noted that the outbreak of the Anglo-French war created new demands for shipping, as the Crown pressed ships into naval service and adventurers began to employ them for privateering. However, Bristol's commercial shipping market also grew during the war, since it was safer for ships sailing between Iberia and England to sail by way of the Bristol Channel than the English Channel.[3] As a result, between October 1545 and June

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[1] The arrest in France was issued on 4 February, that in England on 6 February: *L&P,* XVIII, i, nos. 114, 122. In February the English naval forces at Newcastle were instructed to take all French ships as good prize: *L&P,* XVIII, i, no. 225. On 28 March the first general letter of marque against French shipping was issued in England: *L&P,* XVIII, i, no. 329. By the 2 April, the Vice-admiral of Flanders was instructing an agent in London 'to learn whether the English ships will join ours against the French, as the French do with the Scots against the English.': *L&P,* XVIII, i, no. 356. War was formally declared on 2 August: P. L. Hughes & J. F. Larkin (eds.), *Tudor Royal Proclamations*, Vol. I, p. 320.

[2] Hughes and Larkin, *Tudor Royal Proclamations,* Vol. I, p. 369.

[3] Even diplomatic correspondence was generally sent via Bristol. For instance, in September 1542 an Imperial messenger travelling from London to Spain was reported to have gone to 'Bristol to pass the more surely with the fleet that goes from thence.': *L&P*, XVII, no. 780.

1546 the tonnage of goods legally shipped into or out of Bristol was 40% higher than it had been between October 1541 and June 1542.[4] What happened to the illicit trade during the war is difficult to determine but on the basis of the evidence examined in Chapter 2 it appears that, while the illicit trade in leather continued, little grain was exported at this time. The main reason for this was that rising prices in England and falling prices in Iberia reduced the profitability of the grain trade.[5] However, any Bristol merchants who considered exporting grain might also have been put off by a proclamation, issued on 7 January 1544, which banned all grain exports, even under licence, and imposed tough new penalties on transgressors.[6] The extent to which Bristol's shipowners continued to control Bristol's declared shipping market is examined in Tables 4.1 and 4.2 and their corresponding graphs, Figures 4.1 and 4.2.

[4] The total quantity shipped between October 1541 and June 1542 was 3232 tons. That shipped between October 1545 and June 1546 was 4511 tons: Tables 3.1, 3.2, 4.1, 4.2

[5] The only grain Smyth exported during the war was on the *Clement* of Framilode (11 April 1543). This was sent to Guipuzcoa where it rested for two years before being sold for an 8% net loss: see chapter 2, n. 74.

[6] The proclamation provided that, in addition to having their grain confiscated, merchants would 'suffer imprisonment and make fine at the King's pleasure'. For their part, custom officers 'suffering the same shall loose and forfeit £100 and also have imprisonment at the King's majesties pleasure': Hughes & Larkin, *Tudor Royal Proclamations,* Vol. I, p. 324.

Table 4.1 – Imports from the Continent to Bristol, by Ship's Origin, in Tons: March 1543 – September 1543 and October 1545 – September 1546

Year & Month	Bristol	England & Wales	Empire & Portugal	France	Unknown / Other	Total
1543/3	0	30	0	0	0	30
1543/4	40	17	0	0	0	56
1543/5	0	11	0	0	0	11
1543/6	0	38	0	0	0	38
1543/7	0	160	239	0	0	399
1543/8	0	1	0	0	0	1
1543/9	0	0	72	0	0	72
1545/10	0	19	65	0	2	86
1545/11	0	18	453	0	235	706
1545/12	0	10	154	0	159	324
1546/1	0	2	332	0	0	334
1546/2	0	18	631	0	148	797
1546/3	39	0	642	0	0	681
1546/4	0	6	0	0	0	6
1546/5	3	18	382	0	0	403
1546/6	0	21	22	0	6	49
1546/7	0	22	103	0	0	125
1546/8	0	13	0	177	62	252
1546/9	31	139	283	127	40	619
Tot. Tons	112	542	3378	303	652	4989
% Total	2	11	68	6	13	100

Table 4.2 – Exports from Bristol to the Continent, by Ship's Origin, in Tons: March 1543 – September 1543 and October 1545 – September 1546

Year & Month	Bristol	England & Wales	Empire & Portugal	France	Unknown / Other	Total
1543/3	0	0	13	0	0	13
1543/4	0	7	0	0	0	7
1543/5	0	0	0	0	0	0
1543/6	0	0	0	0	0	0
1543/7	0	0	102	0	0	102
1543/8	0	0	0	0	0	0
1543/9	0	0	17	0	0	17
1545/10	0	0	236	0	154	390
1545/11	0	0	17	0	0	17
1545/12	0	0	41	0	86	127
1546/1	0	0	9	0	0	9
1546/2	0	0	77	0	40	117
1546/3	0	0	177	0	139	316
1546/4	0	0	45	0	0	45
1546/5	0	0	39	0	0	39
1546/6	30	0	46	0	0	76
1546/7	21	0	117	0	0	138
1546/8	92	0	0	54	18	164
1546/9	29	32	67	58	0	187
Tot. Tons	172	39	1005	112	436	1765
% Total	10	2	57	6	25	100

Figure 4.1 – Imports from the Continent to Bristol, by Ship's Origin, in Tons: March 1543 – September 1543 and October 1545 – September 1546

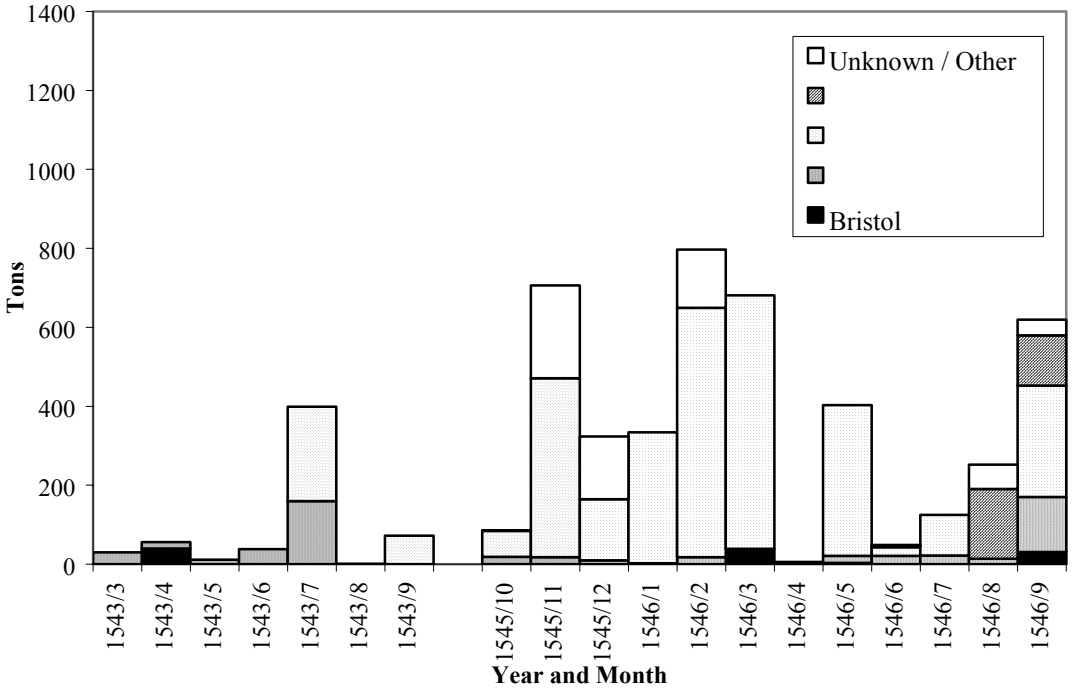
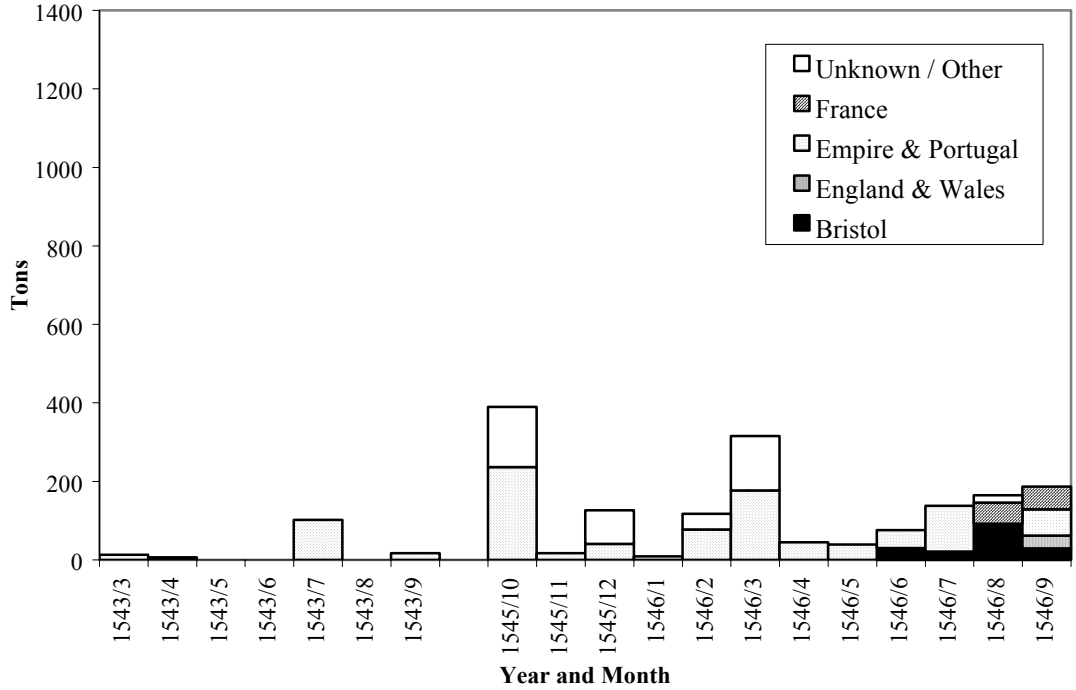


Figure 4.2 – Exports from Bristol to the Continent, by Ship's Origin, in Tons: March 1543 – September 1543 and October 1545 – September 1546



The above tables and graphs reveal that once maritime hostilities had begun, the domination of Bristol's commercial shipping market quickly shifted to the Empire (Spain and the Low Countries) and Portugal. During the period March to September 1543 and October 1545 to June 1546, Bristol ships controlled only 2% of the shipping market, while ships from other parts of England and Wales controlled an additional 8%.[7] The total level of control by English and Welsh shipping thus dropped from 83% before the war to 10% during it. Although the main beneficiaries were clearly the Spanish, Portuguese and Low Countries' shipowners, there was also an increase in the amount laded on ships listed here as 'unknown / other'. This is partly because more shipping came from unidentified ports, such as 'Bokeslate' and 'Intha', and partly because in the 1545/6 accounts the name of the port is frequently not given.[8] Given this, it is possible that some of the ships in the 'unknown / other' category were from Bristol. However, since the names of the ships cannot be identified from other sources as being from Bristol and the ship's masters are not obviously Bristol men, or even English men, this seems unlikely.[9]

That Bristol's shipping market was dominated by foreign shipping throughout the war, and not just at the beginning and end of it, is confirmed by both the fragmentary customs account of 1543/4 and the freighting practices of John Smyth. Although it was not possible to carry out a detailed statistical examination of the 1543/4 customs account, it indicates that Bristol's Continental merchantmen made, at most, one voyage to the Continent during this year. The account reveals that most of Bristol's ships left during the winter of that year and almost all had returned by July 1544.[10] By contrast, the customs account makes constant reference to foreign ships and some of these made at least two voyages to Bristol during the

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[7] The total tonnage imported and exported during this period was 4,668 tons. Bristol ships carried 112 tons, others from England and Wales 375 tons: Tables 4.1 and 4.2.

[8] The value of trade carried each year by ships from all the recorded ports is given in App. 3.

[9] The three ships in the 'unknown / other' category that carried the largest tonnages during 1545/6 were the *Trinity Bermeo*, master Johannus Ithiago (287 tons), the *San Sebastian*, master Anthonius Martinus (144 tons) and the *Santa Maria Gomar*, master Hugo Lucas (104 tons).

[10] The customs account for the period October 1543 to September 1544 is listed by the P.R.O. as 'unfit to be seen' except under direct supervised access: P.R.O. E122 21/12. The top third of each folio is missing and the rest is in too poor a condition to be microfilmed. Nevertheless, most of what survives is legible. It lists the arrival and departure dates of following Bristol ships that appear to be engaged in the Continental trade: *Harry*, returns 7-11 February; *Jesus* (2), returns 18 February; *Julian*, returns 14 July; *Margaret*, departs 7 January, returns 10 July; *Mary Bulleyne*, returns 17 July; *Mary Conception*, departs 7 January, returns 10 July; *Mary George*, departs 6 November, returns 9 September; *Mary James*, departs 8 January, returns 19 June; *Primrose*, departs 28 January, returns 29 April; *Saviour*, departs 31 December, returns 9 July; *Trinity*, departs 5 January, returns 24 March; *Trinity More*, departs 15 January, returns 14-20 July: see App. 6 for full details.

year.[11] For his part, Smyth's lading practices indicate that between March 1543 and June 1546 he laded 74% of his total cargo on foreign ships and that he laded no goods on Bristol ships between July 1544 and the end of the war.[12]

Once the war ended the amount of cargo transported on Bristol ships quickly increased. From July to September 1544, 29% of export tonnage was carried on Bristol vessels.[13] Although the amount imported on Bristol ships was still very small at this time, this is because it would have been very difficult for a Bristol ship to acquire a cargo in Bristol and complete a round-trip voyage to the Continent between the declaration of peace and the end of September.

To understand why Bristol's shipowners reduced their involvement in the city's Continental shipping market during the war will require a detailed examination of how the city's shipping was deployed at this time. Once this has been done, it will be possible to examine some of the strategies they employed to maximise the returns on their shipping during the war.

At the outbreak of maritime hostilities, Bristol's marine included at least eleven vessels that were engaged solely in the Continental trade and four more that serviced both the Continental and the Irish trade.[14] Half the ships were over 100 tons burden and, by the standards of the time, all of the specialised Continental merchantmen would have been

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[11] For instance, the *Saint John* of Renteria, master Michael de Arisavalo, left Bristol at the end of December 1543 with a cargo of cloth and hides. Although the reference of its return to Bristol has not survived, it is again noted as leaving Bristol at the end July, when both John Smyth and the Tyndall brothers laded on it: Chapter 2, Tables 2.15 and 2.16; P.R.O. E122 21/12.

[12] Between 1539 and February 1543 Smyth shipped 1453 tons of which 123 tons (8%) was sent on foreign ships. From March 1543 to June 1546 he shipped 542 tons of which 402 tons (74%) was sent on foreign ships: App. 2. The last Bristol ship to carry his goods was the *Julian*, which entered Bristol on 14 July 1544: App. 6.

[13] Bristol ships carried 142 tons out of the 489 tons exported during this period and 31 tons out of the 996 tons imported: Tables 4.1 and 4.2. The following Bristol owned ships left the city for the Continent between the declaration of peace and the end of September: *Bark Seymer* of Bristol, 21 June; *Trinity More* of Bristol, 24 July; *Harry* of Bristol, 25 August; *Mary Conception* of Bristol, 28 August; *Trinity* of Caerleon, 10 September; *Trinity Gorney*, 13 September; *Magdalen* of Bristol, 20 September: App. 6.

[14] The Continental merchantmen, with their size in tons burden, were: *Harry* (135 tons), *Julian* (60 tons), *Magdalen* (55 tons), *Margaret* (135 tons), *Mary Bonaventure* (90 tons), *Mary Bride* (120 tons), *Mary Conception* (105 tons), *Mary James* (105 tons), *Primrose* (75 tons), *Saviour* (255 tons), *Trinity* (115 tons). The ships which serviced both the Continental and the Irish trades were the *Jesus* 2 (35 tons), *Michael* (30 tons), *Little Trinity* (45 tons), *Trinity More* (40 tons). Although it was not a Bristol registered ship, it is probably also appropriate to consider Continetnal merchantman the *Trinity* of Caerleon (135 tons) as a Bristol vessel, since it was owned by a Bristol man by this time: App. 6.

considered suitable for military service.[15] The Crown soon had reason to be grateful for this as Henry received intelligence that the French were preparing to send gold and arms to the pro-French party in Scotland. At this time Henry VIII was in the midst of delicate negotiations with the Earl of Arran, who had recently been appointed the Protector and Governor of Scotland following the defeat of the Scots at Solway Moss and the death of James V. With Henry hoping to achieve nothing less than the removal of the infant Mary Queen of Scots to England, and her betrothal to Prince Edward, a union of crowns seemed tangibly close.[16] In this context, Henry was understandably keen to prevent any succour reaching his opponents, so, when he heard that the French were planning to send aid by way of the Irish Sea, he decided to mobilise the Bristol marine.[17] If he wished to stop, or at least delay the French aid, this was really his only option, for the King's own ships were fully occupied in the Narrow Seas and North Sea.[18]

In order to prepare the city's ships for naval service, the Bristol merchant, John Wynter, was called to London and, on 23 February, he was provided with £1000 'to fit out ships at Bristol to be sent to sea for the defense of the King's subjects'.[19] In less than a month, Wynter had four Bristol ships stationed in the Irish Sea between Dublin and Holyhead.[20] Not only did their presence force the French to delay their expedition but, as the Lord Deputy of Ireland reported, the presence of the Bristol ships led both to a reduction in activity by French and Scotch privateers on the coast of Ireland, and made the Irish rebel, Odonnell, reconsider his position, for his security depended on his island strongholds.[21]

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[15] This is confirmed by a case heard in the Court of Star Chamber in 1543, where it was noted that at Bristol 'ther ar xii or xiii shippes able to do good seruice vnto the kynges maieste': I. S. Leadam (ed.), 'Radclyffe, Parishoners of vs. Mayor of Bristowe', *Select Cases Before the Star Chamber, Vol. II, A.D. 1509-1544* (Selden Society, Vol. 25, London, 1911), p. 253.

[16] *L&P,* XVIII, i, pp. i-xiv.

[17] The first report to suggest the French were planning to send aid via the Irish Sea was written by Paget, the ambassador in France, on 2 February. Subsequent intelligence from a number of sources confirmed that this was the French plan: *L&P,* XVIII, i, nos. 106, 112, 286, 305.

[18] During the winter the only naval ships in service were those in the Narrow Seas (between Dover and Calais) but once news arrived that Scottish privateers were returning to Edinburgh, with about 19 English ships taken at Bordeaux, the King sought to augment his forces in the east. On 8 January, Lord Lisle was ordered to take up ships at Newcastle and by 26 January the plan was to gather all available ships at Tynemouth to await the return of the Scots. However, a severe storm in early February left the English navy in the east 'so spoiled and torn with tempest' that even this proved impossible: *L&P,* XVIII, i, nos. 19, 80, 104, 123, 127, 161.

[19] *L&P*, XVIII, ii, no. 231, p. 130.

[20] An entry in the King's Augmentations Accounts records a payment on 19 March of £152 'for pay of ships serving in the west parts for one month'. This would have been more than enough to cover the basic pay of the 530 men that are recorded on 10 May to be serving upon the Irish Sea in four ships. Since the latter payment was made to John Wynter, it is clear that he was left in charge of the finances of the Bristol fleet: *L&P,* XVIII, ii, no. 231 pp. 129-30.

[21] *L&P,* XVIII, i, no. 373, 553.

Over the next few months, the French gathered a larger force for their expedition and Henry augmented his navy in the West Seas.[22] By July, six or seven English ships were stationed in the mouth of the Clyde, where the French fleet was expected to land.[23] However, this appears to have been in addition to the vessels stationed in the Irish Sea, for a letter written by Henry VIII later asked for tidings, of the 'tenne shipps which we sent from Bristow' to encounter the French.[24]

In the end Henry's efforts went for nought, for although an alliance was agreed with the Governor of Scotland during the summer, the Governor soon reneged on it and crossed over to the pro-French faction. With this, Henry VIII's Scottish policy collapsed and the Clyde fleet, which appears to have depended on victuals supplied by the Governor, withdrew.[25] So, when the French fleet did finally arrive in October, there were no Bristol ships to meet it.[26]

In the first six months after the outbreak of hostilities it appears that most of Bristol's Continental merchantmen would have been in Crown Service. Which ones were involved is uncertain but there are reasons for believing that the force included the *Trinity* of Bristol, the *Saviour* of Bristol, and the Bristol owned *Trinity* of Caerleon.[27] It also seems likely that the *Mary James* of Bristol was employed as either a Crown ship or a privateer during the summer, since the half tun of wine it brought into the city on 11 May can hardly have been the fruit of a regular commercial voyage.[28] Of the other ships, only one vessel that was capable of serving the Continental trade made another commercial voyage between March

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[22] The French clearly recognised the danger the Bristol ships posed, for on 5 June, the Papal Legate accompanying the French mission wrote to a colleague that they would be sailing to Scotland 'in danger from the English who guard that sea, and they were bound to pass between England and Ireland.' On 16 July he wrote again to say that they would be departing with 'four ships to carry the artillery and munition and our persons; and that eight other armed ships would accompany us' : *L&P,* XVIII, i, nos. 652, 900.
[23] *L&P,* XVIII, i, nos. 810, 952.
[24] *Hamilton Papers*, II, pp. 159-60.
[25] The Governor had undertaken to victual the fleet after its arrival in the mouth of the Clyde on 2 July. Henry's Ambassador confirmed that this had been done on 28 July. However, this supply was probably cut off during August, as the Pro-French party gained the upper hand, and it would certainly have stopped once the Governor defected to the pro-French camp on 3 September: *L&P,* XVIII, i, nos. 810, 966.
[26] *L&P,* XVIII, ii, no. 257.
[27] App. 6, *Saviour* of Bristol, 31 August 1543; *Trinity* of Bristol, Summer 1543; *Trinity* of Caerleon, 28 August 1543.
[28] App. 6.

and September. This was the 30 ton *Michael* of Bristol, which left Bristol for Ireland on 10 August.[29]

On the basis of the above evidence, it appears that the main reason Bristol's ships were withdrawn from the Continental shipping market during the spring and summer of 1543 was that they were being prepared for, or were engaged in, naval service. Of the fifteen Bristol, or Bristol owned, ships that were large enough to engage in the Continental shipping market, only one made a new commercial voyage between March and September. Ten of the ships served in the navy for at least part of the summer. Although it is not clear what the remaining ships were doing, since they do not appear to have been employed by the Crown, the most likely reason for their absence from the commercial shipping market is that they were engaged as privateers.

After Bristol's ships had returned home in the late summer or autumn of 1543, they were sent on a commercial voyage to Iberia. Although ships serving the Iberian wine trade normally left Bristol in August or September, on this occasion most of the Bristol marine did not leave until December or January. This was presumably because it took some time to refit the ships after their period of Crown service and many of Bristol's shipowners might, like John Smyth, have decided to carry out an extensive program of work to prepare their vessels for the times ahead.[30] Some of work carried out by Smyth on the *Trinity* during 1543, such as the mending of guns and the making of grapnels and shear-hooks was clearly designed not only to prepare the *Trinity* for action, but to prepare it for offensive action.[31] Since Kenneth Andrews has suggested that the most profitable form of privateering during the late sixteenth century was the combined privateering/commercial voyage, it is likely that the Bristol ships which left during the winter of 1543/4 were prepared both to defend themselves and to attack enemy shipping.[32]

As noted earlier, all the Bristol ships that engaged in a winter voyage to Iberia had returned home by July 1544. The reason they did not attempt another commercial voyage that summer appears to be that the Crown once more needed the city's ships. After the collapse

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[29] App. 6.
[30] App. 6, *Trinity* of Bristol, Autumn 1543.
[31] Shear-hooks were scythe-like blades fixed to the ends of the yard-arms, which would slash through another ship's rigging when the attacker bore down on it. Grapnels were used to secure an enemy ship before boarding.
[32] K. R. Andrews, *Elizabethan Privateering: English Privateering During the Spanish War 1585-1603* (Cambridge, 1964), p. 135.

of his Scottish policy the year before, Henry VIII decided to secure England's northern border by destroying Scotland's capacity for making war. He did this by ordering a series of deep raids through the Borders and Lowlands, burning towns, villages, crops and farmsteads.[33] The most ambitious of these attacks was a seaborne raid into the Firth of Forth and the planned occupation and fortification of Dumbarton Castle, on the Clyde, which could then be used as a base for making further raids into the heart of Scotland.[34] The ships intended for the western expedition were gathered at Bristol, under the direct supervision of John Wynter, and in early August the fleet left with 400 English soldiers to occupy Dumbarton.[35] A letter written by the Lords of Scotland claimed that it consisted of 18 ships.[36] Although the Crown had presumably hired most of these vessels, some appear to have been privateers, for orders issued to the fleet make reference to 'such other ships as did accompany them of their own charges'.[37] After some delays, the fleet arrived in the Clyde in late August or early September but since the English were unable to gain the castle, they were forced to retire and by 30 September the fleet was back in Bristol.[38] If the estimate of the fleet's size by the Lords of Scotland were even close to being true, this summer expedition explains why none of Bristol's Continental merchantmen left Bristol on a commercial voyage during the spring, summer or early autumn of 1544.

What happened after September 1544 is less clear but, as noted earlier, Smyth did not lade goods on any Bristol ships until the end of the war and few of Bristol's ships were involved in the Continental shipping market between October 1545 and June 1546. This was again partly due to the exigencies of the Crown, for although the Scottish threat was eliminated in 1544, the separate peace which the Empire concluded in September 1544 left England exposed to the full force of the French navy. Early in 1545 it became apparent that the French were raising a great fleet to invade England.[39] To help meet this threat the Crown hired seven of Bristol's largest ships in the summer of 1545 and the city's ships were

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[33] For a full account of the raids conducted between September 1543 and August 1544, see: *L&P,* XIX, ii, no. 53.
[34] The East Coast expedition involved 37 ships and over 2,000 men. It left at the beginning of May and by 20 May it had captured all the shipping in the Forth and burnt Edinburgh, Leith, most of Settlements around the Forth, and all of those on the road back to Berwick: *L&P*, XIX, i, nos 533, 534, 643.
[35] The mandate of the expedition is spelled out in a memorial drawn up in July: *L&P,* XIX, i, no. 813. According to a letter written by the Council with the Queen to Henry VIII, the 'navy from Bristoll' departed about 5 August: *L&P*, XIX, ii, no. 39.
[36] *L&P*, XIX, ii, no. 312.
[37] *L&P*, XIX, ii, no. 280.
[38] *L&P*, XIX, ii, no. 186; *State Papers,* I, p. 770.
[39] *L&P,* XX, i, nos. 11, 121.

employed for the first time in the English Channel. The *Saviour* of Bristol had been hired by May and, along with the other ships, was based at Portsmouth during early August.[40] All the Bristol ships, along with most of the rest of the fleet, were dismissed in early September.[41] This proved to be the last time during the war in which a substantial portion of Bristol's shipping was hired for the navy, for by April 1546 it had become apparent that the French were not preparing a great fleet that year.[42] So, the only Bristol ship to be hired during 1546 was the *Saviour*.[43]

The Crown's demand for shipping during the summer of 1545 thus provides a partial explanation for Bristol's low level of involvement in the Continental shipping market after September 1544. However, since the navy hired only part of the city's marine during this period, and most of these ships only served for a few months, the city's shipping must have been engaged in some other business during this period. For the reasons given below it seems likely that this was privateering.

The period from autumn 1544 to spring 1546 has long been recognised as a time of intense privateering by Englishmen. During this time large numbers of English armed vessels were sent to sea and some of the attacks on Spanish shipping prefigure the activities of Elizabethan adventurers such as Raleigh, Drake and Hawkins.[44] As in the late sixteenth century, privateering grew in the latter part of the 1543-46 war because the Crown promoted it. Henry VIII's ostensible reason for doing this was that England, deserted by the Empire, needed to better provide for its maritime defence against the French and Scots.[45] However, if the Crown relaxed its control over privateers and showed a liberal attitude to those who seized goods from Imperial ships, English privateers would also inevitably turn on these neutral vessels. By promoting privateering Henry was thus able to both increase the number of armed English ships at sea and punish the Emperor for his betrayal.

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[40] The Bristol-registered ships were the *Harry*, *Margaret*, *Mary Conception*, *Mary James*, *Saviour* and *Trinity*. The Bristol owned *Trinity* of Caerleon also served: see App. 6 references to these ships dated 3 and 10 August 1545.
[41] *L&P*, XIX, ii, no. 368.
[42] By late April, the Council was already instructing the Lord Admiral to scale down the size of the English fleet 'perceyveng that thenemys have no great power on the seas nor that there is any lykelyhood they will send shortely': P.R.O., S.P.1 216 f.88.
[43] The '*Salviour'* of Bristol is among the King's ships being sent to the Narrow Seas at the end of March: App. 6, *Saviour* of Bristol. One other Bristol ship, the *Trinity Smith,* can be found in the naval lists of this year, but that was because the Crown bought it from John Smyth sometime before 22 March: App. 6, *Trinity* of Bristol.
[44] G. Connell-Smith, *Forerunners of Drake* (London, 1954), pp. 133-73.
[45] Hughes and Larkin, *Tudor Royal Proclamations,* Vol. I, p. 345-6.

The most important step the Crown took to promote privateering was the issuing of a proclamation, on 20 December 1544, to remove restrictions on the activity.[46] The proclamation contained three important measures. First, it removed the need for privateers to acquire an explicit letter of marque to justify their actions. This meant that anyone could engage in privateering, without having first to acquire a licence or place bonds or recognisance before the Privy Council or Admiralty Courts. Second, the proclamation abolished the right of the Lord Admiral, or any other party, to take a share (usually one-tenth) of privateering gains. Not only did this increase the direct returns on privateering but it also meant that privateers no longer had to engage in the expensive and time-consuming business of declaring their gains before a prize court. Third, all officers of the Crown and the civic authorities of all port towns were ordered to promote privateering and aid those who engaged in it. This included the specific stipulation that the Crown's officers should not requisition munitions or equipment from privateers, unless they had specific orders from the Crown to do so.

From the beginning of 1545, privateering was thus an almost entirely deregulated and unrestricted activity. The Crown's continued interest in promoting privateering is illustrated by a further proclamation, issued on 11 April, which suggested that anyone who wished to serve his majesty on the seas at their own adventure could sign up at Billingsgate with one, John of Calais. However, although such proclamations sent a message to the country that privateering was a patriotic activity, the Crown's shift in policy towards English privateers who seized goods from the neutral shipping of the Empire was equally important to the promotion of privateering.

By contemporary custom it was considered acceptable for privateers to seize goods from a neutral vessel if the goods belonged to an enemy merchant. However, in practice, this was usually difficult to prove for such goods were usually 'coloured' by false documentation to make it appear that the goods belonged to an individual from a neutral country. The onus was thus nominally on the privateer to demonstrate that the goods belonged to a merchant from an enemy country. Nevertheless, since any disputes resulting from a seizure would be tried in England, the English Crown was able to decide for itself what constituted a fair prize. During the latter part of the war with France, the Crown was able to provide

[46] Hughes and Larkin, *Tudor Royal Proclamations,* Vol. I, p. 345-6.

significant encouragement to privateers by favouring Englishmen in such disputes. The most extreme example of the Crown's bias in favour of English privateers was when Robert Renegar seized Imperial treasure from a Spanish ship returning from America in March 1545. In this case the goods could not possibly have been French but despite this the Crown dragged its heels in offering restitution and Renegar, who was regarded as one of England's leading sea-captains, was supported by the Crown in the subsequent dispute.[47] Unsurprisingly, the result was that English attacks on Imperial shipping increased.

The Imperial response to these seizures was to arrest English shipping in Antwerp from January to April 1545 and then, after Renegar's exploits, English goods and ships in Andalusia were arrested to force a return of the goods he stole.[48] However, this simply provided Henry with an excuse for delaying restitution further and, since those who suffered from the seizures in Andalusia were primarily those engaged in trade rather than privateering, the arrests merely provided another incentive for Englishmen to quit the commercial shipping market altogether. This must have been particularly true of the owners of Bristol's Continental merchantmen, for if they could not trade safely with Spain, the only trade they could serve was that between Bristol and Portugal. This state of affairs continued until April 1546, when the approaching peace with France, and Henry's unwillingness to antagonise the Emperor further, finally persuaded him to the recall England's privateers from the sea.[49]

Turning from the national situation to that of the West Country, it may be noted that even before the Crown issued the proclamations to encourage privateering, the West Country communities were apparently heavily involved in the practice. In November 1544 the Privy Council answered a complaint by Lord Shrewsbury, concerning the depredations of Scottish pirates on the north-east coast of England, by suggesting that although it was unable to spare any of the navy to protect them:

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[47] Connell-Smith, *Forerunners of Drake,* pp. 174-96.
[48] The arrest in the Low Countries was on all English goods, ships and merchants. It lasted from 5 January 1545 (*L&P,* XX, i, no. 21) to 6 April: *L&P,* XX, i, no. 494. The arrests in Spain lasted from 31 March 1545 to 8 November 1546: *L&P,* XX, i, no. 459; XXI, ii, no. 371.
[49] *A.P.C.*, I, 13 April 1546, pp. 383-84.

> 'his majestes pleasure is thatt your lordeshipp shall travayle with thinhabitantes of the portes and creekes within your commission, to doo as other his majestes subjects have doon all this yere, and yett doo in many other partes of the realme. We assure yow ther ar att the lest, of the west partes xii or xvi shippes of warre abrod att there own aventures, who have goten this yere amones them (as it is credibly reaported) nott so lytel as x^{ml} li.'[50]

The continuing involvement of West Country ships in privateering is further illustrated by the Privy Council's minutes of the following summer. As fears of a French invasion grew, the Crown became concerned to build up its navy. So, in June letters were sent to the Mayor of Bristol and the sheriffs of Devon, Cornwall and Somerset ordering 'a proclamation to be made for the retiring of all adventurers from the see'.[51] However, after the French invasion fleet had arrived in the Solent, and while French troops were actually being landed in the Isle of Wight, the Privy Council wrote from Portsmouth:

> 'to the Mayour of Bristowe declaring the Kinges Majestes contentacion that thaddventuroures might passe to the sees upon bonde not to moleste themperour's subjectes or others of his Majestes frendes.'[52]

The city was thus not only active in the West Country privateering scene, but was apparently favoured in 1545 by being allowed to send out its privateers when the rest of the South Western shipping was being called up to serve the Crown.

Although it is clear that Bristol adventurers were taking part in privateering, the involvement of individual shipowners is harder to document. There is, however, one case to which reference is made in *Acts of the Privy Council,* which concerns an action taken against two such men. This relates to a Portuguese caravel that was seized:

> 'by a ship of Mynnet [Minehead] beside Bristow, wherof John Hille and John Dulyne of Mynett were capteins, and parteners or vitaylers of the same William Aplom, grocer, and John Capes, merchaunt, of the said Citie, emonges whome the said goodes were devided.'[53]

Here, although the ship was not itself Bristol registered, it appears to have been part owned by John Capps and a man more clearly identified in a follow up letter, as William Appowell.[54] Both these men were Bristol merchants and shipowners who conducted a

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[50] *The Hamilton Papers*, II, p. 355.
[51] *A.P.C.*, I, 14 June 1545, p. 192.
[52] *A.P.C.*, I, 20 July 1545, p. 212.
[53] *A.P.C.*, I, 29 May 1546, p. 435.
[54] *A.P.C.*, I, 24 December 1546, p. 558.

significant international trade through the city.[55] That the taking of the caravel was not the only act of privateering by this ship is made clear in letters sent in July and August 1545 from the Lord Deputy of Ireland to Henry VIII. These note that John Hill had taken two French prizes with his ship on the coast of Scotland and intended to serve the King further, at his own cost, on the coast of Ireland.[56]

Even clearer evidence of Bristol's shipowners being involved in privateering comes from a:

> 'Supplicacion exhibited by Mr. Thorne of Bristowe in the behaulf of Walter Robertes, capten of a ship of the saide Towne, who being by force of wether dryven, with v lawfull prises taken by him of the Frenchemen, to the Towne of S. Sebastians in Spaine, was there by them of thinquisition not only arrested and put in prison with iii Inglishe merchauntes moo, but also his shippe stayed, his chestes broken uppe, and goodes sett on land and deteigned'[57]

This supplication to the Privy Council indicates not only that a known Bristol merchant was directly involved in privateering but that, on being imprisoned, he should be represented by Nicholas Thorn, the city's foremost international merchant and the owner of Bristol's greatest ship.[58] The representation of a privateer by such a substantial figure would seem to suggest that Bristol's merchant community regarded privateering as a respectable activity for one of their number to be involved in.

The last piece of evidence is more suggestive than conclusive but is interesting as, if the reading given is correct, it seems to hint at the way in which the shipowners of Bristol could integrate the functions of Crown service and privateering. Again the evidence relates to the Acts of the Privy Council. In the minutes of February 1546 it is recorded that:

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[55] The value of trade listed in the surviving customs accounts of the 1540s under William Appowell, or William Appowell and associates, was £2,407. This was 3.4% of the city's total trade during this period making him the city's second largest merchant. During the same period the value of trade belonging to John Caps, or John Caps and associates, was £356 or 0.5% of the city's total trade: P.R.O. E122 21/10, 199/4, 21/15. William Appowell and John Capps were joint owners of the *Little Trinity* of Bristol: App. 6.

[56] *L&P,* XX, i, no. 1287; XX, ii, no. 120.

[57] *A.P.C.*, I, 26 November 1545, p. 275.

[58] Walter Roberts and Nicholas Thorn both appear in the Bristol customs accounts of the 1540's. The value of trade listed under the name of Nicholas Thorn, or Nicholas Thorn and associates, was £5,205. This was 7% of the Bristol's total trade during these three years and was twice as great as the next biggest merchant, William Appowell (£2,407). Walter Roberts appears to have been a minor Bristol merchant, with whom John Smyth maintained a personal credit account. The value of trade listed under the name of Water Roberts, or Walter Robets and associates, during the same period was £37 : P.R.O. E122 21/10, 199/4, 21/15; App. 6, *Saviour* of Bristol; *Smyth's Ledger*, fo. 106.

> 'William Karye, Robert Leyton, and John Pryne, merchauntes of Bristow, being commanded by John Wynter, deceassed, about i yere passed to prepare for the Kinges Majestes service on the sees their ship called the Marye James of Bristowe, and haveng not sufficient ordenance for the furniture of the same, bought vi peces of ordenance with their chambres'[59]

The minutes record that the merchants were being sued by the sellers of the ordnance for non-payment. However, the King decided to pay for the ordnance himself as, after the period of royal service, Wynter, acting as the treasurer of Marine Causes, did 'bestow and dispose of the saide ordenance to his Majestes use.'[60] Now the *Mary James* did indeed serve the Crown in the campaign of the summer of 1545 but, as it did not serve over the winter, it was presumably among those Bristol ships dismissed in early September.[61] For this analysis the interesting factor is that the owners of the ship bought the ordnance themselves and would have been liable to pay for it had Wynter not requisitioned it. This suggests that on buying the ordnance they felt they would have a use for it once the King's fleet broke up. It could be that their intent was merely to provide for the protection of their ship while it was engaged in peaceful trading activities but Bristol's ships were little involved in trade during the latter part of the war. It therefore seems more likely that, although the ship was being prepared for Crown service, the owners intended to use it afterwards for privateering. Indeed viewed from this perspective a period of royal service might be seen to prospective privateers as a valuable training occasion for the crew and a chance to test out ordnance, which would probably be paid for by the Crown if it had proved defective when fired.

In conclusion, it appears that for most of the period from February 1543 till the end of the war in June 1546, Bristol's shipping was engaged either in Crown Service or privateering. However, the issue that has yet to be addressed is how the shipowners maximised their returns from such activities.

Returns from Crown Service and Privateering

When returns on Crown service or privateering are considered it is perhaps natural to think first in terms of direct financial reward. When the Crown hired ships it contracted to maintain them during their period of service and compensate shipowners if their vessels were lost or damaged. A hire fee was also paid of one shilling per month per ton of the vessel.

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[59] *A.P.C.*, I, 6 February 1546, p. 332-333.
[60] *A.P.C.*, I, 13 April 1546, pp.380-381.
[61] App. 6.

This meant, for instance, that John Smyth would have received £7 10s. per month for the hire of the 150 ton (by naval standards) *Trinity*. Since he valued his ship at £250 in 1539 this would have represented a 36% per annum return on his capital. However, although this represents an excellent rate of return for what was, in theory, a risk free venture, in reality the hire of a ship by the Crown was unlikely to be so lucrative. One reason for this was that a shipowner was clearly expected to pay the costs of fitting-out a ship before its period of service in the same way that they would for a normal commercial voyage.[62] Moreover, even if the Crown paid all its dues, ships were rarely hired for a long period and payments were only made for the exact number of days of the ship's hire.[63] This meant that ships could be forced to wait while the Crown determined its needs and then, since the Crown's main demand for shipping came during the summer, shipowners could miss their normal autumn voyage to Iberia for the sake of a few months' hire. The practical effect of this should be clear from the earlier examination of the employment of Bristol's ships during the war. For instance, although most of the Bristol ships hired by the Crown in 1543 would only have served for only a few months, Bristol's Continental merchantmen appear to have been unable to make a commercial voyage between February 1543 and December or January 1544. Similarly, in 1544 and 1545, the periods of Crown Service, though short, were so timed that the ships would have missed the opportunity to service the Iberian wine trade. Crown service was thus unlikely to have been a lucrative activity and since there was little that shipowners could do to improve the direct financial returns from it, any additional benefits they received from Crown service would have had to come in the form of political favours.

If Crown service offered few financial rewards, it might be suspected that privateering would offer better opportunities. When a ship engaged in privateering, the shipowner received one third of the spoils and had a much greater degree of control over their vessel than when it was engaged by the Crown. This meant that it would have been possible to fit cruises into a more general pattern of commercial activity or even to combine privateering with commerce to undertake what has been defined as 'commerce-raiding' in a study of eighteenth century privateering.[64] It has already been suggested that Bristol's ships might have undertaken a

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[62] In the case of the *Trinity*, this included the cost of purchasing a new main-yard and extra spars, as well as the mending of guns, dressing of an anchor and the making of grapnels and shear-hooks: App. 6, *Trinity* of Bristol, 1543.
[63] For instance, an account for the East Coast expedition of 1544, noted that hired ships were paid at the rate of 22 ½ d. per ton, which represents the exact daily rate for the 53 day period of hire at 12d. per ton per (28 day) month: *L&P,* XIX, i, no. 643.
[64] D. J. Starkey, *British Privateering Enterprise in the Eighteenth Century* (Exeter, 1990), p. 66.

combined commercial/privateering voyage during the winter and spring of 1544. It has also been noted that the preparation of ships like the *Trinity* of Bristol or the *Mary James* of Bristol for periods of Crown service, would have left them more effective as privateers after they had been dismissed. This would have been particularly true if Bristol's mariners received additional training, for instance in gunnery, while serving in the navy. In the absence of more information about the activity of Bristol's privateers during the 1543-6 war, it is not possible to provide any further assessment of how Bristol's shipowners could have maximised their takings from privateering. However, on the basis of the scant evidence provided above, it can at least be noted that the main cruising grounds of Bristol's privateers appear to have been Biscay and the waters around Ireland and western Scotland.

Apart from financial rewards, the political returns on Crown service and privateering should also be considered. This was important because, for Bristol's shipowners the military value of their vessels to the Crown proved to be a useful way of gaining concessions and favours from the King. Such royal largess could be both individual and collective, and, as will be seen, the value of such patronage could be considerable. The following analysis will examine the cases of two Bristol merchants who received substantial rewards for their particular services to the Crown and consider how others in Bristol's merchant / shipowning community may have benefited directly or indirectly from royal patronage distributed for maritime services.

The clearest example of a Bristol man receiving favours for his naval services to the Crown is the merchant John Wynter. He is interesting because he took a pro-active approach to Crown service, actively seeking royal attention and patronage through the provision of 'naval' services. Wynter first came to the King's notice when he went to court in 1534 to deliver a communication from the customs officer of Bristol. Although his message was directed to Thomas Cromwell, Wynter gained an audience with the King and was able to use the occasion to promote his own ideas and interests, for one of Henry's chief courtiers later wrote to Cromwell that this unknown:

> 'had grete and long conference with his Grace aswell of the occurrents upon the costes of Biscaye and Ireland as also of the good redyness of x shipps which now be at Bristowe and of the grete desire he had to serve his Grace in this his busynes in Irland'[65]

[65] P.R.O. S.P.1 85 fos.189-90.

Indeed, so impressed was the King that he proposed that Wynter, and an associate Wynter recommended, should be made captains of two of the ships which were being prepared to do service in Ireland. Over the next few years Wynter occasionally provided additional 'naval' services to the Crown. For instance in late 1534 he was acting as a spy in Spain to investigate the ships the Spaniards were making and in 1537 he manned a Bristol ship with soldiers, at his own cost, in the hope of capturing some Breton pirates who were frequenting the Bristol Channel.[66] Yet, he was only able to move beyond the position of an occasionally useful merchant-shipowner during the 1543-46 war. At the start of 1543 Wynter was called to London and was given financial control over the Bristol ships dispatched to the Irish Sea. He must have proved his worth, for the following year he was not only given total control over the Bristol fleet going to Dumbarton Castle, but he was made paymaster for the East Coast expedition into the Firth of Forth.[67] After this he rapidly acquired financial responsibility for the whole of the English navy, documents from the end of 1544 till his death in December 1545 describing him variously as 'paymaster of the King's ships', 'paymaster for sea matters' and 'treasurer of the marine causes'.[68] For his services he received a number of royal annuities during 1544.[69] For Wynter the rewards of patronage were great and though he died before he could reap the full benefits himself, he nevertheless had time to install his son, the future Sir William Wynter, as keeper of the King's storehouse at Deptford.[70] In this way John Wynter was able to establish his descendants as a maritime family of note, who were to play a prominent role as privateers, naval officers and pioneering merchants during Elizabeth's reign.[71]

Although Wynter was an exceptional case, at least one other Bristol merchant received royal recognition for services that were at least partly maritime. This was the fairly minor Bristol merchant, Matthew Kent.[72] He entered the King's service in 1544 when he organised the transportation to England of 1000 Irish foot-soldiers who were to serve the King in Scotland and France.[73] When the troops arrived in Chester, they were divided, six hundred of the best being sent to France under the command of Lord Power of Ireland and the remainder going

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[66] *L&P*, VII, no. 1535; XII, ii, no. 208.
[67] *L&P,* XIX, i, nos. 408, 643, 813.
[68] *L&P*, XIX, ii, no. 777; XXI, i, no. 643, f.66; XX ii, no. 707/45; *A.P.C.,* Vol I, p. 381.
[69] *L&P,* XX, i, no. 557 (fo. 47).
[70] *L&P*, XXI, no. 1334.
[71] Andrews, *Elizabethan Privateers*, pp. 13-14, 89-90, 99.
[72] Matthew Kent imported £176 worth of woad and wine during the period October 1541 to September 1543, which represented 0.4% of Bristol's total trade (£39, 637) in this period: P.R.O. E122 21/10, 199/4.
[73] *L&P,* XIX, i, no. 477 (5).

to Scottish Marches.[74] It appears that Kent was given command of the 400 bound for Marches and he served there till the following year.[75] While based there he was captured by the Scots, but still managed to send intelligence back to Lord Shrewsbury, who oversaw the operations against Scotland who forwarded this letter to the King.[76] Kent was rewarded at the end of 1545 'for his good service in the last wars in Scotland', by being granted a licence to export 400 dicker leather and import 300 tons Gascon wine.[77] After this he remained in King's service and in March 1546 he was, perhaps more appropriately for a Bristol merchant, made the captain of the King's ship the *Swallow* (240 tons), serving in the Narrow Seas. He must have continued to do good service for, in October 1546, the King granted 'Mathew Kent, a gentleman usher of the chamber, annuity of £20'.[78]

The cases of Wynter and Kent illustrate how some members of Bristol's merchant-shipping community prospered during the 1543-46 war because the Crown had need of the abilities and connections of men who had experience of maritime affairs. Although these are the only known cases of Bristol men reaching senior positions during this war, it seems likely that others also benefited, either directly or indirectly, from royal patronage. For instance, it appears that some Bristol men were made captains of hired ships because of their family connections, while John Smyth certainly benefited from Matthew Kent's good fortune, for he was able to buy over half the leather licence granted to Kent for the unusually low price of 6s. 8d. per dicker.[79] It seems highly probable that Smyth's connection to John Wynter would also have facilitated matters when Smyth sold the *Trinity* to the Crown in return for a lucrative lead concession.[80] However, although there were probably many instances of

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[74] The Justice and Council of Ireland appointed Lord Power the commander of the whole force but when it reached Chester it was divided along the lines described. A set of accounts for the French war later records that Power was serving in France during the summer with 505 'kernes': *L&P*, XIX, i, no. 471, 477; ii, no. 552.

[75] Matthew Kent is not identified as the 'grand captain of the Irishmen' serving in the Marches until the 23 March 1545: *L&P*, XX, i, no. 410. However, various earlier references speak of the 'captain of the Irishmen' and seem to infer that he was English. For instance, a letter written on 30 June 1544 by Sir William Evers (The Deputy Warden of the East Marches) to Lord Shrewbury notes that 'The captain of the Irishmen has been with me, and takes much pains to rule the said Irishmen, who are by nature wild.': *L&P,* XIX, i, no. 808; ii, no. 284.

[76] *Hamilton Papers*, II, pp. 586-7; *L&P,* XX, i, no. 410

[77] *L&P,* XX, ii, no. 1067 (23); XXI, i, no. 149/10.

[78] *L&P,* XXI, i, no. 498; ii, no. 476/81.

[79] A list of captains serving at Portsmouth on 10 August 1545, notes that John Wynter's son, Arthur Wynter, was the captain of the *Saviour* and that the *Margaret Butler* of Bristol was captained by William Butler, who was presumably related to the ship's owner, Edward Butler: App. 6. Before the war Smyth bought leather licences for between 10s. and 12s. 6d. per dicker. In February 1547 he sold a licence, which may have come from the batch bought from Kent, for 10s. per dicker: *Smyth's Ledger*, fos. 71, 90, 139, 189.

[80] App. 6, *Trinity* of Bristol, 20 March 1546.

individual Bristol merchants and shipowners benefiting from royal largess at this time, it is perhaps more interesting that Bristol's shipowners could exploit the importance of their shipping to the Crown as a way of obtaining collective, rather than individual, advantages.

The best and clearest example of their ability to promote their collective interests concerns the banning of Bristol's Candlemas Fair in 1543. At the beginning of the 1540s Bristol had two great fairs. These were the St. James Fair, which took place in July and the Candlemas Fair, which was held in early February in the suburb of Redcliffe. However, while the St James Fair was well established and widely supported, the city's elite appear to have had some grievance against the Candlemas Fair, the receipts of which went to Redcliffe and a number of other parishes outside the centre.[81] The exact nature of their grievance is uncertain, for, as will become clear, the stated reasons for their opposition to the fair cannot be trusted. Whatever the reasons they had for opposing it, in 1543 the City Council, which was controlled by the commercial elite, decided to override the Royal Charter that had created the Candlemas Fair, and, entirely illegally, the Mayor banned it. This resulted in an immediate outcry by the citizens of the affected parishes, who appealed to the Crown to overturn this ruling.[82] When the City Council was called to account, their approach was direct. Rather than trying to claim any legal right to their action, they simply claimed that were forced to ban the fair, stating in a counter-petition that:

> 'the said merchauntes and owners of shippes of Bristowe do say that the contynuance of the said fayre shall be the utter distrucion and decay of the navy of the said towne by reason that all strangers of the parties of beyond the sea do resorte with their shippes and ballyngars unto the said towne purposly to serve the same fayre to th'entent the merchauntes strangers may by and sell with other strangers and foreners by the libertie of the said farye so frely so that we the marchauntes of the said towne can have no suche utterance of the marchandises which we bryng whome in our owne shippis as we used to have in suche tyme before the said fayre was purchased. By reason wherof wheras our great shippis used to make ii or iii viages in the yere, nowe scarcely we make with them oon viage in the yere, so that for lak of utterance of our marchandizes we shall be compellid and constrayned to give over our great shippes and to use ballyngars and suche other small vesselles to the utter decay of the navy of the said towne'.[83]

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[81] The parishes involved were Redcliff, St. Thomas the Appostle, and Holy Cross: I. S. Leadam (ed.), 'Radclyffe, Parishoners of vs. Mayor of Bristowe', *Select Cases Before the Star Chamber, Vol. II, A.D. 1509-1544* (Selden Society, Vol. 25, London, 1911), p. 237.
[82] Leadam (ed.), 'Radclyffe, Parishoners of vs. Mayor of Bristowe', pp. 237-247.
[83] *Overseas Trade*, p. 31.

The case went before Star Chamber and since most of Bristol's marine were engaged as naval vessels in the Irish Sea and off the coast of Scotland at this time, it will perhaps be no surprise to learn that the Crown ruled in the City's favour. This was despite the fact that the claims made by the merchants were utterly fraudulent for the fair was visited almost exclusively by merchants engaged in the Irish trade. As the Irish trade was carried out by small ships and was any way largely in the hands of Irish men, the fair could not possibly have affected the city's great shipping. That the banning of the fair was simply a political manoeuvre on the part of the city's elite, for whatever reasons, is apparently confirmed by the way in which Bristol's Council obtained a charter to hold a new Winter fair seven years later. This was the St. Paul's Fair that was held each year, from 1550 till 1838, just a week earlier than the former Candlemas Fair.[84]

The banning of the Candlemas Fair is the most clear-cut example of Bristol's commercial and political elite exploiting the importance of their ships in order to obtain the Crown's support. Nevertheless, it seems likely that there was another important way in which shipowners achieved political leverage from the ownership of their ships. In Chapters 2 and 3, it was noted that Bristol's merchants conducted a large-scale illicit export trade from the city and that this trade was of great significance to the city's shipping industry. This was because the illicit trade enabled shipowners to fill their ships on their under-utilised outward voyages. Since participation in the extremely lucrative illicit export trade was facilitated by the ownership of a ship, a direct attack on the illicit trade would have weakened the Bristol marine and provoked considerable hostility from merchants and shipowners, who were otherwise willing supporters of the Crown during crises. That the Crown recognised that the illicit export trade was important to English shipowners can be justified by a 1563 'Acte towching certayne Politique Constitutions made for the maintenance of the Navye'.[85] Among other measures this legislation stipulated that a ship caught 'transporting or carreng of any wheate or other corne or thinges prohibited' would not be confiscated unless the 'owner or owners shalbee witting, knowing, aiding or consenting to the prohybyted transporting or carrieng'. Since it was in practice difficult to prove that a shipowner knew that goods would be illicitly laded on a ship, this legislation effectively freed shipowners from the fear that their ships would be seized if they serviced the illicit trade.[86] The Act thus

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[84] R. C. Latham, *Bristol Charters, 1509-1899* (B.R.S., Vol. XII, Bristol, 1946) pp. 66-68.
[85] *Statutes of the Realm*, IV, i (London, 1819), p. 425.
[86] Until 1555 only the goods transported on a ship were confiscated. The law had been changed during Mary's reign, to allow for the confiscation of a vessel: *Statutes of the Realm*, IV, i, pp. 243-44.

represented a tacit acceptance by the Crown that it was more important to encourage the development of the English shipping industry than to discourage the illicit export trade.

To conclude, the study of how Bristol's Continental shipping was deployed during the 1543-46 war with France has revealed that, although the city's shipping market grew during the war, Bristol's ships were engaged primarily as naval vessels or privateers. Although it is not possible to quantify the benefits Bristol's shipowners received from their vessels during the war, it is at least clear that they sought to maximise the political benefits they received from ship ownership and crown service. During the war some Bristol merchants clearly prospered from the individual services they offered to the Crown in the maritime arena. As such individuals rose in prominence, other members of Bristol's commercial community would have benefited from their contact with these influential people. However, for the current study, what is more interesting is that Bristol's shipowners appear to have been willing to exploit the collective importance of their shipping during the war to achieve forms of collective patronage. Some of this patronage, such as the banning of the Candlemas Fair, was fairly direct and tangible. Yet, in the long run, perhaps the most important consequence of the city maintaining a large and important marine was that it discouraged the Crown from interfering too much in the city's 'private' affairs.

The Deployment of Bristol's Irish Shipping

When the Bristol-Ireland shipping market was examined in the last chapter, it was noted that during the period October 1541 to February 1543, Irish vessels dominated this shipping market. However, two groups of Bristol ships did operate in this market. First, there were a few small vessels of 15-25 tons burden, such as the *Sunday* of Bristol, which appear to have been engaged almost entirely in this trade.[87] Second, there were four larger ships of 30-45 tons burden, which served both the Irish trade and the Continental trade.[88] To determine whether this state of affairs continued after the outbreak of the war, the tables 4.3 and 4.4 and their corresponding graphs, figures 4.3 and 4.4 will examine how great a proportion of the Bristol-Ireland trade was carried by Bristol vessels.

However, as noted in Chapter 2, shipowners, like William Tyndall, were still sometimes able to avoid such a fate.

[87] App. 6, *Margaret* (2); *Mary George*; *Nicholas*; *Sunday.*

[88] App. 6, *Little Trinity*; *Jesus* (2); *Michael*; *Trinity More*.

Table 4.3 – Imports from Ireland to Bristol, by Ship's Origin, in £ Sterling: March 1543 – September 1543 and October 1545 – September 1546

Year & Month	Bristol	England & Wales	Ireland	Unknown	Total
1543/3	19	0	30	3	52
1543/4	4	88	0	0	92
1543/5	21	13	103	0	138
1543/6	23	0	136	0	159
1543/7	12	26	494	161	693
1543/8	7	20	4	0	30
1543/9	0	45	0	0	45
1545/10	38	29	536	0	602
1545/11	0	120	34	0	154
1545/12	58	0	0	0	58
1546/1	11	0	0	0	11
1546/2	0	74	0	0	74
1546/3	54	13	861	2	929
1546/4	0	1	127	0	127
1546/5	21	0	25	0	45
1546/6	0	15	81	0	96
1546/7	6	60	708	0	774
1546/8	0	2	0	0	2
1546/9	0	0	0	0	0
Total £	273	505	3137	166	4081
% Total	7	12	77	4	100

Table 4.4 – Exports from Bristol to Ireland, by Ship's Origin, in £ Sterling: March 1543 – September 1543 and October 1545 – September 1546

Year & Month	Bristol	England & Wales	Ireland	Unknown	Total
1543/3	15	0	152	0	167
1543/4	0	3	4	0	8
1543/5	18	32	101	0	151
1543/6	0	0	75	0	75
1543/7	0	66	0	101	167
1543/8	35	22	257	4	318
1543/9	0	14	0	0	14
1545/10	34	0	0	0	34
1545/11	0	0	380	0	380
1545/12	11	12	0	0	23
1546/1	109	0	0	0	109
1546/2	0	0	0	0	0
1546/3	148	0	451	0	600
1546/4	14	10	149	0	173
1546/5	0	0	125	0	125
1546/6	13	5	34	0	52
1546/7	34	9	10	22	74
1546/8	12	38	566	0	615
1546/9	0	0	0	0	0
Total £	444	210	2305	127	3085
% Total	14	7	75	4	100

Figure 4.3 – Imports from Ireland to Bristol, by Ship's Origin, in £ Sterling: March 1543 – September 1543 and October 1545 – September 1546

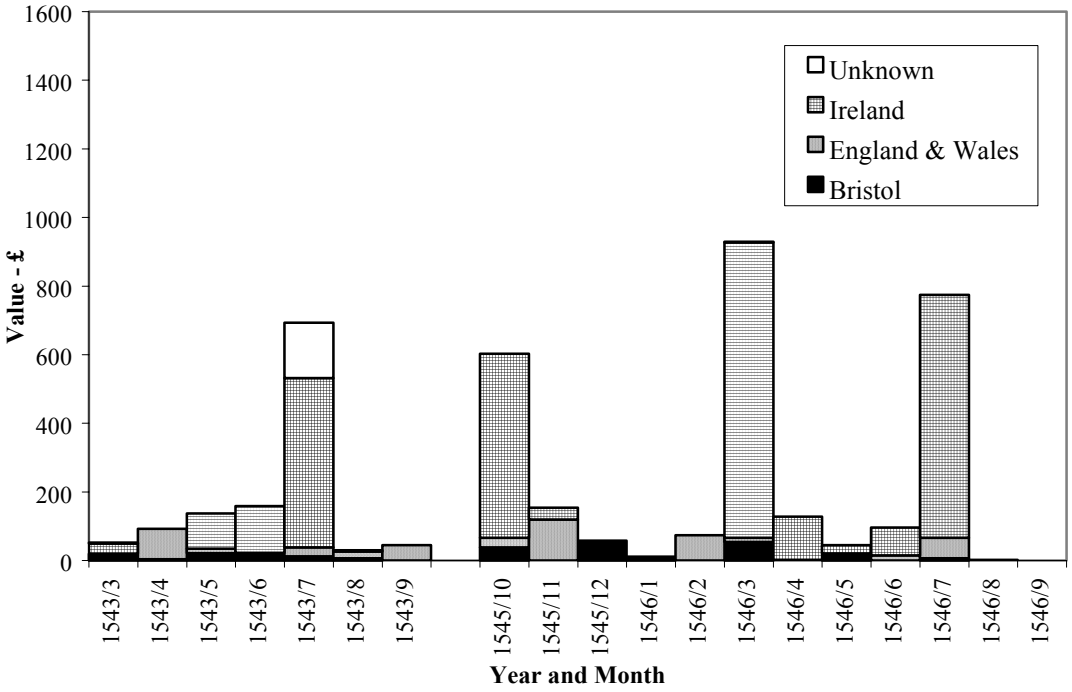
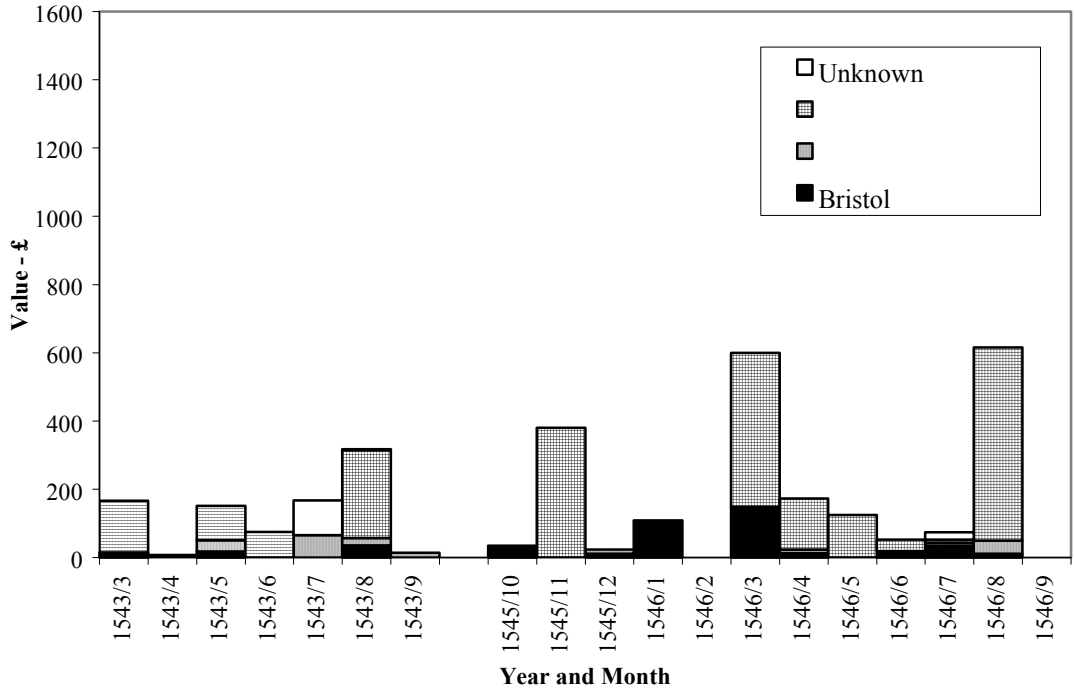


Figure 4.4 – Exports from Bristol to Ireland, by Ship's Origin, in £ Sterling: March 1543 – September 1543 and October 1545 – September 1546



The above tables and graphs indicate that the war appears to have had little effect on the level of the Bristol-Ireland trade or on the shipping that carried it. Irish shipping continued to dominate the Bristol-Ireland trade, carrying three-quarters of the total trade. Bristol, meanwhile, continued to carry about 10% of the trade. As before the war, most of the trade conducted by Bristol ships was carried by vessels of between 15-45 tons burden. The one exception was that on 18 March 1546 a ship, which seems to be the 105 ton *Mary Conception* of Bristol, left the city with about 52 tons of Continental re-exports that were presumably intended for Ireland.[89] This appears to have been the only time that one of Bristol's large ships carried goods to Ireland and it did not acquire a return cargo while there. One possible explanation for this unusual voyage is that the ship was leaving Bristol to cruise off Ireland but the owner decided to take a part-cargo to Ireland first. However, apart from this occasion, there is little indication that the war had any effect on the Bristol-Ireland trade. That this was the case should not really be surprising given that Ireland remained remarkably peaceful throughout the war and, as the Lord Deputy and Council of Ireland reported, 'in no war with France have the enemies done so little hurt upon this coast'.[90] Given this, the only reason the Bristol-Ireland shipping market might have been affected by the war is if the Crown had need of the city's ships. Since the ships that serviced the Bristol-Ireland trade were smaller than those the Crown normally employed for naval service, it is unlikely that any of them did serve in the navy.

In general, it thus appears that the war brought few changes in the Bristol-Ireland shipping market but this does not mean that it had no effect in this area at all. It has, for instance, already been noted that some of the mid-sized Bristol ships, which served both the Continental and the Irish trade, appear to have been withdrawn from all commercial operations during the spring and summer of 1543. There were certainly also occasions when ships from Irish Sea ports, including Waterford, Chester and Bridgwater were pressed into the King's service as troop carriers.[91] However, since such activity had little discernible effect on either the Bristol-Ireland trade or its shipping market, it is not necessary to give

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[89] App. 6.

[90] The general passivity of Ireland during the 1543-46 war was noted a number of times by the Lord Deputy and Council of Ireland. For instance, in April 1545, the Lord Deputy noted that 'this realm remains in the same quiet as for two or three years past' and in November he reconfirmed that 'This realm is as quiet as a land may be.': *L&P*, XX, i, no. 519; ii, no. 819. The comment on the lack of enemy activity on the coasts was made on 13 August 1545: *L&P*, XX, ii, no. 120.

[91] As noted earlier in 1544, Matthew Kent hired ships from Chester, Liverpool and Ireland to transport 1000 Irish soldiers from Dublin to Chester: *L&P,* XIX, i, no. 477. More significantly in November 1545 twenty-one ships, including those from Waterford, Chester, Bridgwater, Minehead and Milford, were employed for taking 2,000 men to campaign in Scotland: *L&P,* XX, ii, no. 819.

detailed consideration to the non-commercial demands on Bristol's ships in detail in this branch of the city's activities.

Conclusion

This study began by examining the basic economic conditions of the Bristol shipping industry. It was shown that the Continental industry was characterised by high costs and high risks. Since shipping insurance was not available and the pooling of risk through shared ownership was apparently unattractive, only the city's wealthiest merchants engaged in the Continental shipping market. While this must have limited aggregate investment in Bristol's industry, it also facilitated the formation of collective strategies to maximise the returns on it.

Following the investigation of Bristol's shipping market, the commercial strategies that Bristol's shipowners adopted between 1539 and 1543 were examined. It was shown that the city's shipowners were able to increase their freight rates by offering credit to local merchants. Since Bristol's shipowners enjoyed an effective monopoly over the credit-based shipping market, they were able to fix their prices at the highest level that the market would bear. In practice the city's merchants, who dominated Bristol's Continental trade, were willing to pay up to 30% more for the privilege of delaying their freight payments. Apart from operating this cartel, Bristol's shipowners were able to maximise the returns on their vessels by servicing the illicit export trade in grain and leather. This was an important trade to shipowners because Bristol's legally declared trade generated little demand for export shipping. The illicit export trade, and particularly the illicit grain trade to Iberia, enabled shipowners to increase greatly the use of their ships at almost no extra cost. This trade was particularly important to Bristol's shipowners because it gave them a chance to benefit from a shipping market that their foreign competitors were poorly placed to exploit. The city's commercial community were able to conduct a large scale, highly organised and lucrative trade without fear of interference because they controlled the city's council, bribed the customs officers and supported each other when accusations of illegal practice were made against one of their members.

Chapter 4 examined how Bristol's shipping was deployed during the 1543-46 war. It revealed that, although the Continental shipping market grew during the war, very few Bristol ships were involved in it. Instead the city's ships were engaged as naval vessels or privateers and in these capacities they played an important part in the prosecution of the war. It was suggested that the hire of their ships by the Crown was not a lucrative activity for Bristol's shipowners and it was noted that there is little information about how they

maximised their financial returns from privateering. However, since Bristol's ships were important to the Crown during the war, and the Crown had need of the expertise of at least some members of Bristol's commercial community, Bristol's commercial elite were able to gain important individual and collective concessions from the Crown during the war.

Overall, it appears that Bristol's shipowners were able to maximise the returns on their investments during the period 1539-46 by co-operating to achieve their mutual best interests. By agreeing to fix freight rates, protecting each other from accusations of fraud and being active in national defence during crises, they were able to augment the benefits they derived from ship ownership. This level of co-operation was probably possible because shipowning was limited to a small group of the city's richest and most politically powerful merchants. However, although the adoption of collective strategies must sometimes have forced shipowners to sacrifice their short-term interests to the general good, the city's shipowners did not sacrifice their operational independence. Indeed, it appears that, compared to later centuries and other ports, Bristol's shipowners maintained a high degree of control over their vessels, for most of the city's ships were owned outright by single merchants.

Having examined how Bristol's shipowners maximised the returns on their concerns during this seven year period, the remainder of this study will consider the extent to which the conclusions drawn are generally applicable to Bristol's shipping industry during this era. It will also consider whether the findings have general relevance to the study of the rest of the English shipping industry at this time. This examination will focus on the importance of credit-based shipping cartels, the illicit export trade and Crown Service / privateering, to the shipping industry.

Credit-Based Shipping and Shipping Cartels

The study of Bristol's credit-based shipping market was concerned only with the period from 1539-43. The provision of extended credit to merchants appears, however, to have been a long established feature of Bristol's shipping market. For instance, a charter party for the *Trinity* of Dittisham in 1504 states that the freight for a cargo of wine should be paid, half on its arrival at Bristol and half two months later.[1] The same terms were set for the chartering of Lord Lisle's ship, the *Mary Plantagenet*, between Bordeaux and Bristol in 1531.[2] In both

[1] Vanes, *Overseas Trade,* p. 78.
[2] Vanes, *Overseas Trade,* pp. 58-59.

cases the shipowners were not Bristol men, which suggests that, when a shipowner offered credit, what mattered was not where they came from but how sure they were that the merchant would pay. In the case of Lord Lisle it seems likely that his confidence was based more on his own personal power and prestige than on the precise relationship he had with the merchants. In the case of the Dittisham ship, it is probable that the shipowner already had an established commercial relationship with the merchant who chartered the ship and was thus confident of receiving payment. These instances suggest that it was not unusual for shipowners to offer extended credit to merchants. Indeed it may well have been a general feature of both Bristol's shipping market and of the markets of many other ports.[3] Yet, most shipowners would only have been willing to offer credit on a regular basis if their customers were local men, whose creditworthiness they could assess and on whom they could put pressure to pay. This is the point where the experience of Bristol probably began to diverge from that of many other English ports, for while Bristol's trade had long been in the hands of local merchants, the trade of other English ports was largely controlled by foreigners.[4] As a result of this tradition, Bristol shipowners had a large pool of potential customers to whom they could safely offer credit.

If it is probable that Bristol shipowners had long offered credit to merchants, the issue that remains to be addressed is whether the collective fixing of credit-based freight rates was also an established feature of Bristol's market. Although it is difficult to assess this issue, it may at least be noted that the maintenance of an effective cartel in the 1540s must have been facilitated by the concentrated pattern of shipping ownership at Bristol. It is thus worth reviewing the evidence for ship ownership at Bristol in earlier and later periods to assess whether the conditions were such that it would have been possible to create and maintain a credit-based shipping cartel.

For earlier times, the most reliable evidence for ship ownership at Bristol comes from a certificate drawn-up by the customs officers of the city on 16 January 1513.[5] This listed the Bristol ships then available for naval service and gave the names of their owners and the size of the ships in tons burden. At this time there were twelve ships in the city that were over 60 tons burden and were thus considered suitable for naval service. The ownership of these

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[3] Various types of loans made by shipowners to shippers were common in France during the late middle ages: J Bernard 'The Maritime intercourse between Bordeaux and Ireland c. 1450-*1520', Irish Economic & Social History*, VII (1980), p. 19.
[4] E. M. Carus Wilson, 'The Overseas Trade of Bristol', in E. Power and M. M. Postan, *Studies in English Trade in the Fifteenth Century* (London, 1933), p. 183.

vessels was spread amongst sixteen men. Five of the ships had one owner, one had two owners, four had three owners and two had four owners. Although more vessels had multiple owners in 1513 than in 1543, the total number of owners of the great ships was about the same as in the later period and it thus seems possible that a cartel could have been sustained in the credit-based shipping market.[6]

If the concentration of ownership was similar in 1513 to the 1540s, it appears that in the late fifteenth century the concentration of ownership was far greater. For instance, William Canynges the younger was reported to have owned a fleet of ten great ships at the time of his death in 1480 and in 1486 twelve of Bristol's ships were said to have been owned by Thomas Strange and several more by John Goodman.[7] Since Canynges and then Strange both owned about half the city's ships, and were exceedingly wealthy men, they would have been very well placed to offer credit to Bristol's merchants on their own terms.

After the 1540s, the first complete list of the city's shipping comes from 1626, when Bristol was once more ordered to draw up a list of ships available for naval service. As in 1513, the certificate provides the names of the ships, their size in tons burden and their owners. It indicates that the city then had twenty-three ships that were greater than fifty tons burden and that these were owned by thirty-six individuals.[8] Although the pattern of ownership was still fairly concentrated for its time, it was more diverse than in the fifteenth or sixteenth century. This suggests that it would probably have been more difficult to sustain a shipping cartel.

To summarise, it seems that the offering of credit to merchants was not unusual in Bristol during at least the first half of the sixteenth century. Since the pattern of shipping ownership at Bristol was highly concentrated from the later fifteenth century to at least the mid-sixteenth century it is possible that a price-fixing cartel was operated in the credit-based shipping market for a long time. Although similar cartels may have been operated in other English ports, their importance to the local shipping industries would have depended on the

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[5] P.R.O. S.P.1 3 fo. 87.
[6] At the outbreak of the 1543-46 war there were ten Bristol owned ships of at least 60 tons burden. These were the *Harry, Julian, Margaret, Mary Bonaventure, Mary Bride, Mary Conceptiion, Mary James, Primrose, Saviour, Trinity*. There is no information about who owned the *Julian*, but the other ships were owned by twelve individuals: App. 6.
[7] Carus Wilson, 'The Overseas Trade of Bristol', p. 239.
[8] P. V. McGrath, 'The Merchant Venturers and Bristol shipping in the early seventeenth century', *Mariner's Mirror*, Vol. 36 (1950), pp. 74-75, 79-80.

extent to which the merchants who bought the freight space were local men whom the shipowners could trust and whose creditworthiness they could assess.

The Illicit Trade and the Shipping Market

In chapter 2 it was shown that a large-scale illicit trade was in operation at Bristol during the years 1539-46. Although the study stopped at 1546, it is clear that John Smyth continued to export leather and grain illicitly during the late 1540s, for there are references in his ledger to the illegal lading of these goods directly aboard ships in the Bristol Channel.[9] By 1555 the Crown had become so concerned by the scale of England's illicit export trade that a new law was passed to prevent it.[10] This involved a tighter system of regulation for coastal grain shipments and the imposition of severe punishments on those caught. Nevertheless, this legislation appears to have had little effect in Bristol for, in 1558, the Tyndall brothers, with the assistance of corrupt customs officers, were still exporting grain illicitly.[11]

Although the exact level of Bristol's illicit trade during the late sixteenth century is not known, the data that exists suggests that it increased rather than decreased during the second half of the sixteenth century. The best evidence for this comes from Vanes' study of the cases brought before the Court of Exchequer concerning Bristol men accused of customs evasion. Her study revealed that the number of allegations made against Bristol men more than doubled in the latter part of the sixteenth century.[12] Her figures show that about four-fifths of the allegations concerned the illicit trade of leather, grain and other products that required export licences. Apart from the increase in the number of allegations, Vanes also notes that the average size of the illicit consignments became much larger over time. For instance, the 25 consignments of calf skins allegedly smuggled between 1509 and 1558 averaged just under 46 dozen skins, while the 100 consignments exported between 1558 and 1603 averaged 184 dozen skins.[13] In the later sixteenth century Bristol merchants also seem to have been willing to go further in the pursuit of illicit profits than their counterparts of the 1540s. For example, in 1587, several Bristol merchants and shipowners were accused of sending victuals, guns and munitions to Spain despite the fact that England and Spain were

[9] *Smyth's Ledger*, fos. 120, 264.
[10] *Statutes of the Realm*, Vol. IV, i, pp. 243-44.
[11] See chapter 2, pp. 56-57.
[12] Vanes, *Overseas Trade*, p. 165.
[13] Ibid., p. 10.

then at war and it was well known that the Spanish were preparing an Armada for the invasion of England.[14]

Whether Bristol's illicit export trade was as vigorous before 1539 as it was after this time is more difficult to assess. However, it may be noted that the Crown showed little concern in customs evasion before the mid-sixteenth century and, as Vanes records, very few Bristol men were brought before the Exchequer for customs evasion during the early part of the century.[15] This does not mean that there was no export fraud before the 1530s, but it is unlikely that it was a large-scale or continuous operation. The main reason for this is that licences were only required to export leather from 1538, and before 1534 it was, at least in theory, legal to export wheat provided it cost less than 6s. 8d. per quarter at the port of export.[16] In practice, licences had often been required even if wheat prices were lower than this but since the long-term price of grain in Western Europe, and particularly Iberia, only rose above English levels after 1510, England rarely exported grain before this time.[17]

It thus seems likely that the illicit grain trade became a regular feature of Bristol's export trade only from the 1510s and that large scale illicit operations began in the 1530s when licences began to be required for the export of leather and crop failures in Iberia vastly inflated grain prices there.[18] That this was the case is suggested by a 1543 Act of Parliament that sought to prevent ships from dumping ballast in the mouth of the River Avon.[19] The Act states that the mouth of the Avon was becoming blocked because ships were dumping ballast in the river prior to acquiring illicit grain cargoes for export 'to parties beyonde the sea, where graines are verye deare'. It further notes that of 'late tyme' great boats, with foremasts, of 15-36 tons burden had been built to carry grain down the Severn to the ships going overseas. Various novel measures were passed to combat the problem, including the institution of the coastal cocket system and the implementation of fines on anyone found to be dumping ballast in the river.[20] However, for current purposes, the most interesting aspect

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[14] Vanes, *Overseas Trade*, p. 141.
[15] Ramsay, *English Overseas Trade,* p. 178-79; Vanes, *Overseas Trade*, p. 9.
[16] Hughes & Larkin, *Tudor Royal Proclamations,* pp. 268-69; Grass, *The Evolution of the English Corn Market*, pp. 137-38.
[17] During the fifteenth century the only large scale exports of grain from England to Castile were in the years 1473-5. These exports required licences, even though English wheat prices were in the region of 5-6s. per quarter at that time: W. R. Childs*, Anglo-Castilian Trade in the Later Middle Ages* (Manchester, 1978), pp. 97-99; Bowden, 'Statistical Appendix', pp. 816, 865.
[18] G. Connell-Smith, *Forerunners of Drake*, p. 4.
[19] 'An Acte for the preservacon of the Ryver of Severne', *Statutes of the Realm,* Vol. III, pp. 906-7.
[20] Up till this time cockets (customs certificates) had only been issued to ships engaged in exporting goods. They stated what goods had been declared at the customs house so that customs searchers,

of this legislation is that the Crown was responding to what was perceived as a new problem. Moreover, the evolution of a form of boat specifically designed for this purpose also implies that the large-scale illicit export trade was then in an early stage of development.

The evidence for Bristol thus suggests that the illicit export trade only became a regular feature of the city's commerce from the 1530s but that it then remained a significant component of the city's trade during the rest of the century. Still, if the extent of Bristol's illicit export trade increased during the second half of the sixteenth century, it appears that the city was not alone in this. On the basis of the Crown's unsuccessful attempts to deal with what was perceived to be a national problem, Ramsay suggested that customs evasion became commonplace in England from the mid-sixteenth century.[21] These conclusions are supported by Neville Williams's study of East Anglia's trade between 1550 and 1590. His research, which is based largely on court records, included the examination of a large-scale export fraud perpetrated by the customs searcher of King's Lynn during the 1560s and 70s.[22] Williams suggested that in some years Lynn's illicit grain exports amounted to as much as 16,000 quarters per annum and he also notes that Lynn was not the only East Anglian port to be involved in this trade.[23] His assertion that 'the bulk of this uncustomed trade was carried on with the connivance and sometimes the active assistance of the very officials whose business it was to prevent it' appears to have been one with which contemporaries would not have argued. For instance, in 1565, an Englishman at Middelburg remarked on:

> 'the marvellous quantity of corn that cometh out of England into these quarters specially out of Norfolk…if it be without licence and all stolen out, ye may be sure the customers and other that sort of officers be privy to it'[24]

The pattern of export fraud at Lynn during the 1560s and 70s was thus similar to that witnessed at Bristol in the 1540s and 50s. As at Bristol, Lynn's illicit trade centered on products that required export licences and was carried out with the assistance of corrupt

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who patrolled the coast, could ensure that additional goods had not been laded after the vessel had left the customs house. The Act of 1543 provided that similar certificates should be provided for those shipping grain along the Severn Estuary to Bristol. The cockets stated where the boat had come from, where it was sailing to and how much grain it was carrying. If a boat was laded with more than it was certified to carry, the grain could be removed and sold at Bristol.

[21] G. D. Ramsay, *English Overseas Trade During the Centuries of Emergence* (London, 1957), pp. 180-91, 197.

[22] N. J. Williams, 'Francis Shaxton and the Elizabethan port books' *English Historical Review,* LXVI (1951).

[23] N. J. Williams, *The Maritime Trade of the East Anglian Ports, 1550-1590* (Oxford, 1988), pp. 30-33.

[24] Ramsay, *English Overseas Trade,* p. 183.

customs officials. Moreover, at both places, local men accused of customs evasion were protected and supported by the civic authorities. Indeed, at Lynn, Francis Shaxton, the customs officer who was convicted of large-scale export fraud in the 1570s, was subsequently elected mayor of the town. Such a tolerance towards local merchants engaged in illicit activities was not, however, extended towards ''foreigners''.[25] By differentiating between local merchants and outsiders, the civic authorities of particular ports could have ensured that their merchants enjoyed a monopoly over the illicit export trade.

There appears to have been two reasons why the illicit export trade grew during the later sixteenth century. First, the licence system was extended during the late 1540s and 50s so that it became necessary to obtain licences to export a wide range of products, including grain, leather, beer, butter, cheese, bacon, coal, timber and bell-metal.[26] Second, inflation in Iberia, caused by the huge influx of silver from the New World, increased the profits to be made on exporting goods there. This was particularly true of the victuals trade, since the combination of a rapidly rising population and the failure of the Iberian agricultural sector to meet indigenous demand led to a great rise in food prices there. Although the direct trade to Iberia would largely have been cut off by the Anglo-Spanish war of 1585-1604, goods could still have reached there via neutral countries such as France. Once the war ended the direct trade to Iberia quickly resumed. Indeed, as Pauline Croft notes, 'By 1605, it was widely known in England that grain was even more welcome in the Iberian peninsula than it had been before the war.'[27] In the seventeenth century it seems likely that a large-scale illicit export trade continued until 1670 when the collapse of English agricultural prices resulted in the abandonment of export restrictions.[28]

To conclude, it seems likely that the large-scale illicit export trade, which was so important to Bristol's shipowners during the period 1539-46, had only developed during the 1530s. After this time, the trade almost certainly grew in size and importance since licences became necessary to export a wide range of products, and the gap between the price of English and Iberian agricultural produce increased. Since England's declared trade to Iberia continued to centre on the export of cloth until at least the seventeenth century, the legally generated

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[25] Williams, *The Maritime Trade of the East Anglian Ports,* p. 37.
[26] Hughes P L & Larkin J F (eds.), *Tudor Royal Proclamations,* Vol. I (Yale, 1964), pp. 423-24, 495-96.
[27] P. Croft, 'Free trade and the House of Commons 1605-1606', *Economic History Review,* XXVIII (1975), pp. 20-21.
[28] N. S. B. Gras, *The Evolution of the English Corn Market from the Twelfth to the Eighteenth Century* (Oxford, 1915), pp. 143-44.

demand for import freight space remained higher than the demand for export freight space for the whole of the sixteenth and seventeenth centuries.[29] As a result, the illicit export trade almost certainly continued to play an important part in helping to rectify this imbalance in shipping demand. Since English merchants would always have been better placed to exploit this trade than their competitors, and there were advantages to merchants using their own ships when engaged in the illicit export trade, this covert sector of England's trade was likely to have been of importance to the English shipping industry for much of the period from the 1530s to the 1660s.

Crown Service and Privateering

During the years 1543-46, Bristol's ships were heavily engaged in naval service and privateering. Although this was possibly the high point of Bristol's military activities during the sixteenth century, the city's marine were certainly engaged as both naval vessels and as privateers at other times. The first period of naval service in this century was the Anglo-French war of 1512-13. At least five Bristol ships served in the navy in 1513 and two were hired as victuallers in 1514.[30] In Henry's second war with France (1522-25) a full mobilisation of the merchant marine was not necessary. However, three Bristol merchants were provided with a writ to prepare two Bristol ships for the war 'at their own cost'.[31] It has already been noted that Bristol was used as a base for England's campaign to Ireland in 1534, that eight of the city's ships served at Portsmouth during the crisis of 1539 and that Bristol's ships were heavily involved in the campaigns of 1543-45. After the death of Henry VIII the city's ships continued to do good service. For instance, at least four Bristol ships served against the Armada in 1588 and three took part in the Cadiz Expedition of 1595.[32] At

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[29] R. Davis, *The Rise of the English Shipping Industry in the 17th and 18th Centuries* (London, 1962), pp. 186, 228-30.

[30] The ships serving in 1513 were the *Matthew Cradock* (240 tons), *Trinity* (160 tons), *Christopher Davy* (160 tons), *Matthew* (150 tons) and the *Mary Christopher* (140 tons). The *Trinity*, *Matthew* and *Mary Christopher* are identified as Bristol ships in the naval accounts of those years: *L&P*, I, nos. 4634, 5112, 5760. The *Matthew Cradock* and *Christopher Davy* are listed in these accounts but are not identified as Bristol ships. However, Powell identified them as Bristol ships from other sources and notes that the *Christopher Davy* also served in 1512: J. W. D. Powell, *Bristol Privateers and Ships of War* (Bristol, 1930), p. 22. In 1514 the *Elizabeth* and *Margaret* of Bristol served as victuallers to the fleet: *L&P,* I, no. 5112.

[31] *L&P,* III, no. 2685.

[32] J. Vanes, *Bristol at the Time of the Spanish Armada* (Bristol, 1988), pp. 23-29. In reality, it is likely that a greater number were actually involved for the naval accounts of the late sixteenth century, like those of 1513 and the 1540s, often failed to record where hired ships came from: J. R. Hale, *The Story of the Great Armada* (London, 1913), pp. 336-40.

least twenty-six Bristol vessels were also granted letters of Marque during the Anglo-Spanish war of 1585-1604.[33]

Since the promotion of the English shipping industry was an important plank of the Crown's commercial and military policy throughout the Tudor period, it seems likely that Bristol's shipowners would have continued to benefit politically from their possession of a large and important marine. A petition made by the city in 1584 demonstrates that Bristol's commercial community continued to play on the importance of their shipping to the Crown during crises, in the hope of receiving collective political patronage. In response to a plea by Gloucester to be made an independent port, Bristol argued to the Crown that Gloucester had no facilities for great ships and making it a port would encourage piracy and fraud. Of Bristol's own ships, it noted:

> 'The trade and shippinge of Bristowe is alreadie so decayed by reason of the premises that they have donne away and must do awaye theire greate shippinge and have offered the same to be solde to theire great losse for, althoughe the greate shippes be more worthier and serviceable, yet are the smale sorte more profytable for the merchauntes and better chepe to be fraighted and will turne and wynde in narrow places'[34]

The implication was clear. Making Gloucester an independent port would result in the Bristol Channel's great ships being replaced by small ships that were useless for naval service but well suited for the illicit trade. Since the Crown was well aware of the problem of the illicit trade and was at this time preparing for war against Spain, Bristol's shipowners must have thought their arguments would be persuasive. However, on this occasion the Crown did not accept their position and Gloucester became an independent port. It is not known whether this was because the Crown had other concerns, or whether it suspected that Bristol was simply trying to secure a monopoly over the illicit trade. Yet the case demonstrates that Bristol's shipowners were as aware in 1584 as they were in 1543 of the importance of their shipping to the Crown.

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[33] Powell, *Bristol Privateers and Ships of War*, pp. 40-48.
[34] Vanes, *Overseas Trade*, pp. 35-36.

Final Comments

This research focused in detail on a short period of time in just one English port. Yet, many of the strategies that Bristol's shipowners adopted to maximise the returns on their shipping concerns between 1539 and 1546, appear to have been used at other times and other places. In particular it seems likely that a credit based shipping cartel could have been in place at Bristol from at least the late fifteenth century to the mid-sixteenth century and that the illicit export trade probably provided a significant boost to the city's industry from the 1530s to the mid-seventeenth century. Since this illicit export trade was not exclusive to Bristol, it may also have played a part in promoting the English shipping industry in other provincial ports as well. It seems likely that the Crown was never willing to take the steps necessary to deal with this problem because it relied on England's merchant shipping in time of war and it recognised that clamping down on the illicit trade damaged the English shipping industry. Whether it really understood why this was so is not clear. Nevertheless, if the Crown had considered the matter, it might have realised that, from a mercantilist point of view, not only was the illicit trade good for English trade and shipping, but its very illegality ensured that this sector of England's commerce was dominated by English men.

Appendix 1: The Tonnage of Goods Shipped in Continental Trade

To calculate the level of demand for shipping generated by Bristol's declared Continental trade, it was necessary to translate the quantities of goods provided in the customs accounts into tonnage estimates. By the late Middle Ages, the ton of shipping capacity had become established as the long-ton of 2,240 lbs. or 40 cubic foot of shipping capacity.[1] If a ton-weight of cargo occupied 40 cubic foot or less it was rated by weight, if it occupied more than this it was rated by volume. The following appendix provides the tonnage estimates of all the goods transported by ships trading between Bristol and the Continent over the three year period covered by the surviving customs accounts of the 1540s. Although the list is a long one, most of the items detailed here are only mentioned a few times and accounted for a tiny proportion of total tonnages shipped. The reality of the Bristol shipping industry of the sixteenth century, like that of the English shipping industry of the seventeenth to eighteenth centuries, was that it was dominated by the shipment of a very narrow range of heavy and bulky commodities.[2] For the present study this is an advantage, since it means that any errors made in estimating the tonnage of the more obscure items which appear on the list would have a negligible impact on the total level of demand.

The descriptions are laid out as follows:

Commodity name *(name as it appears in the customs accounts)* – Commodity unit
Discussion of tonnage of goods.
Tonnage per unit; number of entries in customs account; total tons laded.

Almonds *(almonds)* – C
Assumed 'C' refers to cwt.
Unit = 0.05 tons; Number entries = 1; Total = 0.025 tons

Alum *(alam)* - C
Assumed 'C' refers to cwt.
Unit = 0.05 tons; Number entries = 14; Total = 9.58747 tons

Anchor *(anker)* - piece
Valued at 5s in the customs account. Since iron was valued at 50s. per ton, it was assumed that a piece weighed 0.1 tons.
Unit = 0.1 tons; Number entries = 1; Total = 0.1 tons

[1] F. C. Lane, 'Tonnages, Medieval and Modern', *Economic History Review,* XVII (1964), pp. 219-20.
[2] R. Davis, *The Rise of the English Shipping Industry* (Newton Abbot, 1962), p. 181.

Aniseed *(annes / annes sede)* – doz
Assumed a 'doz' refers to 12 lbs.
Unit = 0.00536 tons; Number entries = 14; Total = 6.71868 tons

Beans *(fabar')* – quarter (48 bushels = 6 quarters = 1wey)
Contemporary estimates suggest that 5 quarters of wheat were equivalent to one tun of Bordeaux wine for shipping purposes.[3]
Unit = 0.2 tons; Number entries = 1; Total = 6 tons

Bells *(campanam)* - piece
Valued at £1.
Unit = 0.25 tons; Number entries = 1; Total = 0.25 tons

Box-wood for combs *(box pro pecten)* – C pieces
Valued at 2s. per hundred pieces. Assumed 0.2 cubic foot per hundred pieces.
Unit = 0.005 tons; Number entries = 1; Total = 0.02999 tons

'Bomy Candarn' - C
Unidentified commodity, assumed 'C' refers to cwt.
Unit = 0.05 tons; Number entries = 1; Total = 0.75 tons

Canes *(canes)* - C
These were probably wooden drinking-vessels, sold by the piece.[4] Assumed a hundred occupied 5 cubic foot.
Unit = 0.125 tons; Number entries = 4; Total = 8.5 tons

Capers *(capers)* – doz
Assumed a 'doz' refers to 12 lbs.
Unit = 0.00536 tons; Number entries = 1; Total = 2.144 tons

Cassia Fistula *(cassa fystula)* - doz
A senna derived laxative. Assumed that a 'doz' refers to a 12 lbs.
Unit = 0.00536 tons; Number entries = 1; Total = 0.64319 tons

Cloth
The best figures on the weights of sixteenth century cloths come from a 1551 'Acte for the makinge of wollen clothe'.[5] This legislation throws considerable light on the size and weight of the fabrics that accounted for the vast majority of Bristol's cloth trade. However, the Act does not mention all the cloths listed in the customs accounts. In those cases where better information about the size or weights of cloths is unavailable, it has been necessary to adopt certain default assumptions about the cloth. These assumptions are that cloths paying poundage were 1 yard wide and weighed 1.5 lbs. per square yard. This roughly tallies with the figures of weights and widths provided in the Act of 1551 for other cloths paying poundage. If there is no information about the length of given cloths, the default assumption is that they were 25 yards long. Although these assumptions provide only rough estimates of the weight of the given cloths, they are accurate enough for present purposes

[3] D. Burwash, *English Merchant Shipping 1460-1540*, p. 94.
[4] T. S. Willan (ed.), *A Tudor Book of Rates* (Manchester, 1962), p. 13.
[5] *Statutes of the Realm*, Vol. IV, i, (London, 1819), pp. 136-7.

since such cloths accounted for only a minute proportion of the total cloth shipped into or out of Bristol.

Once the weight of cloth has been estimated it is necessary to calculate how many tons burden a ton of cloth would have occupied. This is necessary because a ton-weight of cloth would have occupied more than 40 cubic feet of shipping space. Although this issue is difficult to determine precisely, the information available on broadcloths suggest that a ton of broadcloth probably occupied around 2.5 tons burden. In the following analysis the same multiplier is adopted for all cloth. This should be roughly accurate, given that before the introduction of bale-presses in the 18th century a ton-weight of raw cotton occupied three tons of shipping capacity.[6]

Cloth, Canvas *(canvas)* – bolt
Valued at 13s. 4d. per piece. The price suggests this was 53 ells long – see below.
Unit = 0.05088 tons; Number entries = 2; Total = 1.2211 tons

Cloth, Canvas *(canvas)* – ell
Valued at 3d. per ell. The Tudor *Book of Rates* notes that 2,600 ells of canvas weighed one ton.[7] This implies one ell weighed 0.86 lbs.
Unit = 0.00096 tons; Number entries = 13; Total = 6.66806 tons

Cloth, Canvas *(canvas)* – fardel
Valued at £2 per fardel. The price suggests this was 160 ells long – see above.
Unit = 0.1536 tons; Number entries = 1; Total = 0.15360 tons

Cloth, Canvas: Finer *(fyner canvas)* – ell
Valued at 4d. per ell. It was assumed that this was the same weight as ordinary canvas.
Unit = 0.00096 tons; Number entries = 2; Total = 0.92159 tons

Cloth, Canvas: Breton White *(whyte bryttyshe)* – ell
Valued c. 5d. per ell. It was assumed that this was the same weight as ordinary canvas.
Unit = 0.00096 tons; Number entries = 1; 0.01439 tons

Cloth, Canvas: Holland *(holen')* – ell
Valued at 3.33d. per ell. It was assumed that this was the same weight as ordinary canvas.
Unit = 0.00096 tons; Number entries = 1; Total = 0.04608 tons

Cloth, Canvas: Oleron *(olron)* – piece
Valued at 6s. 8d. per piece. In the 1558 *Book of Rates*, it is noted that 100 'Oulderons' weighed one ton, implying that each weighed 22.4 lbs.[8]
Unit = 0.025 tons; Number entries = 1; Total = 0.2 tons

[6] R. Davis, *The Rise of the English Shipping Industry* (Newton Abbot, 1962) p. 179.
[7] Willan (ed.), *A Tudor Book of Rates*, pp. 84-85.
[8] Willan (ed.), *A Tudor Book of Rates,* pp. 84-85.

Cloth, Canvas: Poldavis *(poldavy)* – piece
Valued at 10s. per piece. In the 1582 *Book of Rates*, it is noted that 100 Poldavis weighed one ton, implying that each weighed 22.4 lbs.[9]
Unit = 0.025 tons; Number entries = 6; Total = 3.075 tons

Cloth, Canvas: Vitry *(viteri canvas)* – bale
Valued at 30s. per bale. Based on the price, it was assumed this was 120 ells long.
Unit = 0.0052; Number entries = 1; 0.0416 tons

Cloth, Linen Irish *(pan' linen hiben')* – yard
Valued c. 2d. per yard. This item is listed here because it was carried on a ship that appears to have stopped-off in Ireland on-route between the Continent and Bristol – See Appendix 4. It was assumed that it weighed the same as an ell of canvas.
Unit = 0.00096 tons; Number entries = 1; Total = 0.1728 tons

Cloth, Linen Scottish *(pan' linei scot')* – yard
It was assumed that that it weighed roughly the same as an ell of canvas.
Unit = 0.00096 tons; Number entries = 1; Total = 0.048 tons

Cloth, Lining Narrow *(narrow lynyng)* – piece
Valued 4s. 2d. and 10s. a piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 2; Total = 0.7533 tons

Cloth, Lining *(lynyng)* – piece
Valued £1 a piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 1; Total = 0.29295 tons

Cloth, Lining Yellow *(yelow lynyng)* – piece
Valued 13s. 4d. a piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 1; Total = 0.20925 tons

Cloth, Lining Yellow *(yelow lynyng)* – yard
Valued 7 d. per yard. The default assumptions for cloth weights were adopted.
Unit = 0.00167 tons; Number entries = 1; Total = 0.02008 tons

Cloth, Tissue *(cloth de tyssewe)* - yard
Valued at £2 per yard. The default assumptions for cloth weights were adopted.
Unit = 0.00167 tons; Number entries = 1; Total = 0.03757 tons

Cloth, Woollen - Cloth of Assize
The vast majority of Bristol's cloth trade consisted of the export of English woollen cloth. Since English woollens took many shapes and forms, most were rendered in the customs accounts in terms of nominal cloths of assize. Such nominal cloths paid the ancient custom of 14d. for each cloth exported by indigenous merchants. Cloths of assize were normally described as *'pann' sine grano'*. However, they were also sometimes listed as *'dozens'* and *'straits'*. *Dozens* were half the length of a full cloth, *straits* were half the width. The Bristol customs accounts indicate that the cloth of assize was 24 yards long. This tallies with the figures given in the *Noumbre of Weyghts* that a finished broadcloth was 24 yards long and 2

[9] Willan (ed.), *A Tudor Book of Rates*, pp. 84-85.

yards wide. The weight of such a cloth can be determined from the 1551 'Acte for the makinge of wollen clothe'.[10] The full broadcloths listed in the Act weighed between 68 and 90 lbs. Assuming that a cloth of assize was about midway between these extremes would make a cloth of assize about 80 lbs.[11] The number of ship tons this would have occupied can be determined by working backwards from what knowledge exists about the thickness of English Broadcloth. The best indicator of this comes from a merchant contact of 1458 which has three fragments of well-preserved English broadcloth pinned to it as samples. These fragments are between 1.5 and 2.0 mm. thick, indicating that broadcloth was, by modern standards, a very heavy and exceptionally dense cloth.[12] If it is assumed that the typical broadcloth was 2 mm. thick, the volume of a cloth of assize, weighing 80 lbs. (0.0357 tons), would have been 2.83 cubic foot (0.708 tons). This would indicate that one ton of cloth occupied two ships-tons. However, since space would have been lost in packing and stowage, it seems fairer to assume that one ton-weight of broadcloth occupied 2.5 ship-tons.

Cloth, Woollen: Cloth of Assize, standard size *(pann' sine grano, pan' s' g')* – piece
This is the standard woollen cloth discussed above.
Unit = 0.08929 tons; Number entries = 332; Total = 507.29271 tons

Cloth, Woollen: Cloth of Assize, Dozen *(doz s' g')* – piece
This was half the length of the standard cloth.
Unit = 0.04465 tons; Number entries = 2; Total = 0.26788 tons

Cloth, Woollen: Cloth of Assize, Dozen Straight *(doz strait s' g')* – piece
This was half the length and half the width of the standard cloth.
Unit = 0.02232 tons; Number entries = 16; Total = 2.47745 tons

Cloth, Woollen: Cloth of Assize, Dozen Northern *(doz northern)* – piece
Since it paid the same custom as the standard Dozen it was assumed to be the same size. Unit = 0.04465 tons; Number entries = 2; Total = 0.53578 tons

Cloth, Woollen: Cloth of Assize, Long *(pan' sine g'no longos)* – piece
It was assumed to be 30% longer than the standard cloth.
Unit = 0.11608 tons; Number entries = 1; Total = 0.23216 tons

Cloth, Woollen: Cloth of Assize, Straight Northern *(streit northern)* – piece
Since it paid custom of 7d. per piece, it was assumed to be the same size as the standard straight cloth.
Unit = 0.04465 tons; Number entries = 4; Total = 3.39337 tons

Cloth, Woollen: Brecon *(pan' Brecknock)* – piece
Valued at £1 per cloth. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 4; Total = 0.5859 tons

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[10] *Statutes of the Realm*, Vol. IV, i, (London, 1819), pp. 136-7.
[11] The finished weights of full broadcloths in the Act are: Kent / Sussex / Reading - 90 lbs.; Long Worcester / Coventry - 84 lbs.; Coloured Worcester / Coventry - 80 lbs.; Suffolk / Norfolk / Essex Long cloths - 80 lbs.; Broad Wiltshire Coloureds– 68 lbs.; Wiltshire, Somerset and Gloucestershire Whites - 68 lbs. : *ibid* Although the Act also specifies the length and breadth of the cloths, these should be treated with care, since the dimensions mentioned concern un-finished cloths.
[12] P. Wolff, 'Three samples of English fifteenth-century cloth', in N. B. Harte and K. G. Ponting (eds.), *Cloth and Clothing in Medieval Europe* (London, 1983), pp. 120-25.

Cloth, Woollen: Bristol White *(Bristol white)* – piece
The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 1; Total = 0.04185 tons

Cloth, Woollen: Check *(chek, chekers*) – yard
An Irish product that is included here because it is listed on two ships that appear to have stopped in Ireland on-route between the Continent and Bristol – see Appendix 4. The default assumptions for cloth weights were adopted;
Unit = 0.00167 tons; Number entries = 7; Total = 1.12387 tons

Cloth, Woollen: Cotton Manchester *(manchester cotten, manchesturs)* – piece
Valued 10s. a piece. This was by far the most common cloth among cloths paying poundage. The Act of 1551 stipulated that Manchester / Lancashire / Cheshire Cottons should be 22 yards long, a yard wide and weigh 30 lbs., making them 1.36 lbs. per square yard.[13]
Unit = 0.03348 tons; Number entries = 72; Total = 130.40436 tons

Cloth, Woollen: Cotton Northern *(northen cotten)* – piece
Valued 4s. 2d. a piece. It was assumed that it was the same weight as a Manchester Cotton.
Unit = 0.03348 tons; Number entries = 17; Total = 13.49241 tons

Cloth, Woollen, Dozen Straight Welsh *(doz strait welsh)* – piece
The name suggests this was 12 yards long and 1 yard wide. The default assumptions for cloth weights were adopted on this basis.
Unit = 0.02004 tons; Number entries = 7; Total = 0.92180 tons

Cloth, Woollen, Dozen Western (*doz western*) – piece
The name suggests this was 12 yards long and 1 yard wide. The default assumptions for cloth weights were adopted on this basis.
Unit = 0.02004 tons; Number entries = 3; Total = 1.68333 tons

Cloth, Woollen: Dunster *(dunster)* – piece
Valued at 10 s. per cloth. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 20; Total = 7.86776 tons

Cloth, Woollen, Flannel *(flannel)* – yard
Valued at 6 d. per yard. The default assumptions for cloth weights were adopted.
Unit = 0.00167 tons; Number entries = 1; Total = 0.5009 tons

Cloth, Woollen, Flannel *(flannel)* – ell
Valued at 6 d. per yard. Assuming 1.25 yards to the English ell, the default assumptions for cloth weights were adopted.
Unit = 0.00209 tons; Number entries = 1; Total = 0.05225 tons

Cloth, Woollen: Frieze *(fryse)* – yard
Valued 4 d. per yard. The default assumptions for cloth weights were adopted.
Unit = 0.00167 tons; Number entries = 1; Total = 0.02003 tons

[13] *Statutes of the Realm*, Vol. IV, i, (London, 1819), p. 137.

Cloth, Woollen: Frieze Bristol *(Brystol fryse)* – piece
Valued 13s. 4d. per yard. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 36; Total = 7.99331 tons

Cloth, Woollen: Frieze Double *(doble fryse)* – piece
Valued £2 a piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 1; Total = 0.2511 tons

Cloth, Woollen: Frieze Fletchers *(Fletchers fryshe)* - ell
The default assumptions for cloth weights were adopted.
Unit = 0.00209 tons; Number entries = 1; Total = 0.00209 tons

Cloth, Woollen: Molton *(molton)* – piece
Valued at 4s. 2d. a piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 3; Total = 0.7533 tons

Cloth, Woollen: Molton and Tavestock *(tavestock & molton)* - piece
Valued at 4s. 2d. a piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 1; Total = 13.392 tons

Cloth, Woollen: Motley *(motley)* – piece
Valued at £1 a piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 1; Total = 0.1674 tons

Cloth, Woollen: Stolorn *(pan' stolorn)* – piece
Valued at 10s. 4d. a piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 1; Total = 0.04185 tons

Cloth, Woollen: Tavestock *(tavestock)* – piece
Valued once at 2s. 2d. and once at 4s. 2d. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 2; Total = 1.71585 tons

Cloth, Woollen: Welsh *(pan' wall', walsh)* – piece
Valued at £1 a piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 45; Total = 9.71228 tons

Cloth, Woollen: Wodnall *(wodnoll)* – piece
Valued at between 10s. and 15s. a piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 3; Total = 0.54405 tons

Cloth, Woollen: Wodnall & Flannel *(wodnoll & flannel)* – ell
Valued at 4d. per ell. Assuming 1.25 yards to the ell, the default assumptions for cloth weights were adopted.
Unit = 0.00209 tons; Number entries = 1; Total = 0.08359 tons

Cloth, Woollen: Wodnall & Flannel *(wodnoll & flannel)* – piece
Valued at 12s. 6d. and 20s. 9d. a piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 2; Total = 0.69052 tons

Cloth, Woollen: Worsted *(worsted)* - piece
Valued at £1 per piece. The default assumptions for cloth weights were adopted.
Unit = 0.04185 tons; Number entries = 2; Total = 0.10462 tons

Coal *(carbon)* – wey (4weys = 1 last)
Valued at 3s. 4d. per wey. The wey of coal employed by the Bristol customs officers was roughly one ton.[14]
Unit = 1 ton; Number entries = 22; Total = 384.5 tons

Conserves *(consewes)* – C
Assumed 'C' refers to cwt.
Unit = 0.05 tons; Number entries = 1; Total = 0.025 tons.

Cork *(corke)* - doz
It was assumed a 'doz' refers to 12 lb. Since a ton of cork occupies the same space as 8-10 tons of water, this was assumed to occupy 0.05 tons.[15]
Unit = 0.05 tons; Number entries = 1; Total = 2.5 tons

Dates *(dats)* – C
Assume 'C' refers to cwt.
Unit = 0.05 tons; Number entries = 1; Total = 0.05 tons

Feathers, Down *(plumar)* – C
Valued 13s. 4d. per C. It was assumed 'C' refers to cwt. Since down-feathers would be very bulky commodity it was assumed a cwt. of down occupied 10 cubic foot.
Unit = 0.25 tons; Number entries = 1; Total = 1.25 tons

Feathers *(fethers)* – bag
Valued 13s. 4d. Since a cwt. of feathers is valued 10s. per cwt., this was assumed to occupy 13.33 cubic foot.
Unit = 0.33333 tons; Number entries = 1; Total = 0.33333 tons

Feathers *(fethers)* – C
Valued 10s. per C. It was assumed a 'C' refers to cwt. and that a cwt. of feathers occupied 10 cubic foot.
Unit = 0.25 tons; Number entries = 1; Total = 2.25 tons

Figs *(fyggs)* - ton (1 ton = 40 pieces)
Unit = 1 ton; Number entries = 5; Total = 40.75 tons

Figs and Raisins *(fyggs & resyngs)* – ton
Unit = 1 ton; Number entries = 2; Total = 0.60829 tons

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[14] J. U. Nef, *The Rise of the British Coal Industry,* Vol. II (London, 1932), p. 373.
[15] R. Davis, *The Rise of the English Shipping Industry* (Newton Abbot, 1962), p. 179.

Fish, Newfoundland *(pisc' de nova terra)* - hundred pieces
Stockfish was sold by the long hundred of 120 fish. In the mid-18th century the mean size of live Newfoundland Cod was 10 lbs.[16] At that time Newfoundland fish were still line-caught (as they had been in the sixteenth century) and the Grand Banks had yet to experience the over-fishing that led to a reduction in mean fish sizes during the twentieth century. It therefore seems reasonable to assume that the mean size of sixteenth century Newfoundland fish was also about 10 lbs. The fish listed in the Bristol accounts generally came on French ships, which then dominated the Newfoundland fisheries. They would probably have been transported to France as 'green' fish and then dried there before being exported to England.[17] The weight ratio of dried stockfish to live fish is 4.8:1.[18] The mean weight of the Newfoundland fish appearing in the accounts would thus have been about 2 lbs. and a long-hundred would thus have weighed 240 lbs.
Unit = 0.10714 tons; Number entries = 4; Total = 82.2835 tons

Fish, Salmon *(salmon)* – pipe
An export from Bristol to the Continent. The pipe of salmon was 84 gallons.
Unit = 0.333 tons; Number entries = 1; Total = 2.33333 tons

Flax *(flaxe)* – doz
It was assumed a 'doz' refers to 12 lbs.
Unit = 0.00536 tons; Number entries = 1; Total = 0.01339 tons

Frankincense *(frankensens)* - doz
It was assumed a 'doz' refers to 12 lbs.
Unit = 0.00536 tons; Number entries = 2; Total = 0.29478 tons

Fruit *(fructe)* – ton
Unit = 1 ton; Number entries = 28; Total = 260.41316 tons

Ginger *(gynger)* - lb.
Unit = 0.00045 tons; Number entries = 2; Total = 0.02339 tons

Graynes – lb.
This was a red dye.
Unit = 0.00045 tons; Number entries = 1; Total = 0.0675 tons

Hides, Kip *(kypp)* – dicker (1 dicker = 10 hides)
These are tanned hides from juvenile cattle. Since they were taxed at half the rate of the normal hides, it was assumed they were half the weight.
Unit = 0.08929 tons; Number entries = 13; Total = 3.918 tons

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[16] B. Winsor, 'Historical sizes of Northern Cod' (unpublished paper, Memorial University, Newfoundland).
[17] H. A. Innis, *The Cod Fisheries: The History of an International Economy* (Toronto, 1954), p. 50.
[18] Canadian Department of Fisheries and Oceans, *The Statistical Co-ordination Committee of the Atlantic Coast Standard Conversion Factors, All Species,* Document No.2, Revision No.1 (June 1984).

Hides, Tanned *(corrior' tannat')* – dicker (1 dicker = 10 hides)
Modern cow / steer hides weigh about 55-65 lbs.[19] However, while the average whithers height of Tudor cows was only 1.22 metres, most modern breeds are considerably larger than this.[20] For instance, Britain's most common dairy cow, the Fresian, averages 1.33 metres / 600 kg when fully mature, while the most common beef cow, the Hereford, averages 1.30 m / 540 kg.[21] Among modern breeds from the British Isles, the closest in height to the Tudor cows is the Irish Kerry, average 1.22 m / 375 kg.[22] Since this is only about two-thirds the size of the most common breeds, it was assumed that cow or steer hides in mid-sixteenth century Bristol would have weighed about 40 lbs. This would make a dicker 400 lbs.
Unit = 0.17871 tons; Number entries = 95; Total = 260.41316 tons

Honey *(Mellis)* - tun
Unit = 1 ton; Number entries = 3; Total = 10.333 tons

Hops *(hopps)* – C
It was assumed a C is a cwt.
Unit = 0.05 tons; Number entries = 1; Total = 0.1 ton

Iron *(ferri')* – ton
The late fifteenth century *Noumbre of Weyghtes* states that there were 112 lb. to a cwt. of iron and 20 cwt. to the ton. This was still true in the early seventeenth century.[23]
Unit = 1 ton; Number entries = 86; Total = 2095.41644 tons

Lead *(plu'be)* – ton
Unit = 1 ton; Number entries = 29; Total = 436.599 tons

Lead *(plu'be)* – fother
There were 19.5 royal fothers to a ton.
Unit = 0.975 tons; Number entries = 2; Total = 189.14998 tons

Lead, worked *(plu'be operat')* – ton
Unit = 1 ton; Number entries = 82; Total = 467.66247 tons

Lemons *(lemons)* – thousand pieces
Valued at 3s. 4d. per thousand. A thousand modern lemons weigh c. 200 lbs.[24]
Unit = 0.08929 tons; Number entries = 1; Total = 0.89289 tons

Lemons & Oranges *(lemmans & orenges)* – thousand pieces
Valued 3s. 6d. per thousand. Assuming an even mix of oranges and lemons, a thousand would weigh c. 300 lbs.
Unit = 0.13393 tons; Number entries = 1; Total = 1.3393 tons

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[19] 'Prices', *Leather*, March 1996, p. 64.
[20] S. J. M. Davis, *The Archaeology of Animals* (London, 1987), p. 178.
[21] M. H. French, *European Breeds of Cattle*, Vol. I (Rome, 1966), pp. 120-25, 137-43.
[22] Ibid., pp. 151-55.
[23] H. Hall and F. J. Nicholas (eds.), 'Select tracts and table books relating to English weights and measures (1100-1742), *Camden Miscellany*, Vol. XV (London, 1929), pp. 11, 24.
[24] F.A.O., *Production Yearbook*, Vol. 25 (1971), p. 725.

Lime *(lyme)* – ton
Unit = 1 ton; Number entries = 2; Total = 1.75 tons

Liquorice *(licoric')* - doz
It was assumed a 'doz' was 12 lbs.
Unit = 0.00536 tons; Number entries = 6; Total = 3.85916 tons

Locks, small *(small locks)* - piece
It was assumed a piece weighed 1 lb.
Unit = 0.00045 tons; Number entries = 1; Total = 0.00449 tons

Mantles *(Mant')* - piece
These are Irish woollen cloaks. It is listed here because one arrived on the *Conception* of Leusa on 20 January 1546, which appears to have stopped in Ireland while on-route between the Continent and Bristol – see Appendix 4. It was assumed a piece it occupied half a cubic foot of ship's space.
Unit = 0.0125 tons; Number entries = 1; Total = 0.0125 tons

Marmalade *(marmylad)* – lb.
When recorded by the 'C' or 'barrel' it was assumed that a C is a 112 lbs. and a barrel was 280 lbs.
Unit = 0.00045 tons; Number entries = 13; Total = 1.9152 tons

Masts, little *(lytyll masts)* - piece
Valued 1s. per mast. In the eighteenth century masts were divided into 'great', 'middle' and 'small' masts, small ones being 6-8 inches in diameter and 6-8 yards long.[25] Assuming the 'little' masts described here were 7 inches in diameter and 7 yards long, they would contain 5.7 cubic foot of timber. However since an additional allowance should probably be allowed for the awkwardness of stowing such objects, it is suggested that each mast occupied 10 cubic foot of cargo space.
Unit = 0.25 tons; Number entries = 1; Total = 5 tons

Mees Brode – piece
An unidentified commodity. Assumed a piece weighed a cwt.
Unit = 0.05 tons; Number entries = 1; Total = 0.2 tons

Oakum *(ocam)* – C
It was assumed a 'C' was cwt.
Unit = 0.05 tons; Number entries = 4; Total = 0.525 tons

Oars *(owres, ores)* – piece
Assumed two cubic foot a piece.
Unit = 0.05 tons; Number entries = 2; Total = 9 tons

Oil, Olive *(olei)* – tun
Unit = 1 ton; Number entries = 103; Total = 547.125 tons

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[25] R. G. Albion, *Forests and Seapower* (Cambridge, Mass. 1926), pp. 28-29; H. S. Kent, 'The Anglo-Norwegian timber trade in the eighteenth century', *Economic History Review*, VIII (1955), p. 64.

Oil, train *(trayn)* - tun
Unit = 1 ton; Number entries = 7; Total = 9.205 tons

Olives *(oyle berries)* - C
Valued 4s. per C. It was assumed a C was a cwt.
Unit = 0.05 tons; Number entries = 1; Total = 0.25 tons

Olives *(oyle berries)* – little barrel
Valued once at 6s. 8d. and once at 1s. 8d. per little barrel. Assumed a little barrel weighed a cwt.
Unit = 0.05 tons; Number entries = 2; Total = 5.1 tons

Onions *(onyons)* - rope
A rope of onions contained 15 heads.[26] Assumed 10 lbs. per rope.
Unit = 0.00446 tons; Number entries = 1; Total = 0.669 tons

Oranges *(orynges, orenges)* - thousand pieces
Valued 3s. 4d. per thousand. A thousand modern oranges weigh c. 400 lbs.[27]
Unit = 0.17857 tons; Number entries = 8; Total = 25.53545 tons

Orchil *(orchel)* – C (1 C = 8 stone)
Assumed C refers to cwt.
Unit = 0.05 tons; Number entries = 10; Total = 5.39996 tons

Paper *(paper)* – ream (8 reams = 1 balett)
The Tudor *Book of Rates* indicates that 200 reams weighed one ton, making a ream of paper 12 lbs.[28]
Unit = 0.00536 tons; Number entries = 2; Total = 0.16078 tons

Pepper *(piperis)* – lb.
Unit = 0.00045 tons; Number entries = 3; Total = 0.06209 tons

Perfume *(perfumes)* - lb.
Unit = 0.00045 tons; Number entries = 1; Total = 0.00765 tons

Pitch *(piche)* – C
Assumed 'C' is cwt.
Unit = 0.05 tons; Number entries = 1; Total = 0.08299 tons

Pitch & Rosin *(pytche & rosen)* – C (20 C = 1 ton)
Assumed a 'C' was a cwt.
Unit = 0.05 tons; Number entries = 2; Total = 11 tons

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[26] H. Hall and F. J. Nicholas (ed.), 'Select tracts and table books relating to English weights and measures', *Camden Miscellany*, Vol. XV (London, 1929), p. 28.
[27] F.A.O., *Production Yearbook*, Vol. 25 (1971), p. 725
[28] T. S. Willan (ed.), *A Tudor Book of Rates* (Manchester, 1962), pp. 84-85.

Prunes *(prunes)* – C
Assumed a 'C' was a cwt.
Unit = 0.05 tons; Number entries = 1; Total = 0.34999 tons

Raisins *(resyngs)* – ton (1 ton = 24 pieces)
Unit = 1 ton; Number entries = 29; Total = 188.45826 tons

Rosin *(rosen)* – C (20 C = 1 ton)
Assumed a C was a cwt.
Unit = 0.05 tons; Number entries = 15; Total = 13.299 tons

Salt *(salis)* – ton
Unit = 1 ton; Number entries = 84; Total = 1316.75 tons

Serches - doz
An unidentified product valued at 4s. 2d. per dozen. It always arrived with cargoes of Spanish iron, which suggests that it was a product of Guipuzcoa. It was assumed a 'doz' is 12 lbs.
Unit = 0.00536 tons; Number entries = 15; Total = 0.61625 tons

Skins, Budge *(pell' de boge)* – doz pieces (10 doz = C)
These were high quality lamb skins of a type originating in North Africa.[29] It was assumed a dozen accounted for one cubic foot of capacity.
Unit = 0.025 tons; Number entries = 6; Total = 21.35825 tons

Skins, Calf *(pell' vitul')* – doz
When licenced for export 10 dozen calf skins were the equivalent of 1 dicker of hides.[30] It has thus been assumed that a dozen calf skins weighed one tenth of a dicker of tanned hides.
Unit = 0.01786 tons; Number entries = 69; Total = 44.28335 tons

Skins, Calf tanned *(pell' vitul' tannat')* - doz
This appears to have been a fuller way of writing *'pell' vitul'* - 'Skins, Calf'.
Unit = 0.01786 tons; Number entries = 5; Total = 2.33068 tons

Skins, fish *(pell' pisc')* - doz
It was assumed a 'doz' refers to 12 lbs.
Unit = 0.00536 tons; Number entries = 3; Total = 0.0875 tons

Skins, for fletchers *(pell' pro fletchers)* – piece
It is not clear what these were. It was assumed each occupied a tenth of a cubic foot.
Unit = 0.0025 tons; Number entries = 1; Total = 0.05499 tons

Skins, fox *(pell' vulpis)* - piece
It was assumed that each occupied a tenth of a cubic foot.
Unit = 0.0025 tons; Number entries = 2; Total = 0.02749 tons

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[29] E. M. Veale, *The English Fur Trade in the Later Middle Ages* (Oxford, 1966), pp. 216-17.
[30] *L&P*, XVII, no. 443/7.

Skins, Civet Cat *(pell' de gennett)* - piece
It was assumed that each occupied a tenth of a cubic foot.
Unit = 0.0025 tons; Number entries = 2; Total = 0.01248 tons

Skins, Kid rough – doz
It was assumed a dozen occupied two cubic foot.
Unit = 0.05 tons; Number entries = 1; Total = 0.8999 tons

Skins, lamb *(pell' Agnor)* - doz (10 doz = C)
Assumed the same as for 'Skins, Budge'.
Unit = 0.025 tons; Number entries = 2; Total = 15.875 tons

Skins, Marten *(pell' de martron)* – piece
Assumed that each occupied a tenth of a cubic foot.
Unit = 0.0025 tons; Number entries = 2; Total = 0.1748 tons

Skins, Marten Beach *(pell' de foyne)* - piece
Assumed that each occupied a tenth of a cubic foot.
Unit = 0.0025 tons; Number entries = 2; Total = 0.00498 tons

Skins, sheep *(pell' ovin')* - doz
Valued at 1s. per dozen. Assumed two cubic foot per dozen.
Unit = 0.05 tons; Number entries = 4; Total = 2.625 tons

Skins, Sheep worked *(pell' de ovin' operat')* – doz
Valued at between 1s. and 1s. 4d. per dozen. Assume that worked skins were those that had been tanned. Assume same tonnage as ordinary sheep skins.
Unit = 0.05 tons; Number entries = 6; Total = 13.025 tons

Skins, Wildcat *(pell' catorn')* - piece
Assumed that each occupied a tenth of a cubic foot.
Unit = 0.0025 tons; Number entries = 1; Total = 0.125 tons

Soap *(sope)* – C (1 C = 1.5 serons)
Assumed a C was a cwt.
Unit = 0.05 tons; Number entries = 61; Total = 63.35 tons

Steel *(stelle)* – C
One entry, brought in with a cargo of iron. Assumed a C was a cwt.
Unit = 0.05 tons; Number entries = 1; Total = 0.22499 tons

Strats
Unidentified commodity. Assumed each occupied a doz. lbs.
Unit = 0.005 tons; Number entries = 1; Total = 0.125 tons

Sugar *(shuger)* – lb. (120 lb = 48 loafs = 1 chest)
Unit = 0.00045; Number entries = 21; Total = 3.78 tons

Tankards *(tankards)*– doz
Assumed a dozen tankards occupied 1 cubic foot.
Unit = 0.025 tons; Number entries = 1; Total = 0.1 tons

Tar *(tarr)* – last (1 last = 12 barrels)
Valued £1 per last. A 1533 reference to tar bought by the navy notes that a barrel of tar was 16 gallons.[31] If the Bristol barrel was the same as this, the Bristol last would be 192 gallons.
Unit = 0.7619 tons; Number entries = 4; Total = 93.33274 tons

Thread *(filli)* - bolt
Assumed a bolt of thread occupied 1 cubic foot.
Unit = 0.025 tons; Number entries = 1; Total = 2.5 tons

Tin *(stanni)* – M
Assume 'M' = 10 cwt.
Unit = 0.5 tons; Number entries = 2; Total = 0.375 tons

Tin, worked *(stanni' operat')* – lb.
The number of ship-tons worked tin would occupy would depend entirely on how densely it could be packed. Assumed 1 lb. occupied 6 'ship lbs.'
Unit = 0.00268 tons; Number entries = 3; Total = 3.60192 tons

Turpentine *(turpantyne)* - C
Assumed a 'C' was a cwt.
Unit = 0.05 tons; Number entries = 3; Total = 0.5 tons

Vestments, Misc. *(indiversus peces of vestments)* – unspecified quantity
Valued at 6s. 8d. Assumed it occupied 8 cubic foot.
Unit = 0.2 tons; Number entries = 1; Total = 0.2 tons

Vinegar *(vini egri)* – tun
Unit = 1 ton; Number entries = 10; Total = 19.5 tons

Wax *(wex, cere')* – lb.
Unit = 0.00045 tons; Number entries = 4; Total = 0.71729 tons

Wheat *(frumente, tritur')* – quarter
Contemporary estimates suggest that five quarters of wheat were equivalent to one tun of Bordeaux wine for shipping purposes.[32]
Unit = 0.2 tons; Number entries = 4; Total = 30 tons

Wine *(vini)* – tun
Unit = 1 ton; Number entries = 450; Total = 4465.666 tons

Wine, Corrupt *(vini corupti)* – tun
Unit = 1 ton; Number entries = 67; Total = 345 tons

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[31] J. E. T. Rogers, *A History of Agriculture and Prices in England*, Vol. IV, (Oxford, 1882), pp. 394-95.
[32] D. Burwash, *English Merchant Shipping 1460-1540*, p. 94.

Wire (vyre) – pole
Assumed a pole weighed a cwt.
Unit = 0.05 tons; Number entries = 1; Total = 0.6499 tons

Woad *(wode, gaid)* - C (2.5 cwt. = 1 bale)
Unit = 0.05 tons; Number entries = 9; Total = 16.9675 tons

Woad, Azores *(gaid insulis)* – C (2.5 cwt. = 1 bale)
Unit = 0.05 tons; Number entries = 27; Total = 329.28748 tons

Woad, Toulouse *(gaod tholozie, gaid tolos)* – C (2.5 cwt. = 1 bale)
Unit = 0.05 tons; Number entries = 17; Total = 78 tons

Wood, Boards, Bewdeley – doz
Assumed a dozen boards occupied the same space as a dozen wainscot boards.
Unit = 0.1 tons; Number entries = 1; Total = 1.5 tons

Wood, Clapboard *(Clappoll)* – Hundred pieces
The *Noumbre of Weyghtes* notes that 30 hundred pieces of clapboard equalled a ship-last – the Dutch and Baltic ship-last being roughly two English tons.[33]
Unit = 0.06667 tons; Number entries = 1; Total = 0.40002 tons

Wood, Wainscot *(Weynscot)* – hundred boards
The *Noumbre of Weyghtes* notes that two hundred boards of wainscot make a ship-last, so a hundred boards would equal a ton.[34]
Unit = 1 ton; Number entries = 2; Total = 9.70832 tons

Wool, Spanish *(Lane, Hespan')* – stone
Assumed that a stone (14 lbs.) of raw wool occupied three times its weight in ship space.
Unit = 0.01875 tons; Number entries = 3; Total = 0.74999 tons

[33] H. Hall and F. J. Nicholas (ed.), 'Select tracts and table books relating to English weights and measures', *Camden Miscellany*, Vol. XV (London, 1929), p. 18; F. C. Lane, 'Tonnages, Medieval and Modern', *Economic History Review,* XVII (1964) pp. 224-25.
[34] Hall and Nicholas 'Select tracts and table books relating to English weights and measures', p. 18.

Appendix 2: John Smyth's Imports and Exports 1539 – September 1546, in Tons

The following appendix provides the basis for tables 2.20 and 2.21, figures 2.4 and 2.5, and other references in the thesis to John Smyth's import and export activities. The dates given for Bristol ships represent the date given in Appendix 6. For non-Bristol ships the date given is based on *Smyth's Ledger*. The tonnage of goods was determined by the same criteria used for customs accounts – see Appendix 1. It was assumed that horses, of which Smyth exported three, each occupied two tons burden. The 'References' relate either to Appendix 6 or to the folio number in *Smyth's Ledger*.

John Smyth's Imports

Date	*Ship*	*Registration*	*Commodity*	*Tons*	*Ref.*
15 April 1539	*Trinity*	Bristol	iron	46.66	Ap. 6
14 May 1539	Asteaucu's ship	Pasajes	iron	13.00	50
15 October 1539	*Trinity*	Bristol	iron	50.00	Ap. 6
25 November 1539	*Mary Bride*	Bristol	wine	5.00	Ap. 6
4 December 1539	*Trinity*	Bristol	wine	24.75	Ap. 6
15 December 1539	*Primrose*	Bristol	wine	5.00	Ap. 6
22 December 1539	*John Baptist*	Bristol	wine	15.00	Ap. 6
23 December 1539	*Mary Christopher*	Bristol	wine	6.00	Ap. 6
13 January 1540	*Jesus*	Barnstaple	oil	3.00	84
15 January 1540	*Saviour*	Bristol	oil	2.00	Ap. 6
15 January 1540	*Saviour*	Bristol	wine	2.00	Ap. 6
4 February 1540	*Margaret*	Minehead	wine	5.00	96
14 February 1540	*Katherine*	Barnstaple	wine	5.00	79
29 April 1540	*Trinity*	Bristol	iron	48.07	Ap. 6
19 June 1540	*Jesus*	Bristol	woad	6.80	Ap. 6
8 July 1540	*Magdalen*	Pasajes	woad	10.71	52
17 July 1540	*Mary Christopher*	Bristol	oil	6.00	Ap. 6
15 August 1540	*Trinity*	Caerleon	oil	6.25	Ap. 6
19 August 1540	*Trinity*	Bristol	iron	57.00	Ap. 6
6 November 1540	*Trinity*	Bristol	wine	11.00	Ap. 6
6 November 1540	*Trinity*	Bristol	woad	0.71	Ap. 6
15 November 1540	*Jesus*	Bideford	wine	0.50	114
15 November 1540	*Primrose*	Bristol	wine	5.00	Ap. 6
24 November 1540	*Margaret*	Bristol	wine	10.00	Ap. 6
4 December 1540	*Jesus*	Bristol	wine	8.50	Ap. 6
15 December 1540	*Britton*	Bristol	wine	3.50	Ap. 6
15 December 1540	*Harry*	Bristol	wine	15.00	Ap. 6
15 December 1540	*Christopher*	Dartmouth	wine	10.25	108

Date	*Ship*	*Registration*	*Commodity*	*Tons*	*Ref.*
15 December 1540	*Jesus*	Torres	wine	7.00	108
20 December 1540	*Mary Christopher*	Bristol	wine	4.00	Ap. 6
26 April 1541	*Trinity*	Bristol	iron	50.00	Ap. 6
3 August 1541	*Harry*	Bristol	oil	40.00	Ap. 6
4 October 1541	*John Baptist*	Renteria	iron	10.00	127
6 November 1541	*Ann*	London	woad	1.75	52
14 November 1541	*Margaret*	Bristol	wine	10.25	Ap. 6
15 November 1541	*Margaret Bonaventure*	Plymouth	wine	10.25	144
16 November 1541	*Mary Fortune*	Gloucester	wine	10.00	Ap. 6
20 November 1541	*Britton*	Bristol	wine	8.00	Ap. 6
20 November 1541	*Ann*	London	wine	1.00	145
22 November 1541	*Trinity*	Bristol	wine	16.50	Ap. 6
28 November 1541	*Trinity*	Carleon	wine	10.00	Ap. 6
5 December 1541	*Mary Bonaventure*	Bristol	wine	8.00	Ap. 6
6 December 1541	*Ann*	London	wine	9.75	144
7 December 1541	*Mary*	Penmarch	wine	4.00	145
12 December 1541	*Harry*	Bristol	wine	10.00	Ap. 6
18 December 1541	*Saviour*	Northam	raisins	3.75	146
18 December 1541	*Saviour*	Northam	wine	1.00	145
20 December 1541	*Jesus*	Bristol	wine	6.00	Ap. 6
5 April 1542	*Andrew*	Plymouth	iron	10.00	153
13 April 1542	*Trinity*	Bristol	iron	79.00	Ap. 6
8 May 1542	*Primrose*	Bristol	iron	8.13	Ap. 6
17 July 1542	*Mary Conception*	Bristol	oil	3.00	Ap. 6
14 August 1542	*Trinity*	Bristol	iron	63.00	Ap. 6
13 February 1543	*Trinity*	Bristol	soap	0.88	Ap. 6
13 February 1543	*Trinity*	Bristol	wine	19.50	Ap. 6
13 February 1543	*Trintity*	Bristol	oil	2.00	Ap. 6
13 February 1543	*Trintity*	Bristol	alum	0.35	Ap. 6
15 February 1543	*Harry*	Bristol	oil	3.00	Ap. 6
16 February 1543	*Mary Conception*	Bristol	wine	10.00	Ap. 6
7 March 1543	*unknown*	Portugal	wine	10.00	180
2 July 1543	*Clement*	Framilode	iron	26.00	176
2 July 1543	*San John*	Renteria	iron	8.26	176
10 July 1543	*Santa Maria*	Renteria	iron	12.00	176
15 December 1543	*Trinity*	Deventer	iron	3.00	176
15 December 1543	*Trinity*	Renteria	iron	17.00	176
18 February 1544	*Swan*	Amsterdam	figs	1.00	195
18 February 1544	*Swan*	Amsterdam	raisins	4.00	195
18 February 1544	*Swan*	Amsterdam	wine	52.00	202
18 February 1544	*Swan*	Amsterdam	wine	10.00	203
18 February 1544	*Swan*	Amsterdam	wine	4.00	213
24 March 1544	*Trinity*	Bristol	iron	50.00	Ap. 6
12 May 1544	*Santa Maria*	San Sebastian	wine	13.63	222
13 May 1544	*San John*	Pasajes	wine	13.63	222

Date	*Ship*	*Registration*	*Commodity*	*Tons*	*Ref.*
13 May 1544	*Santa Maria*	San Sebastian	iron	4.00	198
19 June 1544	*Mary James*	Bristol	oil	9.50	Ap. 6
10 July 1544	*Mary Conception*	Bristol	oil	5.00	Ap. 6
11 July 1544	*Mary Bulleine*	unknown	oil	3.50	Ap. 6
11 July 1544	*Mary Bulleine*	unknown	wine	3.00	Ap. 6
11 July 1544	*Santa Maria Miseric.*	Vila do conde	wine	9.00	202
14 July 1544	*Julian*	Bristol	wine	2.00	Ap. 6
17 July 1544	*San John*	Renteria	iron	20.20	198
17 July 1544	*San John*	Renteria	iron	25.00	198
20 October 1544	*Santa Maria*	Renteria	iron	20.00	234
15 February 1545	*Sampson*	Enkuizen	wine	6.00	229
1 May 1545	*San Nicholas*	Orio	iron	23.30	234
1 May 1545	*San John*	Renteria	iron	23.30	234
15 November 1545	*Santa Maria*	Fuenterrabia	wine	38.58	235

John Smyth's Exports

Date	*Ship*	*Registration*	*Commodity*	*Tons*	*Ref.*
7 February 1539	*Mary Conception*	Bristol	cloth	0.18	Ap. 6
7 February 1539	*Mary Conception*	Bristol	cloth, lining	0.18	Ap. 6
7 February 1539	*Mary Conception*	Bristol	leather, calf	0.50	Ap. 6
15 March 1539	*Trinity*	Bristol	beans	27.50	Ap. 6
15 March 1539	*Trinity*	Bristol	cloth	0.89	Ap. 6
15 March 1539	*Trinity*	Bristol	cloth	2.32	Ap. 6
15 March 1539	*Trinity*	Bristol	leather, calf	0.84	Ap. 6
15 March 1539	*Trinity*	Bristol	wheat	25.80	Ap. 6
15 June 1539	*Santa Maria*	Renteria	cloth, coarse	0.25	55
15 June 1539	*Santa Maria*	Renteria	cloth	2.14	55
15 June 1539	*Santa Maria*	Renteria	cloth, frieze	0.04	55
15 July 1539	*Ship of the Passage*	Pasajes	beans	1.81	55
15 July 1539	*Ship of the Passage*	Pasajes	leather, calf	0.02	55
15 July 1539	*Ship of the Passage*	Pasajes	leather, hides	1.79	55
15 July 1539	*Ship of the Passage*	Pasajes	wheat	2.50	55
15 August 1539	*Trinity*	Bristol	beans	12.40	Ap. 6
15 August 1539	*Trinity*	Bristol	cloth	0.89	Ap. 6
15 August 1539	*Trinity*	Bristol	cloth, frieze	0.04	Ap. 6
15 August 1539	*Trinity*	Bristol	leather, hides	3.57	Ap. 6
15 August 1539	*Trinity*	Bristol	wheat	35.88	Ap. 6
29 August 1539	*Mary Bride*	Bristol	cloth, coarse	0.03	Ap. 6
29 August 1539	*Mary Christopher*	Bristol	cloth	2.86	Ap. 6
29 August 1539	*Mary Conception*	Bristol	cloth, truckers	1.05	Ap. 6
15 October 1539	*Trinity*	Bristol	horse	2.00	Ap. 6
15 October 1539	*Trinity*	Bristol	leather, hides	0.04	Ap. 6
08 March 1540	*Jesus*	Bristol	cloth	0.89	Ap. 6
08 March 1540	*Jesus*	Bristol	wheat	2.90	Ap. 6
08 March 1540	*Trinity*	Bristol	beans	37.20	Ap. 6
08 March 1540	*Trinity*	Bristol	leather, calf	1.30	Ap. 6
08 March 1540	*Trinity*	Bristol	leather, hides	8.10	Ap. 6
15 March 1540	*Mary Conception*	Bristol	leather, hides	0.89	Ap. 6
16 March 1540	*Mary Christopher*	Bristol	cloth	0.89	Ap. 6
16 March 1540	*Mary Christopher*	Bristol	cloth, truckers	0.63	Ap. 6
06 April 1540	*Trinity*	Caerleon	cloth, truckers	0.13	Ap. 6
09 June 1540	*Trinity*	Bristol	beans	36.00	Ap. 6
09 June 1540	*Trinity*	Bristol	cloth	1.79	Ap. 6
09 June 1540	*Trinity*	Bristol	cloth, lining	0.04	Ap. 6
09 June 1540	*Trinity*	Bristol	leather, hides	1.27	Ap. 6
09 June 1540	*Trinity*	Bristol	wheat	13.80	Ap. 6
23 July 1540	*Magdalen*	Pasajes	cloth, canvas	0.05	69
23 July 1540	*Magdalen*	Pasajes	wheat	16.80	69
15 August 1540	*Harry*	Bristol	wheat	10.80	Ap. 6
15 August 1540	*Margaret*	Bristol	cloth	0.80	Ap. 6

Date	*Ship*	*Registration*	*Commodity*	*Tons*	*Ref.*
15 August 1540	*Margaret*	Bristol	wheat	9.00	Ap. 6
26 August 1540	*Jesus*	Bristol	cloth	2.59	Ap. 6
28 August 1540	*Trinity*	Bristol	cloth, truckers	0.25	Ap. 6
28 August 1540	*Trinity*	Bristol	horse	2.00	Ap. 6
16 October 1540	*Trinity*	Caerleon	wheat	12.00	Ap. 6
15 February 1541	*Primrose*	Bristol	cloth, coarse	0.46	Ap. 6
15 February 1541	*Primrose*	Bristol	cloth, kersey	0.04	Ap. 6
15 February 1541	*Trinity*	Bristol	cloth	0.18	Ap. 6
15 February 1541	*Trinity*	Bristol	cloth, coarse	0.25	Ap. 6
15 February 1541	*Trinity*	Bristol	leather, calf	2.27	Ap. 6
15 February 1541	*Trinity*	Bristol	leather, hides	3.06	Ap. 6
15 February 1541	*Trinity*	Bristol	wheat	57.60	Ap. 6
20 February 1541	*Jesus*	Bristol	cloth	1.88	Ap. 6
2 March 1541	*Harry*	Bristol	cloth	2.86	Ap. 6
2 March 1541	*Harry*	Bristol	cloth, truckers	0.08	Ap. 6
2 March 1541	*Harry*	Bristol	wheat	37.20	Ap. 6
20 March 1541	*Anthony of the Port*	Portugal	beans	37.20	69
20 March 1541	*Anthony of the Port*	Portugal	wheat	13.20	69
28 June 1541	*Magdalen*	Renteria	cloth	1.79	69
28 June 1541	*Magdalen*	Renteria	cloth, kersey	0.84	69
17 August 1541	*Saviour*	Barnstaple	cloth	0.89	136
17 August 1541	*Saviour*	Barnstaple	cloth, Nor. Cot.	0.07	136
17 August 1541	*Saviour*	Barnstaple	cloth, Nor. Doz.	1.34	136
17 August 1541	*Trinity*	Bristol	cloth	1.88	Ap. 6
17 August 1541	*Trinity*	Bristol	wheat	64.63	Ap. 6
27 August 1541	*Mary Fortune*	Gloucester	lead	10.60	Ap. 6
27 August 1541	*Mary Fortune*	Gloucester	leather, hides	5.36	Ap. 6
7 September 1541	*Margaret*	Bristol	cloth, Nor. Cot.	1.34	Ap. 6
7 September 1541	*Margaret*	Bristol	cloth, truckers	0.25	Ap. 6
7 September 1541	*Ann*	London	horse	2.00	104
15 October 1541	*John Baptist*	Renteria	cloth, truckers	0.13	173
28 November 1541	*Primrose*	Bristol	cloth	0.89	Ap. 6
28 November 1541	*Primrose*	Bristol	cloth, kersey	0.08	Ap. 6
28 November 1541	*Primrose*	Bristol	cloth, truckers	0.29	Ap. 6
12 December 1541	*Mary Fortune*	Gloucester	wheat	25.33	136
13 January 1542	*Trinity*	Bristol	cloth	3.57	Ap. 6
13 January 1542	*Trinity*	Bristol	cloth, kersey	0.17	Ap. 6
13 January 1542	*Trinity*	Bristol	lead	12.20	Ap. 6
13 January 1542	*Trinity*	Bristol	leather, calf	2.71	Ap. 6
13 January 1542	*Trinity*	Bristol	leather, hides	7.15	Ap. 6
13 January 1542	*Trinity*	Bristol	peas	3.83	Ap. 6
3 February 1542	*Mary Bride*	Bristol	cloth	0.89	Ap. 6
3 February 1542	*Mary Bride*	Bristol	cloth, kerseys	0.21	Ap. 6
19 May 1542	*Trinity*	Bristol	cloth	4.46	Ap. 6
19 May 1542	*Trinity*	Bristol	cloth, kersey	0.06	Ap. 6

Date	*Ship*	*Registration*	*Commodity*	*Tons*	*Ref.*
19 May 1542	*Trinity*	Bristol	lead	10.15	Ap. 6
19 May 1542	*Trinity*	Bristol	leather, calf	1.20	Ap. 6
19 May 1542	*Trinity*	Bristol	leather, hides	4.15	Ap. 6
19 May 1542	*Trinity*	Bristol	wheat	2.40	Ap. 6
22 September 1542	*Trinity*	Bristol	lead	7.05	Ap. 6
22 September 1542	*Trinity*	Bristol	wheat	27.60	Ap. 6
2 October 1542	*Mary James*	Bristol	cloth	0.89	Ap. 6
2 October 1542	*Mary James*	Bristol	cloth, B. frieze	0.04	Ap. 6
2 October 1542	*Mary James*	Bristol	cloth, Man. Cot.	1.14	Ap. 6
15 October 1542	*Mary Conception*	Bristol	cloth, Man. Cot.	2.14	Ap. 6
11 April 1543	*Clement*	Framilode	leather, calf	1.79	174
11 April 1543	*Clement*	Framilode	leather, hides	3.04	174
11 April 1543	*Clement*	Framilode	wheat	24.00	174
11 April 1543	*St. John*	Pasajes	cloth	0.89	174
11 April 1543	*St. John*	Pasajes	cloth, B. frieze	0.04	174
11 April 1543	*St. John*	Renteria	cloth	1.79	174
11 April 1543	*St. John*	Renteria	cloth, Man. Cot.	0.07	174
30 July 1543	*St. John*	Pasajes	cloth	0.89	174
30 July 1543	*St. John*	Pasajes	cloth, lining	0.08	174
30 July 1543	*St. John*	Pasajes	leather, calf	1.96	174
30 July 1543	*Santa Maria*	Renteria	cloth	1.79	174
30 July 1543	*Santa Maria*	Renteria	cloth, lining	0.13	174
30 July 1543	*Santa Maria*	Renteria	leather, calf	1.79	174
30 July 1543	*Santa Maria*	Renteria	leather, hides	1.43	174
1 October 1543	*John*	Renteria	cloth	1.79	174
1 October 1543	*John*	Renteria	cloth, Man. Cot.	0.07	174
5 January 1544	*Trinity*	Bristol	lead	2.05	Ap. 6
5 January 1544	*Trinity*	Bristol	leather, calf	3.00	Ap. 6
5 January 1544	*Trinity*	Bristol	leather, hides	6.90	Ap. 6
5 January 1544	*Trinity*	Bristol	tallow	0.19	Ap. 6
7 January 1544	*Margaret*	Bristol	cloth	0.89	Ap. 6
7 January 1544	*Margaret*	Bristol	cloth, Man. Cot.	1.24	Ap. 6
7 January 1544	*Mary Conception*	Bristol	cloth, Man. Cot.	1.24	Ap. 6
8 January 1544	*Mary James*	Bristol	cloth	0.89	Ap. 6
8 January 1544	*Mary James*	Bristol	cloth, Man. Cot.	1.24	Ap. 6
8 January 1544	*Trinity*	Renteria	cloth	0.89	196
8 January 1544	*Trinity*	Renteria	cloth, Man. Cot.	1.24	196
8 January 1544	*Trinity*	Renteria	leather, calf	2.32	196
8 January 1544	*Trinity*	Renteria	leather, hides	0.11	196
15 January 1544	*Mary Conception*	Bristol	cloth	0.89	Ap. 6
4 April 1544	*John Baptist*	Renteria	cloth	2.68	196
4 April 1544	*John Baptist*	Renteria	cloth, Nor. Cot.	0.10	196
4 April 1544	*John Baptist*	Renteria	lead	10.10	196
12 April 1544	*Peter*	Pasajes	lead	6.15	196
9 August 1544	*St. John*	Pasajes	leather, calf	1.06	221

Date	*Ship*	*Registration*	*Commodity*	*Tons*	*Ref.*
9 August 1544	*St. John*	Pasajes	leather, hides	11.08	221
9 August 1544	*St. John*	Renteria	cloth	3.21	221
9 August 1544	*St. John*	Renteria	cloth, kerseys	0.42	221
9 August 1544	*St. John*	Renteria	cloth, Man. Cot.	5.02	221
11 April 1545	*Trinity*	Renteria	cloth, Man. Cot.	4.96	232
12 June 1545	*Nicholas*	Orio	leather, calf	3.37	232
12 June 1545	*Nicholas*	Orio	leather, hides	7.68	232
12 June 1545	*St. John*	Renteria	cloth	2.77	232
12 June 1545	*St. John*	Renteria	cloth, Man. Cot.	0.07	232
17 June 1545	*St. John*	Renteria	cloth, Man. Cot.	1.34	232
28 August 1546	*Mary Conception*	Bristol	cloth	0.09	Ap. 6
10 September 1546	*Trinity*	Caerleon	lead	10.38	Ap. 6
20 September 1546	*Mary Conception*	Bristol	cloth, Man. Cot.	3.35	Ap. 6
20 September 1546	*Mary Conception*	Bristol	lead	21.04	Ap. 6
20 September 1546	*Marietta*	Fuenterrabia	cloth, B. frieze	0.29	254
20 September 1546	*Marietta*	Fuenterrabia	cloth, Man. Cot.	1.67	254
20 September 1546	*Marietta*	Fuenterrabia	cloth, truckers	0.13	254
20 September 1546	*Marietta*	Fuenterrabia	lead	19.10	254

Appendix 3: The Value of Trade Carried in £ Sterling, By Port - 1541/2, 1542/3, 1545/6

The Continental Trade

Port	*County / Region*	*Country*	*1542/3 £*	*1542/3 £*	*1545/6 £*	*% Total for 3 Years*
Barnstaple	Devon	England	832	406	0	2.3
Berkeley	Gloucestershire	England	0	0	9	0.0
Bewdley	Worcestershire	England	0	20	0	0.0
Bideford	Devon	England	3	582	0	1.1
Bridgwater	Somerset	England	120	0	0	0.2
Bristol	Bristol	England	9112	4785	1257	28.0
Churcham	Gloucestershire	England	19	0	0	0.0
Dartmouth	Devon	England	518	263	0	1.4
Elmore	Gloucestershire	England	0	0	1	0.0
Framilode	Gloucestershire	England	83	155	0	0.4
Gatcombe	Gloucestershire	England	0	7	0	0.0
Gloucester	Gloucestershire	England	453	77	10	1.0
Jersey	Jersey	England	15	0	0	0.0
Kingsweare	Devon	England	230	0	0	0.4
Lanherne	Cornwall	England	0	0	2	0.0
London	London	England	568	0	0	1.1
Longney	Gloucestershire	England	0	2	0	0.0
Minehead	Somerset	England	0	0	1	0.0
Moreton	Dorset	England	0	0	3	0.0
Mount's Bay	Cornwall	England	116	0	0	0.2
Newlyn	Cornwall	England	5	0	0	0.0
Newnham	Gloucestershire	England	28	0	0	0.1
Northam	Devon	England	517	139	0	1.2
Padstow	Cornwall	England	2	0	0	0.0
Parton	Gloucestershire	England	0	3	0	0.0
Plymouth	Devon	England	581	0	0	1.1
Saint Ives	Cornwall	England	8	0	0	0.0
Salcombe	Devon	England	311	0	0	0.6
Tewkesbury	Gloucestershire	England	102	218	2	0.6
Wolron	Gloucestershire	England	8	0	0	0.0
Worcester	Worcestershire	England	67	68	0	0.2
Caerleon	Monmouthshire	Wales	1706	933	220	5.3
Camarthan	Camarthanshire	Wales	6	2	2	0.0
Cardiff	Glamorgan	Wales	29	6	68	0.2
Chepstow	Monmouthshire	Wales	100	13	112	0.4
Milford	Pembrokeshire	Wales	0	68	10	0.1
Mumbles	Glamorgan	Wales	0	0	6	0.0
Newport	Monmouthshire	Wales	0	0	8	0.0

Port	*County / Region*	*Country*	*1542/3 £*	*1542/3 £*	*1545/6 £*	*% Total for 3 Years*
St. Davids	Pembrokeshire	Wales	0	0	6	0.0
Swansea	Glamorgan	Wales	0	0	7	0.0
Tenby	Pembrokeshire	Wales	28	23	72	0.2
Tintern	Monmouthshire	Wales	0	2	0	0.0
Dublin	Dublin	Ireland	0	0	20	0.0
Blavet	Britany	France	0	0	21	0.0
Conquet	Britany	France	35	0	190	0.4
Croisic	Britany	France	0	0	45	0.1
Morbihan	Britany	France	0	0	75	0.1
Nantes	Anjou	France	3	0	10	0.0
Paimboef	Anjou	France	0	0	19	0.0
Penmarch	Britany	France	468	0	593	2.0
Poldavye	Britany	France	58	0	0	0.1
Quimperlé	Britany	France	0	0	26	0.0
Rochelle	Poitou	France	8	0	0	0.0
Royan	Poitou	France	186	16	0	0.4
St. Jean de Luz	Gascony	France	158	51	0	0.4
Lubeck	Baltic	Hansa	146	0	0	0.3
Arnemuiden	Low Countries	Low Count.	0	0	88	0.2
Friesland	Friesland	Low Count.	0	0	1734	3.2
Holland	Holland	Low Count.	0	0	20	0.0
Middleburg	Low Countries	Low Count.	0	0	299	0.6
Aveiro	N. Portugal	Portugal	0	0	372	0.7
Leusa	Portugal	Portugal	0	0	506	0.9
Portugal	Portugal	Portugal	1	0	1425	2.6
Viana	N. Portugal	Portugal	0	0	44	0.1
Vila do Conde	N. Portugal	Portugal	0	0	776	1.4
Bilbao	Guipuzcoa	Spain	0	0	154	0.3
Fuenterrabia	Guipuzcoa	Spain	0	0	1266	2.3
Orio	N. Spain	Spain	0	0	882	1.6
Pasajes	Guipuzcoa	Spain	160	1107	1744	5.6
Renteria	Guipuzcoa	Spain	768	1771	6948	17.5
San Antonio	N. Spain	Spain	32	0	0	0.1
San Sebastian	Guipuzcoa	Spain	17	0	1927	3.6
Angelett	unknown	unknown	82	0	0	0.2
Bokeslate	unknown	unknown	0	0	674	1.2
Coke	unknown	unknown	13	0	0	0.0
Dews	unknown	unknown	0	234	0	0.4
Gatmell	unknown	unknown	21	0	0	0.0
Intha	unknown	unknown	0	0	346	0.6
Mindake	unknown	unknown	121	0	0	0.2
Minsterford	unknown	unknown	31	0	0	0.1
Unknown	unknown	unknown	6	38	3223	6.0
Total Carried on all Ships			*17876*	*10988*	*25217*	*100*

The Irish Trade

Port	*County / Region*	*Country*	*1541/2 £*	*1542/3 £*	*1545/6 £*	*% Total for 3 Years*
Bristol	Gloucester	England	639	354	563	9.8
Bridgwater	Somerset	England	0	0	59	0.4
Elmore	Gloucester	England	0	13	0	0.1
Gatcombe	Gloucester	England	29	8	0	0.2
Gloucester	Gloucester	England	149	195	6	2.2
Hasfield	Gloucester	England	0	71	0	0.4
Longney	Gloucester	England	21	4	0	0.2
Minehead	Somerset	England	61	56	76	1.2
Mount's Bay	Cornwall	England	0	3	0	0.0
Newlyn	Cornwall	England	10	0	0	0.1
Padstow	Cornwall	England	3	0	0	0.0
Parton	Gloucester	England	29	0	0	0.2
Plymouth	Devon	England	15	3	0	0.1
Saint Ives	Cornwall	England	6	0	0	0.0
Stonehouse	Gloucester	England	11	0	0	0.1
Tewkesbury	Gloucester	England	47	7	13	0.4
Caerleon	Monmouthshire	Wales	5	1	0	0.0
Cardiff	Glamorgan	Wales	44	0	0	0.3
Chepstow	Monmouthshire	Wales	16	0	0	0.1
Milford	Pembrokeshire	Wales	182	264	197	4.1
Mumbles	Glamorgan	Wales	297	17	32	2.2
Newport	Monmouthshire	Wales	4	10	0	0.1
Pembroke	Pembrokeshire	Wales	0	1	3	0.0
Tenby	Pembrokeshire	Wales	29	8	0	0.2
Tintern	Monmouthshire	Wales	48	25	0	0.5
Cork	Cork	Ireland	121	243	128	3.1
Dublin	Dublin	Ireland	31	0	0	0.2
Dungarvan	Waterford	Ireland	126	42	111	1.8
New Ross	Waterford	Ireland	407	336	141	5.6
Waterford	Waterford	Ireland	3714	2114	3287	57.6
Wexford	Wexford	Ireland	86	85	226	2.5
Youghal	Cork	Ireland	249	176	193	3.9
Castrow	Unknown	Unknown	0	5	0	0.0
Dolyge	Unknown	Unknown	0	4	0	0.0
Minsterford	Unknown	Unknown	9	6	0	0.1
Pa_	Unknown	Unknown	0	1	0	0.0
Unknown	Unknown	Unknown	9	304	24	2.1
Yame	Unknown	Unknown	8	14	0	0.1
Total Carried on all Ships			6405	4368	5058	100.0

Appendix 4: The Destination of Ships Listed in the Customs Accounts

Much of the analysis in this thesis is based on Bristol's three complete surviving customs accounts from the 1540s. To carry out a quantitative analysis of Bristol's trade and shipping market it was necessary to divide the shipping engaged in the Continental trade from that engaged in the Irish trade. For this period, Bristol's customs accounts specify whether a ship was entering or leaving port, but do not indicate where a ship was going to or had come from. Yet, in practice it is almost always possible to ascertain whether a ship was servicing the Irish trade or the Continental trade. This is because these two branches of Bristol's trade had distinct characteristics and appear to have been quite separate from each other. The most important of the distinguishing characteristics are the goods traded. A number of other factors, such as the nationality of the merchants and the home country of the ships, provide further clues as to which trade a vessel was servicing. The following paragraphs specify the method adopted to divide the vessels between those serving the Continental trade and those serving the Irish trade.

Dealing first with the import trade, it can be noted that 98% of Bristol's import trade, by value, was carried in ships laded with cargoes that consisted entirely of goods typical of either Ireland or the Continent.[1] Typical Irish cargoes include herring, hake, salmon, animal skins, check cloth, mantles and Irish Wool.[2] Typical Continental cargoes include wine, iron, olive oil, soap, fruit and salt. So, if a ship entered with a cargo entirely made up of Continental products, it was assumed to be coming from the Continent and if it entered with a cargo that consisted of nothing but Irish products it was assumed to be coming from Ireland. The remaining 2% of goods came in twenty ships that were carrying goods typical of both the Continent and Ireland. This could either be because a ship coming from the Continent had stopped off in Ireland, or because Continental produce was being re-exported from Ireland to Bristol. Since seventeen of these ships were carrying fairly small quantities of Continental goods along with typical Irish cargoes it seems likely that they were sailing

[1] The total value of the import trade was £42, 720 10s. 5d. 2f. of which £41,716 15s. 3f. was carried on ships laded with cargoes that consisted entirely of goods typical of either the Irish or Continental trades.

[2] A. K. Longfield, *Anglo-Irish Trade in the Sixteenth Century* (London, 1929); W. R.Childs, 'Ireland's trade with England in the Later Middle Ages', *Irish Economic & Social history*, IX (1982).

directly from Ireland but were carrying some re-exports.[3] For the purpose of the data-base it was thus assumed that they were sailing from Ireland. This proposition is supported by the fact that in six of the seventeen cases the vessel involved had recently departed Bristol with a cargo made up of produce typical of the Bristol-Ireland trade.[4] In the remaining three cases, however, the ships were assumed to have been coming from the Continent, despite the fact that they carried some goods that may have come from Ireland.[5] In one of these cases the 'mixing' of cargoes is more apparent than real. This involves the arrival of the *Santa Maria* of Renteria on the 18 May 1546.[6] Since it was carrying lamb and marten skins - goods usually associated with the Irish trade - it might be suspected that it had stopped off in Ireland. However closer inspection reveals that at least some of the marten skins were from Stone Martens, that were not native to Ireland, and some of the lamb skins were described as 'Bougie' indicating an Iberian or Mediterranean origin. Since all the other goods on the ship, including 40 tons of wine and 83 tons of iron, are typical Spanish products, it was assumed that it had sailed direct from the Continent. In the other two cases it seems likely that a ship had actually stopped off in Ireland on route from the Continent. When the *Margaret* of Tenby entered on 18 July 1543 it was carrying 270 yards of check cloth in addition to 27 tons of salt; when the *Conception* of Leusa entered on 20 January 1546 it was carrying 15 yards of check cloth, 180 yards of Irish linen and 1 mantle, in addition to 51 tuns of wine and 3.75 tuns of oil.[7] In both these cases the goods carried suggest the ships had visited Ireland, but since the vast majority of their cargo capacity would taken up by Continental produce, they were treated as ships sailing from the Continent.

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[3] The total value of trade carried on these ships was £314 7s. 9d. The Irish goods carried by these ships were 24.4 cwt. hake, 7 barrels white herring, 7.25 pipes salmon, 36 barrels beef, 2 pieces beef 'in hide', 331.6 doz. sheep skins, 117.5 doz. lamb skins, 80.8 dicker salted hides, 4 dicker deer skins, 51 fox skins, 9 otter skins, 2,392 yards check cloth, 520 yards linen cloth, 75 mantles, 4 stone Irish wool and 9 quarters barley. The 'Continental' produce consisted of 24.375 tuns wine, 9.25 tuns olive oil, 9.25 cwt. olives, 0.5 tons salt, 27.5 stone Spanish wool and an anchor.

[4] These six ships were: *George* of Longney, dep. 20 March 1542 ret. 2 May 1542; *Nicholas* of Bristol, dep. 20 March 1542 ret. 15 May 1542; *Sunday* of Bristol, dep. 26 January 1543 ret. 2 March 1543; *Mary George* of Hasfield, dep. 11 February 1543 ret. 10 April 1543; *Nicholas* of Bristol, dep. 8 February 1543 ret. 4 May 1543; *Trinity George* of Bristol, dep. 11 January 1546 ret. 26 May 1546. The other eleven ships in this group were: *Martyn* of Newlyn 13 February 1542; *Mary George* of Bristol 30 March 1542; *George* of Stonehouse 3 April 1542; *Dowghen* of Cardiff 13 July 1542; *Mary* of Millford 3 February 1543; *George* of Longney 8 April 1543; *Mary Gardilop* 7 July 1543; *Sunday* of Bristol 9 July 1543; *Katherine* of Millford 20 July 1543; *Christopher* of Waterford 29 March 1546; *Julian* of Wexford 6 June 1546: E122 21/10, 199/4, 21/15.

[5] The total value of the goods on these three ships was £689 7s. 6d.

[6] E122 21/15.

[7] E122 199/4, 21/15.

Determining the place to which a ship was sailing after leaving Bristol is more difficult. This is not so much because of cargo mixing, but because certain produce such as cloth, coal and grain were exported to both Ireland and the Continent. This creates difficulties if a ship departed with nothing but these goods. Yet, since many goods were specific to the Irish or Continental trade it is usually possible to use the goods carried to identify the place a ship was sailing to. The presence of tanned hides for instance was taken to indicate a Continental destination, since Ireland was a major producer and exporter of hides. Irish bound ships can usually be identified by their heterogeneous cargoes of Continental re-exports and English manufactured goods, such as iron, salt, wine, spices, silk, knives and lace-points. Overall, 93% of traded goods were exported on ships that were carrying produce typical of either the Irish trade or the Continental trade.[8] To assume that such ships were sailing to either Ireland or the Continent, rather than to both, seems reasonable, since there are almost no cases in which a ship left Bristol carrying a cargo that was partly made up of products specific to the Irish trade and partly made up of products specific to the Continental trade. Among the 302 export entries listed during the three year period there are only three exceptions to this rule. First, on 18 January 1546 the *Sunday* of Bristol departed the city carrying aniseed, belts, calf skins, cumin, hops, iron, knives, points, marmalade, soap, sugar and wine.[9] Since all but the six dozen calf skins were goods that were commonly exported to Ireland, it was assumed that the ship was sailing to Ireland. Second, on 30 March 1546 the *Sunday* of Dungarvan departed, carrying 13 cloths of assize, 2 lbs. silk, 1 doz. pillions and 150 lbs. of lead.[10] While silk and pillions were commonly exported to Ireland, lead was a product that was normally only exported to the Continent. Nevertheless, since only a very small amount of lead was involved it was assumed that the ship was sailing to Ireland. Third, on 25 August 1546 the *Harry* of Bristol departed with 28 tons of lead and 2 cwt. of hops. Apart from this occasion hops is always associated with the Irish trade. However, since the *Harry* returned from Andalusia a few months later it must have been sailing to the Continent on this occasion.[11]

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[8] The total value of Bristol's export trade was £27,191 19s. 4d. 2f., of which £25,238 17s. 7d. was carried on ships laden with 'signature' products, typical of either the Irish or the Continental trade. £26,454 19s. 7d. and £1,968 1s. 9d. 3f.
[9] App. 6.
[10] E122 21/15
[11] App. 6.

Other than these instances, the problem encountered with the export trade is that in sixty-one cases the ship left carrying nothing but cloth, coal or arable produce. This is a problem because these goods were exported to both Ireland and the Continent. In a few of these cases it proved difficult to determine the destination of the ship. However, other factors mean that it is usually possible to determine where the ship was going, as is illustrated below.

In four instances the destination of the ship can be established because John Smyth laded goods on the ship and thus recorded the destination of the ship in his ledger.[12] In twelve more cases the destination of the ship can be determined by the cargo it carried back to Bristol.[13] In thirty cases it was assumed that a ship was sailing to the Continent because alien merchants laded goods on ships which were, in most cases, foreign.[14] Since alien merchants had a substantial involvement in the Bristol-Continent trade, but there is very little evidence of foreign merchants or ships ever being involved in the Bristol-Ireland trade, it was assumed that if the ship's export cargo was the property of alien merchants it was sailing to the Continent.[15] In two other cases the destination of the ship must have been

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[12] *Primrose* of Bristol, 28 November 1541; *Mary Fortune* of Gloucester, 12 December 1541; *Mary Bride* of Bristol, 3 February 1542; *Mary Conception* of Bristol, 30 September 1542: App. 6.

[13] Seven of these ships must have sailed to the Continent as they all returned with Continental cargoes: *Magdalen* of Bristol, dep. 13 October 1541 ret. 14 June 1542, *Julian* of Bristol, dep. 20 February 1543 ret. 15 June 1542; *Saviour* of Northam, dep. 27 February 1542 ret. 26 May 1542; *Sunday* of Bristol, dep. 17 March 1542 ret. 20 May 1542; *Primrose* of Bristol, dep. 25 May 1542 ret. 28 July 1542; *Julian* of Bristol, dep. 2 October 1542 ret. 25 April 1543; *Mary Bonaventure* of Bristol, dep. 2 October 1542 ret. 16 February 1543. Five must have sailed to Ireland as they returned within a few months with Irish cargoes: *Sunday* of Bristol, dep. 3 December 1541 ret. 26 January 1542; *George* of Longney, dep. 20 March 1542 ret. 2 May 1542; *Mary* of Gloucester, dep. 3 April 1542 ret. 2 May 1542; *Clement* of Minsterford, dep. 22 April 1542 ret. 13 July 1542; *Mary* of Gloucester, dep. 4 July 1542 ret. 27 October 1542: see App. 6 and E122 21/10.

[14] *Mary Gardilop*, 9 October 1541; *Bonaventure* of Penmach, 3 December 1541; *Mawdolen* of Renteria, 3 December 1541; *James* of Mindake, 23 December 1541; *Mary* of Penmarch, 11 January 1542; *George* of London, 9 February 1542; *John* of Pasajes, 4 April 1542; *Bonaventure* of Penmarch, 15 April 1542; *John* of Conquet, 9 May 1542; *Mary* of Nantes, 10 June 1542; *John* of Conquet, 3 July 1542; *Martin* of St. Anthony, 7 July 1542; *Christopher* of Chepstow, 9 July 1542 & 27 July 1542; *John* of Pasajes, 5 August 1542; *Christopher* of Lübeck, 14 August 1542; *Satar* of Royan, 5 October 1542; *Mawdolen* of St. Jean de Luz, 27 October 1542; *Santa Maria* of Intha, 27 December 1545; *Conception* of Aveiro, 5 January 1546; *Conception* of Viana, 14 January 1546; *Santa Maria Gomar*, 1 February 1546; *Conception* of Leusa, 22 February 1546; *Mary Rose* of Newport, 6 April 1546; *Yevan* of Croisic, 14 August 1546; *Elizabeth* of Quimperlé, 21 August 1546; *Isabel* of Blavet, 25 August 1546; *Julian* of Morbihan, 4 September 1546; *Martin* of Morbihan, 10 September 1546 & 16 September 1546; *James* of Nantes, 11 September 1546; *Mawdolen* of Morbihan, 23 September 1546: E122 21/10, 199/4, 21/15.

[15] This would be a dangerous assumption to make if foreign merchants had a significant involvement in the Bristol-Ireland trade. However, this does not appear to have been the case. For instance, although the total value of the trade carried on ships laded with nothing but products typical of the Bristol-Ireland trade was £15, 348 14s. 6d. during these three years, only £10 (0.065%) of this was owned by alien merchants. Since alien merchants appear to have had almost no involvement in the

Ireland since it was carrying customs-exempt arable produce under the name of Anthony St. Ledger, the Lord Deputy of Ireland.[16] In three more cases it was assumed that ships were sailing to Ireland because the vessels were Irish.[17] This seems a reasonable assumption given that only one instance has been recognised of an Irish ship carrying goods typical of the Bristol-Continent trade.[18] This leaves ten other cases where it is more difficult to determine the destination of given ships. However, by employing more qualitative, case specific information, such as the normal pattern of the ship's use, the normal trading patterns of the merchants lading on the vessel and the patterns of trade at the time of a particular voyage, it is possible to make an informed guess about where the ship was sailing. In five of the cases it seems probable that the ship was sailing to the Continent.[19] In the other five cases it seems likely that Ireland was the destination.[20] In all these last ten cases

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Bristol-Ireland trade, it seems safe to assume that if a ship left with goods belonging to an alien merchant, that could have been traded to the Continent or Ireland, it was almost certainly sailing to Ireland. Other than the two instances mentioned above, there are no known examples of a foreign ship carrying goods typical of the Bristol-Ireland trade.

[16] *Jesus* of Wexford, 4 July 1542; *Margaret* of Mumbles, 18 September 1542: E122 21/10. The Lord Deputy was granted a licence in January 1542 to export grain to Ireland so as to feed his household and provide for his forces: *L&P*, XVII, no. 71/16.

[17] *Mary Bonaventure* of Dublin, 13 January 1542; *Bartholomew* of Wexford, 10 July 1542; *George* of Cork, 12 March 1543: E122 21/10, 199/4.

[18] This was the *Trinity* of Dublin, which entered Bristol on 14 September 1546 with 40 tons of salt: E122 21/15.

[19] The *Trinity* of Coke, 26 May 1542, left under master John Gracyan with cloth belonging to Giles Fowlar. On 14 August 1542, the customs accounts record the entry of the *Trinity* of Churcham, master John Gracen, carrying Continental goods (salt, prunes, canvas, turpentine, oakham etc.) belonging to Giles Fowlar. As the ship's name, its master and the sole merchant lading goods were the same, it seems highly probable that these were in fact the same ship. This would indicate that the *Trinity* had sailed to the Continent. The *Margaret* of Jersey, 27 June 1542, was assumed to be sailing to the Continent, since it was carrying coal, that at that time was being exported there: eg. *John* of Conquet, 9 May 1542, *Primrose* of Bristol, 25 May 1542, *Mary* of Nantes, 10 June 1542. The *Jesus* of Barnstaple, 5 August 1542, left with goods belonging to William Appowell, who traded extensively with both Ireland and the Continent. However, since the *Jesus* had been employed in the Continental trade by Smyth, it seems more likely that it was sailing to the Continent on this occasion. The *George* of Barnstaple, 19 August 1542, seems likely to have been sailing to the Continent as it was a ship of at least 75 tons capacity and had been involved in the continental trade before: e.g. 18 December 1541. The *Trinity Gorney* of Bristol, 20 September 1546, could have been taking its twenty-two cloths to either Ireland or the Continent. However, its departure at a time when many Bristol ships were rushing to France to fill pent-up, post-war demand makes it more likely that the it was bound for the Continent: E122 21/10, 199/4, 21/15.

[20] The *Anthony* of Minsterford, arrived in Bristol on 23 February 1542 with Irish goods belonging to John Comely. It left on 12 March 1542 with malt belonging to Comely. Since the ship and the merchant had recently been involved in the Irish trade and there was a high demand in Ireland for malt to feed the English army, it seems probable it was sailing to Ireland. The *Mary* of Gloucester, 3 April 1542, left carrying malt owned by Thomas Cloturboke. Since he had used this ship for exporting goods to Ireland on at least five other occasions (3 April 1542, 4 July 1542, 2 December 1542, 3 January 1543, 23 April 1543) it seems probable he was also sailing to Ireland on this occasion. The *George* of Longney, 25 May 1542, left with wheat belonging to Hugh Pryn. This ship

the destination of the ship is far from certain. However, since these journeys only account for 0.7% of total exports during the three years, any mistakes made here will have had little impact on the overall analysis.[21]

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had recently completed a round trip to Ireland (dep. 20 March 1542 ret. 2 May 1542) on which Hugh Pryn had exported malt. It thus seems most likely that Pryn was again using it to sail to Ireland. The *Mary Christopher* of Tewkesbury, 27 July 1543 could have been carrying its 1.33 cloths to either the Continent or Ireland. Yet, since any vessel from Tewkesbury would have been quite small and since the war between England and France meant that a Continental voyage would have involved a journey to Spain, it seems more likely that it was bound for Ireland. The *Trinity Pole* of Gloucester arrived in Bristol on 31 August 1543 with fish belonging to Robert Pole. Since the ship and merchant were involved in the Irish trade, it seems probable that when it left that day with two cloths it was sailing to Ireland.

[21] The total value of the goods laded on the ten vessels was £187 9s.10d. 1f.

Appendix 5: Bristol's Trade - 1541/2, 1542/3, 1545/6

The tables below indicate the value of Bristol's declared trade, as recorded in the three complete surviving customs accounts of the 1540s (P.R.O. E122 21/10, 199/4, 21/15). The total value of trade for each specified commodity is given to three decimal places. This has been done so that, if readers wish, they can determine the precise value of the trade in pounds, shillings, pence and farthings. For the purpose of this database, wine has been valued at £4 per ton, full cloths of assize without grain at £2 per cloth and tanned hides at £1 per dicker. For the discussion as to why these goods were valued at this level, see chapter 2, footnote 4.

Imports: Continent to Bristol

Imports Paying Poundage					
Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Almonds	0.000	0.333	0.000	0.333	0.00
Alum	19.500	12.625	63.750	95.875	0.29
Anchors	0.000	0.250	0.000	0.250	0.00
Aniseed	49.167	28.417	2.125	79.708	0.24
Box-wood for combs	0.000	0.000	6.000	6.000	0.02
Canes	0.000	0.000	1.350	1.350	0.00
Capers	0.000	0.000	20.000	20.000	0.06
Cassia Fistula	0.000	0.000	36.000	36.000	0.11
Cloth, canvas	13.000	0.000	59.083	72.083	0.220
Cloth, canvas, finer	0.000	0.000	15.083	15.083	0.05
Cloth, canvas: Breton	0.000	0.000	0.333	0.333	0.00
Cloth, canvas: Holland	0.000	0.000	0.667	0.667	0.00
Cloth, canvas: Poldavis	0.000	0.000	30.000	30.000	0.09
Cloth, canvas: Vitry	0.000	0.000	12.000	12.000	0.04
Cloth, linen: Irish	0.000	0.000	0.750	0.750	0.00
Cloth, tissue	0.000	0.000	45.000	45.000	0.14
Cloth, woollen, check	0.000	4.500	0.250	4.750	0.01
Conserves	0.500	0.000	0.000	0.500	0.00
Cork	4.167	0.000	0.000	4.167	0.01
Dates	0.000	0.667	0.000	0.667	0.00
Feathers	0.000	0.000	4.500	4.500	0.01
Feathers, down	0.000	0.000	10.000	10.000	0.03
Figs	0.000	0.000	81.500	81.500	0.25
Figs & Raisins	0.000	0.000	1.217	1.217	0.00
Fish: Newfoundland	414.200	0.667	0.000	414.867	1.27
Flax	0.167	0.000	0.000	0.167	0.00

Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
'Fletchers Fryshe'	0.000	0.167	0.000	0.167	0.00
Frankensense	0.000	0.000	1.000	1.000	0.00
Fruit	299.758	221.083	0.000	520.842	1.59
Ginger	3.900	0.000	0.000	3.900	0.01
Graynes	10.000	0.000	0.000	10.000	0.03
Honey	6.000	0.000	19.667	25.667	0.08
Iron	2095.692	1389.906	1753.133	5238.731	15.99
Lemons	0.000	0.000	1.667	1.667	0.01
Lemons & Oranges	0.000	0.000	1.750	1.750	0.01
Liquorice	4.000	2.000	8.000	14.000	0.04
Locks, small	0.000	0.000	0.833	0.833	0.00
Mantles	0.000	0.000	0.167	0.167	0.00
Marmalade	10.333	10.000	5.000	25.333	0.08
Masts, small	1.000	0.000	0.000	1.000	0.00
Oakham	1.333	0.000	0.417	1.750	0.01
Oars	3.000	0.000	0.000	3.000	0.01
Oil, Olive	854.500	140.000	1194.000	2188.500	6.68
Oil, train	14.333	0.000	13.408	27.742	0.08
Olives	0.000	0.000	10.000	10.000	0.031
Onions	0.000	0.000	0.917	0.917	0.00
Oranges	13.000	0.000	10.833	23.833	0.07
Orchil	62.000	10.000	0.000	72.000	0.22
Paper	0.000	0.000	2.500	2.500	0.01
Pepper	0.900	6.000	0.000	6.900	0.02
Perfume	0.000	0.000	1.500	1.500	0.00
Pitch	0.000	0.000	0.125	0.125	0.00
Pitch & Rosin	6.667	0.000	8.000	14.667	0.04
Prunes	2.333	0.000	0.000	2.333	0.01
Raisins	0.000	142.000	216.217	358.217	1.09
Rosin	11.133	0.000	6.600	17.733	0.05
Salt	160.375	83.750	414.250	658.375	2.01
'Serches'	6.250	10.204	7.500	23.954	0.07
Skins, civet cat	0.000	0.000	0.250	0.250	0.00
Skins, fish	0.458	2.167	0.000	2.625	0.01
Skins, 'for fletchers'	0.000	0.000	0.333	0.333	0.00
Skins, Fox	0.000	0.000	0.092	0.092	0.00
Skins, lamb	0.000	50.000	1.167	51.167	0.16
Skins, lamb: Budge	0.000	6.333	80.000	86.333	0.26
Skins, marten	0.000	0.000	0.350	0.350	0.00
Skins, sheep	0.000	0.000	1.000	1.000	0.00
Skins, stone-marten	0.000	0.000	0.100	0.100	0.00
Skins, wildcat	0.000	0.000	0.042	0.042	0.00
Soap	262.625	128.375	242.500	633.500	1.93
Steel	0.000	2.250	0.000	2.250	0.01

Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Tankards	0.167	0.000	0.000	0.167	0.00
Tar	122.000	0.000	0.000	122.000	0.37
Turpentine	2.000	0.000	4.667	6.667	0.02
Vinegar	1.000	0.000	38.000	39.000	0.12
Wax	0.067	0.000	0.000	0.067	0.00
Wine, corrupt	38.625	10.500	469.125	518.250	1.58
Woad	42.000	85.875	0.000	127.875	0.39
Woad: Azores	1907.000	195.333	101.250	2203.583	6.73
Woad: Toulouse	165.500	0.000	566.875	732.375	2.24
Wood, clapholt	1.000	0.000	0.000	1.000	0.00
Wood, Wainscot	19.417	0.000	0.000	19.417	0.06
Wool: Spanish	10.517	0.000	0.000	10.517	0.03
Total Value	6656.083	2561.902	5677.842	14895.827	45.47

Imports Paying Tunnage	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Wine	6183.500	4219.500	7459.667	17862.667	54.53

Total Value of Imports	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Total Value	12839.583	6781.402	13137.508	32758.494	100.00

Exports: Bristol to Continent

Exports Paying Poundage					
Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Beans	4.167	0.000	0.000	4.167	0.02
Bells	0.000	0.000	1.000	1.000	0.00
'Bomy Candarn'	0.000	0.000	0.500	0.500	0.00
Cloth, canvas	0.000	18.000	6.000	24.000	0.11
Cloth, canvas: Oleron	0.000	0.000	2.667	2.667	0.01
Cloth, canvas: Poldavis	0.000	0.000	31.500	31.500	0.15
Cloth, check	0.000	0.000	6.467	6.467	0.03
Cloth, cotton: Manchester	167.500	311.000	1469.500	1948.000	9.14
Cloth, cotton: Northern	22.292	18.917	42.917	84.125	0.39
Cloth, linen: Scottish	0.000	0.000	0.833	0.833	0.00
Cloth, lining	0.000	7.000	0.000	7.000	0.03
Cloth, lining, narrow	2.500	3.000	0.000	5.500	0.03
Cloth, lining, yellow	3.333	0.000	0.000	3.333	0.02
Cloth, woollen, doz., strt.: Welsh	1.250	3.125	5.208	9.583	0.04
Cloth, woollen, doz.: Western	17.500	0.000	0.000	17.500	0.08
Cloth, woollen, Dunster	39.500	7.500	47.000	94.000	0.44
Cloth, woollen, flannel	0.750	0.600	0.000	1.350	0.006
Cloth, woollen, frieze	0.000	0.000	0.500	0.500	0.00
Cloth, woollen, frieze, double	0.000	12.000	0.000	12.000	0.06
Cloth, woollen, frieze: Bristol	23.333	36.667	67.333	127.333	0.60
Cloth, woollen, molton	0.000	0.000	3.750	3.750	0.02
Cloth, woollen, molt. & Tavest.	0.000	0.000	66.667	66.667	0.31
Cloth, woollen, motley	0.000	4.000	0.000	4.000	0.02
Cloth, woollen, stolorn	0.000	0.000	0.517	0.517	0.00
Cloth, woollen, strt.: Northern	0.000	0.000	14.167	14.167	0.07
Cloth, woollen, white : Bristol	0.000	0.000	0.433	0.433	0.00
Cloth, woollen, wodnall	4.500	5.000	0.500	10.000	0.05
Cloth, woollen, wodn. & flannel	0.667	12.167	0.000	12.833	0.060
Cloth, woollen, worsted	0.000	0.000	2.500	2.500	0.01
Cloth, woollen: Brecon	6.000	0.000	8.000	14.000	0.07
Cloth, woollen: Tavestock	0.000	0.000	4.542	4.542	0.02
Cloth, woollen: Welsh	68.321	66.500	97.250	232.071	1.09
Cloth, yellow	0.333	0.000	0.000	0.333	0.00
Coal	14.000	7.667	42.417	64.083	0.30
Feathers	0.000	0.000	0.667	0.667	0.00
Fish, salmon	0.000	0.000	10.500	10.500	0.05
Hops	0.000	0.000	1.000	1.000	0.00
Lead	45.000	0.000	1941.000	1986.000	9.31
Lead, worked	973.375	478.313	886.125	2337.813	10.96
Lime	0.217	0.000	0.000	0.217	0.00
'Mees Brode'	0.000	0.000	4.000	4.000	0.02

Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Skins, calf	19.167	119.583	274.500	413.250	1.94
Skins, calf, tanned	0.000	21.750	0.000	21.750	0.10
Skins, kid, rough	0.000	1.800	0.000	1.800	0.01
Skins, sheep	0.500	2.000	0.167	2.667	0.01
Skins, sheep, worked	0.000	9.867	3.575	13.442	0.06
'Strats'	0.000	5.208	0.000	5.208	0.02
Tar	0.000	2.000	0.000	2.000	0.01
Thread	0.000	5.417	0.000	5.417	0.03
Tin	0.000	0.000	7.500	7.500	0.04
Tin, worked	1.167	1.233	15.000	17.400	0.08
Vestments, misc.	0.000	0.000	3.333	3.333	0.02
Wax	10.000	14.500	0.000	24.500	0.11
Wheat	20.000	5.000	0.000	25.000	0.12
Wire, pole	0.000	0.000	0.667	0.667	0.00
Wood, boards: Bewdeley	1.500	0.000	0.000	1.500	0.01
Total Value	1446.871	1179.813	5070.200	7696.883	36.10

Exports Exempted From Customs	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Lead	0.000	0.000	945.750	945.750	4.44

Woollen Cloths of Assize	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Dozen: Northern	0.000	0.000	12.000	12.000	0.06
Dozen, without grain	0.000	6.000	0.000	6.000	0.03
Dozen, straight, without grain	1.000	28.000	26.500	55.500	0.26
Long, without grain	0.000	0.000	5.000	5.000	0.02
Straight: Northern	0.000	0.000	8.000	8.000	0.04
Without grain	3465.276	2809.932	5087.636	11362.844	53.29
Total Value	3466.276	2843.932	5139.136	11449.344	53.69

Hides paying Leather taxes	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Cattle Hides, tanned	123.500	183.000	902.650	1209.150	5.67
Cattle Hides, tanned, kip	0.000	0.000	21.950	21.950	0.10
Total Value	123.500	183.000	924.600	1231.100	5.77

Total Value of Exports	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Total Value	5036.647	4206.745	12079.686	21323.077	100.00

Imports: Ireland to Bristol

Imports Paying Poundage					
Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Anchors	0.000	0.250	0.000	0.250	0.00
Barley	0.000	0.000	2.083	2.083	0.02
Battery	0.208	0.000	0.000	0.208	0.00
Beef	6.750	5.000	0.000	11.750	0.12
Beef, in hides	0.000	0.500	0.000	0.500	0.01
Brass, broken	0.000	0.000	0.375	0.375	0.00
Cloth, linen	6.375	0.333	4.917	11.625	0.12
Cloth, linen: Irish	3.250	5.358	31.042	39.650	0.40
Cloth, lining, russet	0.000	0.150	0.000	0.150	0.00
Cloth, woollen, check	2083.583	1186.600	890.767	4160.950	41.77
Cloth, woollen, frieze	100.500	0.000	0.000	100.500	1.01
Falcons	1.333	0.000	0.000	1.333	0.01
Fish, eels	14.000	3.667	13.000	30.667	0.31
Fish, eels, small	0.000	0.083	0.000	0.083	0.00
Fish, haddock	0.000	0.000	0.333	0.333	0.00
Fish, hake	317.333	381.558	295.917	994.808	9.99
Fish, herring, red	12.625	7.750	6.250	26.625	0.27
Fish, herring, white	495.892	225.750	346.063	1067.704	10.72
Fish, mackerel	0.000	0.000	0.333	0.333	0.00
Fish, Newfoundland	0.800	0.000	0.000	0.800	0.01
Fish, salmon	418.792	53.708	273.175	745.675	7.485
Fish, salted	85.158	35.488	16.904	137.550	1.38
Fish, sprats	0.000	0.000	0.250	0.250	0.00
Fish, stele	0.000	0.000	1.000	1.000	0.01
Fish, whiting	0.000	0.000	0.125	0.125	0.00
‘Gurierds’	0.333	0.000	0.000	0.333	0.00
Hawk, tassel, gentle	1.333	0.000	0.000	1.333	0.01
Honey	0.000	0.833	0.000	0.833	0.01
Horse	0.000	1.333	0.000	1.333	0.01
Items, misc.	0.000	0.000	16.000	16.000	0.16
Madder, green	0.000	0.000	2.333	2.333	0.02
Mantles, small	0.000	2.000	0.000	2.000	0.02
Mantles, unknown	237.817	208.833	283.667	730.317	7.33
Mantles, waist	0.000	0.250	0.000	0.250	0.00
Marten	0.292	0.000	0.000	0.292	0.00
Meat	0.000	0.000	2.250	2.250	0.02
Oil, olive	2.000	0.000	39.000	41.000	0.41
Oil, spermacete	7.500	12.650	0.000	20.150	0.20
Oil, train	0.000	0.250	0.000	0.250	0.00
Olives - cwt.	0.000	0.000	0.667	0.667	0.01
Pewter, broken	0.000	0.167	0.000	0.167	0.00

Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Purses	0.000	0.083	0.000	0.083	0.00
Rye	0.000	0.000	1.667	1.667	0.02
Salt	0.250	0.000	0.000	0.250	0.00
'Seal Pigs'	0.000	0.000	0.333	0.333	0.00
Seals	1.000	0.000	0.000	1.000	0.01
Skins, broken	0.000	0.000	10.250	10.250	0.10
Skins, deer	7.317	4.950	8.392	20.658	0.21
Skins, deer, tanned	0.000	0.000	0.354	0.354	0.00
Skins, fox	7.083	6.817	6.683	20.583	0.21
Skins, kid	4.592	2.188	8.819	15.598	0.16
Skins, lamb	102.913	179.683	217.613	500.208	5.02
Skins, marten	12.950	7.150	9.800	29.900	0.30
Skins, marten, stagers	0.000	0.000	0.667	0.667	0.01
Skins, otter	4.875	6.333	2.375	13.583	0.14
Skins, rabbit	0.000	0.000	34.000	34.000	0.34
Skins, salted	11.333	102.200	5.000	118.533	1.19
Skins, sheep	324.792	211.388	291.033	827.213	8.30
Skins, wolf	0.475	0.108	0.467	1.050	0.01
'Sturse'	2.750	3.750	0.250	6.750	0.07
'Sturse', broken	0.000	0.000	0.675	0.675	0.01
Tallow, molten	0.000	0.500	3.167	3.667	0.04
Tallow, rough	4.417	0.667	0.417	5.500	0.06
Tallow, rough, wey	0.000	0.000	5.000	5.000	0.05
Wax	0.333	0.283	0.833	1.450	0.01
Wheat	0.000	0.000	13.917	13.917	0.14
Wood, boards	9.350	0.000	0.000	9.350	0.09
Wood, boards: Irish	0.000	0.400	0.000	0.400	0.00
Wood, bow staves	0.000	1.000	0.000	1.000	0.01
Wood, dowels	0.167	0.000	0.000	0.167	0.00
Wool	8.933	0.533	0.000	9.467	0.10
Wool, flock	4.885	2.563	5.708	13.156	0.13
Wool: Irish	1.467	12.267	18.200	31.933	0.32
Wool: Spanish	7.333	0.000	0.000	7.333	0.07
Total Value	4313.090	2675.375	2872.069	9860.533	98.98

Imports Paying Tunnage	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Wine	34.500	67.000	0.000	101.500	1.02

Total Value of Imports	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Total Value	4347.590	2742.375	2872.069	9962.033	100.00

Exports: Bristol to Ireland

Exports Paying Poundage					
Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Alum	6.338	6.567	3.508	16.413	0.28
Alum & Aniseed	10.167	0.000	0.333	10.500	0.18
Aniseed	17.200	71.083	61.083	149.367	2.55
Aniseed & Cumin	0.133	0.333	0.717	1.183	0.02
Assicul	0.000	0.000	0.100	0.100	0.00
Balances	0.083	0.000	0.000	0.083	0.00
Balances, small	0.000	0.063	0.000	0.063	0.00
Barrels, lear	0.000	0.000	1.250	1.250	0.02
Beads	0.150	0.225	0.050	0.425	0.01
Beans	3.750	0.000	0.000	3.750	0.06
Beans & Malt	59.438	7.775	0.000	67.213	1.15
Belts	6.717	3.796	5.775	16.288	0.28
Belts & Penners	0.029	0.000	0.000	0.029	0.00
Belts, caddis & leather	0.000	0.117	0.000	0.117	0.00
Blacksoap	0.021	0.000	0.000	0.021	0.00
Books, primers	0.333	0.146	0.850	1.329	0.02
Borate	0.300	0.000	0.000	0.300	0.01
Borax	0.483	0.000	0.167	0.650	0.01
Bowstrings	0.000	0.000	0.050	0.050	0.00
Brazil	4.583	1.250	5.958	11.792	0.20
Buttons	0.000	0.000	0.050	0.050	0.00
Cable & Ropes	0.000	0.000	2.900	2.900	0.05
Capers	0.000	0.017	0.000	0.017	0.00
Caps	1.300	1.175	0.000	2.475	0.04
Cards, playing	8.458	4.083	9.446	21.988	0.37
Cards, stock	3.763	2.100	5.500	11.363	0.19
Cards, wool	4.400	4.117	15.700	24.217	0.41
Cauldrons, brass	0.000	0.000	0.250	0.250	0.00
Chests	1.000	0.000	0.000	1.000	0.02
Cinnamon	2.563	2.779	3.100	8.442	0.14
Cinnamon & Cloves	1.750	1.750	0.500	4.000	0.07
Cinnamon & Mace	0.375	0.188	0.250	0.813	0.01
Cinnamon, Coves & Mace	1.125	0.313	0.000	1.438	0.02
Cloth, buckram	0.200	0.000	0.000	0.200	0.00
Cloth, camlet	0.000	0.750	0.000	0.750	0.01
Cloth, canvas	1.333	0.000	0.333	1.667	0.03
Cloth, canvas, Oleron	0.000	0.000	1.333	1.333	0.02
Cloth, canvas, Poldavis	0.000	0.000	0.500	0.500	0.01
Cloth, canvas: Holland	0.000	0.000	0.500	0.500	0.01
Cloth, cotton: Northern	0.000	0.208	0.000	0.208	0.00
Cloth, damask	2.400	0.000	0.000	2.400	0.04

Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Cloth, fustian	0.417	0.000	0.350	0.767	0.01
Cloth, linen	0.750	1.500	0.000	2.250	0.038
Cloth, linen: Holland	0.000	0.900	0.000	0.900	0.02
Cloth, satin	1.250	0.000	0.000	1.250	0.02
Cloth, saye	0.500	0.000	0.000	0.500	0.01
Cloth, velvet	5.125	0.000	1.125	6.250	0.11
Cloth, woollen, frieze: Bristol	0.000	3.000	3.333	6.333	0.11
Cloth, woollen, worsted	0.708	0.000	0.000	0.708	0.01
Cloth, woollen, worsted, russet	0.000	0.000	1.667	1.667	0.03
Cloth, woollen: Welsh	2.000	0.000	0.000	2.000	0.03
Cloves	1.188	4.375	4.156	9.719	0.17
Cloves & Mace	0.688	0.438	1.250	2.375	0.04
Cloves, Ginger & Mace	0.000	0.000	0.188	0.188	0.00
Coal	2.333	0.500	0.000	2.833	0.05
Coifs, velvet	0.000	1.000	0.000	1.000	0.02
Cord, purse	3.225	0.967	7.121	11.313	0.19
Crablocks	0.038	0.000	0.000	0.038	0.00
‘Crosbowtird’	0.000	0.075	0.000	0.075	0.00
Cumin	2.250	1.129	2.263	5.642	0.10
Cups	0.000	0.033	0.000	0.033	0.00
‘Cuts’	5.083	5.000	8.917	19.000	0.32
‘Diats’	0.025	0.000	0.000	0.025	0.00
Drugs, misc.	0.167	2.900	1.900	4.967	0.08
Fish, stele	0.000	0.083	0.833	0.917	0.02
Fish-hooks	0.000	0.000	0.850	0.850	0.01
Fish-hooks, little	0.000	0.000	2.600	2.600	0.04
Flax	7.283	24.892	3.083	35.258	0.60
Frankincense	0.063	0.125	0.058	0.246	0.00
Fruit	0.500	1.667	0.000	2.167	0.04
‘Fubligar’	0.075	0.000	0.000	0.075	0.00
Game-birds	0.000	0.000	0.167	0.167	0.00
‘Gart’	0.063	0.000	0.000	0.063	0.00
Ginger	1.550	0.663	6.800	9.013	0.15
Girdles	0.000	0.117	0.367	0.483	0.01
Girdles, caddis	0.000	0.917	0.517	1.433	0.02
Girdles, coarse	0.000	0.067	0.000	0.067	0.00
Girdles, leather	0.000	0.029	0.183	0.213	0.00
Girdles, silk	0.333	0.083	0.067	0.483	0.01
Girdles, ribbon	0.000	0.067	0.167	0.233	0.00
Glasses	2.117	0.700	0.921	3.738	0.06
Gloves	0.125	0.000	0.000	0.125	0.00
Glue	0.083	0.000	0.033	0.117	0.00
Graynes	0.150	0.075	1.742	1.967	0.03
Gridirons	0.000	0.083	0.000	0.083	0.00

Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Handkerchiefs, pair	0.000	0.063	0.000	0.063	0.00
Hats	3.392	0.000	1.842	5.233	0.09
Hemp	0.975	0.383	2.067	3.425	0.058
Honey	10.417	0.000	2.292	12.708	0.217
Hooks, small	0.000	0.000	0.167	0.167	0.00
Hooks, unknown	0.000	0.000	0.350	0.350	0.01
Hops	26.375	8.438	63.575	98.388	1.68
Illegible item	0.000	0.617	0.000	0.617	0.01
Incense	0.146	0.000	0.000	0.146	0.00
Inkhorns	0.083	0.000	0.042	0.125	0.00
Iron	40.800	91.200	138.867	270.867	4.62
Items, misc.	3.967	2.667	0.000	6.633	0.11
Knives	106.500	72.917	78.917	258.333	4.40
Knives, pair	34.458	22.167	40.458	97.083	1.65
Knives, small	0.000	0.146	0.000	0.146	0.00
Knives, ‘vl praygs’	0.000	0.100	0.000	0.100	0.00
Lace, silk	0.000	0.300	0.000	0.300	0.01
Lacquer	11.000	7.750	13.000	31.750	0.54
Lead	0.000	0.000	0.313	0.313	0.01
Lead, worked	0.500	1.000	0.000	1.500	0.03
Liquorice	1.375	1.321	2.846	5.542	0.09
Mace	1.279	0.000	1.156	2.435	0.04
Madder	1.833	0.000	0.000	1.833	0.03
Mail	0.000	0.000	0.200	0.200	0.00
Malt	53.421	10.000	0.000	63.421	1.08
Marmalade	0.000	0.000	1.667	1.667	0.03
Mercury	1.188	0.396	0.450	2.033	0.03
Millstones	0.000	27.000	61.000	88.000	1.50
Nails	0.000	0.183	0.000	0.183	0.00
Nails, cleuth & rouze	0.333	0.000	0.000	0.333	0.01
Nails, rouze	1.417	0.000	0.000	1.417	0.02
Needles	0.825	0.358	0.971	2.154	0.037
Nightcaps	2.317	0.750	0.650	3.717	0.06
Nightcaps, cloth	0.200	0.000	0.000	0.200	0.00
Nightcaps, satin	0.600	0.000	1.050	1.650	0.03
Nightcaps, velvet	0.600	0.000	4.133	4.733	0.08
Nightcaps, woollen	0.000	0.000	0.250	0.250	0.00
Nutmeg	0.283	0.388	0.883	1.554	0.03
Oil, bay	0.150	0.100	0.000	0.250	0.00
Orchil	4.083	4.500	4.208	12.792	0.22
Pans, brass	0.000	0.000	0.200	0.200	0.00
Pans, dripping	0.000	0.083	0.000	0.083	0.00
Paper	0.583	0.083	1.833	2.500	0.04
‘Pay’	0.000	0.000	1.000	1.000	0.02

Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Penners	0.358	0.733	0.025	1.117	0.02
Pepper	3.800	4.913	3.050	11.763	0.20
Percular	0.688	0.708	0.333	1.729	0.03
Pewter	0.667	0.500	0.000	1.167	0.02
Pictures	0.250	0.500	0.000	0.750	0.01
Pillions	29.458	12.667	26.458	68.583	1.17
Pillows, for-night	0.000	0.225	0.058	0.283	0.00
Pins	0.000	0.000	0.183	0.183	0.00
Pitch	0.000	0.333	2.250	2.583	0.04
Pitch & Rosin	0.000	0.467	0.000	0.467	0.01
Pitch & Tar	0.000	0.000	0.333	0.333	0.01
Points, lace	82.450	59.775	80.950	223.175	3.80
Points, silk	0.125	0.000	0.533	0.658	0.01
Potol	0.000	0.042	0.000	0.042	0.00
Purses	0.475	0.825	0.700	2.000	0.03
Purses, belt	0.000	0.000	0.100	0.100	0.00
‘Quadraer’	0.000	0.017	0.667	0.683	0.01
Raisins	0.000	0.333	0.000	0.333	0.01
Ribbons	4.813	1.600	0.000	6.413	0.11
Ribbons, caddis	0.000	0.075	0.000	0.075	0.00
Ribbons, saye	0.000	0.000	0.400	0.400	0.01
Rings, copper	0.000	0.033	0.000	0.033	0.00
Ropes	2.000	0.000	0.400	2.400	0.041
Rosin	0.000	0.000	0.283	0.283	0.00
Saffron	271.375	269.000	416.750	957.125	16.31
Salt	0.000	74.500	43.125	117.625	2.00
Scythes	1.417	0.000	0.667	2.083	0.04
Seed, leek	0.000	0.250	0.083	0.333	0.01
Seed, onion	1.283	3.317	2.675	7.275	0.12
Seltis	0.000	0.000	0.483	0.483	0.01
Senna	0.542	0.083	0.100	0.725	0.01
Silk	340.333	241.167	302.000	883.500	15.05
Silk, caddis	0.000	1.333	0.000	1.333	0.02
Skins, calf	0.000	0.000	1.000	1.000	0.02
Skins, golden	38.229	20.975	21.696	80.900	1.38
Skins, red	4.481	1.421	0.881	6.783	0.12
Soap	5.125	1.942	4.083	11.150	0.190
Spectacles	0.000	0.292	2.000	2.292	0.04
Spectacles, pocket	0.000	0.000	0.150	0.150	0.00
‘Stecull’	0.000	0.000	0.150	0.150	0.00
‘Stygret’	0.083	0.000	0.000	0.083	0.00
Sugar	0.000	0.100	3.883	3.983	0.07
Sugar-Candy	0.000	0.033	0.033	0.067	0.00
Sulpher	0.238	0.158	0.104	0.500	0.01

Commodity	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Tar	0.000	0.583	0.500	1.083	0.02
Teasles	0.000	0.000	0.375	0.375	0.01
Thimbles	0.125	0.158	0.000	0.283	0.00
Thread	2.979	1.192	3.338	7.508	0.13
Thread, woollen	1.560	0.331	1.646	3.538	0.06
Thread, woollen, blue	0.000	0.000	0.083	0.083	0.00
Trenchers	0.000	0.000	0.333	0.333	0.01
Turpentine	0.000	0.000	0.067	0.067	0.00
Twine	0.200	0.000	0.000	0.200	0.00
Twine, net	0.000	0.000	4.000	4.000	0.07
Urnate	0.000	0.042	0.000	0.042	0.00
Verdigris	1.938	1.604	1.625	5.167	0.09
Vials	0.000	0.000	0.100	0.100	0.00
Wax	0.000	0.000	0.021	0.021	0.00
Wheat	49.667	3.333	0.000	53.000	0.90
Wine, corrupt	39.750	22.875	47.250	109.875	1.87
Woad-ashes	0.250	0.000	3.367	3.617	0.06
Wood, laths	0.000	0.000	0.250	0.250	0.00
Total Value	1370.238	1141.560	1574.790	4086.588	69.63

Exports Paying Tunnage	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Wine	2.000	6.000	132.000	140.000	2.39

Woollen Cloths of Assize	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Dozen, straight	0.000	4.250	0.000	4.250	0.07
Dozen, straight, without grain	15.250	70.500	46.250	132.000	2.25
Dozen, without grain	0.000	17.000	2.000	19.000	0.32
With grain	3.304	0.000	0.000	3.304	0.06
Without grain	666.806	386.050	430.920	1483.776	25.28
Total Value	685.360	477.800	479.170	1642.330	27.98

Total Value of Exports	*1541/2 £*	*1542/3 £*	*1545/6 £*	*Total £ for 3 years*	*% Total 3 years*
Total Value	2057.598	1625.360	2185.960	5868.918	100.00

Appendix 6: The Histories of the Bristol Ships

The following appendix consists of the histories of all the Bristol ships known to have operated between 1539 and 1546. It also contains the histories of two ships, The *Trinity* of Caerleon and the *Mary Fortune* of Gloucester that were owned by Bristol men or by individuals who were intimately connected with the city's commercial community. The main sources for this study were the customs accounts, John Smyth's ledger and State Papers. At the beginning of each history, the size of the ship is estimated in tons burden and the owners of the ship are given. The following sections explain how these were determined.

Estimating the size of ships

The size of ship in tons burden represented the number of tons of Bordeaux wine a ship could carry in its hold. This was equivalent to 2,240 lbs. or 40 cubic foot of capacity.[1] The starting point for estimating the size of Bristol's ships were the naval records of 3 August 1545, which record the tonnage of seven Bristol owned ships.[2] Since the Crown needed to know the exact tonnage of ships, so that it could calculate hire fees and determine what a ship could carry, these estimates are likely to have been accurate. However, since the navy calculated the tonnage of ships in a different way to merchants, it is necessary to convert the naval estimates into a figure for tons burden. By the late sixteenth century the navy calculated the tonnage of a ship by adding one third to its size in tons burden.[3] This also appears to have been true in the 1540s. For instance, while Nicholas Thorn stated that the *Saviour* of Bristol was of the portage of 250 tons when engaged in commercial activities, on 3 August 1545 its size was recorded as 340 tons (36% greater).[4] The size of the seven Bristol owned ships recorded in the naval list of 3 August 1545, was thus calculated by multiplying the naval estimate by 0.75. A similar conversion was made for the *Mary Bride* of Bristol, since its size by naval estimate is also known.[5] However, although such conversions provide a fairly reliable indication of the size of eight ships in the Bristol marine, it does not help to determine the size

[1] D. Burwash, *English Merchant Shipping, 1460-1540* (Toronto, 1947), pp. 90-95.
[2] App. 6: the *Harry*, *Margaret*, *Mary Conception*, *Mary James*, *Saviour* and *Trinity* of Bristol, and the *Trinity* of Caerleon.
[3] W. Salisbury, 'Early tonnage measurement in England', *Mariners Mirror*, Vol. LII (1966) p. 44-45.
[4] App. 6, c. 1535; 3 August 1545.
[5] App. 6, 1536.

of the remainder. To throw light on this matter it is necessary to employ the customs accounts.

Estimating the size of a ship from the customs account presents considerable difficulties. This is both because ships did not always sail fully laden and because what was laded on a ship did not always correspond with what the customs officers recorded. When the customs accounts are compared to the sizes of the ships based on naval records, it becomes clear that ships entered Bristol with cargoes that could be either more, or considerably less, than their supposed size in tons burden. For instance, the size of cargoes recorded on the return of the *Trinity* of Bristol is recorded in the customs accounts on eight occasions. The total size of the cargo varies between 83 to 129 tons, yet on the basis of the naval records the ship would have been 112.5 tons burden.[6] What is notable about the amounts imported into Bristol is that the smaller cargoes were nearly always of wine while the large cargoes were always of iron. The main reason for the discrepancy in the case of wine was that ullage (leakage in transit) of liquid goods could result in the loss of 10% or more of a cargo.[7] It is less clear why ships laden with iron could carry 10-15% more than their estimated size in tons burden. However, since a hundred tons of iron would only have occupied a fraction of the space occupied by a hundred tons of wine, an iron cargo could certainly have been laded lower in a ship's hold than a cargo of wine.[8] Since this would have added to the stability of a ship, it seems possible that a ship could safely carry a greater weight of iron than it could of wine.[9]

Since there are major differences between what the customs accounts state a ship was laded with and what its nominal size in tons burden was, the customs account can give only a rough

[6] App. 6, *Trinity* of Bristol - 22 December 1536, 84.6 tuns wine, 6.3 tons iron, 2.9 tons rosin and pitch (93.8 tons); 26 May 1537, 82.8 tuns wine, 12.5 tons iron, 7.2 tons woad (102.5 tons); 7 August 1537, 128 tons iron, 1 tun wine (129 tons); 28 November 1541, 88.8 tuns wine; 13 April 1542, 125 tons iron; 14 August 1542, 122 tons iron; 13 February 1543, 70 tuns wine, 11.5 tuns oil, 0.75 tons soap, 0.3 tons alum (82.6 tons); 24 March 1544, 119.8 tons iron, 0.4 tons woad (120.2 tons).

[7] This is apparent from contemporary estimates of wine loss and from John Smyth's ledger. For a fuller discussion, see Chapter 2, pp. 42-43. See also the comparisons between Smyth's records of what was laded on the *Trinity* and the records of the customs officers: App. 6, *Trinity* of Bristol, 22 December 1536; 28 November 1541; 13 April 1542; 14 August 1542; 13 February 1543; 24 March 1544.

[8] The discrepancy does not appear to have been due to the use of different weights, since a ton of iron weighed 2,240 lb.: see, App. 1, 'Iron'.

[9] This may have been particularly true of the 'round' ships used at this time. It is, for instance, notewothy that when the John Cabot's, *Matthew* of Bristol, was reconstructed for the commemoration of the 1497 voyage, the builders had to fix strips of lead to its keel in order to stabilise the ship: verbal communication, Colin Mudie, naval architect.

impression of the size of a ship. However, for the purposes of this thesis this is sufficient, for a highly accurate estimate of ship sizes based on the customs accounts was not necessary for any of the arguments presented in this thesis.[10] The following guidelines were used for estimating the size of ships.

The size of ships was estimated from the largest cargoes recorded in the customs accounts. If a cargo was wine, it was assumed that the size in tons burden was 10% greater than that recorded in the customs accounts. If the cargo was largely of iron, it was assumed that the size in tons burden was 10% less than that recorded. The estimated size of most of the specialised Irish traders is based on the size of herring cargoes. This is because ships frequently sailed into Bristol with cargoes that consisted almost entirely of herring and it is known that the herring-barrel was the same size as the wine-barrel.[11] By adopting the above measures and weightings it is possible to achieve a rough estimate of the size of a ship. When a size estimate is provided, a date is also given (in brackets) to indicate the evidence on which the estimate was based. Nevertheless, it must be stressed that the estimates based on the customs accounts are rough ones and the methodology employed almost certainly underestimates the size of some ships.

The ownership of ships

In most cases the name of a ship's owner is based on John Smyth's ledger. When Smyth bought freight space on a Bristol ship he almost always mentions the owner or owners in his ledger and at other points in his ledger he sometimes refers to a ship as being, for instance, 'John Gorneys Brytton', 'Robert Pooles ship', or the 'Trynte of Wales Master Jones ship'.[12] In some other cases the ownership of a ship can be determined from petitions to the Crown or from surviving legal documents such as court records or wills. In a few cases it is possible to guess who the owner of a ship was from the ship's name.[13] Although some ships can be

[10] The main use of this data was in Chapter 1, Table 1.2, where it was shown that their was a correlation between the size of ships and the trades they operated in. However, even if all the specialised Irish traders were twice the size that is suggested here and the specialised Continental traders were all no larger than their largest recorded wine cargoes, this would still be true.
[11] The barrel of herring was equivalent to 32 wine gallons (1/8th tun) from the early 15th century to the 20th century: R. D. Connor, *The Weights and Measures of England* (London, 1987), pp. 173-74.
[12] App. 6, *Briton* of Bristol, November 1541; *Mary Fortune* of Gloucester, 27 August 1541; Trinity of Caerleon, 6 April 1540.
[13] App. 6, *Trinity More* of Bristol; *Trinity Gelly* of Bristol.

shown to have had multiple owners, and some may have had part-owners who are not mentioned in the available documents, many were clearly owned outright by a single merchant. For instance, Nicholas Thorn's petition to the Crown makes it clear that the *Saviour* was bought outright by his brother, William Shipman's will indicates that he owned the whole of the *Mary Christopher,* and John Smyth certainly owned the *Trinity* outright.[14]

Special Abbreviations used in Appendix Six

S.55	Vanes (ed.), *TheLedger of John Smythe 1538-1550*, fo. 55 etc.
E122 21/10	P.R.O. E 122 21/10 etc.
[Continent]	The place a ship was assumed to be sailing to, or from, for the purposes of the computerised database.
[Ireland]	The place a ship was assumed to be sailing to, or from, for the purposes of the computerised database.

[14] App. 6, *Saviour* of Bristol, c.1535; *Mary Christopher* of Bristol, 3 August 1539. In the case of the *Trinity*, it may be noted that Smyth always referred to it as 'my ship' (e.g. inventory of 1539), never mentioned the dispersment of freight receipts to other merchants and when he sold the ship to the Crown he was the sole beneficiary of the warrant for its sale, 20 March 1546.

THE *ANNE* OF BRISTOL

Size: unknown
Owner: unknown

6 July 1543
Return of the *Anne* of Bristol, master John Morris, carrying 120 yards of check cloth belonging to Richard More: E122 199/4. [Ireland]

THE *BARK SEYMER* OF BRISTOL

Size: > 30 tons burden
Owner: unknown

21 June 1546
Departure of the *Bark Seymer* of Bristol, master John Boysher, carrying 2 tons lead and 28 wey coal belonging to William Sherington: E122 21/15. [Continent]

THE *BRITON* [OF BRISTOL]

Size: > 10 tons burden (November/December 1540)
Owner: John Gorney, Bristol merchant. Owner of the *Mary George* by 1547

November/December 1540
Return of the *Brytton* from Andalusia. A sack wine account indicates that Smyth laded 3.5 tuns on the ship. It paid freight at 15s. per tun: S.114. Since Smyth records this payment in his sack account but does not note it in the personal credit account he held with John Gorney, Smyth must have paid the freight dues in cash: S.88.

November 1541
Loss of the *Briton*.
Smyth records that he laded 8 tuns of sack wine from Andalusia on 'John Gorneys Brytton'. Later in the account he notes that he paid for freight of 4 tuns in the *Brytton* @ 15s. per tun. On 12 January 1542 he notes that he received from 'Bastable [Barnstaple] of the 16 buttes wyne lost in the *Brytton* 12 buttes which owe for costes don at Bastable.' On 23 March he makes a further payment of 19s. to 'John Gorney for the *Brytton* for the ffreight of my wynes lost at Bastable': S.145.
These references suggest that the ship was lost, but some of the wine was recovered.

Note: In neither of the above cases does John Smyth record the freight dues in Gorney's personal account, although he had an account for Gorney during the years 1539-1548: S.88. This must indicate that Smyth paid Gorney the freight dues with cash on delivery, suggesting that a deferred payment had not been agreed.

THE *CLEMENT* OF BRISTOL

Size: unknown
Owner: unknown

21 June 1542
Return of the *Clement* of Bristol, master Dio Banghe, carrying 49 cwt. soap belonging to Morgan Mathew: E122 21/10. [Continent]

THE *GREAT NICHOLAS* OF BRISTOL

Size: unknown
Owner: William Sprat, a Bristol merchant and the owner of the *Jesus*.

15 April 1539
William Sprat buys from Smyth an escutcheon of the Kings arms to put afore the *Nicholas's* stern: S.30.

28 April 1539
The *Gret Nycholas* is reported to be at Land End on the way to join the navy at Portsmouth: *L&P*, XIV I, No. 736.

10 June 1539
Nicholas of Bristol is listed in a naval inventory of ships serving at Portsmouth: *L&P*, XIV, i, no.1097.

5 September 1539
Report on the *Great Nicholas* of Bristol. Thomas Spertt writes to Mr. Gonson that the examiners 'find no fault except that she draws 3 fathoms of water in ballast and 3 1/2 when laden. Find in her 6 port pieces, 2 slings, a small fowler, 8 bassys, 4 hacbus'. The report suggests the ship would be worth £700 if it didn't draw so much water: *L&P*, XIV, ii, No.129.

30 September 1539
Cromwells remembrances notes 'Spratt's suit of Bristow for the sale of his ship': *L&P,* XIV, No. 260.

THE *HARRY* OF BRISTOL

Size: c. 135 tons burden (3 August 1545)
Owners: Francis Codrington, William Carr, Thomas Hicks - Bristol merchants

1515-29
A case brought to Chancery at this time with the theft of 200 crusados on a voyage undertaken by the *Harry* from Lisbon to Bristol. The owner of the money, Peter Joyes of London, took the case to Chancery as he feared he would get no justice in Bristol. Although this is not necessarily the same *Harry* as mentioned later, the case indicates the difficulty a non-Bristol merchant faced in pursuing a legal case in the city: P.R.O. C 1/209 f. 4-9.

August 1540
Smyth laded wheat on the *Harry*, master Antony Picket, for a voyage to Andalusia. It was carrying 9 weys of Smyth's wheat that cost 8s. 1d. per quarter clearaboard. The account indicates that the *Harry* and *Margaret* of Bristol sailed together: S.103.

December 1540
Return of *Harry*, master Antony Pickett, from Lisbon. Laded by Giles White with 30 butts of sherry, but Smyth only paid freight for 29 butts @ 25s. per ton: S.114. One butt was lost to ullage: S114. Since Smyth credited Giles White on 22 December with the sale of the wheat from the *Henry* and *Margaret* this probably indicates that the ship had returned by this time: S.103.
In January 1540 Smyth credited Francis Codrington and William Carr £18 2s. 6d. for 14.5 tuns Andalusian wine carried on the *Harry*. S.60. However on 10 May 1540 Smyth debited £9 1s.3d. from their account and transferred it to Thomas Hicks account 'for the hallf freight' of the wine: S.60, 100.

10 February 1541
Four mats are delivered to the *Harry* by Smyth. Smyth debits Codrington & Carr for this: S.60, 71, 222(B).

26 February 1541
William Bullock is credited for ten wey (60 quarters) of Smyth's wheat 'r. of hym abord the *Harry*, Master A. Pyket': S.87. Direct lading aboard a ship was an illegal practice.

2 March 1541
Smyth laded the *Harry*, master Antony Picket, with 34 cloths and 31 weys of wheat, for a voyage to Andalusia: S.103. Smyth's lading thus amounted to 34 tons wheat c. 3 tons cloth.
Codrington & Carr's personal account seems to refer to the payment of 7s. 2d.1f. per/wey for the cost of transporting some 'wine' However, this must be a transcription error for Codrington & Carr's own account makes it explicit that the 7s. 2d. 1f. per/wey charge related to the cost of the licence for transporting the 31 weys of wheat: S.60, S.222(B). Codrington & Carr's account also notes that Smyth bought 2 quarters of wheat from them to make up his compliment: S.60.
Smyth's own wheat account notes he laded 30.66 weys on the *Harry* and borrowed some corn from Codrington: S.119.

3 August 1541
Return of *Harry*, master Antony Pickett, at or before this date: S.84. Smyth credits Frances Codrington for the freight of 40 tons oil @ £1 ton. After this entry Smyth writes that 'All this forseid countes betwen William Car, Frances Codrynton & me John Smythe be fynischid': S.60.
A Smyth oil account dated 3 August 1541, notes that the oil paid costs of: 10 ducats to Giles White, £40 freight, 37 tun custom @ 13s. 4d., halling, rebating, 2 new pipes 3s., nayles 15d., avers 14d. per ton, selerage & ullage: S.84. The references to 'nayles' and 'new pipes' probably indicates that some of the casks were damaged during transit, which would explain the discrepancy between the freight and the custom. The oil and soap freight is also mentioned in another account: S.222(B).

12 December 1541
Return of *Harry* of Bristol, master Anthony Pigot, carrying 95 tons wine, 6.75 tons oil, 4.5 tons soap, 0.75 tons aniseed and 0.25 tons marmalade. The goods belonged to Bristol merchants: E122 21/10. [Continent]
Smyth's sack account records that at or before December 1541, 10 tons wine were laded on the *Harry* in Andalusia. The master was Antony Pigott and the wine paid 25s. per tun freight: S145. On 24 December 1541 Smyth records the sale of some wine from the *Harry*: S.145.
Codrington & Carr's own account with Smyth is closed up on 24 December. This mentions the freight owed for 9.95 tons in the *Harry*: S.222(B).

17 March 1542
Departure of the *Hary* of Bristol, master Anthony Pigot, carrying 126.5 cloths and 70 lb. worked tin, belonging to Bristol men and one alien: E122 21/10. [Continent]

14 June 1542
Return of the *Hary* of Bristol, master Anthony Pigot, carrying 114 tons of Azores woad belonging to Edward Pryn & assoc. and the alien Peter Gonzales: E122 21/10. [Continent]

30 September 1542
Departure of the *Hary* of Bristol, master Anthony Piggot, carrying 258 cloths, 11.5 tons lead and 6 dicker hides belonging to various Bristol merchants: E122 199/4. [Continent]

15 February 1543
Return of the *Hary* of Bristol, master Anthony Pygot, carrying 94 tons wine, 5.25 tons oil, 0.6 tons aniseed and 0.05 tons sugar belonging to various Bristol merchants: E122 199/4. [Continent]
On 27 February Smyth received from the *Harry* 3 tuns of olive oil @ 30s. per/ton: S.179. In an undated entry Smyth credited Thomas Hickes for '1 ton freight of oyle in his ship this vyntage 1542': S.100.
Some time after 11 April Smyth credited Nicholas Tizon for '£3 which he do pay for me to Thomas Hickes, Frances Codryngton & William Car for 2 tons freight at the last vyntiage in theyr shipp & for thother ton which I had in the seid ship at the same tyme Thomas Hickes do pay, as it may apere to hym in credito fo.100': S.156.

11 April 1543
Credit transfer that involved freight in Codrington & Carr's ship: S.156

7-11 February 1544
Return of the *Harry* of Bristol, master Richard Bryan, with goods belonging to three indigenous merchants that are not known to be Bristol men, carrying 13 barrels herring, 10 pipes salmon, c.1 ton of raisins, 160 yards of check cloth, 12 mantles and some deer skins: E122 21/12. [Ireland]
The involvement in the Irish trade is atypical and the total quantity of goods imported would have taken up a tiny portion of the ships total cargo space. It thus seems likely that the ship had been engaged in the Irish seas on some other business, probably Crown service or privateering, and simply laded some cargo in Ireland before returning to its home port.

Summer 1545
On 3 August the '*Harry* of Bristoll' was serving at Portsmouth. It was said to be a ship of 180 tons, carrying 120 men: S.P. Hen VIII S.205 f.47.
On 10 August it is described as a ship of 200 tons with 300 men on board, under Captain John Elyott. In the order of battle it was placed in the vanguard: S.P. Hen VIII s.205 f.160.
The ship would have been dismissed when the fleet was demobilised in early September: *L&P,* XX, ii, nos. 346, 368.

25 August 1546
Departure of the *Harry*, master Thomas Webb, carrying 28 tons lead and 2 C hops belonging to Nicholas Thorn and Assoc.: E122 21/15. [Continent]

January 1547
Return of *Harry* at or before this date, carrying 1 butt of hullock and 1 butt of taynt @ 30s. per tun. Is presumably returning from southern Spain: S. 255.

February 1548
Return of *Harry* from Spain. Smyth receives 10 buts of sack @ 33s. 4d. per ton.

THE *HART* OF BRISTOL

Size: > 40 tons burden (29 July 1549)
Owner: George Wynter - Bristol merchant, son of John Wynter.

22 September 1546
Departure of the *Harte* of Bristol, master John Boysher, carrying 6.5 tons lead, 14 cloths, 2 dicker hides, 3 dicker kip hides and canvas belonging to the Bristol merchants William Harvest and Edward Pryn: E122 21/15. [Continent]

3 January 1549
Return of the *Hart*. In an oil account Smyth records that 8.5 tuns was laden on the *Hart*. It paid freight @ 35s. per ton: S.183.

5 April 1549
Departure of the *Hart* to Andalusia. In a voyage account Smyth records that he laded it with cloth and 20 dicker leather: S.290. This appears to have been laded illegally, since John Spark was credited for the 20 dicker and for paying a boat to put the leather 'aborde the *Hart'*: S. 264

29 July 1549
Return of the *Hart* of Bristol, master Thomas Boyse, carrying 873 C 26 li English weight of Azores woad belonging to Smyth. Pays freight accounting 22 K to the ton @ 26s.8d. per ton: S.101.

18 September 1549
Departure of the *Hart* of Bristowe to Andalusia. In a voyage account Smyth records the lading of ship with cloth and 14 tons lead: S.290.

19 December 1549
Return of the *Hart*. In a sack account Smyth notes that he laded 34 tuns on the ship. It paid freight for 33.5 tuns @ 35s. per tun: S.251.
On 16 January 1550 Smyth records in George Winter's personal account, that he had paid William Farnall, the purser of the ship, for 33.5 tuns sack laden on the ship @ 35s. per tun: S.67. However, Smyth deducted £4 8s.6d. for the cost, freight and custom of 0.5 tuns that was taken to Prise. He also charged Winter and his company for 0.5 tuns that they drunk at sea: S.67.
The first freight due was paid on 28 December 1549. The last on 16 January 1550: S.67.

9 March 1550
Departure of the *Hart* of Bristowe, master Thomas Boyse, to Andalusia. In a voyage account Smyth recorded that he laded 40 tons of lead aboard the ship: S.290.

THE *JAMES* OF BRISTOL

Size: >10 tons burden (15 November 1541)
Owner: unknown

15 November 1541
Return of the *Jamys* of Bristol, master John de Monmouth, carrying 8.75 tuns of wine belonging to the Bristol merchant, John Wynter: E122 21/10. [Continent]

THE *JESUS* (1) OF BRISTOL

Size: c.115 tons burden (2 May 1537)
Owner: William Sprat. A Bristol merchant with whom Smyth had extensive dealings. Father of Nicholas Sprat. Also owned the *Nicholas* of Bristol.

1532
William Sprat imprisoned by the Spanish for buying a ship off certain Biscayans in Bristol: *L&P,* V, No. 1407. This could be the *Jesus*.

23 December 1536
Return of the 'navicla' *Jesus* of Bristol, master Thomas Dowdyng, carrying 69.25 tuns wine, 20 tons iron and 2 half bales woad belonging to Bristol merchants: E122 199/3.

25 January 1537
Departure of the 'navicla' *Jhesus* of Brystol, master Thomas Webb, carrying hides and cloth belonging to Bristol merchants: E122 199/3.

2 May 1537
Return of the 'navicla' *Jhesus* of Bristol, master Thomas Webb, carrying 121 tons iron, 6.5 tuns oil and 4 doz. 'serches' belonging to Bristol merchants: E122 199/3.

16 May 1537
Departure of the 'navicla' *Jhesus* of Bristol, master Thomas Webb, carrying hides and cloth belonging to Bristol merchants: E122 199/3.

15 July 1537
Return of the 'navicla' *Jhesus* of Bristol, master Thomas Webb, carrying 121.5 tons iron and 0.25 tuns wine belonging to William Shipman & assoc.: E122 199/3.

5 September 1537
Departure of the 'navicla' *Jhesus* of Bristol, master Philip Thomas, carrying 3.75 tons lead and cloth: E122 199/3.

10 June 1539
The *Jesus* of Brystowe served in the navy at Portsmouth: *L&P,* XIV, i, no. 1097.

17 August 1539
Sprat debited for a dozen oars he bought from John Smyth: S.30. These were presumably bought for this ship.

8 March 1540
Departure of the *Jhesus* of Bristowe to Lisbon, master Robert Thomas. Smyth sent 10 cloths and 116 bushels wheat, under the governance of Frances Fowlar. It was to be employed for purchasing woad: S.56.
The wheat costs 9s. 7d. per quarter clearaboard. By June wheat was costing Smyth 8s. 8d. per quarter in England. Since Smyth's licence costs never came below 2s. 9d. per quarter, it seems likely that the consignment on the *Jesus* was not fully covered.

19 June 1540
Return of the *Jhesus*. In William Sprat's personal account, Smyth credits him for freight of 6.8 tons Azores woad, laden 'in his ship the *Jhesus'* accounting 22 C for one ton @ 22s. per ton: S.30. The arrival is also recorded in an Azores woad account of the same day, where the master is listed as Phellip Thomas: S.101.

26 August 1540
Departure of the *Jhesus* by this date. In Giles White's personal account, Smyth debits him for 'the costom of 3 clothes which he entryd apon me in the *Jhesus*.': S.42.
Smyth's voyage accounts for this month records the departure of *Jhesus* of Bristo, master Phillip Thomas, for Andalusia, carrying 38 of Smyth's cloths: S.103.

4 December 1540
Return of *Jhesus* from Andalusia. A Teint wine account of December 1540 states that Smyth had 3 pipes 1 but laden on the *Jhesus.* The first of this wine is sold on 4 December: S.118.
In a sack account of November-December 1540 Smyth records that 3 tuns were laden on the *Jhesus*, master Phelip Thomas. This paid freight for 3 tuns @ 25s. tun: S.114.
In a Bastard wine account of December 1540, Smyth recorded that 2 tuns were laden on the *Jhesus*. This paid freight @ 25s. per tun: S.118.
On 20 December 1540 Sprat's personal account is credited for freight of 8.5 tons in the *Jhesus* from Andalusia. Freight charges came to £10 12s. 6d. @ 25s. per tun. To pay half in hand and half at the end of 3 months. At this point Sprat owed Smyth £8 8s. Smyth paid the remaining £2 4s.6d. on 31 December 1540: S.30.

20 February 1541
Departure of the *Jhesus* of Bristowe, master Philip Thomas, for Andalusia. A voyage account states that it had 21 of Smyth's cloths on board: S.103.

20 December 1541
Loss of the *Jesus* of Bristol.
Smyth records that he had '12 buttes seck lost in the *Jhesus*, master Philip Thomas at Byttbay [Bideford Bay]'. The wine had been laded in Andalusia: S.145.
The loss was written into Smyth's profit and loss account in January 1544, which implies that the wine, and presumably the ship, were not recovered: S.92.

THE *JESUS* (2) OF BRISTOL

Size: c.35 tons burden (18 February 1544)
Owner: unknown

2 November 1541
Return of the *Jhesus* of Bristol, master Patrick Stophyns, carrying 41 barrels of white herring belonging to Robert Newborne: E122 21/10. [Ireland]

26 July 1541
Departure of the *Jhesus* of Bristol, master Lucas Kelly, carrying 1.75 tuns corrupt wine belonging to Patrick Goughe & assoc.: E122 21/10. [Ireland]

18 February 1544
Return of the *Jhesus* of Bristol, master Gomes Ocher, carrying 24 tuns wine, 4 tuns iron and 3 tuns salt, belonging to Nicholas Thorn & assoc.: E122 21/12.

1553
Loss of the *Jesus* of Bristol, which may be the same ship as the above. Richard Baynham, Thomas Smythe and John Becke, merchants of Bristol and Robert Clough, mariner, complained to High Court of Admiralty of the loss of their ship. It was sailing between Isle of Man and Lough Foyle in Ireland when it was taken by a Breton ship, its cargo stolen and the ship taken to Ireland. The owners valued the ship at £60 and the goods, weighing 60+ tons, were valued at c.£440: *Overseas Trade,* pp.64-65.

THE *JOHN BAPTIST* OF BRISTOL

Size: > 15 tons burden (22 December 1539)
Owners: Francis Codrington & William Carr

10 June 1539
The *John Baptiste* of Bristowe included in a naval list of ships at Portsmouth: *L&P,* XIV i, no.1097.

22 December 1539
Return of a *John Baptist* from Andalusia. Smyth credits Codrington and Carr £18 15s. for 14 tuns sack wine and 1 tun taint of this vintage @ 25s. per tun. At this point Codrington and Carr owed Smyth money, so Smyth's freight dues were set off against this debt: S.60
Details of this voyage are also reproduced in a sack account: S.79

THE *JULIAN* OF BRISTOL

Size: c. 60 tons burden (1 December 1550)
Owner: Unknown

19 January 1542
Return of the *Julian* of Bristol, master John Croke, carrying 33.75 tuns of wine belonging to Bristol merchants: E122 21/10. [Continent]

20 February 1542
Departure of the *Julian* of Bristol, master John Crocke, carrying 99 cloths belonging to Bristol merchants: E122 21/10. [Continent]

15 June 1542
Return of the *Julyan* of Bristol, master John Croke, carrying 48.75 tons of woad belonging to the Bristol merchants, John Welsh & assoc.: E122 21/10. [Continent]

7 August 1542
Departure of the *Julian* of Bristol, master John Croke, carrying 84 cloths and 5 tons of lead belonging to two Bristol merchants: E122 21/10. [Continent]

2 October 1542
Departure of the *Julyan* of Bristol, master John Crocke, carrying 12 cloths belonging to the Bristol merchant Thomas Tyson: E122 199/4. [Continent]
Since the voyage is listed so soon after that of 7 August, and since there is no record of the ship returning to Bristol after August, it is possible that the ship did not leave on the earlier date. This may have happened because the deteriorating political situation between England and Scotland/France persuaded the owner that it would be safer if the ship was sent out with the Bristol fleet which sailed at the beginning of October.

25 April 1543
Return of the *Julyan* of Bristol, master John Crock, carrying 37.5 tons raisins, 1 chest sugar and 60lbs of almonds belonging to the Bristol merchants William Jay & Younger: E122 199/4. [Continent]

14 July 1544
Return of the *Julyan* of Bristol, master Thomas Davis, carrying at least 33.625 tuns wine and 4.5 tuns of oil belonging to Bristol merchants. Since the customs account is damaged, part of the record may be missing: E122 21/12.
In July 1544, John Smyth recorded in a sack account that he received 2 tuns of wine from the *Jelyan*, master Thomas Davys. Smyth paid the same rate as the *Mary Bulleyne* of 28s. per tun: S.202. This is lower than the standard rate for Bristol ships at that time. This may have happened because no credit was offered by the shipowner. If cash had been demanded on delivery, it would explain why Smyth did not enter the details of payment in his ledger.
The lading of wine in the *Jelyan* is also mentioned in an account of Henry Setterford, Smyth's factor in Andalusia: S.197

1 December 1550
Return of the *Julian* of Bristol, master Richard White, carrying 56.25 tuns of wine belonging to the Bristol merchant Thomas Hickes & assoc.: E122 22/4.

THE *LITTLE TRINITY* OF BRISTOL

Size: c. 45 tons burden (7 December 1541)
Owners: William Appowell and John Caps

7 December 1541
Return of a *Trinity* of Bristol, master Richard Baldwin, carrying 38 tons wine, 3 tons fruit, 1.125 ton oil and 45 doz. aniseed, belonging to William Appowell, John Capps and Thomas Whalley & Guitton: E122 21/10. [Continent]
Since Appowell and Caps owned two-thirds of the merchandise, it seems likely that this was their ship.

30 March 1542
Departure of a *Trinity* of Bristol, master Thomas David, carrying goods belonging to William Appowell and John Capps. The ship was carrying a diverse consignment of manufactured goods and Continental re-exports typical of the Irish trade: E122 21/10. [Ireland]
Since all the goods belonged to Appowell and Caps and the ship is listed on its return as the *Trinity Appowell*, it must have been their ship.

16 August 1542
Return of the *Trinity Appowell*, master Thomas Davys, carrying 116 pipes salmon, 3 cwt. hake, 7 hogsheads salmon, 4 hawks and 2 falcons belonging to William Appowell & assoc.: E122 21/10. [Ireland]

2 October 1542
Departure of a *Trinity* of Bristol, master John Haye, carrying 17 cloths belonging to John Capps, 6 cloths belonging to Robert Thurban, and 5 tons lead belonging to William Appowell: E122 199/4. [Continent]
Since most of the goods belonged to Appowell and Capps and on its return it is listed as the *Trinity Capps*, this must be their ship.

1543
In a case submitted to the High Court of Admiralty, William Appowell and John Cappes are recorded as the owners of the *Lityll Trinitie* of Bristol: P.R.O. H.C.A. 38 1543.

14 February 1543
Return of the *Trinity Capps*, master John Hay, carrying 34.5 tuns wine, 1 barrel marmalade and half a chest sugar. The goods belong to various Bristol merchants including William Appowell and Capps: E122 199/4. [Continent]

11 April 1544
Departure of the *Trinitie Capps*, master John Hey. It is carrying 22 cloths of assize and 3 gross knives belonging to Nicholas Thorn and associates. Other merchants may have laded on it but the following section is destroyed: E122 21/12. [Ireland]

4 August 1544
Return of the *Trinitie Capps*, master Thomas Morris, carrying 80 pipes salmon, 78 dicker dry hides and 15 dicker salt hides belonging to Nicholas Thorn and associates: E122 21/12. [Ireland]

THE *MAGDALEN* OF BRISTOL

Size: c. 55 tons burden (15 February 1543)
Owner: The full name of the ship, which was apparently the *Thomas Magdalen Cutt,* suggests that it was probably owned by the Bristol merchant Thomas Cutt.

10 February 1539
Mawdolyn of Brystoll, master John Young, leaves Bridgwater, carrying 174 quarters beans belonging to Thomas Aboydwn: E122 200/2

1540
Tristam Lewkenor reported that William Young, merchant of Bristol, had laden 20 dickers of tanned leather in the *Mawdelyn* of Bristol at Hungroad for export uncustomed. The ship was planning to sail to Portugal: *Overseas Trade*, p.150.

13 October 1541
Departure of the *Thomas Mawdolen* of Bristol, master Thomas Hardyng, carrying 82 cloths belonging to Thomas Apbowen, Edward Pryn and Robert Thurban: E122 21/10. [Continent]

14 June 1542
Return of the *Thomas Mawdolen* of Bristol, master Thomas Hardyng, carrying 40.5 tuns wine, 0.5 tuns oil, 2 tuns corrupt wine 16.25 cwt. soap, aniseed and orchil belonging to Robert Thurban, William Young and Thomas Apbowen & assoc.: E122 21/10. [Continent]

30 September 1542
Departure of the *Thomas Mawdolen*, master William Mathew, carrying 2.8 tons lead belonging to Thomas Tison & Snygg: E122 21/10. [Continent]

15 February 1543
Return of the of the *Mawdolen*, master William Mathew, carrying 50.25 tuns wine, 8 pieces raisins, belonging to various Bristol merchants: E122 199/4. [Continent]

13 September 1546
Departure of the *Mawdolen* of Bristol, master Florence Typton, carrying 13 tons lead, 15 dicker hides, 5.6 dicker kip hides, 10 cloths and canvas belonging to various Bristol merchants including John Cutt: E122 21/15. [Continent]

January 1547
Return of the *Mawdelen Cutt*. A wine account records that the ship was laded with 0.5 tuns sack: S.255.

29 July 1547
Departure of the *Mawdolen*, master Anton d'Altamyra, for Bordeaux, carrying some of Smyth's cloth: S.261. This maybe the same ship, although the use of a foreign master is unusual.

THE *MARGARET* (1) OF BRISTOL

Size: c. 135 tons burden (3 August 1545)
Owner: Edward Butler - also part owner of *Katherine* of Bristol, sold at La Rochelle in 1541: *Overseas Trade,* pp. 102-3.

8 January 1537
Return of the 'navicla' *Margaret* of Bristol, master John Davys, carrying 61.5 wine, 2 tons oil, 0.5 tons orchil and 0.25 tons fruit belonging to Bristol merchants: E122 199/3.

6 February 1537
Departure of the 'navicla' *Margaret* of Bristol, master John Davys, carrying cloth, leather, calf skins and lead belonging to Bristol merchants: E122 199/3.

27 April 1537
Return of the 'navicla' *Margaret* of Bristol, master John Davys, carrying at least 73 tons wine, 2.5 tons vinegar and 3.25 tons woad belonging to Bristol merchants. Note part of the entry is illegible: E122 199/3.

28 May 1537
Departure of the 'navicla' *Margaret* of Bristol, master John Davys, carrying 3 tons lead and some cloth belonging to Nicholas Thorn & assoc.: E122 199/3.

9 July 1537
Return of the 'navicla' *Margaret* of Bristol, master John Davys, carrying 80 tons salt and some pitch belonging to Giles Butler and the master: E122 199/3

12 September 1537
Departure of the 'navicla' *Margaret* of Bristol, master John Davys, carrying 8.25 tons lead, cloth and hides belonging to Bristol merchants: E122 199/3

Spring 1539
The *Margaret* of Bristol was laded in La Rochelle with salt and other goods for Bristol. It sailed with the *Matthew* of Bristol for safety but met with Spanish pirates and were attacked by the *Santa Maria* of Deva. The pirates killed the master, Edward Grannell and a sailor. They stole and spoiled some of the cargo and stole an anchor, sails, cables and other equipment, with a total loss to the owner, Edward Butler, of £300. Butler claimed that the ship changed to the *Santa Maria* of Fuenterrabia or Bilbao had come to Bristol where the leaders of the ship were imprisoned by the mayor under the authority of the local Admiralty court: *Overseas Trade*, p. 104.
The High Court of Admiralty index, Vol. 1, states that Butler took an action for spoil against Michael de Cessola, John Martin de Osurla and John Arrabia.

August 1540
Departure of the *Margaret* of Bristol, master John Williams, for Andalusia at or before this date . Smyth laded 9 cloths in one fardel and 7.5 weys (45 quarters) of wheat on the ship: S.103.

24 November 1540
Return of the *Margaret*, master John Williams, from Andalusia. It was apparently laded with 10 tuns but Smyth noted that it was '1 but owt' and so only paid for 9.5 tuns: S.114.
Smyth credited Edward Butler £11 17s. 6d. for 9.5 tons wine laded on his ship @ 25s. per ton. As Butler was in debt to Smyth at this point, and had earlier agreed to pay in freight, a payment plan would have been irrelevant: S.39

1541
Some time this year the Bristol merchant, Edward Pryn, was reported to have laded 4 weys (24 quarters) wheat aboard the *Margaret* uncustomed and unlicensed: J. M. Vanes, 'The Overseas Trade of Bristol in the Sixteenth Century' (unpublished PhD., London, 1975) pp. 99-100.

7 September 1541
Departure of the *Margaret* for Bordeaux. Smyth laded 40 northern dozens and 6 truckers in the ship: S.104.

14 November 1541
Return of the *Margaret* of Bristol, master John Williams, carrying 77 tuns wine belonging to mostly Bristol merchants. Robert and Edward Butler own 19 tons between them: E122 21/10. [Continent]
Smyth received 10.25 tons Gascon wine @ 20s. ton: S.144. There is no mention of this in Butler's incomplete personal account: S.39.

30 August 1542
Departure of the *Margaret* of Bristol, master John Williams, carrying 210 cloths, 40 dicker hides, 5.6 tons lead, 40 doz. calf skins and 170 doz. sheep skins: E122 21/10. [Continent]

15 February 1543
Return of the *Margaret* of Bristol, master John Williams, carrying 68.75 tons wine, 6.5 tons oil, 4 tons fruit, 1 ton soap, 0.75 ton orchil, 0.05 tons sugar. The goods belong to various indigenous merchants, mostly from Bristol, including Robert and Edward Butler: E122 199/4. [Continent]

7 January 1544
Departure of the *Margaret* of Bristol, master John Williams, carrying at least 53 tons lead and cloth belonging to Bristol merchants, including John Smyth. Since the following section of the account is destroyed, there may have been additional entries: E122 21/12
On 15 January Smyth records that he sent 10 cloths and 37 Manchester's to Lisbon in the *Margaret*: S.194.

10 July 1544
Return of the *Margaret Butler* of Bristol, master John Williams, carrying at least 33.5 tons wine, 31.75 tons oil, c.5 tons soap, sugar and spices belonging to Bristol merchants: E122 21/12. Smyth received 1 ton sack from the ship @ 40s. ton: S.90.

Summer 1545
On the 3 August the '*Margaret*' was serving in the navy at Portsmouth. It was said to be a ship of 180 tons with 120 men on board: S.P. Hen VIII S.205 f.47.

On the 10 August the '*Margaret* of Bristoll' was described as a ship of 200 tons with 300 men on board, under Captain William Butler. In the order of battle it was placed in the vanguard: S.P. Hen VIII S.205 f.160.
The ship would have been dismissed when the fleet was demobilised in early September: *L&P,* XX, ii, nos. 346, 368.

THE *MARGARET* (2) OF BRISTOL

Size: c. 15 tons (3 June 1542)
Owner: unknown

3 June 1542
Departure of *Margaret* of Bristol, master John Jones, carrying 30 quarters of malt and 48 quarters of wheat, tax free, for Anthony St. Ledger (governor of Ireland): E122 21/10. [Ireland]
The ship must have been carrying acting as a supply ship for the English forces in Ireland. The master's name, and the fact that in August, Jones takes the vessel to Ireland when the *Margaret* (1) is in Spain (30 August 1542 – 15 February 1543) indicates that there are two ships called the *Margaret* of Bristol.

23 July 1542
Return of the *Margaret* of Bristol, master John Jones, carrying 600 yards of check cloth and 5 burden of salt fish belonging to William Galley & assoc.: E122 21/10. [Ireland]

5 August 1542
Departure of the *Margaret* of Bristol, master John Jones, carrying 2.25 cloths, 2 lb. saffron, 10 lb. silk and 0.25 tons wine belonging to William Appowell and William Chester & assoc.: E122 21/10. [Ireland]

22 October 1542
Return of the *Margaret* of Bristol, master John Jones, carrying 7.5 cwt. hake, 114 barrels herring and 2 dicker deer skins, belonging to William Galley & assoc.: E122 199/4. [Ireland]

6 April 1543
Return of the *Margaret* of Bristol, master Thomas Signet, carrying 240 yards of check cloth belonging to Thomas Gale: E122 199/4. [Ireland]

c. 1558
William Tyndall is the owner of a ship called the *Margaret* that is confiscated for illegal export of wheat and butter without a licence: *Overseas Trade*, p.122. This may be this ship.

THE *MARY BONAVENTURE* OF BRISTOL

Size: c. 90 tons burden (5 December 1541)
Owner: Thomas Tyson, a Bristol merchant

5 December 1541
Return of the *Mary Bonaventure* of Bristol, master Richard White, carrying 79 tuns wine, 0.4 tuns soap and 150 lbs kermes. Belongs to various Bristol merchants. John Smyth has 7 tuns: E122 21/10. [Continent]
In a sack account Smyth notes that he laded 8 tuns in the *Mary Bonaventure*, master Richard White. This cost £10 @ 25s. per tun freight: S.145.
Thomas Tizon's personal account deals with the payment of the freight. It appears that Smyth paid the first £5 in cash. On the 8 February 1542 Smyth received £3 2s. 6d. in cash that Tizon owed him for freight in the *Trinity*. Smyth then credited Tizon with £5 as the second half of his freight due. When this was set against the £3 2s. 6d. Tizon still owed Smyth, Smyth was left owing Tizon £1 17s. 6d.. After this Smyth credited Tizon 1s. 6d. for some alum. On 3 April he paid Tizon £1 19s. for last part of the freight and for the alum. Smyth then broke his seal from the *Mary Bonaventures* charterparty: S.59.

20 February 1542
Departure of the *Mary Bonaventure*, master John Williams, carrying 55 cloths and 9 tons lead belonging to Bristol merchants: E122 21/10. [Continent]

14 August 1542
Return of the *Mary Bonaventure,* master John Williams, carrying 81 tuns salt, alum and sugar belonging to Bristol merchants: E122 21/10. [Continent]

2 October 1542
Departure of the *Mary Bonaventure* of Bristol, master Thomas Davys, carrying 15 Manchester cottons belonging to William Chester: E122 199/4. [Continent]

16 February 1543
Return of the *Mary Bonaventure*, master Thomas Davys, carrying 72.25 tuns wine belonging to various Bristol merchants: E122 199/4. [Continent]

THE *MARY BRIDE* OF BRISTOL

Size: c. 120 tons burden (1536)
Owner: Thomas White, Thomas Hart

1536
Thomas White of Bristol was rewarded £37 6s. 8d. for building the *Mary Bryde* of 160 tons 'To encourage his other subjects in doing likewise the king thus gives White 1cr. of the sun [4s. 8d.] upon every tone of the portage of the ship': *L & P*, Addendum, No.1181.

27 July 1537
Departure of the *Mary Bride* from NE Spain is reported in a letter from Hugh Tipton to his master William Sprat. This states that he has sent two guns in the ship and that it was sailing in the company of the *Trinity*: *Overseas Trade,* p. 128.

7 August 1537
Return of the *Mary Bride* with 119.5 tons iron and a pipe of salt belonging to Thomas White and 'diversus socciis'. It arrived with the *Trinity*: E122 19/94. Eleven days passed between the time the ship left Spain and the time it was customed in Bristol. Since the guns are not mentioned, they were presumably treated as raw iron by the customs house or were passed-off as belonging to the ship - indicating a minor fraud.

29 August 1539
Departure of *Mary Bride* to Lisbon. In a voyage account Smyth records that he laded cloth in the ship: S.56.

25 November 1539
Return of *Mary Bride* from Andalusia. Smyth notes that he owes Thomas Hart £6 5s. for 5 tons sack laden in the ship @ 25s. per tun 'to pay hallf in hand & thother hallf'. At this point Hart owed Smyth £3 15s., so Smyth's actual debt was £2 10s. This was paid in freight when the *Trinity* entered the following month: S.59.
In a sack win account for November/December 1539 Smyth notes that 5 tuns came from the ship: S.78.

1 March 1540
Smyth debits Thomas Hart for 6 oars delivered to John Chawnceller, purser of the *Mary Bride*: S.59.

7 December 1541
Return of *Mary Bride* of Bristol, master John Hylsey, carrying 92.125 tons wine, 4 tons oil, c.1 tun soap, 1 barrel marmalade and aniseed, belonging to Bristol merchants: E122 21/10. [Continent]

3 February 1542
Departure of *Mary Bride*, master John Hylsey, carrying 59 cloths including 19 belonging to Thomas Shipman & Smyth: E122 21/10. [Continent]
On 14 February, Smyth records in a Biscay voyage account the departure of the ship with 14 of his cloths: S.173.

17 July 1544

In an oils account Smyth records the lading of oil in the *Mary Bulleyne*. However on the sales side he refers to the loss of '1 pipe clene owt in the *Mary Bride'*: S.179.

This might be a meaningless error but it is possible that it indicates the ship had been renamed as the *Mary Bulleyne*.

THE MARY BU'KE OF BRISTOL

Size: >5 tons burden (4 November 1538)
Owner: unknown

4 November 1538
The *Mary Bu'ke* of Bristol left Bridgwater, master Davy Abbowyn, carrying 24 quarters wheat belonging to John Dowding: E122 200/2.

THE *MARY CHRISTOPHER* OF BRISTOL

Size: > 6 tons burden (23 December 1539)
Owner: John Shipman, the elder, merchant of Bristol. Presumably the uncle of the John Shipman serving as a factor in Andalusia by 1549: S.290.

1515-18
A case brought to Chancery in Thomas Wolsey's time deals with the wreck of *the Mary Christopher* of Bristol. Although this can not be the same ship as mentioned later, John Shipman was also part owner of the earlier *Mary Christopher*. The case is interesting as it illustrates the influence the city's senior merchants and shipowners had over the city's judicial process. The submission was brought by Yevan Danyell, the master of the ship, and notes that an action of trespass had been brought against him by the owners of the ship - William Shipman, Robert Abynting (sheriff of the town), Thomas Dale, John Shipman and John Ware. They claimed that Danyell had been negligent in allowing the ship to be wrecked and had taken their case before the Mayor of Bristol. In his submission Danyell claimed the fault was not his and notes the political influence of the plaintiffs and the marriage and kinship relationships between them, for instance, one of 'them be shiriffe of the said towne and an other of them hath maried the daughter of the seid mayer and also be of suche grete might and power and so well frynded and alied and in such familiaritie and favor with the seid new maior for the causes aforesaid by reason whereof yor seid beseacher is likely to be condemed.': P.R.O. C 1/404 f.1.

10 June 1539
A *Mary Christopher* was serving in the navy at Portsmouth. Since eight Bristol ships were reported to have joined the fleet, but the inventory of 10 June only details four as Bristol ships, this was probably the *Mary Conception* of Bristol: *L&P*, XIV, i, no. 880, 1097.

3 August 1539
Will of John Shipman, merchant. This states that 'I geve and bequeth unto my said wife my ship called the *Mary Christofer* and I will that she immediately after my decesse shall enjoye the said shipp with almaner of apparell belonging unto her and to use the same as hir ownee propre goodes'. Probate was granted in 1543: *Overseas Trade*, p. 107.

29 August 1539
Departure of the *Mary Cristofor*, to Lisbon and Andalusia. In voyage account Smyth records that it was carrying cloth along with the *Mary Conception* and *Mary Bride*: S.56.

23 December 1539
Return of the *Mary Cristofor* from Andalusia. John Shipman is credited £7 10s. for 6 tuns sent on the ship @ 25s. per tun. At this point Shipman owed Smyth £4 for freight that had been debited the previous day, so Smyth only owed £3 10s. Smyth paid £1 15s. on 5 February 1540 and £1 15s. on the 2 March, then breaking his seal from the charter party: S.86.
A November/December sack wine account of Smyth confirms the freight dues: S.79.

16 March 1540
Departure of the *Mary Cristofor*, for Lisbon and Andalusia. In voyage account Smyth records that it was carrying 10 penny hews and 15 truckers: S.56.

17 July 1540
Return of the *Mary Cristofor*. John Shipman is credited £6 for the freight of 6 tuns oil @ 20s. per tun. He was to pay half in hand and the other half after 3 months. At this point Shipman owed Smyth £3 6s. 8d. for freight on the *Trinity* in May, so in practice Smyth only owed £2 13s. 4d. This debt increased to £3 when Smyth received 6s. 8d. from the purser of the *Mary Christopher*, John Wattes, on the 2 August. This was presumably done to restore Smyth's three months credit. On 23 August the *Trinity* arrived and £2 6s. 8d. of Smyth's debt was paid off by the freight charge. On 20 October 1540 Smyth made a final payment of 13s. 4d. to square him and Shipman up: S.86.
In August 1540 a Smyth oil account confirms the freighting details on the *Mary Christopher*: S.84.

20 December 1540
Return of the *Mary Cristofor*. Smyth credits John Shipman £2 10s. for 2 tons freight @ 25s. per ton. He was pay at the end of 3 months next coming. Smyth pays the freight due on 8 March 1541: S.86.
In a November/December sack wine account, Smyth notes that 4 tons sack were laden in the *Mary Cristofor*, master Richard White. Freight cost 25s. per tun: S.114.
The 2 tun discrepancy probably indicates that Shipman was paid for half on the arrival of the ship.

THE *MARY CONCEPTION* OF BRISTOL

Size: c. 105 tons burden (3 August 1545)
Owners: Nicholas Thorn, Bristol merchant and owner of the *Saviour*, died 1546. On the basis of Smyth's freight payments (see below) it appears the ship was sold to Harris in 1544.

7 February 1539
The *Mary Conception* was apparently in northern Spain, since one of Smyth's accounts states that his factor Thomas Shipman 'r. from hym how of the Mary Conception the 7 day of February' some cash, cloth and calf skins: S.50.

10 June 1539
A *Mary Concepcyon* was serving in the navy at Portsmouth. Since eight Bristol ships were reported to have joined the fleet, but the inventory of 10 June only details four as Bristol ships, this is probably the *Mary Conception* of Bristol: *L&P,* XIV, i, no. 880, 1097.

29 August 1539
Departure of *Mary Conception* to Lisbon/Andalusia, carrying Smyth's cloth: S.56.

March 1540
Departure of *Mary Conception*, master Anthony Picket, to Biscay. Smyth's voyage account notes that in this month he sent 5 dicker of hides in the *Mary Conception* and 45 dicker in the *Trinity*: S.69. However, Smyth's leather licence account for this period indicates that only 20 dicker of the consignments sent in the two ships was covered: S.71.

6 December 1541
Return of the *Mary Conception*, master John Bousher, carrying 68.25 tons wine, 0.25 tons marmalade and 3.463 tons fruit, belonging to various Bristol merchants: E122 21/10. [Continent]

13 February 1542
Departure of the *Mary Conception*, master John Bousher, carrying 46.625 tons lead and 260+ cloths, belonging to various Bristol merchants: E122 21/10. [Continent]

17 July 1542
Return of the *Mary Conception*, master John Bousher, carrying 73.25 tons oil, 13 tuns soap, 0.25 tuns wine and orchil, alum, sugar belonging to various Bristol merchants: E122 21/10. [Continent]
On 31 July Smyth credits Nicholas Thorn £3 for freight of 3 tons oil @ 20s. per tun in the *Mary Conception*. At this point Thorn owed Smyth £6 13/4, so the freight due served to pay off part of Thorn's debt: S.82. An oil account confirms the freight dues for the oil: S.84.
The oil had apparently been bought by Smyth's Andalusian factor Giles White who had 'r. the 100 ducatts left in Thomas Harrys handes & lode it for me in oyles in the Conception.': S.136. This indicates that the voyage had been to Andalusia and that Thomas Harris had accompanied the ship.

30 September 1542
Departure of the *Mary Conception*, master John Champyon, carrying 16 tons lead, 289 cloths, 1440 yards canvas, 100 lb. thread, 22.5 doz. calf skins and 15 dicker tanned hides, belonging to various Bristol merchants: E122 199/4. [Continent]

On 15 October, Smyth records the departure of the *Mary Conception* to Lisbon, carrying 2 fardels of his cloth containing 64 Manchester's: S.136.

16 February 1543
Return of the *Mary Conception*, master William Champyon, carrying 69 tons wine, 2 tons corrupt wine, 1.5 tons soap and 2 tons oil, belonging to various Bristol merchants: E122 199/4. [Continent]
On 26 February Smyth notes in an Andalusia wine account that he laded 10 tuns on the *Mary Conception*. However, he paid freight for 9.5 tuns and custom for 9 tuns: S.180. The reason for the discrepancy is apparently that he had lost 0.75 tuns to ullage: S.180.
On the same day Smyth credited Nicholas Thorn £14 5s. for the freight of 9.5 tuns @ 30s. per tun in the *Mary Conception*, 'to paye hallf in hand & thother hallf at 3 monthes'. At this point Thorn owed Smyth £9 9s. 8d, so Smyth was left owing Thorn £4 15s. 4d. This due, along with an additional debt, was paid on 1 August: S.82.

7 January 1544
Departure of the *Mary Concep[tion]* of Bristol recorded in a heavily damaged customs account. It was carrying lead, cloth and calf skins belonging to Bristol merchants, including 10 broad cloths and 30 Manchester's belonging to John Smyth: E122 21/12.
On 15 January Smyth records the departure of the *Mary Conception* to Lisbon, carrying 10 of his cloths and 37 Manchester's in two fardels: S.195.

10 July 1544
Return of the *Mary Conception*, master William Chamymon, recorded in a damaged customs account. It was carrying at least 36 tuns wine, 31.25 tuns oil, 4.375 tons soap, sugar, spices and orchil, including 4 tuns oil belonging to John Smyth: E122 21/12.
In July 1544 Smyth credits Henry Setterford (his servant) for oil laden in Andalusia aboard three ships, including the *Mary Conception*: S.197.
On 23 July Thomas Harrys is credited £10 by Smyth for freight of 5 tuns oil in the *Mary Conception* @ 40s. per ton. At this point Harris owed Smyth £29 so the freight due served to pay some of this debt off: S.182.
An oil account confirms the freight dues and indicates that about 10% of the cargo was lost to ullage: S.179. The ullage of the wine presumably accounts for the discrepancy between the amount laded and the amount customed.

Summer 1545
On 3 August the *Mary Conception* was serving in the navy in Portsmouth. It was said to be a ship of 140 tons, carrying 100 men: S.P. Hen VIII S.205 f.47.
It can be identified as a Bristol ship from a later declaration of ships serving in the navy from 1545-46: MS Cantab Dd xiii 35 f.5.
However, the ship was not included in a naval list of 10 August: S.P. Hen VIII S.205 f. 160. Since the Crown was desperately trying to hire every ship in southern England at this time, the absence of the ship from the later list may indicate that it had been damaged.
If it did remain in service the ship would have been dismissed when the fleet was demobilised in early September: *L&P,* XX, ii, nos. 346, 368.

18 March 1546
Departure of the *St. Maria Conception*, master James Lewse, carrying 43 tons salt, 7.66 tons iron, 25 cwt. aniseed and 70 lbs. ginger belonging to Nicholas Thorn and associates: E122 21/15. [Ireland]

Since this ship was carrying Continental produce out of Bristol, it was assumed that it was sailing to Ireland. As the goods belonged to Nicholas Thorn, the owner of the *Mary Conception* of Bristol, it seems probable that it was the Bristol ship, and was treated as such for the purpose of the data-base. This is the only time that one of Bristol's large ships can be shown to have exported goods to Ireland. Since it did not carry a return cargo home after the voyage, it is possible that the ship was going on a cruise but that Thorn decided to take the opportunity to first carry a part cargo to Ireland.

28 August 1546
Departure of the *Mary Conception* of Bristol, master Richard White, carrying 34 tons lead, 459 cloths, 210 doz. calf skins, 13 dicker hides, 6 dicker kip hides and canvas belonging to various Bristol merchants. Is first listed in customs books on 9 August and then on 28 August, suggesting that it turned back or decided not to leave at the time originally intended: E122 21/15. [Continent]
On 20 August Smyth records the departure of the *Mary Conception*, master Richard White, to Andalusia, carrying 21 tons lead and 100 Manchester cottons: S.254.

30 August 1546
Smyth records the sale of 3 barrels of Gunpowder to Thomas Harrys: S.189. This was presumably intended for the *Mary Conception*.

January 1547
Return of *Mary Conception* from Andalusia, carrying 1 tun sack, 7.5 tuns bastard and 1 tun taynt, belonging to Smyth: S.255.
On 3 February 1547 Smyth credits Thomas Harrys £14 5s. for freight of 9.5 tuns wine @ 30s. per ton on the ship. Before the arrival of the ship Harris owed Smyth £16 1s. 4d. 1f. So the freight due served to pay off most of Harris's debt: S.189. Smyth debits Harris for 0.5 tuns taken to prise: S.189.
On 4 May Smyth debits his servant Hugh Hammond, 'for 1 pipe bastard that he chargith more in the Mary conception than I r.': S.271. This presumably relates to this voyage.

17 May 1548
Return of the *Mary Conception*, carrying 7 Spanish tons of Rendry iron, belonging to Smyth: S.272.

2 January 1549
Return of *Mary Conception* from Andalusia. Smyth credits Thomas Harrys £21 15s. for freight of 14.5 tuns sack @ 30s. per tun. At this point Harris owed Smyth £16 9s. 4d. so the freight due thus served to pay-off Harris's debt. Smyth paid the balance the same day: S.189. The freight due, and the time by which the ship had arrived, is confirmed by an Andalusian wine account: S.286.

5 April 1549
Departure of *the Mary Conception*, carrying 3 tons of Smyth's lead to Andalusia: S.290.

19 September 1549
Departure of the *Mary Conception*, master John Boshar carrying a fardel of 6 cloths, c. 2 tons lead, 42 dicker of leather and some cash to Andalusia. Smyth's servant Robert Leight accompanied the consignment and was entrusted with 40 ducats (c. £12) to be received of Thomas Harrys's servant: S.290. The 40 ducats may have been to pay for freight .

In November, Smyth credits John Spark for having laded '30 dicker lether aborde the Mary Conception': S.264. Since Spark was Smyth's Newnham factor and it would have been illegal for him to lade directly aboard the ship, this reference indicates that a large part of the leather consignment was laded illicitly.

21 May 1550
Return of *Mary Conception*. A personal account for Hugh Hamon (Smyth's servant) notes that he owed for freight of 2 tons of oil @ 40s. per tun in the *Mary Conception*. S.166
Smyth's oil account of May 1550, states that he received 4 tuns from the *Mary Conception*, for which he paid freight of 40s. per ton: S.185.

THE *MARY FORTUNE* OF GLOUCESTER

Size: c. 65 tons (16 November 1541)
Owner: Robert Pole, a Gloucester merchant who held a personal credit account with Smyth.

27 August 1541
Departure of the *Mary Fortune*, master John Darby, for Biscay, carrying 30 dicker hides and 10.6 tons lead belonging to Smyth: S.173.
On 11 July, Smyth contracted with the Berkeley merchant Thomas Machet to deliver 60 dicker of hides 'abord my ship or eny other ship at Hungrode, Kyngrode or Chepstow': S.128. On 27 August, Smyth credited Machet for '30 dicker lether laden abord Robert Pooles ship': S.128. Since it was illegal to lade goods at any place other than the customs house at Bristol, this account indicates that the goods were exported illicitly.

16 November 1541
Return of the *Mary Forten* of Gloucester, master John Darby, carrying 50.25 tons wine and 10 tons iron belonging to Bristol merchants, including 8 tuns wine of John Smyth: E122 21/10. [Continent]
On 5 December Smyth credits Robert Pole £10 for the freight of 10 tons Gascon wine @ 20s. per ton laden on the *Mary Fortune* of Gloucester, master John Derby. Before the return of the ship, Pole owed Smyth £24 14s. 8d., so the freight due served to pay of part of Pole's debt: S.111.
The freight of the wine is also noted in a Gascon wine account for November 1541, but the second names of the *Mary Fortune* of Gloucester and the *Margaret Bonaventure* of Plymouth are accidentally transposed in the entry relating to the freight payment: S.144.

12 December 1541
Departure of *Mary Fortun* of Gloucester, master Lawrence Nunny. The customs accounts state that it was carrying 80 quarters of wheat belonging to Robert Pole: E122 21/10. [Continent]
In February 1542 Smyth records the departure of Robert Pole's ship the *Mary Fortune* of Gloucester, master Lawrence Nunny, for Lisbon, carrying 126 quarters of Smyth's wheat ship: S.136.
In Robert Pole's personal account, Smyth credits Pole for the wheat laded on his ship the *Mary*. Smyth states that he was to enjoy half the lading: S.111. If this true the ship would have been laded with 252 quarters wheat (50.4 tons), of which about a third was legally declared.

9 August 1542
Departure of the *Mare Forten* of Gloucester, master Lawrence Nunny, carrying 4 tons lead, 4 dicker hides and 47 cloths belonging to Robert Pole and other merchants: E122 12/10. [Continent]

Note: A ship called the *Mary* of Gloucester appears in the customs accounts on sixteen occasions during the years 1541/2, 1542/3 and 1545/6. It appears to have been a small ship of less than 15 tons burden, which was primarily engaged in the Irish trade: E122 12/10, 199/4, 21/15.

THE *MARY GEORGE* (1) OF BRISTOL

Size: c. 25 tons burden (3 November 1545)
Owner: unknown

19 October 1541
Return of the *Mary George* of Bristol, master Cornelius Andrews, carrying 143 barrels herring, 5 barrels beef and 1 cwt. Hake, belonging to Cornelius Andrews & assoc.: E122 21/10. [Ireland]

3 November 1541
Return of the *Mary George* of Bristol, master Moris Welshe, carrying 150 barrels herring, 2.375 tons salmon, 10 barrels beef and 3 dicker salted skins, belonging to William Appowell & assoc.: E122 21/10. [Ireland]

1 December 1541
Departure of the *Mary George* of Bristol, master Moris Welshe, carrying 1.25 tuns corrupt wine belonging to William Benet: E122 21/10. [Ireland]

2 January 1542
Departure of the *Mary George* of Bristol, master Moris Welsh, carrying 4 cloths and mixed consumables belonging to William Appowel and William Benet and Welsh: E122 21/10. [Ireland]

22 January 1542
Mary George of Bristol, master Cornelius Andrew, leaves Bridgwater, carrying 2 weys (12 quarters) beans and c. 2 cloths: E122 27/18.

30 March 1542
Return of the *Mary George* of Bristol, master Cornelius Andrews, carrying 2.625 tuns wine and 3 vyrk [0.375 tuns] salmon: E122 21/10. [Ireland]

15 April 1542
Mary George of Bristol, master Corneli Andrew, leaves Bridgwater, carrying 3 weys beans and 4 cloths belonging to John Botell: E122 27/18.

15 May 1542
Return of the *Mary George* of Bristol, master Cornelius Andrews, carrying 240 yards check cloth and 20 doz. sheep skins: E122 21/10. [Ireland]

18 July 1542
Departure of the *Mary George* of Bristol, master Cornelius Andrews, carrying 2.5 tuns wine, 1 ton iron, silk and 1 cloth belonging to John Thomas & Kelly: E122 21/10. [Ireland]

22 October 1542
Return of the *Mary George* of Bristol, master Cornelius Andrews, carrying 116.5 barrels herring and 8.5 Cwt. hake belonging to Nicholas Kelly & Smyth and Cornelius Andrews & assoc.: E122 199/4. [Ireland]

THE *MARY GEORGE* (2) OF BRISTOL

Size: c. 75 tons burden (9 September 1544)
Owner: John Gorney. Bristol merchant and former owner of the *Briton*.

6 November 1543
Departure of the *Mary George* of Bristol, master John Laike, carrying 26 tons lead and cloth belonging to various merchants, inc. John Gorney, John Capps and Robert Newborn: E122 21/12. [Continent]

9 September 1544
Return of the *Mary George* of Bristol, master John Laike, carrying 74.5 tons Azores woad belonging primarily to Bristol merchants, including John Gorney: E122 21/12.

20 October 1547
Departure of the *Mary George*, master John Crock, for Bordeaux. Smyth laded 5 truckers, 1 cloth, 119 quarters wheat, 9 dicker ox hides, 11.8 dicker cow and steer hides and 99 doz. calf skins aboard: S.261.

28 March 1548
Return of *Mary George* from Spain. Smyth's personal account with John ap Gornay notes that Smyth owed £20 for freight of 20 tons iron @ 20s. per ton: S.88.
The same day Smyth noted that Henry Setterford lent Gorney's purser Thomas Morrys 36s. in Spain. Smyth paid the purser £15 10s. 4d. in ready money and 'broke my seale from the charter partie consernyng the freight of the 20 ton iron'. Since Gorney owed Smyth 53s. 4d. from a previous account, they were left square: S.88.

13 August 1548
Return of *Mary George* from Spain. Personal account for John ap Gornay notes that Smyth owed him £20 for freight of 20 tons iron. At this time Gorney owed Smyth £5. The account was settled the same day by Smyth paying Gorney £15 in ready money: S.88.

THE *MARY GRACE* OF BRISTOL

Size: c. 40 tons burden (31 March 1546)
Owner: unknown

31 March 1546
Return of the *Mary Grac'* of Bristol, master John de Vusta, carrying 35.5 tons iron, 2.75 tuns oil, paper, olives and locks, belonging to the Bristol merchants, Nicholas Thorn and associates and Francis Wolsey: E122 21/15.
This ship is unusual in that it is the only 'Bristol' ship to enter the port with a cargo of Continental produce between October 1545 and May 1546. It is also unusual in that the master has a foreign name.

THE *MARY JAMES* OF BRISTOL

Size: c. 105 tons burden (3 August 1545)
Owners: William Carey, Robert Leighton, John Pryn. All are Bristol merchants mentioned in Smyth's Ledger: S.15, S.46, S.99.

29 January 1541
An ambiguous reference, in which John Pryn is credited 5s. 10d. for '12 ores which my boteswayne ocupyed in the ship of the seid Pryns ores': S.99.

13 April 1542
Return of the *Mary James*, master John Hisley, carrying 121 tons iron belonging to Thomas White & assoc.: E122 21/10. [Continent]

2 October 1542
Departure of the *Mary James* to Lisbon. On 29 August the customs account lists the departure of the *Mary James*, master Richard White, carrying 240 cloths and 15 tons lead belonging to Bristol merchants: E122 21/10. On 2 October the accounts again list the sailing of the *Mary James*, master Richard White, carrying 20 cloths and 2 tons lead belonging to Robert Leighton and Arthur Smyth: E122 199/4. [Continent]
On 15 October Smyth records the departure of the *Mary James*, master Richard White, to Lisbon, carrying 2 fardels of his cloth: S.136. The double entry in the customs account suggests that the ship set sail but then returned to port. Since the ship eventually left in the company of a fleet of eleven Bristol ships and since the summer and autumn of 1542 witnessed the rapid deterioration of Anglo-French relations, accompanied by an increase in piracy by French and Scottish vessels, it seems likely that the *Mary James* returned to port so that it could sail with a larger fleet.

15 February 1543
Return of the *Mary James*, master Richard White, carrying 86.5 tons wine, 4 tons oil, c.1 ton soap and sugar, belonging to Bristol merchants: E122 199/4. [Continent]

11 May 1543
Return of the *Mary James*, master John Poscher, carrying 0.5 tons wine belonging to Thomas Lockar: E122 199/4. [Continent]
Since this is a tiny cargo for any ship, it seems likely that the ship had been operating either as a privateer or as one of the Bristol vessels serving the Crown in the Irish Sea that Spring/Summer. The wine would thus be an incidental cargo picked-up in Ireland or possibly Spain.

8 January 1544
Departure of *Mary James* of Bristol, master Richard White, is listed in a heavily damage customs account. The cargo consisted predominately of cloth belonging to Bristol merchants, including 10 broadcloths, 30 Manchester's and 7 Bristol friezes of John Smyth: E122 21/12.
On 15 January Smyth records the departure of the *Mary Jamys* to Lisbon with 10 cloths and 37 Manchester's: S.195.

19 June 1544
Return of the *Mary James*, listed in a damaged customs account, carrying 37 tuns wine, 50.375 tuns oil, soap, sugar and spices belonging to various Bristol merchants: E122 21/12.
On 21 July Smyth credited Robert Leighton £19 for freight of 9.5 tons oil in the *Mary James* @ 40s. per tun. At this point Leighton owed Smyth £13 6s. 8d., so the freight dues served to pay-off this debt. Smyth paid the remaining £5 6s. 8d. on 11 December: S.46. The freight of the oil is also mentioned in one of Smyth's oil accounts and in a personal account with his servant, Henry Setterford: S.179, S.197.

Summer 1545
On 3 August the *Mary James* was serving at Portsmouth. It was said to be a ship of 140 tons, carrying 100 men: S.P. Hen VIII S.205 f. 47.
On 10 August the *Mary James* is described as a ship of 160 tons with 100 men on board, under Captain William Courtney. In the order of battle it was placed in the vanguard: S.P. Hen VIII S.205 f. 160.
That this is the *Mary James* of Bristol is confirmed by the Privy Council minutes of 6 February 1546.
The ship would have been dismissed when the fleet was demobilised in early September: *L&P,* XX, ii, nos. 346, 368.

6 February 1546
The minutes of the Privy Council record that 'William Karye, Robert Leyton, and John Pryne, merchauntes of Bristow, being commanded by John Wynter, deceassed, about i yere passed to prepare for the Kinges Majestes service on the sees their ship called the *Marye James* of Bristowe, and haveng not sufficient ordenance for the furniture of the same, bought vi peces of ordenance with their chambres of one Williame Edgecombe and Richard Dane of Bristowe aforesaid for the somme of xxiiii li sterling'. The owners were now being sued for non-payment but the Crown accepted that the debt was its own: *A.P.C.*, I, p. 332.
On 13 April, the office of Augmentations issued a warrant to pay the amount owed by William Jaye, Robert Leighton and John Prinne. This was done because the ordnance was disposed to his majesties use after the ship's period of service: *A.P.C.*, I, p. 380-81.

13 March 1550
Departure of the *Mary James* of Bristow for Andalusia, carrying 1 fardel and 1 packet of Smyth's cloth: S.290.

22 December 1550
Return of the *Mary James* of Bristol, master David Gyllyn, carrying wine and oil belonging to Bristol merchants: E122 22/4.

THE *MATTHEW* OF BRISTOL

Size: c. 125 tons burden (26 April 1537)
Owner: unknown

23 December 1536
Return of the 'navicla' *Mathew* of Bristol, master William Deane, carrying 100.25 tons wine, 12 tons iron and 0.75 tons rosin: E122 199/3.

23 January 1537
Departure of the 'navicla' *Mathew* de Bryst', master William Teyn, carrying 3.5 tons lead, 3 cloths and 11 hogshead fish of 'whales': E122 199/3.

26 April 1537
Return of the 'navicla' *Mathew* of Bristoll, master William Deane, carrying 100.75 tons wine, c. 15 tons woad and 1 cwt. rosin: E122 199/3.

31 May 1537
Departure of the 'navicla' *Mathew* of Bristoll, master William Deane, carrying 4.5 tons lead belonging to William Shipman: E122 199/3.

9 July 1537
Return of the 'navicla' Mathew of Bristoll, master William Deyn, carrying 100 tons salt, 4 cwt. alum and 1 bale paper belonging to John Shipman and assoc. and 6 tons wine belonging to the master: E122 199/3.

Spring 1539
The *Matthew* of Bristol was attacked by Breton pirates. It was sailing in the company of the *Margaret* of Bristol: *Overseas Trade,* p. 104.

6 April 1544
Departure of the *Matthew* of Bristol, master John Wade, carrying 10 tons salt, 2 cwt. aniseed and 1 cwt. alum belonging to John Snygg: E122 21/12.
This is almost certainly a different ship to the one mentioned above.

8 May 1544
Return of the *Matthewe* of Bristol, master John Wade, carrying 40 dozen sheepskins belonging to William Chester: E122 21/12.

THE *MICHAEL* OF BRISTOL

Size: c. 30 tons burden (14 April 1542)
Owner: Unknown, but the consistent association with the merchants Alan Hill and William Sprat may indicate that they were at least part-owners.

22 November 1541
Return of the *Michael* of Bristol, master William Mathew, carrying 15.5 tuns wine, 27.5 cwt. woad and 26 cwt. rosin, belonging to Richard Williams, Alan Hill and William Sprat: E122 21/10. [Continent]

20 January 1542
Departure of the *Michael* of Bristol, master Nicholas Besscrest, carrying 15 dicker hides and some cloth, belonging to William Sprat and other Bristol merchants: E122 21/10. [Continent]

14 April 1542
Return of the *Michael* of Bristol, master Nicholas Waisherford, carrying 36 tons iron belonging to Alan Hill & assoc.: E122 21/10. [Continent]

25 May 1542
Departure of the *Michael* of Bristol, master David Gyllam, carrying 16.3 tons lead, 28 cloths and 22 hides, belonging to Bristol merchants inc. Alan Hill and William Sprat: E122 21/10. [Continent]

26 July 1542
Return of the *Michael* of Bristol, master David Gellyn, carrying 36 tons iron belonging to Thomas White & assoc.: E122 21/10. [Continent]

9 August 1542
Departure of the *Michael* of Bristol, master Fesant, carrying safron, corrupt wine, cloth and 0.25 tons iron, belonging to Alan Hill, William Appowell & Benedict Jay: E122 21/10. [Ireland]

22 October 1542
Return of the *Michael* of Bristol, master Thomas Fesant, carrying 135 barrels herring, 24.5 cwt. hake and 0.5 tons salmon belonging to William Sprat & assoc.: E122 199/4. [Ireland]

10 August 1543
Departure of the *Michael* of Bristol, master Moris Welsh, carrying 5 tuns corrupt wine and various consumer goods, belonging to William Appowell and John Caps: E122 199/4. [Ireland]

THE *NICHOLAS* OF BRISTOL

Size: c. 15 tons burden (8 February 1543)
Owner: unknown

28 February 1542
Return of the *Nicholas* of Bristol, master John Llewelyn, carrying 1800 yards check cloth, 100 doz. sheep skins and fish, belonging to various merchants: E122 21/10. [Ireland]

20 March 1542
Departure of the *Nicholas* of Bristol, master Bartholomew Garland, carrying 30 quarters malt, 1 cwt. hops and 1 gross knives: E122 21/10. [Ireland]

15 May 1542
Return of the *Nicholas* of Bristol, master Bartholomew Garland, carrying 1 barrel salmon, 10 doz. sheep skins, 10 doz. lamb skins, 4 dicker deer skins and 0.5 tuns wine, belonging to Edward Pryn: E122 21/10. [Ireland]

16 June 1542
The *Nicholas* of Bristol leaves Bridgwater, master Patrick Garland, carrying 12 qrs wheat, tax free, under the name of Anthony St. Ledger (Lord Deputy of Ireland): E122 27/18.

28 July 1542
Return of the *Nicholas* of Bristol, master Bartholomew Garland, carrying 3.5 cwt. hake and 5 burden salted fish belonging to Richard Sare: E122 21/10. [Ireland]

22 October 1542
Return of the *Nicholas* of Bristol, master Bartholomew Garland, carrying 37 barrels herring, 5.2 cwt. hake, 0.5 tuns salmon, 1 barrel beef belonging to Bartholomew Garland: E122 199/4. [Ireland]

20 November 1542
Departure of the *Nicholas* of Bristol, master Bartholomew Garland, carrying silk, hoops, orchil and knives, belonging to one indigenous and one alien merchant: E122 199/4. [Ireland]

15 January 1543
Nicholas of Bristowe, master Bartholomew White, arrives in Ilfracombe, carrying Bowstaves, salmon and flock wool: E122 43/14.

22 January 1543
Return of the *Nicholas* of Bristol, master Bartholomew Garland, carrying 62 cwt. hake, 0.25 tons salmon and bow staves: E122 199/4. [Ireland]

8 February 1543
Departure of the *Nicholas* of Bristol, master Bartholomew Garland, carrying 13 tons salt: E122 199/4. [Ireland]

4 May 1543
Return of the *Nicholas* of Bristol, master Bartholomew Garland, carrying 3 tuns wine, 420 yards check cloth, sheep skins and kid skins: E122 199/4. [Ireland]

11 May 1543
Departure of the *Nicholas* of Bristol, master Bartholomew Garland, carrying 7 tuns salt, 0.5 tuns iron, 1 tun corrupt wine, 1 cwt. aniseed, 1 piece raisins and 10 lasts coal: E122 199/4. [Ireland]

27 June 1543
Return of the *Nicholas* of Bristol, master Bartholomew Garland, carrying salted skins, Irish wool, check cloth mantles and linen: E122 199/4. [Ireland]

22 December 1543
Departure of the *Nicholas* of Bristol, master Bartholomew Garland, carrying cloth and saffron: E122 21/12.

12-14 February 1544
Return of the *Nicholas* of Bristol, master Bartholomew Garland, carrying fish and raisins: E122 21/12.

THE *PHOENIX* OF BRISTOL

Size: c. 31 tons (10 September 1546)
Owner: unknown

10 September 1546
Return of the *Fenix* of Bristol, master John Boysher, carrying 31 tuns salt belonging to William Sherrington: E122 21/15. [Continent]

THE *PRIMROSE* OF BRISTOL

Size: c. 75 tons burden (2 May 1537)
Owner: Edward Pryn. A respected Bristol merchant engaged largely in the woad trade.

20 November 1536
Creation of a Bordeaux Charter party to take the *Primrose* of Bristol, master Thomas Glaich, to Bristol. Thomas Shipman and Owen Thurston were pursers.
On the 2 January 1537 the Bristol customs account records the return of the *Prymerose* de Brystoll, master Thomas Lache, carrying wine: E122 199/3.
The charter party and customs accounts are compared below. To aid comparison the order in which the names are given has been altered:

Charter Party	*Tuns*	**Customs Account**	*Tuns*
John Smythe	14.125	John Smythe	10.5
William Shipman	4.125	William Shipman & Cutte	4.0
John Court	0.5		
Francis Codrington	11.125	Francis Codryngton	8.5
John Gorney	4.5	John Gurney	3.5
William Sprat	7.0	William Sprat & Teson	7.75
Thomas Tizon	2.125		
John Branthon	7.5	John Brampton	6.5
William Cox	5.5	William Cockys	4.0
William Ballard	2.0	William Balard & Pryen	3.5
Richard Prynn	3.0		
Edward Prynn	2.5	Edward Pryn & Typton	5.5
Owen Thurston	4.5		
Total Tons	68.5	*Total Tons*	53.75

On 20 November, Shipman and Thurston registered a contract with Saubadon de Guachico and a crew of eleven seamen, three grommets and a page to sail the ship to Bristol, returning to Bourdeaux, Pasajes or St. jean de Luz. A Bordeaux merchant guaranteed the payment: *Overseas Trade,* p. 83.

23 January 1537
Departure of the *Primrose* of Bristol, master Thomas Shipman, carrying hides and cloth belonging to Bristol merchants, including John Smyth: E122 199/3.

2 May 1537
Return of the *Prymrose* of Bristol, master Thomas Dowdyng, carrying 74 tons iron, 6.5 tuns oil, 0.5 tuns wine, orchil and alum belonging to Bristol merchants: E122 199/3.

24 May 1537
Departure of the *Prymrose* of Bristol, master Thomas Dowding, carrying hides and cloth belonging to Bristol merchants: E122 199/3.

13 July 37
Return of the *Prymrose* de Bristol, master Thomas Shipman, carrying 69 tons iron belonging to William Shipman & assoc.: E122 199/3.

5 September 1537
Departure of the *Prymrose* of Bristol, master Philip Thomas, carrying hides and cloth belonging to Bristol merchants: E122 199/3.

1 October 1538
Prymrosse of Brystoll, master Rede, leaves Bridgwater carrying 48 quarters wheat, 18 quarters peas and 120 quarters beans belonging to Thomas Dowding. It was also laded with 6 quarters wheat and 54 quarters beans belonging to John Typten: E122 200/2.

31 January 1539
Smyth gives Edward Pryn £4 13s. 11d. to pay Thomas Dowding of Bridgwater for beans which are to be laden on the *Prymros*. However, this money is paid back to Smyth in two instalments, on 26 March and 7 May 1540, since the 'beanes war not laden': S.89. The voyage was presumably that made on 4 March.

4 March 1539
Prymrose of Brystol, master Thomas Dowdyng, leaves Bridgwater carrying 96 quarters beans and one cloth belonging to the master: E122 200/2.

December 1539
Return of *Primrose* from Bordeaux. Smyth owed £5 for the freight 5 tons of wine @ 20s. per tun: S.83. On 26 March 1540 Smyth credited Pryn £2 10s. for the half freight in the *Primrose*. However, since Pryn had laded 5 tons of Gascon wine on Smyth's ship, the *Trinity*, that winter, their debts simply cancelled each other out: S.89.

14 August 1540
Smyth credits Pryn 25s. to reserve the right to send 12 weys corn (72 quarters) to Spain on the *Primrose* freight free: S.89.

15 November 1540
Return of *Primrose* from Gascony. Smyth notes that he owed Pryn £5 for the freight of 5 tons of Gascon wine @ 20s. per ton on the *Primrose* 'to pay at 3 monthes & 3 monthes'. At the same time Pryn freighted iron in Smyth's ship the *Trinity*. Since this cost £9 8s. 4d., Smyth's freight dues were set off against Pryn's: S.89.

15 February 1541
Smyth laded 12 cloths aboard the *Primrose*, master T. Web, for a voyage to Biscay, East Spain: S.69. The ship sailed in the company of the *Trinity*.

24 October 1541
Return of the *Primrose*, master Thomas Lache, carrying 56.5 tons Azores woad, belonging to Edward Pryn & assoc. and the alien merchants Francis Blankeley & Gonzales: E122 21/10. [Continent]

28 November 1541
Departure of the *Primrose*, master Thomas Lache, carrying 68.5 cloths, belonging to Bristol merchants, including John Smyth & Codrington: E122 21/10. [Continent]
On 2 December Smyth records in a Biscay voyage account that he sent in the *Primrose* 10 cloths, 7 truckers and 2 white Kerseys: S.173.

16 December 1541
Premrose of Bristol, master Thomas Lache, leaves Bridgwater, carrying 16 weys (96 quarters) beans, 6 cloths and 2 tons lead belonging to John Taylor, an indigenous merchant: E122 27/18. [Continent]

8 May 1542
Return of *Primrose*, master Thomas White, carrying 80.5 tons iron belonging to William Ballard & assoc.: E122 21/10. [Continent]
On 19 May Smyth noted that he owed Pryn £5 7s. 6d. 2f. for the freight of 8.133 tons iron on the *Primrose* @ 13s. 4d. per ton. At this point Pryn owed Smyth £4 for 6 tons iron shipped the previous month in the *Trinity*. So Smyth was now left owing Pryn £1 7s. 6d. 2f. This debt was paid off in freight by 23 August: S.89.
The freight charge is also detailed in one of Smyth's iron accounts, where Thomas Latche is listed as the master: S.153.

25 May 1542
Departure of *Primrose*, master Thomas Lache, carrying 7 lasts coal and 2 cloths belonging to Edward Pryn: E122 21/10. [Continent]

28 July 1542
Return of *Primrose*, master Thomas Lache, carrying 28 tons salt belonging to William Ballard: E122 21/10. [Continent]

30 September 1542
Departure of *Primrose*, master Thomas Lache, carrying c.200 cloths, 11 hides, 30 calf skins and 2 tons lead belonging to various Bristol merchants: E122 199/4. [Continent]

20 December 1542
In a Biscay voyage account Smyth debits Robert Tyndall '1 duccatt which he r. of the purser of the Primros & gave me no cowmpt of hit': S.174.

29 December 1542
Return of *Primrose*, master Thomas Lache, carrying 69.5 tons iron belonging to Christiana White & assoc.: E122 199/4.

28 January 1544
Departure of the *Prymrose* of Bristol, master Thomas Webbe, carrying cloth, calf skins and 30 tons lead belonging to Bristol merchants: E122 21/12.

29 April 1544
Return of the *Primrose* of Bristol, master David Gowgan. A damaged customs account indicates that the ship is carrying at least 53.5 tons iron and 3.75 tons wine belonging to Bristol merchants: E122 21/12.

12 December 1550
Return of the *Primrose* of Bristol, master Thomas Waryn, carrying 33.16 tons raisins, 2 tuns figs, 5.5 tuns wine, 1.75 tons aniseed and almonds: E122 22/4.

THE *SAVIOUR* OF BRISTOL

Size: c. 255 tons burden (3 August 1545)
Owner: Nicholas Thorn. Bristol's richest and most noted merchant, he was an associate of Thomas Cromwell and also the owner of the *Mary Conception*. He had apparently died by 1546 as a court case was then brought against his heirs. At that time he had trading contacts to the Levant: Overseas Trade, p. 161.

c.1535
Undated petition submitted to Henry VIII after the death of Robert Thorn (1532). Since Nicholas notes that the ship has been let-out to the Levant trade, it must be a year or two after Robert's death. However, since no mention is made of Cromwell or any Royal subsidy, the petition presumably predates the 1535-7 rebuilding of the *Saviour.*
Nicholas Thorn writes 'where as the sayd Robert in andolesya bowght a ship calyd the Savyor of the sayd towne [Bristol] of the portage of CCL tons beyng then offeryd to be sowld unto the Spanyards. And so much to them hit should not apere the sayd port [Bristol] to be so in decay of shipis the same ship then beyng the gretyst and best of this partys of Yngland and also the sayd Robart was then purpoysed to have cam into this yor sayd realme to geff your grase relacyon of countrys to be dyscoveryd and by the same ship and others intendyd throw your gracys ayde to dycovyr and sowght new contrys…' He notes of the ship it 'ys of to gret portage to trad to Bordyas or to the mor port of the partys of andolesya in Spayne to the wych partys your sayd beseacher here to fore have popysed to trade where fore he of latt lett to freyght the same ship into the partys of Levant to his many fold cost & charge by the ressone she ys most appte for the same portys'.
He begs the King's letters patent for him and his assigns to have five years respite of payment of the custom of such merchandises as shall be laden in her or any other ship from Bristol in four voyages next after this date...they giving sufficient surety 50 ton freight free in 5 voyages outwards and homewards and 200 oaks of the Forest of Dean towards the building of a ship: S.P.1 238 f.14 (*L&P,* Addenda I, i, no.812)

28 December 1535
Nicholas Thorne wrote to Cromwell that he had contracted with a shipwright dwelling near Dartmouth 'for the new making of the *Saviour'*. The shipwright had arrived by February 1536 with 20 carpenters. Thorn then asked Cromwell to write to three individuals and tell them to deliver him 30-40 pieces of timber. He further noted that three are diverse forests in Wales and the Forest of Dean, near to the water side that belong to the King and certain religious houses: *L&P,* IX, no.1025.

25 January 1537
Letter from Nicholas Thorne to Thomas Cromwell states 'this yere past I have trobelyd your lordship with dyvers letters ondley dessiryng som ayde towards my chargis for the buldyng the ship the Savyor which by your lordships commandment I builded & have byn unto me very chargibull as by the acownt there of which by your commandment I delyvered M. gonston may apere, where fore I most humbly dessyar your good lordship to command som porsyon of money to be paid towardis my chargis sustayned for the buldyng and settyng forwardis of the sam. Also if it wold plesse your lordship to command the warrant for the tonage to be sent a good part of the sam would be recovered in hir custom': P.R.O. S.P.1 115 f.64 *(L&P*, XII, i, no. 233).

5 February 1537
Return of the *Savyor* of Bristol, master Antony Pygott, carrying c.141.75 tons wine, 21.5 tons corrupt wine, 21.25 tons oil, 4.75 tons fruit, orchil, soap, raisins and marmalade belonging to various Bristol merchants: E122 199/3.

8 March 1537
Departure of the *Savyor* of Bristol, master Anton Pygott, carrying lead, hides and cloth belonging to various Bristol merchants: E122 199/3.

3 August 1537
Return of the *Savyor* of Bristol, master Antony Pygott, carrying 192.25 tuns oil, 18.25 tuns wine, 1 tun corrupt wine, 9.9 tons soap, alum and sugar belonging to Bristol merchants: E122 199/3.

17 September 1537
Departure of the *Savyor* of Bristol, master Antony Pygott, carrying some lead, cloth, hides and calf skins belonging to Bristol merchants: E122 199/3.

10 April 1539
The *Saviour* is reported to be among the Bristol ships ready to depart for Portsmouth, according to the King's command. In his letter to Cromwell, Nicholas Thorn notes that the ship is appointed with 60 mariners besides officers 'with flags and streamers of your Lordship's colours and arms'. Thorn desires Cromwell to appoint the soldiers that the ship is to carry: *L&P*, XIV, i, no. 736.

28 April 1539
The *Saviour* is reported to be at Lands End on its way to Portsmouth to join the fleet: *L&P,* XIV, i, no. 880.

10 June 1539
The *Saviour* was serving in the fleet at Portsmouth: *L&P*, XIV, i, no. 1097.

15 September 1539
Thorne writes to Cromwell that 'These days I advertised your Lordship of the safe arrival of The *Saviour* from Andalusia. I purpose sending her again to Luxborne and shall depart with the first wind. If there is any service I can do your Lordship in those parts I desire you to write': *L&P*, XIV, ii, no. 192.

19 January 1540
Return of *Saviour* from Andalusia. Smyth credits Nicholas Thorn £5 for the freight of 2 tons sack and 2 tons of oil on his ship the *Savior* @ 25s. per ton. The previous month Thorn had transported 3.25 tuns wine on the *Trinity*. So Smyth's effective debt was only £1 15s. This was paid on 21 January: S.82.
An oil account and a sack wine account confirm the freight details: S.84, 79.

1 March 1543
The *Saviour* of Bristol, returning from Andalusia to London (?) with a cargo of poisoned marmalade for the King. A letter from Bonner to Henry VIII warns that an Englishman living in Spain named William Estrige 'havyng suspecte acquayntance with dyverse naughtie freres in Sevill intendethe shortly to presente your Majestie with dyverse costeleye
boxes of

marmelado given to him by the saide friers & suspected to have within them things of danger & great perill.' The goods are being sent on 'the *Saver* of Bristowe': P.R.O. S.P.1 176 f.99. Note *L&P* describes the ship as the '*Saber* of Bristowe' but since there is no known ship of that name and the letters 'b' and 'v' were written in almost the same way, this must be the *Saviour*: *L&P,* XVIII, i, no. 231.

31 August 1543
Return of the *Savior* of Bristol, master Robert Brewys, carrying 5 hogshead Salmon belonging to William Sprat: E122 199/4. [Ireland]
Since these goods must have come from Ireland, it seems likely that the ship had been one of the ten Bristol ships operating in the Irish Sea that Spring and Summer. This 'cargo' would presumably have been picked-up while the ship was in an Irish harbour.

22 November 1543
A court case concerning a voyage of the *Saviour* between San Lucar de Barrameda and London: G. Connell-Smyth, *Forerunners of Drake*, p. 29.

31 December 1543
Departure of the *Saviour* of Bristol, master Robert Brewys, carrying at least 83 tons lead and cloth belonging to Bristol merchants: E122 21/12.

9 July 1544
Return of the *Saviour* of Bristol, master Robert Brewys, carrying at least 99 tons wine, 51 tons oil, 20 tuns soap, sugar and alum belonging to Bristol merchants: E122 21/12.

Summer 1545
By 28 May the *Saviour* was serving in the navy at Portsmouth and John Wynter was ordered to sail in her: *L&P*, XX, i, no. 827.
On 3 August the '*Saviour* of Bristoll' was still at Portsmouth and was described as a ship of 340 tons with 200 men on board: S.P. Hen VIII S.205 f. 47.
On the 10 August it was described as a ship of 350 tons with 200 men on board, under Captain Arthur Wynter (John Wynter's son). In the order of battle it was placed in the battle: S.P. Hen VIII s.205 f.160.
The ship would have been dismissed when the fleet was demobilised in early September: *L&P,* XX, ii, nos. 346, 368.

March 1546
The *Salviour* of Bristol is among the King's ships being sent to the Narrow Seas at the end of March: *L&P*, XXI, i, no. 498.

February 1549
Return of *Saviour* from Andalusia. In an Andalusia wine account, Smyth notes he had laded 5 tons sack @ 5 Nobles (33s. 4d.) per ton freight: S.287.

5 April 1549
Departure of the *Savyor* of Bristowe, master John Fischepill. In an Andalusia voyage account Smyth notes he laded cloths, 19.7 tons lead and 3 quarters wheat on the ship: S.290.

8 June 1549
Departure of the *Saviour*. In a voyage account for Andalusia, Smyth notes he laded the ship with 2 fardels cloth, 1 doz. calf skins and 15.2 tons lead: S.222(D).

September 1549
Return of *Savyor* of Bristol. Smyth had laded 10 tons of oil @ 33s. per ton. Full details of lading costs are given including £2 for custom @ 4s. per ton, indicating the entire cargo was declared: S.183.

18 September 1549
Departure of the *Savior* of Bristowe. In a voyage account for Andalusia, Smyth notes he laded the ship with 14 tons lead and some cloth: S.290.

May 1550
Return of *Savyor* of Bristowe. Smyth had laded 12 tons of oil on the ship, which paid freight @ 40s. per tun: S.185.
A loose sheet included in Smyth's Ledger, dated to Easter Quarter, 4 Edward VI (1550) refers to customs payments made by Willim Syms for John Smyth. The sheet includes payments of 45s. for 12 tons oil on the *Savyor*. Since oil was customed at 4s. per tun, this suggests that it was customed as 11.25 tuns. Payments were also made for cloth, lead and calf skins sent on the ship: S.256(A).

THE *SUNDAY* OF BRISTOL

Size: c. 15 tons burden (17 October 1541)
Owner: unknown

17 October 1541
Return of the *Sunday* of Bristol, master Peter Howell, carrying 110 barrels white herring, 6.25 cwt. hake, and tallow, belonging to William Gelly & assoc. and William Adams: E122 21/10. [Ireland]

22 November 1541
Return of the *Sunday* of Bristol, master Thomas Walter, carrying 28.5 barrels of white herring, belonging to the master & assoc.: E122 21/10. [Ireland]

3 December 1541
Departure of the *Sunday* of Bristol, master John Joyne, carrying 24 quarters wheat, belonging to Nicholas Rudsdale & Adams: E122 21/10. [Ireland]

14 January 1542
Sunday of Bristol, master Thomas Walter, leaves Bridgwater, carrying 6 weys (36 quarters) beans, belonging to John Ginyck(?): E122 27/18. [Ireland]

26 January 42
Return of the *Sunday* of Bristol, master John Jene, carrying 6 barrels herring, 4 cwt. hake, 13.3 c sheep skins and 4 mantles, belonging to William Gelly & Adams: E122 21/10. [Ireland]

17 March 1542
Departure of the *Sunday* of Bristol, master Evan Bretton, carrying 4 weys coal, belonging to William Gelly: E122 21/10. [Ireland]

12 April 1542
The *Sunday* of Bristol leaves Bridgwater, master Thomas Walter, carrying 12 quarters wheat and 2 cloths, belonging to the master: E122 27/18.

10 May 1542
The *Sunday* of Bristol arrives at Bridgwater, master Evan Water, carrying 100 yards Irish frieze and 3 mantles, belonging to William Coke(?): E122 27/18.

10 May 1542
The *Sunday* of Bristol leaves Bridgwater, master Evan Water, carrying 18 quarters wheat and some cloth, belonging to John Spark: E122 27/18.

20 May 1542
Return of the *Sunday* of Bristol, master Evan Bretton, carrying 12 tons salt, belonging to William Gelly: E122 21/10. [Continent]

10 June 1542
Departure of the *Sunday* of Bristol, master Nicholas Beverege, carrying 18 quarters wheat, 30 quarters beans & malt, 2.5 cwt. hops, 5 cwt. aniseed, belonging to Robert Newborn: E122 21/10. [Ireland]

26 June 1542
Return of the *Sunday* of Bristol, master Thomas Walter, carrying check cloth and skins of indigenous merchants with largely Irish names: E122 21/10. [Ireland]

26 June 1542
The *Sunday* of Bristow leaves Bridgwater, master Thomas Walter, carrying 12 quarters wheat belonging to Anthony St.Ledger. The cargo is exempted from custom: E122 27/18.

17 July 1542
Return of the *Sunday* of Bristol, master Nicholas Byforest, carrying 10 stone flock wool, belonging to Nicholas Kelly: E122 21/10. [Ireland]

21 July 1542
Departure of the *Sunday* of Bristol, master William Kelly, carrying 0.5 tuns corrupt wine, belonging to John Griffiths: E122 21/10. [Ireland]

24 October 1542
Return of the *Sunday* of Bristol, master unknown, carrying 45 barrels white herring, belonging to William [G]elly & White: E122 199/4. [Ireland]

26 January 1543
Departure of the *Sunday* of Bristol, master John Jene, carrying 12 tons salt, 2 tons corrupt wine, 3 cwt. aniseed and laces, belonging to William Chester: E122 199/4. [Ireland]

2 March 1543
Return of the *Sunday* of Bristol, master John Jene, carrying 4.5 tons wine and 20 salted hides belonging to William Chester and William Bennet: E122 199/4. [Ireland]

29 March 1543
Departure of the *Sunday* of Bristol, master John Jeyne, carrying spices, millstones and misc. items belonging to two merchants with Irish names: E122 199/4. [Ireland]

30 April 1543
Return of the *Sunday* of Bristol, master John Jeynes, carrying 2 tuns wine of Robert Butler, Lewis Robins and William Lewis. The first two of these are certainly Bristol merchants: E122 199/4. [Ireland]

29 May 1543
Departure of the *Sunday* of Bristol, master John Bougham, carrying 8 pairs millstones, belonging to Peter Howell: E122 199/4. [Ireland]

20 June 1543
Return of the *Sunday* of Bristol, master Thomas Walker, carrying sheep and deer skins, belonging to Richard Grenwey: E122 199/4. [Ireland]

9 July 1543
Return of the *Sunday* of Bristol, master William Gale(?), carrying 1.25 tuns wine, salted skins and salmon, belonging to Nicholas Kelly and William Lewis: E122 199/4. [Ireland]

12 February 1544
Return of the *Sonday* of Bristol, master John Jeyns, carrying fish and salt hides of indigenous merchants: E122 21/12.

4 December 1545
Departure of the *Sonday* of Bristol, master John Colyns, carrying 8 pair millstones and 1 tun corrupt wine, belonging to John Swan and John Griffiths: E122 21/15. [Ireland]

13 January 1546
Return of the *Sunday* of Bristol, master John Gryffith, carrying 5 pipes salmon, 6 cwt. hake, 1 barrel white herring, belonging to John Griffith & assoc.: E122 21/15. [Ireland]

18 January 1546
Departure of the *Sunday* of Bristol, master John Griffiths, carrying 9.5 tuns wine, marmalade, soap, sugar, calf-skins, knives, laces, spices and other consumer items, belonging to the Bristol merchant Nicholas Thorn & assoc.: E122 21/15. [Ireland]

18 March 1546
Return of the *Sunday* of Bristol, master Henry Whyte, carrying 54 quarters wheat, 12 quarters rye, Irish wool, skins and eels, belonging to John Gryffythe & assoc.: E122 21/15. [Ireland]

5 April 1546
Departure of the *Sunday* of Bristol, master John Brother, carrying sugar, soap, cloth, fish-hooks, primers, liquorice, millstones etc.: E122 21/15. [Ireland]

7 May 1546
Return of the *Sunday* of Bristol, master Henry Wyyte, carrying 3 quarters wheat and Irish frieze belonging to John Gryffyth: E122 21/15. [Ireland]

12 July 1546
Return of the *Sunday* of Bristol, master Bartholomew Garland, carrying 6 quarters barley, 22 stone Irish wool and salted fish, belonging to John Gryffyth and Henry Rownsell: E122 21/15. [Ireland]

27 August 1546
Departure of the *Sunday* of Bristol, master Thomas Walter, carrying 3.5 tuns wine and 7.67 cwt. hops, belonging to John Bedfield and William Chester & assoc.: E122 21/15. [Ireland]

THE *TRINITY* OF BRISTOL

Size : c. 115 tons burden (2 August 1545 , suggests 112.5 tons)
Owner: John Smyth

15 November 1536
'La *Trenite* de Bristol', master Johan Darby, is chartered at Bourdeaux. The agreement, made between 'Johan Esmythe and Francoys Codrinthon, marchans du dit Bristol', states that 'le dit Codrinthon a mis et charge audit navire au present port de Bourdeaulx lo nombre de cent troy tonneuaux, troys barriques et deux tiers de vin' (104.035 tons) 'put and charged on the said ship at the present port of Bordeaux the number of 103 tonneaux, three barriques and 2 tiers of wine'], The ship was to leave 'du premier bon temps convenable jusq'a port et havre du dit Bristol'. The freight rate was set at 25s. per ton 'Lequel frect sera paie audit maistre ou a son commis de par della es termes ensuyven, scovis est, la moitie a la descharge dudit vin et l'autre moitie dedens ung mois amprez.' (one month after arrival?): *Overseas Trade*, pp. 82-3.

22 December 1536
The return of the *Trinite* of Bristol, master John Darby, is recorded in the Bristol customs accounts: E122 199/3. The customs account and charter party are compared below. The order of the names has been altered, the names given in the customs account anglicised and French/Spanish measures are converted into tons.

Charter Party	*tons*	**Customs Account**	*tons*
Francoys Codrinthon	18.33 wine	Francis Codrington	14.0 wine
	1.5 rosin		1.5 rosin
Johan Esmythe	18.125 wine	John Smyth	13.5 wine
	6.33 iron		6.33 iron
Johan Branthom	15.25 wine	John Brampton	13.5 wine
Guilhem Cocqs	15.0 wine	William Cokks	12.0 wine
Guilhem Sprat	2.0 wine	William Sprat	1.25 wine
Rafe Lich	10.66 wine	Ralph Leche	8.08 wine
Guilhem Rouller	15.0 wine	William Rowley	12.5 wine
Johan Rolland	2.0 wine	John Rowland	1.75 wine
Johan Chipman	1.0 wine	John Shipman	0.75 wine
Johan Wynther	3.0 wine	John Wynter	2.75 wine
Guilhem Chipman	6.0 wine	William Shipman	4.5 wine
		John Darby	0.5 pitch
		Martinus Saunce (alien)	0.9 rosin
Total Tons	106.365 wine	*Total Tons*	84.58 wine
	6.33 iron		6.33 iron
	1.5 rosin		2.4 rosin
	0.5 pitch		0.5 pitch

Note: John Darby probably doesn't appear in the charter party because, as master, he was carrying his pitch as part of his customary right of portage. Martinus Saunce, may also be a member of the crew.

20 January 1537
Departure of *Trinity*, master John Darby, carrying cloth and hides belonging to Bristol merchants: E122 199/3.

3 May 1537
Smyth notes in his ledger that Ris (Rhys) Moris Abowen, a gentleman of Camarthen and the owner of the *Mary Grace*, owes him 24s. 3d. for beer, Newfoundland fish and a seam of wood given to John Enyons, the purser of the *Mary Grace,* 'in theyr greate nede' by Smyth's 'sarvant Tyndall & purser of my ship the *Trynte'*. However, it appears that Smyth was never paid, since the debt is not cancelled: S.8.

26 May 1537
Return of the *Trinity*, master John Darby, carrying 82.75 tuns wine, 12.5 tons iron and 7.1875 tons woad: E122 199/3.

1 June 1537
Departure of the *Trinity*, master John Darbye, carrying 61 cloths, 31 dicker hides, 8 doz. calf skins and 240 quarters beans. The beans and 14 dicker tanned hides belonged to John Smyth: E122 199/3.

27 July 1537
Hugh Tipton writes to his master, William Sprat, that the *Trinity* and *Mary Bride* left that day Rendry for Bristol. He had laded Sprat's 'cabull' (merchandise) on the *Trinity*: *Overseas Trade*, p. 128.

7 August 1537
Return of *Trinity*, master John Darby, with 128 tons iron & 1 ton wine carried by 'John Shipman and dyvers persoons'. The ship arrived the same day as the *Mary Bryde*: E122 199/3. Eleven days passed between the departure of the ship and it's the payment of customs at Bristol.

29 August 1537
Departure of the *Trinity*, master John Darby. The ship was carrying 120 quarters grain, 100 doz. calf skins and 460 dicker tanned hides, belonging to John Smyth. Other merchants laded hides, calf skins and cloth: E122 199/3.

1539
John Smyth inventories his ship. He records on the debit side of his ledger that 'The Trynte my ship (God save her) owith £250 that is so myche her hull, mastes, takle, sayles, 4 ankers, 4 cables, brazyn shevers [brass sheaves], 2 Gret gouns callid port peces with eich 2 chambers, 2 gret slynges with eich 2 chambers, 4 guns callid basys with eich 2 chambres & 11 peces iren callyd Portyngall verssos with eich 2 chambres & many pelletes of iren & stone belonyng to the same, with bowes, arrows, bills, morys pikes & dartes 7 other monycions & abllymentes belongyng to the same ship.': S. 61.
Since England was on the verge of war with France and Spain at the beginning of 1539 and Smyth sent the *Trinity* to Spain at this time, it seems likely that the inventory was conducted just before the ship sailed, as a way of checking what he would lose if war broke-out and the ship was seized. His interjection 'God save her' and the fact that he was entering the ship as a debit in his ledger suggests that he feared, but was preparing for, the worst.

2 February 1539
Smyth debited Codrington & Carr for the cost of a licence for 8 weys (48 quarters) beans laded on the *Trinity*: S.60.

March 1539
The *Trinity* in Passajes, Northern Spain. Smyth noted that his factor, Thomas Shipman, 'r. *owt* of the Trynte in Marche' 26 London cloths, 10 customs cloths, 47 doz. calf skins, 21.5 weys (129 quarters) wheat, 22 weys 44 bushels (137.5 quarters) beans: S. 50. Smyth's total lading would therefore have been 53.3 tons grain, 0.9 tons cloth and 0.8 tons leather.

April 1539
Return of the *Trinity* from Spain. Smyth credits his factor, Thomas Shipman, 379,300 M (£252 17s. 4d.) for 7 C kyntalls (46.66 Spanish tons) iron laden in ship, 12,554 M (£8 6s. 8d.) for victuals (wheat, cider and hake) for the ship, 3750 M. (£2 10s.) for 388 lb. cordage, 750M (10s.) for two knees for the dalehead and 1445M (19s. 3d.) for the fee for 'towyng her in & owt to the Passage': S.50.
On 31 May 1539 Smyth debits the accounts of three merchants for freighting 32.5 tons iron on the *Trinity*. These are:
William Shipman (15 tons @ 15s.) is debited £6 5s. for 'the rest' of his payment, implying that he has already paid £5. Shipman pays £6 on 20 October, which appears to be for this debt. There is no record of the remaining 5s. being paid: S.7.
John Wynter (7.5 tons @ 15s.) is debited £5 12s. 6d, 'to pay 1/2 in hand & thother 1/2 3 months after her discharging'. He paid £5 on 12 November 1539. The other 12s. 6d. was never paid and was written-off as a bad debt on 2 March 1544: S.11.
Nicholas Gay (3 tons @ 15s.) and (7 tons @ 13s. 4d.) is debited £6 18/4. He paid on 23 October, to Smyth's servant Giles White, in Andalusia: S.16.
Smyth's failure to get full payment from Shipman and Wynter, who were otherwise regular payers, may suggest there was some disagreement about what the freight rate was meant to be. This supposition may be supported by the annomoly of Gay paying freight at two different rates.
The total recorded freight is 79.16 Span tons, worth £59 7s. 6d. However, since many of Smyth's personal accounts do not start until the autumn of 1539, it is possible that other debts for this voyage were recorded in his old ledger (see 10 October).

May 1539
Smyth sells William Chester two Portuguese Verssos with their chambers at 20s. per gun. These may have come from the *Trinity*: S.35.

12 July 1539
Smyth credits Thomas Howell £2 8s. for six butts beer for the *Trinity*: S.37.

August 1539
The *Trinity* is in northern Spain. Robert Tyndall, Smyth's apprentice resident in San Sebastian, received from Smyth 10 London Cloths, a Tenby frieze, 20 dicker leather, 29 wey 43 bushels wheat (179.375 quarters), 10 weys 16 bushels beans (62 quarters): S. 55.
In July Smyth recorded that a licence for 20 weys (120 quarters) wheat and 10 weys (60 quarters) beans was employed on the *Trinity*. The licence was supplied by Francis Cordrington and William Carr, who Smyth credited £8 6d. for the use of half the licence: S.60. This suggests the licence cost c. 2s. 5d. 2f. per quarter.

Codrington & Carr's own account suggests a licence for 30 weys wheat and [10] weys of beans was employed on the *Trinity*, with Smyth taking a half part when he was only due a quarter: S.222(B).
William Tyndall was also sold part of the licence for 7 weys beans: S.222(B).
After the return of the *Trinity* in October Thomas Tyson was rebated 8s. 4d. on his freight charges 'for as much as he lode no corn at the viage'. This suggests that he sent, or was meant to send, corn on this voyage: S.59.
Smyth's thus exported a total of 241.375 quarters wheat and beans of which 90 quarters, or 37%, was legally covered. He thus exported 48.3 tons grain, 0.9 tons cloth and 3.6 tons leather. However, his licence account suggests that Smyth's lading only amounted to half of what was on the ship, so the total lading was at least 101.5 tons.

10 October 1539
Return of *Trinity* from Northern Spain. Smyth debits the personal accounts of seven Bristol merchants £57 7s. 6d. for the freight of 76.5 Spanish tons iron @ 15s. per ton. These are:
Robert Pole of Gloucester (5 tons) owed £3 15s. Although he is debited on 10 September, this is probably a mistake since all other entries read 10 October. Pole also owed. 3s. 4d. for averes @ 8s. per ton and 12s. 6d. for custom @ 2s. 6d. per ton making a total debt of £4 10s. 10d. The fee for customs indicates the consignment was fully declared. The debt was paid on 24 November: S.58.
William Shipman (10 tons) owed £7 10s. 'to be pd. at all tymes'. He paid £6 13s. 4d. on 7 January 1540 and 16s. 8d. on 5 February: S.7.
Giles White (2.5 tons) owed £2 6s. 11d. for freight, avers, custom and petty charges that Smyth paid. White was Smyth's servant and already owed Smyth £12 10s. The freight debt was cleared by 11 May 1540 when Smyth received a tun of wine and 0.55 tons iron: S.42.
Robert Durban (5 tons) owed £3 15s. The debt was settled on 13 December: S.58.
Thomas Hart (5 tons) owed £3 15s. He paid in freight on 23 November: S.59.
Thomas Tizon (5 tons) owed £3 15s. He paid on 3 January 1540: S.59.
Francis Codrington & William Carr (40 tons) owed £30. They also owed £1 10s. for 4 tons @ 7s. 6d. per ton that 'came ded freight in theyres & Master William Shipmans complyment'. The debt was discharged on 15 January 1540: S.60.
Note: On 15 October 1539 Smyth transferred his iron account from his old book to his new ledger. He noted in the new ledger that he had c.64 tons in stock at the 'clozinge up acownt of my iren in my old boke fo. 172': S.53. It seems likely that much of this was laded on this voyage. For the purpose of the study of Smyth's shipments it is assumed he laded 50 tons on this voyage. This would make the complete lading 126.5 tons, which would be a typical iron cargo for the *Trinity*.

2 October 1539
Smyth owed 2s. 6d. for 10 Irish boards for the *Trinity*: S.39.

October 1539
Departure of the *Trinity* to Bordeaux. Smyth sends his apprentice Hugh Hamond in the ship with 2 great ox hides, a bay gelding and some cash, to be received by his apprentice, Robert Tyndall: S.55.

4 December 1539
Return of the *Trinity* from Bordeaux. It seems likely it had returned by this date since Tyndall's account was closed at this time, which probably would not have happened until the *Trinity* returned: S.55.

In December / January Smyth received 24.75 tons of Gascon wine from the *Trinity*. He charged his Bordeaux wine account 20s. per ton freight for this: S.83.
On 12 December 1539 William Ballard was debited £1 for the half-freight of 2 tons of Gascon wine 'this vyntage'@ 20s. Ballard had already paid half, the rest being due on Lady Day (25 March) 1540. The debt was paid on 14 August 1540: S.36.
On 22 December 1539 there are ten references to freight fees due on wine & woad from Bordeaux @ 20s. per ton.
Robert Leighton (5 tons wine & 4 half-bales [0.28 tons] woad) owed £2 12s. 11d for half-freight. He had already paid half and was due to pay the remained by 25 March 1540. The debt was settled on 22 May 1540: S.46.
Thomas Hart (6 tons wine) charged £6. No payment plan is mentioned but at this point Smyth owed Hart £2 10s. After this freight charge Hart was left owing Smyth £3 10s., which was paid on 7 April 1540: S.59.
Francis Codrington & William Carr (200 half-bales (14.28 tons accounting 14 half-bales to the ton)) charged £14 5s. 8d. 'to pay ½ in hand & thother ½ at the end of 3 monthes next commyng' i.e. 30 March 1540. This was paid, along with other debts, on 15 January 1540: S.60.
Nicholas Thorn (3.25 tons wine) charged £3 5s. The debt was paid in freight on 19 January 1540: S.82.
John Shipman, the elder (4 tons wine) charged £4. The debt was paid in freight on 23 December 1539: S.86.
William Rowley (5 tons wine) charged £2 10s for half-freight. He had already paid half his dues and the remainder was to be paid on 23 March 1540. The debt was settled on 8 May 1540: S.87.
John Gorney (5 tons wine) charged £5. He was to pay half in hand and half on 25 March 1540. He actually paid half on 20 February 1540 and other half on 7 February 1541: S.88.
Edward Pryn (5 tons wine) charged £2 10s. for 'the ½ & hole rest' of his freight. He was to pay the rest on 25 March 1540. In reality this debt simply cancelled-out against the 5 tons Gascon wine that Smyth had just laded on Pryn's ship, the *Primrose*. Smyth acknowledges this on 26 March 1540: S.89.
Mathew Kent (6 tons wine and 4 half-bales [0.28 tons] woad) charged £6 5s. 8d. He was to pay half in hand and half on 25 March 1540. He actually paid £2 on 4 March 1540 and the remainder on 25 May: S.90.
Lawrence Vine (1.5 tons wine and 7 half-bales [0.5 tons] woad) charged £2. He was to pay half in hand and half 25 March 1540. He actually paid on 4 May 1540: S.90.
On 22 January 40 there is a further note of freight due on Bordeaux wine this 'vyntage':
William Shipman (5 tons) charged £5. He was to pay half in hand and half 25 March 1540. He paid on 22 March 1540: S.7.
On an unspecified date between 10 October 1539 and 10 May 1540 there is a reference for freight due for this vintage's Gascon wine sent on the *Trinity*. This must refer to this voyage:
Thomas Tyson (4.5 tons) is charged £4 10s. He is to pay half in hand and half 25 March 1540. He actually pays half on 20 February 1540 and half 15 April 1540: S.59.
On an unspecified date between 8 October 1539 and 15 November 1540 there is a reference to freight due for this vintage's Bordeaux wine sent on the *Trinity*. This must also refer to this voyage:
Nicholas Gay (3.5 tons) charged £3 10s., to pay half in hand and half 25 March 1540. He actually pays £1 15s. on 16 February 1540 and the remainder 14 July 1540: S.16.
The total laded amounted to 15.34 tons woad and 80.5 tuns wine, making 95.84 tons.
Total freight charges came to £95 17s. 2d.

1540
Smyth credits Richard Williams 4s. for certain 'ratlyne, marlyne & twyne that Hamond r. of hym for my ship': S.100.

8 March 1540
Departure of the *Trinity*, master John Darby, carrying 39 dicker cow and steer hides, 6.3 dicker ox hides and 31 weys (186 quarters) beans: S.69. The ship was therefore laded with at least 37.2 tons beans and 8.1 tons leather belonging to Smyth.
On 10 May 1540 Robert Pole paid freight charges for cloth and leather sent to Spain on the *Trinity*. This was treated as the equivalent of 19.5 cloths and paid 2 rialles (10.89d) per cloth: S.58.
Edward Pryn apparently sent corn on this the *Trinity* this voyage, since after the return of the *Trinity* in April, Pryn had 25s. deducted from his iron freight charge after 'he promezith me to laide at eny tyme in the Primros 12 weys of corne to Spayne, freight free, as he have don with me in this seid viage': S.89.

13 March 1540
Smyth credits Moris Appowell 5s. 6d. 'for s*er*teyne stuff he made for my ship': S.65.

29 April 1540
Return of the *Trinity* from northern Spain. Smyth received from the ship 477 K (31.8 Spanish tons) Rendry iron and 244 K (16.266 Spanish tons) San Sebastian iron, making a total of 48.066 Spanish tons. By Smyth's measure the consignment weighed 52 tons, 5 cwt., 3 qr., 10 lb. (52.292 Smyth tons): S.53.
The costs paid on the consignment it was treated as 48 tons for freight and customs purposes.
On 10 May 1540 Smyth charged ten merchants for freighting 55.66 Spanish tons iron on the *Trinity* @ 13s. 4d. These were:
John Cutt (1.33 tons) is charged 17s. 9d. 2f. 'to pay it at thend of 3 monthes next commyng'. At this point Smyth's ledger indicates that Cutt was 21s. 2d. in debt to him. However, the way the payments were made suggest that Cutt believed that Smyth owed him 4s. 4d. and so settled this freight charge by paying him 13s. 5d. on 29 July 1540: S.27.
William Sprat (15 tons) is charged £10, to pay at the end of 3 months. On 19 June, Smyth credits Sprat for 6.8 tons freighted on the *Jesus*. Some of this pays for older debts but £4 14s. 2d. would cover the charge on the *Trinity*. The remainder is paid on 16 Oct 1540: S.30.
Giles White, (2 tons) is charged £1 6s. 8d. On 21 August 1540 Smyth declares that White's debts are discharged: S.42.
Robert Pole (5 tons) is charged £3 6s. 8d. He is also charged for freight at 2s. 10d. per ton, indicating that the cargo was treated as 5 tons. He paid on 28 September 1540: S.58.
Thomas Tyson (4 tons) is charged £2 13s. 4d. 'to pay at thend of 3 monthes'. He paid £1 16s. 5d. on 29 July, 16s. 8d. on 12 September and the remainder on 19 February 1541: S.59.
John Shipman, the elder (5 tons) is charged £3 6s. 8d. 'payable at thend of 3 monthes next foloing'. He paid in freight on 17 July 1540: S.86.
William Cockes (9 tons) is charged £6 'to be paid at thend of 3 monthes next com*my*ng, as it may apere by the charter*party*'. He paid on 18 August 1540: S.99.
John Pryn (10 tons) is charged £6 13s. 4d. 'to pay at thend of 3 monthes'. He paid £5 on 4 August 1540 and the remainder on 31 December: S.99.
Thomas Robertz, servant to William Shipman, (2.733 tons) is charged £1 16s. 1d. 'to pay at thend of 3 monthes'. He paid on an unknown date: S.99.
Richard Williams (1 ton) is charged 13s. 4d. 'to pay at then of 3 monthes'. He paid in goods and cash by 5 February 1541: S.100.

On the same day, Edward Pryn is charged £11 5s. for 15 tons iron @ 15s. per ton 'to pay at thend of 3 monthes'. Pryn paid £5 on 14 August and £5 on 17 September. This would have discharged his debt if he had been charged at the same rate as the other merchants. Pryn clearly paid no more money, suggesting that this is all he thought he owed. However, Smyth notes that he only credited Pryn with the outstanding, and presumably disputed, £1 5s. in return for an agreement over future freighting: S.89.
The total recorded lading is 118.063 Spanish tons. Total freight charges are £79 18s. 10d.

9 June 1540
Smyth credits William Pickes 20s. for 'tallow & bytakle to my ship this viage': S.97.

9 June 1540
Departure of the *Trinity*, master John Darby, to Northern Spain.
Smyth laded 21 London cloths, 7.1 dicker cow and steer hides, 180 quarters beans and 69 quarters wheat on the ship: S.69. The ship was thus laded with at least 49.8 tons grain, 1.3 tons leather and 1.9 tons cloth.
The same month Smyth notes in a licence account that he used a licence for 15 dicker hides for entered in the *Trinity*, which belonged to him, Thomas Smythe and Giles White: S.71.

22 August 1540
Smyth credits John Yerbery 25s. for 10 sheaf's of arrows with belts and cases: S.47. These may have been bought for the *Trinity*.

19 August 1540
Return of the *Trinity* from nothern Spain. Smyth received from the ship 420 K (28 Spanish tons) San Sebastian iron, which by his own weights amounted to 30 ton 16C 9li (30.804 tons). He also received 435 K (29 Spanish tons) Rendry iron, which by his own weights amounted to 31 18.5C 4li (31.927 tons): S.53. Smyth's conversions indicate that a Spanish ton was 10% heavier than his own.
On 23 August Smyth charged 13 merchants £45 3s. 11d. for the freight of 67.63 Spanish tons iron from Spain @ 13s. 4d per ton. No specific payment plans are detailed in any case. The merchants were:
William Shipman (5 tons) charged £3 6s 8d. He paid on 15 December: S.7.
John Cutt (1.33 tons) charged 17s. 9d. 2f. Edward Pryn paid for him on 31 December: S.27, S.89.
William Sprat (5 tons) charged £3 6s 8d. He paid in freight on 20 December: S.30.
Nicholas Sprat (1.133 tons) charged £1 3s 1d. His father, William, paid on 20 December: S.30.
Robert Pole (2.133 tons) charged £1 8s. 7d. He paid on 28 September: S.58.
Francis Codrington & William Carr (20 tons) charged £13 6s. 8d. They paid on 18 November: S.60.
John Shipman the elder (3.5 tons) charged £2 6s. 8d. This freight due served to pay off most of Smyth's debt to Shipman: S.86.
Edward Pryn (5 tons) charged £3 6s. 8d. He paid on 6 December 1540: S.89.
Luyes Robyns (1 ton) charged 13s. 4d. He paid on 31 December: S.91.
Thomas White (11 tons) charged £7 6s. 8d. He paid on 17 September 1540: S.91.
Robert Sexy (3 tons) charged £2. He paid on 6 December 1540: S.97.
John Pryn (3.33 tons) charged £2 4s. 6d. He paid 11s. 2d. on 31 December and the remainder on 29 January 1541: S.99.
Thomas Robertz (0.27 tons) charged 3s. 7d. He Paid on 15 January 1541: S.99.

Thomas Smyth (5.93 tons) charged £3 19s. 1d. He paid £3 16s. 4d. on 25 February 1541. Since later payments appear to refer to later debts, the outstanding 2s. 9d. appears to have been left unpaid: S.102. N.B. – Thomas is John Smyth's uncle.
On the same day Edward Pryn is also charged 16s. 1d for 14K (0.932 tons) laden on the *Trinity* @ 10s. per ton: S.89. He paid on 6 December: S.89.
On the 29 August there is a further reference to freight due on this voyage:
Thomas Tyson (0.66 tons iron) @ 13/4 is charged 8s. 10d. He paid on 19 February 1541: S.59.
The total recorded lading is 126.2 Spanish tons. Assuming Smyth charged himself @ 13s. 4d. per ton, total freight receipts would be £84 9s. 2f.

28 August 1540
Departure of the *Trinity*, master John Darby, to Bordeaux. Smyth laded it with 6 cloths, a bay gelding and some cash to be paid to Thomas Shipman: S.104.

6 November 1540
Return of the *Trinity,* master John Derby, from Bordeaux.
Smyth had 11 tons of his Gascon wine on the ship, which owed freight @ 20s. per ton: S.108. On 13 November 1540 Smyth noted that he also received 5 bales (0.714 tons) woad from the *Trinity*: S.52. At 20s. per ton this would be charged 14s. 3d.
On 6 November 1540 Smyth charged 3 merchants £11 15s. for the freight of 11.75 tons wine @ 20s. per ton laded at Bordeaux:
Robert Leighton (3 tons) charged £3 'to pay 30s at thend of 3 monthes next ffolowyng & 30s at thend of 3 monthes next after that'. He paid on 12 February 1541: S.46.
John Gorney (5 tons) charged £5 'to pay it in hallfes at 3 monthes & 3 monthes'. He paid £2 on 1 April 1541, 15s. 7d. on 18 December 1541 and £2 4s. 5d. on 10 April 1542: S.88.
William Cockes (3.75 tons) charged £3 15s. 'to pay at 3 monthes & 3 monthes'. He paid £1 17s. 6d. on 15 February 1541 and £1 7s. 6d. on 7 May 1541. Although Cockes pays later debts, the remaining 10s. of this debt is not accounted for: S.99.
On 15 November 1540 Smyth charged 12 merchants £62 18s. 4d. for the freight of 62.915 tons Gascon wine from Bordeaux. All were to pay half in three months and the remainder three months after that:
William Shipman (12 tons) charged £12. He paid £6 on 7 April 1541 and £6 on 24 September 1541: S.7.
Nicholas Gay (3 tons) charged £3. He paid £1 10s. on 19 March 1541 and £1 10s. on 3 March 1543: S.16.
William Sprat (5 tons) charged £5. He was paid in freight by 20 December: S.30.
Thomas Hart (4 tons) charged £4. He paid £2 on 14 February 1541 and £2 on 3 August 1541: S.59.
Nicholas Thorn (6 tons) charged £6. He paid £3 on 7 February 1541 and £3 on 7 February 1541: S.82.
William Rowley (5 tons) charged £5. He paid £2 10s. on 16 February 1541 and £2 10s. on 4 May 1541: S.87.
Mathew Kent (3 tons) charged £3. He paid £1 10s. on 23 February 1541 and £1 10s. on 12 August 1541: S.90.
Thomas Smyth (3 tons) charged £3. He paid £2 on 17 May 1541. Later payments appear to be associated with later debts, so the remaining £1 from this debt appears to have been unpaid: S.102. NB – Thomas was John Smyth's uncle
Thomas Carpenter (5 tons) charged £5. He paid on 11 July 1541: S.115.

Arthur Smyth (5.5 tons) charged £5 10s. He paid £3 on 13 May 1541, £1 10s. on 16 July 1541 and £1 on 3 August 1541: S.115.
William Jones (2 tons) charged £2. He paid £1 on 7 February 1541 and £1 on 7 May 1541: S.117.
Edward Pryn (9.415 tons) charged £9 8s. 4d for freight taken by him and John Cutt. Of this £5 was immediately set against freight carried on the *Primrose*. A further £2 4s. 2d was paid on 2 March 1541 and £2 4s. 2d. on 19 May 1541: S.89.
On the same day Smyth charges Thomas Tyson for the freight of 1 ton rosin @ 20s. per ton 'to pay at 3 monthes & 3 monthes'. However, although the payment should have been for 20s. Smyth records the debt as 15s. Tyson settles all but 3d. of the debt on 19 February 1541: S.59.
Total lading = 87.379 tons. Total freight charges = c. £87 2s. 7d.

20 January 1541
Smyth sells John Caps 6 Portuguese Verssos of iron with each 2 chambers and firelocks for £6. He also charges £1 for their hire, suggesting these were the same guns he hired to Caps for 20s. on the 17 August 1540: S.22. The guns presumably came from the *Trinity*, which in 1539 was recorded as having 11 iron Portuguese Verssos, with 2 chambers each.

21 January 41
Smyth credits David Williams £2 14s. 3d. for 15 cwt. 74 lb. biscuit @ 3s. 6d. per cwt.: S.13 This is presumably intended for the *Trinity*.

29 January 1541
Smyth credits John Pryn 5s. 10d. for '12 ores which my boteswayne ocupyed in the ship of the seid Pryns ores': S.99.

15 February 1541
Departure of the *Trinity*, master John Darby, to northern Spain.
Smyth's laded 48 weys (288 quarters) wheat, 7 dicker ox hides, 10.1 dicker cow and steer hides, 127 doz. calf skins, and 8 cloths: S.69.
A 'licence' account of the 10 February for the voyage, which is discussed extensively in chapter 2, indicates that Smyth bought a licence to export 100 quarters wheat on the ship. However, in reality he shipped 51 weys (306 quarters) Francis Codrinton shipped 30 weys (180 quarters) and John Darby shipped 3 weys (18 quarters), making a total of 504 quarters: 71. So less than 20% was legally covered, the payments to four customs officers presumably making up the difference.
Francis Codrington & William Carr's own account suggests that they were actually covered for (32 weys) 192 quarters laden on the *Trinity*: S.222(B).
On 10 February 1541 Smyth debits John Darby, for the licence for the 18 quarters wheat he laded on the *Trinity*: S.65.
On 25 February Smyth notes that he received money from William Tyndall 'for his brother Robert my sarvant for 3 wey wheat with the costes in my ship', which explains the discrepancy between the voyage account of what Smyth laded and the licence account: S.119.
Smyth's wheat account for the voyage notes that some of the wheat was 'r. of Frances Codryngton owt of Lawghtons trowe' which indicates that it was illegally laded: S.119.
Smyth's hide and calf skins accounts for the voyage indicates that the leather was illicitly laded: see discussion in chapter 2; S.119.

On this voyage the *Trinity* was laded with at least 100.8 tons wheat, 5.3 tons leather and 0.7 tons cloth. So even if no other goods were laded on the ship it would be laded to 93% of its estimated capacity.

16 February 1541
Smyth credits Thomas Heynes £5 7s. for 14 butts, 1 barrel beer supplied for the *Trinity*: S.78.

26 April 1541
Return of *Trinity*, master John Darby, from Spain.
The date is based on Tyndall's reckoning of sale, which is received this day: S.69. Smyth notes his receipt of 750 K 115 lb. (50.77 Spanish tons) Rendry and San Sebastian iron from the *Trinity*. For the purpose of freight charges and Spanish customs it was treated as 50 tons. However, the Bristol customs officers treated it as 48 tons and by Smyth's own measure it equalled 54 tons 1046 lbs.: S.127.
On 4 May Smyth charged four merchants £50 for 75 tons iron shipped on the *Trinity* @ 13s. 4d. per ton. All were to pay half in hand and half at the end of 3 months next coming (i.e. 31 August):
William Shipman (10 tons) charged £6 13s. 4d. He paid on 24 September 1541: S.7.
Frances Codrington & William Car (40 tons) charged £26 13s. 4d. The debt was settled in August: S.60.
John Shipman thelder (18 tons) charged £12. He had already paid half and paid the remainder on 31 August: S.86.
William Cockes (7 tons) charged £4 13s. 4)d. He had paid half already and paid the remainder on 30 August: S.99.
On 6 May Smyth charged Robert Pole 6s. 8d. for the freight due on two anchors (presumably weighing 0.5 tons) shipped in the *Trinity* from Spain. This debt was covered when Pole arranged a shipment of wheat in December: S.111.
Total freight = 125.5 Spanish tons. Total freight charges = £83.6s. 8

14 August 1541
Smyth credits Moris Appowell 14s. 'that is for so mych r. of hym in iren warck for my Ship until this daye': S.65.

17 August 1541
Departure of the *Trinity*, master Thomas Webb, to Lisbon.
Smyth laded it with 53 weys 41 bushels wheat (323.125 quarters) wheat and 21 'under the rule & governance of Giles Whit my late servant'. It apparently sailed with the *Saviour* of Bastable, owned by Richard Chapell: S.136
Smyth's own lading was 64.6 tons wheat and 1.9 tons cloth, or 58% of the ship's estimated capacity.

25 August 1541
Smyth credits David Williams £4 2s. for 20 cwt. 60 lb. biscuit @ 4s. per cwt.: S.13.

15 September 1541
Smyth credits Thomas Heynes £9 4s. 6d. for 10.25 tuns beer @ 18s. per ton 'd'd at soundry tymes' for the *Trinity*: S.78

22 November 1541

Return of *Trinity*, master Thomas Webbe, is recorded in the customs accounts. It was carrying 88.75 tuns wine, including 11.5 tuns of wine and 1.5 tuns corrupt wine belonging to John Smyth: P.R.O. E122 21/10. [Continent]

In November Smyth records that he had 16.5 tuns Bastard wine laded on the *Trinity* which owed freight at a rate of 25s. per ton and hawling and stowing @ 4d. per ton. He notes that the consignment was customed as 14 tuns. The discrepancy between the amount laded and that customed can be largely accounted for by the 1.75 tuns he lost to ullage and the 0.5 tons that went to prise: S. 118 .

On 1 December Smyth charges 18 merchants £89 7s. 6d. for the freight of 71.5 tuns Bastard wine carried on *Trinity* @ 25s. per ton 'to pay 1/2 in hand and 1/2 at thend of 3 monthes next com*myng*'.

James Baylif (2 tons) charged £2 10s. He had paid his first half already and paid the remainder on 4 April 1542: S.30.

William Sprat (5 tons) charged £6 5s. He paid £3 2s. 6d on 31 January 1542 and the remainder on 9 September 1542: S.30.

William Ballard (5 tons) charged £6 5s. He had paid half already, the rest to be paid at end of 3 months. At this point Smyth owed Ballard £5 16s. 8d. for freight on the *Trinity* of Caerleon the previous month. So Smyth takes his half payment in cash and writes the remainder off against his debt to Ballard: S.36.

Robert Leighton (3 tons) charged £3 15s. He paid on 5 April 1542: S.46.

Robert Durban (5 tons) charged £6 5s. He paid £3 2s. 6d. on 31 January 42, £2 on 9 September 1542 and £1 2s. 6d. on 19 October 1542: S.58.

Thomas Tison (5 tons) charged £6 5s. He had paid, partly in freight, by 8 February 1542: S.59.

John Wellsche (5 tons) charged £6 5s. He paid £3 2s. 6d. on 24 January 1542 and the remainder on 27 May: S.74.

Nicholas Thorn (6 tons) charged £7 10s. He paid £3 15s. on 8 February 1542 and £3 15s. on 13 March: S.82.

Edward Pryn (9 tons) charged £11 5s. He had paid half already. The remainder was paid on 5 April 1542: S.89.

Mathewe Kent (0.5 tons) charged 12s. 6d. This was apparently paid in London some time after 18 February 1543: S.90.

William Cockes (2 tons) charged £2 10s. He paid £1 5s. on 31 January 1542 and £1 5s. on 30 March: S.99.

Joanna Carpynter, widow (3 tons) charged £3 15s. She paid £1 17s. 6d. on 10 February 1542 and the remainder on 19 November: S.116.

Arthur Smythe (3 tons) charged £3 15s. He had paid half already and paid the rest on 19 April 1542: S.116.

Allen Hill (4 tons) charged £5. He had paid half already and paid the remainder on 29 March 1542: S.117.

Robert Guytton (4 tons) charged £5. He had paid half already. The remainder was paid on 31 July 1542: S.129.

Robert Buttler (2 tons) charged £2 10s. He had paid half already. The remainder was paid on 10 April 1542: S.148.

John Pryn (3 tons) charged £3 15s. He had paid half already. The remainder was paid on 15 May 1542: S.99.

Thomas Smythe, Smyth's uncle (5 tons) charged £6 5s. He had paid half (£3 2s. 6d.) already. He paid £1 6s. 8d. on 7 April 1542 and the remaining £1 15s. 10d. on 7 December: S.102.

A loose sheet (not in Smyth's hand) records on the 12 December 1541 a payment due for the freight of 6 tons wine in the *Trinity* from Condado @ 25s per ton (£7 10s.): S.222(B). This is an account relating to Francis Codrington and William Car (see S.60).
On or after the 24 December 1541 Smyth notes that his servants, Thomas Shipman and Giles White owe £5 for the freight of 4 tons Bastard wine on the *Trinity* to be paid by 1 March 1542. Smyth accounts it as having being partly paid in wages etc. by 30 April 1542 and the rest of the debt would be covered by 11 May: S.42.
Total freight recorded = 98 tuns. Freight charges = £122 10s.

Smyth's Ledger	*tuns*	**Customs Account**	*tuns*
John Smyth	16.5	John Smyth	13.0
Nicholas Thorn	6.0	Nicholas Thorn	5.25
William Sprat	5.0	William Sprat	4.5
Edward Pryn	9.0	Edward Pryn	8.0
Francis Codrington & Carr	6.0	Francis Codrington	5.25
William Ballard	5.0	William Ballard	4.5
William Cockes	2.0		
Robert Buttler	2.0	William Cox & Butler	3.25
Thomas Tison	5.0		
Allen Hill	4.0	Alan Hill & Tyson	7.75
Arthur Smythe	3.0		
John Pryn	3.0	John Pryn & Smyth	4.0
Thomas Smythe	5.0		
Robert Durban	5.0	Thomas Smyth & Thurban	8.75
James Baylif	2.0	James Baley	1.75
Robert Guytton	4.0	Robert Gittens	3.5
John Wellsche	5.0	John Welsh	4.0
Johan Carpynter widdow	3.0	Johanna Carpenter	2.5
Robert Leighton	3.0	Robert Leyton	2.25
Mathewe Kent	0.5	Mathew Kent & Pigot	1.0
Giles White & Thomas Shipman	4.0	Giles White	7.0
		William Shipman	2.5
Total Tons	98.0	*Total Tons*	88.75

This account reveals that Smyth's servants White and Shipman are not charged for their full lading, possibly because part of their consignment went freight free.

16 December 1541
Smyth credits Moris Appowell 16s. for iron work for the *Trinity* 'till this daye': S.65.

13 January 1542
Departure of the *Trinity*, master Thomas Webb, is recorded in the customs accounts. It states that the ship is carrying 14.5 tons lead, 70.833 cloths of assize and 33 dicker tanned hides belonging to Bristol merchants. John Smyth was carrying 10 tons lead, 33 cloths and 18 dicker hides belonging to John Smyth: P.R.O. E122 21/10. [Continent]
On 31 January Smyth records the departure of the ship to Biscay with 40 cloths of penny hews, 4 kerssis, 12.2 tons lead, 10 dicker ox hides, 30 dicker cow & steer hides, 152 doz. calf skins and 3 weys 9 bushels (19.125 quarters) green peas: S.173.

Since the peas are not mentioned in the customs accounts and Smyth's own leather consignment exceeds the entire quantity ship's lading listed in the customs account, Smyth must be exporting part of his cargo illicitly.

21 January 1542
Smyth credits David Williams £ 3 7s. 5d. for 14 cwt. 3qr. 15 lbs. biscuit @ 14 grotes (4s. 8d.) per cwt. Two shillings is deducted from the final price: S.13. This was presumably supplied to the *Trinity*.

27 February 1542
Smyth credits Moris Appowell 9s. 2d. 'r. in worck for my ship': S.65.

13 April 1542
Return of the *Trinity*, master Thomas Webb, is listed in the customs accounts. The accounts state that it was carrying 125 tons iron belonging to John Smyth & associates: P.R.O. E122 21/10. [Continent]
On 20 April 1542 Smyth records that he had laded on the *Trinity* 450 K Rendry iron, 300K Vryn & Fuenterarabia iron and 435 K San Sebastian iron. His total lading @ 15K to the ton, is recorded as 79 Spanish tons. He charges the account 13s. 4d. per ton for freight and 21s. (c.3d. per ton) for unlading fees in Bristol: S.153.
On the 24 April Smyth charges nine merchants £33 6s. 8d. for the freight of 50 tons Spanish iron laded in the *Trinity* @ 13s. 4d. per ton, to be paid 'at 3 monthes & 3 monthes'.
William Sprat (6 tons) charged £4. This is paid on 7 February 1543: S.30.
Thomas Shipman & Giles White, Smyth's servants (10 tons) charged £6 13s. 4d. There is no record of payment in the ledger but on 21 August Smyth notes that the account was discharged 'thowgh it apere not here by partyculer items.': S.42.
Nicholas Thorn (10 tons) charged £6 13s. 4d. On 31 July Smyth credits Thorn £3 for freight on his ship. On 31 October he credits him 6s. 8d. for cash received – so covering the first half of the debt. On 26 February 1543 the rest of the debt is covered by freight dues on Thorn's ship: S.82.
Edward Pryn (6 tons) charged £4. On 19 May Smyth credits Pryn for freight on his ship: S.89.
Luyes Robyns (4 tons) charged £2 13s. 4d. He Paid 23 February 1543: S.91.
William Cockes (5 tons) charged £3 6s. 8d. He paid 19 August: S.99.
Joanna Carpynter (3 tons) charged £2. She paid on 19 November: S.116.
Robert Guytton (6 tons) charged £4. At this time Smyth owed Guytton £1, so this was set against the freight debt. He paid a further £1 on 8 August and £2 on 25 November: S.129.
On the same day Smyth's notes that William Ballard laded 1 ton on the ship, the charges being the same charged as above. However, the item was crossed through and not included in the summing up of this account: S.36. It is assumed that this was a simple error.
Total freight = 129 Spanish tons. Total freight charge = £86.

8 May 1542
Smyth credits Thomas Heynes £6 1s. for 15 butts, 1 kynterkyn (7.5625 tuns) beer @ 8s. per butt: S.78. This was presumably intended for the *Trinity*.

19 May 1542
Departure of *Trinity*, master Thomas Webb, is recorded in the customs accounts.
This indicates that thirteen Bristol merchants had 29 tons lead, 12 quarters wheat, 5 dicker tanned hides, 121.49 cloths of assize, 10 Manchester cottons and 5 yellow linings laded on the

ship. Smyth had 8 tons lead, 45 cloths and 5 dicker tanned hides ascribed to him. The wheat belonged to the ship's master: E122, 21/10. [Continent]
On 20 June Smyth records that the *Trinity*, master Thomas Web, had departed for Biscay. Smyth had laded 10.15 tons lead, 2 weys (12 quarters) wheat, 3 dicker ox hides, 20.2 dicker cow & steer hides, 67 dozen calf skins, 50 cloth's of penny hews, 1 kersey and 8 yards of another cloth on board: S.173.
A wheat licence account of 1 June 1542 states a licence for 2 weys (12 quarters) had been used for wheat laded on the *Trinity* by Smyth and T.Web: S.133.
Since Smyth laded far more leather on the ship that the customs accounts indicate a large portion of his leather consignment must have been illicitly exported. It also appears that Smyth illicitly exported some wheat on the ship.

June 1542
Smyth credits David Williams £3 19s. 4d for 17cwt. 14lb. biscuit @ 4s. 8d. per cwt: S.13. This was presumably intended for the *Trinity*.

26 June 1542
Smyth credits Moris Appowell 6s. 8d. for 'spekes, bolltes, a hatchett, a botehooke, mendyng a candell barrel & for a fyreiren sens the 26 day of Aprell last past': S.65. This was presumably for work done on the *Trinity*.

June 1542
Smyth credits Thomas Heynes £4 17s. 6d. for 13 butts beer @ 7s. 6d. per butt 'for my ship the Trynte provisyon to Biscaye'. He later credits him 5s. 3d. for 'the same viage 3 barells': S.78

14 August 1542
Return of *Trinity*, under master Thomas Webb, is listed in the customs accounts. This states that it was carrying 122 tons iron belonging to Thomas White & assoc.: E122 21/10. [Continent]
On 19 August 1542 Smyth records that he received out of the *Trinity* iron from Rendry, Vryn and San Sebastian. This amounted to 63 Spanish tons @ 15K per ton, 68.775 tons by his own weights and was customed in Bristol as 55 tons. He charges the account a freight fee of 13s. 4d. per ton and avers of 10d. per ton for the 63 tons by Spanish measure. He further notes that the cost of 'haling home & pyling' in Bristol were an additional 16s. (c. 4d. per ton):S.153
On the 23 August Smyth charged 10 merchants £36 16s. for the freight of 55.2 Spanish tons iron on the Trinity @ 13s. 4d. per ton. Although he makes no reference to credit terms, he clearly did extent credit to most merchants.
John Cutt (5 tons) charged £3 6s. 8d. He paid on 15 November: S.27.
William Sprat (7 tons) charged £4 13s. 4d. Of this £2 was apparently paid on 7 February 1543 and the remainder on 13 April: S.30, 181.
William Ballard (10 tons) charged £6 13s. 4d. He Paid £2 in November 1542, £1 6s. 8d. on 8 January 1543 and £3 6s. 8d. on 13 February: S.36.
Nicholas Thorn (8.2 tons) charged £5 9s. 4d. This had been redeemed in freight by 26 February 1543: S.82.
Edward Pryn (4 tons) charged £2 13s. 4d.. At this point Smyth owed Pryn £1 7s. 6d. 1f. This freight due cleared Smyth's debt and Pryn paid the remaining £1 5s. 9d. 1f. on 16 November: S.89.

Robert Sexy (7 tons) charged £4 13s. 4d. He paid half on 15 November 1542 and the other half 10 February 1543: S.97.
John Pryn (2 tons) charged £1 6s. 8d. He paid half on 8 February 1543 and the rest on 9 March: S.99.
Arthur Smyth (4 tons) charged £2 13s. 4d. He paid on 23 February 1543: S.116.
Robert Guytton (6 tons) charged £4. He paid £2 on 5 January 1543 and £2 on 13 February: S.129.
William Spyllman, servant of Nicholas Thorn (2 tons) charged £1 6s. 8d. He paid on 31 January 1543: S.170.
Total freight = 118.2 Spanish tons. Total freight charges = £78 16s.

22 September 1542
Departure of the *Trinity*, master Thomas Webb, is listed twice in the customs accounts. The first departure is noted on 22 September 1542, carrying 6 tons lead, 48 quarters wheat and 18 cloths belonging to John Smyth: E122 21/10. On the 30 September 1542 24 dicker hides and 149 cloths belonging to 11 other Bristol merchants were added: E122 199/4. [Continent]
On 13 October 1542 Smyth charged the master, Thomas Webb, for the buying-price, licence, custom and other costs of 3 weys (18 quarters) wheat laded on the *Trinity*: S.62
On 15 October 1542 Smyth records that he laded 7.05 tons lead and 23 weys (138 quarters) wheat on the *Trinity,* bound for Lisbon: S.136. Since the amount of wheat laded by Smyth and Webb greatly exceeded the amount customed, much of it must have been exported illegally.

26 September 1542
Smyth credits Davy Williams, baker, £5 3s. 5d. ob. for 23 cwt. 106 lbs. biscuit 'which I had of hym for my ship Trinity': S.165.

21 November 1542
Smyth credits Moris Appowell 10s. 10d. for iron work for the *Trinity*: S.65.

8 December 1542
Smyth credits Thomas Heynes £7 16s. for 19 butts 1 hogeshead beer @ 8s butt supplied during September and October, but debits him 7s. 6d. for 2 butts 'which he allowe for 2 buttes of bere which I retornyd to hym after my ship came from Spaygne': S.78.

10 January 1543
Smth credits Thomas Heynes £9 7s. 3d. for 16 butts beer @ 9s. per butt, 4 pipes beer @ 8s. per pipe and 5 barrels @ 2s. 3d. per barrel: S.78.

9 February 1543
Smyth credits William Pickes £2 5s. for tallow and 'bytakle': S.97. This was presumably for the *Trinity*.

13 February 1543
Return of *Trinity*, master Thomas Webb, is listed in the customs accounts. This states that it was carrying 70 tons wine, 11.5 tons oil, 0.75 tons soap, 0.3 tons alum belonging to Bristol merchants: P.R.O. E122 199/4. [Continent]
On 14 February 1542 Smyth records that he laded on the *Trinity* 2 tons olive oil. He charged his oil account 30s. per ton freight, 1s. per ton avers, 4s. per ton custom, 4d. per ton for hauling and stowing in Bristol and 1s. 4d. per ton for 'rebating': S.179

On the same day he records that he laded 19.5 tons Andalusian wine on the *Trinity*. He charged his wine account 30s. per ton freight (for 19.5 tons), 4s. 4d. per ton averes, 3s. per ton custom, 6s. 4d. per ton hauling and striking, and 3s. 4d. per ton hooping. He noted that the wine was customed as 17 tons but this makes sense since his own accounts reveal he lost 2 tons to ullage: S.180.

On the same day Smyth records that he laded 14 serons of Andalusian soap on the Trinity. This weighed 26 Spanish K. or 23 K. 6 lb. by Smyth's measure. He charged his soap account 30s. freight (suggesting it was about 1 ton) and notes that it paid 7d. 2f. per seron custom. This indicates that it paid 8s. 9d. custom. Since soap paid 10s. per ton custom in Bristol, Smyth's account suggests it was treated for customs purposes as 0.875 tons. It also paid 4d. hauling and 12d. averes: S.146

In an account dated '1542' (by Smyth's reckoning this lasted till 24 March 1543) Smyth records that he received 4 bags alum laden at Andalusia from the *Trinity*. This weighed 7 cwt. and paid 10s. freight (c. 30s. per ton), 2d. hauling and 3s. custom: S.173.

On the 18 February Smyth charged nineteen merchants £104 5s. for the freight due on 56 tons wine, 8.5 tons oil and 5 tons unspecified goods @ 30s. per ton laden on *Trinity* at Andalusia. All were 'to pay hallf in hand & hallf 3 monthes next after'.

Nicholas Gay (2? tons wine) charged £3. He paid £2 12s. on, or after, 3 March and 8s. on 18 October 1544. S.16. Note - In the ledger the quantity is listed as 3 tons but it seems likely that this was a transcription error, for otherwise Gay would be the only merchant to be charged freight at 20s. per ton.

John Cutt (5 tons wine) charged £7 10s. He paid half on 26 February 1543 and half on 2 August 1543: S.27.

Thomas Tyson (5 tons wine) charged £7 10s. He paid half on 21 March 1543 and half on 18 July 1543: S.59.

Nicholas Thorn (4.5 tons wine) charged £6 15s. He paid in freight on 26 February: S.82.

William Rowley (4 tons freight) charged £6. He paid half on 3 March and half on 19 June: S.87.

John Gorney (3 tons wine) charged £4 10s. He paid half on 3 March and half on 1 August: S.88.

Edward Pryn (2 tons wine) charged £3. He paid half on 26 February and half on 30 June: S.89.

Mathew Kent (5 tons wine) charged £7 10s. Undated payments, probably made after Kent had entered the King's service, would have covered this debt: S.90.

William Cockes (5 tons wine) charged £7 10s. He paid half on 3 March and half on 14 June: S.99.

Thomas Hicks (1 ton wine) charged £1 10s. His freight due was set-off against freight on his own ship at the same time: S.100.

Arthur Smyth (3 tons wine) charged £4 10s. He paid half on 26 February. There is no record of other half being paid: S.116.

Alan Hill (3 tons wine and 1.5 tons oil) charged £6 15s. He paid half on 26 February and the other half on 3 July 1543: S.117.

Robert Guytton (5 tons wine and 1 ton oil) charged £9. He paid £2 on 21 April, £1 6s. 8d. on 2 July and £5 13s. 4d. on 17 October: S.129.

Nicholas Tyson (1 ton freight) charged £1 10s. He paid on 11 April: S.156.

Robert Pressy (4 tons wine) charged £6. He paid half on 28 February and half on 23 June: S.181.

William Sprat (2.5 tons wine) charged £3 15s. He paid on 27 July: S.181.

Richard Sawnders (6 tons wine) charged £9. He paid £4 10s. on 26 February and £4 on 27 July. No mention is made of the last 10s.: S.182.

Thomas Harrys (5 tons oil) charged £7 10s. He paid half on 26 February 1543 and half on 14 June 1543: S.182.
Alice Smyth, John Smyth's mother (1 ton oil) charged £1 10s. Smyth makes no mention of a payment plan in his ledger and there is no record that he was paid: S.183.
Total freight recorded = 92.33 tons. Total freight charges = £137 8s. 9d.

Smyth's Ledger	*Tuns*	**Customs Account**	*Tuns*
John Smith	19.5 wine	Nicholas Thorn & Smith	20.5 wine
Nicholas Thorn	4.5 wine		
John Smith	2.0 oil	Nicholas Thorn & Smith	2.0 oil
John Smith	1.0 soap	Nicholas Thorn & Smith	0.75 soap
John Smith	0.35 alum	Nicholas Thorn & Smith	0.3 alum
William Sprat	2.5 wine	William Rowley & Sprat	5.0 wine
William Rowley	4.0 ton		
John Gorney	3.0 wine	John Gurney & Tyson	6.75 wine
Thomas Tyson	5.0 wine		
Edward Prin	2.0 wine	Edward Pryn & Cox	6.0 wine
William Cockes	5.0 wine		
John Cutt	5.0 wine	John Cutt & Gyttens	8.25 wine
Robert Guytton	5.0 wine		
Robert Guytton	1.0 oil	John Cutt & Gyttens	1.0 oil
Arthur Smith	3.0 wine	Arthur Smyth & Pressy	5.5 wine
Robert Pressy	4.0 wine		
Thomas Harrys	5.0 oil	Thomas Harrys & Hyll	6.25 oil
Alan Hill	1.5 oil		
Alan Hill	3.0 wine	Thomas Harrys & Hyll	2.5 wine
Richard Sawnders	6.0 wine	Giles White & Sawnders	7.0 wine
		Giles White & Sawnders	0.5 oil
Mathew Kent	5.0 wine	Mathew Kent & Tyson	6.0 wine
Nicholas Tison	1.0 ton		
Alice Smith	1.0 oil	Alice Smith & assoc.	1.875 oil
Thomas Hicks	1.0 wine	Alice Smthe & assoc.	1.75 wine
Nicholas Gay	2.0 wine		
TOTAL	78.5 wine	TOTAL	69.25 wine
	10.5 oil		11.625 oil
	1.0 soap		0.75 soap
	0.35 alum		0.3 alum

3 March 1543
Smyth credits Nicholas Gay £2 12s. for 4 butts beer @ 6s. per butt, 1.5 cwt. wet hake @ 23s. per cwt., 8 'cople Newland fisshe' 1s. 8d, and 1.25 cwt. wet hake @ 8s. per cwt.: S.16. It seems likely that these goods were meant for the *Trinity*.

26 February 1543 (or later)
Smyth credits Nicholas Thorn £3 23s. 4d. 'for a mayne yerd to my shipp': S.82.

10 March 1543
Smyth credits William Pickes 24s. for 16 dozen 'bytakle' (binnacle candles), 5s. for 12 ells canvas, 24s. for 'ollrowns for sayles' (sail canvas) and 20d. for elm boards which Hamond received off him 'for my shipp'. S.97

31 March 1543
Smyth credits Morris Appowell £1 19s. 2f. 'for iren warck for my ship': S.65.

Summer 1543
The *Trinity* appears to have been in Crown service at this time.
At some point between 4 August 1541 and 25 March 1545 Smyth charged John Wynter 5s. 'for 5 great Bewdeley powlles' (probably spars) and 8s. 'for vytall for my shipp which I fornysshid she being in the Kinges Wayges': S.11. Since the same entry refers to rent due on a house that Smyth seems to have acquired in July 1543 it is likely that the entry was made after this time.
In the same time frame Smyth bought 201 lb. gunpowder from Wynter for £3 10s. This suggests that Smyth was preparing for the ship's defence or even that he was fitting it out as a privateer: S.11.

7 August 1543
Smyth credits Moris Appowell £2 1s. 8d. 'for mendyng of guns, dressyng of an ancker, makyng of a grap*er* & sherehokes & other iron warck belongyng to my ship'. This work must have been done some time between 19 March and 7 August: S.65.
Shearhooks were curved blades that, when fixed to the end of yard-arms, could cut through another ship's rigging when the attacker bore down on it. Grapnel's were used to secure a ship before boarding. It thus appears that the *Trinity* had been prepared for offensive action. This would be compatible with the preparation of a ship for a period of naval service.

14 September 1543
Smyth credits from John Spark of Newnham £3 18s. for '2 long peces of cheastnut timber at 10s the pece & won hundred bordes for my bote 40s & for 1 kelle & stem & stern post for my bote 12d, for 3C beche boord at 2s per C, 7 knees 12s': S.186.
These materials must have been acquired for the 'new dressing' of the *Trinity*, described below.

Autumn 1543
The 'new dressyng' of the *Trinity*.
On 13 September 1544, Smyth credits Moris Appowell £1 15s. 4d. 2f. 'for iren work which Hamon fet 2 tymes for my ship' and £6 15s. 11d. 2f. 'for the new dressyng of my ship': S.65. Although Appowell is not credited for this work until September 1544 it seems likely that the work was carried out much earlier. Logic suggests that the extensive 'new dressyng' of the ship went with the purchase of ship's timber from Spark on 14 September 1543. Internal evidence from the ledger entry also implies that the work was carried out much earlier than September 1544. This is because on 7 August 1543 Smyth paid Apowell for his work on the *Trinity* and they were left square. Then in December 1543 Smyth supplied Appowell with £3 6s. 11d. 2f. worth of iron. The following summer, after the *Trinitiy's* last commercial voyage, he supplied Appowell with more iron and before Smyth paid Appowell 17s. on 13 September to settle-up their account. Appowell had never been significantly in debt to Smyth before, so it seems likely that the 'new dressyng' of the ship was carried out in the Autumn of 1543 but

that Appowell was willing to rest in credit to Smyth, drawing on Smyth's iron supplies as his needs dictated.

22 October 1543
Smyth credits Robert Pole £6 for 4 cwt. hake: S.159. This was probably for the *Trinity*.

27 October 1543
Smyth credits Davy Williams £5 4s for 19.5 cwt. biscuit @ 5s. 4d. per cwt.: S.165. This was presumably for the *Trinity*.

November 1543
On 17 October 1543 and 14 November 1543 Smyth credited John Spark for leather goods that he was to keep in his house in Newnham but was to deliver 'to me or to myne assyngne at all tymes requyrid'. After this he is credited him £1 'for 1 botes ladyng to my ship': S.186. These entries illustrate how Spark's house served as an upriver warehouse for Smyth's leather before it was illegally laded directly on to the *Trinity*.

19 November 1543
Smyth credits Thomas Heynes £10 5s. for 20 butts, 11 barrels, 2 kynterkyns beer supplied for 'my ship & my hows': S.78.

5 January 1544
Departure of *Trinite-Smythe*, master John Derby, is recorded in the customs account. It was carrying 2 tons lead and 70 doz. calf skin belonging to John Smyth. Other Bristol merchants laded 19 tons lead, 22 cloths of assize, 116 manchester cottons and 13 doz. calf skins on the ship: E122 21/12
On 8 January 1544 Smyth records that the *Trinity*, master John Darby, sailed to East Spain, carrying 2.05 ton lead, 38.6 dicker hides (inc. 12 dicker ox leather) and 168 doz. calf skins and 0.68 tons tallow: S.196.
The discrepancy between the customs account and Smyth's ledger over what was laded indicate that most of the leather and all of the tallow was exported illicitly.

19 January 1544
Smyth credits John Griffithe £2 for ropes: S.164. These were presumably for the *Trinity*.

24 March 1544
Return of the *Trinite Smyth*, master John Derby, is recorded in the customs accounts. It was carrying 119.75 tons iron & 7 half bales of woad belonging to John Smyth & assoc.: E122 21/12.
On 26 March 1544 Smyth records that he had laded on the *Trinity* 600 K Rendry iron and 150 K San Sebastian iron (total 50 Spanish tons). By Smyth's weights this came to 43.405 tons Rendry iron and 11.012 tons San Sebastian iron. Smyth debits his iron account 26s. 8d. per ton freight, 8d. per ton averes, 2s. 6d. per ton custom and 4d. per ton hauling and 'pylling': S. 198. The total charges on the iron were £74 8s. 4d. The freight for 50 tons would have been £66 13s. 4d. and the avers £1 13s. 4d. So the iron must have paid £6 1s. 8d. for custom and hauling & pyling. This charge would make sense if iron was treated for customs and hauling & pyling as 43 tons.
On 1 April 1544 Smyth charged 8 merchants £96 for the freight of 72 tons of Spanish iron on the *Trinity* @ 26s. 8d. per ton. All were 'to pay half in hand and 1/2 at thend of 3 months next commyng'.

James Baylif (5 tons) charged £6 13s. 4d. He paid £3 on 11 May and £3 13s. 4d. on 28 July: S.30.
Walter Robertz (3 tons) charged £4. He had paid half already. Most of the rest was paid in odd items of cloth and some boards on 12 June 1545. This left 4s. 5d. 2f. unpaid: S.106.
Alan Hill (10 tons) charged £13 6s. 8d. He had paid half already and paid the rest sometime between 8 August 1544 and 3 March 1545: S.117.
John Satchefilld (5 tons) charged £6 13s. 4d. There is no record of debt being paid: S.127.
Thomas Harrys (10 tons) charged £13 6s. 8d. He paid £10 in freight on 23 July 1544 and the rest on 20 June 1545: S.182.
William Tyndall (6 tons) charged £8. He paid £3 6s. 8d. 'which he fornysshid to me to the Kynges subsedy'. There are no references to further payments: S.192.
Cristyan White, widow (30 tons) charged £40. She paid £20 on 4 April 1544. It is difficult to tell when remainder of this debt was paid but her debts to Smyth were all cleared by 14 March 1545: S.212.
Frances Wolsey (3 tons) charged £4. He paid £2 in August, £1 on 31 October and £1 on 24 December: S.217.
Total freight = 122 Spanish tons iron. Freight charges = £162 13s. 4d.

22 November 1544
Smyth credits John Wells £3 3s. 3d. for 2.5cwt. molton tallow, 10.5 dozen betakle (binnacle) candles and 241 foot of planks: S.129. This was presumably for the *Trinity*.

Summer 1545
On 3 August the *Trinite Smyth* was serving at Portsmouth. It was said to be 150 tons and was carrying 100 men: S.P. Hen VIII S.205 f.47.
On 10 August it is described as 160 tons, carrying 100 men and captained by Jaymes Parker. In the order of battle it had been placed in the vanguard: S.P. Hen VIII s.205 f.160.
The ship would have been dismissed when the fleet was demobilised in early September: *L&P,* XX, ii, nos. 346, 368.

28 September 1545
Smyth credits Thomas Cowper £1 6s. 2d. for oak boards: S.218. These were possibly for the *Trinity*.

20 October 1545
Smyth credits John Spark 19s. for 8 C elm boards and an unspecified sum for 74 foot of elm boards and 1049 foot of oak boards: S.230. These were possibly for the *Trinity*.

10 November 1545
Smyth credits John Spark £4 for an unspecified quantity of oak boards, 7 C elm boards, 120 'rent' boards and 4 C oak boards. He also pays for their boat hire to Bristol: S.230. This could have been intended for the *Trinity*.

20 March 1546
Sale of the *Trinity*. The following warrant was made out on 22 April 1544.
'After hartie comedacons for as much as the King Ma'tie hath addressid his moost gracious warriunte unto me on the behalf of John Smyth meurchunt of Bristow bering dat the XXth of March in the XXXVIIth yere of his majesties reigne to appointe unto him of Smithe majesties leade remayning at Bristow on hundreth fothers good weight freelye with out any charge to be askid or demanded therfor eithir for poundage or any other charge in consideracion as well one

shipp called the Trinitie Smyth w't all his ordonance takell and apparell delyvered to the Kinges m'ties officers to his highnes use, as also for the same of two hundrets pounds sterling all readie paid to his majesties owne handes as by the said copy of the warrante subscribed with my hande which ye shall reteine herewith more as long it dothe and may appere wherfor theis shalbe to require yow and in the Kinges majesties leade remaying in yor charge at Bristowe ye faile not to make dew delyverie of the said hundreth fothers according to theffecte and purpose of o'r said sovaraigne lorde the Kinges m'tie warraunte. And this my l're shallbe to you sufficiente waurrante and discharge in this behalf forseynye alwayes that the warrants alredy addressed unto yo'u for delyvery of any leade to Sir Anthony Deny knight or unto his factours in this behaulf Domin Eriso and his assignes or unto any other persun be first provided and served accordingly. Thus fare you horteley well from my home XXIIth of April 1546.
Yo'r very friend
Edward North'
P.R.O. E315 472 f.14

The agreement was thus that Smyth gave the King £200 plus the *Trinity* in return for 100 fothers lead that could be exported free from 'poundage or any other charge'. This would make the agreement similar to that offered to other merchants at this time. For instance, when Anthony Guydoll exported 194 fothers lead from Bristol on the *San Sebastian* and the *Jesus* of Portugal (9 September 1545) he also paid no poundage: E122 21/15.
Determining exactly how much the lead was worth is difficult. One royal fother lead was 19.5 cwt. so 100 fothers weighed 97.5 tons. In September 1546 Smyth exported 50.5 tons lead in three ships that cost him £5 6s. 8d. clearaboard: S.261. However, the customs ton for this consignment was 16% heavier than Smyth's ton (see Table 2.12), so a 'custom ton' of lead would have cost about £6 4s. clearaboard. In this case the 'clearaboard' rate is a realistic representation of the value of the Crown's lead, since it could be exported tax free. Assuming that the ton used by the Bristol's customs office was the same as that used by the King, the 100 fothers (97.5 tons) lead would thus have been worth £604 10s. in September 1546.
On the basis of the above calculations the *Trinity* was being sold for about £400. This is much higher than the £250 valuation that Smyth assigned it seven years earlier. In part this may be because it was in better condition or was better equipped than it was in 1539. However, this still seems to represent very a good deal for Smyth.

1546
A naval report describes the *Trinite Smyth* as a ship of 160 tons that could carry 100 men.
At this time it was serving in the North Sea: P.R.O. S.P.1 216 f.52.

4 April 1546
A naval report mentions that hostile ships had been sighted in the North Sea. So 'about the xith or xiith of Marche last one of the King's m'ties shippes callid the Trynyte Smyth of the burden of clx tonnes being a parfeite good sailor and well appoynted for the warres was sent owt of the thames towardes the said costes to be a continual wafter of the Kings m'ties victuallers.': P.R.O. S.P.1 216 f.114.

THE *TRINITY GEORGE* OF BRISTOL

Size: c. 20 tons burden (22 October 1545)
Owners: unknown, but it seems likely that George Gelly was at least a part-owner.

22 October 1545
Return of the *Trinity George* of Bristol, master John Jeynes, carrying 150 barrels herring and 20 doz. sheep skins belonging to William Appowell & associates: E122 21/15. [Ireland]

26 October 1545
Departure of the *Trynyte George* of Bristol, master John Jeynes, carrying 5.5 tons iron, 8 pairs millstones, 1 tun corrupt wine, aniseed and rosin belonging to Jeremy Gene & Worley and Nicholas Thorn & assoc.: E122 21/15. [Ireland]

17 December 1545
Return of the *Trinity George* of Bristol, master John Jeyne, carrying 24 pipes salmon, 16.5 C hake, 18 quarters wheat, 6 barrels herring, 5 cwt. eels, 22 marten skins, 80 yards linen and 2.4 burdens salted fish. About half the consignment belongs to William Gelly: E122 21/12. [Ireland]

11 January 1546
Departure of the *Trinity George*, master Richard Bryan, carrying 5 tuns iron, 7 tuns wine and wood laths, belonging to Nicholas Thorn & assoc. and other Bristol merchants: E122 21/12. [Ireland]

5 March 1546
Return of a *George* of Bristol, master Richard Bryan with fish, skins, tallow and wheat belonging to the Bristol merchants George Gelly and William Appowell: E122 21/15. [Ireland]
The master's name and the fact that the Trinity George apparently left for Ireland in January makes it seem probable that this is the *Trinity George* of Bristol.

21 March 1546
Departure of the *George Gelly* of Bristol, master Richard Bryan, carrying manufactured goods and Continental re-exports typical of the Irish trade. The goods belong to William Gelly and other Bristol merchants: E122 21/15. [Ireland]
The master's name and the fact that it is apparently listed as the *Trinity George* of Bristol on its return, makes it seem likely it is this ship.

26 May 1546
Return of the *Trinity George* of Bristol, master Richard Bryan, carrying, 9 quarters barley, 2 burden salted fish, 1.5 dicker salted skins and 4.25 tons oil belonging to William Gelly: E122 21/12. [Ireland]

THE *TRINITY GORNEY* OF BRISTOL

Size: c. 30 tons burden (9 September 1544)
Owner: Presumably John Gorney of Bristol, merchant and former owner of the *Briton*.

9 September 1544
Return of the *Trinite Gurneay*, master John Beaple, carrying 30 tons Azores woad belonging to John Gorney: E122 21/12.

20 September 1546
Departure of the *Trinity Gurney*, master Nicholas Grynam, carrying 22 cloths belonging to Henry Wyott: E122 21/15. [Continent]

18 April 1548
John Smyth had a contract with John Caps to be supplied with 20 pipes salmon in the *Trynte Gurney* of Bristowe. However the ship was taken by the Scots: S.281.

THE *TRINITY MORE* OF BRISTOL

Size: c. 40 tons burden (20 October 1542)
Owner: Unknown but it seems likely that Richard More was at least at part owner.

4 February 1539
A *Trenyte* of Bristol, master John Water, leaves Bridgwater carrying 48 quarters beans, 3 lbs. worked silk and 2 lb. saffron belonging to Richard More: E122 200/2. The name of the merchant suggests this was the *Trinity More*.

23 March 1539
A *Trynyte* of Brystoll, master John Water, arrives at Bridgwater carrying 0.5 tuns wine, 500 sheep skins, 60 yards of Irish frieze, a C of hake and 5 stone flock wool: E122 200/2. The name of the master suggests this was the same ship as above.

24 March 1539
A *Trenete* of Bristol, master Richard More, leaves Bridgwater carrying 48 quarters beans and 4 lbs. worked silk belonging to Richard More: E122 200/2. The name of the merchant suggests this was the *Trinity More*.

19 May 1539
A *Trenyte* of Bristoll, master Richard More, leaves Minehead, carrying 18 quarters beans, 2 lbs. saffron and 2 lbs. worked silk belonging to Richard More: E122 200/2. The name of the merchant suggests this was the *Trinity More*.

17 October 1541
Return of a *Trinity* of Bristol, master Walter Owen, carrying 114 barrels herring, 6 cwt. hake and 3 salted skins belonging to Richard More & assoc.: E122 21/10. [Ireland]
The name of the merchant suggests this was the *Trinity More*.

2 January 1542
Return of a *Trinity* of Bristol, master Walter Owen, carrying 4.25 cwt. of hake, belonging to Richard More & Yate: E122 21/10. [Ireland]
The name of the merchant suggests this was the *Trinity More*.

9 July 1542
Departure of the *Trinity More,* master John Gall, carrying cloth and tanned hides belonging to William Appowell and Francis Codrington: E122 21/10. [Continent]

20 October 1542
Return of the *Trinity More*, master John Gall, carrying 33 tons fruit, 6.625 tons wine and a barrel of marmalade belonging to William Appowell, William Carr, and Richard More & Gall: E122 199/4. [Continent]

2 January 1544
Return of the *Trinite More*, master Thomas Davis, carrying 12 deer skins belonging to William Pynchyn: E122 21/12.

15 January 1544
Departure of the *Trinite More* of Bristol, master John Gall, carrying 4 tons lead and some cloth belonging to Walter Roberts and More: E122 21/12.

14-20 July 1544
Return of the *Trinity* More, master John Gall, carrying 5.5 tons wine belonging to Richard More and Roberts and William Pyntyn: E122 21/12.

24 July 1546
Departure of the *Trinity* More of Bristol, master Thomas Sherwood, carrying 17.5 tons lead, 47.5 cloths and 4 dicker hides belonging to John Welsh, John Caps and Galfridius Chantrell: E122 21/15. [Continent]

TRINITY (UNKNOWN) OF BRISTOL

In a number of cases, vessels have been listed as a *Trinity* of Bristol in the customs account but it has not been possible to associate this vessel with any of the other ships by this name.

6 December 1543
Return of a '*Trinite* of Brist', master John Higgyns, carrying 7 C hake belonging to Thomas Jenet and associates: E122 21/12. [Ireland]

31 December 1543
Departure of a *Trinite* of Bristol, master David Gillen, carrying 25 tons lead, 22 cloths and 5 dicker tanned hides belonging to the Bristol merchant, Francis Fowler: E122 21/12. [Continent]

11 May 1546
Return of a *Trinity* of Bristol, master John Jeynes, carrying 3 tons of salt belonging to William Butler: E122 21/15. [Continent]
John Jeynes was at one time the master on the *Trinity George*, but by May 1546 the master of that vessel was apparently Richard Bryan.

14 July 1546
Departure of a *Trinity* of Bristol, master John Venecun, carrying 3 tons of corrupt wine belonging to John Caps: E122 21/15. [Ireland]

17 July 1546
Departure of a *Trinity* of Bristol, master Richard Wather, carrying a mixed collection of manufactured goods and Continental re-exports typical of the Irish trade: E122 21/15. [Ireland]

THE *TRINITY* OF CAERLEON

Size: c. 135 tons burden (3 August 1545)
Owners: William Jones of Carleon, gentleman till 1541. It then appears to have belonged to the Bristol merchant William Ballard.

10 June 1539
The *Trinity* of Carlyon was serving in the navy at Portsmouth. It was probably the 'ship of Wales' which had arrived with four Bristol ships on 28 April: *L&P*, XIV, i, no. 880, 1097.

6 April 1540
Smyth laded 3 truckers in the 'Trynte of Wales Master Jones ship' for a voyage to Lisbon and Andalusia: S.56.

August 1540
John Smyth notes that he had received 6.25 tuns Spanish oil from the *Trynte* of Newport. The freight on this was 20s. per tun (£6 5s.): S.84.
On 11 September Smyth notes that he owes William Jones of Carlion, for the freight of 6.25 tuns rack vintage oil on *Trynte* @ 20s. per tun. Smyth had paid half already and was now paying the remaining £3 2s. 6d. The ship's purser was John Appowell: S.74.

16 October 1540
John Smyth notes 'William Jones of Carlion gentleman owith the 16 day of October £11 for so myche pd. For 5 weyes wheat that was laden for hym in his ship the Trynte': S.74.
In an Andalusian voyage account, of the same month Smyth notes that he laded 10 weys wheat on the *Tryntye* of Wales, master Bastian Millior. This cost £24, or 8s. per quarter, clearaboard. S.103.
Smyth thus sold Jones some wheat for 7s. 4d. per quarter, which was the price he had contracted to buy wheat for in May: S.25. However, the clearaboard cost for his own wheat was only 8s. per quarter. Since 8d. per quarter would have been insufficient to pay for cost of licence and custom, it seems fairly certain that much of the wheat was illictly laded.

18 January 1541
Smyth records that Nicholas Tyson owes him £1 for 200 ducats he received 'for my acowmpt at San Lucar of John Apowell purser of the Tryntye of Wales': S.126.

4 November 1541
Return of a '*Trinity* Carlyon', master Thomas Webb, carrying 7 barrels white herring, 5 C hake, 1 barrel beef and 1 cwt. rough tallow, belonging to John Northal & assoc.: E122 21/10. [Continent]
Since the Trinity of Caerleon was clearly returning from Spain this time and this consignment looks like one from Ireland, this must be a different ship.

28 November 1541
Return of the *Trynyte* of Carlion, master Bastain Melyor, carrying 110.75 tuns wine, 2 tuns oil, 1.1 tun soap and orchil belonging to Bristol merchants. This includes 8.5 tuns wine belonging to John Smyth, 13 tons belonging to William Ballard: E122 21/10. [Continent]
In a Sack wine account of November/December 1541 John Smyth records that he laded 10 tuns wine in the *Trinity* of Carlyon, master Bastyan Myllyor. The freight charge was 25s. per tun: S.145.

On 8 November 1541 Smyth notes that he owed William Ballard for 10 tons freight in the *Trinity* of Carlyon @ 25s. per ton (£12 10s.). He states that he had paid half already and was to the remaining £5 16s. 8d. the end of 3 months: S.36. However, it seems likely this entry should read '8 December' for the customs account states the ship did not arrive until the 28 November. It may also be noted that on 1 December Smyth records that Ballard owes him £3 2s. 6d. for freight on the *Trinity* of Bristol and this due was to be paid at the end of three months. Since this freight due was then set off against the freight the *Trinity* of Caerleon, the specification of payment terms would only have made sense if Smyth had not received his wine from Ballard's ship at this stage.
Smyth paid the last part of his freight due on 31 March and 'so broke of my seale' - presumably from the Charterparty: S.36

22 February 1542
Departure of the *Trinity* of Carlion, master Bastian Melyor, carrying 219.5 cloths, 6 dicker hides, 20 tons lead belonging to Bristol merchants: E122 21/10. [Continent]

13 July 1542
Return of the *Trinity* of Carlyon, master Bastian Melyor, carrying 108.25 tuns oil, 12 tons salt, 0.875 tuns wine, alum and orchil belonging to Bristol merchants: E122 21/10. [Continent]

30 September 1542
Departure of the *Trinity* of Caerleon.
On 24 September 1542 the customs record the departure of the *Trinity* of Carlion, master John Darby, carrying 14 tons lead and 54 cloths belonging to William Ballard: E122 21/10. [Continent]
On the 30 September 1542 the ship is again recorded in the accounts, carrying 232.5 cloths, 10 dicker hides and 10 doz. skins belonging to various Bristol merchants: E122 199/4.

15 February 1543
Return of *Trinity* of Carleon, master John Darby, carrying 110.75 tuns wine, 2.75 tuns oil, 1.7 tons soap and 0.5 tons marmalade, belonging to various Bristol merchants, including William Ballard and two people listed as Jones: E122 199/4. [Continent]

28 August 1543
Return of the *Trinity* Carleon, master Richard White, carrying 0.25 tons salmon belonging to William Benet: E122 199/4.
This entry implies the ship had been to Ireland. However since only a very small quantity of goods are involved, the most likely explanation for this anomalous voyage is that the ship had been serving in the navy in the Irish Sea and Benet had acquired this cargo on the way home: see Chapter 4.

Summer 1545
On the 3 August 1545 the *Trinitie Carlion* was serving in the navy at Portsmouth. It was described as a ship of 180 tons, carrying 120 men: S.P. Hen VIII S.205 f.47.
On the 10 August 1545 it is described as a ship of 200 tons under Captain Alexander Carvanion. In the order of battle it was placed in the vanguard: SP Hen VIII S.205 f.160.
The ship would have been dismissed when the fleet was demobilised in early September: *L&P,* XX, ii, nos. 346, 368.

3 September 1546
Return of the *Trinite* of Carlyon, master Thomas Boyse, carrying 114 tons salt belonging to William Ballard: E122 21/15. [Continent]
Since the war had just ended, it seems likely that this was a cargo of Biscay salt acquired in France.

10 September 1546
Departure of the *Trinity* of Bristol, master Thomas Boyse, carrying 31 tons lead belonging to Nicholas Thorn & assoc. and 6 dicker tanned hides belonging to William Sprat: E122 21/15. [Continent]
On 20 September 1546 Smyth notes the departure of the *Trynte of Wales*, master Thomas Boysse, for Andalusia, carrying 10.4 tons of John Smyth's lead: S.254.
The change of the ship's port from Caerleon to Bristol in the customs account may be a mistake on the part of the officer or clerk. However, since Smyth's ship the *Trinity* of Bristol had been sold by this time, Ballard may have decided to change the name of the ship.

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