# THE MARITIME ECONOMY OF NORTH WEST ENGLAND IN THE LATER EIGHTEENTH CENTURY

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A thesis submitted in partial fulfilment of the requirements of the University of Greenwich for the Degree of Doctor of Philosophy

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The most arduous part was entering the copious data gathered into data bases, analysing and presenting the results in a format that could be readily understood.

The work was done from a base in Lancaster and in the process of compiling the text, charts and illustrations I received particular assistance from Ken Harrison, Assistant Librarian at Lancaster University, who contributed invaluable information on the maps of the region and knowhow on editing photographic images and from Simon Chew of the Geography Department, who provided the electronic map backgrounds.

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#### **ABSTRACT**

Maritime historians have not followed the trend set by other disciplines towards regional studies which has become an established practice over the past ten years. Some excellent work has been done on individual ports but no one has attempted to establish the relationship between sea trade and the land based economy on a regional basis. This thesis corrects the omission for the region of the North West of England. A study of the coastwise trade and the trade with Ireland in the late eighteenth century, it provides evidence which argues for the existence of an integrated maritime economy in the Irish Sea region in the period 1750-1810. Altogether, it demonstrates that a complex regional trade existed alongside increasing overseas trade.

The sources to identify coastal trading activity in this period are scarce. With few exceptions, records of the King's Remembrancer Exchequer Port Books are no longer available while the run of records of the Customs Bills of Entry has not started. One of the challenges, therefore, was to identify alternative sources from which the necessary information could be drawn. Shipping lists published in local newspapers were the principal source used. Other key sources included trade directories, trade reports and business papers.

The study of ownership uses the shipping registers from 1786 and examines ownership and relationships with the local economies in greater detail than has been undertaken previously. Research into local sources assisted in identifying the specific business interests of owners, particularly those designated as 'merchant' and 'gentleman' in the registers. A key finding of the ownership study is that a complex shipping investment pattern existed within the region related to the characteristics of the local economies.

Case studies based on surviving business records give insight into the business practices underpinning regional maritime commerce, particularly the use of information networks, methods of payment and the roles of the merchants. The importance of trust in business relationships is the most prominent characteristic to emerge from these case studies.

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#### **ABBREVIATIONS**

B.M. – British Museum

B.P.P. – British Parliamentary Papers

C.I.H.S – Cumbria Industrial History Society

C.R.O.W. – Cumbria Record Office Whitehaven

C.W.A.A.S. – Cumberland and Westmorland Antiquarian and Archaeological Society

L.R.O. - Lancashire Record Office

Liv. R.O. - Liverpool Record Office

LLB – Leyland Letter Book

T.H.S.L.C. - Transactions of the Historic Society of Lancashire and Cheshire

T.N.A. - The National Archive

#### **CHAPTER 1 - INTRODUCTION**

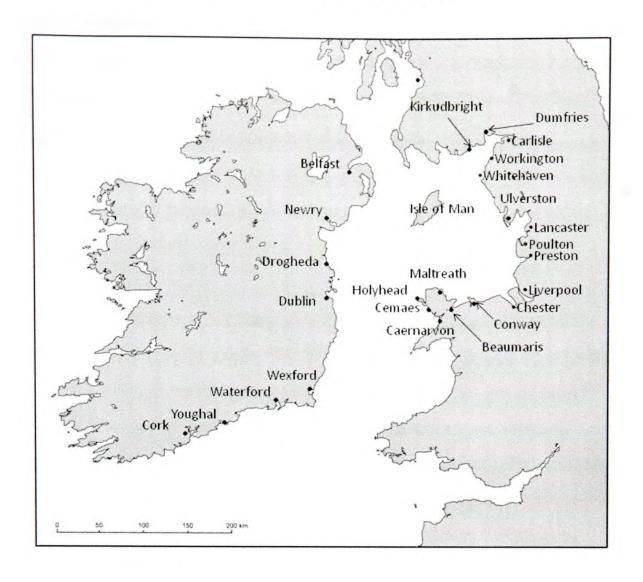
Maritime historians to date have not embraced the concept of the regional study following the path taken by other disciplines in the last two decades. In this period regional history has emerged as a sub-discipline in historical scholarship, being recognised in 2004 by a conference which brought together scholars from a variety of institutions, countries and disciplines. The papers presented covered regions within Britain and Europe formed through political and cultural alliances in addition to those formed by the more traditional geographical and economic associations and extended from the early medieval period to the present day. None of the papers, however, examined the potential of a maritime economy to create a regional identity.<sup>1</sup>

The thesis is a study of the nature of trade of the North West of England in the Irish Sea region in the late eighteenth century and seeks to establish the extent to which it constituted an integrated maritime economy. The trade includes the coastwise trade along the North West coast and the trade with Ireland and the Isle of Man. The thesis also examines the characteristics of the owners of the vessels and the activities of those associated with the trade.

The North West, for the purposes of this study, has been defined as the region contained by the coastline from Carlisle to Chester. The study extends into Scotland at the northern extremity to include the ports of Kirkcudbright and Dumfries on the north of the Solway and as far as the ports in North Wales and Anglesey to the south, in order to include the contribution they made to the sea trade of the region. Map 1 shows the Irish Sea trading region and the ports involved in the trade.

<sup>&</sup>lt;sup>1</sup> Lancaster, W., Newton, D., and Vall, N., (eds.), An Agenda for Regional History (Newcastle, 2007).

Map 1 - The Irish Sea Trading Region



The need for a more integrated approach to the study of North West regional history was highlighted as early as the 1980s by John Walton in *Lancashire, a Social History 1558-1939* (1987). Walton praised the value of the more traditional work done on selected locations within the county, including the work by Marriner and others on the development of Liverpool and Merseyside, but stressed the need for a wider approach. He placed considerable emphasis on the integration created by the larger towns absorbing the activities of their lesser neighbours. Hudson in *Regions and Industries* (1989) also stressed the importance of regional studies in the understanding of the economic and social history of the industrial revolution rather than focussing on the national

<sup>3</sup> Walton, J.K., 4.

<sup>&</sup>lt;sup>2</sup> Walton, J.K., *Lancashire, a Social History, 1558-1939* (Manchester, 1987) and Marriner, S., *The Economic and Social Development of Merseyside* (London, 1984).

perspective and aggregated calculations of national income, industrial output and the rate of capital formation.<sup>4</sup>

The most recent economic study of the North West was undertaken by Jon Stobart in *The First Industrial Region, North West England c.1700-60* (2004). Stobart studied the networks that supported the textile and mineral based industries in the early eighteenth century across Cheshire and Lancashire as far north as Preston. Although consideration was given to the contribution of the internal transportation networks the role played by maritime trade was not included.<sup>5</sup>

The maritime historiography contains excellent work on ports, vessels, shipping companies and specific trades but Willan's work *The English Coasting Trade 1600-1750* (1938) remains as the last substantive work which included regional analysis. In order to meet the standards set by modern economic historians, however, it is necessary to adopt a more in depth approach than that taken by Willan who focussed predominantly on the flow of commodities in and out of individual ports. The study needs to extend inwards from the ports to include consideration of the regional industrial and commercial infrastructure and its relationship with regional maritime trade, i.e. the regional maritime economy.

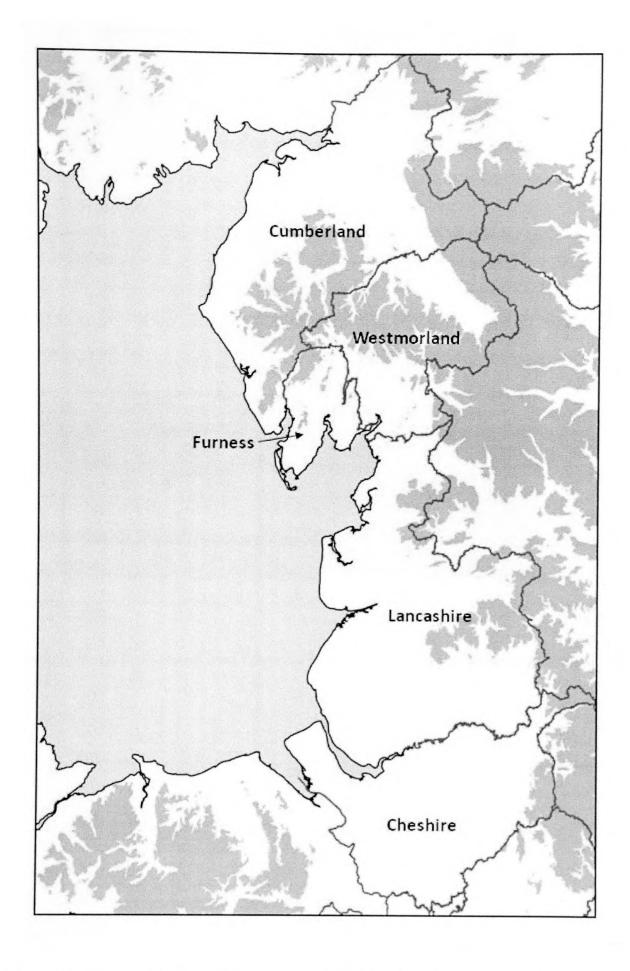
The importance of sea trade to the region is highlighted by Map 2, which shows the topography: the shaded areas indicate the landmass at 250m and above.

<sup>&</sup>lt;sup>4</sup> Hudson, P., 'The Regional Perspective', in Hudson, P., (ed.) Regions and Industries (Cambridge, 1989), 5-6.

<sup>&</sup>lt;sup>5</sup> Stobart, J., The First Industrial Region, North West England, c.1700-60 (Manchester, 2004).

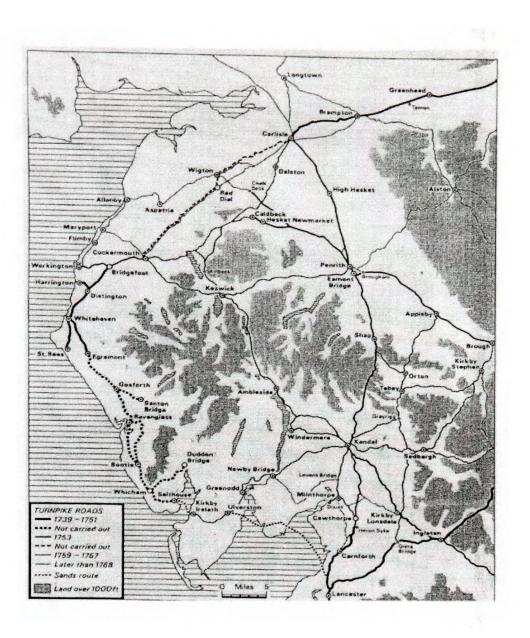
<sup>&</sup>lt;sup>6</sup> Willan, T.S., The English Coasting Trade 1600-1750, (Manchester, 1938)

Map 2 - The Topography of the North West Region



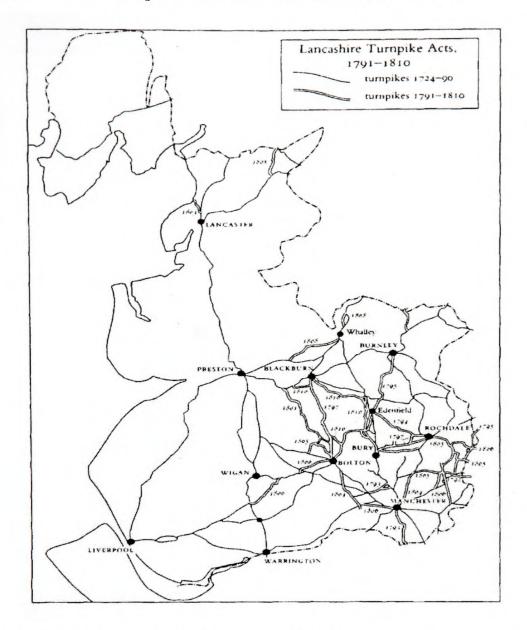
Maps 3 to 5 complement the topographical outline by showing the road and inland waterway options available throughout the region.

Map 3 - The Turnpike Roads of Cumberland, Westmorland and Furness



Source: Hindle B.P., Roads and Trackways of the Lake District (Ashbourne, 1984), 142





Source: Crosby, A. G., 'The Turnpike Era', in Crosby, A.G., (ed.), Leading The Way: a History of Lancashire's Roads (Preston, 1998), 136-7.

# Map 5 - The Inland Waterways of the North West Region in 1800

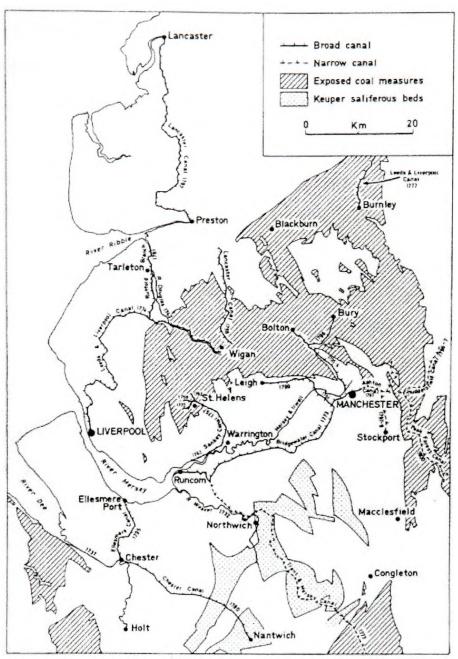


Fig. 1.2. Waterways in North-West England in 1800. Dates of completion given.

Langton, J., 'Liverpool and its Hinterland in the Late Eighteenth Century', in Anderson, B.L., and Stoney, P.J.M., (eds.), *Commerce Industry and Transport: Studies in Economic Change on Merseyside* (Liverpool, 1983), 6.

The alternatives to sea trade were particularly limited in the north of the region because of the mountainous nature of the hinterland. Internal waterways, which were the most practical alternative to coastal shipping for carrying large quantities of mineral ores, coal and other low cost high bulk materials, did not exist. The Lancaster canal, shown as far as Lancaster in Map 5, extended to Tewitfield, just south of Kendal when initially built in 1797, and was the only waterway available on which goods could be transported in and out of the region. The only other waterways were two short sections of canal built to improve access

bay and Carlisle was connected to Port Carlisle, a point on the Solway nearer to the sea and more accessible for shipping, in 1823. The roads were unsuited to carrying heavy goods, particularly those with steep gradients through the Lake District, and the coastal towns of West Cumberland were effectively isolated apart from transportation by sea. The road system shown in the coastal strip was built specifically to carry coal and iron ore from the mines to the ports.

Other trade was carried on roads. Carlisle was well served with turnpike roads leading out of the region to the south to Kendal and east to Newcastle and there are records of an extensive carrier network operating out of the town. Kendal was a hub on the system with connections to the north and south and west across the Pennines to West Yorkshire. The papers of Abraham Dent, a Kirkby Stephen shopkeeper, contain references to the use of the wagon trade for carrying goods from Kendal to destinations throughout the country including London. Furness had just one turnpike road out of the region which ran from Kirkby Ireleth to Kendal; the section from Kirkby to Ulverston being used to carry slate from the mines in the west of the region to Ulverston for shipping. Another road built to carry goods to and from a shipping interface was the spur from the main north to south turnpike road to Dixies, a landing place on the River Kent which served the region of South Westmorland.

Coastal shipping was also important further south. The road system within Lancashire was mainly to the east of the main north to south road and was unable to support transportation in west Lancashire, particularly the Fylde area north of Preston, which utilised the River Wyre as a transportation interface. The region of south west Lancashire south of Preston only had a single road from Preston to Liverpool and before the building of the Leeds and Liverpool canal the area relied on coastal trade from the River Ribble and trade to and from the hinterland on the River Douglas.

Williams, L.A., Road transport in Cumbria in the Nineteenth Century (London, 1975), 163.
 Willan, T.S., An Eighteenth Century Shopkeeper: Abraham Dent of Kirkby Stephen (Manchester,

The most extensive internal waterway system in the region emanated from the Mersey and provided major transportation arteries into the hinterland, the most important of which were the connections to the St Helen's coalfield, the Cheshire salt mines and the link to Manchester provided by the Mersey and Irwell Navigation and later the Bridgewater canal. Routes also existed for the transportation of goods to other regions of Britain. A west to east coast connection was possible through the Trent and Mersey canal which as the name suggests connected with the River Trent and provided a route from Liverpool to the east coast port of Hull. Another west to east crossing was eventually provided by the Leeds and Liverpool canal which took a tortuous route through North Lancashire to eventually connect with the waterway systems that served Leeds with connections to Hull. The Trent and Mersey canal also provided connections to the Midlands and to London through connections into the national canal network further south. The region was far from being self contained and had many important trading links with other regions of Britain both through internal routes and by coastal shipping.

The North West was chosen for the study as one of the major centres of industrial activity in the period as mechanised processes were introduced, particularly in the textile industry, and urban centres became established. The main industrial centre was contained within an arc emanating out of Liverpool and reaching out to Manchester in the east. The industries included coal mining, metal refining and metal working industries in south west Lancashire, textile industries centred on Manchester and its satellite towns, and a salt mining and refining industry based in Cheshire. Many of the manufacturing industries had associations with the overseas trade; the textile industry became established on imported cotton, imported iron was used in the metal working industries, timber was imported for shipbuilding and sugar from the West Indies led to the establishment of sugar refineries in the North West ports. In the return trade the needs of the colonial settlers also boosted local industry; agricultural implements, clothes, pottery and furniture were typical commodities carried by the outgoing vessels.

Industrial centres also existed elsewhere in the region. Flax and hemp processing developed in the Fylde area of Lancashire with the establishment of factory production of sail cloth, sacking and twine in Kirkham, which

subsequently expanded into West Cumberland and the upper reaches of the Lune above Lancaster. Mining of coal and iron ore existed in West Cumberland and the mining of iron ore and slate and the production of iron from charcoal fired furnaces were early industries established in Furness. The industry in Furness also later expanded into factory production of textiles and gunpowder manufacture. Preston, Carlisle and Lancaster became centres for textile production and the area of South Westmorland based round Kendal supported a number of industrial interests in addition to the traditional woollen cloth making. Some were related to the textile trade while others such as gunpowder production, snuff making, and marble working were not. A full account of the industries in the localities within the region is provided in the regional survey in Chapter 2.

Industrial growth stimulated demand through its own fuel and material needs and through those of the associated urban population growth with foodstuffs, fuel and building materials being priority items. Data presented in Chapter 2 shows the population in Liverpool, Manchester and the surrounding towns expanding nearly fourfold in the second half of the eighteenth century demonstrating the magnitude of the increase in consumer demand.

Liverpool emerged as the centre for overseas trade in the region at the expense of Chester, Lancaster and Whitehaven. The port increasingly acted as a hub for the distribution of the imported goods, including those from Ireland, and as a collection point for goods to be shipped in return. Extensive use was made of coastal shipping for distribution and collection along the coast and the internal waterway system acted as the link between the port and its hinterland. Yet, despite the volume of activity in the coasting trade in the region the study of the trade has been neglected in favour of overseas trade. This may be linked to the lack of availability of data for the coastal trade compared with the overseas trade. The relationship between overseas trade and the economic welfare of the country ensured the close attention of the government of the day and resulted in the production of statistics and annual reports by the Inspector General of Shipping which are readily available to researchers in British Parliamentary Papers. In contrast, government records of the coasting trade are much less extensive, with only occasional reports being produced by the Inspector General. The King's Remembrancer Exchequer Port Books and the Customs Bills of Entry, the two

principal sources for the earlier and later periods, are not available for this period. Government records are therefore very sparse for one of the most eventful periods in British economic history in which it is generally acknowledged that coastal shipping played an important role, and alternative records are extremely scarce and difficult to find.<sup>9</sup>

The thesis is therefore seeking to fill a significant gap in historical knowledge which has been noted by previous maritime historians; Jackson in his work on the port of Hull in the eighteenth century in 1972 emphasised the importance of coastal trade and stated that 'foreign trade, though vital to the national economy, was only part of mercantile activity and care must be taken to avoid overemphasising trade which can be easily measured at the expense of that which cannot.'10

The region is considered in eight geographical subdivisions which had different characteristics in terms of resources and industrial activity. Each subdivision had a degree of individual identity but had interdependence through the need to find markets for production and to acquire the necessary supplies of materials, food and fuel to sustain the regional activities and to meet the needs of the population. The study of trade within the region will show that many of these requirements were met from within the region with the coastal trade acting as the unifying link between the sub regions to create an overall regional trading identity, i.e. an integrated maritime economy.

The economic climate in which this trade was being conducted was particularly uncertain with the country at war for most of the period. The review of the economic and political environment of the period undertaken in Chapter 2, however, shows that apart from a downturn in overseas trade during the American War of Independence in the period 1775-83, the country was able to maintain and indeed increase exports throughout the late eighteenth and into the early nineteenth century and maintain a positive balance of payments. The trade records

<sup>&</sup>lt;sup>9</sup> The trade with Ireland was considered as overseas trade in government records until 1824, despite the fact that the Act of Union with Ireland had been enacted in 1801, and therefore records of this trade are more comprehensive.

<sup>&</sup>lt;sup>10</sup> Jackson, G., Hull in the Eighteenth Century (Oxford, 1972), 71.

show that ports in the North West and the industries of the region were some of the principal beneficiaries of the overseas trade and apart from some short-term setbacks, trade in the region thrived and the North West continued to increase its industrial capability.<sup>11</sup>

This study is the first to examine the region as a potential integrated maritime economy and follows on from the many excellent port based studies produced to date, some of which examined the characteristics of the ports in great detail but did not continue through to examine relationships with the land based economies or interrelationships within the region. A review of the historiography of the coastal trade provides useful background information providing examples of ownership patterns and trading practices with which comparisons can be made.

The work on the English coastal trade by Willan, referenced earlier, was the first study of the English coastal trade and used the King's Remembrancer Exchequer Port Books as the principal source. The work examined trade in each of the English regions and in addition conducted studies of trade by categories which included agricultural products, manufactured goods and minerals. The results of the analyses provide a useful record of coastal trade in the period, although unfortunately the work does not include trade with Ireland because of its overseas status at the time. A chapter on government supervision looks at the systems of 'transires' and 'coquets' that were used in the coastal trade in the late seventeenth and early eighteenth centuries and the requirements for the payments of bonds to ensure that goods arrived at their stated coastal destination and were not shipped surreptitiously overseas without paying the appropriate dues.

In considering the organisation of the trade Willan seeks to establish who, of the merchants, shipmasters and shipowners were the dominant figures and concludes that no definitive pattern existed prior to 1750. The East Coast coal trade was seen as being particularly complex with colliery owners, fitters, keels, factors, shipmasters, and the London lightermen all playing roles, which changed over time. In other trades two patterns emerged, one in which the masters of the

<sup>11</sup> Davis, R., The Industrial Revolution and British Overseas Trade (Leicester, 1979).

<sup>&</sup>lt;sup>12</sup> The King's Remembrancer Exchequer Port Books are held in T.N.A. under catalogue reference E 190.

vessels also acted as merchants and the second in which the roles of master and merchant were separate.<sup>13</sup> The pattern was seen to differ from port to port and even in the same port at different times; the master would carry a cargo for himself on one voyage and for someone else on another.<sup>14</sup>

Another work considered as a benchmark on shipping and trade in the seventeenth and eighteenth centuries is Davis's work *The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries* (1962). <sup>15</sup> The work examines English shipping trade to and from all the major regions of the world and includes complementary subjects including shipbuilding, vessel ownership and vessel management. Irish trade is considered in the trading analysis as part of the overseas trade in a 'Near European' region which included Norway, Denmark, Sweden, the Baltic Countries and Russia. These were all countries considered to be important trading partners with Britain at the time, and in 1773 Ireland was shown to have the highest value of trade with Britain among those. <sup>16</sup>

In the study of ownership patterns and the role of the masters, Davis found that merchants were the leading occupation investing in vessels and were investing in large groups before the introduction of marine insurance in 1720. Their aim was to spread the risk in the event of loss even though they could often have found the funds from their own resources; a practice that Davis found to be inconsistent with the practice in other areas of business. <sup>17</sup> Mariners on the other hand, who were often owners in addition to being masters of the vessels, needed other investors in order to raise the money to buy the vessels. Examples are provided of successful mariners extending their ownership stake in a vessel and acquiring an interest in other vessels, with some eventually becoming merchants or retiring ashore to become arrangers of shipping partnerships. <sup>18</sup>

Davis also highlights the dichotomy that existed for merchants who were also shipowners at a time when there was a high level of competition for sea

<sup>&</sup>lt;sup>13</sup> Willan, T.S., 34.

<sup>&</sup>lt;sup>14</sup> Willan, T.S., 43.

<sup>&</sup>lt;sup>15</sup> Davis, R., The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries (London, 1962)

<sup>&</sup>lt;sup>16</sup> Davis, R., 204.

<sup>&</sup>lt;sup>17</sup> Davis, R., 88.

<sup>&</sup>lt;sup>18</sup> Davis, R., 85-6.

freight and rates were generally low. As the leading owner of a group of shipping investors, the merchant would be expected to negotiate the highest possible rates for his fellow investors but as a merchant he wanted his goods carried at the lowest rates. Merchants when they invested, therefore, generally did not invest for the purpose of carrying their own cargoes but to trade profitably in other sectors through intelligence gained through their network of connections at home and overseas.

In summary Davis provides some useful benchmarks for this study. Although the work is essentially concerned with the overseas trade some interesting observations are made about ownership profiles which can be compared with those found by this study for the coasting and Irish Sea trade.

John Armstrong has written extensively on coastal trade and in 'The Significance of Coastal Shipping in British Domestic Transport, 1550-1830,' he argues that the coastal vessel had a vital part to play in the widening and integration of markets and reduction of transport costs during the seventeenth and eighteenth centuries. 19 Examples are provided of the coaster participating in the high value low bulk commodity trade in addition to the high bulk trade with which it is traditionally identified. The examples include the movements of textile goods over long distances, a trade with which road transportation is commonly associated, because of the incentive offered by reduced cost. The cost of transportation by sea was estimated as being between 14 and 27 per cent of the road rate and made economic sense in instances where the distribution was punctiform rather than areal. The examples provided include Mc Connell and Kennedy, the Manchester textile manufacturers, sending yarn from Manchester to Glasgow by coastal vessels via Liverpool in the years 1812-3 although earlier they were also seen to have been using road transport.<sup>20</sup> Other examples given of low bulk high cost goods being shipped include wool from ports on the south and east coasts to Hull and bundles of steel rod from Greenock to Liverpool. While the

<sup>&</sup>lt;sup>19</sup> Armstrong, J., 'The Significance of Coastal Shipping in British Domestic Transport, 1550-1830', *International Journal of Maritime History*, iii, No. 2, 1991, 63-93.

<sup>20</sup> Armstrong, J., 70.

drawback of the coastal trade was reliability, which was most commonly affected by adverse weather conditions, with favourable winds the sea passage along the British coast was invariably faster than road transportation even though the distance was longer.

Armstrong like others finds difficulty in estimating volumes of coastal trade in the eighteenth century. He admits to the shipping statistics for the period being a minefield but believes that it is reasonable to assume that Dwight E Robinson's estimate of an annual growth in coastal tonnage of about 1.5 per cent in the period 1686-1776 is valid.<sup>21</sup> This shows that a significant rate of growth occurred in the coasting trade in this period. Measurement of trading volumes, however, has not been a focus of this work.

The profitability of shipowning is also a subject addressed by Armstrong. In his joint work with Andreas Kunz, *Coastal Shipping and the European Economy 1750-1980* (2002) he asks the questions why did people invest and how profitable were the particular trades in which they were engaged?<sup>22</sup> Davis also devotes a whole chapter in *The Rise of the English Shipping Industry* to address the question, 'Was it a Profitable Business?' These questions are also not addressed in this work. Profit statements are included in a number of the business records examined but the basis on which the profit was calculated is not always clear.

In respect of studies of ownership, R.C. Jarvis probably undertook the most extensive work in the 1960s and 70s using the post 1786 shipping registers which included examination of vessel ownership in the port of London and in the ports of the North West. Jackson and Ville both studied ownership patterns of vessels outside of the region. Jackson studied those owned in the port of Hull and Ville studied shipping in the port of Newcastle and shipping owned by the Henley

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<sup>&</sup>lt;sup>21</sup> Armstrong, J., 69.

<sup>&</sup>lt;sup>22</sup> Armstrong, J., & Kunz, A., 'British Coastal Shipping' in Armstrong, J., & Kunz, A., (eds.), Coastal Shipping and the European Economy 1750-1980 (Mainz, 2002)

family based on the Thames in London during the period of the industrial revolution.<sup>23</sup>

Jackson in *Hull in the Eighteenth Century* (1972) did not have the benefit of the availability of shipping registers for his work, which he states were lost for the port of Hull, but found evidence of the existence of shipowners as an occupation from as early as 1766 in apprenticeship records where men describing themselves as shipowners were advertising to attract recruits. Jackson found 114 names from this source for the period 1766-1800 and by cross-referencing with other sources identified 54 as master mariners and of the rest 10 were shipbuilders; a strong bias therefore existed towards the maritime trades. A trade directory for 1791-2 listed 45 shipowners of which at least 29 were identified by Jackson as having originally been masters.<sup>24</sup> There was also evidence of merchants owning vessels in trades with which they had an interest, which Jackson says may have been to simplify the process of finding the right ship at the right time, a process as vital to the merchant as the acquisition of the cargo or market. Chartering of vessels by merchants was also common practice with instances of six or more merchants freighting goods in the same vessel, even for low cost commodities. The complexity of finding vessels to carry cargoes to an ever-increasing number of destinations increased, however, as the number of merchants increased together with the variety of goods carried and the ports with which the port traded. This situation led to the emergence of the specialist broker or ship broker, although the directories of the day did not include broker as a category and some of those who acted as brokers remained as merchants in the directory. A number of brokers were, however, listed in the general section of the directory, seven were described as ship brokers and three as brokers and Jackson identified five as masters from the 1768 and 1775 Port Books while only two were recognisable as merchants,

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<sup>&</sup>lt;sup>23</sup> Jackson, G., *Hull in the Eighteenth Century, A Study in Economic and Social History* (Oxford, 1972) and Ville, S.P., 'Shipping in the Port of Newcastle, 1780-1800', *Journal of Transport History*, 3<sup>rd</sup> Series, 9, 1, 1988, and *English Shipowning during the Industrial Revolution* (Manchester, 1987)

<sup>&</sup>lt;sup>24</sup> Jackson, G., 143.

again emphasising the leading role played by representatives from the maritime trades.<sup>25</sup>

Jackson's work also examined the practices employed by the merchants to further their trade, including the appointment of agents and commercial travellers in the second half of the century. The established methods of introduction by recommendation, correspondence with references and familial connections, however, were still shown to be important.<sup>26</sup>

Simon Ville's work, English Shipowning during the Industrial Revolution (1987) is based on the activities of Michael Henley and Son who expanded into vessel ownership having originally been coal merchants based on the Thames. The period spans the years 1770-1830 during which time they expanded from two vessels up to a peak of 22 in 1810 declining to seven by 1815.<sup>27</sup> The company became involved in trade outside of their coal merchanting interests taking an interest in overseas trade, supplying vessels to the Transport Board and generally making maximum use of the opportunities available to shipowners during the war period. Important as the Henley papers are to the furtherance of knowledge in shipowning in the period, particularly in respect of the approach to business and the policies used by the early shipowners, Ville acknowledges that the specialist shipowner only represented one of many forms of ownership which he says can be easily seen from an inspection of the shipping registers for the period. In the introductory chapter on the growth of the professional shipowner he goes over most of the ground previously covered by Jackson which showed the late emergence of the specialist shipowner as an occupation and the involvement of those from the mercantile and related occupations. Ville also comments on the variations in the sizes of ownership groups in Liverpool, London and Whitehaven found by Jarvis and others in their earlier work. He offers the opinion that the smaller ownership groups in Liverpool and London could have been the result of the entrepreneurial characteristics of the merchant communities who were

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<sup>&</sup>lt;sup>25</sup> Jackson, G., 147-8.

<sup>&</sup>lt;sup>26</sup> Jackson, G., 116.

<sup>&</sup>lt;sup>27</sup> Ville, S.P., *English Shipowning during the Industrial Revolution*, 29.

prepared to move into shipping if the markets promised good rewards. A theory that will be tested by the data/evidence gained for this study.

In recent years historians have paid increasing attention to the role of networks in economic activity and important work on business networks in the period has been produced by Pearson and Richardson and by Sherylynne Haggerty. In 'Business Networking in the Industrial Revolution' (2001) Pearson and Richardson stress the importance of business networks as an integral part of economic activity in the period, suggesting that they are moulded by social, cultural and political influences as well as by market mechanisms. Great emphasis was placed on trust in business dealings in the period with traders preferring to deal with individuals of known repute and to base their decision to trade on information about reputation from reliable sources or on their own past dealings with the individuals. This approach was much preferred to one which relied on contractual devices to discourage malfeasance.

Jarvis and Lee in their introduction to *Trade, Migration and Urban*Networks in Port Cities c.1640-1940 (2008) warn of the pitfalls in the use of networks and stress that outside of the immediate and extended family, only people with whom there was a shared religious affiliation could normally be trusted. They maintain that this may have been a more reliable yardstick of trust because many religious beliefs incorporate factors which are often absent from legal codes, namely specific assumptions about business ethics, with ostracism, or possibly hellfire, as the penalty for transgression. Networking relied on the credibility of the informant and the process in many ways could be likened to gossip. The disseminator of false gossip. whether maliciously or through misinformation, was capable of causing harm equivalent to any other mercantile

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<sup>&</sup>lt;sup>28</sup> Pearson R. and Richardson, D., 'Business Networking in the Industrial Revolution', *Economic History Review*, liv, 4, 2001, 657 and Haggerty, S., 'A Link in the Chain and the Transhipment of Knowledge in the Late Eighteenth Century,' *International Journal of Maritime History*, xiv, 1, 2005, 157-172.

<sup>&</sup>lt;sup>29</sup> Pearson R. and Richardson, D., 657.

hazard. This concern supported the role of the merchant who offered less risk in transactions for which customers were prepared to pay.<sup>30</sup>

Haggerty in 'A Link in the Chain and the Transhipment of Knowledge in the late Eighteenth Century' (2005) concentrates on information networks and the various forms utilised by the merchants of the late eighteenth century in Liverpool and Philadelphia. The article includes the role of newspapers, letter writing and meeting places such as coffee houses as effective means of communication and also again stresses the importance of the use of religious, familial and other connections to reduce risk and increase trust in addition to providing convenient access to finance and credit.<sup>31</sup> The means of communication and the use of networks of trust will be evaluated in the examination of business operations in Chapter 6.

Specific studies of the North West region have shed light on the coasting trade and the trade with Ireland in the period. For instance, Maurice Schofield in his work *Outlines of the Economic History of Lancaster* (1946) included analyses of coastal trading activity together with a study of overseas trade and its contribution to industrial development in Lancaster.<sup>32</sup> The records of the payments made to the Port Commission in Lancaster are used as the basis for defining the numbers and tonnages of the vessels entering the port in the overseas and coasting trades and comparisons are made between the two. Schofield was also able to define the regions with which coastal trade was conducted through the differential tariff system operated by the Port Commission. A tariff of 4d per ton applied to an 'inner zone', defined as extending from Holyhead to the Mull of Galloway and outside this zone the tariff was 6d per ton. Schofield used this information to show that in 1800, 90 per cent of the vessels traded within the inner zone, or 91 per cent if the Irish and Isle of Man trade was included.<sup>33</sup> The defined inner zone together with Ireland closely approximates to the area defined for this study and it is

<sup>&</sup>lt;sup>30</sup> Jarvis, A., and Lee, R., *Research in Maritime History No. 38* (St Johns, Newfoundland, 2008), 8-11.

<sup>&</sup>lt;sup>31</sup> Haggerty, S., 157-8.

<sup>&</sup>lt;sup>32</sup> Schofield, M.M., *Outlines of an Economic History of Lancaster*, Part 1, Transactions of the Lancaster Branch of the Historical Association No. 1, 1946, and Part 2, Transactions of the Lancaster Branch of the Historical Association No. 2, 1951.

<sup>&</sup>lt;sup>33</sup> Schofield, M.M., Part 1, 32.

interesting to note the low level of activity between the port and Ireland which confirms the dominant role played by Liverpool in this trade shown by the analyses of commodity flows in Chapter 5. Schofield does not analyse the commodities carried in the coastal trade in any detail, acknowledging the difficulty in finding sources and in the main falls back on the work of Willan for the early period and occasional accounts of travellers through the region. In the main he surmises the nature of the commodities carried from the activities in the region surrounding the ports from which the vessels arrived.

Schofield's work is useful in providing data on trading volumes and identifies the Port Commission records as another source for the study of shipping activity although there is a warning that the statistics are not fully representative because port dues were not payable on all types of cargo. Vessels carrying coal, for instance, did not have to pay port dues in Lancaster, although it is not made clear whether this was temporary or permanent and whether or not it applied to other commodities.<sup>34</sup> Although Schofield examines the statistics of the coastal trade he does not consider the interactions between the trade and the local industrial interests which is one of the aims of this study.

The relationship between industrialisation and coastal shipping activity in the Furness region is examined by J D Marshall in his work *Furness and the Industrial Revolution* (1958).<sup>35</sup> The developments in the principal industries in the region are described in some detail and there is a review of transportation by road and sea in the period 1760-1840 in which examples are provided of coastal vessels carrying products of the Furness iron industry. The papers of the Duddon Iron Company show that in 1750 there were shipments of pig iron to Chepstow, iron ore to Frodsham in Cheshire and small quantities of iron rod to Liverpool.<sup>36</sup> The dependence of the region on coastal shipping is reinforced by making reference to the large number of coastal vessels shown as belonging to Ulverston in the period 1765-82 which far exceeded the number registered in Lancaster.<sup>37</sup>

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<sup>&</sup>lt;sup>34</sup> Schofield, M.M., Part 1, 33.

<sup>35</sup> Marshall, J.D., Furness and the Industrial Revolution (Barrow, 1958).

<sup>&</sup>lt;sup>36</sup> Marshall, J.D., 32-3.

<sup>&</sup>lt;sup>37</sup> Marshall, J.D., 87.

The work provides a useful overview of the principal industries of the region and their dependencies on sea trade. It does not however make any analysis of the patterns of the trade, the ownership of the vessels, or their management.

The definitive work in the North West region on vessel ownership patterns was carried out by Jarvis, Schofield and Craig in the 1960s and 70s using the post 1786 shipping registers. The work analysed the registration details for vessels belonging to the ports of Whitehaven, Ulverston, Preston, Liverpool and Chester. Lancaster was not included because Schofield, who researched vessels belonging to the North Lancashire ports, wanted to concentrate on the coasting trade and only included vessels belonging to Ulverston and Preston. Jarvis and Craig collaborated on a study of vessels registered in Liverpool while Jarvis separately examined those registered in Cumberland and Craig studied vessel ownership in the port of Chester for which he had to re-construct registers from records of the vessels visiting other ports because those for Chester have only survived from 1836 onwards. Other significant work using the registers was carried out by Eaglesham for the ports of West Cumberland and by Pope for the port of Liverpool.

The studies by Jarvis, Schofield and Craig showed the existence of large ownership groups in the ports of West Cumberland and Ulverston and smaller groups in the remaining ports. Smaller ownership groups were also found to be typical of vessels owned elsewhere in Britain by reference to the register of vessels visiting Liverpool but not owned in the port. Reasons were not sought for the differences in size of the ownership groups but further research was recommended by the authors with the potential benefit of establishing links between shipping investment and the economic welfare of the region. This study is

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1818 are held in the archive of the Merseyside Maritime Museum in Liverpool.

Jarvis, R.C., 'Liverpool Statutory Registers of British Merchant Ships,' *T.H.S.L.C.*, 105, 1953, 107-119 and 'Cumberland Shipping in the Eighteenth Century', *C.W.A.A.S.*, New Series, liv, 1955, 212-235, Craig, R and Jarvis, R.C., *Liverpool Registry of Merchant Ships* (Manchester, 1967), Schofield, M.M., 'The Statutory Registers of British Merchant Ships for North Lancashire in 1786', *T.H.S.L.C.*, 110, 1958, 107-125, and Craig, R., 'Shipping and Shipbuilding in the Port of Chester in the Eighteenth and Early Nineteenth centuries', *T.H.S.L.C.*, 116, 1964, 39-68.

<sup>39</sup> Eaglesham, A., 'The Growth and Influence of the West Cumberland Shipping Industry, 1660-1800', unpublished PhD Thesis, Lancaster University 1977 and Pope, D.J., 'Shipping and Trade in the Port of Liverpool 1788-93', unpublished PhD thesis, University of Liverpool 1970.

<sup>40</sup> The Registers of Shipping visiting Liverpool but not belonging to the port in the period 1788-

not seeking to meet such a broad-reaching challenge but looks for connections between shipping investment and economic activity in the region to establish the extent to which a maritime economy existed, a considerable task in its own right given the scarcity of available sources.

Craig separately researched and reported on trade and shipping in the River Dee in the eighteenth century making use of the King's Remembrancer Exchequer Port Books, which for Chester were available until the 1770s, to examine entries and clearances in the overseas and coastal trade, including Ireland, and the commodities carried. Unfortunately the Port Books for Chester do not extend through to the commencement of the new registration system in 1786 and the types and ownership could not be established for the vessels for which trade was identified. The situation did not improve post 1786 because no source was available to define shipping activity; the Chester newspapers at that time did not include shipping lists and Craig was unable to identify an alternative source, a situation that has continued through to the present day and has restricted the scope of this study.

Annie Eaglesham's unpublished doctoral thesis, 'The Growth and Influence of the West Cumberland Shipping Industry, 1660-1800' (Lancaster University, 1977) examined several aspects of the shipping industry of West Cumberland, including the trade, the characteristics of the seamen and the owners and the impact of the trade on shipbuilding and the supporting maritime trades in the region. The study includes an examination of coastal trade, which in Eaglesham's case includes Ireland and the Isle of Man. She draws information from a number of sources including the Port Books and Willan for the earlier period and for the later period takes information from the Curwen, Senhouse and Lonsdale papers and other records in the Cumbria Record Office which provide interesting insights, particularly into the coal trade, but also to a limited extent into other trades. Other records used include the Tonnage Account Books for Workington Harbour for the period 1775-90 and the trading accounts of two

<sup>&</sup>lt;sup>41</sup> Craig, R., Some Aspects of the Trade and Shipping of the River Dee in the Eighteenth Century', *T.H.S.L.C.*, 114, 1962, 99-128.

vessels, the *Betty and Jane* of Workington in 1776 and the *William and Sally* over the period 1786-1806, which show outward voyages to Ireland with coal and return voyages with corn or livestock. <sup>42</sup> Unfortunately these account books are no longer available for further study. Coal is the principal trade considered by Eaglesham but outgoing trade in iron ore is also identified as is incoming trade in timber from Dumfries, Dolgelly and Liverpool for use in the collieries, harbour construction and in the shipbuilding industry. Reference is also made to the sea trade in Carlisle and extracts are taken from a register of vessels trading with but not belonging to the port in the period 1786-1800. <sup>43</sup>

Eaglesham comments on the work done by Jarvis on vessel ownership suggesting that that the comparisons he made between the size of ownership groups for the Cumberland vessels and those registered elsewhere may not be representative of contemporaneous investment practice because no consideration was given to differences in the ages of the vessels. The vessels registered in Whitehaven in 1788, were on average 15 years older than those that made up the sample of vessels owned in Liverpool and would therefore have been subject to increases in ownership numbers through division of property on the death of original owners. In support of her case Eaglesham researched the inventories attached to the wills of shipowners at the time which showed that divisions of ownership shares by two and even four were common. This is unlikely, however, to have been fully responsible for the major differences that were seen.

Eaglesham was also of the opinion that the size of the ownership groups was related more to the trade in which the vessels were engaged rather than the prosperity of the region, which she stated was one of the commonly held theories. The conclusion was based on comparisons of numbers of owners in the overseas and coastal trade in Whitehaven, but the coastal trade she was comparing with included the coal trade with Ireland trade and the large group sizes have been found by this study to have only been typical for the brigantines which were the principal vessel types used in the Irish trade.

<sup>&</sup>lt;sup>42</sup> Eaglesham, A., 110.

<sup>&</sup>lt;sup>43</sup> Eaglesham, A., 114.

In examining the geographical distribution of owners Eaglesham notes the significant level of ownership in West Cumberland vessels by residents of Ireland and identifies one of the Irish investors as being a widow, Jane Conway of Dublin, who had shares in six vessels and was thought to have been connected with the Dublin ship provisioning firm of the same name whose bills appear amongst Workington ship accounts.<sup>44</sup>

Eaglesham's work on trade is based largely on the coal trade and regrettably she does not use the sources she identifies, particularly the vessel account books, to develop a more comprehensive analysis of the trading patterns of the ports. The work, however, is a useful reference work for the study of the West Cumberland shipping industry in the period.

D J Pope's unpublished doctoral thesis, 'Shipping and Trade in the Port of Liverpool 1788-93' (University of Liverpool, 1970) examined the levels and nature of trade conducted by Liverpool with ports and regions within Britain and overseas and the characteristics of the vessels and their owners. The emphasis was on the overseas trade and mainly overseas merchants were selected in the study of patterns of ownership, although a merchant specialising in the Irish trade was included. A family of Warrington coal merchants were identified as being major investors in coastal vessels and the Parys mining company were identified as owners of a large fleet for the transportation of ore from Anglesey to the refiners in St Helens. Despite the size of the work there are few analyses of trading patterns for the vessels identified as operating in the coasting trade and only limited consideration of patterns of ownership, although the analyses of the coasting and Irish trade are extensive and have been utilised for this study.

Francis Hyde also studied Liverpool: Liverpool and the Mersey: an Economic History of a Port 1700-1970 (1971) reported on the development of the port, the growth of the trade and shipping and the commercial organisation. The work focussed on the overseas trade and is therefore not of direct relevance to this work except for the statistics presented on the tonnage of shipping in the overseas

<sup>&</sup>lt;sup>44</sup> Eaglesham, A., 310.

<sup>&</sup>lt;sup>45</sup> Pope, D.J., II, 97.

and coasting trade entering the port. The statistics, which are mainly taken from the records of the Liverpool Dock Trust, provide a useful monitor of activity and are presented in Chapter 2 to show the pattern of growth in trade in the port during the period.<sup>46</sup>

Sheila Marriner's work *The Economic and Social Development of Merseyside* (1984) looked at the development of the greater Merseyside region from 1750 through to the twentieth century and included chapters on the dock constructions in Liverpool and on the development of the region's transportation systems, particularly the canal constructions and river improvements to improve access to the hinterland.<sup>47</sup>

The principal work on Ireland is L M Cullen, *Anglo Irish trade* 1660-1800 (1968) in which the trade with England and the Irish economy are examined in detail over an extended period.<sup>48</sup> A chapter is included on shipping, freights and insurance in which reference is made to vessels employed as constant traders between Cork and Dublin and the ports of London, Liverpool, Bristol and Chester in 1790. The work looks at both the corn and coal trades and in the section on the coal trade highlights the differences in the types of vessel used in the trade with Whitehaven and South Wales. The Whitehaven vessels are described as being large broad beamed 'floaty' vessels up to 200 tons specially built for the trade and generally controlled by the masters, while in contrast the vessels in the South Wales trade were more general purpose with the masters acting under the direction of merchant owners and generally only carried coal in the absence of other freights. 49 The organisation and financial structure of the trade and how it changed through the period is also examined although trade with specific ports or regions of Britain is not identified. A comprehensive bibliography, however, provides leads to documents of value for investigation of the trade including the Irish Customs records and an extensive list of business papers.

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<sup>&</sup>lt;sup>46</sup> Hyde, F.E., *Liverpool and the Mersey: an Economic History of a Port 1700-1970* (Newton Abbot, 1971), App. 1.

<sup>&</sup>lt;sup>47</sup> Marriner, S., The Economic and Social Development of Merseyside (London, 1984).

<sup>&</sup>lt;sup>48</sup> Cullen, L.M., *Anglo Irish Trade 1660-1800* (Manchester, 1968).

<sup>&</sup>lt;sup>49</sup> Cullen, L.M., 131.

The identification of primary material on coastal trade in this period presents a formidable challenge because the period falls between the availability of two important sources for identification of maritime trade, the King's Remembrancer Exchequer Port Books and the Customs Bills of Entry. <sup>50</sup> The port books are only generally available until the mid eighteenth century for the ports of the North West; the exceptions being those for Chester which are available to the 1775 and those for the North Wales ports which are available until the end of the century. The Customs Bills of Entry, although introduced in 1696, are not available for most ports until the 1820s and later. This void and the lack of routine reports on coastal trade by the Inspector General of Shipping necessitated a search for other sources to establish the characteristics and the volume of trade.

The chronological runs of the alternative sources available are important in determining the extent to which they can be used to build a representative picture of the sea trade in the period. Shipping lists published in regional newspapers were the principal source available to define shipping activity although they were not always published on a regular basis and therefore could not be used to provide quantitative assessments of trade. The lists provide details of the entries and clearances of vessels by vessel name and master's name and in some instances provided details of the cargoes carried. The inclusion of cargoes was mainly confined to vessels entering in the overseas trade although some were specified for entries in the coastal trade, and exceptionally for Liverpool, the persons or companies to whom the cargoes were consigned was also included. The shipping lists rarely included vessels in ballast, perhaps because they were not recorded in Customs records, and this may have contributed to the imbalance between entries and clearances for ports which was often seen in the records.

The regional newspapers available in the North West in which shipping lists were included with their first year of publication are as follows: *Williamson's Liverpool Advertiser* and *Gore's General Advertiser* from 1756 and 1765 respectively, the *Cumberland Pacquet* from 1774, the *Carlisle Journal* from 1802,

<sup>&</sup>lt;sup>50</sup> The principal collection of the Customs Bills of Entry is held in the archive of the Merseyside Maritime Museum.

the Lancaster Gazette from 1801 and the Preston Journal and Croft's Lancashire General Advertiser from 1807. The Chester Chronicle and the Chester Courant, which started publication in the mid eighteenth century, did not include shipping lists during the period of the study.

The newspapers also included shipping movements for other ports in their locality, for instance, the *Cumberland Pacquet* included entries and clearances for Workington in addition to those for Whitehaven, the *Lancaster Gazette* included those for Lancaster, Ulverston and Milnthorpe and the *Preston Journal included* entries and clearances for Preston and Poulton.

The gaps in the information provided by the shipping lists can be compensated to some extent by information available from other sources including occasional trade reviews, trade directories and business papers. Local newspapers are also a useful source for the advertisements they carried which regularly announced vessels about to depart with destinations and contact names of the master or the agent, goods for sale from vessels that had recently arrived and details of the schedules of the vessels that were constant traders between ports.

Trade Directories are available for the period which include the major towns in the North West but were not published annually.<sup>51</sup> The directories listed manufacturers, tradesmen and merchants and were further source for identifying carriers and regular shipping services. A drawback of the directories, however, is that they were sponsored and therefore, unsurprisingly, omissions occurred which suggests that caution had to be exercised in their use.

Harbour authority records are another means of measuring shipping tonnages as vessels were required to pay harbour or town dues when entering a port and in the North West records have survived for the Liverpool Dock Trust and the Lancaster Port Commission which provide details of shipping entering the

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<sup>&</sup>lt;sup>51</sup> Examples of directories for the North West used for the study include the Universal British Directory 1794, Bailey's Northern Directory 1781, and Gore's Liverpool Directory for 1777 and 1790.

ports from the mid eighteenth century.<sup>52</sup> Hyde's work drew on the Liverpool port records and Schofield used those for Lancaster.

The reports of the States of Navigation, Commerce and Revenue are the official Customs records which provide annual reports of the numbers of new vessels and their tonnages registered by port in size categories and accounts of the number of vessels their tonnage and numbers of men usually employed in navigating same for each port. The reports are available for the period 1772-1808 and provide a measure of the level of investment in the individual ports although they do not discriminate between coastal and overseas trades in the later period of the eighteenth century. The ports included in the records for the North West were Carlisle, Chester, Preston, Lancaster, Liverpool Whitehaven and occasionally Poulton.<sup>53</sup> The reports very occasionally included the number and tonnages of coastal vessels that entered and cleared the ports; a report was included in the publication for 1796 but this was the only year in the decade that this occurred.<sup>54</sup> The Musgrave manuscripts are extracts from the State of Navigation reports and show the tonnage of all vessels belonging to British ports that have traded to foreign ports or coastwise for the years 1771-80, a period when the records discriminated between overseas and coastal trade. 55 The Manuscripts include records for all the North West ports and include Ulverston as a separate port instead of being included with the Lancaster records as they are in the primary source. Some doubt has been cast on the accuracy of the data in the Musgrave Manuscripts by previous researchers because the numbers for ports can be seen to be unchanged over successive years, which suggest that the records were not always updated.<sup>56</sup> This may have been a result of the State of Navigation reports not being updated and not a problem of the secondary source.

The imports and exports from the ports of Ireland can be monitored from the records of the Irish Customs, which were transferred to the National Archive

<sup>&</sup>lt;sup>52</sup> The records of the Liverpool Dock Trust are held in the archive of the Merseyside Maritime Museum and those of the Lancaster Port Commission are held in the Lancaster Public Library. <sup>53</sup> T.N.A., CUST 17.

<sup>&</sup>lt;sup>54</sup> T.N.A., CUST 17/18.

<sup>&</sup>lt;sup>55</sup> The Musgrave Manuscripts are in B.M., M.S.S. 11255-6 held in the British Library.

<sup>&</sup>lt;sup>56</sup> Armstrong. J., 'The Significance of Coastal Shipping in British Domestic Transport', 67.

and are available for the period 1689 to 1819.<sup>57</sup> The records identify by quantity and value the commodities imported and exported by each Irish port, twenty-six in number, to and from England, Scotland and overseas destinations. There are also listings of the numbers and tonnages of the vessels cleared for England from each Irish port. The ports in England with which trade was conducted are not identified individually but in occasional years the English ports can be identified in surveys of trade prepared by the Inspector Generals of Shipping in London and Dublin, as trade with Ireland was a popular subject for reports to Parliament. They reported most frequently on imports of grain, meal and flour and exports of coal.<sup>58</sup>

The overseas trade from Ireland, including the grain trade, was subject to tight fiscal controls in the period as were other commodities in the export trade. Duties were applied to virtually every commodity imported and exported with drawbacks and bounties being payable for preferred exports and re exports for which bonds had to be deposited pending confirmation that the goods were delivered to the stated destination. Traders in the period had to be fully aware of the duty structure and the potential changes that could occur; this was particularly relevant to the trade in grain where imports and exports were controlled by the British Corn Laws which had been introduced in Elizabethan times. An Act was passed in 1773 to stabilise prices in the home market by fixing prices for imports, below which full duties were applied and for exports above which exports were prohibited. As an example the import and export prices applying to wheat were 48/- per quarter for imports and 44/- per quarter for exports; prices were also included for rye, peas and beans; barley, beer, bigg, and oats.<sup>59</sup> A bounty was payable on exports, which for wheat was 5/- per quarter, provided the grain had been grown in Britain and it was carried on a British ship on which at least two thirds of the crew were British subjects. The Act also included a warehousing provision which allowed imported grain to be offloaded and stored under the

<sup>&</sup>lt;sup>57</sup>T.N.A., CUST 15 the Ledgers of Imports and Exports, Ireland.

<sup>&</sup>lt;sup>58</sup> Some examples are: B.P.P.1786 Vol. X, Coals exported coastwise with duties 1780-85, 1788 Vol. XXII, Wheat, Barley, Malt etc exported, imported and sent coastwise 1780-86 and 1808 and Vol. XI, Account of Quantity of Grain, Meal and Flour Imported and Exported between GB and Ireland, 1806-07.

<sup>&</sup>lt;sup>59</sup> 13 George III, c.43

supervision of the local Customs officers without any duty being paid until it was withdrawn from the store when the duty in force at the time was payable.

The procedure for determining prices for the regulation of the trade had been set in earlier Acts. Average weekly prices were calculated from prices obtained in the local markets by corn factors appointed by the Justices in each county and returns sent to the Treasury for publication in the London Gazette. Prices for regulation of exports were the average of price of each type of grain in the previous week and those to regulate imports were an average of the previous thirteen weeks which was set by the Justices at each meeting of the Quarter Sessions after which the ports in the county might be open or closed to a particular grain for a full quarter. The Act specifically excluded grain carried in the coasting trade, provided it was carried under cover of a coast cocquet, and grain supplied to warships.

Salt, another commodity traded extensively between Liverpool and Ireland, was subject to excise duty at source but was carried free of duty coastwise and overseas with drawbacks available for salt used in the fishing industry; bounties could be claimed on prescribed exports. The bounty claims were the subject of abuse throughout the eighteenth century when Ireland became a ready dumping ground for bounty-fed exported English salt which was 'run' back to Britain in the absence of any Irish salt duties. Until the Act of Union this was a thorn in the flesh of the English Revenue department.<sup>61</sup>

The papers of the Liverpool merchants examined in Chapter 6 show how well they understood the fiscal requirements and the provisions of the Act relating to imports and exports and used them to their advantage. There is an example of a Liverpool merchant commissioning a man to convey early news of the decisions made on corn prices at the Quarter Sessions in Lancaster so that he could be the

<sup>61</sup> Hughes, E., Studies in Administration and Finance 1558-1825 (Manchester, 1934), 210

<sup>&</sup>lt;sup>60</sup> Barnes, D.G., A History of the English Corn Laws from 1660-1846 (London, 1930), 41

first to advise his suppliers in Ireland of which types of grain the port would be open to over the next quarter.<sup>62</sup>

The revenue that accrued from duties in the coasting trade was negligible when compared to the returns from foreign trade. The coasting trade was generally free from payment of duties on the cargoes carried between British ports. A schedule of duties introduced in April 1803 showed that the only commodities on which duties were payable were coal, culm, cinders, slate and stone, except for 'marble, limestone or ironstone or any stone cut or manufactured.' Grain, as stated above, was carried without duty provided it was carried under the cover of a coast cocquet, this also applied to goods on which export duties would apply and imports on which duty had already been paid. Initially the system of coastal coquets and sufferances had applied to all coastal movements regardless of the commodity being carried. The procedure was lengthy and involved a Customs Coast Waiter inspecting the goods, marking them, and issuing a sufferance which the master submitted to the Customs Collector Outwards for a coast coquet to be issued. This permitted the shipping of the cargo subject to him taking out a bond to land the cargo at the designated port.<sup>64</sup> The procedure caused delays and much frustration in the coastal trade and in 1790 a Bill proposing a simplified procedure was introduced to Parliament, which stated that 'the rules and restrictions cause embarrassment and expense to the coasting trade'. 65 The Bill was enacted in 1792 and introduced a simplified procedure in which coquets were only required if the vessel was carrying goods that were prohibited to be exported or attracted duty on export or were subject to a payment of a bounty on export and on goods on which import duties were payable or had been warehoused on importation and goods for which allowances for losses due to spoilt cargo could be claimed.<sup>66</sup>

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<sup>&</sup>lt;sup>62</sup> Liverpool Record Office, catalogue reference, 387 MD 59, Leyland Letter book, 236, letter to John Foster dated 6 Jan 1787.

<sup>63</sup> New Duties of Customs in Great Britain, B.P.P. Accounts and Papers 1802-3, VII, 279.

<sup>&</sup>lt;sup>64</sup> Hoon, E.E., *The Organisation of the English Customs System, 1696-1786* (Newton Abbot, 1968), 265.

<sup>&</sup>lt;sup>65</sup> The Relief of the Coasting Trade of Great Britain, B.P.P. Bills 1790, Vol. xx, No. 590.

<sup>&</sup>lt;sup>66</sup> 32 Geo III, c. 50, An Act for the Relief of the Coast Trade of Great Britain.

The methodology adopted for the study was to marry records of shipping movements from the shipping lists published in local newspapers and from other sources with records of vessel registrations in order to make connections between the trade in which the vessels were engaged and the business interests of the owners. Samples were taken from the shipping lists aiming for a contemporaneous analysis across the ports, with 1801 selected as the earliest year which provided reasonable cover of the ports with the available records, although the earliest records available for Carlisle were from 1802 and for Preston from 1807. In the absence of shipping lists for Chester the latest available Port Books were used which were for 1774. The data for Liverpool was taken from the extensive analyses of trade undertaken by Pope for his thesis.

The data extracted from the shipping lists and the port books typically covered 10 to 12 weeks of trade taken across different seasons although the seasonal cover was not sufficiently extensive to eliminate the possibility of some trade being missed. In Carlisle the lists were published so infrequently that a two year period was necessary to collect a significant quantity of data. In the period for which the records were extracted the *Cumberland Pacquet* had lists in every issue for Whitehaven and in 70 per cent of the issues for Workington. The percentage of editions in which shipping lists were included in the remaining newspapers were 80 per cent for the *Preston Journal*, 60 per cent for the *Lancaster Gazette* and only 30 per cent for the *Carlisle Journal*. Pope found the Liverpool shipping lists to be more complete. A comparison he made between shipping lists published in *Williamson's Liverpool Advertiser* and *Gore's General Advertiser* in the years 1790-92 and the corresponding entries in the General Register of Shipping showed a 94 per cent level of agreement. 67

The data extracted from the shipping lists was entered into a Microsoft Excel database for each port and analysed to produce the tables presented in Chapter 5.

The principal source for obtaining the characteristics of vessels and their owners were the Registers of Shipping maintained in the individual ports. An Act

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<sup>&</sup>lt;sup>67</sup> Pope, D.J., I, 24.

of 1786 introduced the requirement that all vessels above 15 tons operating under the English flag and benefiting from the provisions of the Navigation Laws had to be registered. The registration details contained significantly more information than had been previously available and present an opportunity to make in depth studies of the vessels and their owners. The information required by the Act included the dimensions of the vessels and their tonnage, which were verified by a Customs Surveyor, the date and place where they were built, the port where they belonged, the name of the master and the names of the owners. Revisions to the details often resulted in re registrations.

Initially the size of the share of each owner was not given; the registers when first introduced did not require this to be shown, although it did appear in some registers. The formal introduction of the <sup>1</sup>/<sub>64</sub> th share system came with a later revision in 1824.<sup>69</sup> The Act, however, required that a group of owners should take and subscribe an oath swearing that they, together with any other owners, were the sole owners of the vessel, had not taken allegiance to any foreign states and the details of the vessel were as described in the certificate of the surveying officer. The owners taking the oath were described as subscribing owners; other owners were described as being non subscribing. The subscribing owners were also required to provide a bond to vouchsafe that the certificate would only be used for the service of the vessel for which it was granted and would be returned if the vessel was lost or broken up. The value of the bond was high in monetary terms. For vessels from 15 to 50 tons it was £100, from 51 to 100 tons £300 and from 101 to 200 tons £500.70 In this study I have made the assumption that because the subscribing owners took on greater commitment at registration they had more interest in the operation of the vessel. In the course of this work analyses are made of the ownership profiles of the subscribing owners with this in mind. This may not, of course, have been the case. Helen Doe has recently researched the responsibilities for the management of vessels in the nineteenth century and found that in many cases the direction of the vessel was a balance between owners, managing owners, agents and masters and this could equally well have applied to

<sup>&</sup>lt;sup>68</sup> 25 Geo III Cap. 60.

<sup>&</sup>lt;sup>69</sup> 4 Geo IV Cap. 41.

<sup>&</sup>lt;sup>70</sup> 25 Geo III Cap. 60, s., x and xv.

the vessels considered in this study but no references to shared responsibilities of this nature were found in the business documents reviewed in Chapter 6.<sup>71</sup>

Vessels were recorded as belonging to the registration ports and to the minor ports within the locality of the principal port. For instance the registers for Lancaster also included vessels belonging to Milnthorpe and Ulverston, those for Whitehaven included vessels belonging to Workington, Maryport and Harrington and those for Preston included vessels belonging to Poulton. Unfortunately registration records for Chester are not available until after 1836 and we have to thank Robin Craig for showing a method of re-constructing the register from the registration details of the vessels which were recorded when they visited the port of Liverpool where a separate register was maintained for visiting vessels for the period 1788-1818. Craig records that he reconstructed the records for twenty vessels registered in the period 1786-88 but unfortunately they were not published and I was only able to re construct the records for ten vessels from the notes which he kindly provided.<sup>72</sup>

It was a requirement of the Act that the vessels were recorded as belonging to the port from which they normally traded; although the trading records examined in the course of the study suggest that there are doubts as to whether or not this was always observed.<sup>73</sup>

For the purposes of this study data was taken from the registers of shipping in the period 1786-95 with a target of approximately 40 vessels for each port, although Carlisle, Minthorpe and Poulton registered less than this number in the ten year period. The Chester sample was limited to the ten vessels that could be identified in the register of vessels visiting Liverpool and for Liverpool use was again made of the data collected by Pope for his thesis. The sample size was constrained by the scope of the study and limited the time period over which data could be collected for each port.

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<sup>&</sup>lt;sup>71</sup> Doe, H.R., 'Who is in Charge? The Role of the Managing Owner and the Master in the Nineteenth Century', 5th International Congress of Maritime History, 22<sup>nd</sup>-27<sup>th</sup> June 2008, Greenwich Maritime Institute, University of Greenwich, UK.

<sup>&</sup>lt;sup>72</sup> Craig, R., Shipping and Shipbuilding, 39-68.

<sup>&</sup>lt;sup>73</sup> 25 Geo III Cap. 60, s. v.

In Whitehaven the 40 vessels only represented 12 per cent of the total registered in 1786, the first year of registration. This was the least representative, the samples for the other ports captured a minimum of two years' registrations, although the sample of Lancaster vessels was extended to 67 to meet this target. Despite the limited sample sizes significant patterns emerged in the ownership characteristics, even within the Whitehaven registrations.

The collection and entry of data from the shipping registers into Excel databases for each port was a major undertaking but permitted the characterisation of the ports by the types of vessel registered and the size and characteristics of the ownership groups. The resulting analyses produced the extensive library of charts of ownership characteristics presented in Appendix 2 and the tables in Appendix 1. The tables and charts are used as the basis for the ownership study element of the thesis in Chapters 3 and 4 and contain information which could be used as the basis for more detailed study of the individual ports.

The business activities and networks are researched from surviving business records but unfortunately, as for elsewhere in the country, the survival rate in the North West has been low. A number of important records, however, have survived and are studied in groups within the same chronological period to give the possibility of being able to identify changes in practices over time. The sources cover the period 1750-1820 although the extraction from the final source was only to 1808 for compatibility with the study period. The period is segregated into three sub divisions, 1750-70, 1771-90 and 1791-1808. The records for the first period are all associated with the trade in Wigan coal emanating from the River Douglas in South West Lancashire and include those of James Winstanley & Co., the records of Henry Tindall, a Lancaster merchant who had an interest in the Ribble coal trade and the records of the river flat *Success*.

The records for the period 1770-90 include the letters of Thomas Langton of Langton Birley & Co. who were manufacturers of sailcloth, canvas and twine in Kirkham, the records of the Liverpool merchants, Thomas Leyland and David Tuohy who both traded with Ireland as part of an extensive overseas trading portfolio and distributed and collected goods within the North West region in association with their overseas trade.

In the final period there are the records of John Brockbank, a Lancaster shipbuilder who in addition to shipbuilding owned and operated vessels and had many other business interests and finally the accounts of the Preston sloop, *Active* which is a particularly valuable source because of the extended chronological span of the records, 1796-1820, although they were only utilised up to 1808. The most important information contained in the records is the details of the voyages undertaken and the cargoes carried which are analysed and included in Chapter 5. Information on prices and profitability of the operation are considered alongside others in Chapter 6.<sup>74</sup>

In summary, the principal aim of the study is to examine the activities in the much-neglected North West coasting trade and trade with Ireland in the late eighteenth century. The study also examines the role of those who were involved in the trade and in vessel ownership and the business practices they employed. Reasons are sought for the differences that occurred in ownership profiles in the individual ports to advance the work done by previous researchers on the ports of the region. The thesis will conclude with an assessment of the extent that the maritime trade in the Irish Sea constituted an integrated maritime economy.

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The records of Henry Tindall are held in the archive of the Maritime Museum in Lancaster. The accounts of the *Success* and those of James Winstanley are held in the Lancashire Record Office. The respective catalogue references are PR 2851/5/5 and DDCa/1/47-8. The letters of Thomas Langton are also held in the Lancashire Record Office, catalogue reference, DDX 190/21-67, The Leyland papers and the Tuohy papers are held in the Liverpool Record Office, catalogue references, 387 MD 59 and 380 TUO. The day books of John Brockbank and a book of contracts and specifications are held in the reference section of Lancaster Public Library. The account book for the *Active* is in the personal collection of Mr D Kirby and a transcription was kindly provided by Mr Peter Shakeshaft.

# CHAPTER 2 - THE CONTEXT OF THE MARITIME ECONOMY IN THE NORTH WEST REGION

The chapter examines the economic structure in the North West of England in the period and particularly how the region survived when the country was at war and great demands were put on people and financial resources.

The review in Chapter 1 shows that the region had a mix of economic activity with the major industrial centre being in the hinterland of Liverpool and around Manchester and its satellite towns with other more isolated pockets being distributed throughout the region. The mineral extraction industries, apart from the coal and salt in southwest Lancashire and Cheshire, were in the north of the region and in Furness they were well scattered geographically. The areas producing agricultural surpluses were well distributed throughout the region but those in the north were remote from the centres of population. The availability of supplies suggests that the region was well prepared for self-sufficiency, with many of the basic commodities required to sustain growth being within its boundaries, provided an effective means of transportation was available.

Population profiles are a good indicator of the levels of economic activity and how they changed. Stobart in his economic study of an area from Cheshire to the Ribble for the period 1664 to 1775 noted that Manchester and Liverpool experienced the greatest population increases followed by the industrialising towns in the outlying districts of Manchester. In contrast Chester, Nantwich and Macclesfield in Cheshire saw only modest increases. Work by Wrigley confirmed Stobart's findings and provided estimates of population growth in the period 1750-1801. The estimate for Liverpool indicated an increase from 22,000 to 83,000 and for Manchester an increase from 18,000 to 89,000, which in percentage terms equated to 277 and 394 per cent respectively. Chester, in contrast, only showed a

<sup>&</sup>lt;sup>1</sup> Stobart, J., The First Industrial Region, North West England c.1700-60 (Manchester, 2004), 50-1.

30 per cent increase from 10,000 to 13,000.<sup>2</sup> These rates far exceeded the national growth rate which Wrigley and Schofield estimated as being 50 per cent over the same period.<sup>3</sup>

Population growth in other centres of industrialisation was of a similar order. In the same period Leeds, which was a centre for the West Riding textile industry, showed an increase of 231 per cent, Sheffield the capital of the industrial region of South Yorkshire increased by 283 per cent and Birmingham, the centre of the Midlands metal industries, increased by 208 per cent. In contrast Bristol only increased by 20 per cent and Norwich and Exeter remained the same. In London, which was the major influence on the national average with a population in 1801 of 959,000, the rate of increase was only 39 per cent.<sup>4</sup>

The growth was not consistent throughout the North West region. Dean and Cole in their review of British economic growth examined comparative growth in the constituent counties of the regions including those in the North West.<sup>5</sup> Table 2.1 shows the results for rates of natural increase and rates of migration for the North West counties from 1791-1800 and Table 2.2 shows the population taken from census returns in 1801.

<sup>&</sup>lt;sup>2</sup> Wrigley, E. A., 'Urban growth and agricultural change: England and the Continent in the early-modern period', in Borsay, P., (ed.), *The Eighteenth Century Town, 1688-1820: A Reader in English Urban History*, (London:1990), 42.

<sup>&</sup>lt;sup>3</sup> Data taken from Wrigley, E.A. and Schofield, R.S., *The Population History of England 1541-1871* (London ,1989), 208-9.

<sup>&</sup>lt;sup>4</sup> Wrigley, E. A., 42.

<sup>&</sup>lt;sup>5</sup> Deane, P. and Cole, W.A., *British Economic Growth, 1688-1959* (Cambridge, 1969), 103 and 115.

Table 2.1 - Percentage rates of natural increase and migration in the North West 1781-1800

County	Rate of Natural Increase	Rate of Migration
Cheshire	9.8	-0.2
Cumberland	10.8	-4.2
Lancashire	13.4	11.6
Westmorland	12.4	-7

Source: Deane, P., and Cole, W.A., *British Economic Growth*, 1688-1959 (Cambridge, 1969), Table 26, 115.

Table 2.2 - Populations in the North West Counties in 1801

County	Population
Cheshire	197,871
Cumberland	120,972
Lancashire	694,202
Westmorland	42,945

Source: Deane, P., and Cole, W.A., Table 24, 103.

The tables show that Lancashire had the largest population in 1801 and the highest rate of migration into the region in the period 1781-1800. The reason advanced by Dean and Cole for the major influx into Lancashire after 1780 is that the rise of Lancashire industrially stimulated the growth of population in the surrounding counties and part of that population increase was then siphoned off into Lancashire itself. As a whole the increase of the population in the North West was found to have been attributable to natural increase and not from migration from outside the region. The average rate of natural increase for the North West was 12.8 per cent and the rate of migration of 0.8 per cent compared with equivalent figures of 2.7 and 9.6 per cent for London.

Population statistics for other towns in Lancashire can be found in local works of regional history and include an estimated increase in Preston from 5,500 in 1760 to 11,887 in 1801, resulting principally from an influx to support the introduction of the cotton trade into the town.<sup>6</sup> Lancaster had a similar increase in the second half of the eighteenth century and had a recorded population of 9030 in the 1801 census report. The generic population growth was again supplemented by

<sup>&</sup>lt;sup>6</sup> Hewitson, A., *History of Preston* (Preston, 1883), 44.

an influx from the surrounding area; in this case from the South Lakeland area and Furness from where many of the Lancaster merchants originated.<sup>7</sup>

The population of Furness was more widely spread geographically because of the distribution of the centres of the mineral extraction and processing throughout the region. A total of 17,887 was reported for Furness in the 1801 census of which only 2,937 were residents of Ulverston. The 1801 census returns for other towns in the region showed populations of 6,891 in Kendal, 8,741 in Whitehaven, 5,716 in Workington, and 10,221 in Carlisle.

The demographic pattern reflects the concentration of activity in Liverpool, Manchester and the satellite towns which was achieved to some extent at the expense of the surrounding rural areas. Other significant centres of population also existed, however, retained by the established mineral extraction and agricultural industries and by local industrialisation, some of which was stimulated by the overseas trade. The activities of each of the sub regions are reviewed detail in geographic order from north to south.

#### North Cumberland

The principal activity in the region was agricultural production on the fertile land to the south and east of the Solway. Carlisle was the principal town and prior to the Act of Union in 1707 was the Customs post for land-based traffic between Scotland and England. The industrial base in the town was built on a textile tradition, which initially consisted of handloom weaving of coarse linen cloths, known as Osnaburghs, and subsequently developed into the mechanised production of fine linen and cotton cloth. Calico printing was introduced to the town in 1761, initially using cloth supplied from Lancashire, but later from looms installed locally to save the expense incurred in transportation. The cotton industry eventually expanded from weaving to include carding, roving, and spinning of the cotton. In 1794 the four printers in the town were said to employ about a thousand

<sup>9</sup> Williams, L. A., Road Transport in Cumbria in the Nineteenth Century (London, 1975), 163.

<sup>&</sup>lt;sup>7</sup> Dalziel, N., 'Trade and Transition:1690-1815' in White, A., (ed.), *A History of Lancaster 1193-1993* (Keele, 1993), 126.

<sup>&</sup>lt;sup>8</sup> Marshall, J.D., Furness and the Industrial Revolution (Barrow-in-Furness, 1958), 235.

people and one of the cotton spinners, Messrs Wood and Co., were said to employ two hundred. There are also references to three breweries and a soap works operating in the town. Other activities included coal which was mined in the North Pennines and carted to landing places on the south shore of the Solway from where it was shipped to Dumfries. Shipbuilding was also established at Sandsfield and Bowness on the south bank of the Solway. An analysis in Chapter 4 of the places of build of vessels registered in Carlisle in the period 1786-95 shows that seven of the twenty five vessels registered were built locally.

Although it was the nominated Customs port for the region the town of Carlisle was above the navigable reaches of the River Eden and the shipping interfaces were further downstream. A location known as Raven Banke was the first legal quay appointed by Customs in 1681 for the loading and unloading of goods. Shifting of the channels in the estuary eventually made Raven Banke inaccessible and in 1769 following representations from the merchants in the town Bowness, Sandsfield and Rockliffe were appointed as additional legal quays on the south of the Solway. Hutchinson in 1794 listed importations as deals, tar, staves and rum &c. and exportations as grain, potatoes, oak bark, oat meal, flour, timber, lead, freestone, herrings, alabaster, British barrel staves &c. 13

Access to the ports on the south of the Solway was inhibited by the shallow waters of the estuary and could only accommodate vessels up to 60 tons. This limitation was eventually overcome by the construction of a canal from Carlisle to Fishers Cross further down the estuary which took the name Port Carlisle and replaced Sandsfield and the other appointed ports. <sup>14</sup> The canal was  $11^{1}/_{4}$  miles long and was opened for business in 1823 although it also suffered from restrictions from shifting sands and was eventually replaced by Silloth and further development of the port of Maryport when the early railways were established. <sup>15</sup>

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<sup>&</sup>lt;sup>10</sup> Hutchinson, W., The History of the County of Cumberland, ii (1794, reprint Ilkley, 1974), 664.

Broos, G., 'The Price of Coal', C.I.H.S. Newsletter 1995.

<sup>&</sup>lt;sup>12</sup> Jarvis, R.C., 'The Appointment of Ports in Cumberland, Westmorland and Lancashire North of the Sands', *C.W.A.A.S.*, N.S., xlvii, 157-160.

<sup>&</sup>lt;sup>13</sup> Hutchinson, W., ii, 681.

<sup>&</sup>lt;sup>14</sup> Mc Intire, W.T., 'The Old Port of Sandsfield,' C.W.A.A.S., N.S., xliii, 76.

<sup>&</sup>lt;sup>15</sup> Rigg, A.N., Cumbria, Slavery and the Textile Industrial Revolution (Kirkby Stephen, 1994), 95.

In addition to the available shipping interfaces Carlisle had turnpike road connections to the south through Shap and Kendal, a road to the east to Newcastle, and a road to the south east through Appleby and Brough to the textile areas of West Yorkshire. <sup>16</sup> The records of a Carlisle carrier show that a comprehensive network existed for wagon trade including a regular service to London. A notice issued by Messrs Hanley in 1790 advertised that 'Expeditious Waggons would run in ten days from Carlisle to London and the same in return by way of York every week' with forwarding arrangements to other towns in Cumberland. <sup>17</sup>

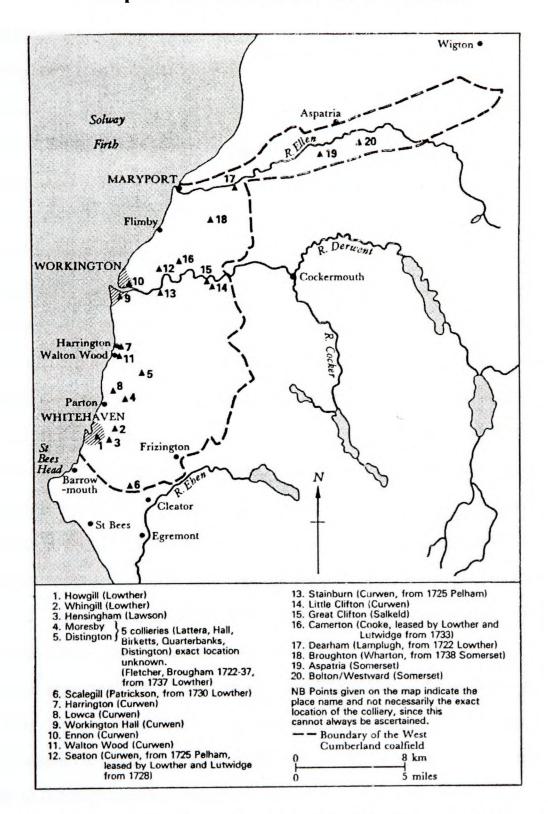
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<sup>&</sup>lt;sup>16</sup> Hindle B.P., Roads and Trackways of the Lake District (Ashbourne, 1984), 142.

<sup>&</sup>lt;sup>17</sup> Williams, L. A., 104.

## West Cumberland

The population analysis showed that Whitehaven and Workington were the principal centres of population in the region and developed as a result of their close proximity to the coal mining activities in the region. Map 6 shows the layout of the West Cumberland coalfield during the seventeenth and eighteenth centuries.



Map 6 - The West Cumberland Coalfield

Source: Beckett, J.V., Coal and Tobacco, The Lowthers and the Economic Development of West Cumberland, 1660-1760 (Cambridge, 1981), 42. Note: the names in brackets are those of the owners

In the period of the study coal and iron shipments were the main activity of the ports with the trade in coal to Dublin being the principal element. Whitehaven, initially, was the leading port for shipments to Ireland followed by Workington. Maryport and Harrington were two smaller settlements with shipping interests which saw rapid development throughout the eighteenth century and by 1790 they jointly owned 229 vessels compared to 216 in Whitehaven and shipped 92,931 compared to 84,011 chaldrons of coal. 18 Whitehaven had previously had substantial trade with Maryland and Virginia in tobacco dating back to the seventeenth century which later expanded to include timber, rice and naval stores. The tobacco trade gave rise to secondary trade in its re-shipment to Ireland and Europe which realised return cargoes, some of which made up the return cargoes to Virginia together with locally manufactured textiles, haberdashery and leather goods. The tobacco trade in Whitehaven however, fell into serious decline when the pattern of trade changed resulting in the trade being lost to Glasgow during the 1750s. 19 The trade initially had relied on the sale of exported goods to finance the purchase of the tobacco but in the 1740s it became impossible to get cash payments for the goods quickly enough and the masters were obliged to have recourse to bills of exchange for the purchase of the return cargo. This resulted in unpaid debts accumulating and the nature of the trade changed to few goods being shipped out and the tobacco paid for with bills of exchange drawn on London. The change to payment with bills placed Whitehaven at a disadvantage. There was not a bank in the town and it was difficult to raise money at short notice and at a reasonable premium. Insurance rates also rose during the period of the Austrian War of Succession, (1740-48), and the increase in insurance and an increase in shipping rates further added to the difficulties. The more lax customs system in Scotland was also a considerable factor in Glasgow's favour.<sup>20</sup>

Local consumption of coal was minimal and the welfare of the mining industry was dependent on marketing activities which were actively pursued by the mine owners. A number of industries using coal as a fuel were established in the region in the eighteenth century including glass making, copperas production

<sup>&</sup>lt;sup>18</sup> Eaglesham, A., 'The Growth and Influence of the West Cumberland Shipping Industry 1660-1800', unpublished PhD thesis, Lancaster University, 1977, 40-3.

<sup>&</sup>lt;sup>19</sup> Eaglesham, A., 60 and Beckett, J.V., Coal and Tobacco, the Lowthers and the Economic Development of West Cumberland, 1660-1760 (Cambridge, 1981), 8.

<sup>&</sup>lt;sup>20</sup> Hughes, E., North Country Life in the eighteenth century, ii, Cumberland and Westmorland 1700-1830, (London, 1965), 32-8.

and iron works at Whitehaven and Maryport but many did not survive and local industry generally remained on a small scale during the period. The reasons advanced for the failure to establish an industrial base at this time were the remoteness of the region, the limited availability of manpower and the lack of industrial investment, particularly by the Lowther family in Whitehaven who continually looked for investment from outside the area.

In contrast to the lack of industry to utilise the coal there was investment in the means of carrying the coal as shipbuilding and ship repairing flourished in the West Cumberland ports. This activity was accompanied by many of the ancillary skills and trades such as rope making, iron working and block making, many of which were equally useful to the coal mining industry.<sup>21</sup> Hutchinson states that there were six ship builder's yards in Whitehaven often with a total of ten or twelve vessels on the stocks at any one time.<sup>22</sup> The manufacture of sail cloth was a late addition to the trades when in 1786 Messrs Hornby, Bell and Birley, from Kirkham in the Fylde area of Lancashire, established a factory in Scotch Street in the town in premises which had previously been used for processing tobacco. A factory was built later at Corkickle, a district of Whitehaven, and buildings at Low Mill, near Egremont were improved and enlarged, to further expand the business. Hutchinson reports that 'some hundreds of people are constantly employed in the different departments of this manufactory'. 23 Flax dressing and sailcloth weaving also existed in Workington and Maryport as supporting activities to the shipbuilding.<sup>24</sup>

The output from the West Cumberland shipyards increased in the eighteenth century, rising from 101 ships in the 1760s to 205 ships in the 1790s, the increase stimulated by the need to replace losses in the American War of Independence and the loss of competition from the American yards when the colonies became independent. Eaglesham reports that in 1790 Whitehaven built

<sup>&</sup>lt;sup>21</sup> Beckett, J.V., 119-25.

<sup>&</sup>lt;sup>22</sup> Hutchinson, W., ii, 83.

<sup>&</sup>lt;sup>23</sup> Hutchinson, W., ii, 85.

<sup>&</sup>lt;sup>24</sup> Robinson, M, 'The linen industry in North Lancashire and Cumbria, 1660-1830', in Roberts, E., (ed.), A History of Linen in the North West (Lancaster, 1998), 55.

the third largest tonnage of shipping in the northern ports after Newcastle and Liverpool.<sup>25</sup>

Sea transportation was the only realistic means of carrying bulk goods out of West Cumberland to other markets on the mainland. Sea access was good. The ports had sheltered berthing facilities which had been developed by the owners of the coal interests, amongst others.

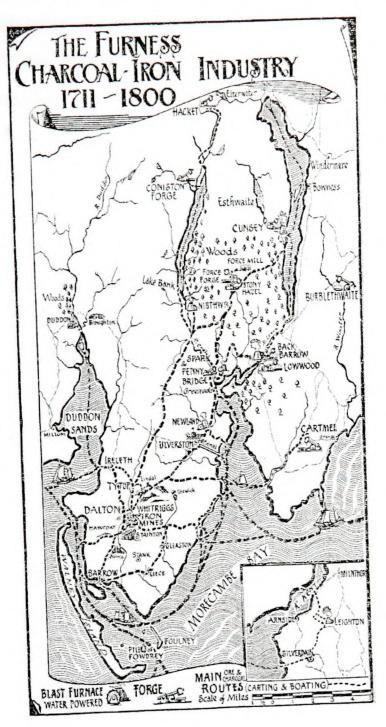
The coastal strip had turnpike roads which were the earliest built in the region to improve the access for cart traffic carrying coal to the harbour from the mines. In terms of roads out of the region the road to Carlisle was one of the few options available. The roads through the mountainous region to the east were only suitable for pack horses at this time.

# North Lancashire - Furness

The Furness region had a similar topography to Cumberland with a hilly hinterland, although it also had an arable coastal plain in the south of the region. The principal minerals mined in Furness were iron ore and slate; there was no coal in the Furness region, a characteristic which we will see later gave rise to trade in coal to the region from Preston and Liverpool. Large quantities of iron ore and slate were shipped out of the region and an iron industry based on charcoal smelting was also established. The installations associated with the charcoal iron industry in Furness are shown in Map 7.

<sup>&</sup>lt;sup>25</sup> Eaglesham, A., 161.

Map 7 - The Furness Charcoal Iron Industry 1711-1800



Source: Marshall, J.D., Furness and the Industrial Revolution (Barrow-in-Furness, 1958), xix.

There was great demand outside the region for the Furness haematite ore which was valued for its high productivity in smelting and the quality of product it produced both on its own account and when blended with other ores. The ore was shipped to iron works in Cheshire and Staffordshire, through Liverpool and the Cheshire waterway system, from the late seventeenth century. <sup>26</sup> In 1766 an advocate for the building of the Trent and Mersey canal quoted the improvements it would make to the transportation of the Furness ore as one of the supporting

<sup>&</sup>lt;sup>26</sup> Marshall, J.D., 32-3.

cases.<sup>27</sup> There are also references to trade in the early eighteenth century between the Backbarrow Iron Company of Furness and the Severn ports promoted by the Quaker connections between William Rawlinson one of the founders of the company and Quaker merchants in Bristol and the first Abraham Darby of Coalbrookdale.<sup>28</sup> The charcoal smelting industry, however, suffered a sharp decline as coke smelting processes became established elsewhere. The peak appears to have been around 1750. Three furnaces were closed in the period 1775-85 but the demand for the ore continued.<sup>29</sup>

Alfred Fell's definitive work on the early iron industry in Furness published in 1908 has provided the basis for a detailed review of the industry and the people involved, many of whom, as we will see in Chapter 3, were investors in shipping.<sup>30</sup> There were initially four iron companies, located at Backbarrow, Newland, Lowwood, and Cunsey. The Cunsey Company was the first company to be established in the region when a group of investors including representatives from the Cheshire iron industry combined to establish the business in 1718 on the western shore of Windermere. The investors were Edward Hall of Cranage and Thomas Cotton of Doddlepool in Cheshire who joined with William Rea of Monmouth, Edward Kendall of Stourbridge and Ralph Kent of Kinderton in Cheshire. The company was also known as Edward Hall and Company.<sup>31</sup> The lease at Cunsey expired in 1750 but the company had built a furnace at Duddon in 1736 and continued to operate it under the various names of Hall Kendall and Company, Jonathan Latham and Company and Kendall Latham and Company until 1799 when the name of the company became Joseph and Richard Latham. Edward Hall died in 1750. His executors were his second son, Richard Edward Hall, a Manchester surgeon, his nephew William Bridge and William Latham. At the time when the company was operating as Jonathan Kendall and Company a furnace was built at Goatfield near Inverary which together with the Duddon furnace later came into the possession of the Lathams of Broughton. Henry

<sup>&</sup>lt;sup>27</sup> Awty, B.G., 'Charcoal Ironmasters of Cheshire and Lancashire, 1600-1785', T.H.S.L.C, 109, 77.

<sup>&</sup>lt;sup>28</sup> Marshall, J.D., 21.

<sup>&</sup>lt;sup>29</sup> Marshall, J.D., 34.

<sup>&</sup>lt;sup>30</sup> Fell, A., The Early Iron Industry of Furness and District (Ulverston, 1908).

<sup>&</sup>lt;sup>31</sup> Fell, A., 265.

Kendall was a member of the company and was a prominent citizen in Ulverston until his death in 1787.

The Cunsey Company was followed by the Backbarrow Company which in 1731 came into the ownership of William Rawlinson of Graythwaite and John Machell of Backbarrow, who were two of the original four investors in the company. Rawlinson and Machell were the sole proprietors holding equal shares until 1749 when John Machell bought his partner's interest and divided it amongst the owners of the works at Penny Bridge after it was amalgamated with the Backbarrow company. After the amalgamation the company was managed by Myles Postlethwaite who continued as a managing partner until 1781. The company, however, lacked enterprise and in 1818 the assets were acquired by the Newland Company.

The first furnace at Newland was built by Richard Ford in 1747 together with associates which included his son, William Ford of Grizedale, Michael Knott of Rydal and James Backhouse of Finsthwaite. 32 The company was variously known from its inception as Richard Ford and Company, William Ford and Company, George Knott and Company, Knott Ainslie and Company, Harrison Ainslie and Company and finally as the Newland Company. Michael Knott died in 1772 and his son George acquired the business and ran it with Mathew Harrison until his death in 1784 when Mathew Harrison was given the sole management of the company with George's son, another Michael, maintaining the family interest.<sup>33</sup> Michael Knott retired from the concern in 1812 when Mathew Harrison acquired the Knott family interest. Agnes the younger daughter of William Ford and granddaughter of Richard Ford, one of the founders, married Dr Henry Ainslie a physician who later took an active role in the running of the company.<sup>34</sup> The company also invested in Scotland where it purchased woodland at Bonaw in Argylshire and a furnace was built in the region at Lorn in the following year. The search for woodland to provide charcoal was an ongoing activity for the iron companies who imposed severe demands on the woodlands in Furness and the Lake District in order to maintain adequate local supplies. The Chadwick family

<sup>&</sup>lt;sup>32</sup> Fell, A., 272.

<sup>&</sup>lt;sup>33</sup> Fell, A., 274.

<sup>&</sup>lt;sup>34</sup> Fell, A., 275.

who operated a forge at Burgh, near Chorley in Lancashire, held a sixteenth share in the Newland Company and also had an interest in the Lorn furnace. The furnaces in both locations could have been a source of pig iron for their forge.<sup>35</sup>

The Lowwood Company was established in 1747 and two years later the original partners sold their interests to John and Thomas Sunderland. Thomas died in 1774 and John in 1782, leaving his son Thomas of Lowwood and later Ulverston in possession of the furnace which in 1784 was sold to the Newland and Backbarrow companies.<sup>36</sup>

A similar definitive history does not exist for the slate industry and the work of John Marshall on the general industrial development of the region is the principal source available. This work informs us that slate mining was also an important industry in the region which thrived until about 1794 when it suffered a setback through the imposition of a tax on slates carried coastwise.<sup>37</sup> Eames' work on the ships and seamen of Anglesey records that a similar setback was seen in the slate industry of North Wales at this time which he attributes to the outbreak of war with France as London trade was adversely impacted by dramatic increase in the freight charges on the cargos.<sup>38</sup> The recession continued through to 1801 with high levels of unemployment in the industry but it had evidently recovered by 1807 when a report on coastal imports and exports through Ulverston showed outgoing consignments of 11,202 tons of iron ore, 11,372 tons of slate and 682 tons of pig and bar iron.<sup>39</sup> The main centres for slate mining were situated in upper Furness around Coniston and in Kirkby Ireleth in the west of the region. The blue and green slates found in Furness were of high quality and were suitable for a variety of roofing and other purposes and therefore together with Welsh slate were much in demand in the growing industrial areas further south. Kirkby was on the west coast near to the Duddon estuary for direct sea transportation although large quantities were also carried by road and shipped from Ulverston. The slate from Coniston was carried by boat down Lake Coniston and then by road through the

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<sup>35</sup> Awty, B.G., 104-5.

<sup>&</sup>lt;sup>36</sup> Fell, A., 311-2.

<sup>&</sup>lt;sup>37</sup> Marshall, J.D., 45.

<sup>38</sup> Eames, A., Ships and Seamen of Anglesey, 1558-1918 (Llangefni, 1981), 186-94.

<sup>&</sup>lt;sup>39</sup> Dickson, R.W., General View of the Agriculture of Lancashire (London, 1815), 639.

Crake valley to the Leven estuary where it was shipped from both Greenodd and Ulverston.<sup>40</sup>

Copper mining had existed at Coniston and Keswick from the sixteenth and seventeenth centuries but there was little activity by the eighteenth century. A minor piece of activity occurred in the mid eighteenth century when the Macclesfield Copper Company leased a mine in Coniston but found difficulty with drainage; a total of 904 tons is reported to have been mined in the period 1758-67. There were other ventures by investors from outside the region in the eighteenth century, but again without any significant result and in 1772 the industry was reported as being in a state of decline.<sup>41</sup>

Later in the eighteenth century cotton spinning was established at factories in Backbarrow and Cark in Cartmel and a gunpowder works was in operation at Lowwood by 1798. The wood coppicing industry of South Lakeland also provided products shipped to customers outside of the region including baskets, brooms and barrel staves.

Again shipbuilding was a feature of the local activity with references to its existence at several locations round the Furness coastline. Entries in the Lancaster shipping register for vessels belonging to Ulverston in the period 1786-95, show that of the 55 vessels registered in the period, 28 were built in the Furness region at locations which included Carter House, Salt Coats, Hammerside Hill, Penny Bridge and Ulverston.

The early harbour for Furness and the first appointed Customs port was Piel of Foudray which was a safe harbour in the west of the region but in the period of the study Ulverston was the principal shipping interface point. A canal was built to the town from the Leven estuary in 1796 although entry became difficult when the course of the River Leven moved away from the entrance to the lock gates. Other interfaces for sea trade included Penny Bridge and Greenodd on the River Crake, a tributary of the Leven, and Kirkby Pool on the Duddon estuary in the west of the region, which was a local loading point for slate from the Kirkby mines. Other locations round the coastline were used close to local communities

<sup>&</sup>lt;sup>40</sup> Marshall, J.D., 42-5.

<sup>&</sup>lt;sup>41</sup> Marshall, J.D., 47-8.

where the vessels were beached and cargoes were simply discharged over the side into carts at low tide. Ulverston became a Customs port alongside Piel after 1765 when entries started to appear for both ports. <sup>42</sup> Barrow did not emerge as a port until the late eighteenth century when the Newland Company built a quay there and started to ship haematite in 1782. Barrow later became the major port in the region.

The region was only served by one turnpike road, built in 1753, which ran from Kirkby Ireleth in the west to Kendal, through Ulverston, Greenodd and Newby Bridge. Although the section between Kirkby Ireleth and Ulverston carried slate for loading on to the coastal vessels it is unlikely that the road was used to transport bulk materials in and out of the region and was more likely to have been used for the textiles and other lighter goods. Kendal was an important hub in the national road network positioned as it was on the main north to south route between Carlisle and Lancaster with a connection to the east through Kirkby Lonsdale and Ingleton to the woollen districts in the West Riding of Yorkshire. There was also a route across Morecambe Bay to Lancaster which carried mail and passengers but was unsuitable for heavy goods.

#### South Westmorland

Industrial activities in South Westmorland were mainly centred on Kendal and its outer townships, although there was also activity in the parishes and townships to the south west of the town along the River Kent and down to Milnthorpe in the parish of Haverthwaite. The production of woollen cloths was the traditional activity of the region and was accompanied by supporting industries such as dyeing and the manufacture of mechanical equipment such as carding machines. Other industries included the tanning and currying of leather, rope and twine manufacture, the manufacture of sacking and coarse cloth, comb making, secondary iron industries, marble working, drysalting and snuff production. The area of South Lakeland produced baskets, brushes, barrel hoops and barrel staves and also produced charcoal for the iron industry and for use in gunpowder manufacture. A gunpowder works was located in Sedgwick on the River Kent, in

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<sup>&</sup>lt;sup>42</sup> Marshall, J.D., 85.

the parish of Heversham; the parish was also a centre for flax processing and papermaking. Supplies of materials from outside the region including from overseas were essential to support many of the activities. Examples included ammonium nitrate and sulphur for gunpowder manufacture, hides for the tanning industry, dye woods for the drysalting industry, iron bar for the secondary iron industry and flax and hemp for sacking and twine manufacture.

Milnthorpe on the River Bela, a tributary of the River Kent, was used as the principal landing place for the region until c.1800 when the building of a road bridge across the mouth of the river prevented access. The name Milnthorpe, or Milthrop as it was earlier known, continued to be used in shipping lists although after 1800 the vessels were beached at a number of locations along the southern bank of the Kent and the goods taken to and from the sides of the vessels on carts. 44 One of the highest points reached on the Kent was opposite an inn called Dixies although this was only possible on high spring tides. Nevertheless a branch was made from the main north to south turnpike road to connect the landing place with the main road network. More commonly the vessels reached Sandside, near the present Ship Inn. There were times when the main channel of the river moved to the opposite bank which necessitated the vessels being beached nearer to the mouth of the river, at Arnside, opposite the Fighting Cocks Inn. Goods were carted away to their final destinations, mainly in South Westmorland and Kendal in particular, but also to destinations in South Lakeland.

There are records of sea trade being conducted through Milnthorpe as far back as the sixteenth century and in the eighteenth century it is reported by John Somervell as being the only sea port in the county and having trading connections with Liverpool and Scotland which demonstrates the importance of sea trade to the region.<sup>45</sup>

Kendal was a hub on the turnpike road system with connections to the north and south and across the Pennines to Yorkshire and was also served by a canal from 1797 which initially terminated at Tewitfield, some 15 miles south of

<sup>&</sup>lt;sup>43</sup> Parson W. and White W., A History, Directory and Gazetteer of Cumberland and Westmorland, (Leeds, 1829).

<sup>&</sup>lt;sup>44</sup> Bingham, R.K., The Chronicles of Milnthorpe (Milnthorpe, 1987), 39.

<sup>&</sup>lt;sup>45</sup> Curwen J F., *The History of Heversham with Milnthorpe* (Kendal, 1930), 74.and Somervell J., *Water Power Mills of Westmorland* (Kendal, 1930), 106.

the town, and was completed through to the town in 1819. The canal connected the region with Lancaster and Preston and later, from 1804, to the Wigan coalfield when the northern section of the canal was connected to a southern section through a tramway at Preston. There was no direct sea interface with the canal until a branch was built from Glasson Dock, the wet dock that served the Port of Lancaster, although a shipping interface was made with the canal at Hest Bank on Morecambe Bay in 1820 where the shoreline was within a mile of the canal. Prior to this the sea interface to the canal was through the quays in Lancaster itself, although transhipment was not easy because the canal crossed the river on an aqueduct which was at a significant elevation above sea level.

# North Lancashire – Lancaster

Lancaster developed as a town in the period leading up to 1800 when it acquired economic prosperity based on the development of overseas trade with the colonies in the West Indies and with Europe and the Baltic. 46 Following 1800 there was a general migration of the overseas trade to Liverpool together with a large section of the merchant community.<sup>47</sup>

Schofield examined the characteristics of the overseas and coastal trade in the port and produced tabulations, from the Port Commission records, of the tonnages of shipping paying dues in the port in both trades from 1761 to 1810. The tabulations were of decade averages and a graphical representation of the tabulations is given in Figure 2.1.

<sup>46</sup> Dalziel, N., 117.

<sup>&</sup>lt;sup>47</sup> Schofield, M.M., Part 2, 12.

14000 12000 10000 8000 Coastal Tonnage Tons Overseas Tonnage 6000 4000 2000 0 1791-1800 1761-70 1801-10 1771-80 1781-90

Figure 2.1 - Lancaster Entries 1760-1810 - Overseas and Coastal Tonnages

Source: Schofield, M.M., Outlines of an Economic History of Lancaster, Part 2, 12.

Unlike the national profile and the profile for Liverpool shown later, the overseas trade does not show a reaction to the American War of Independence. This could be accounted for by the Trans Atlantic trade in the port being principally with the West Indies and therefore not directly affected by the war with America. The coasting trade, however, did show a reaction which could have reflected a setback in the distribution trade arising from the recession in the trade to and from Liverpool shown later in Figure 2.2. The overseas trade is seen to be in decline after 1800 but in contrast the coastal trade continued to increase although not as steeply as previously which could have reflected the reduction in imports available for re-distribution. Unfortunately the data in decade averages is not sensitive enough to identify the impact of short-term economic fluctuations shown by the Liverpool records.

The first significant industrial activity in Lancaster was associated with shipbuilding which was established by George Brockbank in the 1730s and was continued through to the nineteenth century by his son John. Production peaked in the decade of the 1780s when a total of 45 vessels were built, a figure believed to

have been substantially influenced by the need for replacement of vessels lost in the American War of Independence. The demand was so great that another shipbuilder, James Smith, established a yard on the opposite side of the river. Brockbanks made a wide range of vessels from those built for the Lancaster merchants in the West Indies trade to canal boats and sloops and flats for the coasting trade. Original papers of the Brockbank shipyard have survived and are used as the basis for a case study of his activities in Chapter 6. The shipyards also supported ancillary trades including anchorsmiths, blockmakers, and rope and sail makers.

Industries developed from the overseas trade of the town. Imports of cheap tropical hardwoods, particularly mahogany, were used in the manufacture of fashionable furniture and it was reported that in 1794 there were at least eleven cabinet making workshops in the town the most renowned of which was that of Robert and Richard Gillow. Other industries included candle and soap making based on the tallow imports from the Baltic, dye making using tropical woods, sugar refining and tobacco processing and snuff manufacture. A number of textile spinning and later weaving mills also developed around the sources of water power in the Lune valley and the Bowland fells, and in 1801 it is reported that sixteen mills were working processing cotton, silk, wool, and linen in the area. Flax was imported for linen production and from 1785 the Hornbys of Kirkham in the Fylde area of Lancashire, imported flax and hemp at Lancaster for their mill at Bentham from where spun yarn was sent to their factory at Kirkham.

Iron production, in which the Quaker family of Rawlinson had an important involvement, had been established in the area since the 1750s when the Halton Iron Company established a furnace by the Lune to supply forges in the area which included one at Caton, which operated until 1796, and two others at Halton. In 1755 the Halton Iron Company took over the Leighton charcoal furnace from the Backbarrow Iron Company of Furness which sent pig iron by sea for refining at Caton. The Backbarrow Company also stored and sold iron in Lancaster. The Halton Company had a warehouse on the quay by 1807 which it is

<sup>&</sup>lt;sup>48</sup> Dalziel, N., 124.

<sup>&</sup>lt;sup>49</sup> Kennerly, E., *The Brockbanks of Lancaster-The Story of an Eighteenth Century Shipbuilding Firm*, (Lancaster, 1981), 11, 14.

believed was probably associated with the shipment of their firegrates, ranges and tools. Paper mills were established in the area at Oakenclough in 1775 and Beetham, which is close to Milnthorpe on the border with South Westmorland, before 1788 and snuff was produced at Ashton with Stodday, downstream from Lancaster.<sup>50</sup>

St George's Quay was built in Lancaster following the establishment of the Harbour Commission in 1750. Earlier, vessels had been beached at the mouth of the River Lune at a landing place known as Sunderland Point and the goods were brought upstream on lighters, a practice which was continued after the building of the quay when the larger fully laden vessels found difficulty in navigating up to the town. The difficulties in navigation eventually led to the building of a dock nearer to the mouth of the river and in 1787 a wet dock was constructed at Glasson Dock, from where goods were either carted to the town or again brought up the river on lighters. In 1826 a branch was constructed from the dock to the Lancaster canal and goods were transhipped to canal barges mainly for trade with Preston and Kendal.

Other transportation options were open to Lancaster. Lancaster was situated on the main north to south turnpike route which provided good access to Preston and points further south and to Kendal and Carlisle to the north. The Lancaster canal, which was opened to the town from Preston in 1797, provided another connection to the north and south and was used to bring coal to the town from the Wigan coalfields with a trade in limestone returning. The canal in addition to carrying goods also carried passengers on packet boats between Lancaster and Preston.

## West Lancashire - Preston, Kirkham and Poulton

The principal town in west Lancashire, Preston, was developing as a centre for the mechanised cotton industry in the late eighteenth century, having previously been associated with the linen industry.<sup>51</sup> The adjacent countryside to the north, the Fylde area, was a major agricultural region which had been

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<sup>&</sup>lt;sup>50</sup> Dalziel, N., 124-7.

<sup>51</sup> Stobart, J., The First Industrial Region, North-West England c1700-609 (Manchester, 2004), 70.

reclaimed from marshland. The agricultural work was often combined with flax spinning and flax processing developed into a factory based industry around Kirkham when the Hornby, Langton and Birley families established factories there to produce coarse linen, sailcloth and twine. F.J. Singleton researched the history of both companies and the following review is based on his work.<sup>52</sup>

The Hornby business was started by the Hankinson family through Joseph Hankinson who in 1736 was described as a flax dresser and also joined with merchants in Kirkham and Poulton in a company to trade with Barbados. The partnership had plans to build a warehouse at Skippool, close to Poulton on the River Wyre, in connection with the trade but Hankinson unfortunately died before the warehouse was completed in 1744. Hankinson's mercantile interests were left to his son Thomas who continued to trade from the Wyre with his brother-in-law Hugh Hornby. Records show that in 1752 they were part owners of a vessel, the Hankinson, trading with St Kitts, Riga and St Petersburg; in the case of Riga and St Petersburg to obtain supplies of flax; their continued activity in the flax business being evidenced by an apprentice indenture document for 1757. Thomas Hankinson died intestate around 1775 and his property went to his sister Margaret, the wife of Hugh Hornby, who with his sons carried on the business which became known as 'Hornby, Hugh and Sons, Merchants and Sailcloth Manufacturers'. On the death of Hugh Hornby in 1781 he was succeeded by his eldest son Joseph who formed a partnership with his brothers Thomas and William which led to the formation of J. T. & W. Hornby in 1793. Although their principal property ownership and manufacturing premises were in Kirkham the Hornby brothers expanded their manufacturing base to Whitehaven and Egremont in Cumberland and to Bentham in the upper reaches of the Lune valley above Lancaster. In Whitehaven they formed a partnership with Joseph Bell of Whitehaven and Thomas Birley of Kirkham, a member of the rival family, around 1786, to form a company known as Hornby, Bell and Birley and established manufacturing in the town. In addition to premises in Whitehaven they also converted the ruins of an ironworks at Low Mill near Egremont into a large sailcloth factory as reported earlier. In 1800 the Low Mill factory was described as having 1,500 spindles and

<sup>&</sup>lt;sup>52</sup> Singleton, F.J., 'The Flax Merchants of Kirkham', T.H.S.L.C, 126, 73-108.

using 8 tons of flax a week.<sup>53</sup> The first investment in Bentham dates from 1785 when a mill, probably built by them, was recorded as spinning yarn for the sailcloth factories in Kirkham using flax imported from the Baltic into Lancaster and stored in their warehouse on the quay. They later built premises for weavers some of whom came from Kirkham.<sup>54</sup> These outposts of the Hornby empire explain the coastal traffic in flax and yarn between Poulton (Wyre) and Lancaster and Whitehaven.

Langton Birley and Co was initially Langton, Shepherd and Co., having been formed by William Shepherd and John Langton around 1746. Shepherd and Langton were part owners of the snow *Betty and Martha* which was engaged in the colonial trade although an interest in the Baltic trade was indicated by a petition by the Wyre merchants for new legal quays to be established at Skippool and Wardleys because the existing quays were unsuitable for vessels from the Baltic, a request which was granted in 1745. It is not clear when their sailcloth business started, but soon after the formation of the partnership they are recorded as buying land and property in Kirkham to extend their sailcloth business. On the death of John Langton in 1762, his son Thomas and his partner William Shepherd took in John Birley, who was the brother in law of William Shepherd, and the company became known as Shepherd, Langton and Birley. John Birley also had a background of being a Wyre trader and in the 1740s had been a part owner of several vessels along with Langton, Shepherd and Co. On his death in 1767 his younger sons John and William continued the family interest in the flax business together with Thomas Langton and his two sons John and William which led to the firm becoming Langton Birley and Co. in 1780; William Shepherd by that time having ceased to take an active interest in the company. The eldest son, Thomas Birley, was involved with the Hornbys in Whitehaven.

Thomas Langton's death in 1794, two years after that of William Birley, left his two sons, together with John Birley, as the surviving members of the partnership. The partnership from this point started to break up and by 1804 John Birley, who had trained in Jamaica under the direction of the former Lancaster

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<sup>53</sup> Singleton, F.J., 98.

<sup>&</sup>lt;sup>54</sup> Singleton, F.J., 99.

merchant, Charles Inman, started to operate on his own account and by 1804 had bought out the Langton interests and the company then traded as John Birley and Sons.<sup>55</sup>

Both families were extensive traders and shippers who had a dislike of middle men and arranged for the purchase and shipping of their own flax supplies from the Baltic.<sup>56</sup> They also invested in shipping and in Chapter 3 are seen to have held ownerships in vessels registered as belonging to Whitehaven, Ulverston, Lancaster, Preston and Poulton. The commercial activities of the Kirkham families in the mid eighteenth century are studied in detail in Chapter 6 from surviving papers of Thomas Langton.

The flax processing industry also became established in the adjacent town of Freckleton where John Mayor, was one of those involved. Mayor had connections with the Hornbys. Thomas and William Hornby were named as executors of Mayor's will, although it is not clear that there was a business relationship.<sup>57</sup>

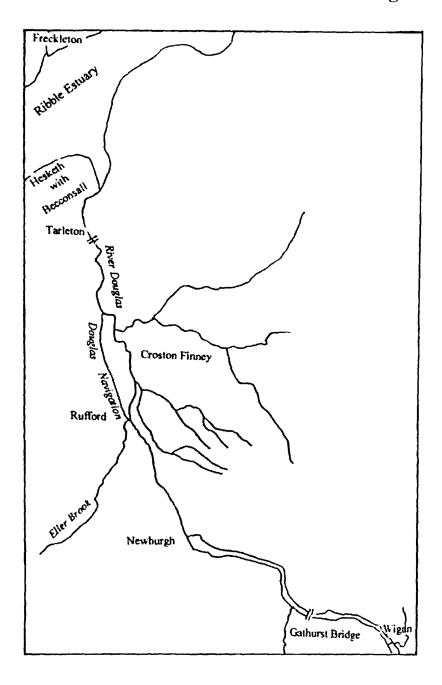
The area to the south of the Ribble was also one of intensive farming activity centred round the towns of Burscough and Ormskirk. This area was bordered on the east by the River Douglas which ran north to meet the Ribble near to its mouth at Hesketh Bank. An upgrade of the Douglas for navigation was undertaken and completed in 1742 to provide a waterway for the transportation of coal from the Wigan coalfield to the Ribble. This provided an outlet for the coal to Preston and the ports of north Lancashire and Ireland through a distribution network operated by coastal vessels from Tarleton and Freckleton. In the period before the Leeds and Liverpool canal was built coal was transported by coastal vessels down to Liverpool. Tarleton and Freckleton became centres for the distribution of coal which was carried on manually hauled flats from the coal fields. A map of the River Douglas and the surrounding area is included as Map 8

<sup>57</sup> Shakeshaft, P., *The History of Freckleton* (Lancaster, 2003), 180.

<sup>&</sup>lt;sup>55</sup> Singleton, F.J., 85-6.

<sup>&</sup>lt;sup>56</sup> Wilkinson, J., 'The Linen Merchants of Kirkham in the Eighteenth and Nineteenth Centuries' in Roberts, E., (ed.), *A History of Linen in the North West* (Lancaster, 1998) 70-1.

**Map 8 - The Environs of the River Douglas** 



Source: Firn, D., 'An Eighteenth Century Shipping Enterprise based at Tarleton', Lancashire Local Historian, 16 (2003), 17.

The coal trade on the Douglas experienced serious competition from the Lancaster canal from 1804, when a tramway was built across the Ribble at Preston to link the southern section from Walton Summit to the Wigan coalfield with the northern section from Preston to Lancaster and Tewitfield. Records exist of the Leeds and Liverpool Canal Company, which by then owned the Douglas waterway and warehousing at Freckleton, having to discount their coal to remain competitive. The operations of companies in the coal business on the Douglas and in the coastal trade to North Lancashire and Ireland in the 1750s and 60s are examined in Chapter 6. The investments in shipping of John Mayor, who in

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<sup>&</sup>lt;sup>58</sup> Shakeshaft, P., 205.

addition to being a flax processor was in partnership with James Goodshaw as a coal merchant, are reviewed in Chapter 3.<sup>59</sup>

The shipping registers for Preston for the years 1786-95 show that shipbuilding was also a major activity in the region. Vessels were built at Preston, Freckleton, Hoole and Hesketh Bank and at locations along the River Douglas including Tarleton, Newburgh and Appley Bridge. Of the 59 vessels registered in Preston in the 10 year period, 36 were built locally.

The town of Preston was difficult to access through shoals and sandbanks in the river and the principal shipping interfaces were initially further down river at Freckleton and Hesketh Bank and a dock was created at Lytham where the larger vessels unloaded, often transhipping their cargoes to lighters or smaller vessels for the goods to be taken upriver to Preston. A series of efforts to improve the navigation were unsuccessful and although an Act to improve the navigation was passed in 1806 it was the 1820s before work commenced and 1892 before the course of the river was deepened and a wet dock was built in the town. <sup>60</sup>

Shipping interfaces to serve the Fylde were also established on the River Wyre at Skippool and Wardleys and were extensively used by the merchants in Poulton and Kirkham. The landing places were about five miles from Poulton which was the designated Customs port for the area before Preston. Early Port Book records show that trade with the colonies was conducted from the port and the Langton records make reference to Wardleys as being a landing place for flax supplies from the Baltic.

The Fylde and South West Lancashire were poorly served by turnpike roads with the principal area of construction being to the east of a line from Preston to Warrington. Preston itself was on the main north to south turnpike.

# South West Lancashire - Liverpool

Liverpool developed into a major international trading centre in the eighteenth century as the dock estate and the merchant community expanded. The trade to Africa and the West Indies was an important element in the overseas trade and there was substantial trade with Europe and the Far East but we shall see later

<sup>&</sup>lt;sup>59</sup> Shakeshaft, P., 206.

<sup>&</sup>lt;sup>60</sup> Barron, J.W., A History of the Ribble Navigation (Preston, 1938), 51.

that the trade with Ireland in the period 1788-93 was responsible for the highest number of shipping entries into the port, much of which centred on the foodstuffs and animal products with re exports, particularly sugar and tea, being shipped in return.

Francis Hyde included a tabulation of the annual tonnages of shipping entering Liverpool, during the eighteenth and nineteenth centuries, in an appendix to his work on Liverpool and Merseyside.<sup>61</sup> An extract for the period 1775 to 1793, represented graphically in Figure 2.2, illustrates the growth that occurred, except for the period of the American War of Independence. The dips in 1788 and 1793 were caused by short term financial crises.

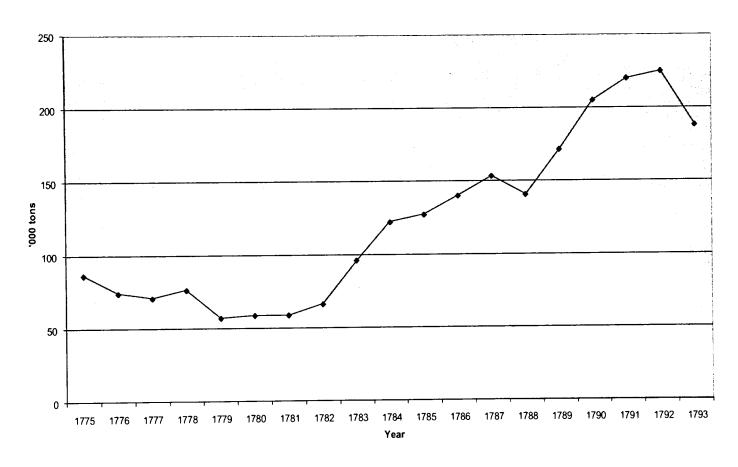


Figure 2.2 - Tonnages of Shipping Entering Liverpool 1775-93

Source: Hyde, F.E., Liverpool and the Mersey: an Economic History of a Port 1700-1970 (Newton Abbot, 1971), Appendix. 1.

In respect of outgoing trade, coal from the South West Lancashire coalfield around St Helens and salt from the Cheshire salt fields were the cornerstones of early outgoing trade. A triangular waterborne trade was established in coal and salt with the building of the Sankey canal and improvements to the navigation of the

<sup>&</sup>lt;sup>61</sup> Hyde, F.E., Liverpool and the Mersey (Newton Abbot, 1971), 235-237.

River Weaver in which coal from the St Helen's coalfields was carried to the Cheshire salt fields as fuel for salt refining. Both rock and refined salt were shipped to coastal and overseas destinations from Liverpool. There was an increasing investment in the salt industry by Liverpool entrepreneurs who became dissatisfied with the irregularity of supplies of salt reaching them for export. In 1784 most of the Cheshire salt works' proprietors lived in Cheshire but by 1804 two thirds lived in Liverpool. Around the turn of the century they also began to acquire coal mines to reduce their dependence on the coal masters and in turn the St Helens coal masters replied by acquiring salt works.

Coal was also shipped to Liverpool from the Wigan coalfield, first by sea from the Ribble through the improvements to the River Douglas navigation, which provided a shipping route from the head of the river to Liverpool, and later along the Leeds and Liverpool canal. By 1799 the total output of coal was estimated at 680,000 tons per annum of which 250,000 tons were carried on the Leeds and Liverpool canal. 62

Manufacturing industries were also well established by 1750 in the Merseyside region with copper refining, glass making, shipbuilding, soap boiling, sugar baking and pottery production in operation alongside the more traditional agricultural and craft activities. <sup>63</sup> Many of these industries were coal burning and were established close to the St Helens coalfield. A copper smelting and refining works was established at Ravenhead in 1779 to process copper ore from the Parys mine on Anglesey and a copper refinery, which had been established at Bank Quay Warrington in 1719 by Thomas Patten, eventually moved to St Helens to be closer to the coal supply. The refinery was acquired by Thomas Williams, the owner of the works at Ravenhead in 1785. Glass production was also established close to the coal field with the formation of the British Cast Plate Glass Company in Ravenhead in 1776 and the principal salt refining company in Liverpool, Blackburnes, moved to Garston further up river in the 1790s to be nearer the coal supplies.

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<sup>63</sup> Marriner, S., 47.

<sup>&</sup>lt;sup>62</sup> Marriner, S., The Economic and Social Development of Merseyside (London, 1982), 52.

A pottery industry was in existence by the eighteenth century relying heavily on supplies of clay brought in mainly from Cornwall and the South Coast. By 1760 Liverpool had some twenty factories producing earthenware, delftware, porcelain and salt glaze for which the port gained a high reputation.

Merseyside also played a part in the production of iron goods in the late eighteenth century although it was not one of the major centres of the industry. A steam powered rolling and slitting mill was in operation in Liverpool in the 1790s together with several ironworks including the Phoenix foundry, which was an outpost of Coalbrookdale, and was run by George Perry. Coalbrookdale is also known to have exported iron pots and kettles through Liverpool and a warehouse was built in the port in 1758. After Perry's death the foundry was first taken over by Joseph Rathbone and then in 1793 by William Fawcett who was engaged in the lucrative business of producing cannon for ships. Other iron works included the St Helen's foundry established in the 1790s, which amongst other production made iron pots for the Africa trade and Warrington was a centre for the production of spades and shovels and products that called for finer skills such as files and other small tools and locks and hinges. There was also a precision instrument trade which realised thriving exports in watches, watch cases, springs and other parts that went to London and overseas.

The later development of the alkali chemical industry in South West
Lancashire resulted from the need for alkali by the soap and glass industries. Prior
to its manufacture the natural source of alkali was kelp, which was shipped from
Scotland, but supplies became inadequate as the industries expanded. The fat for
the soap production was tallow, an animal by-product, which was imported from
Ireland and elsewhere.

Shipbuilding was also an important activity in Liverpool with an average annual tonnage of 3,728 tons built in the period 1787-1800 and a total of 16 shipbuilders employing 479 people were reported as being active in the port in 1805.<sup>64</sup>

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<sup>&</sup>lt;sup>64</sup> Neal, F., 'Liverpool Shipping in the Early Nineteenth Century,' in Harris, J.R., (ed.), *Liverpool and Merseyside* (London, 1969), 171, Stewart-Brown, R., *Liverpool Ships in the Eighteenth Century* (Liverpool, 1932).

The construction of wet dock facilities, which started early in the eighteenth century, was essential to the development of Liverpool as a port. The River Mersey was not a hospitable place for berthing vessels with difficult access and a large tidal range. The first dock was opened in 1715 and the dock estate had expanded to some 28 acres by 1796 and included five wet docks, five graving docks, three dry docks and the Duke's Dock which had been built by the Duke of Bridgewater to tranship goods destined for the inland waterways. The dock building programme was described by Marriner as being a complex procedure influenced by an ever increasing demand for berthing space combined with changes in requirements as the role of the port developed to meet the needs of the industrial growth. Increasing quantities of foodstuffs and of raw materials including cotton, iron and copper ore, kelp and timber were coming into the port and in addition rapidly increasing volumes of manufactured goods were arriving from the industrial hinterland and from Yorkshire and the Midlands for shipment within Britain and overseas.<sup>65</sup> The development of the internal waterways systems was key to Liverpool being able to function as an entrepot port.

The town had one of the earliest turnpike roads in the North West in the Prescot turnpike, which was built in 1725 to improve access to coal supplies, but it was the internal waterways that were the mainstay of the transportation of goods to and from Manchester and its satellite towns and into Cheshire and Staffordshire with connections to London and the East Coast.

The waterway routes to Manchester were of paramount importance to the early commercial success of the South East Lancashire region of which Manchester was the commercial capital. The Mersey and Irwell navigation, which entered the Mersey at Warrington, had established the first connection in 1736. The second connection was the Bridgewater canal which was opened in 1767. A port was established at Runcorn on the Mersey from which the canal could be accessed through a series of locks. The Duke of Bridgewater had further warehousing at Runcorn and the Bridgewater canal also had a junction with the Trent and Mersey canal at Preston Brook. The Trent and Mersey canal, completed in 1777, was an important to link to the pottery industry of Staffordshire pioneered

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<sup>&</sup>lt;sup>65</sup> Marriner, S., 31.

by Josiah Wedgwood. The canal, also known as the Grand Trunk, had added importance because of the links that were made with other canal constructions which opened up waterborne traffic routes to the ports of the East coast, to the Severn Estuary and the Midlands and eventually to London.<sup>66</sup>

## **Cheshire-Chester**

The Customs port of Chester included the quays in the town itself and the creeks on the Dee between Chester and the sea which included Parkgate on the north bank, which became a leading port for passenger traffic to Ireland, and the ports of Bagillt and Mostyn on the south shore that served the industries of North Flintshire which included coal, lead mining and lead smelting. Lead and lead ore were shipped from the Dee to the centres of industry in Britain and to destinations overseas. Chester, previously the Customs port for the North West, had been the leading port for overseas and coastal trade, including trade to Ireland, but lost this position because of the navigation limitations of the Dee and the development of Liverpool. It has been reported that between 1758 and 1777 the exports of lead both overseas and coastwise from Chester and its subordinate creeks amounted to nearly 80,000 tons and those of lead ore to more than 12,000.67 There was also a flourishing brick and pottery industry in North Flintshire which used the extensive clay deposits around Buckley which in its heyday, in 1815, was said to have supported fourteen factories and the shipping lists examined in Chapter 5 show bricks and fire bricks being shipped to centres of population and industry within Britain.

A significant level of trade was conducted through the quay at Chester itself. The Chester Guide of 1782 makes reference to large warehouses on the quay belonging to the merchants of the town with cheese (esteemed the best in England), coals, lead and cannon being exported from the port and vessels of 300 to 400 tons being built. The cannon were cast at the iron works at Bersham near Wrexham which was owned by John and William Wilkinson whose father, Isaac,

<sup>&</sup>lt;sup>66</sup> Langton, J., 'Liverpool and its Hinterland in the Late Eighteenth Century' in Anderson, B.L., and Stoney, P.J.M., (eds.) Commerce Industry and Transport: Studies in Economic Change on Merseyside

<sup>(</sup>Liverpool, 1983), 6, 7.

<sup>&</sup>lt;sup>67</sup> Dodd, A.H., The Industrial Revolution in North Wales (Cardiff, 1933), 171.

had moved from Furness in 1753 to take over the works. John Wilkinson became the driving force in the business and by 1775 he had taken out a patent for boring cannon and the company became established in the supply of munitions during the American War of Independence. The expertise in precision boring extended to more peaceful uses in the manufacture of cylinders for steam engines and James Watt and his partner Mathew Boulton found that Wilkinson's cannon lathe was the 'only proper apparatus' which could produce cylinders and some of the fitting to the level of precision required. The company was also a major manufacture of other products included the manufacture of iron pipes for which it secured a contract to supply the Paris Waterworks Company. <sup>68</sup>

The depth of the channel of the River Dee was an enduring problem in the early eighteenth century and there are many references to vessels discharging their cargoes at Parkgate, on the north shore of the Dee, for final delivery to Chester on barges or lighters. The restriction of the river channel was removed in the 1730s by the construction of a 'new cut' and the Chester Guide of 1782 reported that vessels of 350 tons were able to load and unload. Chester in addition to its sea connection to Liverpool was connected to the Mersey through the building of the Ellesmere canal in 1795. Prior to this low bulk cargoes were ferried across the Mersey and completed their journey on carts.

In order to discover why the economies within the region flourished during the period a period characterised by long periods of war and general economic stringency, we have to examine the overseas trade during the period and the capital and credit structure that prevailed to support investment.

Despite the potential for interruptions to trade resulting from embargoes and losses of vessels at sea the trade statistics show that, apart from the period of the American War of Independence, overseas trade increased and contributed to the country's earnings. Minor setbacks occurred during periods of financial uncertainty, of which the crisis in 1793 was the most notable, but these were only short in duration. In reporting on the overall performance of the economy in the

<sup>&</sup>lt;sup>68</sup> Dodd, A.H., 134 -7.

<sup>&</sup>lt;sup>69</sup> Craig,R., 'Some Aspects of the Trade and Shipping of the River Dee in the Eighteenth Century', *T.H.S.L.C.*, exiv, 103-4.

period Rostow thought it unlikely that the volume of world trade in the long run was greater because of the wars between 1700 and 1815, but the proportionate volume of British trade was undoubtedly greater than it otherwise would have been and stated that 'Britain emerged with a special set of trade relations with India and the Western Hemisphere that were virtually monopolistic in their effect.' The Viscount Hamilton in addressing Parliament in 1808 on the impact of the Napoleonic War on British trade stated that 'Our commerce had flourished, our wealth had increased, our possessions had multiplied. War, the curse of every other nation, had to Great Britain, been a comparative blessing'. <sup>71</sup>

Analysis of the overseas trade showed that manufactured goods were a major component of the exports and provided a stimulus to industrial output which added to that created by the need to manufacture materials of war. Davis examined the export trade in successive decades from 1780 to 1850. For the period 1780-1810 he found that the value of exports to the West Indies and America increased, as did the re-export trade to Northern and North West Europe and to Ireland. The re-export trade rose as a result of the restrictions imposed by the British Navigation Laws on exports from the British colonies to countries other than Britain, which for a period included Ireland. The industries of the North West were one of the principal beneficiaries of the trade. Many of the exported manufactured goods, particularly textiles, manufactured iron goods and refined sugar were produced in the North West and the region was also a supplier of coal and lead which were amongst the leading minerals exported. The imports included the raw materials needed by the industries of the region including cotton and sugar from the West Indies and timber, tallow, flax and hemp from Northern Europe. 72

Daunton examines the capital and credit structure that existed to support the industrial growth in *Progress and Poverty: An Economic and Social History of Britain 1700-1850* (1995).<sup>73</sup> The general contemporary view was that there was no shortage of capital but there was a need to provide effective channels for available

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<sup>&</sup>lt;sup>70</sup> Rostow, W.W., The Process of Economic Growth (London, 1960), 159-60.

<sup>&</sup>lt;sup>71</sup> British Parliamentary Debates, vol. 10, col. 38, 21 Jan 1808.

<sup>&</sup>lt;sup>72</sup> Davis, R., The Industrial Revolution and British Overseas Trade (Leicester, 1979), 94-114...

<sup>&</sup>lt;sup>73</sup> Daunton, M.J., *Progress and Poverty: An Economic and Social History of Britain 1700-1850* (Oxford, 1995).

capital to flow into productive enterprise.<sup>74</sup> The fixed capital requirements of industry were considered to be minimal in the early period of industrialisation and the working capital was of greater importance. The raising of short-term working capital, however, was not necessarily easier than finding long term fixed capital, the problems were simply different. The proportion of fixed to working capital varied according to the credit status of the individual concerns. A firm might be a net debtor, receiving more credit from its suppliers than it gave to its customers or might have felt it needed to 'buy' markets by offering generous terms of credit to its customers. The policy adopted was dependent on an assessment of risks, which could be mitigated by intermediaries or increased by commercial panics and bankruptcies, but however operated was crucial to the success or failure of a business.

There was, however, a view which challenged the opinion that funds were readily available and suggested that a limitation of funds 'crowded out' private investment, although it has also been suggested that this did not impact directly on investment in business enterprises but only affected investment in the infrastructure outside of the factories in the provision of housing and sanitation for the workers. O'Brien states that the tax strategy pursued by the government to raise funds imposed a major share of the burden on the consumption standards of the population and encouraged private capital formation to continue. The share of the national income invested during the war remained roughly constant while private consumption fell sharply from over 83 per cent of national expenditure in 1788-92 to around 72 per cent in 1793-1812. Household incomes were depressed by both heavy taxes and inflation and public borrowing was maintained at high levels without significantly affecting private investment. The share of the private investment are depressed by both significantly affecting private investment.

The continued availability of capital for private investment is evidenced by the Acts that continued to be passed by Parliament for transport infrastructure projects throughout the period including highway, river and dock improvements and the building of canals. In the period 1790-94 over 80 'Navigation Acts' were

<sup>&</sup>lt;sup>74</sup> Daunton, M.J., 236.

<sup>&</sup>lt;sup>75</sup> Daunton, M.J., 236-8.

<sup>&</sup>lt;sup>76</sup> O'Brien, P.K., 'The Impact of the Revolutionary and Napoleonic Wars, 1793-1815, on the Long-Run Growth of the British Economy,' *Fernand Braudel Centre Review*, xii, (1989).

presented with as many as 51 representing authorisation for new projects and the dock expansion continued apace in Liverpool, although there was a lull during the period of the French wars.<sup>77</sup> There was also significant investment by turnpike trusts. Although the period described as 'turnpike mania' was earlier in 1750-72, there was renewed investment activity in the early 1790s following two decades of relative quiescence.<sup>78</sup>

The investments in transportation infrastructure were seen as being key to releasing the growth potential of many of the industries by opening markets to producers and making available cost effective means of obtaining supplies. Those who invested generally operated within a corporate framework; there were some exceptions, for instance the Lowther family who developed the port of Whitehaven to provide a shipping outlet for the output from their coal mines. Mostly, however, the work was undertaken by trusts or improvement commissions which brought together a range of interests, usually merchants who had a direct interest in trade and also local landowners who believed that an improvement in trade would result in increase in the value of land.<sup>79</sup>

The process of making the accumulated wealth of the rich landowners and merchants available for industrial investment was assisted by the merchants themselves who became more concerned with the provision of financial services than with trading in goods. Agents and brokers appeared, towards the end of the eighteenth century, as intermediaries between the manufacturers and their customers. Manufacturers also moved into the traditional role previously undertaken by the merchants and started to take an active role in marketing, driven by the incentive to maintain a high level of output to reduce unit costs as the amount of fixed capital in the business began to increase early in the nineteenth century; a situation which became particularly acute at the end of the Napoleonic wars when they were faced with intensive competition and falling prices. Daunton provides examples of textile producers in the West Riding of Yorkshire absorbing the finishing trades, which had traditionally been managed by the merchants using

<sup>79</sup> Daunton, M.J., 285-7.

<sup>&</sup>lt;sup>77</sup> Duckham, B.F., 'Canals and River Navigations', and Jackson, G., 'The Ports' in Aldcroft, D.H., and Freeman, M.J., (eds.) Transport in the Industrial Revolution (Manchester, 1983), 106 and 200-

<sup>2.
&</sup>lt;sup>78</sup> Albert, W., 'The Turnpike Trusts' in Aldcroft, D.H., and Freeman, M.J., 42.

specialist contractors. The merchants moved their capital into land, government stocks and into the provision of financial services to manufacturers who handled their own sales. The change in role of the manufacturers was not exclusive to the textile industry. Daunton cites the example of Mathew Boulton the steam engine maker and Josiah Wedgewood the pottery manufacturer who both entered into partnership with merchants who travelled Europe looking for custom well before the end of the Napoleonic war. As overseas markets became more dispersed, however, it became more difficult for lesser firms to conduct their own marketing activities and agents came to the fore.80 Agents operated on a commission basis which was less than the profit margin demanded by merchants and therefore the manufacturers were able to capture most of that margin although they often had to wait for payment as the agents were obliged to offer extended credit to the customers. Credit was available to manufacturers from merchants who had formed merchant banks and provided finance for manufacturers who were selling through commission agents but most manufacturers continued to sell part of their output to middle men to reduce risk.

Brokers formed an important link between manufacturers and customers and were also providers of finance. Brokers did not buy and sell on their own account but made their profits from commissions and interest on credit. For instance in the cotton trade in Liverpool they often paid freight charges, import duties and insurance on a cargo of cotton before it was sold and they offered advances to merchants on the security of consignments and cotton spinners were allowed three months to pay for their purchases of raw materials. Brokers became increasingly important figures in London and Liverpool, making a market in a wide range of goods and linking importers of raw materials and colonial goods to industrialists and distributors.<sup>81</sup>

This pattern of marketing and finance has been criticised by historians of the later nineteenth century who feel that it caused problems for British industry because British exports suffered from a reliance upon commission agents which meant that there was little contact between the foreign consumer and the home

<sup>80</sup> Daunton, M.J., 336.

<sup>81</sup> Daunton, M.J., 337.

producer and above all it is claimed that the merchant bankers were more concerned with foreign loans and the finance of overseas trade and neglected the needs of domestic industry for investment. This criticism however was considered to be largely unjustified because commission agents were responsible for manufacturers being able to penetrate overseas markets and the provision of trade credit enabled the manufacturers to use their own capital in development of their businesses.<sup>82</sup>

The subject of financing is not complete without a more detailed consideration of the role played by the banks. The banking function in England was served by two types of bankers, the private London banks in the West End and in the City that concentrated on the needs of landowners for mortgages and left the discounting of Bills of Exchange and the loans to stockbrokers to specialist banks clustered round Lombard Street. In the late eighteenth century the City banks increasingly came to act as the London agents for the second type of bank, the country banks, which were local banks, usually with a single branch formed by local groups with interests in financing. Typically attorneys who collected rents or held trust funds and acted as intermediaries in the mortgage market were often involved as partners in banks as were traders who needed to transfer money from the sale of goods and collectors of government revenue with a need to remit taxes and excise duties to London in the form of bills or drafts.

Other country banks emerged from the ranks of the business communities as industrialists were heavily involved in finance because of the importance of working capital to most industries. Daunton states that this was particularly the case in Lancashire where the bill of exchange was used extensively. Reliance on credit meant that any industrialist was obliged to become a banker of sorts, and the shortage of local means of payment provided an incentive to move into the issue of notes. There are examples, however, in Chapter 6, of transactions being made by cash and by bills or notes with deferred payments of cash constituting a form of credit. 83

<sup>82</sup> Daunton, M.J., 338.

<sup>83</sup> Daunton, M.J., 346-7.

This chapter has provided a background for the examination of trade within the region and has demonstrated that, apart from some minor setbacks, the region prospered and benefitted, particularly as a producer of manufactured goods which sustained exports and assisted the war effort. It will be of interest, therefore, to see to what extent trade within the Irish Sea region contributed to this prosperity.

## CHAPTER 3 - PATTERNS OF SHIPOWNING IN THE NORTH WEST REGION

The chapter examines the characteristics and ownership patterns for vessels in the ports of the North West in the late eighteenth century and seeks to provide reasons for the differences that occurred. The detailed analysis of ownership on which this chapter is based is presented in Chapter 4. To connect the vessels and owners with specific trades the chapter also draws on evidence of commodity flows to be further examined in Chapter 5.

The analyses in this chapter show that the vessel types and their ownership patterns varied from port to port. Work done in the 1960s and 70s identified differences in the sizes of the ownership groups across the British ports including those in the North West region. No further work had been done on the North West to investigate why this occurred although Jarvis and Schofield both stated that the region merited further investigation with the potential benefit of establishing links between shipping investment and the economic welfare of the region. The contribution of the present study is to examine the relationship between vessel ownership, the occupations of the owners and their relationship with the economy of the region.

The levels of investment in shipping in the individual ports of the North West are shown in Tables 3.1 and 3.2. These give the number and tonnage of the vessels registered in each port in the period 1771-95. Table 3.1 is prepared from Customs records for the period up to 1780 when the tonnages were separated into coastal and overseas vessels.<sup>2</sup> Table 3.2 is prepared from information taken directly from shipping registers for the individual ports from 1786 onwards which do not include the intended service of the vessel. The numbers of vessels registered do not necessarily represent the amount of trade in individual ports.

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<sup>&</sup>lt;sup>1</sup> Jarvis, R.C., 'Eighteenth Century London Shipping', in Hollaender, A.E.J., and Kellaway, W., *Studies in London History* (Manchester, 1969), Jones, S., 'A Maritime History of the Port of Whitby, 1700-1914' unpublished PhD thesis, University of London, 1982, Jarvis, R.C., 'Cumberland Shipping in the Eighteenth Century', *C.W.A.A.S.*, New Series, liv, 213-235 and Schofield, M.M., 'The Statutory Registers of British Merchant Ships for North Lancashire in 1786', *T.H.S.L.C.*, 110, 107-125,

<sup>&</sup>lt;sup>2</sup> Prepared from the Musgrave Manuscripts which are held in the British Library as B.M., Add. M.S.S., 11255-6.

Trade was also conducted by vessels belonging to other ports within the region and part of the same regional maritime economy.

Table 3.1 - Tonnages of vessels in the overseas and coastal trade belonging to each port in the North West

	1771		17	75	1780		
	Overseas	Coastal	Overseas	Coastal	Overseas	Coastal	
Carlisle	40	405		375	72	725	
Whitehaven	23720	1395	26328	1695	25698	1240	
Ulverstone		1200		1340		1963	
Lancaster	2487	395	3472	621	3872	495	
Preston	100	795		770		586	
Liverpool	35586	3600	41029	3357	26579	3662	
Chester	1058	590	1349	640	1080	500	

Source: British Library, B.M., Add. M.S.S., 11255.

Table 3.2 - Number of vessels registered in the North West Ports 1786-95

Year	Carlisle	Whitehaven	Ulverston	Lancaster	Preston	Liverpool	Chester	Total
1786	9	317	31	49	24	201	11	642
1787	2	162	8	18	4	262	17	473_
1788	2	65	1	16	2	98	4	188_
1789	2	65	2	7	2	78	3	159_
1790	1	50	3	5	3	135	3	200
1791	3	62	1	10	3	102	3	184
1792	3	68	3	9	4	143	4	234
1793	2	74	1	4	9	100	3	193
1794	1	57	3	10	10	110	4	195
1795	0	55	2	11	4	109	2	183
Total	25	975	55	139	65	1338	54	2651

Source: Shipping registers for the individual ports except for Chester which were taken from The National Archive, BT6/191.

The tables show that Whitehaven and Liverpool were the major centres of investment in shipping in the North West in the period. Table 3.1 indicates that much of this investment, particularly in Whitehaven and Liverpool, was in vessels for the overseas trade, which at this time included trade with Ireland. Of these two Liverpool had the highest proportion of vessels for the coasting trade and we shall see later that this reflected the role of the port as a distribution hub serving the lesser ports. Lancaster also had a major interest in overseas trade vessels while Carlisle, Preston and Ulverston were essentially ports in which ownership, at least in these years, was dedicated to the coastal trade.

The principal vessel types seen in the registers of the North West ports for use in the short voyage coasting trade were flats, sloops and doggers. Brigs and brigantines were more often seen in the overseas trade, including trade with Ireland, and the longer voyage coasting trade. The larger ships and snows were generally used in the overseas trade, although they also occasionally appeared in the long voyage coasting trade.<sup>3</sup> Flats and sloops were similar vessels, single masted and single decked, although there was a version of the flat with a mizzen mast added which was known as a jigger flat. Much has been written about flats including studies by Pope and Stammers which contain extensive references to the sizes, places of build, trading activities and ownership.<sup>4</sup> The average tonnage of sloops was generally between 40 and 50 tons; flats were more typically larger vessels with an average tonnage of between 60 and 70 tons. Nevertheless Pope's analysis of the tonnages of the sloops and flats registered in Liverpool revealed a wide range of tonnages for each type with sloops ranging from 8 to 100 tons and flats from 28 to 101 tons.<sup>5</sup> The dogger was another single decked vessel which occasionally appeared in the trade. This was an East Coast design based on a Dutch fishing vessel with a main and mizzen mast and an average tonnage of between 70 and 80 tons. Brigs and brigantines were two masted vessels with an average tonnage of over 100 tons and a range extending from around 40 tons to 200 tons. The brigantine was a variation of the brig with the foremast square rigged similar to the brig but with the mainmast fore and aft rigged instead of square.<sup>6</sup> Both variants were owned and operated out of the ports of the North West but the notation in the registers does not clearly discriminate between the two so throughout this study the term brigantine has been used as a generic expression to cover both types.

<sup>&</sup>lt;sup>3</sup> The names of vessels in the various trades are shown in the records of payments to the Merchant Seamen's Fund in Lancaster which are held in Lancaster Public Library, Local Studies Section, Collection PT 8822

<sup>&</sup>lt;sup>4</sup> Stammers, M, Mersey Flats and Flatmen, (Liverpool, 1993) and Pope, D.J., 'The Flat', Mariner's Mirror, 60, 1.

<sup>&</sup>lt;sup>5</sup> Pope, D.J., 'Shipping and Trade in the Port of Liverpool 1788-93', unpublished PhD thesis, University of Liverpool 1970, I, Table 53, 446.

<sup>&</sup>lt;sup>6</sup> Kemp, P., (ed.), The Oxford Companion to Ships and the Sea (London, 1979), 109.

The study is based on the registration records for the period 1786-95, except in the case of Liverpool where it utilises the results of analyses previously performed by Pope for the period 1788-93. Registration records outside of this period are also utilised where a match could be found for a vessel identified in the shipping lists to identify the type and ownership of vessels in particular trades.

Tables 1-9 in Appendix 1 show the characteristics of the vessels and the size of the ownership groups for the vessels registered in each port. Inevitably the number of registrations selected for analysis had to be restricted to make the exercise manageable and these do not cover the full ten year period for the larger ports. In the port of Whitehaven the sample is 40 of the total of 317 registered in 1786 and in Lancaster the sample only includes the registrations made in 1786-7. The sample for Whitehaven provided the least cover of the period but nevertheless proved to be sufficient to show variations in the ownership patterns. Milnthorpe and Poulton had only six and four vessels registered respectively in the ten year period. This does not, however, necessarily reflect the level of interest of investors in the locality of the port. We shall see later that the flax merchants of Kirkham, which was local to Poulton, also invested in vessels in other ports. In the case of Chester, due to the unavailability of registers for the port, the number of records is limited to those that could be re-constructed from records of Chester vessels visiting Liverpool and recorded in the Liverpool register of vessels visiting but not belonging to the port.<sup>8</sup>

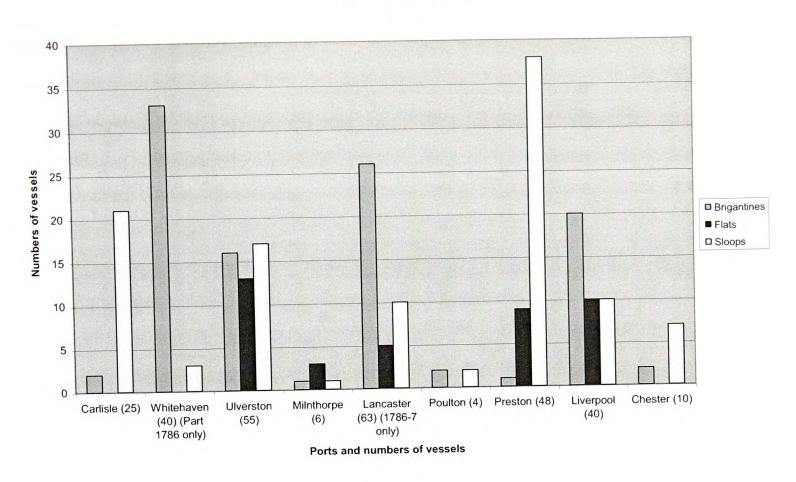
The proportionality of the flats and sloops to the number of brigantines registered in each port give an indication of the type of trade in which they were involved; the short haul coasting trade or the longer voyage coasting trade and trade with Ireland. Figure 3.1 shows the numbers of flats, sloops and brigantines registered in each port and Figure 3.2 the average tonnage for each type. The figures are prepared from the Tables in Appendix 1. Pope's data for 1788-93 was used for Liverpool. A representative sample of 40 vessels was selected for Figure 3.1 to show the proportionality of the flats, sloops and brigantines registered.<sup>9</sup>

<sup>&</sup>lt;sup>7</sup> Pope, D.J., thesis.

<sup>&</sup>lt;sup>8</sup> The register of vessels visiting Liverpool but not belonging to the port in the period 1788-1818 is held in the archive of the Merseyside Maritime Museum.

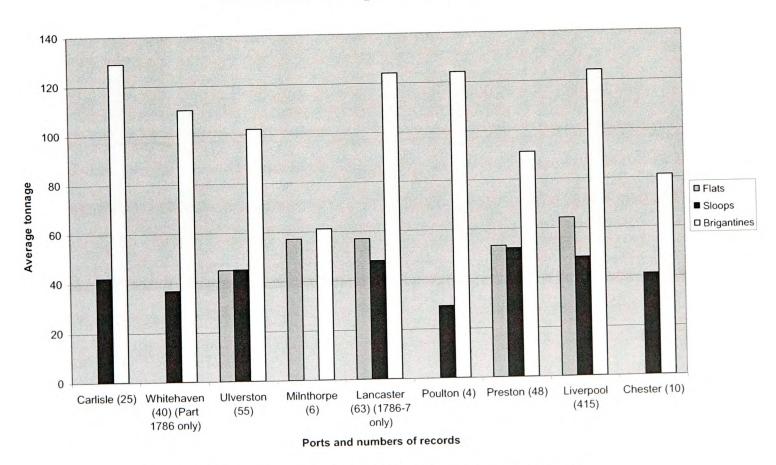
Data taken from Pope, D.J., I, Table 53.

Figure 3.1 - Numbers of flats sloops and brigantines registered in the North West ports 1786-95



The number for Liverpool is a representative sample only to show the relative proportions

Figure 3.2 - Average tonnage of the flats sloops and brigantines registered in the North West ports 1786-95



Liverpool data on tonnage is taken from Pope, D.J., I Table 53.

The charts show that flats and sloops outnumbered brigantines in the smaller ports of Carlisle, Ulverston, Milnthorpe, Preston and Chester and the reverse applied in Whitehaven and Lancaster with a substantial number of brigantines also being owned in Ulverston. Pope's data for Liverpool showed that the total number of flats and sloops together equalled the number of brigantines. Generally the tonnages for each vessel type were the same throughout the region although there was a slight tendency towards increased tonnage in the sloops in the south of the region.

The average sizes of the ownership groups for each of the vessel types are given in Figure 3.3.

Carlisle (25) Whitehaven Ulverston (55) Milnthorpe (6) Lancaster (63) Poulton (4) Preston (48) Liverpool (30) Chester (10) (1786-7 only)

Figure 3.3 - Average numbers of owners of the flats, sloops and brigantines registered in the North West ports 1786-95

The numbers for Liverpool are taken from the first 10 records for each type of vessel included in the 1786 Liverpool Shipping Registers. Pope did not analyse ownership by vessel type.

Ports and numbers of records

The differences in the size of ownership groups were most pronounced for the brigantines. The differences for the flats and sloops were not so great, especially as we will see later, the averages for Ulverston and Milnthorpe were influenced by a small number of vessels with very high ownership numbers. The Poulton figure for brigantines appears out of line with the surrounding ports but

this was because many of the owners came from the Furness region and the ownership characteristic was more typical of that seen for Ulverston vessels.

A feature that emerged from the analysis of the occupations of the owners was the diminishing role played by mariners in vessel ownership as we move south through the region from Carlisle. A chart showing the investment of mariners compared with merchants in the ports is included as Figure 3.4. The percentages for Liverpool are taken from Pope's data for 1788-93 which covered 3643 vessels.

Figure 3.4 - Mariners compared with Merchants as owners of vessels in the North West ports – all ports all vessels

The data for Liverpool is taken from Pope, D.J., Thesis, I, Table 61(b)

Ulverston was the first port where the merchants were the principal ownership group and the trend continued through the remainder of the ports. The difference was greatest in Lancaster and Liverpool, both ports which specialised in overseas trade. This pattern reflects the findings of Davis and Ville that merchants were the principal investors in the major ports. Yet it conflicts with the view that in the smaller ports, dedicated to coastal trade, ownership was generally in the hands of those whose interests and connections were maritime in origin rather than

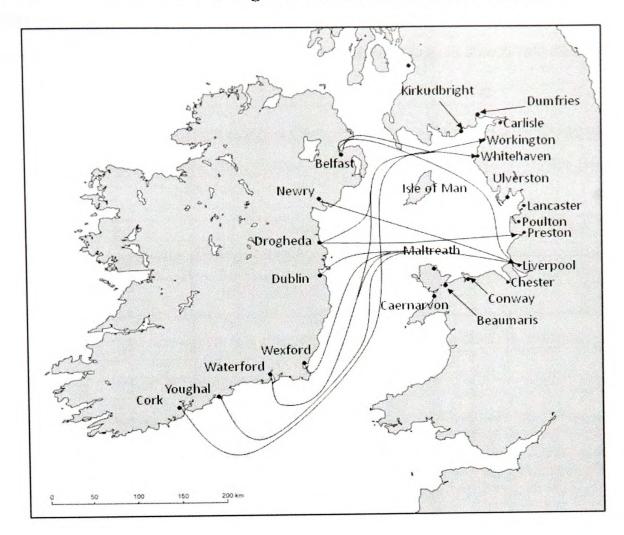
commercial. It is now evident that commercial interests in shipping were more entrenched across the North West than had previously been assumed.

Having considered the evidence on the types of vessels registered in each port, and the involvement of mariners and merchants as owners, we can now turn to an examination of ownership in detail looking for any similarities with patterns found by researchers into other regions. The approach is thematic, looking first at ownership in the principal commodity trades.

Corn was the longest established commodity trade having existed from the thirteenth century. Together with foodstuffs generally the corn trade expanded as the population increased and demand exceeded production capacity in the vicinity of the urban areas. The major centres of production in the North West were the fertile areas to the north and south of the Solway and along the Eden valley towards Appleby in the north of the region, the coastal plains in the south and south west of Furness, the Fylde region in west Lancashire, the south west of Lancashire around Burscough and the Cheshire plain. The ports close to these areas that might have been expected to have been involved in outgoing shipments were Carlisle, Maryport, Ulverston, Poulton, Preston and Chester, although agricultural production in South West Lancashire was close to Liverpool and foodstuffs could have been transported by road.

Liverpool and its hinterland represented a large urban conurbation and was a major consumer of grain and foodstuffs. The analyses of commodity flows in Chapter 5 show that high volumes of grain and foodstuffs were imported into Liverpool from Ireland. This was in addition to the supplies received from other ports in the North West and ports on the east and south coast of England. The ports in the North West found to have been shipping grain and foodstuffs to Liverpool included Dumfries, Carlisle, Ulverston and ports in North Wales. Supplies were also received in Poulton from Carlisle and in Preston from Dumfries and Kirkcudbright. There is also evidence of trade in corn and foodstuffs from Ireland to Whitehaven and Workington carried by colliers returning from Irish ports associated with the corn and provisions trade. Flow diagrams of the corn and foodstuffs trade identified within the region are included as Maps 9 and 10. Map 9 shows the trade from Ireland and Map 10 the trade within the North West coast.

Map 9 - Pattern of trade in grain and foodstuffs from Ireland



Map 10 - Pattern of trade in grain and foodstuffs on the North West Coast

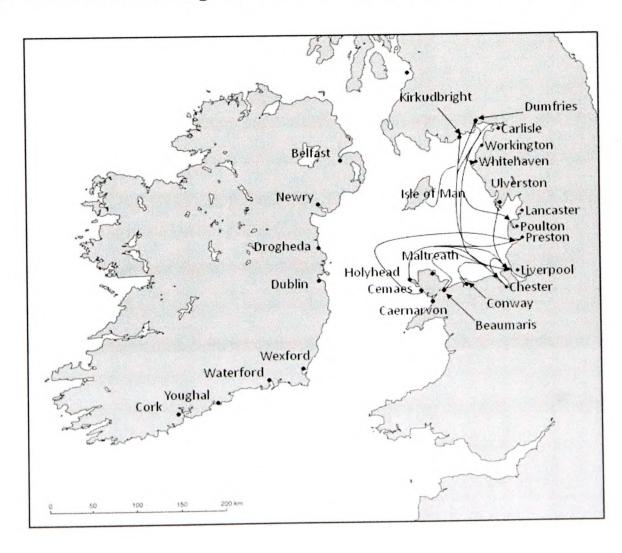


Table 3.3 shows the numbers of farmers and yeomen investing in each port and the types of vessel in which they invested. Unfortunately the data for Liverpool is not available; Pope's work examined ownership in much broader occupational categories.

Table 3.3 - Number of farmers and yeomen investing in the North West ports with vessel types 1786-95

Port	No. Investing	Vessel Type						No. per Vessel
		Sloops	Flats	Doggers	Brigantines	Snows	Unspec.	
Carlisle	30	7			11			3.8
Whitehaven	9				6	11		1.3
Workington	1				11			1.0
Maryport	33				7		2	3.7
Harrington	4				4			1.0
Ulverston	17	4	1	1_1_	2			2.1
Milnthorpe	6	1			1			3.0
Lancaster	2				1			2.0
Poulton	2				11			2.0
Preston	9	5						1.8
Chester	0							0.0

Prepared from samples taken from port registration records.

Farmers and yeomen were investing outside of the ports that principally served the major areas of agricultural production. Farming, both arable and pastoral, was practised to some degree throughout the region, as it was in most of Britain, and it appeared that farmers with spare funds were investing in shipping across the region. The ports in which they made the highest level of investment, expressed as number of investors per vessel, were Carlisle and Maryport which were both close to the agricultural belt around the Solway. It is understandable that those associated with agricultural production would have had an interest in transporting the produce to market and a number of the vessels in which they invested were identified as being in the corn trade. The vessels, however, carried other goods with the corn and generally carried cargo on the return voyage which would have generated income.

One example is the 58 ton sloop *Whale* registered in Carlisle, which was a regular trader between Carlisle and Liverpool, in which five of the ten owners were farmers. The remaining owners included a Liverpool merchant associated

with a firm of corn dealers in the port. <sup>10</sup> The shipping list records examined showed that the vessel had seven clearances to Liverpool of which two were exclusively carrying corn, three were corn and unspecified merchant goods and two merchant goods only. The fact that the vessel was not dedicated to the corn trade suggests that, even if the principal interest was in carrying corn, to some extent it was a separate business venture; the vessel carried corn when there was a need and other cargoes when available to maintain the earnings. There were also earnings to be gained from the return trade from Liverpool in which the vessel usually carried merchant goods.

Whitehaven merchant John Hartley also invested alongside farmers and yeomen in vessels registered in Carlisle and Maryport and there is a suggestion of a connection with the London trade through the involvement of a London merchant in the brigantine *Joshua* which was registered in Whitehaven as belonging to Maryport. Unfortunately the vessel was not included in the sample of shipping lists examined for Carlisle and shipping lists are not available for Maryport. The only recourse to confirm the operation of the *Joshua* in the London trade would be to the London shipping lists for the period.

Hartley also shared ownership in the Carlisle registered brigantine *Curwen* and *Bradills* with farming interests from the Solway region and possible connections to the Irish trade with the inclusion of William Blain, a Waterford merchant, as an owner. <sup>12</sup> Chapter 5 identifies a trading route between Waterford and the ports of West Cumberland but unfortunately no records of the *Curwen and Bradills* were found in the shipping lists for Carlisle, Whitehaven or Workington.

Other examples of merchants being involved with the corn trade are provided by the Carlisle merchants, Musgrave Lewthwaite and Joseph Liddle who with five others, of which only one was a farmer, owned the sloop *Experiment*. This vessel was a regular trader to Liverpool with corn and merchants goods, again returning with merchants goods. Evidence of other farming communities investing is provided by five farmers from Dalton and Broughton in the west of

<sup>&</sup>lt;sup>10</sup> Carlisle Register No., 1/1786.

Whitehaven Register No., 175/1786.

<sup>&</sup>lt;sup>12</sup> Carlisle Register No., 1/1791.

<sup>&</sup>lt;sup>13</sup> Carlisle Register Nos., Experiment 2/1791, Whale 1/1786.

Furness who invested with seventeen others in the brigantine *Thomas*, which was registered as belonging to Maryport.<sup>14</sup>

The farming communities in Furness had a much lower level of investment than those in Carlisle and Maryport. The Furness investors only held a significant ownership share in two Ulverston registered vessels, the sloop *Backbarrow* and the flat *Betty*. <sup>15</sup> Farmers held three of the eight shares in the *Backbarrow* and two of the five shares in the *Betty*. Unfortunately the vessels did not appear in the shipping list sample selected and the trading patterns of the vessels is therefore not known.

Other investors from the agricultural community in the region included farmers and shearmen from the area round Kendal in Westmorland who were investors in a brigantine and a dogger both belonging to Milnthorpe, one of which is identified in the Lancaster shipping lists as being in the wool trade with Greenock. Yeomen from South West Lancashire invested in sloops registered in Preston. Of the total of seven yeomen who invested in Preston vessels, three from Hoyle owned the 40 ton sloop *Friendship*. A yeoman from Burscough shared ownership of the 51 ton sloop *Mary Ann* and the 50 ton sloop *Rebecca* with a Liverpool yeoman, who was also described as a merchant. The 59 ton sloop, *Marys*, was owned by a Brotherton yeoman and a Lancaster shipwright, the vessel having been built in Lancaster. <sup>16</sup>

How does this evidence of agricultural involvement in shipping compare with the situation elsewhere? Examples of ownership in North Wales are provided by Aled Eames in *Ships and Seamen of Anglesey* in which he notes that there was a higher percentage of farmers with shares in vessels in an agricultural community such as Anglesey than in the ports analysed by Craig, Jarvis and Ward-Jackson.<sup>17</sup> The studies by Craig and Jarvis to which he refers, however, did not include the port of Carlisle In the analysis made by Eames of vessels 'with definite Anglesey association' in the Beaumaris register for 1786, farmers held only 5 per cent compared with 19 per cent held by farmers in the vessels registered in Carlisle in

<sup>&</sup>lt;sup>14</sup> Whitehaven Register No., 178/1786.

<sup>&</sup>lt;sup>15</sup> Lancaster Register Nos., Backbarrow, 26/1786, Betty, 47/1786.

<sup>&</sup>lt;sup>16</sup> Preston Register Nos., Rebecca, 15/1786, Friendship, 3/1787, Mary Ann 1/1789, Marys, 4/1793.

Ward-Jackson analysed the registers for Fowey.

the period 1786-95, although the percentage had increased to 20 per cent by 1836. Eames accounted for the low percentage of local ownership in 1786 as being attributable to 'outsiders' consisting of Cornish mining engineers and English engineers and contractors employed in building roads, harbour works and the Menai Bridge being the principal investors immediately after 1786. Presumably before 1786, before these constructions started, the percentage was again much higher although he does not state this.<sup>18</sup>

Eames also looked at the voyage patterns of a number of these locally owned vessels. He reported that in 1770-1 they were carrying copper ore and slate on the outgoing voyages with no mention of grain or foodstuffs, although the chapter in which the reference was made was specific to the copper and slate industries; there is not a chapter dedicated to the agricultural industry of the island and its associated trade. It is difficult to believe that the local vessels were not involved in carrying agricultural produce since there is ample evidence of the trade existing to Chester in the Chester port books for 1784.

Outside of the North West region Tony Barrow examined investments in shipping by the farming communities in the borders region around Berwick but unfortunately did not have the benefit of shipping registers for Berwick until 1824. Nevertheless he was able to establish from other sources that in the late eighteenth century corn was being shipped to London in smacks, mainly belonging to Berwick itself, which were owned by two shipping companies, the Old Company which had been formed in 1764 and the Union Shipping Company formed in 1794; evidence therefore of the existence of shipping companies outside of the major overseas ports well before the end of the eighteenth century. The Old Company was owned by merchants from Berwick and Tweedmouth and Union Shipping by merchants from the Scottish borders towns of Jedburgh, Kelso, Selkirk and elsewhere. The farming communities themselves were not involved at this stage. The companies integrated coastal shipping with an extensive network of distribution by road carrying grain, eggs, potatoes, pork, woolpacks, leather and dairy produce to London and returning with goods from London which were

<sup>&</sup>lt;sup>18</sup> Eames, A., Ships and Seamen of Anglesey, 1558-1918 (Llangefni, 1981), 545-7.

carried overland from Berwick to Edinburgh and Glasgow by the carrier services operated by the two companies on an excellent network of turnpike roads. 19 Corn was therefore just one element in an extensive pattern of trade between London and the principal urban centres in Scotland. The ports in the Borders region, however, collectively were responsible for the shipment of extensive quantities of grain throughout the late eighteenth and early nineteenth centuries with London being the principal recipient. Quantities of 11.045 tons are quoted for the period 1781-86 and 27,840 tons for the period 1819-27.20 The companies eventually concentrated their activities in Edinburgh and broadened their trading interests.<sup>21</sup>

The Berwick smacks used in the trade were originally designed for the fish trade, particularly salmon to Billingsgate market in the second half of the eighteenth century, and of necessity were a particularly fast sailing vessel. The smacks operated by the shipping companies therefore also carried passengers, attracted by the fast passages offered by the vessels.

In summary, shipping in the corn and provisions trade in the North West was owned in part by merchants, in part by farming interests and in part by others, showing that the North West's maritime economy extended well into the heartland of the region. The farmers appeared not to have been investing solely for their own trade, although it could well have been as an insurance to ensure that transportation was available when needed. The vessels made earnings from carrying cargoes outside of the corn and foodstuffs trade. The corn and foodstuffs trade would have peaked around harvest time in the summer and it would have been necessary to seek alternative cargoes for the winter months; the opposite of the vessels in the coal trade which had to seek alternative cargoes in the summer months. No evidence was found of companies owning and operating vessels together with road transportation as seen in the Berwick trade.

Coal was another substantial commodity stream within the region The coal mining districts in the North West were located in the North Pennines around

<sup>&</sup>lt;sup>19</sup> Barrow, T., 'The Shipping Trade of Berwick and the Borders 1730-1830', Journal of Transport History, 3<sup>rd</sup> Series, 21, 1 (2000), 15-6.

<sup>&</sup>lt;sup>20</sup> Barrow, T., 11.

<sup>&</sup>lt;sup>21</sup> Barrow, T., 17-9.

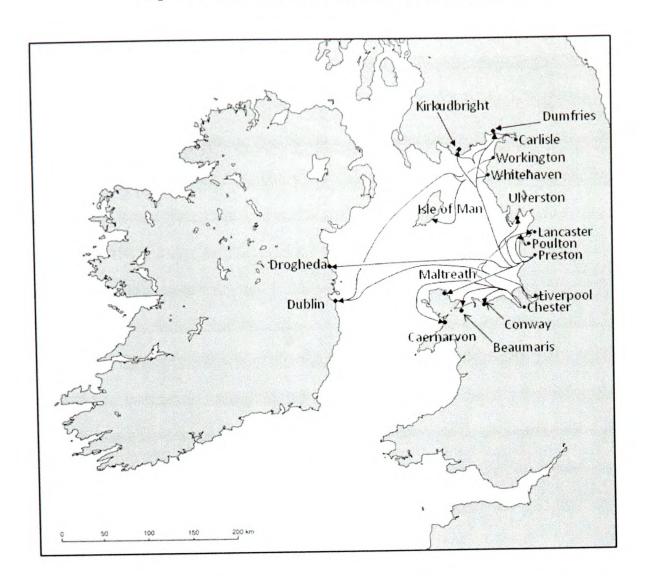
Brampton, in the West Cumberland coastal strip at the locations shown in Figure 3.5, in the coal fields of South West Lancashire around St Helens and Wigan and in the hills of north Flintshire. The ports in closest proximity to the sources were Carlisle, Whitehaven, Workington, Maryport, Harrington, Preston, Liverpool and the ports on the north Flintshire coast within the Customs port of Chester.

Trade in coal was identified from Carlisle to Dumfries, Preston to Lancaster, Ulverston, Dumfries and Kirkcudbright, Liverpool to Lancaster, Ulverston and Dublin and from Chester to Lancaster and the ports of North Wales. Unfortunately the shipping lists for the West Cumberland ports do not contain references to the cargoes; the trade had to be identified from other sources. Trade from Preston to Ireland is identified in Dickson's report on agricultural trade in the period 1806-8. This was a trade in which grain was received in return for outgoing shipments of coal. A flow diagram of the coal trade identified within the region is included as Map 11

Sources included, Beckett, J.V., Coal and Tobacco: the Lowthers and the Economic Development of West Cumberland, 1660-1750 (Cambridge, 1981) and Eaglesham, A., 'The Growth and Influence of the West Cumberland Shipping Industry 1660-1800', unpublished PhD thesis, Lancaster University, 1977.

<sup>&</sup>lt;sup>23</sup> Dickson, R.W., General View of the Agriculture of Lancashire (London, 1815), 634-5.

Map 11 - Pattern of Irish Sea Trade in Coal



A search was conducted to identify owners of the vessels by matching vessels identified in the shipping lists with those contained in the shipping registers. The vessels in the trade to Dumfries from Carlisle could not be found in the registers for Carlisle and were assumed to be owned in Dumfries. The vessels in the West Cumberland trade with Ireland were almost exclusively brigantines which were owned by large groups in which mariners were both masters and part owners and also part owners outside of being masters. Eaglesham found evidence of the involvement of the masters in the commercial aspects of the trade. A West Cumberland masters committee existed which was concerned with the fluctuating selling price of the coal in Dublin and at one point appointed an agent in Dublin in an attempt to stabilise the prices; an appointment which was not universally approved by the masters.<sup>24</sup>

<sup>24</sup> Eaglesham, A., 46.

90

In the ports of Harrington and Whitehaven gentlemen were also prominent suggesting potential connections to landowners with the mineral rights, although none of the three principal families associated with the coal industry, the Lowthers, Curwens or Senhouses, were represented. Eaglesham who examined the shipping ownership interests of the West Cumberland mine owners found that their investment interests, in the main, lay elsewhere. The Lowthers in Whitehaven were said to be more interested in developing their mining interests and trading prospects than they were in shipowning. Nevertheless, James Lowther steadily acquired controlling interests in 11 vessels through the 1730s and 40s, following advice given to his father that this was necessary if you wanted to control the market and increase prices. Most of these investments were sold off after his death in 1755 and his successor, another James Lowther, only held a few small fractional ownerships until the period 1787-93 when he acquired three vessels in sole ownership. This was again thought to have been with the purpose of stimulating and influencing trade, this time in the period of the American War of Independence.<sup>25</sup>

In contrast the Curwens in Workington spread their holdings across a larger number of vessels through a series of small fractional ownerships which suggested an alternative policy of stimulating the supply of shipping rather than an aim to control the trade. These shares were often financed by being set against coal cargos rather than being paid for in cash. This type of investment although extensive was of debatable value to the coal owner. Eaglesham found a reference to the holding of large ownership stakes as being 'improper' although there was no evidence that the Curwens held the shares in order to manipulate rather than encourage 'the prosperity and happiness of the town and its Inhabitants'. In Maryport the Senhouses held far fewer shares in shipping, and again in small fractional holdings although there is evidence in their case of taking a share in some outgoing cargos. <sup>26</sup>

The mine owners therefore had holdings in the vessels but it appears that they were not seeking to take a controlling interest in their operation.

<sup>&</sup>lt;sup>25</sup> Eaglesham, A., 311-5.

<sup>&</sup>lt;sup>26</sup> Eaglesham, A., 315-6.

Merchants were the largest occupational group in Maryport suggesting connections with other trades including the corn trade as discussed above.

In contrast the vessels in the trade owned in Preston were flats and sloops either in sole ownership or owned by small groups. Merchants were the main occupational group although mariners and those with occupations unrelated to the trade were also involved. These included gentlemen, with an indication that there were connections with mining rights. The trade from Liverpool along the North West coast was also carried in similar vessels again owned by small groups in which merchants were the major occupational category.

The use of sloops and flats might have been expected in the coastal coal trade out of Preston and Liverpool because the delivery ports, mainly those in North Lancashire, often had very primitive berthing facilities. In many cases the vessels were simply beached, and the coal offloaded over the side to carts; a role for which the smaller flat bottomed vessels were ideally suited. The brigantines in the West Cumberland trade with Ireland, larger vessels with more carrying capacity, were easier to handle in the sea conditions of the Irish Sea and traded to and from harbours where the vessels could be safely berthed.

The sloops and flats carrying the coal along the North West coast were seen to have been general carriers, regardless of their ownership, and this included those owned by coal merchants. The vessels owned by the Clare family in Warrington and those of Mayor and Goodshaw, the principal firm of coal merchants in Freckleton, are frequently seen in other trades.

The trade in iron and iron ore from Ulverston was an established trade dating back to the early eighteenth century with records of shipments to the Severn and to the iron industry in Cheshire.<sup>27</sup> The trade continued through the period of the study, although the industry was in decline towards the end of the eighteenth century as production based on charcoal furnaces was replaced by more efficient processes elsewhere. The trade was conducted through the port of Ulverston and the detailed analysis of the owners of the vessels belonging to the port which follows in Chapter 4 shows that those involved in the ownership of iron companies

<sup>&</sup>lt;sup>27</sup> Marshall, J.D., Furness and the Industrial Revolution, (Barrow-in-Furness, 1958), 21.

had significant levels of investment in the vessels. Of the vessels in which they were seen to have a major share of the ownership, a number were identified as trading with other centres in the iron industry. Unfortunately the Ulverston shipping lists do not include cargo descriptions but it is a reasonable assumption that the activity was related to the trade.

Examples are provided by the sloop *Michael* owned by interests associated with the Newland Iron Company which had two entries into Ulverston from Oban, a clearance to Whitehaven and an entry from Kirkcudbright between the two. Oban was near to Lorn where the company had earlier built a furnace to take advantage of the local woodlands for the supply of charcoal. A second vessel in which the Newland Company owners were represented, the brigantine *George*, also had an entry from Oban and a clearance to Gloucester, a centre for the iron industry on the Severn. The brigantine *Hollow Oak* belonging to the owners of the Backbarrow Company had an entry into Ulverston from Newry in ballast, one of the few cargoes specified in the Ulverston shipping lists, and a clearance to Chepstow. A second vessel, the flat *Penny Bridge*, had three clearances to Lancaster, possibly for the Halton Iron Company in the Lune valley. Outside of Ulverston the shipping list for Milnthorpe records ironstone delivered to the port from Workington by the 61 ton flat *Leighton* for which a Leighton iron founder, John Hutton, was a subscribing owner.

Not all of those involved with the iron companies confined their interests in shipping to the carriage of iron. Mathew Harrison, the manager of the Newland Company, had investments spread across a total of thirteen vessels together with investors with many interests and backgrounds from both within and outside the community. The investments covered all types of vessels with potential involvement in overseas trade. This indicated the availability of surplus of funds which were not required in the development of their core businesses, the industry at this time being in decline as noted above.

<sup>30</sup> Lancaster Register No., 11/1794.

<sup>&</sup>lt;sup>28</sup> Lancaster Register Nos., George, 71/1786, Michael, 3/1787.

<sup>&</sup>lt;sup>29</sup> Lancaster Register Nos., *Pennybridge*, 41/1786, *Hollow Oak*, 4/1787.

Ownership of vessels by those involved in the Furness slate trade was also extensive. Examples of slate merchants investing include Isaac Prill who had an interest in five vessels, and John Woodburne, who had an interest in two. Two vessels were owned exclusively by those associated with the slate trade. These were the *Elisabeth* in which Prill shared ownership with two other slate merchants and the *Friendship*. Here Prill invested with John Woodburne and three others from Kirkby Ireleth in west Furness, a slate mining area. Woodburne also had a share of a slate quarry in Kirkby Ireleth. This had been bequeathed to him in the will of George Lowrey, an Ulverston sailmaker who also invested in shipping. This connection serves as an example of the diverse investment interests of the prominent members of the business community in Furness.

The flat *Minerva* in which John Woodburne was a subscribing owner and the sloop *Jane* in which Prill had a non subscribing interest were constant traders between Ulverston and Liverpool.<sup>32</sup> A 1792 Liverpool shipping list shows the *Minerva* and the flat *Molly*, in which Prill also had an interest, entering from Ulverston carrying slate.<sup>33</sup>.

The investment from within the Furness slate trade community was therefore significant and reflected that noted by Eames from within the slate companies of North Wales.<sup>34</sup>

Not all the vessels carrying slate from the area were registered in Ulverston. The shipping lists for Carlisle show that slates from Ulverston also came in vessels belonging to both Preston and Liverpool. One was the sloop *Pattys* belonging to the Clare coal merchant family of Warrington. Another, the Preston sloop *Ellen and Susan*, was owned by a Burscough wheelwright and an Eccleston innkeeper, both occupations far removed from quarrying. The amounts of slate shown as having been shipped in Dickson's survey in 1807 would have

<sup>&</sup>lt;sup>31</sup> Lancaster Register Nos., Friendship, 5/1794, Elisabeth, 53/1786.

<sup>&</sup>lt;sup>32</sup> Lancaster Register Nos., Jane, 1/1792, Minerva, 2/1790

<sup>&</sup>lt;sup>33</sup> Williamsons Liverpool Advertiser, Shipping Lists, entry for Minerva 20 Feb 1792, entry for Molly, 12 March 1792

<sup>&</sup>lt;sup>34</sup> Eames, A., 186-94.

<sup>&</sup>lt;sup>35</sup> Liverpool Register No., 11/1786.

<sup>&</sup>lt;sup>36</sup> Preston Register No., 11/1786.

needed the involvement of both Ulverston vessels and vessels belonging to other ports to handle the trade.<sup>37</sup>

The spread of investment interest throughout Furness resulting from the geographical dispersion of the industries provides a further example of how the North West's maritime economy penetrated into the hinterland. Map 12 showing the geographical spread of the investors in Furness illustrates this point.

<sup>&</sup>lt;sup>37</sup> Dickson, R.W., 639.

**Map 12 - Shipping Investors in Furness** 



Source: Yates Map of Lancashire, 1786 annotated with residences of owners of Ulverston vessels.

There was no evidence of those associated with the North Flintshire brick industry owning vessels although their products were shipped extensively throughout the region. Examples of shipments shown in the Liverpool shipping

lists for the first quarter of 1792 included entries by the flat *St Hellen* delivering bricks for Roe & Co., who were copper and brass manufacturers in Macclesfield, on 9 January and the flats *Intrepid* and *Glory* supplying firebricks to S Livesly and J Wright respectively on the 13 and 27 February.<sup>38</sup> The *St Hellen* was a 49 ton flat which had been owned by a Ravenhead merchant, John Mackey, but in 1792 was administered by a Royal Navy captain who was the executor of his will. The *Intrepid* was a 53 ton flat owned by two Liverpool merchants and the master and the *Glory* was one of the flats owned by the Clare family of Warrington, the coal merchants-again showing the versatility of the trade in which their vessels were involved.<sup>39</sup>

The ready availability of vessels in the region of the Dee and the Mersey may have been a factor discouraging those in the brick industry from themselves becoming involved. This was, moreover, an expanding industry offering other opportunities for investment. In contrast the Furness iron industry was not, having reached maturity and starting to decline by the third quarter of the eighteenth century, so shipping offered an alternative outlet for savings. Indeed, in considering the connections more generally between North West industries and shipping what we now know of their interplay as a result of this research suggests that a number of factors were at work. Lack of opportunity for alternative investment was certainly one which is typified by the investments in Cumberland and Furness. The more advanced industrial and commercial centres see the shipping mainly in the hands of the mercantile community with the industrialists more preoccupied with financing development of their own businesses.

Before proceeding to consider ownership by occupational groups it is worth considering the occupations of mariners and merchants, the most prominent occupational groups seen in the shipping registers, and the activities that the occupations embraced.

The occupation of mariner included everyone from the humble deckhand to the master of the vessel. The mariners that appeared in the registers, however,

<sup>39</sup> Liverpool Register Nos., St Hellen, 190/1787, Intrepid, 99/1786 and Glory, 195/1786. Reference to Roe & Co., in Bailey's British Directory, 1784, 608.

<sup>&</sup>lt;sup>38</sup> References taken from Shipping Lists published in Williamsons Liverpool Advertiser

appeared to be the more senior members of the community. They were often also the master of the vessel and were subscribing owners, sharing in the benefits accruing from the trade of the vessel while at the same time exercising some control over its operation.

Merchants also covered a broad spread of activities extending from local enterprises reselling coal and timber to major concerns dealing in the import/export trade. The merchants investing in the coastal vessels, however, were generally not those with extensive overseas trading interests but were more typically the local coal, timber and corn merchants. Very few merchants dealing in the long voyage overseas trade had interests in the coasting trade. There were exceptions, however, the Lancaster merchant Henry Tindall was one, with interests in the West Indies and Baltic trade and investment in the Ribble coal trade. The Carlisle merchants Musgrave Lewthwaite and Joseph Liddle were another, sharing interests in the Baltic trade with ownership interests in coastal vessels.

The respective shareholdings of the mariners and merchants in each of the ports are shown in Figure 3.4. Willan and Davis examined the roles of mariners and merchants as owners in some detail and found that the distinction between the two occupations was not always clear. The mariner was often seen in both roles, being master of vessels with the cargo arranged by a merchant on one voyage and carrying cargo on his own account in the next. The combining of the roles of master and merchants was common for smaller vessels when the master was also the owner. In the East Coast coal trade the master was an agent for the shipowner in marketing the coal and also may have been a shipowner or a part owner himself which gave him a direct interest in the price he obtained for the coal. This is a pattern that has been seen to have been replicated in the West Cumberland trade where, as noted above, Eaglesham found evidence of the involvement of the masters in the commercial aspects of the trade. This commercial involvement of

<sup>&</sup>lt;sup>40</sup> Willan, T.S., The English Coasting Trade 1600-1750 (Manchester, 1938), 42-3.

<sup>&</sup>lt;sup>41</sup> Willan, T.S., 35-6.

the masters where the trade was simple may have also occurred elsewhere in other single commodity trades.

In contrast the vessels in which the merchants were involved as owners operated a more varied trading pattern carrying an assortment of cargoes to different destinations. Our research supported Davis's observation that merchants treated vessel ownership as a freestanding investment carrying their own goods and the goods of others when it was appropriate to do so.

Consideration of the detailed ownership patterns of mariners and merchants in the ports of the region progressing from north to south, reveals the reducing influence of the mariner. In Carlisle where the mariners were the largest ownership group overall, they were masters and sole owners of five of the seven sloops of 35 tons or less that were in single ownership in the port, clearly having the finances to support this level of investment. Although mariners were the largest numerical group merchants also had a significant level of investment interest, although less than that of the farmers. The partnership of Musgrave Lewthwaite and Joseph Liddle in Carlisle were the leading investors with interests in eight vessels between them. As noted earlier they were involved in the trade to Liverpool in corn. The partnership also owned a brigantine but there are no records to indicate if the vessel was used in the iron and timber trade from the Baltic with which they were also associated.

Mariners were again the largest group of investors in the West Cumberland ports. In respect of subscribing owners, however, they were only the leading occupational group in Whitehaven and Workington. Merchants were the largest group in Maryport while gentlemen and mariners were represented in equal numbers in Harrington. In both Whitehaven and Workington there was evidence of familial connections between subscribing owner mariners. In Whitehaven Abraham Adamson was the master and subscribing owner of a brigantine, *Endside*, in which John and Joseph Adamson were also subscribing owners. John and Joseph Adamson were also subscribing owners in the brigantine *John and William* for which Joseph was the master. In Workington Thomas Martindale was a subscribing owner in the brigantine *Vine* for which Robert Martindale was the master and also a subscribing owner.

Davis noted the existence of familial links in maritime communities in which sons were expected to follow their fathers to sea to continue the tradition. Earle in reporting generally on the strength of the maritime communities in the ports estimated that in the period 1650-1775 they contributed well over 90 per cent of provincial sailors and that the strength of the communities accounted for the influence that they exerted where other forms of investment were not as forthcoming. 43

The presence of merchants as the leading subscribing owner group in Maryport can be explained by the ports proximity to the arable land south of the Solway, which accounted for the higher levels of investment by the farmers and yeomen as seen earlier. Merchants had significant ownership interests in vessels involved with the corn trade. The largest single investor in Maryport was the Whitehaven merchant John Hartley. Since he shared his interests with not only farmers and yeomen but also investors from London, it is probable that he was involved in the London corn trade. The merchants investing in Maryport vessels were residents of Whitehaven which may have been the continuation of a culture developed in the period of Whitehaven's overseas trade. There was also coasting trade in smaller sloops and flats with Whitehaven, Liverpool and the Isle of Man which would have required management.

At Ulverston, in contrast to Carlisle, mariners only owned one of the six sloops or flats in single ownership. The remainder were owned by a husbandman, a carrier, a gentleman and a merchant and one had the occupation unspecified. A mariner however was the master and sole owner on the brigantine *Broughton Tower*.

Despite owning fewer shares than merchants overall, mariners held the majority of subscribing ownership shares for both the types of vessels examined. For the doggers flats and sloops the held 22 of the 57 subscribing ownerships compared to 15 by the merchants. Mariners were only master and subscribing owner for 41 per cent of the vessels, however, compared to 88 per cent for the brigantines which suggests a lesser involvement in the day to day operation of the

<sup>43</sup> Earle, P., Sailors: English Merchant Seamen 1650-1775 (London, 1998), 17, 19.

<sup>&</sup>lt;sup>42</sup> Davis, R., *The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries* (London, 1962), 153.

smaller vessels. We can conclude therefore that in Ulverston, although mariners were less significant in overall investment numbers than the merchants, they still dominated operation of the largest vessels belonging to the port, although the merchants appeared to have a stronger hold of the short haul coasting trade. Comparisons with Carlisle cannot be made because the designation of the type of ownership is not given.

The dominance of mariners in the subscribing ownership groups for the brigantines did not extend to Lancaster. The port and its vessels were very much under the control of merchants with mariners holding less than 10 per cent of the ownerships overall while the merchant had over 70 per cent. The mariners increased their ownership share as the vessels reduced in size owning only 5 per cent of the shares in the ships and snows, 6 per cent in the brigantines but 18 per cent in the doggers, flats and sloops. Their position as masters and subscribing owners for the smaller vessels remained at about 40 per cent, as in Ulverston, but was only 35 per cent for the brigantines compared to 88 per cent in Ulverston indicating a much diminished role. The percentage was even less for the ships and snows with a mariner only being both master and a subscribing owner for two of the nineteen vessels.

The overall ownership level of the mariners in Preston was about 20 per cent with the mariners being the master and subscribing owner for 37 per cent of the vessels; the types of vessels being 47 flats or sloops and one brigantine. The incidence of the master also being a subscribing owner for the smaller vessels in Preston was therefore comparable to the level seen in Ulverston and Lancaster and further reflects the greater control being exercised by the merchants. In Preston, merchants were owners of seven of the nine vessels in single ownership, a much higher percentage than seen in Ulverston. Thomas Briggs, a Preston coal merchant, had the highest individual single ownership with three and a number of merchants had ownership shares which extended across several vessels. John Mayor and James Goodshaw who again were coal merchants, although Mayor was also a flax processor, had a joint interest in five.

Although the influence of the mariners is seen to greatly diminish as we move south through the region with merchants becoming the controlling force the

influence of the mariners should not be underestimated. As controlling owners for a large component of the brigantine fleet in the north of the region, their influence was substantial.

In considering the ownership interests of 'gentlemen' it is important to recognise that this was an indication of social status rather than membership of an occupational group, so an individual described as such could have active business interests. This duality is reflected in some cases in the shipping registers. In the Preston registers John Dalton and James Hall are both referred to as being a gentleman twice and as a merchant once and Samuel Bold of Wigan, described as being a gentlemen, owned mining rights for the mining of coal. In the Ulverston registrations examples of gentlemen in other guises include, Mathew Harrison, Edward Chadwick and George and Michael Kent who were associated with the Newland Iron Company and Miles Postlethwaite of the Backbarrow Company. No occupational connections, however, could be found between the gentlemen listed in the Whitehaven registers, for instance none of the names appear amongst the owners of the coal mines shown on the map of the mines and their owners.<sup>44</sup> The charts in Appendix 2 show that gentlemen appeared in significant numbers as investors in Harrington, Preston and in Ulverston as investors in brigantines. They do not feature in significant numbers in Carlisle or in either of the two merchant dominated ports of Lancaster and Liverpool

In summary, therefore, in respect of gentlemen it is difficult to ascertain the motivation behind their investment. Were they investing spare monies arising from the income generated by their estates or were they investing in connection with a business interest? There is evidence of investment by gentlemen involved with the iron industry in Furness and with the coal industry around Wigan but a search needs to be done of family records to take the investigation further. It would appear, however, that they were not involved where the merchant community was dominating affairs. Perhaps in this environment the gentlemen found more attractive alternative opportunities for investment.

<sup>&</sup>lt;sup>44</sup> A list of the mine owners is included with Map 6.

Investment by women, as in the case of the gentlemen, differed across the region with most being within the geographical area of Furness and West Cumberland. This is of particular interest because work for a later period has suggested that ownership by women was more widespread. Helen Doe in her work on women owners in the mid nineteenth century found that a fairly consistent level of ownership existed across the ports which she examined, of which Whitehaven was one, and many were active investors undertaking share transactions on their own behalf. In contrast the level of investment by women in the North West ports for the period some 50 years earlier was shown by this study to be much less. Table 3.4 below compares the extent of the ownership by women with those by men in the samples of registrations selected. The percentages held by women shown on the bottom line of the table for each port compare with an average of 13 per cent found by Doe across the ports she examined in 1865. Only West Cumberland, therefore, approached the levels seen by Doe.

Table 3.4 - Ownership by Women in the North West Ports, 1786-95

Number of ownership shares held by Women in North West Ports, 1786-95								
	Carlisle	W. Cumb	Ulverston	Milnthorpe	Lancaster	Poulton	Preston	Chester
No. of Vessels	25	40	55	6	63	4	48	10
Widows	0	51	0	0	1	0	1	0
Spinsters	2	12	13	0	3	1	0	0
Unknown	11_	0	0	0	0	0	0	0
Total Women	3	63	13	0	4	1	1	0
All Shares	129	571	414	0	309	35	111	48
Percent Women	2.3	11	3.1	0	1.3	2.9	0.9	0

Prepared from samples taken from port registration records

The balance between widows and spinsters was also different. In Doe's data for Whitehaven the spinsters outnumbered the widows by 50 per cent. In the data collected for this study the situation was reversed with widows outnumbering spinsters by three to one, which represents a significant change over a relatively short period of time. The reason why the widows were replaced by the spinsters

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<sup>&</sup>lt;sup>45</sup> Doe, H.R., 'Enterprising Women: Maritime Businesswomen 1780-1880', unpublished PhD thesis, Exeter University, 2007, 96-7 and 102, show that for the period 1840-92 in Whitehaven a total of 246 women held 1550 shares in 149 vessels which equated to 4.65 shares held by each woman of which 80 were widows and 122 were spinsters.

<sup>&</sup>lt;sup>46</sup> Doe, H.R., 151.

would require an investigation of their social and economic circumstances at the two different times.

Some work was done in this study to identify the widows who invested in Whitehaven and found that in residential terms only 12 of the 28 shareholdings owned by widows were held by residents of Whitehaven. There were six held by residents of Dublin of which Jane Conway, who was considered by Eaglesham to have probably been connected with a victualling business, held three.<sup>47</sup> No other widow held more than one. Apart from the share held by Ann Senhouse in Carlisle, all the remainder were held by residents within the West Cumberland region. Three were held by residents of Cockermouth, two each by residents of Wigton and Workington and one each by residents of Allonby and Whitekeld; a wide geographical spread across the region and untypical of the general geographical spread of the Whitehaven investors of which 70 per cent were residents of Whitehaven. More importantly 93 per cent of the 70 shareholdings held by mariners, from whom the population of widows might have been expected to have arisen, were held by those resident in Whitehaven. This suggests that the husbands of the widows were from a wider occupational background than just mariners. Local wills can provide more information. Eight of the twenty eight widows were found to have left wills and a review of the will of an Ann Peele, revealed that she had been a resident of the parish of St Mary's Islington in the County of Middlesex and was only late of Cockermouth and that her late husband was John Peele of King Street, Cheapside, who had been a linen draper and possessed a considerable personal estate. 48 The initial evidence is therefore that the widows, of whom a significant number left wills, had been married to men in occupations other than those related to the sea and that their investment was related to a need to invest proceeds of inheritance for which shipping provided a convenient vehicle.

The more minor occupational and social groupings are considered in the port-by-port analysis in Chapter 4. Amongst those were some important ownership

<sup>7</sup> Eaglesham, A., 310.

<sup>&</sup>lt;sup>48</sup> C.R.O.W., Copeland Wills, Ann Peele, 1794, AL 215, MM 2170.

groups; the sailmakers in Ulverston and the shipbuilders throughout the region being examples.

In summary the patterns of investment in shipping in the North West region showed significant differences between the ports and for the different vessel types. The brigantines were the vessels in which ownership numbers showed the greatest difference with the larger groups existing in the ports of Ulverston and West Cumberland. The ownership group sizes for the smaller vessels did not change significantly throughout the region except for a small number of vessels in Ulverston and one in Milnthorpe which had particularly large groups. The large ownership groups are most persuasively explained by the lack of availability of alternative avenues of investment. In the ports with larger groups, the industries in the locality were well established and in the hands of a small number of controlling interests; the coal industry in West Cumberland and the iron industry in Furness being typical examples. The maturity of the industries also meant that no significant further investment was required and in this situation shipping provided a convenient outlet for surplus funds.

In Lancaster, Preston and Liverpool there was a more advanced economic climate and more diverse industrial interests, which in the case of Lancaster and Liverpool were stimulated by the available imports and the needs of the colonies for manufactured goods. In these localities alternative avenues for investment were plentiful and the shipping investment was mainly in the hands of the merchants.

Mariners were shown to be the primary occupational group amongst the ownership groups north of Ulverston and were the leading occupation in the groups of subscribing owners in Ulverston. Nevertheless, despite the maritime dominance in West Cumberland, merchants also invested in significant numbers in Maryport and suggested that a wider trading interest existed for the brigantines outside of the traditional coal trade to Dublin.

The shipping industry in Liverpool, which had extensive overseas and coastal trading interests, was dominated by merchants; a characteristic repeated in Lancaster but on a smaller scale. Preston, although merchants were again influential, had different ownership and trading characteristics to the other two ports. Preston was a small port specialising in coastal trade together with some

Irish trade in which the merchants had more local interests dealing typically in coal, timber and corn and used Liverpool as the import export interface.

In respect of investment in shipping related to local industries, the farming communities and those with interests in the iron and slate interests in Furness were the most prominent, although significant interests were also held by shipbuilders and the associated trades.

A number of investors were seen to own shares in vessels registered in several ports, the flax processing concerns based in Kirkham were an example as were investors in Furness. The spread of investment could be indicative of the ports from which the vessels traded. It was a requirement of the Registration Act. that the vessels should be registered in the ports with which they usually traded. The involvement of investors from Furness with the Kirkham flax processors is difficult to explain. There are no records of substantial investment in flax processing in the region and no voyages to and from the Baltic were found in the shipping lists for Ulverston.

Investors from outside the region indicated potential trading activities, those in Chepstow indicating possible interests in the iron and timber trades. Irish investors in the main were associated with the coal trade although there was also some investment associated with foodstuffs supply and there were potential links with the linen industry in Northern Ireland.

The investment by the gentlemen was generally outside of the large commercial ports and the motivation was difficult to establish. The investments by women, similar to those of the mariners, were mainly concentrated in Ulverston and the port of West Cumberland with very few investing elsewhere which was at variance with the more extended involvement seen some fifty years later.

# **CHAPTER 4 - OWNERS AND VESSELS**

This chapter provides the detailed analysis which underpinned the broader discussion in Chapter 3. Using the samples taken from the port registers, and proceeding geographically from north to south, it examines the characteristics of the vessels registered in each port of the region and the ownership profiles. The narrative makes reference to Appendix 1, which contains tabulations of the characteristics of the vessels and the size of the ownership groups and Appendix 2, which contains charts of ownership characteristics.

### Carlisle

Table 1 of Appendix 1 shows the characteristics of 25 Carlisle vessels registered in the period 1786-95 and the size of the ownership groups. Sloops were the predominant vessel type confirming that interest was principally in the short haul coastal trade. That there was nevertheless some interest in longer voyage trade is shown by the investment in two brigantines. The two wherries registered may have been used for trade in the immediate region or for fishing which was the traditional occupation of these small vessels.

In Carlisle there was a wide variation in the size of groups owning individual vessels. These extended from single ownership for seven vessels to ten owners for two vessels and eleven and thirteen owners for two others. (Figures 1 and 2 of Appendix 2) All vessels of 34 tons or under had either one or two owners suggesting that this was general affordability limit for ownership groups of this size. Above 34 tons there was a trend towards increased numbers of investors, although there were exceptions. The 47 ton sloop *Jenny* had only one owner, the 75 ton *Neptune* had only three and the 95 ton sloop *Stormont* was jointly owned by its master, James Cleminson, and John Sands a farmer, both from Sandshill on the north of the Solway.<sup>1</sup>

The ownerships of Carlisle vessels were spread across 24 occupations with mariners, farmers and merchants holding the majority of shares. (Figure 3 of

<sup>&</sup>lt;sup>1</sup> Carlisle Register Nos., Jenny 2/1787, Neptune, 1/1793, Stormont, 2/1792.

Appendix 2) Relatively few belonged to the professional classes such as attorneys, physicians and schoolteachers compared to the ports of West Cumberland and Ulverston to be considered later. Maryport and Allonby on the West Cumberland coast appear as the leading places of residence, although there was a similar number of investors from the Solway region, just more widely dispersed as might be expected with members of the farming community. (Figure 4 of Appendix 2)

Four of the single owners were Allonby mariners who were also the master of the vessels, one was a mariner and master from Hillside on the north of the Solway, one a merchant from Howend, in the parish of Thursby six miles to the south west of Carlisle, and another a ships carpenter from Bowness on the south of the Solway.

Mariners were the first listed name in all the larger groups which suggests that they were the leaders. (The Carlisle registers do not distinguish between subscribing and other owners, but in other ports where this distinction was made the subscribing owners, whose names are listed first, are assumed to be the principal investors).

The 113 ton brigantine *Curwin and Bradills* had 27 owners from the Solway region, of whom 14 were described as 'yeoman' or 'esquire'. The owners also included the merchant John Blain from Waterford, an Irish port associated with the grain trade, and John Hartley a Whitehaven merchant, who was also an investor in West Cumberland vessels. In contrast the second brigantine, the 145 ton *Mary*, had only two owners - the Carlisle merchants, Musgrave Lewthwaite and Joseph Liddle. Lewthwaite and Liddle were prominent merchants in Carlisle with interests in both coastal and overseas trade and their ability to share ownership in the *Mary* is a reflection of the success of their joint venture.

Farmers and yeomen were well represented among groups investing in sloops, but not in all. For instance the sloop *Amity* had no farmers amongst the motley group of ten owners which included two anchorsmiths from Maryport, a slate merchant, a woodmonger and a grocer from Brampton in the North

<sup>&</sup>lt;sup>2</sup> Carlisle Register No., 1/1791.

<sup>&</sup>lt;sup>3</sup> Carlisle Register No., 1/1788.

Pennines.<sup>4</sup> It is noteworthy that the vessels with the highest representation of farmers were both 'led' by mariners from the south of the Solway. They were the *Whale* for which five of the ten owners were farmers and the *Charlotte and Ann* for which six of the thirteen owners were farmers.<sup>5</sup> It is unsurprising that those making a living from the land were also concerned with providing a means of transportation to market but the presence of the mariners as the first named owner suggests that they were the initiator of the enterprise.

Members of the shipbuilding trades owned shares in vessels built in the ports in which they were residents and also in vessels built elsewhere. Share ownership may have been a form of recompense for work done in the build of the vessel or may have been an example of business patronage by the shipbuilding trades to acquire repair and replacement work as suggested by Ville.<sup>6</sup>

Investors from outside the immediate locality included Thomas Allison, a Liverpool merchant with connections in the corn trade who was a part owner of the sloop *Whale*. The ownership was shared with nine others from south of the Solway, five of which were farmers. A Liverpool directory showed Thomas Allison sharing an address in Liverpool with Richard and James Allison who were corn merchants.<sup>7</sup>

In respect of individual stakes Musgrave Lewthwaite and Joseph Liddle, the Carlisle merchants, had the greatest interest in shipowning. Each had shares in five vessels, not the same five, and in total they covered eight vessels. Newspaper notices show that their activities included the importation of timber from the Baltic but the vessels in which they held ownerships did not appear in the Baltic entries in the Carlisle shipping lists examined, suggesting that their interests in vessel ownership and the overseas timber trade were unconnected. Unfortunately there are no surviving records of their business as merchants to identify the other trades in which they had an interest although the fact that those with whom they

<sup>&</sup>lt;sup>4</sup> Carlisle Register No., 4/1786.

<sup>&</sup>lt;sup>5</sup> Carlisle Register Nos., Whale 1/1786, Charlotte and Ann 9/1786.

<sup>&</sup>lt;sup>6</sup> Ville, S.P., The Growth of Specialisation in English Shipowning, 1750-1850', *Economic History Review*, New Series, 46, 4, 706.

<sup>&</sup>lt;sup>7</sup> The 1781 edition of Gore's Liverpool Directory shows a Thomas Alison as sharing the same address, 13 Temple Street, with Richard and James Alison, corn merchants.

<sup>&</sup>lt;sup>8</sup> An advertisement for the sale of Memel timber appeared in the *Carlisle Journal*, 20 November 1802

shared ownership extended over a wide range of occupations suggests that the vessels were used for general trading activity, including the corn trade. Others also had interests in a number of vessels, although not on the same scale. William Nixon a Sandsfield farmer had the next highest ownership stake with shares in four vessels. This was equalled by Joshua Sharp, a taylor (tailor) from Glasson on the Solway coast, who also had four.

The individual ownership stakes held by residents of Maryport and Allonby were not as large. John Penny an anchorsmith and John Fawcett a merchant, both from Maryport, held the ownership stakes in two vessels. Penny had an interest in the sloops *Amity* and *Assistance* and Fawcett's interests were also in the Assistance and in the sloop Johns. The highest single investment in Allonby was held by Richard Harker, a merchant and fish curer who had an interest in three sloops, Hope, Charlotte and Ann and the Assistance, and was the sole owner of the wherry, Fanny, of which he was also the master, no doubt operating the vessel in connection with his business as a fish curer<sup>10</sup>.

There was little evidence of investment in shipping by the textile industry which was operating on a sizeable scale in Carlisle by the end of the eighteenth century. Only one representative was identified: Richard Hodgson, a calico printer, who was a part owner in the brigantine Curwen and Bradills. Unlike the case of the farming community in which the movement of large bulk quantities was involved, and with a network of road transportation well established for the trade, it is unlikely that there was any incentive for textile manufacturers to invest. There is evidence, however, of mechanical equipment being carried for the textile industry in the coastal trade from Liverpool.<sup>11</sup>

Nineteen of the twenty-five vessels, 76 per cent, were constructed locally. Bowness and Sandsfield on the south of the Solway and Seafield and Kirkcudbright on the north built eight of the vessels with the remaining eleven built in Maryport or Allonby. The earliest Solway vessel was the 21 ton sloop Content, built in Sandsfield in 1782 but vessels were built in Maryport and

<sup>&</sup>lt;sup>9</sup> Carlisle Register Nos., *Amity* 4/1786, *Assistance* 2/1789, *Johns* 2/1788. <sup>10</sup> Carlisle Register Nos., *Hope* 8/1786, *Fanny* 1/1790.

<sup>&</sup>lt;sup>11</sup> See Table 5.1, page 149.

Allonby in 1766 and 1772 showing the greater maturity of the industry in those ports. <sup>12</sup> Five sloops were built elsewhere in the North West region (at Lancaster, 'Lancashire,' Llygwy on Anglesey and two in Liverpool) and only one was built outside the region in Greenock.

In summary, the picture that emerges of maritime interests in the most northerly part of the region is of generally locally built, locally owned and locally employed shipping. With two exceptions Carlisle-registered vessels were employed in the coastal trade with ownership dominated by mariners and farmers. Merchants were also involved, the two major investors having interests in both the coastal and overseas trade. No references were found to investors from the North Pennine coal industry and only one from the textile industry.

There is just a slight indication of greater commercial ambition. The large group of investors from the agricultural industry in the brigantine *Curwen and Bradills* suggests an interest in longer voyage trade, perhaps to London but the Carlisle shipping lists examined contained no reference to the vessel or to trade with London. Robinson found evidence of trade with London in the port books in the 1720s but her work makes no reference to the cargoes carried. There were also no references in the shipping lists to the second brigantine, *Mary*. The limited coverage of shipping activity by the lists means that their movements may have been missed, but it is also possible that the vessels were trading from other ports.

# West Cumberland

West Cumberland registered shipping contrasted markedly with Carlisle. The sample of vessels extracted for analysis from the Whitehaven registrations in 1786 included 19 vessels belonging to Whitehaven, 12 to Maryport, five to Workington and four to Harrington. These 40 vessels consisted of 33 brigantines, a ship, a snow and three sloops. (Table 2, Appendix 1). This profile of large, deeper sea vessels mirrors the primary interests of the ports in the transport of coal to Ireland, with the brigantine the principal type, while the ship and the snow

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<sup>&</sup>lt;sup>12</sup> Carlisle Register No., 3/1786.

<sup>&</sup>lt;sup>13</sup> Robinson, M.J., 'Coastal Shipping in Cumberland, 1680-1740', Mariner's Mirror, 92, 3, 274-5.

reflect a continued interests in the long voyage overseas trade and the low number of smaller vessels a lack of concern with coastal trade.

The sloops were the 44 ton *Thomas* belonging to Whitehaven, which was in the sole ownership of its Whitehaven master, Thomas Janes; the 17 ton *Nicholas* belonging to Maryport owned by two Allonby mariners, William Heskett and George Henry, neither of whom were the master and the 49 ton *Nancy* belonging to Workington. <sup>14</sup> The *Nancy* had ten owners, with the three subscribing owners being the master Patrick Carr, Jeremiah Page a shoemaker and John Thompson a taylor, from Workington. The group of non subscribing owners included a mariner, a blacksmith, a gardener, a shipbuilder and a widow (all from Workington) together with a merchant and a mariner from nearby Harrington. Such a variation in the number of investors shows that both single ownership and large syndicates could exist in parallel for virtually identical vessels and, as with the case of the two Carlisle brigantines, warns us against assuming that the size of the ownership group was connected with the size - and hence the cost of a vessel.

The distribution of the sizes of the ownership groups in the brigantines and the relationships to tonnage across the four ports are included as Figures 5 and 6 of Appendix 2. The charts show significant variations for individual vessels with no apparent dependency on the tonnage and no differences between ports. Sixteen of the vessels were owned in Whitehaven, nine in Maryport, and four each in Workington and Harrington. The average number of owners across all the vessels was 14.8 but again there were examples of a wide spread in ownership numbers in this case extending from single ownership to a group of 22. The single owner was a mariner, Musgrave Wilkinson, who was the sole owner and master of the 64 ton brigantine *Griffin* belong to Maryport. The lack of a relationship to tonnage suggests the ownership numbers were related more to established tradition rather than to one driven by financial needs.

Figures 7 to 14 of Appendix 2 show the residential and occupational profiles of the owners in the four ports. The ports are considered separately in

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<sup>&</sup>lt;sup>14</sup> Whitehaven Register Nos., *Thomas* 156/1786, *Nicholas* 180/1786, *Nancy* 152/1786.

<sup>&</sup>lt;sup>15</sup> Whitehaven Register No., 154/1786.

order to detect any differences in ownership patterns which might suggest distinctive trading patterns of the ports.

In Whitehaven, mariners were by far the largest occupational group followed by gentlemen, merchants and widows. Approaching three-quarters (70 per cent) of these owners lived in the port. A major group of investors from outside the region were 13 residents of Dublin, non subscribing owners in eight of the 16 vessels. This significant representation is indicative of the trading link with Ireland.

If subscribing owners are taken to represent the managing interests of the vessels, mariners had the leading interest holding 27 subscribing ownership shares, 56 per cent of the total. In the case of 12 of the 16 vessels, the master was also a subscribing owner. Surnames suggest that familial relationships might be important for mariner involvement. The Adamsons provide an example. Joseph Adamson was the master and also a subscribing owner of the *John and William* in addition to being a subscribing owner in the *Endside* for which Abraham Adamson was the master and also a subscribing owner. <sup>16</sup> John Adamson, also a mariner, was a subscribing owner in both vessels. <sup>17</sup>

Other subscribing ownerships were held by members of the shipbuilding trades who held seven, 15 per cent of the total, including James Atkinson a Whitehaven blockmaker who held the highest individual stake with four. Of the other occupations three gentlemen, two merchants and two mercers held one subscribing ownership each. Apart from these there were seven other individuals with occupations as diverse as a barber, a shoemaker, a grocer a taylor and a tobacconist who each held subscribing ownerships. All apart from one were residents of Whitehaven showing the autonomy of the port in respect of controlling interests in vessels.

Whitehaven non subscribing owners were spread across 37 different occupations with mariners again the principal group holding 20 per cent, followed by gentlemen with 15 per cent, widows with 14 per cent and merchants with 13 per cent. The remainder were distributed across occupations which extended from

<sup>&</sup>lt;sup>16</sup> Whitehaven Register Nos., John and William 186/1786, Endside 166/1786.

<sup>&</sup>lt;sup>17</sup> The relationship is only by common name and the familial relationship would have to be checked by searches of family records.

an attorney, a naval officer and a surgeon to a bread baker, a jeweller, a house carpenter and a plumber. The representation of widows was the highest seen in any of the North West ports; a total of 17 widows held 26 non subscribing ownerships. Twelve of these women lived in Whitehaven, five in Dublin and the remainder were distributed through throughout West Cumberland, with the exception of Mary Senhouse who was a resident of Carlisle. The only widow in the group with multiple ownerships, Jane Conway, a resident of Dublin with shares in two vessels, was identified by Eaglesham, from invoices found in the account books of Whitehaven vessels, as having been involved in a Dublin victualling concern. <sup>18</sup>

In Maryport, the port with the next highest number of vessels, the mariners were again the largest occupational group overall although merchants had a greater representation than in Whitehaven holding an equal number of shares with the yeomen. Gentlemen, the second highest occupational group in Whitehaven, were relegated to fifth place in Maryport after widows. The presence of yeomen can be accounted for by the close proximity of the port to the agricultural belt to the south of the Solway.

Merchants held the highest number of subscribing shares with 11 of the 24, 46 per cent, followed by mariners with eight, 33 per cent. This suggests more interest by merchants in the operation of the vessels, although the mariners retained an interest as master and subscribing owner for eight of the nine vessels. The occupations of the subscribing owners of the ninth vessel, the *Nancy*, point to a strong merchant influence in the direction of the vessel. <sup>19</sup> They were Whitehaven merchant John Hodgson; the Whitehaven blockmaker John Atkinson, also a multiple subscribing owner in Whitehaven vessels; and John Fawcett, a Maryport merchant seen also as an investor in sloops registered in Carlisle. Among the 16 non subscribing Maryport owners, the presence of six yeomen further suggests an involvement with the corn trade.

<sup>18</sup> Eaglesham, A., 'The Growth and Influence of the West Cumberland Shipping Industry 1660-1800', unpublished PhD thesis, Lancaster University, 310.

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<sup>&</sup>lt;sup>19</sup> Whitehaven Register No., 165/1786.

The occupational spread of the subscribing owners was much less than in Whitehaven extending to only five occupations compared to fifteen in Whitehaven. Places of residence were more diverse because most merchant investors were residents of Whitehaven outnumbering the Maryport merchants by nine to two as investors. The Whitehaven merchant community was established early in the eighteenth century, particularly in overseas trade, and it appears that with the decline of this trade the expertise was spreading to other ports.

In respect of multiple subscribing ownerships John Hartley, the Whitehaven merchant, held five and John Fawcett the Maryport merchant held two. John Hartley was a subscribing owner in the *Joshua* together with three farmers, two yeomen and a London merchant, William Borrowdale, as non subscribing owners which suggested a possible link with the London corn trade. Hartley was also an investor in the Carlisle registered vessel *Curwin and Bradills* with members of the agricultural community. Another London merchant, George Thompson, was a non subscribing owner in the brigantine *Glory*. 21

The occupational spread of the non subscribing owners was also less than in vessels belonging to Whitehaven with only 24 occupations recorded compared with 37 in Whitehaven. Mariners and yeomen held equal shares with 22 per cent each, merchants held 13 per cent, widows 10 per cent and gentlemen 6 per cent. The residential analysis showed that most lived in Maryport, followed by those from Whitehaven but in total the locations were more diverse extending over 37 places compared to 25 in Whitehaven vessels. Farmers and yeomen mainly accounted for the broader residential spread. As an example, the subscribing owners of the brigantine *Thomas* were mariner John Thoresby, merchant John Fawcett and William Wylde a sailmaker. All were from Maryport but the remaining investors included five yeomen from Barrow and Dalton and a gentleman from Walney Island. At this time, before the development of Barrow as a port and industrial area, this was an agricultural region noted for the production of oats and barley.

<sup>&</sup>lt;sup>20</sup> Whitehaven Register No., 175/1786.

Whitehaven Register No., 167/1786.

<sup>&</sup>lt;sup>22</sup> Whitehaven Register No., 178/1786.

Further examples of investment from adjacent regions are provided by Carlisle's Lewthwaite and Liddle, non subscribing owners in the brigantine *Liddle* and Carlisle widow Ann Senhouse, a non subscribing owner in the brigantine *Senhouse*. In contrast with Whitehaven, however, no Irish residents were involved with the Maryport vessels.<sup>23</sup>

The investment pattern for vessels belonging to Workington was similar to Maryport with merchants having a substantial holding although, in contrast to Maryport, not dominant amongst the subscribing owners. Only two featured here, 16 per cent of the total, compared to the 40 per cent in Maryport – a much lower level of involvement. With seven of 12 subscribing ownerships, mariners were in the lead here and in four cases were also the master. Mercers had three subscribing ownerships. Mercers, although traditionally associated with textiles, also traded in grocery wares outside of the major commercial centres.

There were a few cases of limited multiple investment. Thomas Martindale, a Workington mariner, held subscribing ownerships in two vessels but was not the master of either but for one of the vessels, the brigantine *Vine*, a Robert Martindale was the master so there may have been a family association.<sup>24</sup> William Cragg, a Workington mercer and John Hodgson the Whitehaven merchant, seen earlier as a subscribing owner of a Maryport vessel, both held subscribing ownerships in two vessels.

Non subscribing owners were spread across 18 occupations. Mariners and merchants held 21 per cent each followed by widows with nine per cent. The mix of the remainder was much the same as seen previously in Whitehaven and Maryport.

Workington or Whitehaven, provided the subscribing owners, apart from a Maryport mariner, and in all 13 places were represented. Not all of these were in West Cumberland, however. A Dublin merchant, Edward Favel, was a non subscribing owner of the brigantine *Seaflower* and the brigantine *Vine* had as non

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<sup>&</sup>lt;sup>23</sup> Whitehaven Register Nos., Liddle 188/1786, Senhouse 187/1786.

<sup>&</sup>lt;sup>24</sup> Whitehaven Register No., 189/1786.

subscribing owners a Newcastle merchant James Rudman and John Holmes a Kendal merchant.<sup>25</sup>

In Harrington gentlemen were the leading occupational group overall closely followed by mariners and merchants. Equal numbers lived in Harrington and Workington, the nearest neighbouring port, while some other investors in Harrington vessels came from Cockermouth, which is a few miles inland, or Whitehaven. Among non subscribing owners were a farmer from Downpatrick in Northern Ireland and a tallow chandler and a merchant, both from Wicklow, indicating Irish shipping investment in trade other than coal.

Subscribing owners included the masters of three vessels, a mariner, gentlemen, a Harrington labourer, a Harrington merchant and a Whitehaven anchorsmith. The non subscribing owners were spread across 15 occupations with gentlemen having 27 per cent, followed by mariners and merchants with 5 per cent each.

The review of shipowning across the West Cumberland ports has revealed some interesting differences and provided an insight into the economic interests underpinning the maritime activity. Whilst the coal trade to Ireland was the focus of interest for the maritime professionals and was responsible for the Dublin investment in Whitehaven vessels, there was a strong mercantile interest in Maryport shipping. This mercantile interest was supported by those from the agricultural community, both locally and in Furness, and together with the presence of a London merchant amongst the owners suggested the existence of trade in corn or foodstuffs with the capital. The involvement of Irish investors outside of the coal trade in Harrington vessels also suggest that other trading interests existed with Ireland although coal was undoubtedly the primary interest.

Taking West Cumberland as a whole, however, what is equally striking about investment in the shipping of its ports is the diverse and extensive occupational mix of the non-subscribing owners which was much the same everywhere. Noting also that the size of groups investing in a vessel had no

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<sup>&</sup>lt;sup>25</sup> Whitehaven Register No., Seaflower 181/1786.

connection with the size and hence cost of a vessel, we see here evidence of an established culture of investment in shipping.

The importance of wider associations can in fact also be demonstrated by consideration of the places where West Cumberland vessels had been constructed. The extent to which the vessels were built locally in the ports of West Cumberland was less than in Carlisle with only 18 of the 40 vessels (45 per cent) being built locally which is surprising considering the extent of the shipbuilding activity in the region. The vessels were built in almost equal numbers in the ports of Maryport, Whitehaven and Workington with one vessel being built in Harrington and one in Ravenglass. The vessels built locally were all brigantines except for two snows built in Whitehaven and Ravenglass and a 96 ton vessel of unspecified type built in Maryport. The earliest date of build was the brigantine *Prosperity* in Workington in 1739. Of the remaining 22 vessels only seven were built in the North West. These consisted of five brigantines, three of which were built in Ulverston, two in Chester and two sloops built in Milnthorpe and Kirkcudbright. The remainder built elsewhere were all brigantines except for a vessel of unspecified type and a sloop built in Newnham. The brigantines were built in a wide range of locations including Sunderland, Yarmouth and Hull on the East Coast, no doubt reflecting the design used for the East Coast coal trade. Two vessels were built in Ireland, at Larne and Strangford, three in the South West at Barnstaple and Chepstow, two on the South Coast in Hampshire, one in Leith, one in America and two were prizes. There was little evidence therefore of containment of shipbuilding within the North West region, more a reflection of best vessel fit for purpose regardless of the place of build.

## Ulverston

The characteristics of the Ulverston vessels and the size of the ownership groups are shown in Table 3 of Appendix 1. This shows that shipping investment in Ulverston reflected interest in both the short and long voyage coasting trade and perhaps overseas trade including trade with Ireland, with vessels for both registered in more or less equivalent numbers. Flats and doggers appear here. Flats had their origin in the environs of the Mersey and were a vessel used extensively in the North West coasting trade and are to be seen in increasing numbers in the

port registers as we proceed south. Doggers were not present in great numbers in the North West but appeared regularly in the trade.

The distribution of the ownership group sizes for the doggers, flats and sloops and their relationship to vessel tonnage are in included as Figures 15 and 16 of Appendix 2. The average number of owners for the sloops was inflated by four vessels with 11, 13, 22 and 23 owners. These large groups were not associated with vessel size: the sloop with 23 owners was the *Nelly* of only 46 tons. <sup>26</sup> The subscribing owners of the vessel were three mariners, one of whom was the master, while the 20 non subscribing owners encompassed 12 occupations. Those holding the highest number of the non subscribing shares were the mariners again with four. Farmers held three, merchants two - one was a resident of Liverpool, and mercers and spinsters also two. The single shareholders included a cordwainer, a grocer, a labourer, a miller, a sailmaker, a wine merchant and a weaver. The *Nelly* therefore very much represented a community investment venture, arranged and managed by the mariners. A potential trading interest with Liverpool is suggested by the presence of a Liverpool merchant amongst the investors.

The next largest group, one of 22, owned the sloop *Tryall*, when the vessel was re-registered in 1788, and showed similar occupational characteristics although the distribution was less extensive. <sup>27</sup> The group was again led by mariners as subscribing owners, one of whom was the master. The non subscribing owners consisted of seven mariners, four merchants (two residents of Chepstow), a merchant, a sailmaker, a spinster, a teaman, a yeoman and four with no specified occupation of which two were residents of Argyll. The investors in Argyll and Chepstow suggest a connection with the iron industry but otherwise it is again a community style investment based round Ulverston, although one of the mariners and the teaman were from Ireleth in the west of the region. (Teamen were tea dealers).

We therefore have two examples of large community investment groups led by mariners. The sloops *Jane* and the *Fanny* of 66 and 55 tons with 13 and 11

<sup>&</sup>lt;sup>26</sup> Lancaster Register No., 60/1786.

owners respectively did not follow the same pattern.<sup>28</sup> The Jane had two subscribing owners, a merchant and the master of the vessel. A draper, an attorney, a grocer, a schoolmaster and an esquire were amongst the 11 non subscribing owners. The Fanny had a merchant, a sailmaker and a mariner, who was not the master, as the subscribing owners. The eight non subscribing owners were all merchants of which three were from Oban and one from Chepstow, again indicating an interest in the iron industry.

The distribution of ownership group sizes shows that such large groups were the exception but that a variety of group sizes existed. The owners of the six vessels in sole ownership were spread across five different occupations. A mariner, carrier, husbandman, merchant and gentleman each owned vessels in the tonnage range of 21 to 55 tons, with one owner's occupation unspecified. This contrasted with Carlisle where five of the seven single owners were mariners. Figure 17 of Appendix 2 shows that merchants were the leading occupational group followed by mariners and gentlemen. Again in contrast to Carlisle, few farmers were involved. The residential spread shown in Figure 18 of Appendix 2 shows how widely the owners were dispersed, reflecting the distribution of the population and industrial interests throughout the Furness region.

While not the largest ownership group overall, mariners held the highest number of subscribing ownerships, with 22 compared to 15 held by merchants and six by sail makers. They were the master as well as subscribing owner in the case of only 15 of the 36 vessels. This suggests a significant mariner involvement as general investors in shipping apart from as masters. Perhaps, as instanced by Davis, there were cases here of retired mariners acting as syndicate leaders.<sup>29</sup>

Non subscribing owners encompassed 22 occupations. Although most were Ulverston residents, the remainder came from 47 other locations.

Residents of Liverpool, Chepstow and Cambridge also invested in the smaller Ulverston vessels. The Liverpool investors were six merchants, one also described as a mariner. Between them these held eight shares in seven vessels. This strong indication of a trading interest between the ports is confirmed by

<sup>&</sup>lt;sup>28</sup> Lancaster Register Nos., *Jane* 1/1792, *Fanny* 79/1786.
<sup>29</sup> Davis, R., *The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries* (London, 1962), 93.

directory entries showing Ulverston vessels as 'constant traders' with Liverpool. The Chepstow investors were two merchants and an 'esquire' who held shares in three vessels indicating a trading link which is confirmed by the shipping lists. The Cambridge owner was a surgeon, Henry Ainsty, who had married into the Ford family, the founders of the Newland Iron Company, and became active in the business.

Figures 19 and 20 of Appendix 2 show ownership group sizes for the brigantines and their relationship to vessel tonnage. There is a wide distribution extending from a single owner to a group of 22. There are similarities to the pattern for the doggers, flats and sloops although the overall average number of owners was greater. The average of 10.9, however, was less than the 14.8 for the West Cumberland brigantines. Similar to the West Cumberland brigantines there was no discernable trend towards increased group size with tonnage and if anything the chart shows the opposite.

The occupational profile of Ulverston brigantine owners (Figure 21 of Appendix 2), contrasts with those in West Cumberland. In Ulverston merchants dominated. Mariners were in second place followed by gentlemen. In respect of subscribing ownerships the situation was reversed with mariners holding 16 and merchants only nine. The next largest groups were gentlemen and sail makers with three each. Mariners were subscribing owners and masters of brigantines in far more cases than they had been for the doggers, flats and sloops being the master of 14 of the 16 vessels compared to 15 out of 36 for the smaller vessels. This suggests a greater involvement in the operation of the larger vessels.

As in the case of smaller vessels, Figure 22 of Appendix 2 shows a residential spread of brigantine owners across Furness, but they had more owners from outside the region. These included members of the Langton and Birley and Hornby flax processing concerns in Kirkham, indicating overseas trading involvement. Three merchants from Chepstow were investors in the 96 ton *Valentine*, a vessel built in Chepstow, and a Whitehaven merchant was amongst the owners of the 105 ton *Tom* when it was re registered in 1792. The Ulverston

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<sup>&</sup>lt;sup>30</sup> Lancaster Register Nos., Valentine 46/1786, Tom 11/1792.

brigantines also attracted investors from the Lancaster merchant community two of whom were subscribing owners in the *Reynolds*.<sup>31</sup> A Lancaster ironmonger and a Lancaster merchant were also subscribing owners in the *Valentine*, the three Chepstow merchants being non subscribing. The fact that Lancaster merchants had no interest in the smaller Ulverston vessels reflects a primary interest in the longer voyage trade, which was the main activity in their home port.

Investment in shipping by the business interests in the region was substantial. Three of the major iron companies, Newland, Backbarrow and Duddon featured. Mathew Harrison, George and Michael Knott, Edward Chadwick and Henry Ainsty of the Newland Iron Company were owners of the two sloops *Ford* and *Michael*, the brigantine *George* and the dogger *Unity*. The names of three of the vessels reflected the names of owners of the company; *George* and *Michael* being the Christian names of the Knott brothers and *Ford* following the family name of the company founder.

Mathew Harrison was an investor on his own account, although only once as a subscribing owner, in nine other vessels. These were four sloops, three flats and two brigantines. He was an investor in six vessels with Ulverston sailmaker John Webster, together with many other individuals who covered a broad range of occupations and places of residence. These included merchants in Ulverston, Chepstow, Oban and Liverpool, a slate merchant from Broughton and an extensive list of mariners from Ulverston, Bardsea and Ireleth. The largest vessel in which Harrison invested was the *Ellen*, a 158 ton brigantine in which the Langtons and Birleys of Kirkham were joint owners.<sup>33</sup> Harrison was also a non subscribing owner in the sloop *Tryall*, the ownership of which was reviewed above. The vessel was listed in a trade directory for 1794 as a regular trader to Liverpool.<sup>34</sup> The flat *Molly* and the sloop *Benson* in which he was also an owner are identified in the same directory as being 'traders to various parts'.<sup>35</sup> Harrison's interests covered a

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<sup>&</sup>lt;sup>31</sup> Lancaster Register No., 8/1787.

<sup>&</sup>lt;sup>32</sup> Lancaster Register Nos., Ford 73/1786, Michael 3/1787, George 71/1786, Unity 70/1786.

<sup>&</sup>lt;sup>33</sup> Lancaster Register No., 40/1786.

<sup>&</sup>lt;sup>34</sup> Universal British Directory 1794, 4, 635.

<sup>35</sup> Lancaster Register Nos., Molly 1/1789, Benson 1/1793.

wide spectrum of vessels and trades, reflecting a general concern with the business of shipping, as opposed to one associated with the Newland Iron Company, although these vessels may on occasions have carried cargoes on its behalf.

Miles Postlethwaite, John Machel and William Penny of the Backbarrow Iron Company were the only non subscribing owners in the 23 ton flat *Penny Bridge*, a vessel for which a mariner William Towers who was not the master, was the sole subscribing owner.<sup>36</sup> William Towers appears again as the sole subscribing owner but not master of the 185 ton brigantine *Albion* in which the Hornby family of Kirkham were non subscribing owners.<sup>37</sup> Towers also appears later as a subscribing owner and master of the flat *Molly* and the sloop *Benson* registered in 1789 and 1793 respectively. There are strong indications here that Towers was a leader of ownership syndicates.

Postlethwaite, Machel and Penny were also non subscribing owners of the 93 ton brigantine *Hollow Oak*. <sup>38</sup> They shared non subscribing ownership with eight gentlemen, an 'esquire' and a mariner from the Furness region and two residents from Kendal and Chepstow with unspecified occupations. The subscribing owners were Thomas Machell, the master of the vessel, and William Satterthwaite, an Ulverston merchant. Postlethwaite and Machel also appeared as non subscribing owners of the 32 ton sloop *Backbarrow* a role they shared with a butcher and two farmers from the south of the region around Cartmel. <sup>39</sup> A mercer and a farmer from the same locality and a mariner from Barber Green were the three subscribing owners. The occupational backgrounds of the group suggest more of an interest in the agricultural trade than in the iron trade, although the name of the vessel was the place of one of the Backbarrow Company furnaces.

The Duddon Iron Company's Henry Kendal, was the sole subscribing owner of the sloop *Anna*. He also shared subscribing ownership of the brigantine *Argyle* with two Bardsea mariners, one of whom was also the master. Another man associated with the company, Joseph Latham, was a non subscribing owner in the *Argyle*. Latham was a resident of Goat Field, Argyllshire, the location of one

<sup>39</sup> Lancaster Register No., 26/1786.

<sup>&</sup>lt;sup>36</sup> Lancaster Register No., 41/1786.

<sup>&</sup>lt;sup>37</sup> Lancaster Register No., 11/1787.

<sup>&</sup>lt;sup>38</sup> Lancaster Register No., 4/1787.

Lancaster Register Nos., Anna 68/1786, Argyle 67/1786.

of the company's furnaces, after which it would appear the vessel was named. The remaining non subscribing owners also had connections with the company, indicating a link of the vessel with the business.

Those owners who were associated with the iron industry invested in vessels for both the long and short voyage trade. Possible short voyage passages were up the coast to Whitehaven, Carlisle and Argyll, across the bay to Lancaster to supply the Halton Iron Works in the Lune valley and to Liverpool to supply the iron industry in Cheshire through the internal waterway system. Longer voyage business for the brigantines, to Chepstow and South Wales, was identified in the shipping lists.

Others involved in the local industry who invested in Furness shipping included John Webster and George Lowrey who were Ulverston sailmakers. Webster and Lowrey between them held interests in 19 vessels, though they only invested together in one vessel, the dogger *Nelly and Fanny*. Webster held ownerships in 11 vessels which included subscribing ownerships in the sloops, *Fanny, Liberty,* and *Peggy,* the flats *Nancy,* and *Molly and Sally,* the dogger *Nelly and Fanny* and the brigantine *Sunderland*. Non subscribing ownerships were held in the flat *Molly* and the brigantine *Valentine* together with unclassified ownerships in the sloop *Tryall* and the brigantine *Fanny*. Unwrey held ownerships in eight vessels which included subscribing ownerships in the brigantines *Ellen* and *Tom* and the dogger *William*. The non subscribing ownerships included shares in the dogger *Tryall* and *Nelly and Fanny* and in the sloop *Nelly*. Lowrey was also an unclassified owner in the sloop *Jane* and the schooner *Friendship*.

Both men, therefore, invested extensively across the full range of vessels. Eleven of the nineteen vessels were built in the Furness region which suggests that there may have been some connection with their sail making businesses in the construction. They may well also have been repairing and replacing sails which

<sup>&</sup>lt;sup>41</sup> Lancaster Register No., 29/1786.

<sup>&</sup>lt;sup>42</sup> Lancaster Register Nos., *Liberty* 72/1786, *Peggy* 31/1786, *Nancy* 58/1786, *Molly and Sally* 2/1791, *Sunderland* 21/1786.

<sup>&</sup>lt;sup>43</sup> Lancaster Register Nos., *Molly* 1/1789, *Fanny* 12/1794.

Lancaster Register Nos., Tom 6/1787, William 25/1786.

<sup>&</sup>lt;sup>45</sup> Lancaster Register Nos., Jane 1/1792, Friendship 5/1794.

were paid for by shares in the vessels though equally their occupation would have made them particularly aware of investment opportunities but it is impossible to know much more about the reasons for their involvement without the support of their business accounts which unfortunately have not survived.

Two of the vessels in which they invested, the *Molly* and one of the *Tryalls*, as noted previously, were listed as constant traders to Liverpool. There was also the possibility of trade with Ireland for the brigantine *Ellen* with the involvement of John Ellerton, a Dublin merchant as a part owner. The brigantine *Valentine*, as seen earlier, had three Chepstow merchants as non subscribing owners.

Investors from the slate industry included Isaac Prill the Broughton slate merchant who held ownership interests in the sloops *Benson*, *Elisabeth*, Friendship and Jane and in the flat Molly. 46 The Elizabeth was shared with two other slate merchants, Joseph Penny of Bridge Field and Roger Atkinson of Ivy Tree, which suggests that the vessel may have been dedicated to the trade. The remaining four vessels in which Prill had an interest as a non subscribing owner had investors drawn from a broad spread of occupations. One with slate trade connections was the 30 ton sloop Friendship, many of whose owners came from West Furness, a slate mining region. Owners included the merchant John Woodburne from Kirkby Ireleth. Woodburne was identified in the will of George Lowrey, the Ulverston sail maker, as being a 'friend' who inherited Lowrey's rights and interests in a slate quarry at Smithy Hill in Kirkby Ireleth, together with Lowrey's brother in law, John Harriman, and two attorneys at law in Ulverston.<sup>47</sup> In addition to his investment in the *Friendship* with Isaac Prill, Woodburne was also a subscribing owner of the *Minerva*, a 74 ton flat in which he shared ownership with a maltster and a mariner from Ulverston and a merchant from North Cheshire.<sup>48</sup>

Thomas Rigge a slate merchant of Hawshead Rigge held non subscribing ownerships in two vessels. He was among 12 owners of the *Young William*, a 118

<sup>&</sup>lt;sup>46</sup> Lancaster Register Nos., Benson 1/1793, Elisabeth 53/1786, Friendship 5/1789, Jane 1/1792.

<sup>&</sup>lt;sup>47</sup> Lancashire Record Office, Wills proved at Richmond, 1805.

<sup>&</sup>lt;sup>48</sup> Lancaster Register No., 2/1790.

ton brigantine, who also included Thomas Langton, the Kirkham flax merchant and James Stockdale of Cark as subscribing owners and a further five members of the Langton and Birley families as non subscribing owners. <sup>49</sup> The background of these owners suggests that this vessel may have been involved in the Baltic trade. The second vessel in which Rigge was also a non subscribing owner was a 58 ton flat, the *Penny Bridge* referenced earlier as a vessel with investors from the Backbarrow Iron Company. Reference is made to Rigge in the Universal British Directory for 1794 where it is said he was 'a most respectable merchant who has several sloops constantly employed in the carriage of it (slate) from Pennybridge to almost every principal sea port town in England and Ireland, lately a quantity has been shipped to the West Indies. <sup>50</sup> This statement, however, is not supported by the registration records for Ulverston which suggests that if this was the case the vessels were registered in other ports.

The Furness merchant with the largest ownership stake was William Fell of Ulverston who was variously described as a merchant, mercer, and draper. Fell had investments in five vessels. Fell's principal interest appears to have been in the longer voyage trade, since he had ownership interests in three brigantines, *Betsy, Tom* and *Valentine*. He was also an investor in the dogger *William* and the sloop *Jane*. The *Jane* was included in a trade directory as a constant trader with Liverpool, while the *William, Valentine, Betsey* and *Tom,* were included in the same directory as 'traders to various parts.' Fell shared ownership of four of the vessels with either George Lowrey or John Webster. The remaining owners consisted of other merchants, both from within and outside the region, and a spread of local retailers and craftsmen including, stationers, butchers, drapers, furniture makers and cordwainers. In every case the vessels had the master, as one of the subscribing owners – a feature of brigantine ownership noted previously.

In summary the distinguishing feature of the patterns of ownership for the Ulverston vessels was the association with the iron and slate industries. The spread

<sup>49</sup> Lancaster Register No., 7/1787.

<sup>&</sup>lt;sup>50</sup> Universal British Directory 1794, 3, 250.

<sup>&</sup>lt;sup>51</sup> Lancaster Register No., *Betsy* 55/1786.

of these industrial centres across the Furness region was also reflected in the residential origins of those investing in shipping. Many of the owners had interests across the spectrum of vessel sizes and the occupations of the non subscribing owners again showed a wide distribution across the tradesmen, retailers and professions in the region although the number was less than that seen in Whitehaven registered vessels. The 55 vessels registered in Ulverston had 213 non subscribing owners spread over 32 occupations compared with the 446 non subscribing owners covering 56 occupations in the 40 Whitehaven registered vessels.

The investment in Ulverston vessels by merchants in Liverpool and Chepstow matches what has been uncovered of the region's pattern of trade from the evidence of the shipping lists and directories. The interest of the Kirkham flax processors in the brigantines, however, suggests the use of these vessels in the Baltic flax and hemp trade but this was not seen in the sample of shipping lists taken. It is therefore likely that the vessels traded to and from other ports, despite the requirement of the registration Act for the vessels to be registered in the port from where they normally traded.

The region's shipbuilding interests were extensive, vessels being constructed at many locations. Of the Ulverston registered vessels, 29, 53 per cent of the total, were built at locations along the Furness coastline including Carter House, Hammerside Hill, Salt Coats, Penny Bridge and Ulverston. The oldest vessels were the brigantine *Peggy and Ellen* built at Hammerside Hill in 1765 and two flats and a sloop built at Salt Coats in 1768-9. Of the remaining 26 vessels, 20 were built in the North West of which eight were built in Lancaster, and five at Tarleton or Freckleton on the Ribble. The six vessels built outside of the North West were all brigantines of which two were built in Chepstow, two in Whitby and one each in Hull and Newnham.

### Milnthorpe

In the ten year period 1786-95 only six vessels were registered in Lancaster as belonging to Milnthorpe. There was either little local interest in shipping or the trade was conducted by vessels belonging to other ports. Table 4 of Appendix 1 sets out the types of vessel, tonnages and number of owners and Figures 23 and 24 of Appendix 2 show their occupations and the places of residence. Merchants from

Kendal dominated the ownerships overall but in respect of subscribing ownerships merchants and mariners held more or less equivalent numbers holding five and four respectively. Merchants dominated the non subscribing ownerships holding 18 of the total of 33 with five farmers and four shearmen from Kendal holding the next highest numbers. These were all in one vessel, the brigantine Jenny.<sup>52</sup>

Apart from the master, the eleven owners of the *Jenny* were all associated with the woollen industry. The subscribing owners were John Wakefield, a Kendal wool merchant, and Thomas Johnson the master, with Kendal farmers and shearmen associated as the *Jenny's* non subscribing owners. John Hutton, an iron founder from Leighton, was a subscribing owner of the flat *Leighton* together with James Evans a Holme merchant and James Evans a Brackenthwaite husbandman.<sup>53</sup> Leighton was a township north of Carnforth in North Lancashire where a forge was operated by the Halton Iron Company of Lancaster which suggests a potential link between the vessel and the iron trade. The remaining vessels were owned by groups of Kendal merchants, one of which, the flat Kendal, also had two Liverpool merchants, Alexander Carson and Hwll Farrer, as non subscribing owners indicating the existence of a trading connection between the ports.54

In terms of individual levels of investment John Simpson a Kendal merchant had the highest level of investment being a non subscribing owner in the case of four of the vessels the dogger James, the flats Kent and Kendall and the sloop *Isabella*. 55 The next highest level of investment was by Holme merchant James Evans. In addition to his investment in the flat *Leighton*, Evans was also a subscribing owner in the flat James, and the sloop Isabella. George Braithwaite a Kendal drysalter, who would have had an interest in supplies of dye wood through Liverpool, was a non subscribing owner in the dogger James and the sloop Isabella.

The investment pattern in Milnthorp therefore reflected the local woollen and iron industries, although Kendal merchants were the principal investors. The

<sup>&</sup>lt;sup>52</sup> Lancaster Register No., 19/1786.

<sup>&</sup>lt;sup>53</sup> Lancaster Register No., 11/1794.

<sup>&</sup>lt;sup>54</sup> Lancaster Register No., 1/1791.

<sup>&</sup>lt;sup>55</sup> Lancaster Register Nos., James 22/1786, Kent 9/1787, Isabella 6/1791.

involvement of Liverpool merchants suggested an interest in the Liverpool trade which would have been the source of many of the supplies from overseas required for economic activities around Kendal. The higher profile of merchants as investors in Milnthorpe is a continuation of the pattern seen in Ulverston, a trend which we will see was continued in Lancaster.

These six Milnthorpe vessels were built locally; the brigantine *Jenny* and the flat *Kendal* in Lancaster and the remainder on the River Kent at either Milnthorpe or Haverbreck Bank. All were fairly new vessels having been built between 1784 and 1791.

#### Lancaster

Table 5 of Appendix 1 sets out the types, tonnages and size of the ownership groups for 63 Lancaster vessels registered in the years 1786 and 1787. The major interest was in vessels for the overseas trade with the West Indies and the Baltic, very few vessels, as we shall see later, were involved in trade with Ireland. The vessel types, however, reflect the involvement of the port in both overseas and coasting trade.

The distribution of ownership group sizes, their relationship to tonnage and the occupations and places of residence of the owners are considered for three separate groups of vessels in order to identify any differences in investment pattern for the different types of trade in which they would have been engaged. The first group is the snows and ships, the second the brigantines and the third the doggers, flats and sloops. The snows and ships would have mainly traded overseas to the Baltic and the West Indies. Brigantines were employed here, but could also have been used in longer distance coastwise trade and in trade with Ireland. The doggers, flats and sloops were the workhorses of the short haul coastal trade, although there are occasional records of them also appearing in the trade to Ireland. <sup>56</sup>

The characteristics of ownership for the 16 ships and snows are included as Figures 25-8 of Appendix 2. The vessels had the smallest ownership numbers of all three vessel groups and were owned almost exclusively by Lancaster merchants

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<sup>&</sup>lt;sup>56</sup> An example is the Preston sloop *Active* which traded with Drogheda. See Appendix 3.

in the West Indies trade and members of their families located in the islands as resident agents. Together they held 55 of the 63 ownership shares. The vessel ownerships were well spread across the merchant community with no one individual having an interest in more than three of the 16 vessels. The Rawlinson brothers, Abram and John, who were leading West India merchants, each had three ownership stakes. They were joint owners of two vessels, the *Cavendish* and the appropriately named *Two Brothers* and shared with four others in ownership of the *Active*. Thomas Rawlinson and Edward Salisbury, also prominent West Indies traders, had an interest in three vessels. Other investors included the London merchant, Robert Gillow, a member of a family of furniture makers in Lancaster, as a non subscribing owner of the 205 ton ship *Thomas*. The company imported mahogany and other hardwoods from the West Indies and sold furniture throughout Britain and to the colonies.

The 26 brigantines were also owned by small groups, with the average of 6.9 investors the lowest seen so far for brigantines registered in the northern ports and coincided with merchants having the highest level of representation in the ownership groups. Figure 31 of Appendix 2 shows the dominance of the merchants in the ownership of these vessels holding 137 of the 179 ownership shares, (76 per cent), and 45 of the 55 subscribing ownerships, (82 per cent). The next largest group, but at a much lower level, were the mariners with a total of 11. They were both a subscribing owner and master in the case of nine of the 26 vessels. This was a much lower percentage than for the brigantines in Ulverston or in West Cumberland and reflected the increasing interest of the merchants in the operation of the vessels. In the absence of direct Irish trade for the vessels in Lancaster they would have been involved in long haul overseas trade or in the longer voyage coasting trade, for instance to London, for which we will see that vessels were specially built.

A number of Lancaster brigantines were owned by residents of Furness. Fifteen from Cartmel featured as investors in five vessels. Among Cartmel

<sup>58</sup> Lancaster Register No., 114/1787.

<sup>&</sup>lt;sup>57</sup> Lancaster Register Nos., Cavendish 11/1786, Two Brothers 12/1786, Active 74/1786.

subscribing owners in the *Brittania* were merchants William and Thomas Roper. The Ropers shared subscribing ownership with Robert Inman, a Lancaster merchant, and members of the Langton and Birley family of Kirkham and a Whitby merchant were amongst the non subscribing owners. Merchants were the leading occupational group among the Furness investors in Lancaster brigantines. They accounted for 40 per cent of the total, with the remainder consisting of two gentlemen, a mariner, a surgeon, a yeoman, a farmer a spinster and a widow, which was a mix typical of the ownership patterns seen in Ulverston vessels.

Residents of Barbados and Dominica also featured among owners, reflecting Lancaster's interests in the West Indies trade. Metropolitan interests are indicated by London merchants' shares in the *Betsey, Triton* and *New Ellen*. <sup>60</sup> This connection is confirmed by the contract and specification records of John Brockbank, the Lancaster shipbuilder, which show that he built vessels specifically for the London trade. <sup>61</sup>

Despite the outside interests and the investors from Furness the owners of the brigantines are mainly residents of Lancaster as they were for the ships and snows. (Figures 28 and 32 of Appendix 2)

There was little multiple ownership of shares in Lancaster brigantines.

Two merchants, John Dilworth and Thomas Worswick, had the maximum ownership stakes being subscribing or non subscribing owners in four vessels.

John Brockbank, the Lancaster shipbuilder, was a subscribing owner for one vessel and a non subscribing owner for two and John Gardner a Cartmel surgeon held one subscribing and one non subscribing ownership.

Figure 35 of Appendix 2 shows that the merchants were also the leading investors in the doggers, sloops and flats. Despite an increased presence as an ownership group, mariners were only masters and owners for seven of the seventeen vessels, four as subscribing owners and three unspecified. The percentage for which the mariners were both owners and masters was about the same as the percentage for the equivalent vessels in Ulverston. Local tradesmen,

<sup>&</sup>lt;sup>59</sup> Lancaster Register No., 11/1787.

<sup>60</sup> Lancaster Register Nos., *Betsey* 20/1786, *Triton* 4/1786, *New Ellen* 76/1786.

<sup>&</sup>lt;sup>61</sup> Lancaster Public Library, Reference Section, catalogue reference PT 88921, John Brockbank, Contracts and Specifications, 1791-1820.

gentry, farmers, professional classes and spinsters were also more evident as owners for these vessels. The owners were largely residents of Lancaster and its immediate environs. Investors in these smaller vessels from outside the region consisted of two merchants from Liverpool, a gentleman from Flookburgh in Furness, a gentleman from Yorkshire, a mariner from Ulverston and a merchant, John Proctor, who was a resident of Grenada and also held shares in two ships in the West Indies trade. (Figure 36 of Appendix 2)

In respect of multiple ownerships the merchant John Chippendale had an interest in three vessels *Hope, Mary* and *Reynolds*. <sup>62</sup> Eight individuals with an interest in two vessels included three merchants John Dilworth, Thomas Satterthwaite, Thomas Edmundson, the shipbuilder, John Brockbank, ironmongers John Gardner and Thomas Walmsley, stonemason Robert Charnley and mariner George Mathews.

A comparison of ownership across the vessel types establishes the extent to which merchants had interests across the full spectrum of trade. Comparing the names of the owners of the three categories of vessels it is clear that the owners of the doggers, flats and sloops only had a limited interest in ownership of the ships and snows and vice versa. In general those who invested in the coastal traders did not invest in the overseas traders. Abram and John Rawlinson and Edward Salisbury, who were leading merchants in the West Indies trade, were amongst those who had no ownership interest in the vessels for the coasting trade. Exceptions included the merchants Francis and William Carter who together with others were owners of the flat *Thomas and Isaac* and the ship *Nancy*<sup>63</sup>. They also held stakes individually in a ship and two brigantines. Others who invested across the size spectrum included the merchants Thomas Satterthwaite and John Dilworth. Satterthwaite was a subscribing owner in two ships, a brigantine, a dogger and a sloop. Dilworth, who held the most ownership stakes of any individual in Lancaster, was a non subscribing owner in two ships, four brigantines and a sloop and was a subscribing owner in a dogger.

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<sup>62</sup> Lancaster Register Nos., Hope 5/1786, Mary 39/1786, Reynolds 16/1786.

The lack of integration of coasting and overseas trading interests is surprising. It would appear to have been a natural progression for the West Indies merchants to have had an interest in coastal vessels as a means of distributing their imported goods and also to have taken an interest in trade with Liverpool, but this does not appear to have been the case.

In summary the investment in Lancaster was mostly by merchants with interests in shipping cargoes to fulfil their trading commitments. The merchants owning the smaller vessels for the coasting trade tended to be a discrete group and we see other interests, such as John Brockbank the shipbuilder being involved. Brockbank used his vessels to carry timber for his yard and also, as we will see later, in the trade from Liverpool to Ulverston. Merchants were virtually sole owners of the vessels that operated in the West Indies trade and continued to be the principal owners in the smaller vessels although with a lesser interest as mariners and local tradesmen became involved. For the brigantines the ownership pattern was influenced by a number of the vessels having residents of Furness amongst the owners and the ownership pattern for these vessels followed, to some extent, the Ulverston pattern seen earlier.

There were very few investors representing the manufacturing concerns in the town and its environs, the Gillow family who were manufacturers of furniture and were investing in vessels in the overseas trade were one of the few. There was no investment by the sugar refiners, the candle and soap makers and the dyemakers who all had an interest in receiving supplies by sea. The investment culture in Lancaster was very much one in which the merchants played the leading role; the manufacturers were apparently more inward looking and concerned with investment in the development of their businesses. (The absence of sugar refiners as investors was surprising because John Lawson the father of one of the leading refiners in the town, Robert Lawson, started the business as an importer and built a quay in the town in the early eighteenth century to unload the vessels.)

The number of vessels built in Lancaster was surprisingly low at 54 per cent of the total registered, considering that the port had at least two shipyards. <sup>64</sup> Of the remainder the smaller vessels were mainly built in Liverpool and Tarleton and the larger vessels in Whitehaven and on the East Coast in Hull, Whitby and Yarmouth with a number purchased as prizes. The earliest vessel recorded as being built in Lancaster was the 149 ton snow *Concord* built by George Brockbank in 1764. <sup>65</sup> The vessels in the sample were only some six or seven years old which equates the fleet with the age of that in Ulverston and more modern than that in Whitehaven.

## **Poulton**

Only four vessels were registered as belonging to Poulton in the period 1786-95 suggesting again that the recorded trade of the port was conducted by vessels belonging to other ports. Table 6 of Appendix 1 shows a summary of the characteristics of the vessels and the size of the ownership groups.

The brigantines had the Kirkham flax processors as the principal owners. The 128 ton *Betty and Margaret* was owned by the Hornby family together with investors from the Furness region. These included some of those previously seen as investors in Ulverston vessels including John Webster the Ulverston sailmaker, John Towers a mariner from Aradfoot and Thomas Sunderland Esquire from Ulverston. The second brigantine, the 120 ton *Henry*, was owned by the rival Langton Birley company, again with investors from Furness including Mathew Harrison of the Newlands Iron Company. This is another example of Furness residents investing in vessels not registered in Ulverston and the third port in which the Kirkham firms invested in vessels with essentially the same profile of fellow investors from Furness, although very few of the Furness investors invested in more than one vessel. Of the two firms Langton and Birley were the leading investors with shares in four vessels; two in Ulverston, one in Poulton and one in Lancaster. The Hornby family were only involved with the *Betty and Margaret*.

<sup>&</sup>lt;sup>64</sup> Brockbanks' yard on the Green Area on the south bank of the River Lune and Smiths' yard on the north bank at Skerton were both building vessels in the late eighteenth century.

<sup>&</sup>lt;sup>65</sup> Lancaster Register No., 8/1786.

<sup>&</sup>lt;sup>66</sup> Preston Register No., 16/1786.

<sup>&</sup>lt;sup>67</sup> Preston Register No., 17/1786.

It is not clear why the Kirkham firms were investing in vessels in a number of ports with investors from Furness when there is no evidence of them having land based interests in Furness. Furthermore the analysis of commodity flows in Chapter 5 does not show any vessels trading to the Baltic from Ulverston. The Baltic trade carrying flax, hemp and timber was centred on Liverpool, Lancaster and Poulton.

The larger of the two sloops, the 50 ton *Molly and Nancy*, had James Livesley a Tarleton mariner as master and subscribing owner together with James Standen a Poulton merchant.<sup>68</sup> The vessel was re-registered in Preston in 1790 with Edmund Singleton a Poulton merchant as the sole owner and Henry Caunce as the master. The vessel is typical of those used in the Ribble coal trade and we see later that coal was traded to Poulton from Tarleton with limestone being carried on the return leg of the voyage.<sup>69</sup> The smaller sloop was owned by two pilots suggesting that it was not used in commercial trade.

The two brigantines *Henry* and *Betty and Margaret*, were built in Hull and Chepstow respectively in 1776 and 1784. The 50 ton sloop, the *Molly and Nancy*, was built in Tarleton Dock, a location where many such vessels were built for the Ribble coal trade. The 8 ton sloop, *Friends*, was built in Lancaster in 1786.<sup>70</sup>

# Preston

Table 7 of Appendix 1 shows the characteristics and size of the ownership groups for the vessels registered as belonging to the port in the period 1786-95. The vessels, apart from one brigantine, were sloops and flats which confirms the principal interest of the port in the short voyage coastwise trade although these vessels were also occasionally seen in trade with Ireland. The characteristics of the ownership groups in Figures 37 and 38 of Appendix 2 show that the average number of owners for each vessel type was less than those seen in the earlier ports for vessels of a similar size. There was also no trend towards increased numbers with increase in tonnage. Figures 39 and 40 of Appendix 2 show that merchants again were the dominant ownership group, and the residences of the owners were

<sup>68</sup> Preston Register No., 23/1786.

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<sup>&</sup>lt;sup>69</sup> See Lancashire Record Office, catalogue reference, DDCa/1/47-8, Accounts of James Winstanley & Co., trading records of the flat *Liverpool*.

<sup>&</sup>lt;sup>70</sup> Preston Register No., 21/1786.

mainly in Preston or Freckleton or in the environs of the Ribble or the Douglas. Three ownership shares were held by Edward Cammack of Liverpool who was variously described as a merchant, a yeoman and a farmer.

Although merchants held the highest ownership stake in the vessels mariners were more prominent than they had been in Lancaster, being the master and a subscribing owner for 18 of the 48 vessels, equivalent to 37 per cent of the total. This was only a slightly higher percentage than for the smaller vessels in Ulverston and showed again the increased influence of the merchants. Of the nine vessels in sole ownership merchants owned seven and mariners two. Thomas Briggs, a Preston coal merchant, had the highest individual single ownership with three. John Mayor, a Freckleton coal merchant and flax processor, was the owner with the highest overall level of investment with ownership shares in six vessels. Mayor shared ownership of five of the vessels with James Goodshaw with whom he was in partnership as a coal merchant. The vessels included two flats and three sloops, all the vessels being built in Freckleton. The largest vessel, the 64 ton sloop *Unity*, had seven owners one of whom was William Hornby the Kirkham sailmaker and flax merchant showing an association with coastal vessels in addition to those for the overseas trade.<sup>71</sup> The remaining four vessels in which Mayor and Goodshaw had an interest, the sloops Delight, 48 tons, Hero, 61 tons and the flats Lion, 51 tons and Content, 47 tons had either three or four owners who were all from Freckleton and were either merchants or mariners; the merchant John Hardiker featured twice. 72 The vessel in which John Mayor was an owner without James Goodshaw, the 50 ton sloop *Active*, had a Thomas Mayor, most likely Mayor's nephew, as a subscribing owner together with a John Goodshaw; John Mayor was a non subscribing owner of this vessel.<sup>73</sup>

James Monk, who was described as a merchant and a wheelwright from Burscough, had subscribing ownerships registered in three sloops, *Ellen and Susan*, *Sprightly*, and *Brothers* in the range 48 to 60 tons and a flat *Betty* of 42

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<sup>&</sup>lt;sup>71</sup> Preston Register No., 8/1786.

<sup>&</sup>lt;sup>72</sup> Preston Register Nos., Delight 1/1786, Hero 2/1795, Lion 5/1794, Content 3/1786.

<sup>&</sup>lt;sup>73</sup> Preston Register No., 2/1790. The Mayor family tree is included in Shakeshaft, P., *The History of Freckleton* (Lancaster, 2003), 177. This shows that John Mayor also had a son Thomas but he would have only been 19 years of age when the *Active* was registered. Mayor's nephew Thomas, described as a coal merchant and boat owner, would have been 25.

tons.<sup>74</sup> Ellen and Susan was built at Appley Bridge on the higher reaches of the River Douglas and the remainder at Hoole on the Ribble at the confluence with the Douglas. Monk was a subscribing owner with one other person for every vessel. In the case of three of the four vessels the second owner was John Monk who was described in the registers as being an Eccleston innholder in 1786 but by 1794 had become a merchant from Latham, near Ormskirk. The fourth vessel was co-owned with Elizabeth Rymer from Hesketh Bank who did not have a recorded occupation.

Those with interests in three vessels included Edward Abbat who was described as a Preston nailor in the shipping register and as a coal merchant in a Preston trade directory, John Dalton, described as a gentleman twice and as a merchant once, also from Preston, and James Hall a resident of Lytham again described as a gentleman twice and a merchant once.

Abbat had an interest in two flats *Hope* and *Happy* of 46 and 49 tons and a sloop *Lord Stanley* of 68 tons.<sup>75</sup> He shared ownership of the two flats with Peter Lomax a Preston salt merchant together with the executors of Robert Lowe, an attorney for one of the vessels. The ownership of the sloop was shared with Edward Slater, a Kirkham slater, and Thomas Smith a timber merchant from Chorley. Peter Lomax was also registered as a subscribing owner of a 52 ton sloop, *Heart of Oak*, with Christopher Wilcock a coal merchant from Ashton. John Dalton, described as a gentleman twice and a merchant once, invested as a subscribing owner with the Preston grocer John Hoghton and the vessel masters in *Union* and *Friendship*, two sloops of 46 tons, with Richard Newsham of Preston Banks as a non subscribing owner. Dalton was also the sole owner of the 62 ton sloop, *Tryall*.<sup>76</sup>

James Hall, variously described as a gentleman and merchant, was the sole owner of the 57 ton sloop *Sincerity* and shared ownership of a 91 ton brigantine *Concord* with two Preston merchants, Henry Brewer and James Meadows. Hall

<sup>76</sup> Preston Register Nos., Union 2/1786, Friendship 4/1786, Tryall 7/1793.

<sup>&</sup>lt;sup>74</sup> Preston Register Nos., *Ellen and Susan* 11/1786, *Sprightly* 5/1786, *Brothers* 2/1791, *Betty* 6/1794.

<sup>&</sup>lt;sup>75</sup> Preston Register Nos., *Hope* 4/1792, *Happy* 3/1791, *Lord Stanley* 3/1793.

shared ownership in a third vessel, the 54 ton sloop *Endeavour*, with Thomas Forshaw a Blackpool gentleman.<sup>77</sup>

Merchants from across the trades were investing in vessels together with mariners, and gentlemen appear again as owners, not having been seen as owners in the Lancaster vessels. Such gentlemen may have owned the mineral rights on land on which coal was mined. Samuel Bold from Wigan, who had interests in three sloops, was an example.<sup>78</sup> There was no evidence in Preston of the existence of the large multi occupational ownership groups seen in the ports further north and there was no evidence of investment by the emerging industries in Preston, of which the cotton textile industry was expanding the most rapidly at the time. The main investment came from tradesmen, merchants, mariners and landed gentry from the environs of the rivers Douglas and Ribble.

The creeks of the Ribble and settlements on the Douglas were centres of shipbuilding and 35 of the 48 vessels registered, 73 per cent, were built at 14 such locations showing the wide dispersion of the activity in the locality. The earliest vessel built was the sloop *Ingine* built at Tarleton in 1768. Of the remainder, all apart from two were built at locations in the North West, which included Lancaster, Liverpool Ulverston and Northwich. The two from outside the region were sloops built at Carmarthen and Milton in Kent. The average year of build of the vessels in the sample was 1782 which showed that a relatively young fleet was registered in the port.

#### Liverpool

The vessel types and the tonnages registered in the port in the period 1788-93 are shown in Table 8 of Appendix 1 which is taken from Pope's thesis. The emphasis on the overseas trade is shown by the 492 ships registered in the port although there was significant investment in the smaller vessels for the coasting trade. Brigantines which could have been involved in longer voyage coastwise trade and trade with Ireland were the second highest number of vessels registered.

<sup>79</sup> Preston Register No., 12/1786.

<sup>&</sup>lt;sup>77</sup> Preston Register Nos., Sincerity 13/1786, Concord 2/1787, Endeavour 2/1789.

<sup>&</sup>lt;sup>78</sup> Samuel Bold was identified as one of eight people named on a lease of land for a coal mine in Orrell dated 7 January 1773. See Lancashire Record Office, Catalogue Reference, DDX 233/5.

Figure 41 in Appendix 2 shows the ownership groups to have been small, similar to those for vessels in Lancaster and Figure 42 confirms that again, similar to Lancaster, the commercial classes, of which the merchants were the principal group, were by far the major investors in the vessels. Figure 43 shows that the places of residences of the owners were centred on Liverpool and the environs of the River Mersey and Figure 44 shows that multiple ownership was not a dominant pattern although there were some large ownership stakes, including one of 31 which unfortunately are not analysed by Pope.

Pope does not analyse the ownership by vessel type and it is not therefore possible to examine patterns of ownership for the different trades although he does comment that although the social classes, defined typically as widows, spinsters schoolteachers etc, only held 6.9 per cent of the total of 3,643 ownership shares overall, their most substantial holdings were in the flats and sloops. The group held 28.5 per cent of the shares in vessels in the tonnage range 1 to 50 tons and 33.6 per cent of those in vessels in the range 51-100 tons. In total 80 per cent of their ownerships were in vessels of 150 tons or less. The principal type of vessel in which they invested was the flat in which they held 33.2 percent of the ownership shares. 80

This reflects the trend seen in Lancaster where the ownership spread increased outside of merchants and mariners for the smaller vessels but in the case of Lancaster the owners were principally local tradesmen. The pattern, however, was not reflected in the fleet of flats and sloops which Pope identified as being owned by the Clare family of Warrington, who were in the coal trade. The Clare family owned eighteen vessels and details of the vessels have been extracted from the Liverpool registers from the references provided by Pope and are shown in Table 4.1.

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<sup>&</sup>lt;sup>80</sup> Pope, D.J., 'Shipping and Trade in the Port of Liverpool 1788-93', unpublished PhD thesis, University of Liverpool 1970, II, 331.

Table 4.1 - Vessels owned by the Clare family, coal merchants of Warrington

Name	Reg.No.	Year	Туре	Tonnage	Where Built	When	No. of Owners
Pattys	11	1786	Sloop	70	Manchester	1783	3
Mary	26	1786	Flat	68	Northwich	1766	3
Molly and Nancy	27	1786	Flat	75	Northwich	1776	2
King of Prussia	35	1786	Flat	57	Northwich	1760	3
Molly	74	1786	Dogger	92	Frodsham	1786	3
Glory	195	1786	Flat	49	Chester	1782	2
Amity	197	1786	Flat	70	Northwich	1786	4
Providence	85	1787	Flat	66	Manchester	1778	4
Mary	111	1787	Flat	53	Manchester	1769	2
John	152	1787	Flat	60	Chester	1783	2
Miner	251	1787	Flat	75	St Helens	1787	4
Venus	52	1790	Flat	72	St Helens	1790	1
Neptune	90	1790	Flat	54	Liverpool	1768	3
True Blue	85	1791	Flat	71	St Helens	1791	2
Two Brothers	55	1792	Sloop	86	Liverpool	1792	2
Lyon	52	1793	Flat	80	Liverpool	1793	3
Wilderspool	53	1793	Flat	76	St Helens	1793	4
John and William	79	1793	Flat	74	St Helens	1793	2

The vessels were mainly flats of between 49 and 80 tons, somewhat larger than the sloops operating in the coal trade on the Douglas and the Ribble. The size of the ownership groups were small, averaging 2.7 owners per vessel, which is slightly higher than the 2.3 owners per vessel recorded for the sloops registered in Preston. There is no evidence here of the social classes investing in the numbers seen by Pope The occupations of the owners were principally merchants or coal merchants with John and William Clare holding 74 per cent of the shares. The next highest occupational group were mariners with 13 per cent. The ownership characteristics of the Clare vessels are in close agreement with the results obtained by Craig and Jarvis from an analysis of all the vessels registered in Liverpool in 1786, which showed merchants as the leading ownership group with 79 per cent, followed by mariners with 12 per cent. There was little change when they also looked at registrations for the years 1804-5 when merchants still held 79 per cent but the mariners had declined to eight per cent with the next highest group being gentlemen with two per cent; no evidence again of the social classes investing at the level reported by Pope.81

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<sup>&</sup>lt;sup>81</sup> Craig, R and Jarvis, R.C., *Liverpool Registry of Merchant Ships* (Manchester, 1967), Table 26, 201-2.

## Chester

Robin Craig worked extensively on the port of Chester and its trade and overcame the lack of shipping registers by identifying 33 vessels registered in the port in the period 1786-8 from other records of which he was able to trace the full details for 20 and the rig only for a further two. <sup>82</sup> Unfortunately he did not publish these details and I have only been able to find full information for 10 vessels in the Liverpool register of vessels visiting the port from the references that he kindly provided. The characteristics of these vessels and the numbers of owners are shown in Table 9 of Appendix 1.

The characteristics of the vessels show that an interest existed in both the overseas and coastal trade with the range of vessels extending from a sloop of 41 tons to a ship of 132 tons, although sloops were owned in the greater numbers. The ship, *Princess Royal*, had two Parkgate merchants, John Brown and John Washington as the first named owners but the records for the vessel were particularly difficult to read and only a limited amount of information could be obtained for the remaining eighteen owners of whom two were identified as Chester gentlemen, one was Henry Hegg a Chester druggist, one a Heston surgeon and there were also two innkeepers a tobacconist and an attorney. <sup>83</sup> Geoffrey Place in his study of Parkgate identified Washington as a Liverpool businessman who launched the Parkgate Packet Company to provide vessels to carry passengers and was in partnership with Thomas Makin in 'Makin and Washington shipbuilders of Parkgate in the period 1785-90'. The company failed in 1790 following Washington's death in 1789 and Makin was declared bankrupt. <sup>84</sup>

The two brigantines, the 97 ton *Salisbury* and the 66 ton *Peggy*, had twelve owners and one owner respectively. <sup>85</sup> The *Salisbury* included Thomas Guile a Parkgate mariner, Henry Hegg and Robert Whittol a roper, both from Chester,

<sup>&</sup>lt;sup>82</sup> Craig, R., 'Shipping and Shipbuilding in the Port of Chester in the Eighteenth and Early Nineteenth Centuries', T.H.S.L.C., cxvi, 42. Unfortunately these details were not published and although he provided me with a list of the vessel names with BT 6 references and references of entries in registers for other ports, I have only been able to reconstruct the register details for ten of the vessels.

<sup>83</sup> Chester Register No., 26/1787.

<sup>&</sup>lt;sup>84</sup> Place, G.W., *The Rise and Fall of Parkgate, Passenger Port for Ireland 1686-1815*, (Manchester, 1994), 102-3.

<sup>85</sup> Chester Register Nos., Salisbury 13/1786, Peggy 27/1787.

amongst the owners. Thomas Griffiths a merchant and one other were identified as being residents of Salisbury, after which perhaps the name of the vessel took its name although it is difficult to see a possible connection with Salisbury in Wiltshire. Apart from these owners only a Parkgate mariner, a sailmaker and a gentleman could be identified. The Salisbury is identified by Place as being a regular trader between Parkgate and Dublin. 86The Peggy was built in Chester with the shipbuilder Peter Jackson as the sole owner. Jackson was also the sole owner of the sloops Peter and Dick.87 Craig identifies Jackson as being one of the two principal shipbuilders in Chester in the late eighteenth century together with Joseph and John Troughton who both built their vessels on the banks of the Dee close to the town.<sup>88</sup> The remaining sloops included the Collyflower which had three owners including John Washington of Parkgate, seen above as an owner in the ship *Princess Royal*, and two Parkgate mariners. 89 The *Nancy* and *Venus* were both owned by Thomas Williams an esquire from Llanydan with John Daws a London solicitor and Edward Hughes a clerk from Greenfield, all of whom were connected with the Parys Copper Mining Company. 90 The final sloop was the Lady Mary Fitzmaurice which was in the ownership of the Hon. Thomas Fitzmaurice of Denbigh together with two others of unspecified occupation and place of residence as owners.<sup>91</sup>

The *Princess Royal* was built in Parkgate in 1787. The brigantine *Salisbury* was built in Liverpool in 1780 and the *Peggy* in Chester in 1787, all relatively new vessels. Of the seven sloops three were built in Chester and one each in Newnham, Liverpool, Abersaueth near Pwllheli, and Minford near Barmouth. All the vessels were built in the period 1778-85 with the exception of the *Venus* which was built in Abersaueth in 1774 and all apart from two were built in the North West region.

Craig analysed the records of the 20 vessels for which he was able to assemble full registration details and the two for which he was only able to identify the rig. The analysis showed that the vessels consisted of 11 sloops, six

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<sup>&</sup>lt;sup>86</sup> Place, G.W., 96. The reference was taken from the *Chester Chronicle* edition dated 28 April 1780

<sup>87</sup> Chester Register Nos., *Peter* 9/1786, *Dick* 19/1787.

<sup>&</sup>lt;sup>88</sup> Craig, R., 60.

<sup>89</sup> Chester Register No., 25/1787

<sup>90</sup> Chester Register Nos., Nancy 2/1786, Venus 7/1786.

<sup>91</sup> Chester Register No., 14/1787.

brigantines, two brigs, a ship, a flat or dogger, and a galliot. The average tonnage was 72 tons compared with a national average of 102 tons in 1788, and the average age was five years which would bring it much in line with the vessels examined in this study in the North West ports except for Whitehaven. Sixty per cent of the vessels were built in Chester.

In respect of sizes of ownership groups six vessels had a single owner and the overall average was five for each vessel. Of the total of 90 ownership shares, residents of Chester held 36, or 40 per cent of the total, and the remainder were widely spread amongst residents of Flintshire, Anglesey, Denbighshire, Staffordshire, London, Liverpool, Dublin and Londonderry, suggesting trading interests with North Wales, Liverpool, London and Ireland.

The mix of occupations was also widely spread and was not dominated by merchants. Craig reported that grocers, druggists, innkeepers, ropers, carriers, tobacconists, a banker, a brewer, a flour dealer, a tallow chandler, a corn merchant, a liquor merchant and a corn cutter were amongst the many trades and professions involved as owners; a situation which Craig contrasted with the major centres of shipping such as Liverpool and London where he stated 'it would seem that shipping was predominantly owned by members of the merchant community.' The vessel types, apart from the ship, were typically those that might be used in the near coasting trade, trade to London and trade to Ireland.

In summary the review of ownership from north to south through the North West region has revealed a transition from a maritime dominated environment, where the industries were mature and long established, to a merchant dominated environment where newer more complex trade was developing fuelled by overseas trade and advances in industrialisation. Investment from within the community and by those connected with the land-based economies was also reduced in the south as development of the industries had a pressing claim for investment and merchants became the principal shipowners. The ownership group sizes were reduced with the merchants having the funds to invest in smaller groups with less accountability to others for the operation of the vessels.

# CHAPTER 5 - COMMODITY FLOWS, VESSELS AND OWNERS

The chapter examines the commodity flows and the types of vessels and their owners involved in the trade to and from the ports of the North West and across the Irish Sea in the late eighteenth and early nineteenth centuries.

Vessel movements were reported in shipping lists published in local newspapers, albeit in some cases intermittently, but nevertheless the available lists are sufficient to define many of the trading patterns that existed in the region in the period. Shipping lists provide dates of entries and clearances, the master's name and in some instances details of the cargoes carried by the vessels in both the coasting and overseas trade. The information on cargoes, however, was generally more complete for vessels in the overseas trade and the information was invariably more complete for entries than for clearances. Even when included, the description of the cargo was not always specific. The terms 'merchant goods' and 'sundries' were used extensively in the shipping lists, especially to and from Liverpool and the ports in the North West. An indication of what these may have consisted of is given by the Port Books for the North Wales ports, which are available up to the end of the eighteenth century; examples for 1788/9 show that the trade from Liverpool consisted of goods shipped by several merchants, some of which were transhipped imported goods and others raw materials and manufactured goods from Liverpool and its hinterland.1

The entries generally outnumbered the clearances and it is not clear why this was the case. It could have been through vessels clearing being in ballast, which were generally not recorded, or carrying non-excisable goods which were not recorded by Customs, or simply a lack of interest in outgoing cargoes; those incoming being of greater interest to the merchant communities in the ports. Other sources were identified to provide a more complete picture of the trade. These included sailing notices in newspapers advertising the availability of vessels to take cargoes to stated destinations, trade directories, occasional Government

<sup>&</sup>lt;sup>1</sup> See Table 5.23 for cargoes taken from Liverpool to the ports of North Wales in 1788-9.

Surveys on the state of trade and business records, although the latter are scarce. One particularly valuable surviving business record is the account book of the *Active*, a 50 ton sloop registered in Preston, which details the voyages of the vessel and the cargoes carried in the coasting trade in the North West and in the trade with Ireland over the period 1796-1820.<sup>2</sup>

The availability of newspapers with shipping lists for the ports of the region has been described in detail in Chapter 1, and with some not being available until the nineteenth century the extracts selected for analysis were for the earliest year that provided reasonable cover of the ports, 1801. The exceptions were the records for Carlisle which are from the first editions of the *Carlisle Journal* from 1802 and those for Preston and Poulton from the first editions of the *Preston Journal* in 1807. In the absence of shipping lists for Chester the Port Books for 1774 are used. The data for Liverpool was taken from Pope's thesis.

The samples of data, of necessity in such an extended regional review, are limited in size and it has to be accepted that some trade may have been missed, especially activity which had a seasonal characteristic, although there is evidence of commodities being shipped out of season, for instance coal shipped from Preston to Lancaster in June and July.

A search of the port shipping registers was undertaken to define the characteristics of the vessels included in the shipping lists and the names and occupations of the owners. The name of the master being important to confirm the identification of a vessel because of the extensive duplication of vessel names. The registration details of Chester vessels, where registration records are only available from 1836, were taken from the Liverpool register of vessels visiting the port.<sup>3</sup> This method was first recognised and used by Robin Craig who identified 20 of the 33 vessels registered in Chester in the period 1786-88.<sup>4</sup>

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<sup>&</sup>lt;sup>2</sup> The Account book for the *Active* is in the personal collection of Mr D Kirby and a transcription was kindly provided by Mr Peter Shakeshaft.

<sup>&</sup>lt;sup>3</sup> Merseyside Maritime Museum, Register of vessels visiting Liverpool but not belonging to the port, 1788-1818.

<sup>&</sup>lt;sup>4</sup> Craig, R., 'Shipping and Shipbuilding in the Port of Chester in the Eighteenth and Early Nineteenth Centuries', *T.H.S.L.C.*, 116, 42.

The analysis of commodity flows and vessel types employed are again examined in a geographical sequence of ports from north to south. The flows of the principal commodities are also illustrated by charts in Chapter 3.<sup>5</sup> The vessels in the shipping lists include a number of those which appeared in the samples of registration details analysed in Chapter 3; others were sought in the registration records outside of those selected.

#### Carlisle

# **Commodity Flows**

Table 5.1 shows the number of coastal entries reported in the Carlisle Journal for the port of Carlisle in the period from 3 April 1802 to 28 Dec 1804 with the ports of supply and the goods received identified. There were no entries recorded from Ireland or the Isle of Man.

Table 5.1 - Coastal Entries into Carlisle 1802-4

Port	Entries	Commodities
Liverpool	50	Merchant Goods, Sundries, Cast Iron, Machinery, Steam Engine, Cotton Frame, Timber, Tar, Butter, Salt, Bricks, Mahogany, Oats, Beans
Ulverston	12	Slates,Iron Spades(1)
Workington	12	Pig Iron, Deals, Barley, Oats, Lathwood
Beaumaris	5	Slates
Whitehaven	4	Pig Iron,Wheat
Chepstow	4	Oak Timber, Oak Bark
Glasgow	3	Sundries, Vitriol, Red Wine, Bricks
Leith	1	Oil of Vitriol
Lancaster	1	Mahogany
Kirkudbright	1	Oak Timber
Conway	1	Oak Timber

The most entries and the most extensive range of commodities were received from Liverpool, and no doubt even more commodities were included within the umbrella of 'merchant goods'. The machinery, steam engine and cotton frame received from Liverpool reflected the importance of Liverpool for the shipment of a wide range of manufactured goods produced in the hinterland and the salt and bricks were other products seen in shipping lists for vessels arriving from Liverpool. The bricks would most likely have been manufactured in Flintshire and initially shipped to Liverpool from the Dee. Consignments of bricks

<sup>&</sup>lt;sup>5</sup> See Maps 9, 10 and 11.

from Liverpool and Glasgow and slate from Ulverston and Beaumaris show the need for building products in the region.

The shipments of pig iron from Workington and Whitehaven indicate that forges were being operated. The entries from overseas, not shown in the table, show shipments of iron were being received from Gothenburg. Musgrave Lewthwaite, identified in Chapter 4 as an owner of coastal shipping, was offering Swedish and Russian iron and Memel timber for sale at Bowness along with manufactured items described as English iron axle trees and sock plates. John Lonsdale, an iron merchant and tallow chandler, was also offering 'iron landing at Newcastle on board the *Union* and *Pelican*, both from Sweden' in addition to having a quantity of Russia and English iron of all descriptions on hand' No entries were recorded from Newcastle and it is possible that the iron could have been transported from Newcastle along the 'Military Road', an upgraded turnpike from Newcastle to Carlisle. Oil of vitriol received from Leith and Glasgow could have been used to clean the iron preparatory to tin plating. 8

The surprise cargoes were the wheat, barley and oats from Whitehaven and Workington and the oats and beans from Liverpool. Whitehaven and Workington also sent grain to Liverpool. Although arable land existed in West Cumberland it was not extensive and the shipments are most likely to have arisen from supplies received in the port by sea which were in excess of those required for consumption. There is compelling evidence shown later that grain was received from Ireland and from the Isle of Man and Dumfries and it may well have been that merchants in the ports were dealing in grain as a commodity. Shipping lists show that Liverpool was well supplied with grain from a number of sources and merchants in the port could have been sending oats and beans to Carlisle at a time of local shortage. Table 5.2 shows the coastal clearances from Carlisle over the same period.

<sup>&</sup>lt;sup>6</sup> Carlisle Journal, 20 November 1802.

<sup>&</sup>lt;sup>7</sup> Carlisle Journal, 3 November 1803.

<sup>&</sup>lt;sup>8</sup> Minchinton, W.E., The British Tin Plate Industry, a History (Oxford, 1957).

<sup>&</sup>lt;sup>9</sup> Reference from Shipping Lists in Billinge's Liverpool Advertiser for 1801.

Table 5.2 - Coastal Clearances from Carlisle 1802-4

Port	Clearances	Commodities
Dumfries	27	Coals
Liverpool	22	Merchant Goods, Sundries, Corn, Oats, Oat Meal, Bacon, Alabaster
Glasgow	1	Not Specified
Leith	1	Barrel Staves
Poulton	1	Corn
Preston	1	Corn
Ulverston	1	Coals
Whitehaver	11	Barrel Staves
Workington	1	Not Specified

The shipping of coal mined in the North Pennines across the Solway Firth to Dumfries was the principal activity although there was also substantial return trade to Liverpool; 12 of the 22 clearances were carrying grain and merchant goods and sundries were also a significant element of the trade. It is difficult to surmise what might have been included in the outgoing sundries and merchant goods. The principal manufactured goods were textiles, which were traditionally transported by road, although transportation by sea was not unknown with examples existing of Manchester textiles being shipped to Scotland. 10 Other possibilities included manufactured iron goods and re distribution of some of the commodities received in the trade from overseas. The appearance of barrel staves in the outgoing cargoes is surprising because the region was not wooded close to the coast although wooded areas existed further up the Eden valley around Appleby. Oak timber from which barrel staves were traditionally manufactured was being shipped to the port from a number of locations. The shipping industry would have had a need for oak timber and other types, some of which would have originated in the Baltic.

The shipping lists for Carlisle are the least complete of any for the North West ports because of their infrequent publication but they have nevertheless confirmed the existence of outgoing trade in corn and foodstuffs. The entry with machinery, a steam engine and a cotton frame from Liverpool, has indicated the reliance of the textile industry on sea trade for the shipping of large bulky

<sup>&</sup>lt;sup>10</sup> Armstrong, J., 'The Significance of Coastal Shipping in British Domestic Transport, 1550-1830', *International Journal of Maritime History*, iii, No. 2, 1991, 70.

mechanical items which would be difficult to transport by road. The imports of iron confirmed the existence of metal-working which was typical for an agricultural region, where a demand would exist for ironware to use as farming implements. Iron products would also have been required for the shipbuilding industry.

#### Vessels

The 72 entries and clearances with Liverpool were shared by 21 vessels of which only five were identified in the Carlisle registers. These five vessels, however, accounted for 51 of the 162 entries and clearances with 38 vessels sharing the rest. The sloops *Experiment*, *Johns*, and *Whale* were constant traders with Liverpool. *Experiment* and *Johns* had mainly merchants, mariners and shipwrights as owners, including Musgrave Lewthwaite, the Carlisle merchant, whereas the *Whale* had farmers as the major occupational group, including William Nixon of Sandsfield who was also the first named owner of the *Experiment*. The schooner *St Andrew*, was also used in the Liverpool trade but also had a recorded entry from Chepstow and a clearance to Workington.<sup>11</sup>

The *Experiment* had seven clearances recorded to Liverpool carrying corn or grain, on occasions accompanied by merchant goods, and nine entries from Liverpool of which eight were specified as carrying merchant goods, one with timber, and one had no cargo specified. The *Johns* had four clearances and seven entries from Liverpool all carrying merchant goods or sundries. The imbalance could very well be attributed to missing shipping lists rather than an imbalance in trade. The activities of the *Johns* and *Experiment* confirm Musgrave Lewthwaite the Carlisle merchant as having been a general trader and not confined to his timber and iron import business which was identified in Chapter 4. It is regrettable that we do not have any surviving papers to learn about his activities in more detail.<sup>12</sup>

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<sup>&</sup>lt;sup>11</sup> Carlisle Register Nos., *Experiment* 2/1791, *Johns* 2/1788, *Whale* 1/1786 and *St Andrew* 5/1800. <sup>12</sup> *Experiment* was owned by the Carlisle merchant Musgrave Lewthwaite, together with six others of which only one was a farmer and two were ships carpenters. The owners of the *Johns* also included Musgrave Lewthwaite and a Joseph Lewthwaite also described as a merchant from Carlisle together with four other owners who included a mariner from Sandsfield on the Solway,

The *Whale* was a 58 ton sloop, built in Maryport in 1766 which in 1802 was nearly forty years old. The vessel had five clearances recorded to Liverpool, three of which were carrying corn and merchants goods and two had merchant goods only. Merchant goods were specified for seven of the eight return voyages and sundries specified for one. <sup>13</sup> Five of the ten owners were farmers and a Liverpool merchant with connections to the corn trade was involved, but no merchants in Carlisle. The first named owner was Francis Ashburn, a Sandsfield mariner, which suggests that he was the 'manager' of the vessel and responsible for dealing with the Liverpool merchants; an example of a mariner in the merchants role. It is also interesting to note that despite the high proportion of farmers amongst the owners the vessel was not exclusively carrying corn in the recorded clearances to Liverpool.

The *St Andrew* had seven entries from Liverpool, six with merchant goods and one with oats and beans, one clearance to Workington with an unspecified cargo and an entry from Chepstow with oak bark. The vessel was in the sole ownership of a Bowness mariner.

Only one other vessel in the shipping lists appeared in the Carlisle registers, this was the sloop *William and Ann*, which was owned in part by a cotton manufacturer from Annan. The vessel had one recorded entry from Liverpool carrying salt and one return clearance to Liverpool carrying bacon and oats and nothing associated with the textile industry. This suggests that the vessel was a free standing investment and not owned to be used in connection with the textile business of the owner.<sup>14</sup>

Other examples of constant traders were the vessels, *Betty* and *Experiment*, a different *Experiment* to the vessel in the Liverpool trade, which were engaged in the coal trade to Dumfries. The vessel *Friendship* was also involved in the trade but in addition to 12 clearances with coal to Dumfries the vessel also had six entries from Workington with deals, lathwood and pig iron, an entry from

John Fawcett a Maryport merchant, Thomas Fawcett a Maryport mariner and John Barns a Maryport soapmaker.

The *Whale* had ten owners including Thomas Allison, who was identified in Chapter 4 as being associated with corn merchants in Liverpool and five of the owners were farmers from south of the Solway.

<sup>&</sup>lt;sup>14</sup> Carlisle Register No., 1/1803.

Ulverston with slate and one from Kirkcudbright with oak timber. These vessels could not be found in the registers for the North West ports and were assumed to have been registered in a Scottish port.

A search of the Liverpool, Preston and Lancaster registers identified a further five vessels trading between Carlisle and Liverpool but not as constant traders. One vessel was registered in Lancaster as belonging to Ulverston and the remaining three were registered in Liverpool. The Ulverston vessel was the *Bardsea*, a 38 ton flat owned by a Bardsea merchant, James Bowskill, which had an entry from Liverpool carrying tar, an entry from Whitehaven with slate and one from Whitehaven with pig iron. Slate was not mined in West Cumberland but Willan records shipments of slate to Whitehaven from the North Wales ports in his examination of Port Books in the late eighteenth and early nineteenth centuries suggesting that there may have been a trader in the port.

The three Liverpool vessels included, the *Edward and William*, a 72 ton galliot, with one entry shown to be carrying cast iron, machinery, a steam engine and a cotton frame, the *Atherton Quay* a 57 ton flat with one entry carrying merchant goods and the *Pattys* a 70 ton sloop with one entry carrying slates from Ulverston.<sup>16</sup>

Other vessels not identified in the registers were operating in a similar manner to those belonging to Liverpool. The *Alliance*, had two entries carrying mahogany, one from Lancaster and one from Liverpool, both ports which would have received imports from the West Indies, and two clearances carrying alabaster. The *Peggy and Mary* had an entry from Beaumaris with slates and an entry from Ulverston with slates and iron spades and the *Prosperity* had a clearance to Liverpool with oats, an entry from Ulverston with slates and an entry from Liverpool with 'goods'.

This pattern of entries or clearances to and from various ports carrying a miscellany of cargoes overlaid on a number of constant traders will be seen to be a recurring feature of the trading pattern of vessels and illustrates the underlying

<sup>&</sup>lt;sup>15</sup> Lancaster Register No., 42/1786.

<sup>&</sup>lt;sup>16</sup> Lancaster Register No. Bardsea 27/1786, Liverpool Register Nos., Edward & William 174/1800, Atherton Quay 15/1786 and Pattys, 11/1786.

complexity of the trade and organisation that would have been necessary to manage the scheduling of the vessels.

The number of Carlisle registered vessels that appeared in the shipping lists was surprisingly small, only six of the 53 vessels, suggesting that most of the trade was conducted by vessels belonging to other ports, but that does leave the question of the operational range of the Carlisle vessels. The incompleteness of the shipping lists could have been responsible for a number of the vessels being missed and, as an alternative to Carlisle, the vessels could have been trading in and out of Maryport for which no shipping list exists. Of the nine vessels with recorded entries from Memel, Gothenburg and Riga only one was traced in the registers for the North West ports. This was the *Horta*, a 180 ton barque registered in Whitehaven as belonging to Maryport. The brigantines *Curwin and Bradills* and *Mary* registered in Carlisle, which were typical of the type of vessel used in the trade, did not appear in the shipping lists.

The overall impression therefore gained of Carlisle was that the smaller vessels owned in the locality were engaged in regular trade with Liverpool with an emphasis on shipping corn to the Liverpool market and bringing a more or less equal number of shipments of merchant goods back in return. The other regular trade operated by dedicated vessels was the coal trade to Dumfries although the vessels were owned elsewhere, most likely in Dumfries.

Overlaid on this regular trade was a more intermittent trade conducted by vessels owned elsewhere, including flats, sloops and a galliot owned in Liverpool and similar vessels owned in other North West ports carrying a wide range of cargoes on an on demand basis. In total over the three-year period there were records of 48 vessels responsible for 150 entries and clearances trading with 14 locations in the coasting trade but there was no direct trade with Ireland. Many of the vessels had only one or two entries or clearances with Carlisle which suggested that the vessels were operating in a 'tramp' type pattern collecting and delivering cargoes as and when they were available throughout the region. Clearly a sophisticated information network was in place to enable the vessels to operate

<sup>&</sup>lt;sup>17</sup> Whitehaven Register No. 21/1801

effectively in this mode which relates to the networking activities of the merchants discussed in Chapter 6.

The identified commodity flows in order of number of recorded shipments in and out were merchant goods, which dominated the trade with Liverpool, coal to Dumfries, slate from Ulverston and Beaumaris, and corn to Liverpool, Poulton and Preston. More occasional shipments included lathwood and deals received from Workington, suggesting that the port had direct trade with Northern Europe, vitriol for tin plating, oak timber for the shipping industry and oak bark for tanning. The barrel staves shipped to Leith and Whitehaven were a typical requirement for ports which required barrels for shipping goods.

## Whitehaven and Workington

# **Commodity Flows**

The shipping movements in the coasting trade and in the trade with Ireland from Whitehaven and Workington were examined from the shipping lists published in the Cumberland Pacquet for the first ten weeks of 1801.

Unfortunately no lists were published for Maryport and at this time. Cargoes were not included in the shipping lists and therefore commodity flows had to be identified from other sources including vessel accounts, the trading characteristics of the remote ports, identification of goods shipped, from entries in the receiving port and from previous research work. The principal trade of both ports was coal to Dublin but the shipping lists show that other trade existed.

Table 5.3 shows the entries and clearances for Whitehaven including ports with two or more entries or clearances in the period from 6 January to 10 March 1801.

Table 5.3 - Whitehaven entries and clearances in the 1rish and coasting trade with ports having two or more entries or clearances

6 January - 10 March 1801

Ireland					
Port	Entries	Clearances	Total	% of Total	
Dublin	48	92	140	50.4	
Waterford	11	1	12	4.3	
Cork	4	0	4	1.4	
Drogheda	3	0	3	1.1	
Gatehouse	3	0	3	1.1	
Belfast	2	0	2	0.7	
Total	71	93	164	59.0	

Isle of Man					
Port	Entries	Clearances	Total	% of Total	
Isle of Man	16	18	34	12.2	

England and Scotland					
Port	Entries	Clearances	Total	% of Total	
Liverpool	17	13	30	10.8	
Workington	9	8	17	6.1	
Harrington	6	2	8	2.9	
Garlistown	4	11	5	1.8	
Chepstow	3	0	3	1.1	
Kirkudbright	3	2	5	1.8	
Dumfries	2	2	4	1.4	
Maryport	2	3	5	1.8	
Preston	1	2	3	1.1	
Total	47	33	80	28.8	

Overall the trade was nearly in balance with a total of 150 entries and 160 clearances, which was not typical; entries normally exceeded clearances. The trade with Dublin was the most significant feature of shipping activity, although in this case clearances exceeded entries by a ratio of almost two to one. This could have been accounted for in part by the vessels delivering coal and returning in ballast, but vessels clearing for Dublin and returning from other Irish ports were also a contributory factor. The Irish port supplying the most entries after Dublin was Waterford, followed by Cork and Drogheda suggesting that a return trade in grain and foodstuffs existed. Waterford, Cork and Drogheda were ports shown in the

Irish Customs records to have been shipping foodstuffs, typically butter, pork, beef, bacon, wheat, oats and flour to England in 1803-5.<sup>18</sup>

The potential for coal vessels to carry other cargoes, including foodstuffs, has been noted previously by Cullen who makes reference to the masters of the coal vessels deserting the coal trade in summer, when the prices were low, to seek more lucrative work in the overseas trade from other ports. <sup>19</sup> The accounts of the *Active* in Appendix 4 show that it was an established practice for Preston vessels to carry coal to Dumfries and Annan and return with agricultural produce.

Vessels clearing Whitehaven for Dublin also had entries recorded from the other West Cumberland ports of Workington, Harrington and Allonby suggesting the possibility that a quadrilateral trading pattern existed between the West Cumberland ports and ports in Ireland, although it is difficult to find documentary evidence for all the legs of the voyages. The Workington shipping lists could be researched to identify matching entries from Ireland but no shipping lists were published for Maryport, Harrington and Allonby.

Table 5.4 shows the vessels and voyages found as examples of triangular trade and Table 5.5 those with the potential to have been involved in quadrilateral trade.

<sup>19</sup> Cullen, L.M., *Anglo Irish Trade 1660-1800* (Manchester, 1968),122

<sup>&</sup>lt;sup>18</sup> T.N.A., CUST 15/107, Export of commodities from Ireland to England by port, 5 Jan 1803-5 Jan 1804. Unfortunately the records do not specify the English ports.

Table 5.4 - Examples of triangular trade for Whitehaven 6 January - 10 March 1801

Vessel Name	Entry From	Date	Clearance To	Date
Orion	Waterford	22-Feb	Dublin	05-Feb
Pleasant	Youghall	17-Jan	Dublin	06-Mar
Portland	Cork	09-Jan	Dublin	07-Feb
Prince of Wales	Waterford	19-Jan	Dublin	14-Feb
Samuel and Thomas	Waterford	16-Jan	Dublin	13-Feb
Wells	Londonderry	30-Jan	Dublin	06-Mar

Table 5.5 - Examples of potential quadrilateral trade for Whitehaven 6 January - 10 March 1801

Vessel Name	Entry From	Date	Clearance To	Date
Dove	Harrington	20-Jan	Dublin	10-Feb
Dispatch	Harrington	20-Jan	Dublin	05-Feb
Economist	Harrington	20-Jan	Dublin	05-Feb
Freedom	Workington	02-Jan	Dublin	06-Feb
Goodwill	Maryport	02-Jan	Dublin	07-Feb
Integrity	Workington	27-Jan	Dublin	06-Feb
Jane (Hewitt)	Workington	01-Jan	Dublin	07-Feb
Jane (Pearce)	Harrington	20-Jan	Dublin	06-Feb
Liberty	Harrington	01-Jan	Dublin	26-Jan
Mentor	Allonby	09-Jan	Dublin	17-Feb
Sarah	Workington	01-Jan	Dublin	06-Feb

Of the potential examples of quadrilateral trade only the *Integrity* was confirmed with a recorded entry into Workington from Cork on the 13 January and a clearance from Workington for Dublin on the 27 January, which coincided with the vessel's entry into Whitehaven on the same date. It was common practice in the Workington shipping list to show clearances as the final destination and not including any intermediate port of call. The vessel was shown as a clearance for Dublin from Whitehaven on 6 February. As a measure of the extent of the triangular and potential quadrilateral trade, the vessels listed in Tables 5.4 and 5.5 represent 17 of the total of 98 vessels identified as trading between Whitehaven and Dublin in the selected period.

The records also provide an insight into the utilisation of the vessels. The majority of the vessels trading to Dublin from Whitehaven only achieved one return voyage in the ten week period which almost certainly was as a result of the

queuing system in force at Whitehaven for loading coal.<sup>20</sup> The time between a clearance to Dublin and a re-entry into Whitehaven tended to be only around three weeks which suggests that there were not the same limitations in unloading. The weather conditions could also have been a factor in the time taken for the round voyages. There was a tendency for the vessels to move as a fleet, which may have been in response to sailing conditions or could have been to avoid privateers which often preyed on merchant vessels in the Irish Sea. As an example, there were 55 clearances for Dublin from 5 February to 7 February and then only a further 31 clearances until 5 March. Similarly the vessels tended to return in large contingents. A total of 16 vessels returned between 27 February and 3 March, when previously the same number had been spread over a five-week period from 19 January to 25 February.

In respect of other trade a frequent and reasonably well-balanced flow of trade existed between Whitehaven and Liverpool and Whitehaven and the Isle of Man, which equated to more than one vessel each way every week, typical liner trade. The later section on vessels identifies two vessels in the Liverpool trade as being packet boats carrying passengers and one is also identified in the Isle of Man trade by Hutchinson who stated that 'there are frequently from 15 to 20 passengers weekly by this vessel; sometimes a much greater number.'<sup>21</sup>

The cargoes carried in the incoming Liverpool trade would most likely again have been merchants goods, as they were to Carlisle, consisting of re shipped imports and locally produced materials and manufactured goods. Whitehaven had a shipbuilding industry and would have been in need of the necessary construction materials, some of which would have been imported.

It is more difficult to envisage the composition of the return trade.

Manufacturing industry in West Cumberland was limited at that time and the items in Table 5.22 listed as being received in Liverpool from Whitehaven in 1790

<sup>21</sup> Hutchinson, W., The History of the County of Cumberland (1794, reprint Ilkley, 1974), ii, 83.

coal hurriedly at a low price in order to return to the queue as quickly as possible to reload.

<sup>&</sup>lt;sup>20</sup> Beckett, J.V., Coal and Tobacco, the Lowthers and the Economic Development of West Cumberland, 1660-1760 (Cambridge, 1981), 83. The queuing system had a regulation to control the 'turn' in which the place was determined by the order in which the vessels passed the Isle of Man on the outward voyage. This helped to control the price by preventing masters discharging the

show sundries as the principal category with specific references to only alabaster, tar, cordage and wheat.

The nature of the trade with the Isle of Man could be envisaged as having been coal outgoing and agricultural produce returning. The entries from Chepstow were most likely to have been associated with the supply of oak timber for shipbuilding and the clearance for Neath associated with the iron trade. No trade with Carlisle was recorded in this period, although Whitehaven appeared in the Carlisle shipping lists for 1802-4 and therefore a level of trade did exist but apparently at a sufficiently low frequency to have been missed by this sample. The trade with Dumfries and Kirkcudbright would most likely have followed that to and from Preston shown in the accounts of the Active, with coal outgoing and corn and foodstuffs returning.

#### Vessels

Eight of the vessels in the Dublin trade were identified in the Whitehaven shipping registers. They consisted of five brigantines, a hoy, a snow and a sloop. The brigantines were the *Dallam Tower*, 97 tons, *Integrity*, 200 tons, *Orion*, 174 tons, Peggy, 130 tons and Radcliff, 139 tons. The hoy was the Pilgrim, of 93 tons and the snow the Sarah of 130 tons.<sup>22</sup> All were large vessels except for the sloop, the Hopewell, of 37 tons, which was owned by two Whitehaven fish curers.

The ownership patterns for the larger vessels were generally the same as those found in the study of ownerships of Whitehaven vessels analysed in Chapter 4, with a mariner being the first named of three subscribing owners supported by an extensive list of non-subscribing owners. The *Peggy* and *Pilgrim* were exceptions. The *Peggy* was in the sole ownership of Jonathan Harrison, a Whitehaven cabinet maker, and the *Pilgrim* had the usual three subscribing owners, including the master, a sailmaker and a Whitehaven gentleman, but only had one non subscribing owner, John Stewart, who was a Whitehaven merchant. The sole ownership of the *Peggy* by a cabinet maker suggests an exception in the

<sup>&</sup>lt;sup>22</sup> Whitehaven Register Nos., Dallam Tower 01/1788, Integrity 50/1800, Orion 10/1801, Peggy 15/1800, Radcliffe 31/1794, Pilgrim 9/1800 and Sarah 31/1794. The hoy was a sloop-rigged vessel more typically used in the North Sea in the trade between London and the North Kent coast, the name being Dutch in origin.

pattern of ownership of vessels in the coal trade, the vessel being typical of others in the trade, or the existence of other trade to Dublin.

The trade with Liverpool was conducted by smaller vessels, similar to those seen in the Liverpool trade to and from Carlisle. Three sloops, *Apollo*, *Fly* and *Grizel*, were constant traders with Liverpool. The *Apollo* of 52 tons and the *Grizel* of 57 tons were both registered in Whitehaven; the *Fly* could not be found in the Whitehaven or Liverpool registers but was found in an advertisement for packet boats in the *Cumberland Pacquet*.<sup>23</sup> The ownership patterns of the *Apollo* and *Grizel* were different than those for the brigantines with merchants of the town holding the controlling subscribing ownerships. The Kirkham flax merchants Henry and Joseph Birley and Thomas and William Hornby, were amongst the eight non-subscribing owners of the *Grizel*; an investment which may have been associated with the transportation of goods in the coastal trade between their factories in Kirkham and Whitehaven. The vessels, which were constant traders with Liverpool, were completing more voyages in the period than those involved in the trade with Ireland. The *Fly* had three entries and two clearances recorded and the *Apollo* and the *Grizel* both had two entries and a clearance.

The *Fly*, together with another sloop the *James*, were advertised as Liverpool packets and the Fly was said to be 'a strong fast sailing vessel, elegantly fitted in her accommodations, in which passengers may depend on being properly attended to.' The vessels were being prepared for service in January 1801 to provide a sailing every two days, weather permitting, between the two ports.<sup>24</sup> The *James* made a late entry into the service only recording her first entry into Whitehaven on 28 February and registering only one entry and a clearance. The *Fly* made her first entry on 29 January 1801 and demonstrated that she was capable of a short turn round time, making her first clearance on 5 February and re-entering on the 11 February. The six days between the clearance and the reentry demonstrate not only favourable sailing conditions, but also facilities at Liverpool to rapidly offload and re-load any cargo carried with the passengers. Each vessel, of course, needed to complete the round trip in a week to maintain the

<sup>&</sup>lt;sup>23</sup> Whitehaven Register Nos., Apollo 51/1800, Grizel 48/1799

<sup>&</sup>lt;sup>24</sup> Cumberland Pacquet, 16 Jan 1801.

twice weekly sailing in each direction by two vessels. The existence of sailing 'packets', designed for fast passages with accommodation for passengers, provides another aspect of the North West coastal trade which, in the case of Whitehaven, would replace an arduous journey by road.

The packet type operation between Whitehaven and the Isle of Man was conducted by the *Isle of Man Packet*, a vessel also not registered in Whitehaven and assumed to have been registered in the Isle of Man. The vessel recorded seven entries and six clearances in the period indicating a turn round of between four and seven days from clearance to re-entry. The vessel carried passengers and again any cargo would have needed to have been capable of being rapidly loaded and unloaded so that the schedule could be maintained.

There were fifteen other vessels recorded as trading between Whitehaven and the Isle of Man, many with only one entry or clearance or at the most one round trip, which was more typical of the timing for the coal trade. Three vessels combined the Isle of Man with trade to and from other ports. The vessel *Mary* had an entry from Liverpool prior to a clearance for the Isle of Man, followed by an entry and a further clearance to the Isle of Man; the *Sincerity* traded with the Isle of Man and with Garliston and Kirkcudbright and the *Friendship* had an entry from Dromore in Waterford followed by a clearance to the Isle of Man; more examples of vessels in the 'tramping' mode.

The trade with Preston, although only consisting of one entry and two clearances in the period was of special interest because they were undertaken by two Preston registered sloops, *Hero* and *Active*. The account book of the *Active* supports the clearance record shown in the shipping list showing the voyage to and from Whitehaven with the vessel clearing Poulton for Whitehaven on 9 February 1801 with a cargo of flax mats and bobs and returning to Preston on 20 February with yarn, 'for Hornby,' - one of the Kirkham flax processing concerns. The Whitehaven shipping list does not record the entry but shows the vessel clearing for Preston on 18 February, which is a complementary date to the Preston arrival. The *Hero* is recorded as entering Whitehaven from Preston on 7 February and clearing for Kirkcudbright on 10 February

<sup>&</sup>lt;sup>25</sup> Preston Register Nos., *Active* 2/1790, *Hero* 2/1795.

Nine other vessels were recorded as trading between Whitehaven and either Dumfries or Kirkcudbright but only one vessel recorded an entry and a clearance suggesting that there were no constant traders in the trade. None of these vessels were found in the registers and again, as in the trade in coal from Carlisle, were most likely to have been registered in a Scottish port.

Trade in and out of Workington in the same period consisted of 111 entries and 138 clearances. Table 5.6 shows the entries and clearances for Workington with ports with two or more entries or clearances.

Table 5.6 - Workington entries and clearances in the Irish and coasting trade, with ports having two or more entries or clearances

1 January – 10 March 1801

Ireland						
Port	Entries	Clearances	Total	% of Overall Total		
Dublin	35	116	151	64.3		
Belfast	20	0	20	8.5		
Drogheda	_12	0	12	5.1		
Cork	10	0	10	4.3		
Newry	4	0	4	1.7		
Kinsale	2	0	2	0.9		
Youghall	2	0	2	0.9		
Total	85	116	201	85.5		

Isle of Man				
Port	Entries_	Clearances	Total	% of Total
Ramsey	0	2	2	0.9

England and Scotland						
Port	Entries	Clearances	Total	% of Total		
Dumfries	5	7	12	5.1		
Chepstow	4	0	4	1.7		
Liverpool	1	5	6	2.6		
Maryport	0	3	3	1.3		
Stranraer	3	0	3	1.3		
Kirkudbright	2	2	4	1.7		
Total	15	17	32	13.6		

The trade between Workington and Ireland was a greater percentage of the total than in Whitehaven and the ratio of re-entries to clearances for Dublin is less and the returns from other Irish ports greater than they were in Whitehaven. Belfast, which had accounted for only two entries into Whitehaven, was the Irish port, providing the most entries after Dublin, although both Drogheda and Cork, as for Whitehaven, provided significant numbers of entries. Evidence again therefore

existed of a triangular trading pattern. Of the 95 vessels in the trade between Workington and Ireland there were 32 vessels in a triangular trading pattern with northern and southern Irish ports. Table 5.7 shows the trade with the ports in southern Ireland and Table 5.8 the trade with the ports in the north. There may well also have been quadrilateral trade but this cannot be established because of the practice of only showing final destinations in shipping lists in Workington.

Table 5.7 - Examples of triangular trade for Workington, 1 Jan - 10 March 1801 (Southern Ireland)

Vessel Name	Entry From	Date	Clearance To	Date
Bella			Dublin	17-Feb
	Drogheda	03-Mar		
Brittania	Cork	27-Jan	Dublin	17-Feb
Cleopatra	Cork	27-Jan	Dublin	17-Feb
Friends	Youghall	27-Jan	Dublin	17-Feb
Hector			Dublin	06-Jan
	Drogheda	03-Mar		
Industry			Dublin	17-Feb
	Drogheda	03-Mar		
Integrity	Cork	10-Feb	Dublin	17-Feb
John	Youghall	10-Feb	Dublin	03-Mar
John and William			Dublin	06-Jan
	Drogheda	03-Mar	Dublin	10-Mar
Lark	Drogheda	06-Jan	Dublin	17-Feb
Martin	Kinsale	27-Jan	Dublin	17-Feb
Minerva	Cork	03-Mar	Dublin	10-Mar
Musgrave	Cork	06-Jan	Dublin	17-Feb
Neptune	Cork	10-Feb	Dublin	17-Feb
Robert	Cork	10-Feb	Dublin	10-Mar
Royal Oak	Drogheda	06-Jan	Dublin	17-Feb
	Drogheda	10-Mar	<u> </u>	

Table 5.8 - Examples of triangular trade for Workington, 1 Jan – 10 March 1801(Northern Ireland)

Vessel Name	Entry From	Date	Clearance To	Date
Acorn	Newry	06-Jan	Dublin	17-Feb
	Belfast	10-Mar		
Ann	Belfast	27-Jan	Dublin	17-Feb
	Belfast	10-Mar		
Beaver	Belfast	06-Jan	Dublin	10-Mar
Dispatch	Newry	06-Jan	Dublin	10-Feb
Eliza	Newry	06-Jan	Dublin	17-Feb
Friendship	Belfast	27-Jan	Dublin	10-Mar
Happy Return			Dublin	06-Jan
	Belfast	27-Jan	Dublin	17-Feb
Joshua	Belfast	27-Jan	Dublin	17-Feb
	Drogheda	03-Mar		
Leland	Belfast	10-Feb	Dublin	10-Mar
Lion			Dublin	06-Jan
	Belfast	27-Jan	Dublin	17-Feb
Mary (Bell)	Belfast	13-Jan	Dublin	10-Mar
Mary (Collin)	Belfast	10-Feb	Dublin	10-Mar
Mary Ann			Dublin	06-Jan
	Belfast	27-Jan	Dublin	17-Feb
	Belfast	03-Mar		<u> </u>
Three Brothers (Halcrow)			Dublin	06-Jan
	Belfast	27-Jan		
Three Brothers (Thompson)			Dublin	06-Jan
	Belfast	27-Jan		
Wiliam	Belfast	27-Jan	Dublin	17-Feb

A feature evident in both tables is that vessels were completing more voyages in the ten week period than had been the case in Whitehaven which suggests that faster turnarounds were achieved in loading coal at Workington. The trade with Northern Ireland showed an even faster turnaround time which may have been accounted for by more efficient unloading in the ports of Northern Ireland or perhaps different commodities carried in the trade.

The trade from Belfast could indicate a connection with the Irish linen trade. The Irish Customs records show that Belfast was one of the principal ports from which linen was exported and the regional review in Chapter 2 showed that sailmaking and linen cloth production existed in the West Cumberland ports and Workington may have been trading with Belfast for flax or yarn supplies. The lack of similar trade to Whitehaven may have been a result of the connection of the Kirkham flax merchants with manufacturing in Whitehaven for which they supplied materials from other sources.

There is only one record of trade between Workington and other West Cumberland ports which was one clearance for Whitehaven. The vessel, the *Henderson*, was also recorded as an entry into Whitehaven and subsequently cleared for Virginia. The Whitehaven records show nine entries and eight clearances with Workington, which is further evidence of the inaccuracies in the Workington records which were instanced earlier by clearances for Ireland via Whitehaven being recorded as clearances to Ireland.

Workington had much less trade with Liverpool than Whitehaven with only six entries and clearances with the port while Whitehaven recorded thirty over the same period and there were also only two clearances to the Isle of Man. The trade with Kirkcudbright was at about the same level but that with Dumfries was much greater, twelve entries and clearances compared to four. Overall there was less trade in Workington than in Whitehaven, with only 249 entries and clearances compared to 310.

#### Vessels

Two of the vessels in the Irish trade were located in the Whitehaven registers as belonging to Workington. The *Joshua*, 101 tons, appears in Table 5.8 trading with Belfast and Drogheda and the *Pallas* 122 tons, traded exclusively to and from Dublin.<sup>26</sup> The ownership profiles for the vessels generally followed the pattern seen in Chapter 3 with mariners being the major shareholders. No other vessels were found in the registers.

The trade with Liverpool was conducted by a number of vessels with none in constant trade with the port. Each entry and clearance with Liverpool was recorded by a different vessel and only one was found in the registers, the *Ford* a 40 ton sloop registered in Lancaster as belonging to Ulverston and owned by the Newland Iron Company.<sup>27</sup>

There was a constant trader operating between Workington and Dumfries. The vessel *Sincerity* recorded a total of seven entries or clearances in the ten week period. The *Welcome*, *Margaret* and the *Catherine* also had a clearance each and the *Jenny* recorded a clearance and an entry. Unfortunately, none of these vessels

<sup>&</sup>lt;sup>26</sup> Whitehaven Register Nos., Pallas 28/1789, and Joshua 65/1790

<sup>&</sup>lt;sup>27</sup> Lancaster Register No., 73/1786.

were found in the registers. The trade with Kirkcudbright was conducted by a single vessel, the *Isabella*, with two entries and two clearances, but again the vessel could not be traced.

The overall impression gained of the West Cumberland shipping was one in which the coal trade of the brigantines to Dublin predominated but in addition there were underlying patterns of other trade. The smaller vessels traded between Liverpool and Whitehaven which included a fast packet service for passengers. There was also trade with the Solway and the Isle of Man, again including a packet service. Following the example of the *Active* the most likely trade would have been in coal with corn and foodstuffs being received in return. Evidence of trade in flax and linen existed through the trade between Belfast and Workington and by trade between Preston and Whitehaven, where factories existed for flax spinning.

# Ulverston, Milnthorpe and Lancaster

The records of the coastal trade and the trade with Ireland conducted through Lancaster, Ulverston and Milnthorpe were examined for a nineteen week period using the shipping lists published in the *Lancaster Gazette* from its first date of publication on 27 June 1801 to 7 Nov 1801. There were, however, four editions published with no shipping lists and when lists were included they did not always cover all three ports. Four editions with shipping lists did not include those for Ulverston and a list for Milnthorpe was only included in the edition published on 27 June. Analysis of the records, however, suggests that the Ulverston records were carried over if they missed an edition as they were expressed as being to a date whereas the Lancaster movements were for specific dates and appeared to be lost if no list was included for the following week. The information therefore could not be used as a quantitative measure of trade and some records of trade between the ports may have been missed.

Also in respect of the cargoes carried information is only provided for entries into Lancaster and Milnthorpe and no information is provided for clearances from any port. This means that commodity flows into Ulverston had to be obtained from other sources. The identification of the cargoes carried by the vessels, however, was assisted by vessels entering the port from the same port of origin as Lancaster entries for which the cargoes were identified.

#### Ulverston

# **Commodity Flows**

The entries and clearances for Ulverston with ports having two or more entries or clearances in the period from 3 July to 1 October 1801 are shown in Table 5.9.

Table 5.9 - Ulverston entries and clearances in the Irish and coasting trade with ports having two or more entries or clearances

3 July to 1 October 1801

Ireland				
Port	Entries	Clearances	Total	% of Overall Total
Dublin	9	2	11	3.6
Newry	3	0	3	1.0
Londonderry	2	0	2	0.7
Total	14	2	16	5.2

Isle of Man				
<u>Isle of Man</u>	6	0	6	2.0

England and Scotland				
Liverpool	40	67	107	34.9
Preston	42	14	56	18.2
Kirkcudbright	4	6	10	3.3
Oban	3	5	8	2.6
Chester	2	8	10	3.3
Glasgow	2	4	6	2.0
London	2	4	6	2.0
Total	95	108	203	66.1

There were 125 entries and 188 clearances in which the Liverpool and Preston trade dominated the movements. It is clear from the Lancaster records that the incoming trade from Preston would have been coal. Surprisingly there was little return trade. Preston was a developing town at this point and would have been expected to have had a demand for building materials, including slate, which is shown later to have been shipped in significant quantities from Ulverston to Liverpool and has previously been identified as being shipped to Carlisle. The Lancaster records also show coal being shipped from Liverpool to Lancaster and therefore it is reasonable to assume that it was also carried to Ulverston, no doubt in addition to cargoes of merchant goods. An account of the coastal 'imports' and 'exports' of the port of Ulverston in 1807 is provided by Dickson in his review of

agriculture in Lancashire in the early nineteenth century and shows the commodities shipped in and out of the port.<sup>28</sup> Table 5.10 is taken from the accounts.

Table 5.10 - Ulverston coastal 'imports' and 'exports' 1807

Incoming	Outgoing
Tonnage per register 18,018 tons	Tonnage per register 28,560 tons
1913 bushels of white salt	11,202 tons of iron ore
8747 gallons of spirituous liquors	11,372 tons of slate
418 quarters of wheat	682 tons pig and bar iron
255 quarters of malt	634,000 hoops and basket rods
22 quarters of oats	163 quarters of wheat
140 quarters of barley	794 quarters of barley
4763 chaldrons 26 bushels of coal	3551 quarters of malt
94 tons 8 cwt cannel coal	1096 cwt of tanned leather
570 chaldrons of culm	2191 barrels of gunpowder
173 chaldrons 32 bushels of cinders	

Source: Dickson, R.W., General View of the Agriculture of Lancashire (London 1815), 639

The list shows that salt and coal, in its various forms and derivatives, which were typical of the commodities shipped from Liverpool, were the principal commodities received. The spirituous liquors could have originated from overseas, including Ireland, and been re-shipped from Liverpool. The outgoing tonnage was much greater than the incoming tonnage as a result of the high tonnages shipped of slate and iron ore with the clearances to Llanelly and Chepstow suggesting that these centres of iron production were beneficiaries of the trade. Iron ore may also have been shipped to Liverpool for transportation on the inland waterway network to the iron works in Cheshire - a trade that was being conducted earlier in the eighteenth century.<sup>29</sup> Oban could also have been a destination for iron ore to supply the furnace operated by the Duddon Iron Company in Bonaw in Argyll.

Malt was used in the brewing industry and the total of malt and barley shown as being shipped out in Dickson's table suggests that barley was the

<sup>29</sup> Marshall, J.D., Furness and the Industrial Revolution (Barrow-in-Furness 1958), 21.

<sup>&</sup>lt;sup>28</sup> Dickson, R.W., General View of the Agriculture of Lancashire (London 1815), 639.

principal grain produced in the locality. The hoops and basket rods were products of the Lakeland coppicing industry and the gunpowder factory was established in 1798 at Low Moor on the River Leven. The barrel hoops and basket rods would have been needed in Liverpool for the manufacture of containers for shipping and gunpowder would have been in demand by the magazines in Liverpool for the armed merchant shipping and for the export trade to West Africa.

The trade with Ireland was at a relatively low level and was mainly with Dublin; entries greatly outnumbered clearances. There was also some trade with Londonderry and Newry in Northern Ireland. The nature of the trade is difficult to define; cargoes were not identified in the shipping lists and no references were found in the historiography. An analysis of voyage patterns showed vessels entering from Dublin and Newry and making only a brief call in Ulverston before proceeding on to Chepstow and Llanelly suggesting a potential triangular trade involving Ireland and the iron industry although the specifics are difficult to identify.

#### Vessels

The 42 entries from Preston included 36 by 11 vessels registered in Preston, one by a vessel belonging to Ulverston and five entries by three vessels, which could not be found in the registers. The Preston vessels included the sloops *Active, Dart, Minerva, Union* and *Lion* which we will see later were recorded as entering Lancaster carrying coal and provide the evidence that coal was also being shipped to Ulverston.<sup>30</sup> The Preston registered vessels that traded most frequently between Preston and Ulverston were the *Ellen and Susan*, a 48 ton sloop with six entries and three clearances and the *Lively*, a 57 ton sloop with seven entries and one clearance which reflected the imbalance in the trade.<sup>31</sup> The destinations of the Preston vessels clearing from Ulverston, apart from Preston, were five clearances to Liverpool and one to Chepstow but mostly there were no recorded clearances, suggesting that the vessels returned in ballast. The vessels in the coal trade were

<sup>&</sup>lt;sup>30</sup> Preston Register Nos., *Active 2/1790*, *Dart 2/1788*, *Minerva 1/1800*, *Union 2/1800* and *Lion 5/1794*.

<sup>&</sup>lt;sup>31</sup> Preston Register Nos., Ellen and Susan 11/1786, Lively 9/1786.

owned in and around the port of supply, similar to those in the Carlisle corn trade, although the opposite applied in the coal trade from Carlisle to Dumfries.

The trade with Liverpool was conducted by 46 vessels of which 24 were found in the registers. Nine vessels belonged to Ulverston, six to Liverpool, five to Preston and four to Lancaster. The highest number of entries and clearances between Ulverston and Liverpool was recorded by a Lancaster vessel, the *Dove*, a 67 ton flat owned by the Lancaster shipbuilder John Brockbank, which recorded a total of eight. The *Dove* was followed by the Ulverston vessels *Jane* and *Newland*, sloops of 66 and 52 tons, with six entries or clearances each, two flats, the *Minerva* 74 tons and the *Content* 47 tons and a 93 ton schooner, the *Friendship*, all with five each.<sup>32</sup>

The Ulverston vessels were responsible for the highest number of entries and clearances of all the identified vessels having 36 with the next highest being the Lancaster vessels, with 16, followed by the Liverpool vessels with nine. This perhaps reflects the importance of the outgoing trade. The 22 vessels not identified shared 38. The most regular traders on the basis of the voyages per vessel were the Lancaster vessels and Ulverston vessels with ratios of five to one and four to one respectively.

Four of the Liverpool vessels seen trading with Ulverston were also recorded in the trade with Lancaster. The *Borlase Warren* had a Lancaster entry from Liverpool with timber, the *John and Nancy* and the *John and William* both had an entry from Liverpool with sundries and the *Happy Return* which had an entry into Ulverston from the Isle of Man and a clearance to Liverpool, also had an entry into Lancaster with sundries. Sundries, no doubt, would have been an element of the trade into Ulverston from Liverpool together with many of the commodities listed in Table 5.10 and manufactured goods. The analysis of cargoes received in Liverpool from Ulverston, shown in Table 5.22, suggests that slates and sundries or merchant goods were the main components of the outgoing trade in 1790.

<sup>&</sup>lt;sup>32</sup> Lancaster Register Nos., *Jane* 1/1792, *Newland* 21/1798, *Minerva* 2/1790, *Content* 1/1794 and *Friendship* 5/1794.

There was also regular trade with other ports, the *Agnes*, a 73 ton dogger was a constant trader with Glasgow with two entries and two clearances, and a 25 ton sloop, *Thomas and Elizabeth*, registered in Liverpool had an entry and two clearances with Poulton; the same vessel is seen later trading between Poulton and Lancaster carrying flax. The Maid in her Teens, which had four clearances to Carlisle and one to Dumfries, was not found in the registers. Two larger vessels, the 105 ton snow Sally and the 96 ton brigantine Valentine, both belonging to Ulverston, traded with London.<sup>33</sup> Each had an entry shown as from 'Whitehaven and London' with a subsequent clearance to London, which suggested that the vessels may have been operating a triangular trade.

The imbalance between entries and clearances in the Irish trade were accounted for by vessels entering from Dublin or Newry and clearing for Chepstow or Llanelly with no re entry from Chepstow suggesting that a triangular trading pattern existed. The clearances to Chepstow and Llanelly imply trade in iron ore, which was supported by the involvement of the *Hollow Oak*, a 93 ton brigantine belonging to Ulverston which had owners of the Backbarrow Iron Company as part owners of the vessel. The Lancaster brigantine *Vine* was also involved in the trade but the owners had no connections with the iron trade, the vessel being owned by four Lancaster merchants and a Lancaster mariner.<sup>34</sup> Three other vessels in the trade, the *Thomas*, the *John* and the *Resolution*, could not be found in the registers suggesting that they may have been owned in Chepstow or Ireland. All three vessels entered from Dublin and cleared for Chepstow in the same week of records, week commencing 10 September, which suggests either that off loading and loading was particularly efficient in Ulverston, or that the main cargo was being shipped from Dublin to Chepstow. It is difficult to envisage what this cargo might have been. A search would have to be made in the Dublin and Chepstow shipping lists to investigate this further. Another vessel, the brigantine Betsey belonging to Ulverston, was also involved in the Irish trade but after entering Ulverston from Dublin cleared for Glasgow.<sup>35</sup>

Lancaster Register Nos., Valentine, 45/1786, Sally, 2/1789.
 Lancaster Register Nos., Vine 18/1796 and Hollow Oak 4/1787.

<sup>35</sup> Lancaster Register No., 55/1786

Although the brigantine was the vessel type most commonly employed in the Irish trade, at least of the English owned vessels, there is also a reference to an Ulverston flat being used in the trade. The *Good Intent* of 55 tons, owned by three Furness merchants, included Ireland in its tramp style operation which consisted of an entry from Dublin, an entry and two clearances to Chester and an entry and a clearance with Liverpool.<sup>36</sup> This is one of the few records of a flat being used in the trade with Ireland and is also another example of tramp style operation.

Only two of the entries from the Isle of Man could be attributed to vessels registered in the North West ports. These were the 54 ton flat *Hopewell* and the 83 ton galliot *Happy Return* which were both registered in Liverpool. Each had an entry from the Isle of Man and a clearance to Liverpool, again implying the existence of a triangular trading pattern.<sup>37</sup>

# Milnthorpe

# **Commodity Flows**

The only shipping list for Milnthorpe, published in the *Lancaster Gazette* dated 27 June 1801, showed five entries and three clearances. Three of the entries were from Liverpool with 'sundries' and one with coal and there was an entry from Workington with ironstone. The sundries may have included imported materials to meet the needs of the South Westmorland industries in addition to the more general range of imported commodities and manufactured goods and materials either from the hinterland of the port or transhipped there. The three clearances were two to Liverpool and one to Greenock with no cargoes specified.

#### Vessels

The three vessels entering from Liverpool with sundries were the flat *Kendal*, 77 tons, and the sloop *Isabella* 88 tons, both registered in Lancaster as belonging to Milnthorpe and the flat *Sprightly* of 58 tons registered in Lancaster as belonging to Cartmel.<sup>38</sup> The vessel arriving with the consignment of coal was the *Potter*, a 72 ton flat registered in Liverpool and owned by three Liverpool merchants. The ironstone from Workington was carried by the *Leighton*, a 61 ton

<sup>&</sup>lt;sup>36</sup> Lancaster Register No., 28/1786.

<sup>&</sup>lt;sup>37</sup> Liverpool Register Nos., *Hopewell* 11/1794 and *Happy Return* 100/1800.

Lancaster Register Nos., Kendall 1/1791, Sprightly 5/1798 and Isabella 6/1791.

flat registered in Lancaster as belonging to the port. The ownerships of the *Leighton*, the *Kendal*, and the *Isabella* were reviewed in Chapter 4. The *Leighton* was owned by a Leighton iron founder John Hutton and two others and in this instance was trading in connection with his iron business. The owners of the *Kendal* and the *Isabella* were principally Kendal merchants together with two Liverpool merchants in the case of the *Kendal* showing a trading connection with the port. The *Sprightly* had the master as a subscribing owner together with a maltster and the eight non subscribing owners were a group of tradesmen from the Cartmel region.

The data on Milnthorpe trade is limited and the only identifiable commodities carried were coal from Liverpool and ironstone from Workington. The brigantine *Jenny* which was identified in Chapter 4 as being owned by John Wakefield, a Kendal wool merchant and a number of farmers and shearmen, was not captured by this sample of shipping movements although there was a clearance to Greenock by an unidentified vessel. Later analysis of the Lancaster records shows that a vessel owned by Wakefield and a similar group of associates, the 101 ton dogger *Mary*, was seen to be trading with Greenock, suggesting an association with the wool trade from the incoming cargo received.

<sup>&</sup>lt;sup>39</sup> Leighton, Lancaster Register No., 11/1794, and Potter, Liverpool Register No., 43/1800.

#### Lancaster

# **Commodity Flows**

The entries and clearances for Lancaster with ports having two or more entries or clearances in the period from 20 June to 6 November 1801 are shown in Table 5.11.

Table 5.11 - Lancaster entries and clearances in the coasting trade with ports having two or more entries or clearances

20 June – 6 November 1801

England and Scotland					
Port	Entries	Clearanœs	Total	% of Overall Total	
Liverpool	66	43	109	75.2	
Conway	6	1	7	4.8	
Poulton	5	0	5	3.4	
Preston	5	0	5	3.4	
Greenock	0	4	4	2.8	
Bristol	3	1	4	2.8	
London	2	2	4	2.8	
Workington	2	1	3	2.1	
Fort William	2	0	2	1.4	
Kirkcudbrigh	2	0	2	1.4	

There were a total of 98 entries and 56 clearances recorded during the period. The Lancaster coastal trade was overwhelmingly with Liverpool. Only seven of the 98 entries did not have the cargo specified which provides an excellent basis for studying commodity flows. Table 5.12 shows the commodities received in the coasting trade and the ports from which they came.

Table 5.12 - Commodities received in Lancaster from the coasting trade with ports of origin 20 June – 6 November 1801

Port of Origin	Number of Entries	Cargoes	
Liverpool	66	Sundries, Coal, Timber	
Conway	6	Timber	
Poulton	5	Flax,Tow	
Preston	5	Coal	
Bristol	3	Sundries, Glass Bottles	
Fort William	2	Wood,Oak Bark	
Kirkcudbright	2	Wood,Oak Bark	
London	2	Sundries	
Workington	2	Ironware, Herrings	
Chester	1	Charcoal	
Dumfries	1	Oats	
Greenock	1	Wool	
Stranraer	1	Oak,Bere,Peas	
Tobermory	1111	W∞l	

The principal incoming trade was in sundries from Liverpool with similar trade existing with London and Bristol, but at a much lower level. Coal was received from Liverpool and Preston, timber from Conway, Fort William and Kirkcudbright and wool from Greenock and Tobermory. Entries with coal were not at the same level as in Ulverston but a major contributory factor to this would have been the alternative route established for the supply coal from the Wigan coalfields to Lancaster by the opening of the Lancaster canal from Preston in 1797. No trade with Ireland was recorded in this period. The lack of direct Irish trade is confirmed by the Lancaster Port Commission records for the year May 1800 to May 1801 which show that only two vessels were employed in the trade with Ireland and the Isle of Man compared with 240 in the 'near' coasting trade north of Holyhead and south of the Mull of Galloway and 23 in the coasting trade outside this region.<sup>40</sup> The indications are therefore that the Irish trade was conducted through Liverpool with goods transhipped for Lancaster although Lancaster also had an outgoing trade to Ireland, particularly with Cork, through vessels for the West Indies calling there for supplies of foodstuffs on their outward voyages. The outgoing cargoes generally consisted of re shipped imports.

<sup>&</sup>lt;sup>40</sup> Lancaster Port Authority record displayed in the Lancaster Maritime Museum, 'The number of ships employed in the different trade out of this port,' May 1800 to May 1801.

#### Vessels

There were 21 vessels in the sundries trade with Liverpool of which 19 were found in the registers. Ten vessels belonged to Lancaster, six to Liverpool and three to Milnthorpe. Four vessels were constant traders with five entries or clearances recorded of which three belonged to Lancaster and one to Milnthorpe. This follows the pattern seen in Carlisle and Ulverston where the constant traders were owned in the satellite ports. The vessels belonging to Lancaster were the flats *Lark*, 95 tons and *Sprightly* 58 tons and the 91 ton sloop *Fox*. The *Fox* and the *Lark* were both built by John Brockbank in Lancaster. Brockbank was also the sole owner of the *Lark* and a subscribing owner in the *Fox* together with a business associate the local anchorsmith Joseph Sharp and John Richardson, the master, with six Lancaster merchants as non subscribing owners.

The vessels involved in the coal trade belonged to the supply ports of Liverpool and Preston as they had in the Ulverston records. Four Preston vessels, the sloops *Union* 46 tons, *Dart* 52 tons, *Minerva* 58 tons and the *Active* 50 tons shared the five entries bringing coal from Preston and two of the three vessels in the trade from Liverpool, the flats *King of Prussia* and *True Blue*, of 57 and 71 tons, were registered in Liverpool. The third vessel, the *Jane*, could not be found in the registers. The *King of Prussia* and *True Blue* were owned by members of the Clare and Briggs families of Warrington and Liverpool, coal merchants, whose ownerships were reviewed in Chapter 4. The same owners also held ownerships in the flats *Mary*, 68 tons and *Wilderspool*, 76 tons which had entries with sundries but were not constant traders; an example of vessels being used outside of the principal business interest. As

Two of the vessels in the timber trade, the 97 ton sloop *Lune* and the 88 ton flat *Dove*, owned by John Brockbank the Lancaster shipbuilder, were recorded as bringing timber from Liverpool and Conway but were also used in general trade. The *Lune* had a recorded entry with a cargo of sundries from Liverpool and the *Dove* was identified earlier as being in regular trade between Liverpool and

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<sup>&</sup>lt;sup>41</sup> Lancaster Register Nos., Lark 7/1794, Fox 5/1792 and Sprightly 5/1798

<sup>&</sup>lt;sup>42</sup> Preston Register Nos., *Union* 2/1786, *Dart* 1/1787, *Minerva* 1/1800 and *Active* 2/1790,

Liverpool Register Nos., *King of Prussia* 35/1786, and *True Blue* 85/1791. Liverpool Register Nos., *Mary* 26/1786 and *Wilderspool* 53/1793.

Ulverston. John Dweanhouses, a shipbuilder from Harrington near Liverpool also shipped a consignment of timber to Lancaster in a 51 ton flat, the *Borlase Warren*, which was registered in Liverpool in his sole ownership, confirming that he also traded as a timber merchant.<sup>44</sup>

The flax and tow received from Poulton was shipped in four vessels *Thomas and Elizabeth, Friends* and two different vessels called *Lion*. The *Thomas and Elizabeth,* already seen in the trade with Ulverston, was a 25 ton sloop registered in Liverpool which was in the sole ownership of a Liverpool boatbuilder, Richard Busshell and the remaining vessels were all registered in Preston. *Friends* was an 18 ton sloop identified in Chapter 4 in the Preston register as belonging to Poulton although it was re-registered as belonging to Preston in 1794. One of the vessels called *Lion*, was a 51 ton flat registered in Preston owned by Goodshaw and Mayor of Freckleton, Mayor having flax processing interests in addition to operating as a coal merchant in partnership with Goodshaw. The second *Lion* or *Lyon*, was a 57 ton flat registered in Lancaster and owned by John Brockbank, the shipbuilder, together with two Lancaster merchants. The trade in flax and tow could well have been associated with the factory owned by the Hornby family at Bentham in the Lune valley above Lancaster.

The trade with Greenock in wool was conducted by two vessels, the *Margaret*, which could not be traced, and the *Mary*, which was a 101 ton dogger belonging to Milnthorpe, in which John Wakefield a Kendal merchant and woollen manufacturer was a subscribing owner together with Alex Laird, a Greenock merchant and a number of farmers and shearers from Kendal, a similar ownership profile to the brigantine *Jenny* identified in Chapter 4.<sup>46</sup>

The two entries and clearances with London were provided by the brigantines *Flora* and *Laurel* which had been specifically built by John Brockbank

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<sup>&</sup>lt;sup>44</sup> Liverpool Register No., 59/1801.

<sup>&</sup>lt;sup>45</sup> Preston Register Nos., *Friends* 3/1794, *Lion* 17/1786 and 5/1794 and Liverpool Register No., *Thomas and Elizabeth* 191/1799.

<sup>&</sup>lt;sup>46</sup> Lancaster Register No. 23/1799.

for the London trade and were referred to in his business papers as 'the Londoners'.<sup>47</sup>

#### **Preston and Poulton**

The records of Irish and coastal trade in Preston and Poulton were examined using the shipping lists in the first fifteen issues of the *Preston Journal* and *Crofts Lancashire General Advertiser* published from 14 February to 23 May 1807. Shipping lists for Poulton were only published in eight of the issues and it is not clear if this was a true reflection of the movements or the list was omitted on space considerations and some movements were missed. No details were provided of the cargoes carried in any of the lists.

#### **Poulton**

# **Commodity Flows**

The entries and clearances for Poulton in the Irish and coastal trade with ports having more than two recorded entries or clearances in the period from 14 February to 23 May are shown in Table 5.13.

Table 5.13 - Poulton entries and clearances in the Irish and coasting trade with ports having two or more entries or clearances

14 February – 23 May 1807

Port	Entries	Clearances
Dumfries	12	0
Liverpool	2	1
Kirkudbright	2	0
Ulverston	1	1
Drogheda	0	2

Poulton had a total of 21 recorded movements with entries from Dumfries being the predominant item. Entries from Dumfries and Kirkcudbright, are shown by the accounts of the *Active* to have been associated with grain shipments which would not have been expected in Poulton. The Fylde region in West Lancashire was itself an area of grain and foodstuff production and would have been expected to have had a surplus of these commodities. It is equally puzzling that there were recorded clearances to Drogheda if the outgoing commodity was coal as stated by

<sup>&</sup>lt;sup>47</sup> Lancaster Public Library Reference Section, catalogue reference, MS 3720, John Brockbank Daybook originals, 1789-1793..

Dickson in the following analysis for Preston, although we see later that coal was delivered to Poulton by vessels belonging to the James Winstanley Company and may have been transhipped for the Irish trade, but this seems unlikely. The trade conducted with these ports is therefore something of an enigma.

#### Vessels

The 12 entries from Dumfries were undertaken by nine vessels with only the *Lark*, with three, having more than one entry and possibly therefore a constant trader. The absence of clearances from the port suggests that the vessels were in ballast with no return cargo available. The two entries from Kirkcudbright were also by vessels not found in the registers but one of the vessels, the *Margaret*, was seen in the trade with Ulverston recording an entry from the Isle of Man and a clearance to Dublin in 1801.

The trade with Liverpool was conducted by two Preston sloops *Collier* and *Hero* and the Lancaster flat *Lark*. 48 The entry and clearance with Ulverston were made by the Preston sloops *Friends* and *Lion* and the two clearances to Drogheda were by the *Mary & Ann* and the *Johannes* which were respectively an 80 ton schooner and a 65 ton sloop owned by a Preston merchant Thomas Ogle, with Charles Ambler, another Preston merchant and the master in the case of the *Mary & Ann*, and with the master only in the case of the *Johannes*. 49 The *Mary & Ann* is also seen later trading between Preston and Drogheda showing that Ogle and Ambler were established merchants in the Irish trade.

#### **Preston**

# **Commodity Flows**

The entries and clearances for Preston in the Irish and coastal trade with ports having more than two recorded entries or clearances in the period from 14 February to 23 May 1807 are shown in Table 5.14.

<sup>48</sup> Preston Register Nos., Collier, 6/1796, Hero, 2/1795, Lancaster Register No., Lark 67/1794.

<sup>&</sup>lt;sup>49</sup> Preston Register Nos., *Friends*, 3/1794, *Lion*, 5/1794, *Mary & Ann*, 6/1805 and the *Johannes*, 4/1807.

Table 5.14 - Preston entries and clearances in the Irish and coasting trade with ports having two or more entries or clearances

14 February – 23 May 1807

		Ireland		
Port	Entries	Clearances	Total	% of Overall Total
Drogheda	7	5	12	11.4

North Wales					
Beaumaris	2	2	4	3.8	
Bangor	0	2	2	1.9	
Holyhead	0	2	2	1.9	
Total	2	6	8	7.6	

England and Scotland					
Ulverston	8	26	34	32.4	
Liverpool	14	8	22	21.0	
Dumfries	9	3	12	11.4	
Whitehaven	6	2	8	7.6	
Kirkudbright	7	0	7	6.7	
Total	44	39	83	79.0	

Clearances to Ulverston were the dominant feature of the outgoing trade, which has previously been identified as including coal. Coal was also the principal commodity shipped to Drogheda. A survey conducted by Dickson of trade with Ireland for the three year period 1806-8 showed that 1,794 chaldrons of coal were shipped out and 311 quarters of wheat, 7,477 quarters of oats, 180 quarters of oatmeal and 23 quarters of peas being received in return. The accounts of the *Active* enable the cargoes to be identified on a number of the identified routes. Coal was carried to Dumfries, Kirkcudbright and Beaumaris with agricultural produce shipped in return and there was trade with Whitehaven in flax and processed products. The Liverpool trade also had a significant element of flax hemp and processed products outgoing, typically cloth, sailcloth, sacks and twine with the previously described merchant goods being received in return.

The *Active* accounts were examined at two year intervals from 1796 to 1808 and the analyses of the voyage patterns are included in Appendix 3. There was a high level of variability in both the number of voyages undertaken each year and the number of routes on which cargoes were carried. The number of voyages varied from a minimum of 10 in 1804 to a maximum of 32 in 1798 while the base

<sup>&</sup>lt;sup>50</sup> Dickson, R.W, 634-5.

trade was Freckleton to Liverpool and return, there were two other trading routes in 1804, the lowest number, increasing to 10 in 1806. The commodities carried on each route are listed in Appendix 4.

John Mayor, who was a flax processor in Freckleton, in addition to being a partner in a coal business, was a non subscribing owner of the vessel and it was interesting to see that the vessel often carried goods for his flax processing business together with similar goods for Langton Birley and Hornby, two other concerns based in Kirkham, only a short distance by road from Freckleton. This demonstrated the close association that existed within the trade.

#### Vessels

Only two vessels were identified as being constant traders with Liverpool, the *Collier*, a 55 ton sloop owned by John Taylor a resident of Preston with unspecified occupation, and the *Trafalgar*, a 73 ton sloop owned by Jonathan Atkinson and James Clayton, two Preston timber merchants. The *Mary and Ann* and the *Sally*, an 80 ton schooner and a 70 ton sloop owned by the Preston merchants, Thomas Ogle and Charles Ambler, were constant traders with Drogheda and two other vessels, the *Lively*, a 56 ton sloop owned by a Warton innkeeper and the *Robert and Alice*, a 30 ton sloop owned by a husbandman from Piel of Foudray and registered in Lancaster, were constant traders with Dumfries. <sup>52</sup>

The pattern of trading adopted by many of the Preston registered sloops was as tramps in a sea region which extended from the North Wales ports in the south to the ports on the north of the Solway and including Ireland and the Isle of Man to the west. The accounts of the *Active* provide an example of a vessel operating in this mode as do the records in the shipping list for the *Delight* and *Hero*, also owned by Mayor and Goodshaw. The *Delight*, a 50 ton sloop, recorded three entries from Whitehaven, two entries and clearances from and to Drogheda and finally a clearance to Holyhead in the period. *Hero*, a 61 ton sloop, had the most diverse trading pattern of all the vessels, consisting of entries from

<sup>52</sup> Preston Register No., *Lively*, 5/1805, Lancaster Register No., *Robert & Alice*, 2/1803.

<sup>53</sup> Preston Register Nos., *Active* 2/1790, *Delight* 1/1786, *Hero* 2/1795.

<sup>&</sup>lt;sup>51</sup> Preston Register Nos., Collier, 9/1802, Trafalgar 2/1806.

Chester, Holyhead and Kirkcudbright, an entry and a clearance with Liverpool and a clearance for Ulverston.

The coal trade with Ulverston was the major trading activity and twelve Preston-registered vessels recorded clearances to the port. Many of these vessels and their ownerships have been identified previously in the analysis of shipping activity in Ulverston. The vessel with the highest number of entries and clearances was the Margaret and Peggy with 5 entries and 2 clearances. The vessel also had an entry from Dumfries and a clearance to Holyhead in the same period. The total voyages therefore totalled nine in the fifteen week period which demonstrates a high level of utilisation. In respect of utilisation the Hero had the next highest with eight followed by the *Ellen* with seven.<sup>54</sup> The *Ellen* was the vessel with the next highest number of entries and clearances with Ulverston, with 4 clearances and 2 entries together with an entry from Dumfries and the third highest was the Lion with 4 clearances.<sup>55</sup> The *Lion* was another vessel owned by Goodshaw and Mayor. James Goodshaw was also an owner of the *Hero* but the other two vessels had owners who were unconnected with the coal trade. The *Ellen* was owned by a mariner from Hesketh Bank and a clerk from Freckleton and the Margaret and *Peggy* was owned by two maltsters from Tarleton who may have been more interested in the incoming barley and malt than in the outgoing coal.

#### Liverpool

## **Commodity Flows**

The shipping entering and clearing the port of Liverpool during a six-year period in the late eighteenth century was studied by D J Pope using the shipping lists published in Williamson's Liverpool Advertiser and Gore's General Advertiser. 56 The following tables are prepared from data contained in his thesis.

<sup>&</sup>lt;sup>54</sup> Preston Register Nos., Margaret & Peggy 5/1801, Hero 2/1795 and Ellen 4/1806.

<sup>&</sup>lt;sup>55</sup> Preston Register No., *Lion* 5/1794.

<sup>&</sup>lt;sup>56</sup> Pope D.J, 'Shipping and Trade in the Port of Liverpool 1788-93', unpublished PhD thesis, University of Liverpool, 1970.

Table 5.15 shows the number of entries received from the leading ten countries or regions that traded with Liverpool in the period 1788-93 and the percentage they represented of the total.<sup>57</sup>

Table 5.15 - Overseas and coastal entries into Liverpool, 1788-93 (leading 10 ports)

Country or region of origin	Number	Per Cent of Total
Ireland	3811	22.9%
River Dee and Coast of Wales	2977	17.9%
Southern England	1865	11.2%
North West England	1402	8.4%
West Indies	1066	6.4%
West Scotland	994	6.0%
United States	804	4.8%
Prussia and Poland	617	3.7%
East England	549	3.3%

Source: Pope, D.J., PhD Thesis, I, Table 22.

Ireland provided the most entries followed by the River Dee and the Coast of Wales, the ports of Southern England, including London, and the ports of the North West of England. The West Indies, the next leading overseas region after Ireland, supplied only 6.4 per cent of the entries, although these would have represented a higher percentage of the tonnage because the vessels would have been larger.

The Irish trade is broken down by ports and commodities; Table 5.16 shows the numbers of entries into Liverpool from the leading ten Irish ports in the period 1788-93 and Table 5.17 shows the commodities shipped on twenty or more occasions in 1790 and the principal ports from which they originated.<sup>58</sup>

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<sup>&</sup>lt;sup>57</sup> Pope D.J., PhD thesis, I, Table 22, 302-17.

<sup>&</sup>lt;sup>58</sup> Pope D.J., PhD thesis, I, Table 22, 302 and Table 5, 191.

Table 5.16 - Irish entries into Liverpool, 1788-93 (leading 10 ports)

Port	No. of Entries	Per Cent of Total
Newry & Dundalk	487	12.8
Waterford	374	9.8
Drogheda	353	9.3
Dublin	339	8.9
Wexford	336	8.8
Youghall & Dungarvon	331	8.7
Cork & Kinsale	324	8.5
Belfast	222	5.8
Limerick & Newry	152	4
Ross & Waterford	120	3.1

Source: Pope, D.J., PhD Thesis, I, Table 22.

Table 5.17 - Commodities shipped from Ireland to Liverpool in 1790 (10 entries or more)

Commodities	No. of Shipments	Principal Sources
Oats	416	Youghall (88), Wexford (74), Waterford (68)
Butter	179	Cork (32), Belfast (28), Newry (27)
Linen Cloth	151	Newry (38), Belfast (29), Dublin (28)
Beef	98	Dublin (25), Belfast (15), Cork (9)
Cows	94	Newry (73)
Pigs	80	Newry (55)
Pork	79	Newry (17), Dublin (15), Belfast (14)
Calf Skins	65	Dublin (15), Cork (10), Newry (9)
Wheat	63	Waterford (23)
Linen Yarn	61	Dublin (24)
Tanners Waste	54	Dublin (10), Newry (9)
Hides Cow	51	Cork (9), Newry (9), Dublin (8)
Feathers	34	Dublin (23)
Tallow	34	Cork (15), Dublin (10)
Oatmeal	31	Waterford (13)
Barley	29	Strangford (7), Youghall (6), Sligo (4)
Calves Velves	29	Dublin (10), Waterford (6), Newry (5)
Bacon	28	Dublin(13), Wexford (12)
Glue	25	Dublin (12)
Tongues	21	Dublin (14)
Beans	20	Wexford (19)
Mats	17	Waterford (10)
Horses	15	Newry (9)
Quills	14	Dublin (10)
Bay Yarn	14	Dublin (7), Cork (7)
Hams	13	Dublin (8)
Limestone	10	Drogheda (7)
Wool	10	Dublin (10)

Source: Pope, D.J., PhD Thesis, I, Table 5.

Shipments of oats from Youghall, Wexford and Waterford are shown to have dominated the imports from Ireland in 1790. This situation in respect of oats was shown to extend into the early nineteenth century by a government report into quantities of grain received by type from Ireland in the various ports of England and Scotland in the period 1 October 1806 to 5 January 1808. The report recorded that Liverpool received 269,443 quarters of oats with the next highest quantity being 47,448 quarters of wheat. The ports supplying the oats were identified as being Waterford, Limerick and Youghall.<sup>59</sup>

Oats were important in the North West for bread making in addition to being required as horse fodder. Deane and Cole reported on work done by Charles Smith in 1766 in which he examined the type of grain used in making bread in six regions of Britain. The conclusions were that in London and the South East nearly 90 per cent of the population ate wheat bread, in the south west it was about 75 per cent with the remainder eating mainly barley or rye bread and in Wales nearly all the bread was made from barley or rye. In the northern regions, however, bread made from oats was popular and a slightly higher percentage of the population ate oat bread rather than wheat bread, each accounting for about 30 per cent of the population, with the remainder eating varying proportions of barley and rye bread. 60 Tastes changed, however, towards the end of the century and wheaten bread was starting to be preferred to the traditional oat bread in South Lancashire. Aitkin reported that grain production as a whole became an increasing problem in South Lancashire towards the end of the eighteenth century as local soils were not suited to wheat production and the shrinking land availability and increasing labour costs, brought on by the encroachment of industrialisation, made Lancashire increasingly dependent on external supplies brought coastwise or from overseas. By 1795 the county only produced 25 per cent of the grain it consumed which would explain the high levels of imports from Ireland and elsewhere.<sup>61</sup> Liverpool was one of the main conduits for these imports and acted as a distributor for the hinterland including Manchester. For example it was reported that in June

<sup>&</sup>lt;sup>59</sup> B.P.P., Accounts and Papers, 1808, XI, 20.

<sup>60</sup> Deane P and Cole W. A., British Economic Growth 1688-1959 (Cambridge, 1969), 63.

<sup>&</sup>lt;sup>61</sup> Aikin, J., A Description of the County from 30 to 40 miles around Manchester (London, 1795), 18.

and July of 1774 43,000 bushels of corn were taken from Liverpool to Manchester along the Bridgewater canal.<sup>62</sup>

Shipments of grain from other parts of Britain were also investigated by Pope and Table 5.18 taken from his thesis shows the contributions of the individual regions in 1791.63

Table 5.18 - Grain in quarters imported coastwise into Liverpool in 1791

Region	Barley	Beans	Oats	Peas	Wheat
North West England	540		2210		
River Dee and Coast of Wales	2090	44	3326	28	2727
Bristol Channel	431	28	350		
South England	15496	5118	245	150	6431
EastEngland	26837	13884	810	1310	21169
East Scotland	425				
West Scotland	976		30		_ 6
Others	2703	17			813
Total	49498	19091	6971	1488	31146

Source: Pope, D. J., PhD Thesis, II, Table 72

The table shows that the main sources of grain were the ports on the south and East coast of England which shipped mainly wheat and barley. The principal suppliers of oats were the regions defined as Chester and the Coast of Wales and North West England, although the quantities were far less than those brought from Ireland.

Pope also examined the numbers of shipments of all types of commodities into Liverpool from British ports in the period 1788-9. Table 5.19 shows the leading ports in all regions and Table 5.20 shows those in the North West.<sup>64</sup>

Pope D.J., PhD thesis, II, 188-9.
 Pope D.J., PhD thesis, II, Table 72, 275.

<sup>&</sup>lt;sup>64</sup> Pope D.J., PhD thesis, I, Table 23, 318.

Table 5.19 - Ten leading British ports providing entries into Liverpool 1788-93

Port	No. of Entries
Beaumaris	1156
Chester	696
London	645
Ulverston	592
Lancaster	385
Greenock	346
Exeter	343
Caernarvon	302
Conway	290
Poole	260

Source: Pope, D. J., PhD Thesis, I, Table 23.

Table 5.20 - Leading North West ports providing entries into Liverpool 1788-93

Port	No of Entries
	No. of Entries
Beaumaris	1156
Chester	696
Ulverston	592
Lancaster	385
Caernarvon	302
Conway	290
Dumfries	187
Preston	96
Workington	62

Source: Pope, D. J., PhD Thesis, I, Table 23.

Beaumaris was the leading North West port followed by Chester with Ulverston and Lancaster also being in the first five demonstrating the importance of the ports of the North West and Ireland as trading partners. Only London appeared in the first five with the North West ports.

Pope also investigated the commodities shipped from the ports in the year 1790, and the results of his analyses for the regions defined as 'Chester and the Coast of Wales' and 'The North West of England' are shown in Tables 5.21 and 5.22.<sup>65</sup>

<sup>&</sup>lt;sup>65</sup> Pope D.J., PhD thesis, I, Table 6, 199-215.

Table 5.21 - Commodity shipments to Liverpool from Chester and the Coast of Wales in 1790

Commodity	Ports							
	Beaumaris	Caernarvon	Chester	Wales Coast	Conway	Holyhead	Pwllheli	
Hops	1							
Malt			1					
Barley		2			1	4	4	
Flour					1			
Oats	8	3			4	_ 11	2	
Potatoes	_	1			3			
Wheat	1		4		21			
Porter			1					
Butter						1		
Cheese		1						
Ashes,fern					2			
Ashes,Soap			1					
Candles	1							
Kelp	2					2	2	
Sand			1					
Calamine			4					
Copper	2		20					
Copper Ore	124		1				1	
Copper Waste			1					
Lead			45					
Lead Ore			7					
Tin		1						
Bricks			1		_			
Fire Bricks			11					
China Stones					11			
Skins,rabbit			_	<u> </u>		11	<u> </u>	
Coals			1			<u> </u>		
Limestones	32	18		8	6		1	
Paving Stones	3	3	1	9	4		5	
Slates	56	40			2		1	
Stones	<u> </u>		11					
Mats					_	ļ	1	
Empty Casks	1	ļ				2	<del> </del>	
Timber			_27		9		<b></b>	
Ballast	3		10	11	11	11	2	
Sundries	1		4		11			
Total	235	72	142	18	56	22	19	

Source: Pope, D. J., PhD Thesis, I, Table 6.

Table 5.22 - Commodity shipments to Liverpool from the North West of England in 1790

Commodities	Ports					
	Carlisle	Lancaster	Lancs. Coast	Preston	Ulverston	Whitehaven
Wheat						1
Iron		1			1	
Cordage						1
Hemp				2		
Sailcloth				1		
Tar						1
Limestones		1	1		1	
Alabaster						1
Paving Stones		5	11		4	
Slates					52	
Fustic		1				
Mahogany		1				
Ballast	1	7		15	1	2
No Cargoes	4				5	3
Sundries	12	46_		3_	22	16
Total	17	62	12	21	86	25

Source: Pope, D. J., PhD Thesis, I, Table 6.

In the region of Chester and the Coast of Wales, Beaumaris was shipping copper ore and slate as its principal commodities and Chester, the next port of importance, was shipping lead, copper, timber and bricks. The lead ore, lead and copper would have been shipped from the landing places of Flint and Bagillt on the south bank of the Dee as would the bricks which were made in Buckley in North Flintshire. The landing places on the south of the Dee were also close to the Flintshire lead mines and lead smelters; there was also a copper refinery in Holywell close to Bagillt. Conway shipped principally wheat and timber and Caernarvon shipped principally slates and limestone.

The commodities shipped are not so clear for the ports in the North West because of the extensive use of the term 'sundries' to describe the cargoes. The only useful information is for the port of Ulverston from which 52 entries of slate were received, but none of the other commodities shown in Table 5.10 for outgoing Ulverston cargoes are identified. The absence of gunpowder could be explained because the gunpowder works in Furness, at Lowwood on the River Leven, was not established until 1798, but some shipments of products of the

wood coppicing industry and the grain production might have been expected. It can only be assumed that these were included within the 'sundries' cargoes.

The entries from Preston were mainly in ballast, which is surprising because only seven years later the account book of the *Active* shows that a thriving trade existed between Preston and Liverpool particularly in the products of the Kirkham flax and hemp processors. This may suggest some concern about the completeness of the information in the newspaper shipping lists used by Pope for his analysis.

Pope does not report on the clearances from Liverpool in the same detail, understandably, because the information on clearances in the shipping lists was not as complete. He does, however, identify commodities carried to the ports of North Wales from the port books which are available until the end of the eighteenth century for these ports. The analysis of the commodities carried from Liverpool to the ports of Beaumaris, Caernarvon and Conway in North Wales over periods of six months in 1788 and 1789 is shown in Table 5.23 and provides a valuable insight into the composition of the 'sundries' trade. The cargoes included the staple items of coal and salt but also a wide range of other commodities, of both British supply and from overseas. <sup>66</sup>

66 Pope D.J., PhD thesis, I, Table 14, 258-67.

Table 5.23 - Cargoes taken from Liverpool to North Wales Ports 1788-9

Ale Apothecary's Goods Brandy Coal Candles Cider Dyewood Flax Flour Foreign Iron **Furniture** Groceries Hardware Imported Fruit Laths and Deals Salt Soap Sugar Tea **Textiles** Timber Tobacco

Source: Pope, D. J., PhD Thesis, I, Table 14.

Wines and Spirits

An analysis of commodities shipped to Dublin was also undertaken using the listings in Dublin newspapers for a short period in 1784 and a longer period in 1788-9. The results for the period in 1788-9, which extended from 3 January 1788 to 7 March 1789 was taken from the *Dublin Chronicle* and showed the commodities listed in Table 5.24.<sup>67</sup>

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<sup>&</sup>lt;sup>67</sup> Pope D.J., PhD thesis, I, Table 13, 257.

Table 5.24 - Number of shipments of commodities to Dublin from Liverpool 3 January1788 - 7 March 1789

Commodity	Number of Shipments
Coals	20
Earthenware	1
Goods	4
Goods, Merchants	17
Kelp	1
Potatoes	11
Rum	1
Salt	15
Salt, bay	1
Salt, rock	31
Salt, white	1
Sugar	3

Source: Pope, D. J., PhD Thesis, I, Table 13.

The table shows the existence of trade in coal, salt and sugar and again the ubiquitous merchant goods. The number of entries, at 96, is greater than the average annual number of 56 indicated by Pope's analysis of the five-year period 1788-93 shown in Table 5.17, which suggests that a peak occurred in this two year period.

# Vessels

Pope looked at the types of vessel, registered at Liverpool in the trades to the various ports and Table 5.25, which is compiled from his data, shows the results of the analysis for the ports in the North West, West Scotland, Chester and the Coast of Wales, Ireland and the Isle of Man.<sup>68</sup>

<sup>&</sup>lt;sup>68</sup> Pope D.J., PhD thesis, I, Table 55, 452.

Table 5.25 - Trading region in Irish and coastal trade of each type of vessel registered at Liverpool 1788-93

Vessel Type	Trading Region						
	Ireland	IOM	Chester/ Coast of Wales	NW England	W Scotland		
Brigantines	210	1	3	0	3		
Cutters	9	4	1	0	1		
Doggers	1	1	0	39	5		
Flats	3	5	661	91	7		
Galliots	38	0	73	18	0		
Schooners	22	4	28	0	0		
Ships	2	0	2	1	0		
Sloops	94	74	125	48	205		
Smacks	1	9 _	0	0	0		
Snows	32	0	0	0	0		

Source: Pope, D. J., PhD Thesis, I, Table 55

Flats and sloops were the principal types used in the trade with Chester and the Coast of Wales, the Isle of Man and the ports of the North West and sloops were almost exclusively used in the trade with West Scotland.

Brigantines were the predominant vessel type used in the trade with Ireland, although sloops also played a significant part. An example of brigantines in the Irish trade was provided by an advertisement in the *Liverpool General* Advertiser in which six vessels were named as operating from the port as 'constant traders' with Dublin. The vessels were to sail in rotation with a vessel leaving every ten days.<sup>69</sup> Of the six vessels, five were found in the Liverpool registers and all were brigantines in the range 104 to 140 tons. Merchants in Liverpool and Dublin jointly owned all five vessels, with the most recurring name being that of Thomas Ryan of Liverpool who was listed as a part owner in four of the vessels, suggesting that he specialised in the Dublin trade. Ryan, however, was not a large scale shipowner at the time; the Liverpool Shipping Registers showed him to only have an interest in eight vessels in the period 1786-88.70

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<sup>&</sup>lt;sup>69</sup> Williamson's Liverpool Advertiser 18 May 1786. <sup>70</sup> Registrations examined were those included in Craig, R. and Jarvis, R., Liverpool Registry of

## Chester

### **Commodity Flows**

In the absence of shipping lists the shipping movements and commodities carried in the coastal and Irish trade are determined from the latest port books available, which are for 1774. Unfortunately this makes identification of vessel types from the registers virtually impossible, because the records of shipping movements are for a period 12 years before the new registration system was introduced, nevertheless some possible matches are listed later. The sample from the port books is taken for the first seven weeks of 1774 for which the analysis is included as Table 5.26.<sup>71</sup> It was initially proposed to analyse the first twelve weeks from 5 January to 31 March but difficulties were encountered with legibility of the records. There was even some difficulty in reading overseas clearances in the first seven weeks, which may have led to some inaccuracy in the Irish clearances.

Records are available for the trade into the Dee for later in the century but only for Parkgate in the form of a Customs account book.<sup>72</sup> Parkgate was within the Customs port of Chester on the north bank of the Dee about halfway along the estuary and was established principally for the passenger trade to Ireland to avoid the additional overland journey to Holyhead. The port also acted as a feeder port for Chester as cargoes were transferred to lighters for final delivery to overcome the navigation difficulties presented by the Dee. The records are of imports only and consist entirely of vessels from Ireland and the Isle of Man. The entries include vessels carrying passengers from Dublin and vessels from ports such as Newry, Dundalk and Wexford carrying mainly livestock. The Parkgate entries, however, were only a small percentage of the overall trade of the Customs port of Chester; the Customs port also included the creeks of Flint, Bagillt, Greenfield and Mostyn which served the industries of North Flintshire. The average number of entries each year shown in the Parkgate Customs account book for the fourth quarter of the eighteenth century was around 60 compared with around 290 for the Customs port overall, based on an extrapolation of the port book data for the

<sup>71</sup> T.N.A., E190/1442/3 for Coastal Trade and E190/1442/5 for Overseas Clearances and

E190/1442/1 for Overseas Entries

<sup>&</sup>lt;sup>72</sup> Place, G.W., 93-4.

first seven weeks of 1774. The analysis for this study is therefore based on the information contained in the port books.

Table 5.26 - Chester entries and clearances in the Irish and coastal trade 5 January 1774 - 25 February 1774

Port	Entries	Clearances
Liverpool	9	11
Dublin	9	10
Pwlhelly	2	3
London	4	4
Wigtown	1	0
Drogheda	4	1
Bristol	3	3
Holyhead	2	0
Belfast	2	0
Beaumaris	2	10
Conway	1	6
Carnarvon	0	10
Ulverston	0	3

Source: T.N.A., E190/1442/1, 3 & 5.

The port books show the existence of significant levels of balanced trade with both Liverpool and Dublin, and a lower level of balanced trade also existing with London and Bristol. There was also an equal volume of trade, although only outgoing, to the North Wales ports of Beaumaris and Caernarvon.

In respect of commodities carried in the Irish trade, the outgoing shipments to Dublin consisted of eight of coal, one of lead and one of litharge with the return cargoes consisting of one of cowhides, two of Irish linen and seven unspecified. The outgoing commodity shipped to Drogheda was again coal with two shipments of barley and two shipments of cowhides being received in return. The two entries from Belfast were also of cowhides. The imports did not include oats as seen in the Liverpool entries but this could have been a consequence of the close proximity of Chester to supplies in North Wales.

A broad spectrum of commodities was shipped to Liverpool including lead and lead ore, wrought copper and brass, calcined calamine, used in the production of brass, fire clay, firebricks, wheat, oats and beans. The incoming shipments from Liverpool consisted of a wide range of commodities of both British and overseas origin and it was common for shipments to consist of fifteen or more different items. The commodities from overseas included muscovado sugar, spices, wines

and spirits, train oil, tobacco and Swedish iron bar. Those of British origin included pipe clay, refined salt and iron ware, again a pointer to the composition of the sundries trade to other ports.

The incoming shipments from London had similar components to those received from Liverpool although many of the overseas goods were from the Scandinavian and Baltic trade including imported bar iron from Russia and Sweden and tar and tallow from Archangel. Consignments of nuts were also received which had been shipped to London in the Mediterranean trade.

All the outgoing shipments to London were mixed cargoes and all included lead with a selection of other commodities including lead ore, printing types, presumably made from lead, iron guns, which would have been cast at the Bersham Iron Works near Wrexham which used the Dee as a shipping point, hollywood, empty casks and cheese; one of the traditional longstanding trades identified by Willan.

The shipments received from Bristol were again a mix of British and overseas goods although the majority were goods of British origin and included English pig iron (an indication of the port's proximity to the iron industry on the Severn), British gunpowder, glass, coppiced wood products, sheets of tin and tin plate, English glue and household goods. The overseas commodities were train oil and ivory. The outgoing shipments to Bristol all consisted of lead and two also carried calamine and one Portuguese wine.

The outward trade to the North Wales ports and to Ulverston was coal with shipments of oats and barley received in return from the North Wales ports. There was also trade in lead ore from Wigtown in Dumfries and Galloway, which was also a centre for lead mining and used to supplement the local supplies of ore used by the refiners, although this appeared just outside the period examined.

#### Vessels

The vessels registered in Chester identified and listed in Chapter 4 could not be matched with the vessels named in the port book records for the reason stated above, however, a search of the early Liverpool registrations identified some vessels with a high degree of probability because of the ages of the vessels and the type being typical of those used in the trade. None, however, could be positively identified because there were no matches with masters' names. Those

with a high level of probability included the *William and Nancy* a 52 ton flat built in Liverpool in 1769 which had one clearance to Ulverston carrying coal and the *King of Prussia* a 57 ton flat built in Northwich in 1760 with one clearance to Liverpool carrying wheat and beans. The *Thomas* could have either been a 52 ton flat built in Northwich in 1756 or a 61 ton sloop of built in Northwich in 1770. The latter had two entries recorded from Liverpool, one with a mixed cargo consisting of thirteen items of both British and overseas origin and one carrying tar and hemp, and one clearance to Liverpool carrying lead and litharge. Two vessels had one recorded clearance to Caernarvon with coal. These were the *Dove*, a 56 ton flat built in Liverpool in 1774 and the brigantine, *Peggy*, of 61 tons and built in Chester in 1767.<sup>73</sup>

The study of commodity flows is difficult in this period because of the limited availability of records. The newspaper shipping lists are often incomplete and only occasionally include the commodities carried, but nevertheless it has proved possible to define the principal flows with the assistance of information from other sources. The results have indicated that a strong intraregional trading structure existed with grain, foodstuffs and coal being the principal commodity flows.

Cross matching of the vessels from the shipping lists with the records of the shipping registers was also achieved in many cases and enabled vessel types and their owners to be identified for vessels in specific trades.

The importance of Liverpool is seen from the wide range of imported goods and goods from its hinterland and elsewhere in Britain transhipped in the port and distributed throughout the North West under the heading of sundries or merchant goods. Irish trade was important, both from Liverpool and from the West Cumberland. The Liverpool trade outgoing being coal and salt and the sundries and merchants goods with oats, animal products and foodstuffs being received in return. There is also strong evidence to suggest that grain and foodstuffs were shipped to the West Cumberland ports in returning colliers.

<sup>&</sup>lt;sup>73</sup> Liverpool Register Nos., *William and Nancy* 129/1787 and 238/1797, *King of Prussia* 35/1786, *Thomas* 46/1786 and 186/1786, *Dove* 135/1786 and *Peggy* 34/1786.

Other suppliers of grain and foodstuffs were the ports of Carlisle and Ulverston, the ports of Dumfries and Kirkcudbright on the north Solway coast and ports in North Wales, particularly those on Anglesey, which with the exception of Carlisle, received coal shipments in return. Carlisle had access to coal mined in the North Pennines which was also shipped to Dumfries.

Other commodity flows identified within the region included building materials. The slate trade operated out of Ulverston, Beaumaris and Conway and bricks and firebricks produced in Buckley in Flintshire were shipped out of ports on the Dee within the Customs port of Chester. There are no shipping list references to the trade in pig iron and iron ore from the Furness region out of Ulverston. Other sources suggest, however, that this was a thriving trade with links to the industry in Cheshire through Liverpool and to the industry around the Severn, the latter being supported by the ownership stakes held by investors in Ulverston vessels seen in the analyses in Chapter 3.

The pattern in which the vessels traded was varied; some vessels, mainly owned in the regional ports outside of Liverpool, were operating as constant traders while others operated in a tramping mode throughout the region. This is shown particularly by the vessels registered in Preston but also noted for vessels owned in Ulverston, Lancaster and Liverpool. The trading pattern was therefore a mix of liner and tramp style operation.

There was apparently no restriction on the commodity mix for the vessels with coal often carried on one voyage leg and grain on the next, cargoes which would have been thought to have been totally incompatible. The vessels must have been capable of being cleaned, or perhaps the odd black spec in the processed grain was not too objectionable. There was clearly commercial intelligence available to support this complex trading operation which appeared to work well because the utilisation of the vessels was high.

In summary there is evidence that the Irish Sea region bounded by the coast of North West England and the east coast of Ireland operated as an integrated trading region where the needs of the consumer demand were met by vessels carrying commodities produced within the region or transhipped from the overseas trade at Liverpool. There was also no reluctance to look outside the region for essential supplies and to sell the materials and products of the region.

The complexity of the trade required management to be well informed and flexible and the vessels to be versatile in the voyages undertaken and the variety of cargoes carried. The networks employed and the commercial procedures adopted to achieve this outcome are investigated through the available business records in Chapter 6.

# CHAPTER 6 - THE BUSINESS OF COASTAL SHIPPING

This chapter looks at the people who were involved in the business of coastal shipping in the period using available business records to prepare case studies of their business activities. The studies consider particularly the roles undertaken by the people involved and how they used the networks at their disposal; particularly those relating to information and trust. The records used are determined to some extent on availability, the survival rate being low in the North West as elsewhere. Nevertheless those examined cover a range of activities within the business structure which enable the economy to be viewed from a number of perspectives including those of the merchant and the manufacturer. The sources also have a wide chronological spread giving the possibility of noting changes that might have occurred through the period.

It is clear from the historiography (reviewed in Chapter 2) that increasing levels of manufacturing and expanding markets resulted in changes to the traditional roles played by both manufacturers and merchants with agents and brokers appearing as new specialists in the commercial chain. This chapter examines evidence relating to this transition in order to assess the extent of specialisation in the North West Region by the end of the eighteenth century.

A thematic approach will be taken involving the examination of a range of business archives in order to establish any changes in the business culture over the period. The particular aspects of business practice to be considered will be the business structures, the methods of communication, the means of establishing trust, the methods of payment, systems of credit and the role of the merchant.

Unfortunately the records are fragmentary and do not provide information on all aspects of the business operation. Some are accounts with no narrative support to provide information on how the business was conducted, others provide narrative in the form of day books or letter books without accounts - but overall there is sufficient evidence to gain an appreciation of the key aspects of the business operation. A study by Hudson of the West Riding textile industry in the

period 1750-1850 provides a useful point of reference against which businesses associated with shipping in the North West can be compared.<sup>1</sup>

The sources cover the period 1750-1808 and are segregated into three sub divisions, 1750-70, 1771-90 and 1791-1808. The records for the first period are associated with the trade in Wigan coal emanating from the River Douglas in South West Lancashire and include those of James Winstanley & Co. who hauled flats on the River Douglas and operated coastal vessels from Tarleton at the head of the river trading with North Lancashire and Ireland (1752-55); the records of Henry Tindall, a Lancaster merchant who had an interest in the Ribble coal trade in addition to interests in overseas trade with the West Indies, the Baltic and Ireland (1759-63), and the records of the river flat *Success* (1764-71) which operated on the Douglas and up the Ribble to Preston.

The records for the period 1770-90 include those of Langton Birley & Co. (1771-8), who were manufacturers of sailcloth, canvas and twine and also held shipping interests, and the records of the Liverpool merchants, Thomas Leyland (1786-88) and David Tuohy (1775-85), who both traded with Ireland as part of an extensive overseas trading interest and distributed and collected goods within the North West region in association with their overseas trade.

In the final period there are the records of John Brockbank, a Lancaster shipbuilder (1789-1822), who in addition to shipbuilding owned and operated vessels and had many other business interests and the accounts of the Preston sloop, *Active* (1796-1808). The latter is a particularly valuable source because of the chronological span of the records and the detail they contain on the voyages undertaken and the cargoes carried.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Hudson, P., *The Genesis of Industrial Capital: A study of the West Riding Wool Textile Industry, c. 1750-1850* (Cambridge, 1986).

The records of Henry Tindall are held in the archive of the Maritime Museum in Lancaster. The records of the *Success*, James Winstanley & Co., and Thomas Langton are all held in the Lancashire Record Office under catalogue references PR 2851/5/5, DDCa/1/47-8 and DDX 190/21-67 respectively. The Leyland papers and the Tuohy papers are held in the Liverpool Record Office, catalogue references. 387 MD 59, and 380 TUO respectively. The account books of John Brockbank and the book of contracts and specifications are held in the reference section of Lancaster Public Library. The account book for the *Active* is in the personal collection of Mr D Kirby and a transcription was kindly provided by Mr Peter Shakeshaft.

# James Winstanley & Co.

James Winstanley & Co. was a small shipping partnership operating three or possibly four vessels in both a river and coastal trade. The river trade involved hauling flats loaded with coal at Gathurst Bridge along the River Douglas to Tarleton for storage and distribution and hauled to creeks along the Ribble and to Preston for the local market. Coal was carried in the coastal trade to ports in North Lancashire using vessels owned by the company, the coal on occasions being transhipped from the river flats at Becconsall Marsh at the head of the Douglas. Coal was also shipped to Ireland with skins and pearl ashes being received in return. The return trade from the North Lancashire ports was mostly limestone, for use in road building and for burning to produce fertiliser, together with occasional consignments of stone. The merchants at Tarleton who provided the coal also traded in limestone; a number were partners in the business.

The company was formed in 1752 when a partnership was established between James Winstanley and Richard Hatton and the first vessel, the flat *Expedition*, a river flat, was bought for £104.9.11. In October of the same year Winstanley and Hatton took Robert Howard and James Bradshaw into partnership and bought a second vessel, a sea going flat, the *Thomas* for £195, which was renamed the *Liverpool*. The company expanded further in May 1753 when Richard Topping, Captain James Fell and William Crosfield became investors. At this time James Bradshaw was bought out, already by that time having sold half of his share to a mariner, William Dandy, the master of the *Liverpool*. This share was bought out at the same time, although Dandy continued to be the master of the vessel. A re-distribution of all of the individual investments took place at this point with the company becoming owned in equal sixth shares and expanding to add a third sea going flat, the *Sincerity*, bought at Lancaster by Captain Fell for £237.18.0. Occasional reference is made in the accounts to 'the Lancaster flat', although no record is included of the purchase of the vessel.

The name of the company identifies Winstanley as the key figure in the enterprise. His occupational background could not be found but it is evident that Bradshaw and Howard were coal merchants, since the vessels carried their coal. Bradshaw was also one of eight people who had leased land for a mine in Orrell.

The other seven lease holders included Ralph Bradshaw of Parbold, who may have been related and supplied coal to the *Liverpool* and the *Sincerity* from Tarleton from mid 1753, Samuel Bold of Wigan, who was seen as an owner of vessels registered in Preston in Chapter 4 and Richard Culcheth of Orrell who was a supplier of cannel to Winstanley & Co. but despite their specific business interests all were described in the lease documentation as yeomen.<sup>3</sup>

It is not clear to what extent the remaining investors in the shipping enterprise were involved with the coal industry although on one occasion James Fell, who had been entrusted with the assignment of buying the *Sincerity*, acted as a merchant for the sale of 70 tons of coal carried by the vessel to Penny Bridge in Furness. Fell was not the master of any of the Winstanley vessels and could have been retired and acting as a trader.

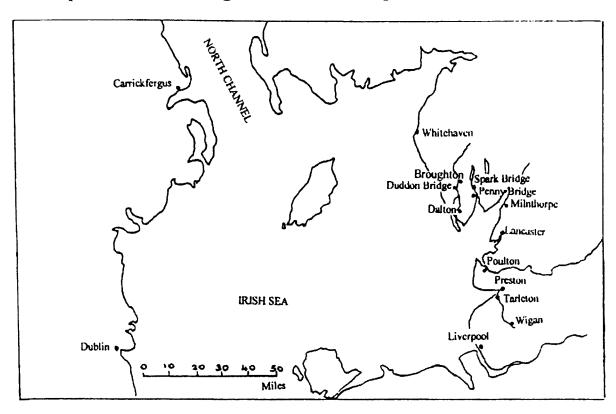
The payments into the business by the partners were all made in cash with the exception of those of James Fell and William Crosfield who submitted bills. The day-to-day business of the company was conducted on a cash payment basis. Many of the outgoing payments in the river trade were small amounts for services such as 'halling' (hauling) the flats and cartage of coal from the mines to the river. The more substantial amounts such as river dues and the payments for coal and limestone were also paid in cash although occasionally in instalments.

The accounts of the two coastal vessels the *Liverpool* and the *Sincerity* examined over the first year of their operation showed that payment in cash also extended to the coasting trade with the masters of the vessels often receiving cash payment at the time the deliveries were made. This contrasts with the experiences in the woollen textile trade portrayed by Hudson where the granting of credit to the customers was a standard business practice. A credit structure was seen to be operating in the accounts of the *Success*, reviewed later, through payment in instalments by the customers.

The voyage details of the *Liverpool* and *Sincerity* in their first year of operation are included below in Tables 6.1 and 6.2. The area over which the vessels traded is shown as in Map 13

<sup>&</sup>lt;sup>3</sup> Lancashire Record Office, Catalogue Reference, DDX 233/5.

Map 13 - The trading area of the Liverpool and the Sincerity



Source: Firn, D., 'An Eighteenth Century Shipping Enterprise based at Tarleton', Lancashire Local Historian, 16, (2003), 16.

Table 6.1 - The First Year's Trading of the Flat Liverpool 1752-3

Voyage No.	Start Date	From	То	Cargo Out	Customer	Cargo Return	Customer
1	1 Nov 1752	Liverpool	Preston	Textiles,Kelp,Timber	Mr Chadwick	None	
2	5 Dec 1752	Tarleton	Preston	Coal,Cannel	Sundry	None	
3	17 Jan 1753	Tarleton	Poulton	Coal, Cinders	John Bird	Limestone	James Bradshaw
4	19 Feb 1753	Tarleton	Pennybridge	Coal	Mr Satherwaite	Paving Stones	Not Specified
5	9 April 1753	Tarleton	Lancaster	Coal	Sundry	Limestone	Not Specified
6	30 April 1753	Tarleton	Poulton	Coal	Peter Finnison	Limestone	William Jump
7	28 May 1753	Tarleton	Poulton	Coal	John Whiteside	Limestone	Not Specified
8	18 June 1753	Tarleton	Lindale	Coal	William Garner	Limestone	Not Specified
9	30 July 1753	Tarleton	Dalton	Coal	John Ashburner	Limestone	Not Specified
10	17 Sept 1753	Tarleton	Conison Bank	Coal	John Cason	Limestone	Not Specified

Source: Accounts of James Winstanley and Co., L.R.O., Cat Ref., DDCa/1/47-8,

The *Liverpool*, undertook 10 voyages in the first year of operation. The voyages varied from three to eight weeks and generally consisted of one delivery of coal, cannel or cinders, followed by a back cargo of limestone or paving stones. The exception was the first voyage which was from Liverpool, where the vessel was bought, to Preston carrying textiles, kelp and timber, The customers were different for each voyage, even in the same port, which suggests that deliveries were arranged on a single voyage basis rather than as part of a contract agreement. Entries in the accounts show James Winstanley's expenses for sales, which

included travel and postage and suggest that he was involved in arranging the sales.

The duration of the voyages was excessive for the activities listed. The voyages should have typically taken about three weeks, but the average was much longer, in the order of four to five weeks. There may, however, have been some delay in identifying the source of the back cargo which was invariably bought and loaded in another port. The master and crew were paid for the full period from the start of each voyage to the start of the next and it is difficult to accept that other activities were not found for the vessel but there is only one reference to another activity and this was on completion of voyage 10 when the vessel was engaged in carrying sundry goods from Lytham to Preston from a vessel that had arrived from overseas and was too large to navigate the river.

The price paid for coal at Tarleton was 5s 10d per ton. Cannel was more expensive and was typically 11s 8d per ton. The suppliers at Tarleton included James Stocks, James Bradshaw, Alex Leigh and a Mr Jackson before 18 June 1753. James Bradshaw was a partner in the company until being bought out in May 1753. After 18 June 1753 the coal was bought from Ralph Bradshaw for every voyage. Bradshaw also supplied the *Sincerity*, but there was no price advantage because the purchase price remained at 5s 10d per ton. The selling price of the coal varied between 9s 0d per ton and 9s 6d per ton with the vessel loading between 32 and 40 tons of coal on each voyage. Accounts for each voyage show that margins were small once expenses had been paid although the annual accounts, reviewed later, show that a reasonable return on turnover was achieved.

Table 6.2 - The First Year's Trading of the Flat Sincerity 1753-4

Voyage No.	Start Date	From	То	Cargo Out	Customer	Cargo Return	Customer
1	26 June 1753	Tarleton	Dudden	Coal	William Southall		
		Dudden	Liverpod			Slate	Nat Specified (Liverpool)
		Liverpool	Tarleton			Balks	Thomas Norris
						Clapboards, Balks, Lats	Thomas Donaldson & Co.
						Oak Plank	James Bradshaw
						3 Anchors, 1 Boat	Thomas Hawarden & Co.
2	17 Sept 1753	Tarleton	Dublin	Cannel	William Bibby	Soap Ashes	Not Specified
3	5 Nov 1753	Tarleton	Dublin	Coal	Sundry	Soap Ashes, Hides	
4	31 Dec 1753	Tarleton	Lancaster	Coal	Sundry		
		Minthorpe	Wyre			Limestone	Hugh Seed
5	6 April 1754	Tarleton	Pennybridge	Coal	James Fell		
		Hammerside Hill	Liverpod			Limestone, Sundries	Not Specified
		Liverpool	Tarleton			Light	
6	5 May 1754	Tarleton	Lancaster	Coal, Cannel	Sundry		
		Minthorpe	Meals			Limestone	Henry Wright

Source: Accounts of James Winstanley and Co., L.R.O., Cat Ref., DDCa/1/47-8.

The Sincerity only made six voyages in the first year of operation compared to the compared to the ten undertaken by the *Liverpool*. The first voyage was to Duddon in Furness from where the vessel returned with slate for Liverpool; the Duddon estuary being close to slate deposits at Kirkby Ireleth in West Furness. The vessel then returned from Liverpool to Tarleton with timber including oak planks for James Bradshaw and three anchors and a boat for Thomas Hawarden who appears in the Success accounts as a supplier of coal at Gathurst Bridge. The duration of the voyage was 11 weeks and 6 days which compares with 7 and 8 weeks for voyages two and three which were to Dublin. The first voyage to Dublin supplied coal to William Bibby, for which the master, John Tatherson, received £12.7s 6d English in cash, and returned with a cargo of soap ashes.<sup>4</sup> The second was with coal for sundry buyers returning to Tarleton with soap ashes and 40 hides. The coal sold for 13s 9d per ton in Dublin and the hides cost £8 8s 0d with a duty of £1 9s 4d payable at Preston. The remaining three voyages consisted of two selling coal and cannel at Lancaster to sundry buyers and one to Penny Bridge with coal; the transaction made by James Fell as referenced above. The *Sincerity* was a larger vessel, loading between 40 and 60 tons, and therefore the income for each voyage was more significant although with the voyage duration being longer it had to be set against increased running expenses. The pricing structure was identical to that seen for the *Liverpool* with coal bought at Tarleton for 5s 10d and sold at prices varying from 8s 8d to 9s 8d. The back cargo from Lancaster was limestone loaded at Milnthorpe and from Penny Bridge was one of limestone and sundries for Liverpool from which the vessel returned light to Tarleton.

The accounts of the company also include those for the Douglas river trade but no reference is made to purchases of coal made at Gathurst Bridge where the coal was loaded and the company owned a yard. One of those who appeared regularly as receiving payments for carting coal to Gathurst Bridge was Richard Halliwell, who appears in the accounts of the *Success* as a supplier of coal but was only paid as a carrier by James Winstanley & Co. This suggests that the company

<sup>&</sup>lt;sup>4</sup> Soap ashes were the product of burning certain types of timber and were used as fertiliser in addition to being used in soap making because of the high potash content.

<sup>&</sup>lt;sup>5</sup> Payment for raising the yard at Gathurst Bridge appears in the accounts in July 1754.

owned the coal but why then did they buy from merchants at Tarleton to supply the coastal trade? This is something of a conundrum which merits further research.

The accounts of James Winstanley & Co. provide insights into the ownership and operation of a business involved in the distribution of Wigan coal. There was evidence of a vertically integrated business structure extending from production through to the point of sale with the presence of at least one mining lease owner in the partnership. The principal owner, James Winstanley, was reimbursed for travel, suggesting that he was involved in arranging sales and other partners were merchants in the business no doubt with their own network of contacts. Coal was bought at a fixed price and sold at varying prices depending on where it was carried and also, it would appear, on prevailing market conditions. This is supported by instances of coal being sold in the same port at different prices during the year.

Outgoing and incoming payments were on a cash basis with some evidence of deferred payments for the coal purchased by the company. There is no evidence of this in the sales which were often paid for on delivery in cash to the master. Similarly return cargoes were paid for in cash at the time of purchase. A profit figure was allocated to each of the coastal voyages but this was not a true profit because it only related to income and outgoings per voyage, mainly in wages and the master's disbursements, and did not take into account any maintenance and repairs to the vessels. Company accounts to 28 September 1754, which represent approximately two years of operation, show receipts of £503 19s 9d against payments of £359 19s 10d with the profit of £143 19s 11d being shared between James Winstanley and Richard Topping for repayment of overpayments made at the start of the new company and Richard Topping for payments made for coal received from Ralph Bradshaw. The profit was 28.6 per cent on turnover which over the two years averaged £250 per annum. This profit figure, however, has to be treated with caution because fully detailed accounts are not provided and periodic costs, such as vessel maintenance, may not have been included.

#### Henry Tindall: Lancaster Merchant

Henry Tindall was a Lancaster merchant and shipowner whose principal interests were in the overseas trade with Africa, the West Indies and the Baltic. Tindall also traded with Ireland in re exports of goods from the colonies and had

an interest in the flats *Supply*, *Industry* and *Dilligence* which were engaged in the Ribble coal trade. The vessels in the coal trade were administered for Tindall and other investors by a Thomas Cock of Longton Marsh, a location on the Ribble estuary close to the confluence of the river with the River Douglas, an ideal location to acquire knowledge and intelligence about the coal trade.

The surviving record of his business affairs is an account book for the period 1759-63. The coal accounts were kept separately and the account book only shows key information transferred from the coal accounts, with references made to the coal account book numbers. Unfortunately the coal account books have not survived so we do not have the detail of the sources of supply and the customers to whom the coal was delivered but some information on the trade is contained in the account book together with the trading results and the names of those who invested. Coal sales to customers in Lancaster were recorded in the account book which included sales to Tindall's household account and to shareholders of the vessels, some of whom were also business associates of Tindall.

The flats are also seen occasionally operating outside of the coal trade. Examples include the *Industry* carrying yards and bowsprits from Whitehaven for George Brockbank a Lancaster shipbuilder and a shareholder on 20 March 1759 and on 26 February, 27 March and 20 May 1762. Brockbank was the father of John Brockbank who succeeded him in the business and whose business accounts are reviewed later. The *Industry* also made voyages to Liverpool carrying limestone and unspecified goods from Kendal and on 16 May 1760 was recorded as carrying beef from Dublin for a William Butterfield in Lancaster who is seen as a supplier of cordage in the outfitting accounts of the snow *Castleton* for a voyage to Barbados in 21 November 1758; a vessel in which Tindall also had an interest; an example of the closeness of the networks that existed in ports such as Lancaster.

Some assessment can be made of the profitability of the business. Coal trade accounts are presented in the account book for the years 1758-9 combined and separately for 1760. The accounts for 1758-9 show proceeds of £25 6s 6d from a turnover £1229 13s 1d which only amounted to a profit of 2 per cent on turnover. In 1760 the situation was improved with proceeds of £59 8s 9d accruing from a turnover of £519 9s  $9^{1}/_{2}$ d, a profit of 11.4 per cent but on a lower level of trade. References to the purchase price of the coal are included in the accounts

dated 3 May 1758 which show a purchase of coal at Tarleton for 6s 0d per ton, only 2d per ton more than the price paid by James Winstanley & Co. in 1753. In the same accounts the 642 tons bought direct 'from the pits' in the year 1756-7 cost 5s 3d per ton including wages and river duty. The trade is described as consisting of deliveries of coal from 'the pits' and a return trade in limestone collected either at Freckleton or Tarleton on the return voyage which suggests that the vessels were also involved in the river trade. The coal sold to Tindall and his associates in Lancaster was not sold at preferential rates. A record for 30 May 1759 shows coal being charged to Tindalls house account and sold to George Brockbank and John Sheldring, at 12s 0d per ton. This is well in excess of the typical price of 9s.0d per ton that the Winstanley vessels were selling in Lancaster in 1754.

The fractional holdings in the company of each of the investors is indicated by the distribution of proceeds for the business in the years 1758, 59 and 1760 shown in the account book entry for 2 January 1761. The holdings were:

Henry Tindall	<sup>5</sup> / <sub>16</sub>
George Brockbank	<sup>4</sup> / <sub>16</sub>
Midleton and Suart	<sup>2</sup> / <sub>16</sub>
Samuel Sandys	<sup>3</sup> / <sub>16</sub>
Richard Gibson	<sup>1</sup> / <sub>16</sub>
Thomas Cock	<sup>1</sup> / <sub>16</sub>

Richard Gibson was a sailmaker and Midleton and Suart were most likely to have been Lancaster merchants. Edward and George Suart are listed as merchants in a Lancaster Directory for 1781 and were investors in Lancaster shipping for the West Indies trade in 1786-7. Samuel Sandys was a sea captain but it is not clear from the accounts whether he was active or retired.

<sup>&</sup>lt;sup>6</sup> Bailey's Northern Directory for 1781, 213.

Tindall also invested in the larger ships in the West Indies and Baltic trades, usually holding a seventh share with other Lancaster merchants. The imported goods gave rise to trade within the North West and to Ireland which included re selling of imported cotton to manufacturers or merchants in the North West including Chorley, Preston and Manchester and sales of sugar to customers in Preston and Kendal, some of which was delivered by the *Supply* and the *Industry*. Sugar was also sold to customers in Ireland through William Hurst a merchant in Dublin. Hurst bought a 1/16 share in the Lancaster snow *Ann* in Aug 1761 indicating his commercial interest in the Lancaster trade. In addition to sales of sugar, Tindall purchased beef and linen through Hurst to be collected by the vessels at Cork on the outward voyages to the West Indies. The financial transactions were conducted in both cash and by the exchange of bills. Tindall generally sold on the basis of cash payments payable in three or six months but there are also records of payments by second and third hand bills and drafts on French and Hobson who were London merchants.

The Tindall papers show that he was one of the few Lancaster merchants with interests in both the overseas and coasting trade. Unfortunately, because of the unavailability of the coal account books, we have only minimal information on the coal business which was managed by a third party. We do however know that Tindall's fellow shareholders were business associates from Lancaster and the account book shows something of how the business operated and its profitability. The vessels also operated outside of the coal trade carrying cargos for Tindall and his fellow investors in the coasting and Irish trade. Another example of the versatility of use of the vessels.

Tindall had a business relationship with a merchant in Dublin who handled the trade with both Dublin and Cork, a similar arrangement seen later to have been adopted by Thomas Leyland, the Liverpool merchant. We do not know, however, how Tindall established his contacts for the distribution of his imported goods in the North West or the conditions under which he traded.

#### **Success Accounts**

The *Success* was a flat that traded exclusively on the Rivers Douglas and Ribble carrying coal bought at Gathurst Bridge and Tarleton and conveying it to customers in Preston and other points on the Ribble. Accounts for the vessel

provide information on the buying and selling prices of coal in the period 1764-71 and details of the customers.<sup>7</sup> Table 6.3 is an account of a typical voyage.

Table 6.3 – Success – Accounts of voyage commencing 31 January 1766

Costs							
Date Item	£	s	d				
31-Jan Purchase of 15 ton of coal at Gathurst Bridge (4s 0d/t	on) 3	0	0				
01-Feb Halling from Gathurst to Tarleton (9d/ton)	0	11	3				
01-Feb River Duty	0	15	0				
10-Feb Purchase of 2 ton of coal at Tarleton (6s 6d/ton)		13	0				
12-Feb Halling 19 ton to Preston (1s 3d/ton)	1	3	9				
12-Feb Discharging		2	0				
Total	6	5	0				
Sale							
Date Item							
12-Feb Coal sold to Thos Briggs 19 ton @ 8s 6d/ton	8	1	6				
Proceeds of the voyage	1	16	6				

<sup>\*</sup> The accounts regularly contain an inconsistency with more coal being delivered than bought. In this case 19 tons of coal were delivered and only 17 ton of coal bought. No explanation is evident as to why this occurred.

The proceeds represent a healthy return of 30 per cent on the outlay for the voyage but this is only the trading profit and takes no account of the wages of the master and crew and any other costs associated with the operation and maintenance of the vessel. The accounts for the two-year period 26 January1766 to February 1768 are presented towards the end of the records and show a 4.3 per cent profit of £14 2s 3d on a turnover of £324 19s 4d, although details are not provided to show how the profit was calculated Reference is made to numbers of folios where this data was kept which unfortunately are not available. The return is far from impressive but better than the first year of trading reported by Thomas Cock for Henry Tindall.

The utilisation of the vessel was high with a total of 23 voyages recorded for 1766. A study of the voyage accounts for the period from 6 April to 23 July 1766 showed that in the 106 day period five and a half return voyages were made from Gathurst Bridge to Freckleton, with an additional three intermediate voyages collecting coal at Tarleton and discharging at Freckleton twice and at Clifton

<sup>&</sup>lt;sup>7</sup> L.R.O., PR 2851/5/5, Account book of the Success

once.<sup>8</sup> The vessel usually returned light to Gathurst Bridge but there were occasional return voyages carrying limestone collected at Tarleton and delivered to either Wigan or Finney Lock.<sup>9</sup> In 1766 a total of 16 return voyages with limestone are recorded, 12 to Wigan and four to Finney Lock.

Coal suppliers at Gathurst Bridge included a Mr Halliwell, a Mr Porter, and Thomas Harwarden and at Tarleton, James Bradshaw, George Peascod, Thomas Wiggan, Mr Porter again, George Graham and Robert Howard, who sold on behalf of Edward Leigh. James Bradshaw and Robert Howard were shareholders in James Winstanley & Co and Edward Leigh was the son of Alexander Leigh who held extensive coal mining rights and supplied coal to Winstanley & Co. Alexander Leigh also owned five sixths of the Douglas Navigation and was the person to whom river duties were payable.

The customers of the *Success* included Thomas Briggs, a Preston coal merchant, seen in Chapter 4 as an owner of vessels in Preston, Thomas Helm of Savick Pool, Richard Atkinson and a Mr Cowburn of Freckleton, John Swan of Kirkham and Mathew Riley of Clifton, all locations along the Ribble. In addition there were sales to the inhabitants of Croston, a small settlement on the River Douglas. The price paid for the coal by the customers varied from 8s 0d to 8s 6d per ton, similar to that paid by the customers of Winstanley & Co. locally, although the residents of Croston paid a reduced price of 7s 0d per ton. Coal was bought for 4s 0d per ton at Gathurst Bridge and 6s 6d at Tarleton.

A list of those who supplied limestone at Tarleton in 1766 included many of the names of those who also supplied coal including, James Bradshaw, James Winstanley, George Graham and George Peascod. This confirms that the merchants traded in both commodities. The limestone taken to Wigan was most likely used as road materials whereas Finney Lock in the middle of the agricultural region was more likely to have used the stone to supply lime kilns.

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<sup>&</sup>lt;sup>8</sup> L.R.O., PR 2851/5/5, 12-14.

<sup>&</sup>lt;sup>9</sup> Finney Lock on the Douglas Navigation was in the locality of Croston Finney approximately half way to Wigan.

The owners of the vessel are not identified although there is a possibility that the vessel was owned by Winstanley & Co. James Winstanley and the master of the vessel, Henry Wakinson, were signatories to the accounts in February 1768.

All references to payments in the accounts are to cash with some paid through intermediaries; for instance the owners of the flat paid a William Robinson £7 10s 1<sup>1</sup>/<sub>2</sub>d on 21 Nov 1765 'for the use of' Mr Halliwell, a coal supplier at Gathurst Bridge. The payment terms appeared to be very relaxed with full and part payments often being made over extended periods of time after the purchase or delivery date. As an example 17 tons of coal bought from James Bradshaw at Tarleton on 5 June 1765 was not paid for until 9 July 1765, and 3 tons of coal, value 19s 6d, bought on 19 July 1765 and 19 tons, value £6 5s  $1^{1}/_{2}$ d, bought on 12 October 1765 were paid for in instalments of £1 1s 0d on 15 October 1765, £5 0s 0d on 27 January 1766 and a final payment of £1 3s  $7^{1}/_{2}$ d on 16 April 1766. 10 Similarly there was no consistent pattern of payment for coal sold with part payments again featuring and accounts often being well in arrears. In contrast some smaller deliveries, for example 12 baskets delivered to a Christopher Carr on 26 November 1765, were paid for on the same day. 11 The system appeared to be one of balancing credit, with payment for purchases being made when cash was available from sales.

The records of the coal trade represent just a small window on business activity in the mid eighteenth century but demonstrate a number of practices that were followed. The Lancaster merchants and tradesmen investing with HenryTindall in his coal venture demonstrate the practice of investing with other known associates and show Tindall to have been a merchant with both overseas and coasting interests. The accounts of James Winstanley & Co. and the *Success* show how the credit system was operated in the coal business in which payments were made in cash. The accounts of the Winstanley Company also show it to have been an example of a vertically integrated structure with interests extending from owners of mining leases through to masters of the vessels but not to actual coal users.

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<sup>&</sup>lt;sup>10</sup> L.R.O., PR 2851/5/5, 65.

<sup>&</sup>lt;sup>11</sup> L.R.O., PR 2851/5/5, 63-4.

The price of the coal remained fairly stable over the 20 year period encompassing the Winstanley and *Success* accounts with the purchase price at Tarleton being 5s 10d per ton at the start of the period and only escalating to 6s 6d per ton at the close. The selling price, however, did not show a similar escalation with coal still being sold by the *Success* at 8s 6d per ton in Preston at the end of the period.

#### 1771-90

### Kirkham Flax Processors

Thomas Langton was the leading force in Langton, Birley & Co. and it is a collection of his letters, mainly to his sons John and William, which provide us with valuable information on their trading activities in the period 1771-8. There are no surviving papers for J.T.&W Hornby, their business rivals in Kirkham. The letters provide an interesting insight into the supply chain that operated for flax and hemp from the Baltic and the market situation in London for sailcloth and canvas, a market which the letters show was fiercely contested by manufacturers from Warrington and Scotland in addition to the Kirkham concerns. The papers also show that Langton, Birley & Co. were involved in trade in imported flax and other commodities. The vessels from the Baltic also carried wheat and timber which the company sold through the markets in Liverpool and Lancaster. They also traded in tobacco through their connections in the colonies.

The majority of the letters are written to William who at various times is in Kirkham, Liverpool and London and to John who appears to be mainly in Kirkham. Langton's youngest son, Zachary, having been educated in Hampstead, was involved in the company's affairs in London from 1788 whilst the remaining brother, Thomas, was sent to Riga in 1788 at the age of seventeen to join the firm of Thorley Morrison. He later became a partner in the firm and one of the principal merchants there.<sup>13</sup>

All four of Langton's sons were involved in the business from an early age, although their father maintained a close supervision of their activities. The

<sup>&</sup>lt;sup>12</sup> L.R.O., DDX 190/21-67, Letter book of Thomas Langton.

<sup>&</sup>lt;sup>13</sup> Singleton, F.J., 'The Flax Merchants of Kirkham', T.H.S.L.C., 126, (1977), 96-7.

letters date from 1771 when the two elder sons John and William were at school and it is 1775 before we see the first letters to his sons on business matters when they were 21 and 17 years of age respectively. The 1775 letters are written from Bristol when Thomas Langton was indisposed and 'taking the waters' at Hotwells to cure a colic and are addressed to William who at that time was in Kirkham, although he later writes to him in Liverpool and London. Despite William's relative immaturity the letters make it clear that he is active in business affairs.

The first letter from his father, written on 19 June 1775, is concerned with the first flax deliveries for the year from the Baltic which he has discovered have already arrived in Liverpool; presumably he visited the coffee houses the recognised meeting places for merchants, or other places of meeting in Bristol to obtain this information since he makes no reference to other correspondents. <sup>14</sup> He has been unable, however, to find out about the price or the quality since he writes to William, 'I fancy you will learn their prices' and asks, 'what accounts do you have from London and Hull on quality', explaining his lack of information on the fact that 'not much is imported to this place.' Thomas is also concerned about the North American market, relaying the message that the situation is considered to be serious in Bristol 'since the late unfortunate affair at Boston', and asks if any letters have been received enclosing remittances since he left because he fears that 'it will be long, very long, before we get anything from that quarter.'

At the same time that Langton is in Bristol his Kirkham rival Hugh Hornby and his wife are taking the waters in Bath. Langton visits them and although they are friends it is clear that they are rivals when after the visit he writes to William to say that he has learned from Hugh Hornby that the vessels carrying the Langton's flax may be delayed in Riga waiting for timber balks which have not yet arrived for loading, whereas a Hornby vessel is only loading flax and may leave earlier. The consequence being that 'they will have new flax on the market long before us', which appears to be disadvantageous to the Langtons, although in a later letter to William on 13 July when their flax has arrived he says' I hope that you may meet with a ready sale but they (the chapmen) are generally tardy in

<sup>14</sup> L.R.O., DDX 190/47.

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laying in their stocks so early, being desirous of seeing the whole importation arrive first.<sup>15</sup>

It is clear from these statements that both concerns are trading in flax and not just buying to meet their own manufacturing needs. The companies were using their knowledge of the market to create further marketing opportunities, a practice which we will see later was followed by John Brockbank the Lancaster shipbuilder who bought timber for his own use from the British market and overseas and operated as a timber merchant alongside his shipbuilding business.

The Langtons also owned land in Kirkham which was farmed. There is a reference to a James Haighton buying and selling cattle and Langton asking William to advise him of what share is to his account and what is to the company. The final letter to William from Bristol, before he returns to Kirkham on 24 July 1775, asks William if he has housed the hay, the weather in Bristol on that day being very conducive to the activity. We will see later that John Brockbank also owned land and took an active interest in farming.

The company owned at least two vessels in 1775; reference being made to the insurance on the *Betsy* and the *Tindall* being pleasingly low. <sup>17</sup> It is also clear from the letters that the Langtons were also chartering vessels. A letter to William in Liverpool in 1778 expresses concern that a Captain Williams is late in departing to the Baltic in the *Bersham* with the winter season approaching and expresses the view that they would have been happier to have charted a vessel from Mason and Bourne, who can be identified in the Liverpool Shipping Registers as substantive owners of vessels in Liverpool, but they could not be released from their contract for the *Bersham*. A final comment on the matter states that in another time they will be glad to give them a freight 'for a good ship of suitable burthen'. <sup>18</sup>

The letters in 1776 show that Thomas Langton was in London for a period, visiting friends including Edmund Threlfall who was a local Kirkham man and was a partner in the London linen drapers, Turner and Threlfall. While in London he also makes arrangements for his son Zachary to attend school in Hampstead

<sup>16</sup> L.R.O., DDX 190/49.

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<sup>&</sup>lt;sup>15</sup> L.R.O., DDX 190/48.

<sup>&</sup>lt;sup>17</sup> L.R.O., DDX 190/47.

<sup>&</sup>lt;sup>18</sup> L.R.O., DDX 190/56.

which it later transpires was part of the longer term objective of having him represent the company's interests in the capital.

In 1778, when William was 20 years of age, his father wrote to him in Liverpool in connection with the tobacco in which he was trading on his own account and advised that the prospects of a good price were not promising. He added that a sale at Lancaster had gone badly with the tobacco withdrawn after only seven hogsheads had been sold at a low price with only two 'chaps' being present. Reference is also made to John Birley selling tobacco in Lancaster and selling wheat brought with the flax from Riga in Liverpool. Thomas Langton is very critical of Captain Potts bringing the wheat on this occasion saying that he is sorry that he has brought so much and stating, 'I fear that it will meet with a dull sale, present prices may subject it to payment of high duties'; this was a facet of the operation of the corn laws which was understood and carefully observed by the Liverpool merchants, including Thomas Leyland, when trading with Ireland. 20

London was a major trading centre for canvas and sailcloth and letters in 1780, a time of financial difficulty for the company, make reference to the competition from sail makers in Warrington and from their near neighbours the Hornbys in Kirkham. In a letter to William, at this time in London, his father informed him that little has been done on sales and that there is little prospect while Messrs Hornby & Co. are determined to part with their flax at any rate and on extended credit terms. He added that the Warrington men were up in London in great numbers and were running down the price of canvas so much that it would be necessary for the Langtons to do the same to compete.<sup>21</sup> Thomas is concerned that agents may have been making up consignments at reduced price for their customers without informing the Langtons and giving them the chance to be involved at the lower price. He therefore advises William to tell all agents that they will sell at the reduced price of 15d per yard on 12 months credit or at 14d per yard for prompt payment, which is the price William has advised is being offered by the Warrington men. William is further advised to offer a further one per cent discount if he can make an engagement for a quantity and to seek out and make

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<sup>&</sup>lt;sup>19</sup> L.R.O., DDX 190/ 56.

<sup>&</sup>lt;sup>20</sup> L.R.O., DDX 190/47.

<sup>&</sup>lt;sup>21</sup> L.R.O., DDX 190/59, 60.

the acquaintance of some of the 'chaps' which may save the commission on the sales charged by the agents. Agents are operating at different rates of commission and William is asked to press Messrs. Birkbeck and Blake, who are charging only  $2^{1}/_{2}$  per cent, to exert themselves to make sales for them and also to ask to be advised if other suppliers are offering canvas to them at a lower price; other agents were charging 4 per cent.<sup>22</sup>

The canvas is often described as being 'Government' or 'Navy' canvas and research by Singleton established that both Langton and Birley and J.T. & W Hornby had contracts with the Navy Board for the supply of sailcloth from about 1780.<sup>23</sup> This is illustrated by a reference to a warrant being received from a Mr Bromley for 50 bolts of canvas of which the same proportion as last time will be sent down to Deptford.<sup>24</sup>

Financial transactions by the Langtons are invariably made using bills of exchange. Compared to the coal businesses examined above they were buying in much larger quantities with greater financial sums involved, mostly in overseas markets, and were selling sailcloth and canvas, again probably in consignments which individually were worth more than one of the Winstanley's cargos of coal, into a sophisticated London market and to the Admiralty; all factors that would suggest that they were involved in a credit web more typical of that seen in the woollen textile industry by Hudson. Unfortunately there are no accounts for the trading activities and no information on the manufacturing aspects of the business to enable a more complete picture to be assembled.

The Langton letters provide us with an example of a manufacturer, who was also a merchant, operating in an international market. The most notable features of the operation are the extensive lengths to which Langton went to acquire intelligence on the situation in the market place for the materials he was buying and the market he was selling into, including intelligence on his competitors. Much of this was communicated in letters to and from his sons; letter writing being his principal means of communication.

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<sup>&</sup>lt;sup>22</sup> L.R.O., DDX 190/60.

<sup>&</sup>lt;sup>23</sup> Singleton, F.J., 95.

<sup>&</sup>lt;sup>24</sup> L.R.O., DDX 190/63.

Clearly the market in sailcloth and canvas in London was extremely competitive and it was necessary to have good connections with factors and chapmen to ensure that the products were competitively priced and offered on competitive credit terms. Family members were groomed for the roles of being in position with the suppliers and dealers to cultivate the necessary relationships and to provide trustworthy intelligence essential to the successful operation of the business. Payment was invariably in Bills with no evidence found in the letters of cash payments being made.

# Thomas Leyland: Liverpool Merchant

Thomas Leyland was another merchant who combined interests in the overseas trade with interests in the coasting trade and trade with Ireland. Leyland's overseas interests were in trade with Africa and the West Indies and with Southern Europe where he had a particular interest in the fruit trade. Coastal vessels and vessels on the inland waterways emanating out of Liverpool carried the redistributed imports and brought materials for export from the North West and the Midlands. Correspondence relating to Leyland's trading activities is included in a letter book for the period 1786-88. The letters refer mainly to the European and Irish trade, the distribution of imports and the collection of goods for export, which he was managing on his own account. The impression gained is that Leyland's other interests in the overseas trade were in collaboration with others and did not require the same 'hands on' attention. They may of course have been contained in other letter books which have not survived.

Leyland had trading connections with thirteen ports in Ireland from which he received grains of various types, pork, beef, butter, skins and tallow. He shipped salt, sugar, coal and earthenware in return together with occasional consignments of manufactured goods. There was a requirement for foodstuffs in the port for victualling vessels in the overseas trade and providing supplies for transportation to the colonies.

Leyland used a warehouse in the Liverpool docks, located in Nova Scotia, an area between St George's Dock and the Old Dry Dock, now known as the Canning Dock, and conveniently situated close to the Duke's Dock in Liverpool. There are many references to goods being shipped by 'Duke's Flatt' to Manchester and destinations in the Midlands. The flats would have navigated the river up to

Runcorn at which point they would have entered the staircase of locks leading up to the Bridgewater canal. Goods for the Midlands would have used the connection to the Trent and Mersey canal at Preston Brook.

Oranges were shipped along the Bridgewater canal for customers in Manchester, Altrincham, Stockport, Bury, Rochdale and down the Trent and Mersey canal to Birmingham and Dudley in the Midlands and used the coastal vessels to supply customers in Preston, Lancaster and Kendal, the latter through Milnthorpe. Oranges were also shipped to George Abbatt and Thomas Farrer in Preston on the coastal traders *Union Trader* and *Friendship*, olive oil was shipped to Isaac Whitwell in Kendal on the *James*, presumably via Milnthorpe, and wine was shipped to Thomas Satterthwaite in Lancaster on the *Delight*.<sup>25</sup>

There are no references to Leyland owning vessels in the coasting trade or in the trade to Ireland and his only shipping interests appear to have been in two vessels, used principally in the trade with Spain and Portugal. The brigantine *Nelly* of 98 tons, for which he is shown as the sole owner in the Liverpool Shipping Register, was a regular trader between Liverpool and Spain although there is at least one recorded voyage to Limerick carrying salt and staves of cheese.<sup>26</sup> The *Eliza*, which is referenced in correspondence as being held in joint ownership with a Captain Bridge and a Mr James Bridge and considered too large for the Spanish trade, was not listed in the Liverpool Shipping Register. The vessel was subsequently sold for £1200 in 1786 but prior to the sale also had a recorded voyage to Ireland, carrying salt to Ross.<sup>27</sup> It appears that Leyland would consider using his vessels for work in the Irish trade if they were not required for the Spanish or Portuguese trade, but in the main he used vessels owned by others. In general the vessels used by Leyland in the Irish trade were either owned by the Irish merchants, chartered by Leyland on their behalf, or were 'constant traders', particularly in the trade with Dublin.

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<sup>&</sup>lt;sup>25</sup> Liv. R.O., 387 MD 59, Leyland Letter Book (hereafter LLB), 273, Letter to George Abbatt dated 3 Feb 1787, 245, Letter to Thomas Farrer dated 12 Jan 1787, 670, Letter to Isaac Whitwell dated 26 Feb 1788 and 371, Letter to Thomas. Satterthwaite dated 22 Jun 1787.

<sup>&</sup>lt;sup>26</sup> LLB, 239, letter to Frances Creagh, dated 10 Jan 1787. The Liverpool Registration of the *Nelly* was 57/1786.

<sup>&</sup>lt;sup>27</sup> LLB, 36, Letters to Geo. & Thos. Kough dated 13 and 20 July 1786.

In the Irish trade Leyland was dealing with merchants who traded across a wide range of commodities. As an example the principal contact in Ross, George and Thomas Kough, provided beef, pork and oats and received coal, paint and oil in return. Leyland had more than a simple trading relationship with the Koughs, as demonstrated by his request to them to assist in the recovery of monies due to be paid by Lamphier and Allen, other merchants in Ross, for goods supplied to them in May of the previous year and to progress the issue of overdue salt certificates from a John Shannon.<sup>28</sup> A later letter direct to John Shannon states that salt certificates were missing for consignments from 1784, which amounted to 14,202 bushels with the Salt Commissioners demanding £3550.10s 0d in payment of bonds given by Leyland. Leyland could only be released from the bonds by the return of the certificates signed by the appropriate Irish authorities. George and Thomas Kough were also asked to recover the monies due on a draft on John Shannon for 25 per cent of £130 6s 2d in payment for a consignment of paint and oil and to pay Leyland directly or to pay a Pat Dease in Dublin on Leyland's account. Pat Dease receives a regular flow of correspondence from Leyland, 45 letters in two years, and was another important contributor to Leyland's business affairs in Ireland.

In return for the favours asked of the Koughs, Leyland works hard on their behalf to dispose of some poor quality beef and pork, which he describes as being unsatisfactory for the market. Leyland complains that the beef is of poor quality and is in tierces rather than barrels; the pork although of good quality is dirty, he specifically describes it as 'filthy and some pieces have hair on them.' He advises that suppliers to the 'Guineamen' will not buy inferior beef at any price and says how John Copland, another Liverpool merchant with extensive shipping interests, who is offered the beef at 60/- a tierce, refuses, and buys beef from Limerick at 75/- a tierce.<sup>30</sup> Eventually Leyland sends 40 casks on a vessel under his own management for which he says 'I fear I will receive great complaints' and

<sup>&</sup>lt;sup>28</sup> LLB, 15, Letter to Geo & Thos. Kough dated 12 June 1786.
<sup>29</sup> LLB, 36, Letter to Geo & Thos. Kough dated 13 Jul 1786.

<sup>&</sup>lt;sup>30</sup> LLB, 23, Letter to Geo & Thos, Kough dated 27 June 1786.

also persuades Copland to buy 47 tierces for 58/- a tierce to ship to Dominica about which Leyland 'doubts if Copland will recover the money.'31

Leyland also values the Kough's knowledge of Newfoundland trade which is instanced by him asking them if the *Eliza*, which he believes is too large for the Spanish trade, might be used in the Newfoundland trade and to what plan. In informing them that he has sold the vessel he acknowledges their response by saying that he would have sent her to Newfoundland on the plan that they had provided if she had not been sold.<sup>32</sup>

Leyland's principal customer for raw and refined sugar was Edward Butler in Dublin who is listed in Wilson's 1786 Dublin Directory as a grocer and is also additionally designated a wholesale merchant who was 'free of the 6 and 10 per cent in the Dublin Custom House.' On the 12 June 1786 Butler was sent a bill of lading for 5 hogsheads of raw sugar shipped on the *Hannah* at a cost of £178 2s 2d for which Leyland had drawn a part payment of £138 18s 0d from a draft on Messrs Robert and George Nixon. He requested that Butler should send a certificate for receipt of the sugar as soon as possible so that he could recover the drawback. A subsequent letter on the 6<sup>th</sup> July acknowledges the receipt of the certificate and informs Butler that the drawback of £39 1s 1d has been recovered and the amount credited to his account. The total does not quite relate to the total of £178.2s 2d due but no reference is made to the minor discrepancy. It is interesting in this case that the reclamation of the drawback on this occasion is at the customer's risk whereas in the earlier case of the salt certificates it appears that Leyland held the risk of forfeit of the bonds.

Butler is regularly updated with prices for raw and refined sugar and for Jamaican rum and Leyland also uses his knowledge of the Dublin sugar industry to ask for the addresses of the sugar houses currently working in Dublin and for recommendations of sugar bakers who are known to him as 'safe men' and over

LLB, 42, Letter to Geo & Thos. Kough dated 22 July 1786
 Treble Almanack for the year 1786 containing I, Watson's Irish Almanack, II, Exshaw's English Court Registry, III, Wilson's Dublin Directory with a new correct plan of the city, 24.

<sup>31</sup> LLB, 30, Letter to Geo & Thos. Kough dated 5 July 1786.

<sup>&</sup>lt;sup>34</sup> LLB, 13, 14, 31, Letters to Edward Butler dated 8 June, 12 June, 6 July 1786.

whom 'he may have influence.' Butler is also shipped liquorice root which Leyland acquires for him from a Richard Dunhill in Pontefract to whom Leyland issues the following warning: 'my correspondent complains that what you sent last year was a year old and much injured in quality from age. I beg you will be careful I hear of no fault with this parcel'. Butler sends a draft of Charles Coldwell & Co. on Burton, Forbes and Gregory for £30 1s 8d in part payment and asks Dunhill to send a friend, when convenient, to collect the small outstanding balance. The consignment is shipped on board the *Three Brothers*, a 'constant trader' with Dublin, and Leyland sends the invoice and bill of lading in a letter dated 26 Sept 1786. The invoice is for £32 1s 2d which suggests only a minimal profit to Leyland's account. Sentence of the suggests only a minimal profit to Leyland's account.

Leyland does not buy and re-sell in the Irish trade but acts as an agent making the connection between buyers and sellers. In a letter to Ign. Everard in Sligoe, he states that 'I believe I before mentioned to you I never import any goods from Ireland for my own account and by that means endeavour to accommodate my friends with my money they want in advance.' In the case of George and Thomas Kough Leyland sends a draft for an amount against which they draw in accordance with the quantity that he has sold and the price obtained. There was an occasion however when they overdrew and Leyland in a letter said 'put me under no further advance on provisions, what has been sold does not equate to near what I have already paid.'<sup>39</sup>

In the citrus fruit trade with Cahill and White in Seville, however, it appears that Leyland is trading on his own account. There are no references in correspondence to market prices or to progressive drawings against drafts. Also, Leyland sends his own vessel to collect the fruit in a single consignment, impressing on the master the need to complete the return voyage as quickly as possible so that the fruit is in the best possible condition. In contrast Leyland is clearly selling olive oil from Spain on behalf of a client. A letter advising of the

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<sup>&</sup>lt;sup>35</sup> LLB, 31, 39, Letters to Edward Butler dated 17 July, 8 Aug 1786.

<sup>&</sup>lt;sup>36</sup> LLB, 90, Letter to Richard Dunhill dated 11 Sept 1786.

<sup>&</sup>lt;sup>37</sup> LLB, 107, Letter to Richard Dunhill dated 26 Sept 1786

<sup>&</sup>lt;sup>38</sup> LLB, 108, Letter to Edward Butler dated 26 Sept 1786

<sup>&</sup>lt;sup>39</sup> LLB, 36, Letter to Geo. and Thos. Kough dated 13 July 1786.

<sup>&</sup>lt;sup>40</sup> LLB, 99, Letter to Captain Michael Dowe of the brig 'Nelly' dated 20 Sept 1786.

shipment of two pipes of olive oil to William Holland in Rochdale states that 'the owner of it who lives in Spain ordered me some time ago not to sell any of the oil under £44 10s 0d per ton ready money'. 41

In addition to fulfilling the role as agent, and merchant on his own account in the Irish trade Leyland also acts as both a shipping and insurance broker, functions for which specialists existed. There is an example of Leyland acting as a shipping and insurance broker in a letter to Frances Creagh of Limerick in which he advises that I have endeavoured to charter a vessel to your limits but have not been successful, one is loading now at 13s per ton but all object to carrying the staves of cheese freight free'. In a letter four days later Leyland advises Creagh that Captain Dowe will carry the cargo of 80-100 tons of salt in the *Nelly*, his own vessel, at 13s per ton with the staves of cheese carried at the customary freight and says that he will write to Mr Gorman in London for insurance and at the same time will draw on him at three months for the amount due on the cargo. In closing he asks Creagh to issue the necessary instructions to Gorman on receipt of the letter and to assist Captain Dowe in obtaining a back freight.

Acting as an agent in the Irish grain and provisions trade Leyland was operating with minimal commercial risk, he even exempted himself from the possibility of having to pay high duties on grains, which may not have been reimbursable, when the ports became 'closed,' by advising his suppliers not to ship when a Quarterly Assizes session was imminent and changes might be made. John Foster, a contact in Lancaster where the Assizes were held, was charged with providing him with the outcome of the meeting by the fastest possible means.<sup>45</sup>

The framework within which Leyland operated consisted of a network of suppliers and customers established by reputation and past performance and by recommendations of 'safe men.' Leyland had a special relationship with George and Thomas Kough in Ross and Pat Dease and Edward Butler in Dublin who assisted in financial matters with other customers and in the case of Butler provided intelligence on the sugar trade. Thomas Oliphant in Bury, Joshua

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<sup>&</sup>lt;sup>41</sup> LLB, 725, Letter to William Holland dated 7 Aug 1788.

<sup>&</sup>lt;sup>42</sup> Brokers in Liverpool are listed in Bailey's British Directory for 1784.

<sup>&</sup>lt;sup>43</sup> LLB, 237, Letter to France Creagh dated 6 Jan 1787.

<sup>&</sup>lt;sup>44</sup> LLB, 239, Letter to Frances Creagh dated 10 Jan 1787.

<sup>&</sup>lt;sup>45</sup> LLB 236, Letter to John Foster dated 6 Jan 1787.

Bramley and Sons in Halifax and Samuel and Thomas Taylor in Manchester assisted in his citrus fruit trade in the North West and provided goods for his outgoing trade to Africa and the West Indies. In the Manchester area Leyland also employed a salesman, a Mr Mc Viccar, who assisted in finding customers for the citrus fruit trade.

### **David Tuohy: Liverpool Merchant**

The characteristics of David Tuohy's business operation were similar to that of Thomas Leyland although he had more direct involvement with shipping. Tuohy was a part owner with six other merchants in five vessels registered in Liverpool in 1786-87, three of which were over 200 tons. One of the vessels, the schooner *Dick*, was lost in the Benin River in 1789, confirming his interest in the slave trade. 46 Tuohy also traded in coal and salt with Ireland, although not with any of the vessels in which he was an owner. There are records of trade with Dingle and Tralee in the South West of Ireland in 1779 and 1780 with reference made to two vessels, the *Edward* and the *Nicholas Connolly*, neither of which was registered in Liverpool.<sup>47</sup> Tuohy also acted as an insurance and ship broker similar to Leyland. A letter from a Thomas Trant in Cork asks him to procure a vessel between 25 and 50 tons at 20s per ton and to dispatch with a cargo of good coal. Trant further adds that 'she may have room over the coals for crates of earthen ware and if so please to procure same on freight in order to lighten the expense'. There is also a post script to the letter which says 'should you light on a small fast sailing vessel I may give her a freight to Gibraltar or take a 1/3 or 1/4 interest with the owners of her in a cargo of potatoes to that garrison.'48 Trant later writes to Tuohy offering his services as an agent to sell English manufactures in New York which he says are in great demand.<sup>49</sup>

Clearly, like Leyland, Tuohy wanted assurances that those he might deal with were trustworthy. A letter from an Owen Ferries of the Salt Works in Tralee asking for 70 to 100 English tons of rock salt, for which he says he will remit

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<sup>&</sup>lt;sup>46</sup> Liverpool Register No., 6/1786.

<sup>&</sup>lt;sup>47</sup> Liverpool Record Office, references 380 TUO1/1 and 1/8, letters to David Tuohy dated 19 May 1779 and 31 March 1780.

<sup>&</sup>lt;sup>48</sup> Liv. R.O., 380 TUO/1/44, Letter to David Tuohy dated Nov 1781.

<sup>&</sup>lt;sup>49</sup> Liv. R.O., 380 TUO/1/13, Letter to David Tuohy dated 9 May 1780.

Tuohy six months after shipping, is supported by a letter from a Jno. Blenner of Tralee who says that he will be his security for the payment. At the request of Blenner, Ferries is also recommended by Tuohy's brother, who is Blenner's 'particular friend' an example of the importance attached to family links as a means of ensuring trust.50

The records of Tuohy are not as extensive as those of Leyland and do not provide the same insight into the commodities traded. The references provided are to hops, salt and coal being shipped, although Ferries in Tralee also asks for prices of sugars. There are no references to goods imported from Ireland.

The records of the Liverpool merchants provide an insight into the range of activities undertaken at this time, which extended beyond simple buying and selling into involvement as shipping and insurance brokers. In many instances they acted as commission agents providing the contact between suppliers and customers rather than buying and selling on their own account. Great importance was attached to minimising risk. The people with whom they traded were carefully selected for trustworthiness and were invariably recommended, in some instances with relatives providing endorsements. Operating as commission agents also reduced risk compared to buying and selling on their own behalf. The emphasis on trust reflects the findings of Pearson and Richardson who maintained that traders much preferred to deal with individuals of known repute and to base their decision to trade on information about reputation from reliable sources or on their own past dealings with the individuals rather than to adopt an approach which relied on contractual devices to discourage malfeasance.<sup>51</sup>

Letter writing was the principal means of communication, Leyland wrote several letters every day on a wide range of topics. The letters reveal that he aimed to provide the highest level of service to his clients, providing drafts on which they could draw against sales and reminding his suppliers of the need to provide goods of the highest quality. At the same time he was commercially astute maintaining a close watch on the amounts drawn on his drafts against sales and monitoring the

<sup>50</sup> Liv. R.O., 380 TUO1/20, Letter to David Tuohy dated 21 July 1781.

<sup>&</sup>lt;sup>51</sup> Pearson R. and Richardson, D., 'Business Networking in the Industrial Revolution', Economic History Review, liv, 4, 2001, 657.

situation on the return of certificates he needed to release him from bonds. He also carefully monitored the fiscal situation so that he was only importing and exporting when conditions were appropriate. A detail not observed by Langton earlier when he left the purchase of corn to the master of the vessels and it arrived when the level of duty to be paid was high.

Leyland traded across a wide range of commodities in trade with Ireland and Southern Europe and would have required an extensive knowledge of market conditions, both locally and overseas, and an understanding of the fiscal framework of bonds and drawbacks that applied to the specific trades.

#### 1791-1808

### John Brockbank: Lancaster Shipbuilder

John Brockbank, a Lancaster shipbuilder in the late eighteenth and early nineteenth centuries, was involved in a wide range of activities outside of his main occupation. He was the son of George Brockbank, a sailmaker and ships carpenter, seen previously as an associate of Henry Tindall. Brockbank Senior established a shipyard in the Green Ayre district of the town on the banks of the River Lune in the mid eighteenth century. John was born in 1749 and was only fifteen years of age when his father died prematurely in 1764. It is 1789 before we see records of John's involvement with the business. He was 40 years of age in 1789 and had probably taken control of the business at an earlier age. An estimated number of around 134 vessels were built in the period from when his father started building to the date of the last vessel to be built in 1817. John had a younger brother George who was a sailmaker, and like his father died prematurely in 1789 at the age of 38. The sailmaking business was continued by his wife, Mary, while George's son, another John, was apprenticed to his uncle in 1796 and was made a partner in 1806. John senior did not have any children and on his death in 1822 the remains of the business passed to his nephew.<sup>52</sup>

The surviving records of John Brockbank's activities are two daybooks covering the period 1789-1822 and a book of contracts and specifications of

<sup>&</sup>lt;sup>52</sup> Kennerley, E., *The Brockbanks of Lancaster – The Story of an Eighteenth Century Shipbuilding Firm* (Lancaster, 1981), 2,3 and Dalziel, N., 'Trade and Transition, 1690-1815', in White, A., (ed.), *A History of Lancaster* (Edinburgh, 2001), 123-4.

vessels built between 1791 and 1820.<sup>53</sup> The records show that Brockbank not only designed and built vessels from canal boats to ships of over 400 tons but also travelled extensively in seeking supplies of timber and in finding customers for his vessels. Many were built to order but others were speculatively built to occupy the spare capacity for which customers had to be found. The daybooks incorporate a diary which shows details of his travel and records the principal events that occurred. Occasional arrival and departures of vessels are noted in the diary as are extremes of weather.

The details of travel show that Brockbank travelled extensively locally and in North Wales in search of timber supplies. There are records of shipments being made from Chester, Conway, Chepstow, Bridgewater and Rhydland (Rhuddlan) in Flintshire, North Wales. References are made to oak timber lying at Rhydland and at a location near Denbigh 'at 22<sup>d</sup> per foot alongside the flat' and a Mr Meadow offering 1600 oaks and 700 ash within one mile of Conway for £720, payable in two instalments.<sup>54</sup> Records of timber bought in Chester include over 14,000 ft being bought from Cartwright and Turners and George Walford in Chester with corresponding shipments to Lancaster in the flats William and Nancy and Mary over the period 27 December 1788 to 24 April 1789.55 Brockbank also bought timber from overseas both directly and through merchants in Liverpool and Selby who were buying from North America and the Baltic. A mixture of timbers were used in the building of a vessel. There is a reference to Messrs Frime, Wardell, Baldwin, Leigh, Thornton and Backhouse & Co. in Liverpool supplying an assortment of timber. including pitch pine logs, elm planks, oak planks, deck planks and poles, all of which were shipped on Brockbank's vessel, the Providence. 56 There is also a reference to agents for deals in Kirkham. Timber was often being shipped with flax from the Baltic as ballast.<sup>57</sup>

Timber was obtained direct from the Baltic on vessels trading with Lancaster. A note in the daybook for 1792 reminds him of the need to write to

<sup>&</sup>lt;sup>53</sup> Lancaster Public Library Reference Section, John Brockbank Daybook, originals, MS 3720, 1789-1793, MS 241, 1794-1805, transcriptions, PT8891, 1789-93, PT 8373, 1794-1805, PT 8892 1806-13 and 1814 –22. Contracts and Specifications, 1791-1820, transcription, PT 8372.

<sup>&</sup>lt;sup>54</sup> MS 3720, April and June 1789.

<sup>&</sup>lt;sup>55</sup> MS 3720, April 1789. <sup>56</sup> MS 241 April 1804.

<sup>&</sup>lt;sup>57</sup> Singleton, F.J., 91.

Riga for masts to be shipped 'per the *Brittania*'. The *Brittania* was a 172 ton brigantine built in Whitby and registered in Lancaster, which had members of the Langton and Birley families of Kirkham amongst its owners, no doubt trading with Riga to obtain supplies of flax. There is also reference to deals being shipped from Longsound (Langesund) in Norway 'per the *Sally*'.

Lancaster merchants in the West Indies trade were regular customers for vessels built by Brockbank and there are also records of merchants in Liverpool, London and Greenock buying vessels for the overseas trade. Brockbank also supplied canal boats to the Lancaster Canal Company, of which he was a committee member, and to canal users. Gregson & Co., coal carriers, with whom Brockbank was also involved, were customers. The investors in Gregson & Co. were listed in the Lancaster Canal Company Committee minutes in 1799 in an application to acquire a piece of land owned by the company in Preston, for the purpose of building a lime kiln. They were, Samuel Gregson, who was secretary to the canal company committee, Edward Suart the younger, Alex Worswick and John Brockbank. Suart and Worswick were both Lancaster merchants and Suart was another member of the canal committee. The coal company was later noted as supplying coal to the steam engine that lifted the wagons up from the low level crossing of the Ribble to Walton summit at the start of the southern section.

Brockbank supplied both flats and canal boats to Gregson & Co. The book of contracts and specifications contains specifications for a canal boat, of which four were to be built, and a 'Ribble Flat for the Douglas and Ribble trade.' In addition Brockbank also supplied packet boats and general cargo boats for the canal company and supplied timber for the canal construction, including that associated with the building of the aqueduct which crossed the Lune at Lancaster. There is a reference in the day books to the import of Memel balks and Danzig deals which were used as the piles for Lune aqueduct. Brockbank also built 'barrows' to carry coal on the tramway that connected the northern and southern

<sup>&</sup>lt;sup>58</sup> MS 3720, April 1789

<sup>&</sup>lt;sup>59</sup> MS 3720, October 1792.

<sup>&</sup>lt;sup>60</sup> Kennerley, E., 11.

<sup>61</sup> T.N.A., RAIL 844/231, 41, The Lancaster Canal Company Minute Book, 1798-1813,.

<sup>62</sup> Philpotts, R., Building the Lancaster Canal (London, 1989), 43-4.

<sup>&</sup>lt;sup>63</sup> PT 8372, Contracts 62 and 63.

<sup>&</sup>lt;sup>64</sup> MS 3720, November 1792.

branches of the canal at Preston which was opened in 1804. There are estimates of 12s 6d and 12s 10d as the cost for each 'barrow'. 65

In addition to his activities with the canal committee and the coal company Brockbank was an investor in shipping and held ownership stakes in at least ten vessels registered in Lancaster, mostly, but not all, built by himself. The investments were mainly in flats, sloops schooners and brigs for the coasting trade and included three flats for which he was the sole owner. These were the *Dove*, the *Lark* and the *Lune*, which are recorded in his daybooks as bringing timber from Chester, Conway, Rhydland and Chepstow. The shipping lists also show the vessels in general trade providing a further example of the versatility of use of the vessels.

Flats were the type of vessel generally used in the transportation of the timber from Liverpool, Chester, North Wales and the ports in the South West. In the period before Brockbank built his own vessels the flats William and Nancy and Mary, as referenced above, carried timber from Chester in 1788-9. The Liverpool shipping registers show that the William and Nancy was a 52 ton vessel built at Liverpool and jointly owned by John Hinde a merchant and William Gamon a mariner, both from Liverpool.<sup>66</sup> The Mary could not be positively identified because three flats of that name were registered at Liverpool in the period 1786-7, all within the range 53 to 68 tons.<sup>67</sup> The vessels carried between 1000 and 1200 feet of timber on each voyage between Chester and Lancaster. The flats built later by Brockbank were larger, in the size range 81-90 tons, which were in the top 3 per cent in terms of tonnage of all the flats built in the North West ports in the eighteenth century. The most popular size ranges were 51-60 tons (30%) and 71-80 tons (27.1%).<sup>68</sup> A calculation by Brockbank suggests that this was a deliberate policy to enhance their timber carrying capacity. The calculation estimates that a flat, the *Ellens* of 67 tons, could carry 1600ft of round oak timber whereas one of 89 tons could carry 2136 ft.<sup>69</sup>

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<sup>65</sup> MS 3720, February 1793.

<sup>66</sup> Liverpool Registration 83/1786

<sup>&</sup>lt;sup>67</sup> Liverpool Registrations, 26/1786, 136/1786 and 111/1787.

<sup>&</sup>lt;sup>68</sup> Pope, D.J., 'The Flat', Mariner's Mirror, 60, 1, 84-91.

<sup>&</sup>lt;sup>69</sup> MS 3720, February 1793.

The *Dove*, built in 1797, was the first record of a flat built by Brockbank for his own use. The vessel was specified as 'mine own' in the book of contracts and specifications and was subsequently recorded as entering Lancaster with oak timber from Conway. The *Lark* and the *Lune*, built in 1793 and 1801 respectively, although not specified as being for his use in his book of contracts and specifications, were both registered in his name as the sole owner in the Lancaster Shipping register. Lancaster Shipping register.

Some differences are evident between the registered tonnage and the tonnage given in Brockbank's specifications, which was attributable to the different methods of calculation used. A new system for determination of registered tonnage was introduced with the Registration Act in 1786 which was independent of the depth of the vessels but the calculation shown in Brockbank's daybooks included the depth of the hold and was said to calculate the tons dead weight. As examples of the differences, the *Lark* was registered as 95 tons compared to 87 tons specified by Brockbank and for the *Lune* the equivalent figures were 97 tons and 85 tons. There was also some ambiguity over vessel types as the *Lune* was registered as a sloop and not as a flat as specified by Brockbank.

In addition to their use in carrying timber the vessels were also used in more general trade. The *Lark*, as an example, was identified in the shipping lists as being a constant trader between Lancaster and Liverpool, generally carrying sundries.<sup>73</sup>

Brockbank also had an interest in London trade and was a member of a Lancaster London traders committee making visits to London, often accompanied by two merchants, Samuel Gregson and George Suart.<sup>74</sup> The brigantine *Flor*a was a 173 ton vessel specifically built for the London trade by Brockbank which had three subscribing and 27 non subscribing owners. The subscribing owners were a Lancaster merchant, John Stable, an anchorsmith, Joseph Sharp who was a

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<sup>&</sup>lt;sup>70</sup> PT 8372, 55, Shipping Lists published in the *Lancaster Gazette* from June to November 1801, Lancaster Register No., 35/1786.

<sup>&</sup>lt;sup>71</sup> Lancaster Register Nos., Lark 7/1794 and Lune 3/1801.

<sup>&</sup>lt;sup>72</sup> Registration Act, 26 Geo. 3, c.60, s.xiv and MS 3720, July 1790.

<sup>&</sup>lt;sup>73</sup> Shipping Lists published in the *Lancaster Gazette* from June to November 1801.

<sup>&</sup>lt;sup>74</sup> MS 3720, March 1789

business associate of Brockbank, and the master Thomas Rogerson. Of the 27 non subscribing owners 17 were Lancaster merchants, two were merchants from Liverpool and one a merchant from London. Brockbank was a non subscribing owner in the vessel and paid a sixteenth share of the cost when the vessel was initially built. Brockbank was not an investor in the larger snows and ships which were built in his yard for the West Indies trade, although he was named as a shareholder in one of the brigantines, the 110 ton *Lancaster*, which traded with the West Indies and the Southern States of America. America.

Brockbank's other interests included involvement with an iron company, the Force Bank Company, a company which operated a forge, in which he was an investor with Joseph Sharp the anchorsmith. Sharp invested in shipping with Brockbank and was a supplier of iron goods to the vessels he built. Brockbank also owned houses in the town and farming land at Aldcliffe on the Lune, near to the town, for which he records the fortunes of the haymaking each year. Another case of farming interests similar to those held by Thomas Langton in Kirkham.

Finally in addition to all his other interests Brockbank was a member of the Lancaster Port Commission, a position that he shared with many of the influential merchants of the town and no doubt a body which provided many of the contacts he needed for his shipbuilding and other business interests.

The Brockbank papers again provide another example of a manufacturer who was also a merchant and show how networks were used to further business interests. The networks often resulted in the formation of joint investment ventures in addition to providing commercial intelligence. Brockbank is clearly seen to be closely involved with the mercantile community in Lancaster. Membership of the Port Commission brought him into contact with the overseas merchants in the town who bought vessels from him. His involvement with the canal committee brought him sales of construction timber and canal boats and his business relationship with the secretary to the committee, in a coal shipping company, realised further sales of both canal boats and coastal vessels.

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<sup>&</sup>lt;sup>75</sup> Lancaster Register No., 10/1792.

<sup>&</sup>lt;sup>76</sup> PT 8372, 26.

<sup>&</sup>lt;sup>77</sup> Lancaster Public Library, Local Studies Section, Collection PT 8822, an account of 6d a month received out of the wages of sailors on board all such ships etc. as have cleared inwards 1747-1851.

In respect of his financial transactions, many of those recorded in his daybooks are cash payments, particularly in his direct purchases of British timber, for which he was often offered deferred payments of 3 to 6 months. Bills and cash appear in payment for vessels with a pre-determined payment structure contained within the contract of vessels built to order. Varying terms existed which reflected to some extent the date when the vessel was to be completed and also, no doubt, other factors such as market conditions. The larger ships and snows took about one year to build. Examples of vessels commissioned to be built include the ship Aurora of 255 tons built for a group of Lancaster merchants including Thomas Burrow and George Danson for which the terms were particularly generous. The contract dated 20 March 1804 states the vessel will be built before the 10 April 1805 for the sum of £3150 and payments will be made in Bills at two months date, one for a quarter of the cost with the order, one for a further quarter 6 months after the launch and the two for the remaining quarters at 9 and 15 months after the launch.<sup>78</sup> The terms were much more onerous in the specification, dated 12 December 1798, for the ship *Richard*, built for Edward Salisbury & Co, another Lancaster firm of merchants, at a cost of £3158. This specification required stage payments of a third when the keel was laid, a third when the bends were on and the final third when the vessel was launched, except that if the vessel was not launched 'on or before the following April' the last payment would not become due before the first day of October, a form of penalty clause on the builder. No mention was made of Bills suggesting that the payments were to be of cash with no credit allowed.<sup>79</sup> The build time of the vessel was very short and a condition of the accelerated build may have been the more demanding payment structure which could have been offered by the buyer as an inducement.

Examples of the sale of completed and part completed vessels include a vessel in build, the ship *Holland*, which was sold to Taylor, Hughan and Penny in London through their agent, John Cundale, under a contract dated 3 Aug 1803 with a completion date of on or before the 3 September of the same year. For this vessel the terms were for a payment to be made on completion and one 6 months

<sup>&</sup>lt;sup>78</sup> PT 8372, 17.

<sup>&</sup>lt;sup>79</sup> PT 8372, 74.

after. <sup>80</sup> A completed ship, the *Creole*, was sold to the same company in 1808, by then known as Taylor Hughan & Co., again through their agent John Cundale at a price of 12s 10d per ton, the tonnage to be determined by a London measure. The contract dated 2 June 1808 stipulated that, subject to a satisfactory inspection, the payment, based on the tonnage determined by the survey, was to be made in the form of three bills payable at one, two and three months. <sup>81</sup> Another vessel in build, the ship *Lord Cranstoun*, was sold to Messrs Shipley, Williams & Co of Liverpool under a contract dated 14 July 1807 and was promised for completion the first Spring tide in the following September or October. The price was to be £14 10s per ton, with the tonnage to be determined by measure at Lancaster. The payments to be £2200 on signing the contract by their draft or acceptance payable in London four months after the date, £2200 on the same terms to be presented on the day of launching with another for the remainder at the same time payable in 8 months. <sup>82</sup>

The smaller Ribble flats built for Messrs Gregson & Co, as per contract dated 16 October 1797, were sold on cash terms with no credit given. The vessels were to cost £327 each with a third payment required when the vessels were framed and the remainder when launched, completion to be one in February, one in March and one or two in April of the following year 'as may be determined.' 83.

The examples show that a wide range of credit structures applied to the sales and it would appear, as in many other business ventures, that these were the subject of negotiation depending on the market situation and the other conditions of the contract.

#### Active

The voyages of the *Active* have been shown and discussed in Chapter 5. The business records, which are the subject of this Chapter, are sparse and only provide limited information on commercial matters. We are, however, able to determine the level of investment by each of the owners from profit statements which are included in the accounts for the years 1796-1803 inclusive.

<sup>81</sup> PT 8372, 127.

<sup>&</sup>lt;sup>80</sup> PT 8372, 106.

<sup>82</sup> PT 8372, 122.

<sup>&</sup>lt;sup>83</sup> PT 8372, 63.

The vessel was a 50 ton sloop built in Freckleton and registered in Preston in 1790 with John Goodshaw and Thomas Mayor, described as merchants, as subscribing owners together with George Richardson, the master of the vessel and John Mayor as a non subscribing owner.<sup>84</sup>

The profit statements only show the subscribing owners as receivers of the profit. Goodshaw and Thomas Mayor receive three quarters and George Richardson receives one quarter; John Mayor does not receive any payment. Thomas Mayor was related to John Goodshaw through the marriage of his sister, Nancy, to Goodshaw in 1794. Thomas Mayor was the nephew of John Mayor. 85 An example of the familial ties that often existed in business partnerships.

The levels of profit can be compared year to year and with the profits reported for the previous enterprises examined. The annual profits and the number of voyages undertaken in the years 1796-1802 are shown in Table 6.4 with a calculated value for the profits for each voyage.

Year	Profit	No. of Voyages	Profit per Voyage
1796	£133 18s.9d	20	£6 13s 11d
1797	£101 4s 7d	20	£5 1s 3d
1798	£130 7s 3d	32	£4 1s 6d
1799	£84 7s 9d	27	£3 2s 6d
1800	£191 7s 0d	45	£4 5s 0d
1801	£85 6s 10d	20	£4 5s 4d
1802	£131 18s 3d	21	£6.5c.8d

Table 6.4 - Annual profits of the Active

There was a significant variation in the number of voyages completed in each year with a peak of 45 occurring in 1800 which realised the highest profit but profit was not always related to the number of voyages undertaken. One of the lowest annual profits was in 1801 from 20 voyages while from the same number of voyages in 1796 the profit was over 50 per cent greater. The profit was therefore more related to the market situation at the time or perhaps the pattern of trade conducted by the vessel. Unfortunately the voyage details are not very clear for 1801 but the vessel appeared to be involved in longer distance trade to Whitehaven, Annan and Ulverston than in 1796 when the vessel had more local

<sup>&</sup>lt;sup>84</sup> Preston Register No., 2/1790.

<sup>85</sup> For Mayor family tree see Shakeshaft, P., *The History of Freckleton* (Lancaster, 2003), 177.

trade to and from Liverpool. The profit statements, again, only appear to be operating profits. No details of maintenance costs are included which would have impacted on the overall profit situation.

Comparisons with the profitability of the coal operations in the first period show the average annual profit of £122.13s 0d of the *Active* to be much greater than the profits made in the earlier period. The average annual profit of James Winstanley's operation over the two year period 1752-4 was only £71.19s 11d, Henry Tindall's coal business had annual profits of £25. 6s 5d and £59. 8s 9d for the years 1758-9 and 1760 and the *Success* an annual profit of £14. 2s 3d over the two year period 1766-8. It is difficult, however, to be sure that the comparisons are made on an equitable basis because of the lack of full information in the accounts.

In summary the papers have given a good appreciation of the business practices in use in a number of manufacturing and trading concerns. The major findings include evidence that the manufacturers were extending their activities into the merchants' domain, purchasing direct and finding customers for the finished goods. One of the principal motivations was a reluctance to pay commission to middlemen. In some instances agents controlled the market and payments were difficult to avoid, the sailcloth market based in London was such an example.

While manufacturers were moving into the merchants' domain the merchants themselves were extending the range of services they offered. In addition to buying and re-selling they were acting as agents, trading on commission, and also providing shipping, finance and insurance when this was required. There was no evidence of the use of the specialist brokers and agents in the papers examined although the services were available in Liverpool at the time.

The merchants also handled a wide range of commodities in both the overseas and coastal trade. Leyland had the broadest interests extending from the full range of commodities in the Irish trade to trade with Southern Europe and an interest in the West Indies and African trade. Tindall traded in imports from the Baltic and the West Indies and their resale within the North West and to Ireland in addition to having an interest in a coal company and Langton traded outside of the flax industry in other commodities from the Baltic and in tobacco.

There are many examples of networking. John Brockbank was a great networker, establishing contacts through the many committees on which he served which invariably gave rise to sales and no doubt valuable intelligence on market conditions and prospective clients. Brockbank also travelled extensively to find contacts for supplies and sales. Langton used his sons strategically placed in key commercial centres related to his trade to gather intelligence and establish relationships and Henry Tindall and Thomas Leyland had special relationships with contacts in Ireland to assist them in their business dealings.

In terms of business structure the Winstanley Company was a partnership led by James Winstanley in which the partners represented a vertical business structure with interests extending from mining to coal merchants, but not to coal users. Brockbank ran his own core business while being a partner in a number of other business ventures. It was a feature of business partnerships that those with interests in one sphere combined to form new associations. The underlying reason for this was undoubtedly trust, prior knowledge of business associates being highly desirable. Another example was Henry Tindall who formed a partnership with other Lancaster tradesmen and merchants to establish a shipping company which specialised in the coal trade but also served other interests.

Letter writing was an important means of communication. We have ample evidence of this in the letter books of Leyland and Tuohy and Brockbank makes reference to letters in his daybooks.

Payment was by both cash and bills often with deferred payment. The shipbuilding business often required stage payments to maintain cash flow during construction although there was also deferment of the final payment in some instances. Unfortunately Langton does not inform us on his manufacturing interests and we are therefore unable to compare the credit structure used with that described by Hudson for the West Riding textile industry.

All the concerns owned vessels but apart from those owned by the Winstanley Company, and the *Success*, none were a principal business interest. The manufacturers and merchants both owned and chartered vessels, the vessels they owned being used in their own trade and to carry the goods of others.

The requirement to establish trust was a major theme to emerge from the papers. The question, 'do you know of a safe man' often being asked. The

merchants reliance on key contacts in remote locations to provide intelligence and assist in business matters and the placing of relatives in important locations are all evidence of this as were alliances of existing business associates in new ventures. The underlying reason for this was undoubtedly trust, prior knowledge of business associates being highly desirable.

There were no perceived changes in business culture over the period; many commercial practices remained the same and differences appeared to be more related to the nature of the trade rather than being time related.

## **CHAPTER 7 - CONCLUSIONS**

This thesis has filled the gap left by previous maritime historians of the North West who have not followed the concept of regional studies and have concentrated on ports or specific trades. The study has examined the North West coasting trade and the trade with Ireland and the Isle of Man and has provided evidence that argues for the existence of an integrated maritime economy in the Irish Sea region in the period 1750-1808.

Although the period is one of great interest, because of the political and economic uncertainty which existed with the country almost continually at war, it is also a period when available records are particularly sparse and one of the principal challenges was to identify sources from which such a study could be made. It was a period when government records were focussed on overseas trade because of its importance to the economy.

Sea trade was an essential means of transportation within the North West region, particularly in the north where the hilly hinterland presented difficulties for overland transportation. Sea transportation linked the region north to south and met the needs of the trade with Ireland. A complex web of trade existed within the Irish Sea region, a mix of traditional commodities and new commodities fuelled by overseas trade and advances in industrialisation. The core trade in corn, salt and coal was supplemented by an increasing range of imported goods transhipped through Liverpool. Consumer needs both grew and expanded from the basic commodities of fuel, food and building materials to include imported sugar, fruit, wines and exotic textiles.

The vessels involved in the trade along the North West coast were mainly flats and sloops, shallow draft vessels which could be readily beached for loading and unloading where docking facilities did not exist. Brigantines were used in the longer voyage coasting trade and in the trade to Ireland. The analysis of the registrations in the individual ports showed that the types registered were complementary to the principal trading interests of the ports. Whitehaven, with principally Irish trading interests, and Lancaster, a port specialising in overseas trade, had the highest ratios of brigantines to flats and sloops and in Carlisle and

Preston, which were principally coastal ports, the ratio was reversed. In Liverpool the number of brigantines equalled the total number of flats and sloops; the port having significant volumes of both coasting and Irish trade. Brigantines were registered in significant numbers in Ulverston but few records were found for the vessels trading out of the port; those that were identified showed trade with Ireland, Scotland and the Severn, the latter two indicating potential links to the iron industry. The investment in the Ulverston brigantines by the Kirkham flax merchants suggested an interest in overseas trade with the Baltic, although no records were found of this trade from Ulverston and suggested that the vessels traded from other ports, despite this being contrary to the registration requirements.

The trade was conducted, in the main, by vessels owned within the region and unsurprisingly those belonging to the ports with the largest numbers registered were seen most often. The pattern of trade conducted by the vessels was mainly a mixture of liner and tramp style operation, the vessels in the liner trade often being referred to as 'constant traders' in the trade directories, although other repetitive patterns also existed. A proportion of the West Cumberland colliers were seen to have been undertaking triangular and quadrilateral trading patterns with the outgoing trade with coal to Dublin being followed by a return voyage from ports associated with the grain and foodstuffs trade. The pattern suggested the existence of a further supply route for grain and foodstuffs to West Cumberland in addition to those from the Isle of Man and the ports of Kirkcudbright and Dumfries on the Solway.

The study of ownership showed that the patterns within the region were complex. The large ownership groups, with which the region is generally associated, actually only existed for the brigantines registered in the ports of West Cumberland and Ulverston. The flats and sloops registered in the same ports, with very few exceptions, had small ownership groups typical of the vessels owned in the ports elsewhere in the region and in other British ports. It is difficult to be certain why the larger groups existed. The most compelling reason is the lack of alternative investment opportunities. In West Cumberland and Furness the mineral extraction industries were largely mature and not requiring new investment. Shipping was therefore one of the few outlets available for investment.

From Lancaster southwards the situation was different. There was a pattern of rapid industrial growth, much of it stimulated by colonial imports and exports, which needed new investment. The industrialists were therefore inward looking rather than outward looking and concentrated on their business interests leaving the ownership and organisation of the shipping to the merchants; the merchants being entrepreneurs and having the necessary commercial acumen and market knowledge were attracted into shipping by the promise of good rewards.

Mariners generally controlled the vessels in the north of the region as masters and subscribing owners. Mariners also appeared to act as syndicate leaders outside of being masters. This was indicative of the strength of the coastal maritime communities who would take the initiative in ownership in the absence of any other controlling interests. Mariners as masters and subscribing owners were often involved in trade where the commercial aspects were relatively simple, as in single commodity trade. This was seen to be the case for the vessels in the West Cumberland coal trade. Further south trade was more complex as new commodities entered the trade and the vessels were often involved in multiple trading activities. The shipping organisation therefore became more sophisticated in parallel with the increasing complexity of the trade. This mode of operation required greater commercial skills to manage, a role which the merchants were better equipped to perform.

Investors related to land based industries consisted principally of those associated with agriculture, and in Furness, those associated with the mineral extraction industries. There was a need to get their products to market to ensure survival and little need for new investment in their industries. Other investors included those associated with shipbuilding and its associated trades. There was also some investment from the coal industry around Wigan but none from the industry in West Cumberland. The brick makers of North Flintshire, who used coastal transportation extensively, were also not seen as investors. The brick making business was still growing at this stage and would have required continuing investment and, in any case, a large pool of vessels was available in the Dee and Mersey regions to carry the trade.

The vessels owned by those associated with the local industries also generated income by carrying other goods which contributed to them being a viable business in their own right. A similar practice was followed by the

merchants for the vessels in their ownership and suggests that the merchants and industrial investors were effectively operating shipping companies under the umbrella of their primary business interests.

Merchants rarely, however, combined interests in the Irish and coasting trade with interests in the longer voyage overseas trade; Thomas Leyland, the Liverpool merchant, and Henry Tindall of Lancaster were two of those that did. This is surprising since the two activities could be considered to have been complementary, with the coasting and Irish trade acting as an essential distribution service for the overseas trade. Scrutiny of the Lancaster vessel ownership records has shown that this was not generally the case.

Other categories who invested in significant numbers, mainly in the most northerly ports, were gentlemen and women. Gentlemen invested in vessels in West Cumberland, Furness and Preston. They did not appear in Carlisle or in the merchant dominated ports of Lancaster and Liverpool. It is not clear if the gentlemen were representing a business interest or were investing profits from owning land. For instance, in Furness a number were identified as being connected with the iron industry and in Preston there were links to the coal industry through the ownership land with mineral rights. No associations could be found for those investing in West Cumberland, however. The first assumption might be that they were investing profits made from their estates, although not all gentlemen were landowners. In Liverpool, for instance, retired businessmen were also accorded the title of gentleman. The motivation of the gentlemen in becoming investors in shipping would therefore have to be established from research of their backgrounds in local records.

Women as investors were most evident in West Cumberland vessels, and in particular those belonging to Whitehaven. Women also appeared as investors in Furness, but in much lesser numbers, and were not seen as investors elsewhere. The women investing were mainly widows in contrast with fifty years later when other research has shown that they were predominantly spinsters. Again, further research of local records would be needed to establish why this difference occurred.

The most prominent characteristic to emerge from the business papers examined was the endorsement given to the importance of trust in business relationships. The business records contain many references to merchants

establishing personal contacts in remote locations to act on their behalf in their relationships with others and in expanding their business interests. Thomas Leyland and Henry Tindall both had business associates in Ireland who performed this role.

The use of familial relationships to provide trust is shown in a number of instances. David Tuohy had a friend of his brother who acted as a guarantor for a prospective new customer in Ireland and Thomas Langton, the Kirkham sailcloth manufacturer and trader, placed his sons in important centres of trade to negotiate deals and to ensure that the intelligence he gained on the commercial situation was sound. No evidence was found of religious affiliations although this had previously been noted between iron industry interests in Furness and the Severn.

Other forms of networking were seen. Participation in committees played an important role in the success of John Brockbank in Lancaster. Brockbank gained work through his membership of the Lancaster canal committee and as a member of the Lancaster Port Commission he associated with the principal merchants in the town from whom he received orders for vessels for the West Indies trade. Brockbank also invested in vessels for the London trade with the Lancaster merchants. Lancaster merchants and tradesmen were also seen investing together in Henry Tindall's coal venture. Brockbank was also a great traveller in his quest for suppliers and customers and clearly believed in personal contact as a means of securing business, again, no doubt, there was an element of assuring trust in doing this.

The complexity of the coasting and Irish trade is well illustrated by the activities of the Liverpool merchants and the scope of services they offered. Thomas Leyland, who only had limited ownership interests in vessels, mainly for the European trade, operated as a shipping broker, chartering vessels and making provision for goods to be carried as part cargos on vessels on behalf of his clients. He also acted as an insurance broker and provided finance for his clients in the Irish trade, showing that, in his case at least, the transition to the use of specialists for these activities had not occurred. Leyland's activities in finance may have been a precursor to his eventual entry into banking in Liverpool.

The methods of payment in use included both cash and bills of credit and no change in practice was discernable. Cash transactions appear in the business papers of John Brockbank in the final period and also in the early papers of the

coal traders operating on the Ribble. The records of the Liverpool merchants show more references to bills of credit and it appears that this was generally how they did business, often through intermediaries in London. Henry Tindall, the Lancaster merchant, dealt in both cash and bills with references in his papers to payments being made by cash on deferred terms. Brockbank mainly operated in cash, being given credit through deferred payment in his timber purchases and giving credit to his customers on sales, although this generally only applied to the final payment and was not given in all cases. The credit terms depended on the customer, the type of vessel and the delivery schedule.

In summary, the study has shown the existence of a maritime economy which connected the constituent parts of the region and has established that a complex regional trade existed alongside increasing overseas trade. The study has also advanced the knowledge on ownership patterns and why differences existed, establishing ownership profiles for vessel types and making connections between the owners and the land-based economies. The large ownership groups were found to be specific to the brigantines owned in West Cumberland and Ulverston and were not a general feature of all types of vessel owned in the north of the region. Mariners were leaders of investment groups in the north of the region with investors from within the land-based economies. In the south of the region, where trade was more complex, resulting from the interplay between regional and international trade, a more sophisticated trading pattern was in operation and merchants were the leading owners. Here, those associated with the land-based economies were more inward looking, concentrating on the development of their businesses and leaving the shipping to the merchants.

The need to research coastal trade in this period has often been identified but has nevertheless been neglected. The subject may have been thought to be too mundane making researchers reluctant to examine an area of maritime trade for which resources are so scarce. This thesis has shown, despite the limited information available, that the coasting trade was far from being mundane. It had developed into complex business in the North West, particularly in the rapidly industrialising south of the region. The management of shipping needed to be sophisticated as vessels operated a flexible trading pattern with voyages throughout the region carrying a wide range of commodities. In the north of the

region, however, where the more traditional industries still predominated, there is evidence that older and simpler patterns of trade still prevailed.

# APPENDIX 1 - CHARACTERISTICS OF VESSELS IN EACH PORT

Table 1

Vessels registered in Carlisle 1786-95									
			Tonnage			. of (	owners		
Туре	Number	Max	Min	Average	Max	Min	Average		
Brigantines	2	145	113	129	27	2	14.5		
Sloops	21	95	20	42	13	1	4.6		
Wherries	2	22	12.5	17.2	1	1	1		

Table 2

Vessel registration numbers 150-189 Whitehaven 1786									
		Tonnage			No. of owners				
Туре	Number	Max	Min	Average	Max	Min	Average		
Brigantines	33	157	38	110	22	1	14.8		
Ships	1	173	173	173	10	10	10		
Sloops	3	49	17	36.7	10	1	4.3		
Snows	1	137	137	137	19	19	19		
Unspec.	2	143	96	120	22	18	20		

Table 3

Vessels registered as belonging to Ulverston 1786-95									
		Tonnage No. of own			owners				
Туре	Number	Max	Min	Average	Max	Min	Average		
Brigantines	16	185	62	102	22	1_	10.9		
Doggers	6	82	54	71.3	15	6	8.6		
Flats	13	74	21	44.8	8	1	3.6		
Schooners	1	93	93	93	8	8	8		
Sloops	17	78	21	45	23	1	7.6		
Smacks	1	14	14	14	1	1	1		
Wherries	1	6	6_	6	2	2	2		

Table 4

Vessels registered in Lancaster as belonging to Milnthorpe 1786-95										
		Tonnage				No. of	owners			
Туре	Number	Max	Min	Average	Max	Min	Average			
Brigantine	1	61	61	61	11	11	11			
Dogger	1	95	95	95	5	5	5			
Flats	3	77	32	57	15	2	7			
Sloop	1	85	85	85	9	9	9			

Table 5

Vessels registered as belonging to Lancaster 1786-87									
			Tonn	age	No. of owners				
Туре	Number	Max	Min	Average	Max	Min	Average		
Brigantines	26	172	74	123.8	16	1	6.9		
Doggers	2	79	65	72	6	6	6		
Flats	5	69	43	56.8	12	1	4.2		
Schooners	1	62	62	62	10	10	10		
Ships	16	338	145	199.8	10	1	3.25		
Sloops	10	70	9	47.8	8	1	3.4		
Snows	3	149	83	121.3	5	1	3.3		

Table 6

Vessels registered as belonging to Poulton 1786-95									
		Tonnage			N	o. of ow	ners		
Туре	Number	Max	Min	Average	Max	Min	Average		
Brigantines	2	120	128	124	16	12	14		
Sloops	2	50	8	29	2	2	2		

Table 7

Vessels registered as belonging to Preston 1786-95									
		Tonnage			No	of o	owners		
Туре	Number	Max	Min	Average	Max	Min	Average		
Brigantine	1	91	91	91	3	3	3		
Flats	9	58	44	53	3	1	2.2		
Sloops	38	78	15	52	7	1	2.3		

Table 8

Types and tonnages of vessels registered in Liverpool 1786-93								
Type	No_	Total Tons	Average Tons	Largest	Smallest			
Barques	27	4128	153	310	103			
Boats	8	83	10	18	6			
Brigantines	213	26356	124	280	48			
Cutters	13	636	49	93	11			
Doggers	3	258	86	92	80			
Flatts	101	6360	64	101	28			
Galliots	13	1272	98	397	50			
Ketches	1	147	147	147	147_			
Luggers	1	71	71	71	71			
Schooners	61	2793	46	123	8			
Ships	492	116658	237	781	83			
Sloops	101	4806	48	101	8			
Smacks	13	455	35	72	10			
Snows	21	2966	141	201	76			
Wherries	1	13	13	13	13			

Source: Pope D.J., Thesis, I, Table 53

Table 9

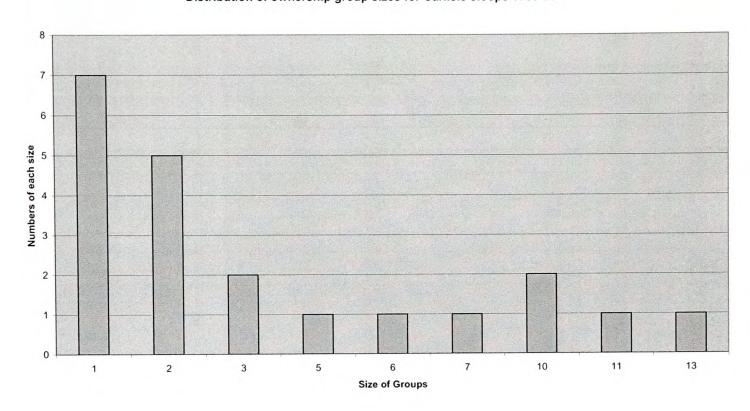
Vessels registered in Chester 1786-7										
		Tonnage			No	o. of owr	ners			
Туре	Number	Max	Min	Average	Max	Min	Average			
Brigantines	2	97	66	81	12	1	7			
Ship	1	132	132	132	20	20	20			
Sloops	7	51	19	41	3	1	2.1			

# APPENDIX 2 - CHARTS OF OWNERSHIP CHARACTERISTICS

## Carlisle Vessels

Figure 1

Distribution of ownership group sizes for Carlisle sloops 1786-95



 $Figure\ 2$  Ownership group size in relation to tonnage for Carlisle Sloops 1786-95

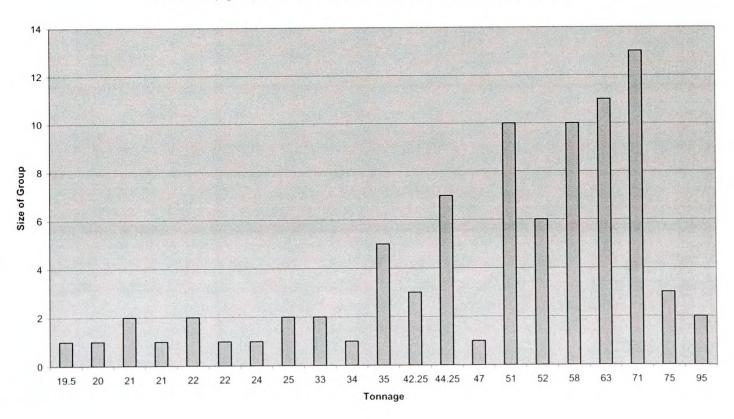


Figure 3

#### Occupations of owners of Carlisle sloops 1786-95

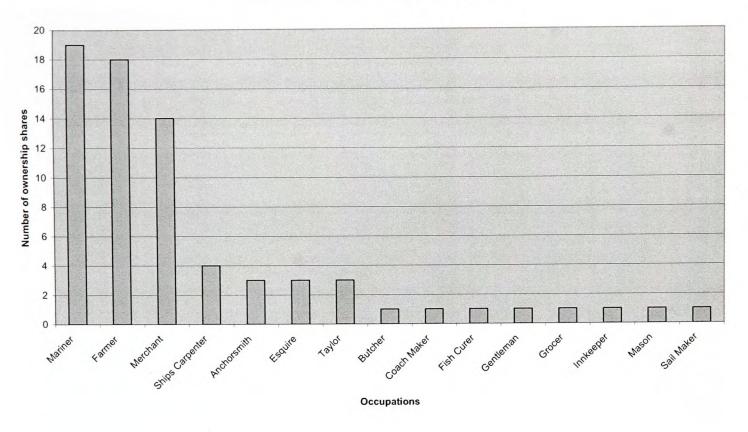
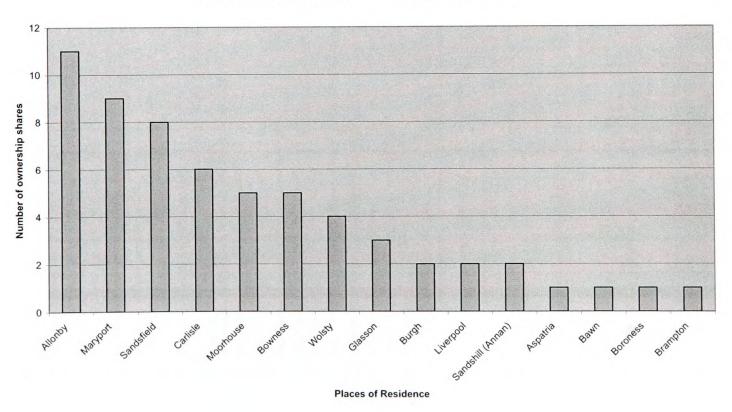


Figure 4

#### Places of residence of owners of Carlisle sloops 1786-95



## West Cumberland Vessels

Figure 5

Distribution of ownership group sizes for West Cumberland brigantines: taken from Whitehaven registration numbers 150-89, 1786

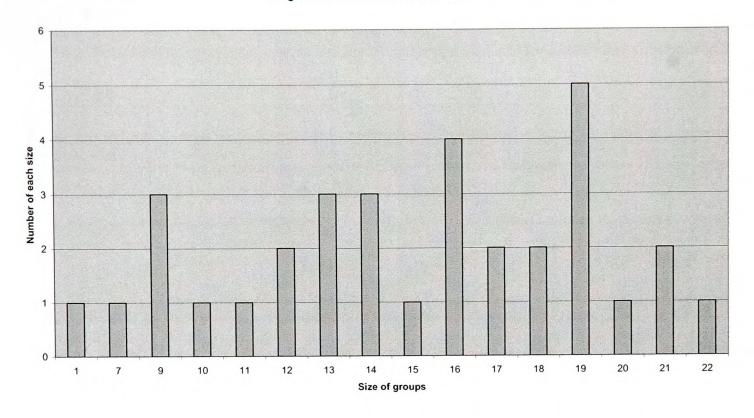
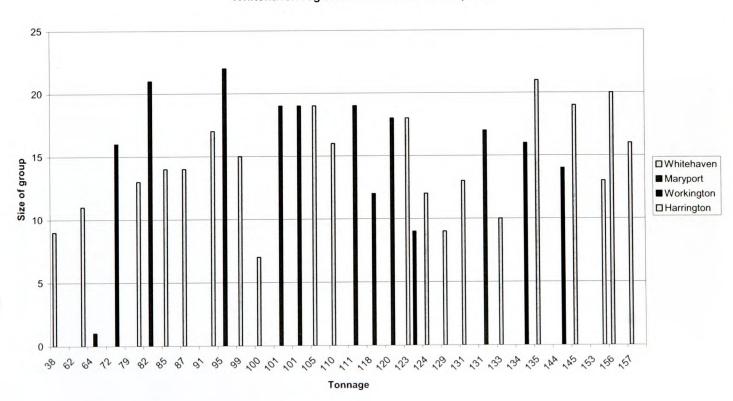


Figure 6

Ownership group size in relation to tonnage for West Cumberland brigantines: taken from Whitehaven registration numbers 150-89, 1786



## Whitehaven Vessels

Figure 7

Occupations of owners of brigantines belonging to Whitehaven: taken from Whitehaven register numbers 150-89, 1786

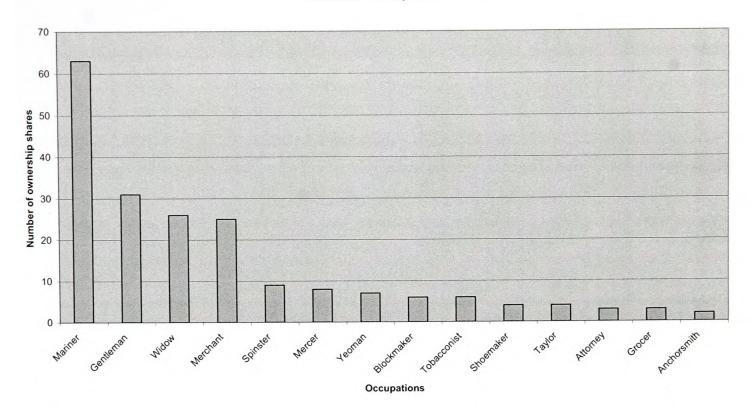


Figure 8

Places of residence of owners of brigantines belonging to Whitehaven: taken from Whitehaven register numbers 150-89, 1786

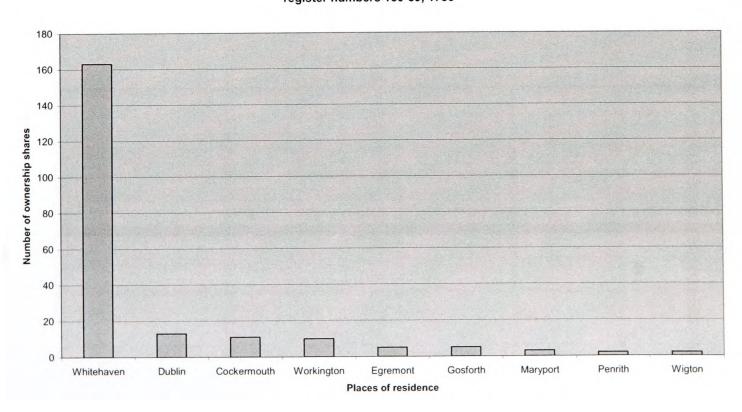


Figure 9

Occupations of owners of brigantines belonging to Maryport: taken from Whitehaven register numbers 150-89, 1786

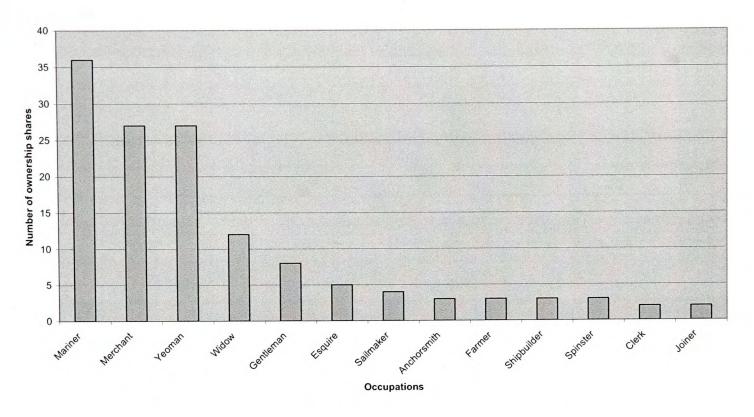
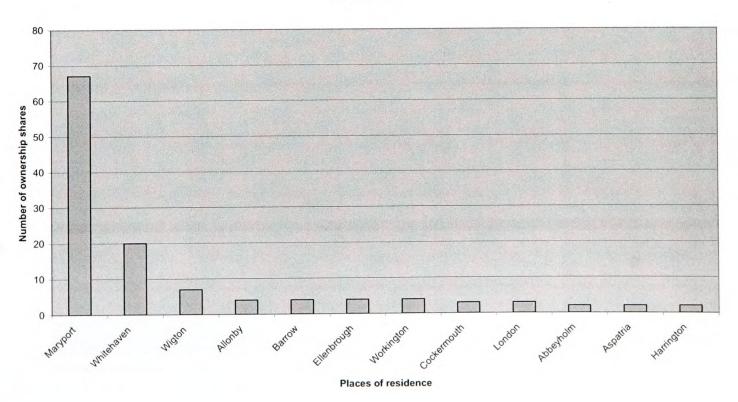


Figure 10

Places of residence of owners belonging to Maryport: taken from Whitehaven register numbers 150-89, 1786



## **Workington Vessels**

Figure 11

Occupations of owners of brigantines belonging to Workington: taken from Whitehaven register numbers 150-89,1786

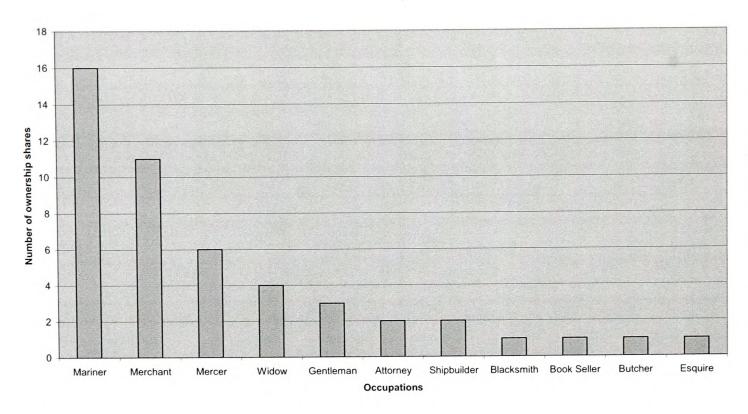
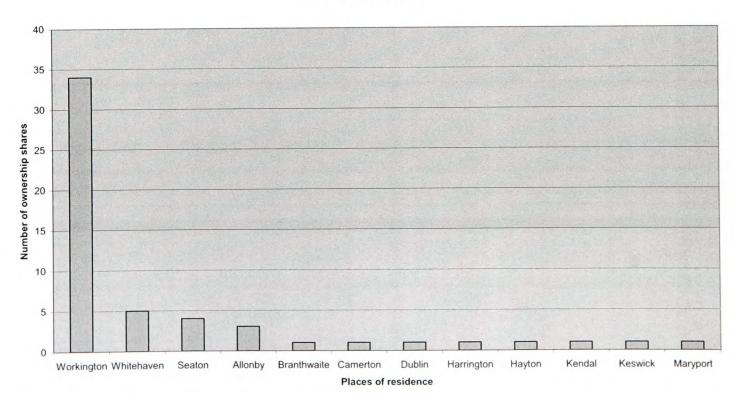


Figure 12

Places of residence of brigantines belonging to Workington: taken from Whitehaven register numbers 150-89, 1786



## **Harrington Vessels**

Figure 13

Occupations of owners of brigantines belonging to Harrington: taken from Whitehaven register numbers 150-89, 1786

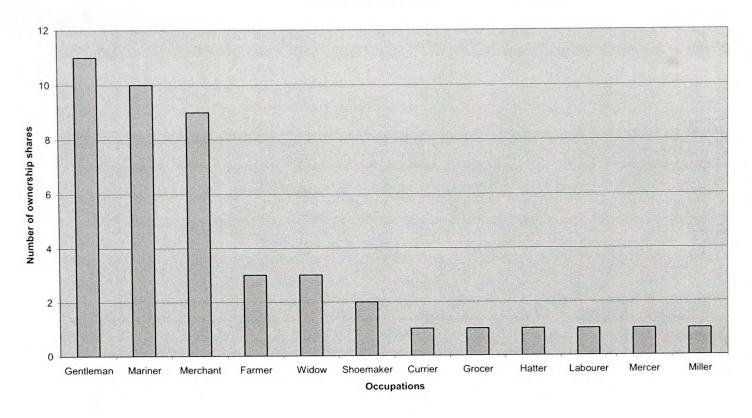
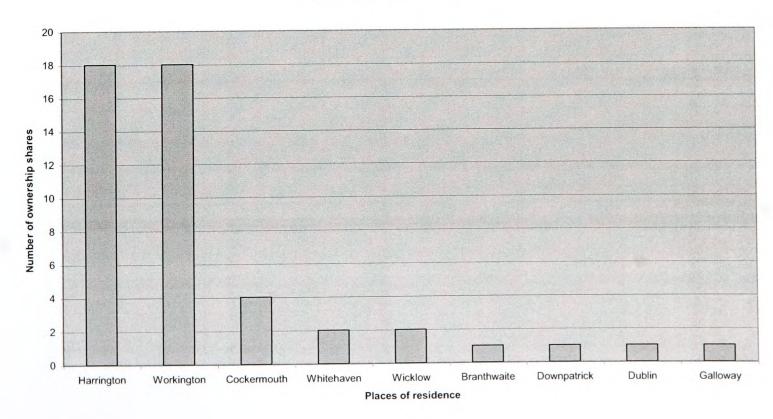


Figure 14

Places of residence of owners of brigantines belonging to Harrington: taken from Whitehaven register numbers 150-89, 1786



## **Ulverston Vessels**

Figure 15

Distribution of ownership group sizes for doggers, flats and sloops belonging to Ulverston, 1786-95

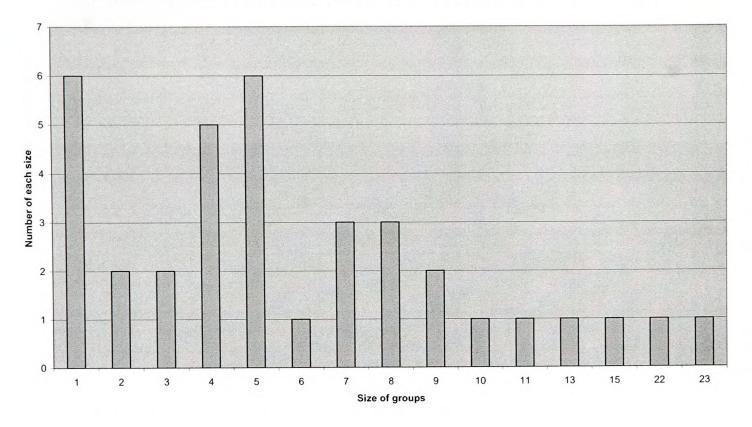
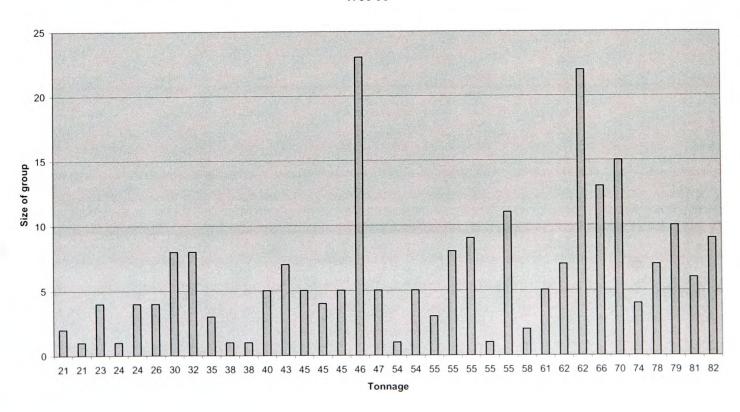


Figure 16

Ownership group size in relation to tonnage for doggers, flats and sloops belonging to Ulverston , \$1786-95\$



Occupations of owners of doggers, flats and sloops belonging to Ulverston, 1786-95

Figure 17

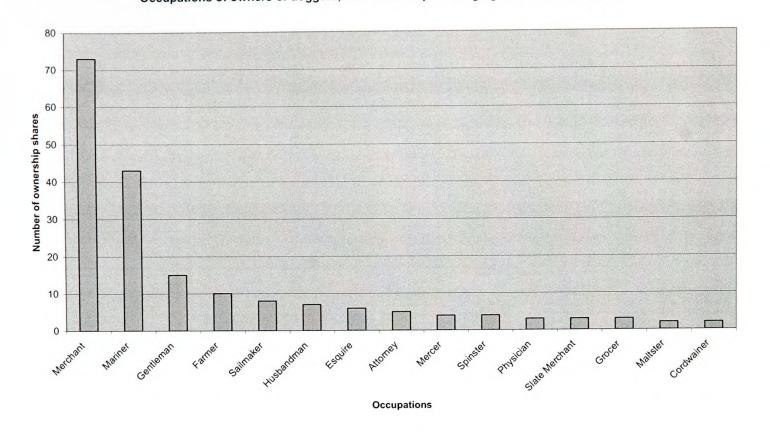


Figure 18

Places of residence of owners of doggers, flats and sloops belonging to Ulverston, 1786-95

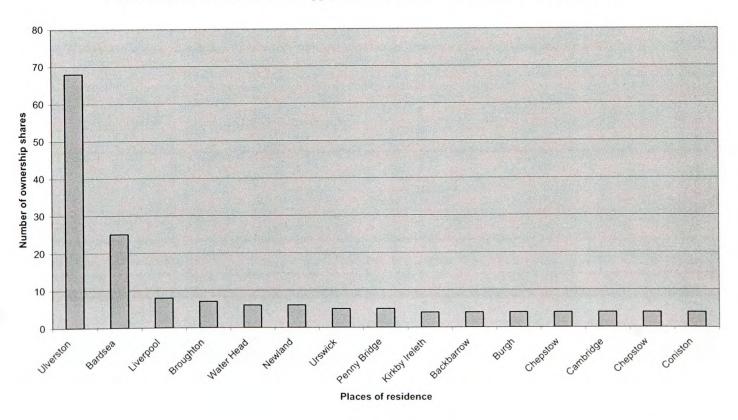


Figure 19

Distribution of ownership group sizes for brigantines belonging to Ulverston, 1786-95

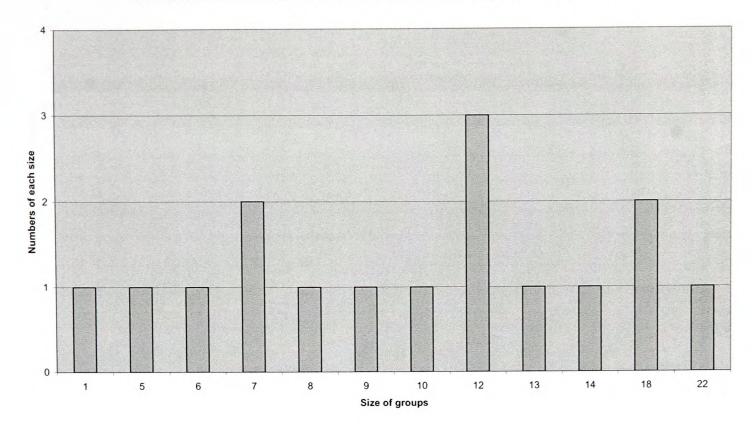


Figure 20

Ownership group size in relation to tonnage for brigantines belonging to Ulverston, 1786-95

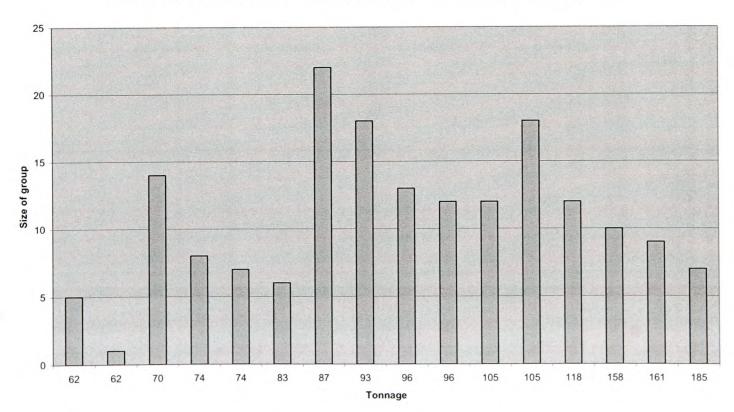


Figure 21

Occupations of owners of brigantines belonging to Ulverston, 1786-95

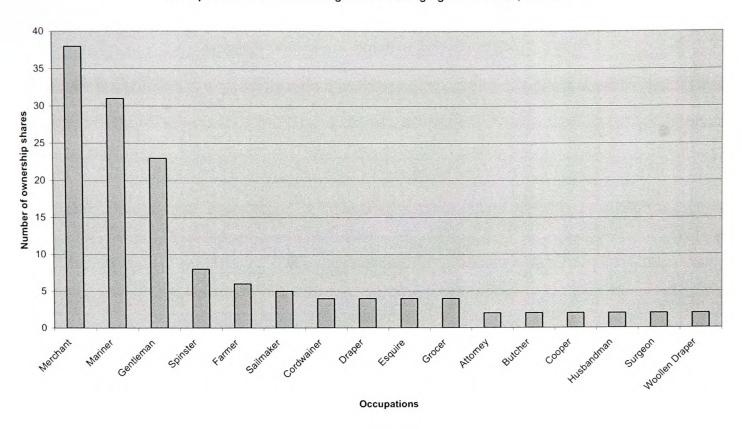
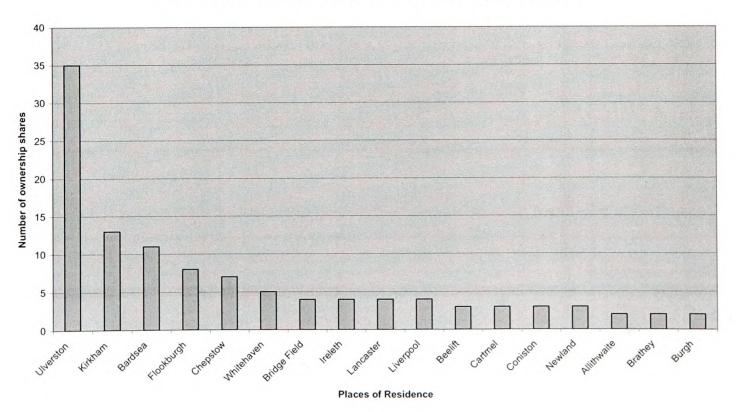


Figure 22

Places of residence of owners of brigantines belonging to Ulverston, 1786-95



## Milnthorpe Vessels

Figure 23

Occupations of owners of vessels belonging to Milnthorpe, 1786-95

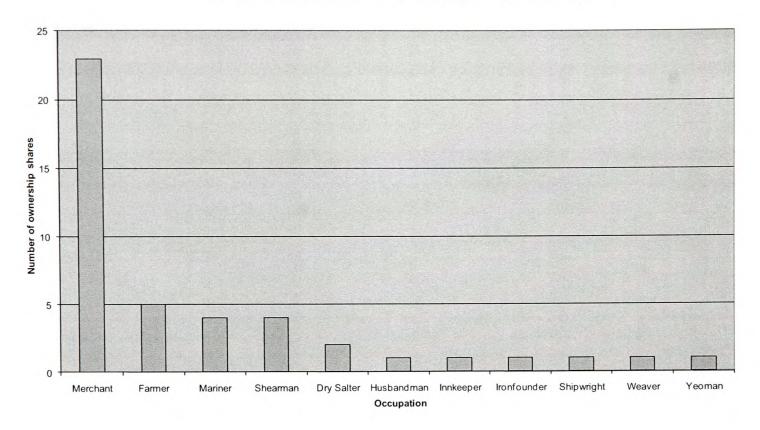
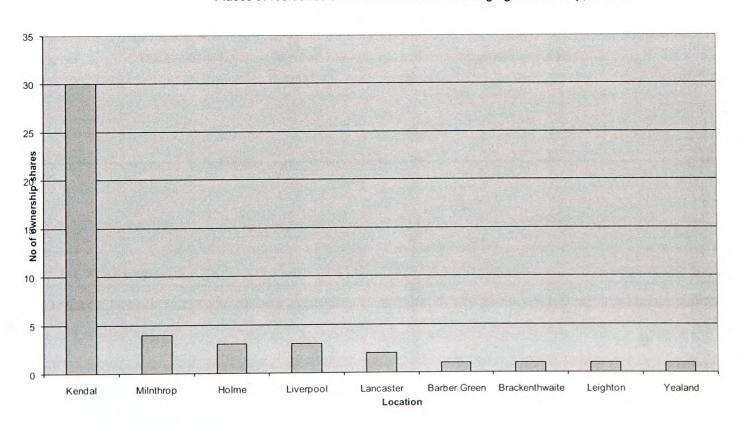


Figure 24

Places of residence of owners of vessels belonging to Milnthorp, 1786-95



## **Lancaster Vessels**

Figure 25

Distribution of ownership group sizes for Lancaster ships and snows 1786-7

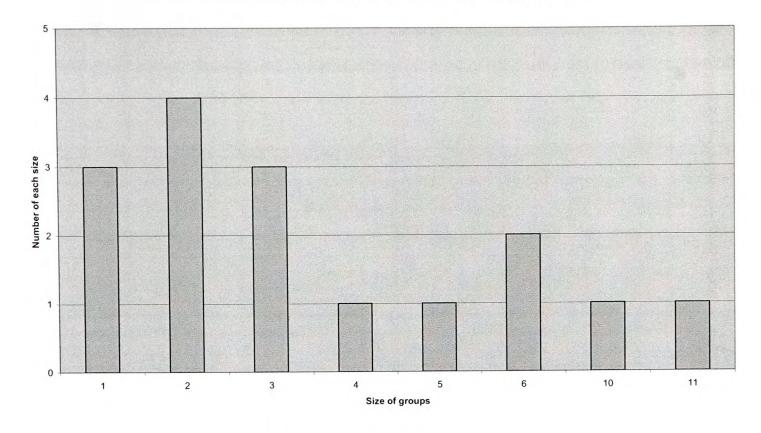


Figure 26

Ownership group sizes in relation to tonnage for Lancaster ships and snows, 1786-7

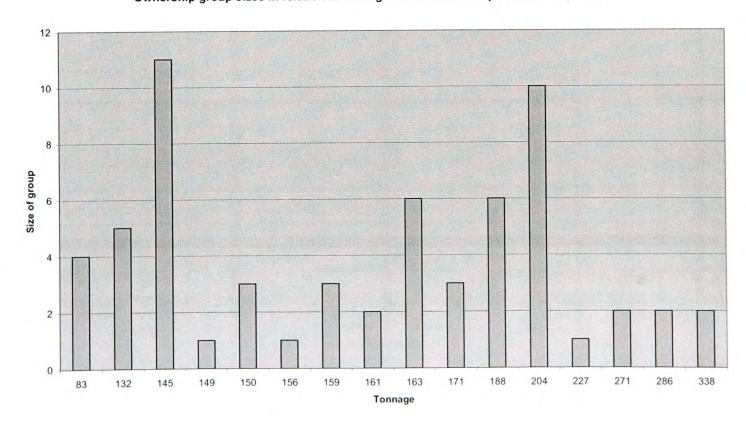


Figure 27

Occupations of owners of ships and snows in Lancaster 1786-7

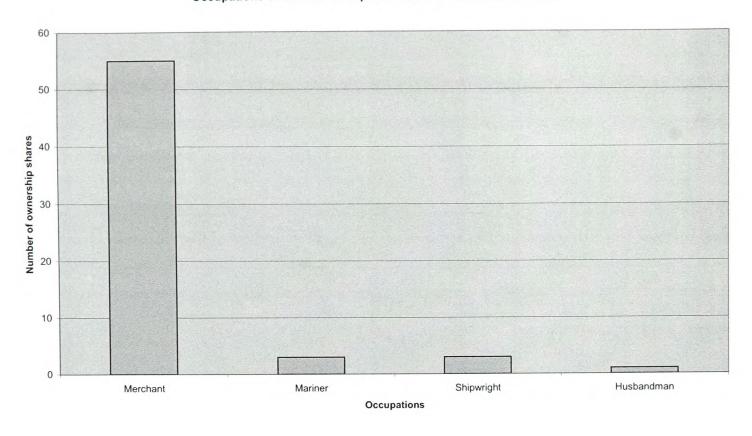


Figure 28

Places of residence of owners of Lancaster ships and snows 1786-7

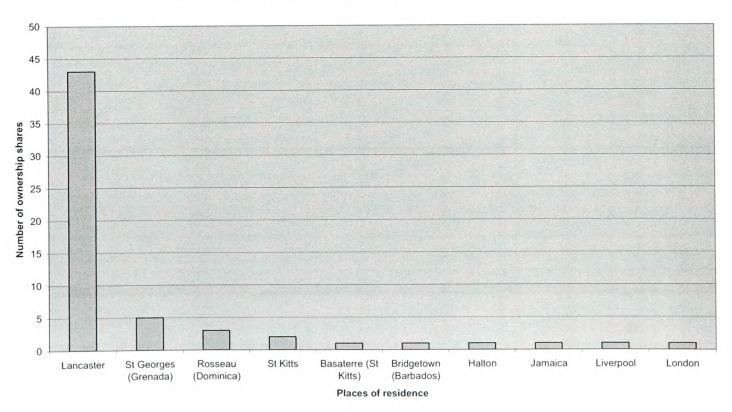


Figure 29

Distribution of ownership group sizes for Lancaster brigantines 1786-7

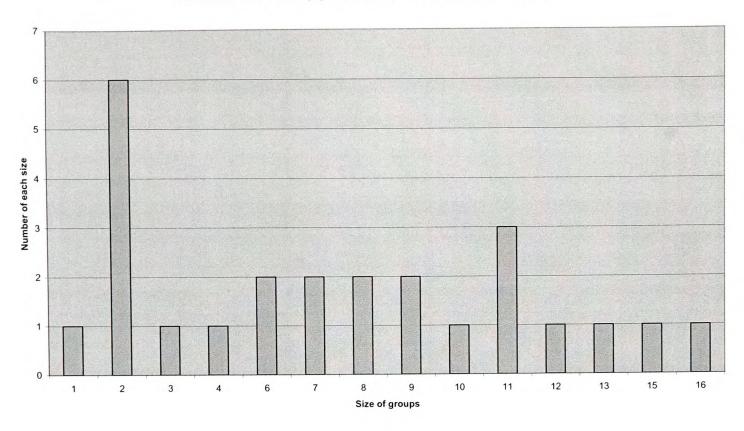


Figure 30

Ownership group size in relation to tonnage for Lancaster brigantines, 1786-7

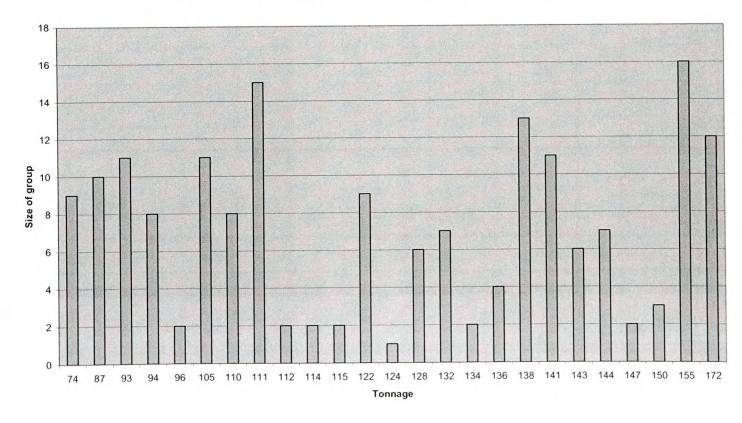


Figure 31

Occupations of owners of Lancaster brigantines 1786-7

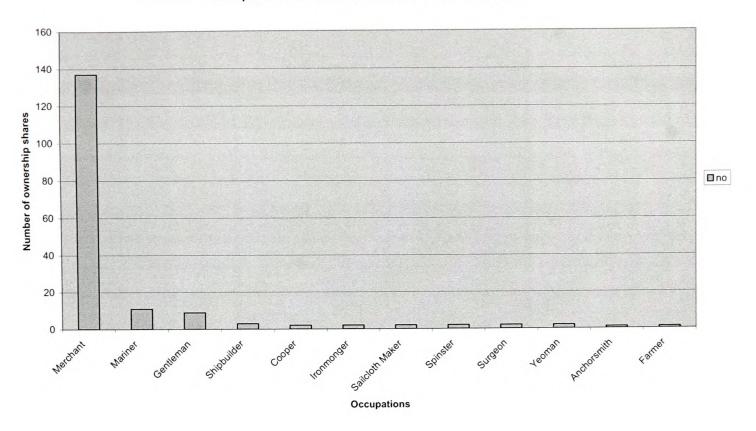


Figure 32

Places of residence of owners of Lancaster brigantines 1786-7

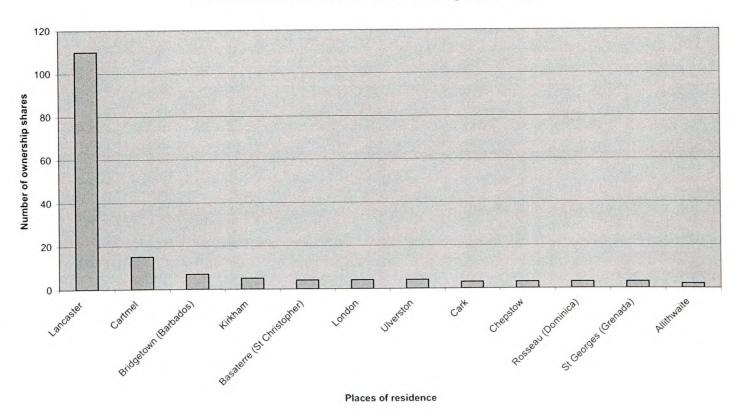


Figure 33

Distribution of ownership group sizes for Lancaster doggers, flats and sloops 1786-87

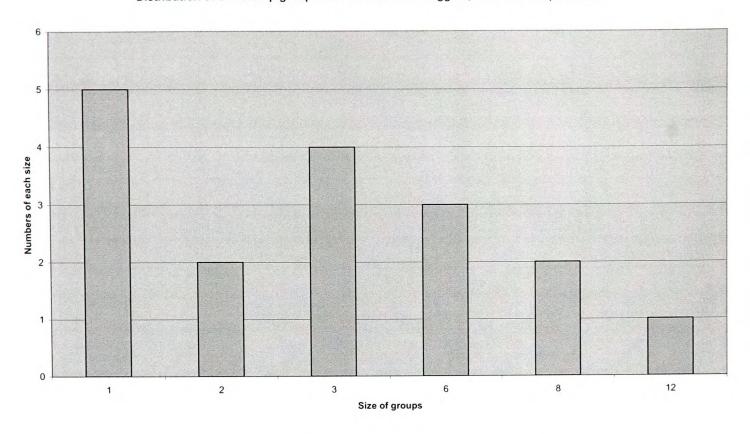
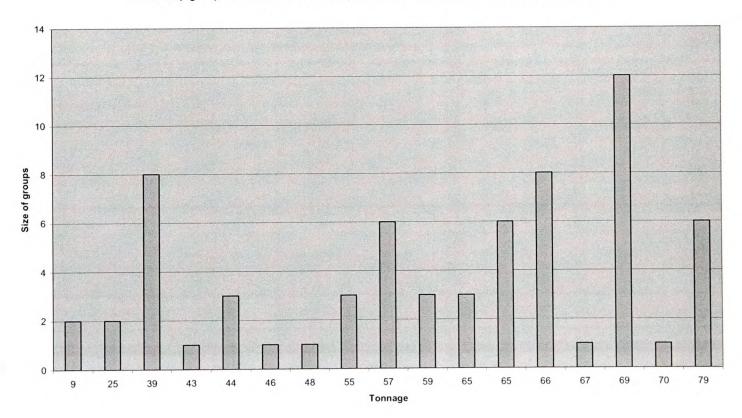


Figure 34

Ownership group size in relation to tonnage for Lancaster doggers, flats and sloops, 1786-7



Occupations of owners of Lancaster doggers, flats and sloops 1786-7

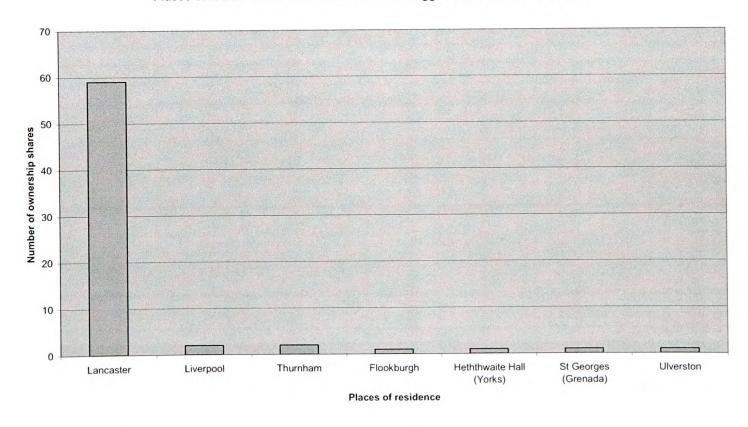
Figure 35

September of states and the state of the sta

Figure 36

Places of residence for owners of Lancaster doggers, flats and sloops 1786-7

Occupations



## **Preston Vessels**

Figure 37

Distribution of ownership group sizes for Preston flats and sloops 1786-95

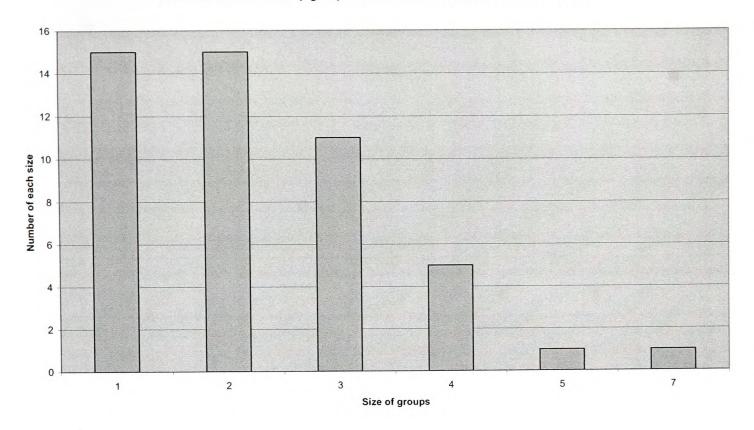


Figure 38

Ownership group size in relation to tonnage for Preston flats and sloops 1786-95

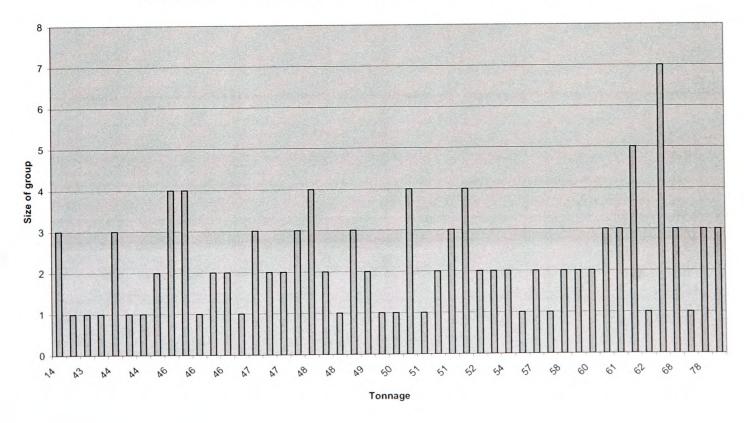


Figure 39

Occupations of owners of Preston flats and sloops, 1786-95

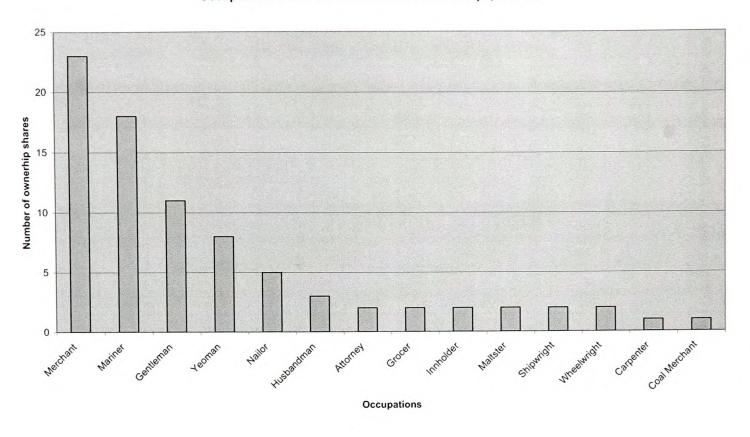


Figure 40

30

25

20

15

10

5

Number of ownership shares

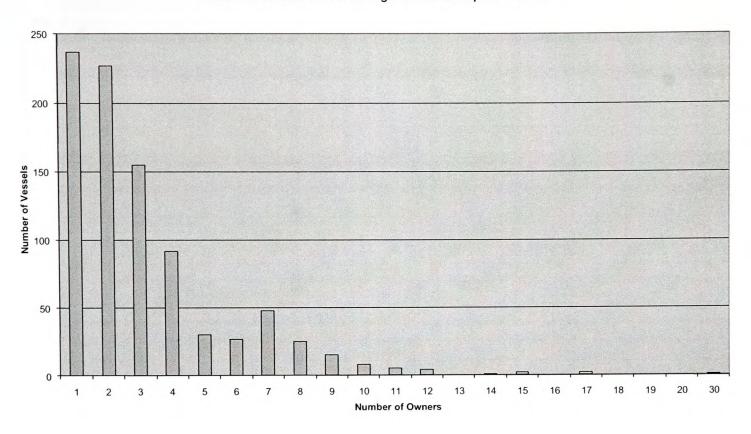
Places of residence of owners of Preston flats and sloops 1786-95

Places of residence

## **Liverpool Vessels**

Figure 41

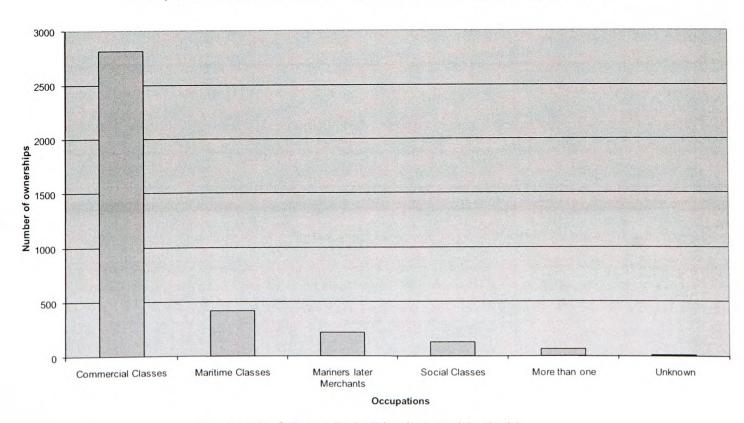
Number of owners of vessels registered in Liverpool 1788-93



Source: Pope, D.J., Thesis, Table 62

Figure 42

Occupations of those holding ownerships in vessels registered in Liverpool 1788-93



Source: Ref: Pope, D.J., Thesis 1, Table 61(b)

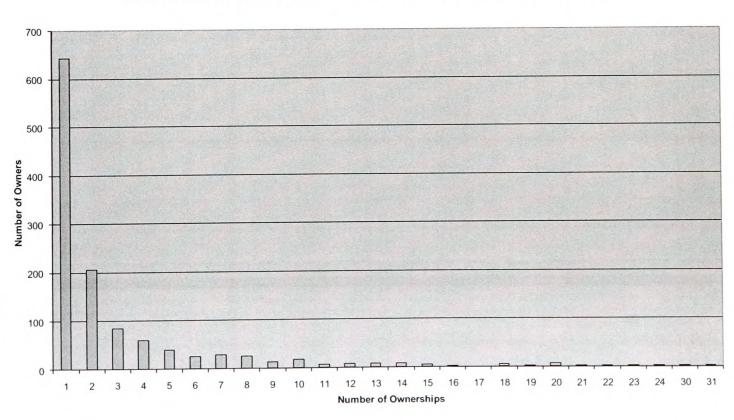
Figure 43

Location of residences of those holding ownerships in vessels registered in Liverpool 1788-93

Source: Pope, D.J., Thesis, Table 61(a)

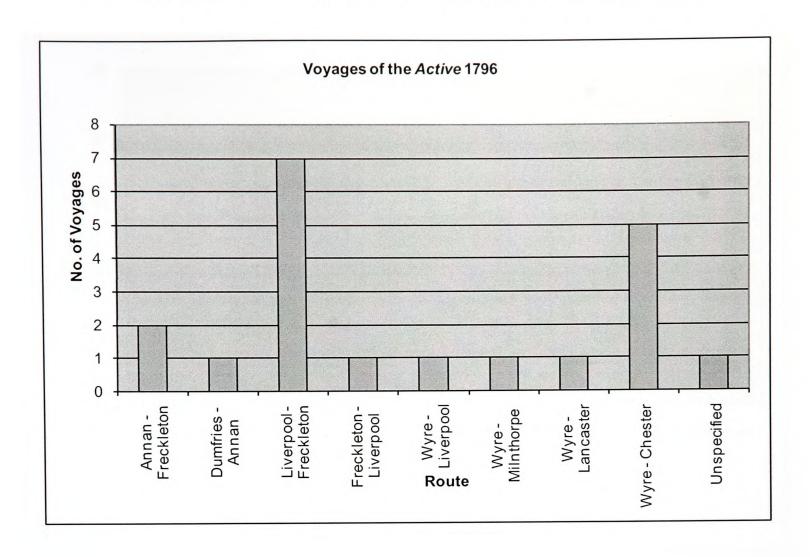
Figure 44

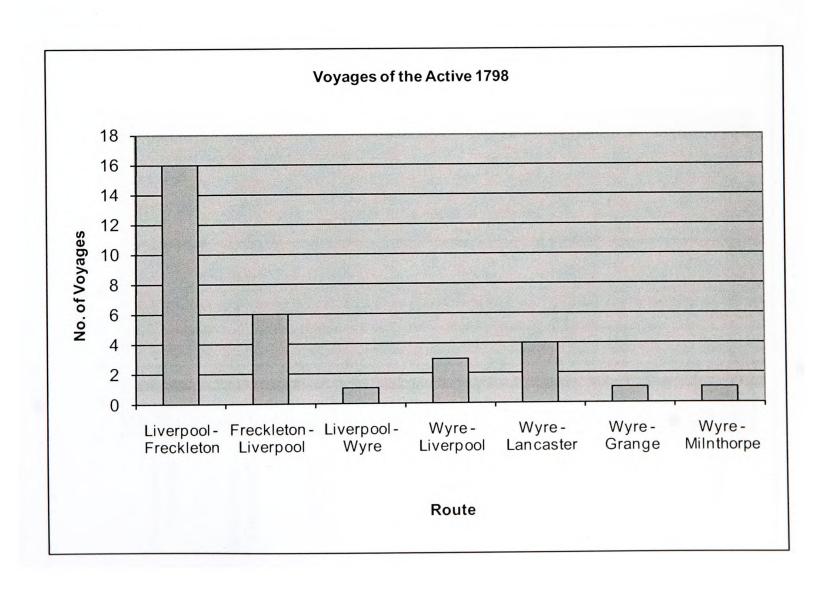
Number of ownerships held by the owners of vessels registered in Liverpool 1788-93

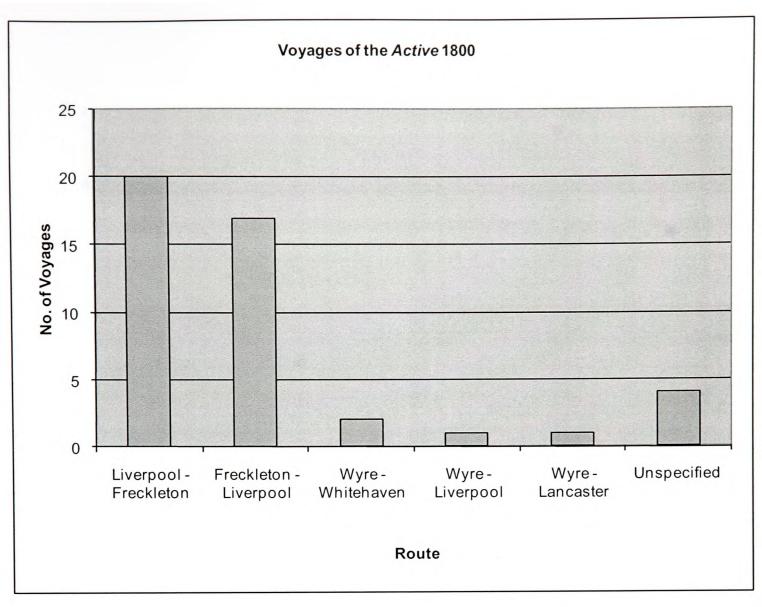


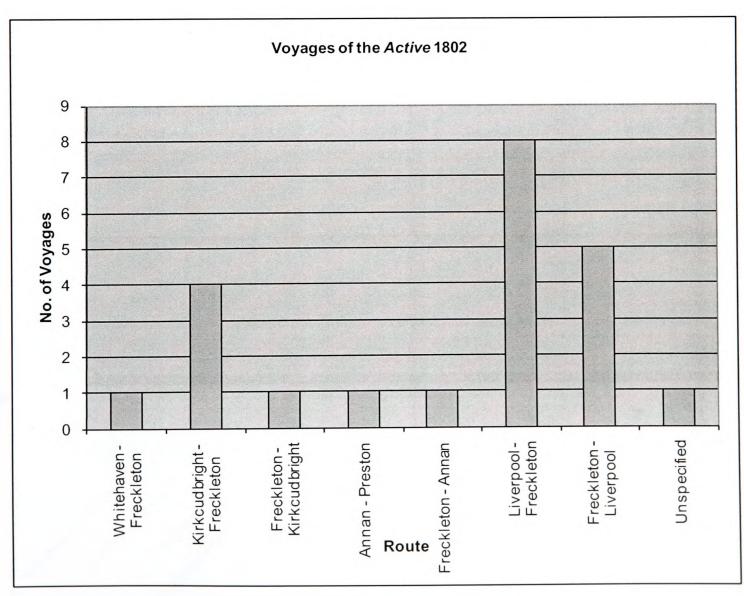
Source: Pope, D.J., Thesis, I, Table 59

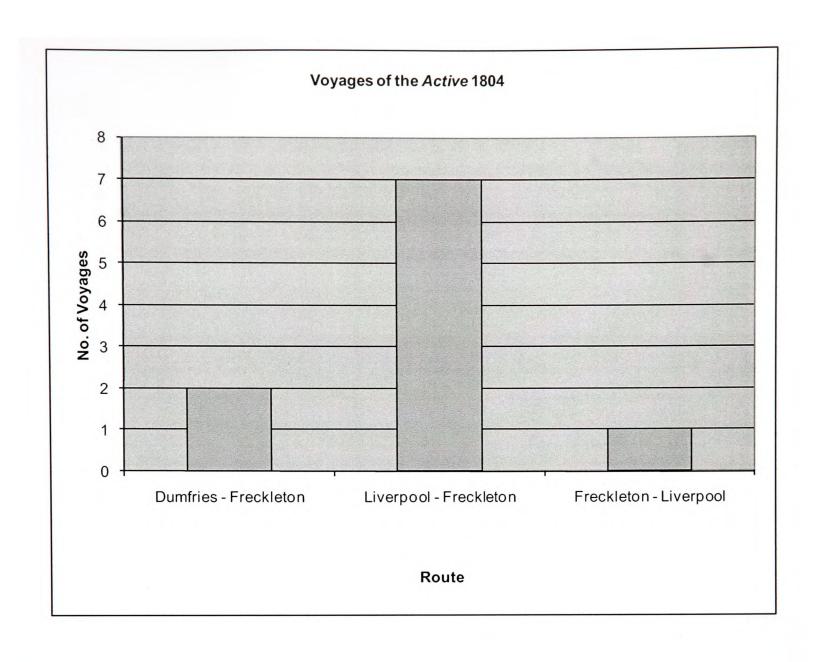
## APPENDIX 3 - VOYAGES OF THE ACTIVE 1796-1808

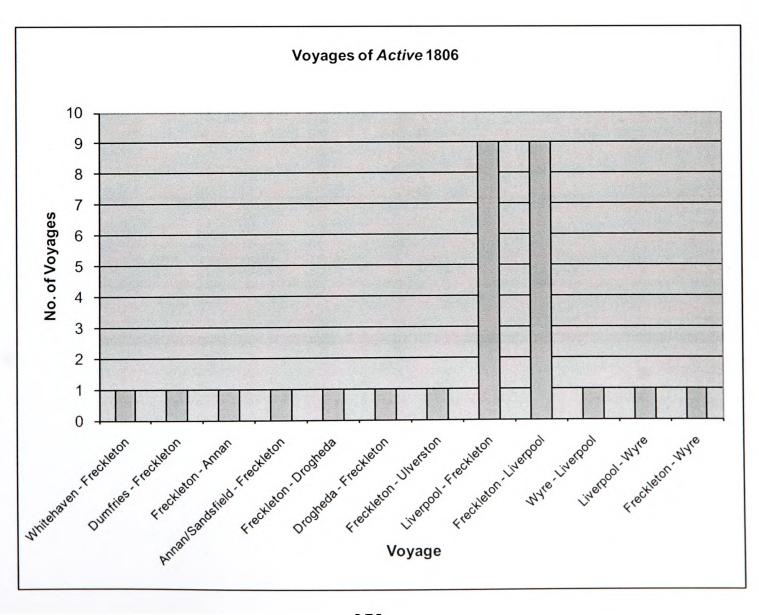


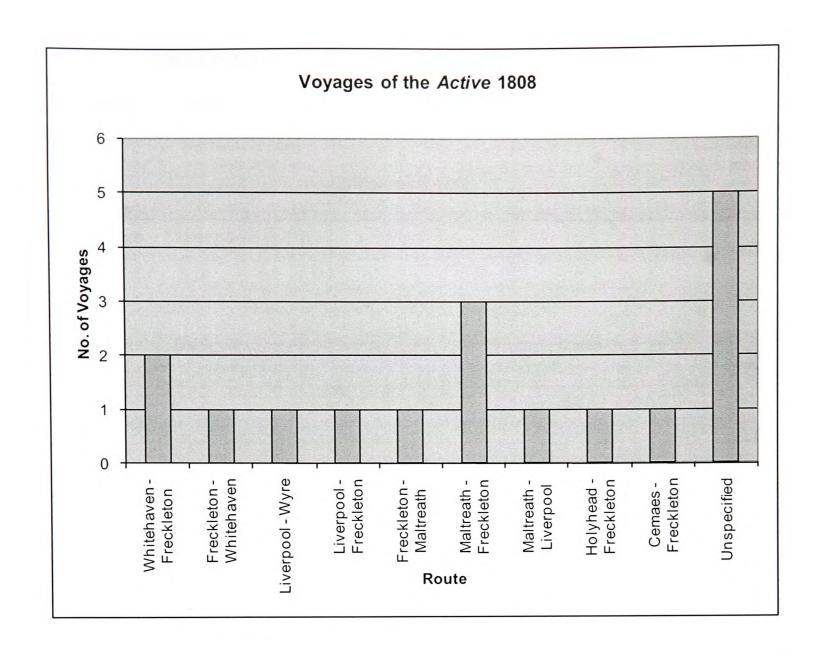












## APPENDIX 4 - ACTIVE VOYAGES 1796-1808 ROUTES AND CARGOES WITH SENDERS AND RECEIVERS

## **Principal Route**

## Freckleton - Liverpool

## Cargo

Sacks, Sacking, Cheese, Canvas, Flax, Tow, Hemp, Trusses, Twine, Potatoes, Yarn, Cloth, Cart Covers, Sail Cloth, Bales, Bothams, Ropes, Rags

#### **Senders**

Langton Birley, Mayor, Hornby, Sharples, Banks, Moon, Others Various

## Liverpool - Freckleton

## Cargos

Hemp, Looms, Wheat, Mats, Oats, Salt, Iron, Wine, Meal, Flour, Tarring Machine, Yarn, Mixed

## **Receivers**

Langton Birley, John Mayor, Nangles, Miles Myers, Hodgson, Unsworth, Thomas Copeland, Heatley, Various

## **Other Routes**

Route	Cargoes	Senders or Receivers	
Whitehaven - Freckleton	Yarn,Barley,Cast Iron	Homby,Mayor,Parker	
Freckleton - Whitehaven	Iron	Not Specified	
Annan - Freckleton	Meal,Oats,Wheat,Barley	Jno.Lowes & Co.	
Freckleton - Annan	Coals	Johnson	
Annan - Preston	Malt,Meal,Butter	Messenger	
Dumfries - Annan	Mait	Little & Co.	
Dumfries - Preston	Potatoes, Barley	Heatley,Blilock	
Kirkcudbright - Freckleton	Oats,Meal,Wheat	Hodgson	
Freckleton - Kirkcudbright	Coals	Unspecified	
Wyre - Liverpool	Flax, Canvas, Bobbins, Tallow	Langton Birley	
Liverpool - Wyre	Oats	Swarbrick	
Wyre - Lancaster	Flax, Hemp, Tallow, Iron	Langton Birley	
Wyre - Chester	Sundries	Langton Birley	
Wyre - Grange	Bobbins,Mats,Flax	Langton Birley	
Wyre - Milnthorpe	Flax	Langton Birley, Hornby	
Freckleton - Drogheda	Coals	Unspecified	
Drogheda - Freckleton	Oats	Blundell & Gradwell	
Freckleton - Maltreath	Coal	J & H Mayor	
Maltreath - Freckleton	Oats, A Cargo	J & H Mayor, Humber	
Maltreath - Liverpool	Oats,Wheat	J & H Mayor	
Cemaes - Freckleton	Oats	Humber	
Holyhead - Freckleton	Oats	Humber	

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