

THE SEABORNE TRADE OF SUSSEX, 1720-1845

By John H. Farrant, M.A.

The volume of cargo-carrying commercial shipping which used the Sussex Ports (Rye, Newhaven, Shoreham, Arundel and Chichester) increased at least five fold between 1701 and 1789-90 and about three fold between 1789-90 and 1841 (when railway competition began). This represents an annual average growth rate of 2 to 2½%. Rates of growth varied substantially between ports. Coastal imports expanded relatively faster than other branches of trade, reflecting the decline of local self-sufficiency in foodstuffs and fuel. Foreign trade declined as a proportion of the whole. The average tonnage of vessels increased at least threefold, 1701-1841, thanks to harbour improvements which began in the 1720s and are described. Commodities specifically discussed are corn, timber and underwood, coal, wool, hops, fish, iron, chalk, boulders, animal products, salt, stone and manufactured goods. The coasting trade with London is considered separately.

INTRODUCTION

The role of transport in 18th and 19th century economic development has long been recognised, but local studies have tended to concentrate on the provision of track and terminal facilities, and even then for only some forms of transport, to the neglect of the traffic carried. Certainly for south-east England before the coming of the railway inland waterways have probably received attention disproportionate to their importance relative to roads and harbours, and the connection with other developments is inferred rather than demonstrated. This study seeks to supply a counterweight by concentrating on the goods carried by sea and landed or embarked on the coast of Sussex.

The starting date is chosen first because the 1720s saw the beginning of continuous harbour development in Sussex and secondly because Dr. Andrews's work¹ is based on the Port Books which, as a moderately complete series, end in 1714. The terminal date marks the advent of the railway which, from 1841, was to transform the nature of the Sussex harbours' trade. The information on the chosen period is therefore sparse compared with both preceding and following periods.

THE HARBOURS

For the purposes of Customs administration the coast of Sussex was divided into five Ports and most statistics of trade relate to these.² Hence ships may not have berthed at the actual place from which the Port took its name, but elsewhere in the Port. The places to which ships traded and the facilities available are therefore described under the heading of their Port, beginning at the east end of the county. 'Port' with a capital letter is used in this legal sense: 'harbour' is used loosely for any place frequented by shipping even if harbour works properly so called were lacking. Schemes of improvement proposed but not started are usually not mentioned.

¹ J. H. Andrews, 'Geographical aspects of the maritime trade of Kent and Sussex 1650-1750' (unpublished Ph.D. thesis, University of London (1954), cited hereafter as Andrews). I am grateful to Dr. Andrews for permission to make use of his thesis.

² J. H. Andrews, 'The Customs Ports of Sussex 1680-1730,' *Sussex Notes and Queries* (hereafter

abbreviated to *S.N.Q.*) vol. 14 (1954-7), pp. 1-3. The rest of this section is wholly based on J. H. Farrant, *The harbours of Sussex 1700-1914* (Brighton, 1976), in which full source references are given, and which also discusses harbour development and seaborne trade in the railway age.

The Port of Rye extended from the county boundary with Kent to Beachy Head. Pevensy's trade had been killed by a sluice built across its haven in 1694, so in our period it was Rye, Hastings, Bexhill and Eastbourne which shipping frequented. Bexhill was receiving a few cargoes a year over the beach in the 1830s; Eastbourne had a continuous history of such traffic. Hastings's trade was also across the beach which had long since lost the protection of the pier built in 1578 and 1596-7. The excellent roadstead below the town of Rye, at the mouth of the river Rother, was progressively inundated by shingle until by 1720 it was no more than a tortuous channel down the east side. Hence in 1724 work began on digging a new, locked, channel down the west side of the former lagoon. It was completed after 63 years, only to be abandoned as useless within three months. In 1799 to 1808 the mouth of the old harbour was recut and with limited success protected by a pier and wharfing on the east side. These were extended in 1834-42. The Tidal Harbours Commission sourly observed in 1845 that the tidal rise in the bay was, at 23 feet, greater than anywhere else in south-east England; on a spring tide the rise was 17 feet at the pierhead and 14 feet at the town. Yet the approach was very intricate and difficult because of the sandbanks and the tortuous course of the channel, and at low water the harbour was dry.

The limits of the Port of Newhaven were Beachy Head and Rottingdean. Shipping activity was almost entirely in the estuary of the river Ouse at Newhaven. A few barges from there took coal up the Cuckmere River and the occasional ship beached in front of Seaford. The beginning of the 18th century found the entrance to Newhaven harbour diverted eastwards by a spit half a mile long. In the next 30 years the spit's length doubled. In the face of this deterioration a harbour commission was established in 1731. Within four years it had dug through the spit at its west end and protected the cut by piers. In 1791-3 the piers were rebuilt on a different orientation in an attempt to prevent a bar forming between them. From 1827 the interior of the harbour was deepened and in 1843-5 a trap groyne was built to the west of the piers, with considerable success in keeping the shingle clear of them.

Within the Port of Shoreham (whose western boundary was at Heene) the main landing places were in Shoreham harbour at the mouth of the river Adur and on the beach at Brighton. The Adur too was turned eastwards by a spit which was two and a half miles long by 1700. But only from about 1720 was shipping seriously impeded and only in 1760, when the spit was four miles long, was a harbour commission formed. The Commission's first scheme, opposite Kingston, was unsuccessful because the piles of the piers were driven only into the shingle and were quickly undermined. The entrance moved eastwards again, but the second attempt in 1816-21 succeeded. The beach trade was soon transferred from Brighton which, with the completion of the Chain Pier in 1823, could offer much better facilities for embarking and landing passengers. By that date Worthing, as a growing seaside resort (and like Bexhill and Bognor) had a small beach trade. In 1834 and 1837-9, Shoreham's piers were extended to counteract partial blocking by shingle.

The Port of Arundel stretched from Heene to Felpham sluice but its traffic was confined to the estuary of the Arun where it was divided between Littlehampton at the mouth and Arundel five miles upstream. The shingle spit was a modest half mile long in 1700, but though it did not get longer the depth of water diminished. The commission of 1733 made a new entrance protected by piers and by 1737 deepened the river up to Arundel. By 1782 the entrance was deteriorating again and from 1783 the piers were extended by jetty work to counteract the shingle.

The western limit of the Port of Chichester was the river Ems which is part of the boundary between West Sussex and Hampshire. Sidlesham and Bognor were both within the Port but the great majority of its traffic was handled within Chichester Harbour. The harbour escaped the attention of engineers except for a ship canal to the outskirts of Chichester opened in 1822. The main landing place was Dell Quay, two miles from Chichester, but at some dates ships unloaded into lighters at Itchenor; and there were other quays including several new ones built in the early 18th century.

The hinterlands of the harbours cannot be delineated with any precision and in any case must have varied over time and for different commodities. However, given the location of other harbours to the east, north and west of the county, it would seem a reasonable general assumption that the combined hinterlands of the five Ports lay fairly close to the county boundary on the west and north but extended into a thinly populated area of south Kent immediately north of Rye. Hence the traffic of the Ports was largely the seaborne trade with starting points or destinations in Sussex, with the passenger traffic across the Channel being the principal exception. But in relation to London, a major market for both the produce and the purchases of Sussex, there was evidently competition between land and water transport throughout the period.¹

THE VOLUME OF TRAFFIC

The best available measure of the volume of traffic is the aggregate tonnage of all vessels entering or clearing a Port during one year with cargo. Such figures, nearly always produced by the custom houses, have several disadvantages. However small a proportion of a ship's capacity was filled by cargo, the ship was included at its full tonnage. Some cargoes were not recorded by the customs officers: those loaded or unshipped by representatives of the state or within the limits of the same Port, and a varying list of bulk commodities, particularly constructional materials (brick, gravel, slates, etc.), hay and straw. 'Tonnage' had different meanings at different dates. Furthermore, figures survive for all five Ports only in 1789-91, 1841 and 1843 onwards, though there are incomplete figures for other years.

To provide some comparison between these data and the beginning of our period, a summary analysis was made of the Port Books for 1701 which is the last peacetime year for which the Port Books are reasonably complete. Unfortunately, tonnages were recorded only in the Port of Chichester and the other total tonnages have been estimated from the average tonnages of vessels in the same trades at Chichester. These figures, averages for 1789-90 (1791 being omitted because the Irish trade was not differentiated), and the figures for 1841 (the last year before the railway made a marked impact on the Ports' traffic) and for 1851 are given in Table 1. The tonnages from the Port Books are 'burden', being owners' estimates of their ships' capacity in tons weight having regard to the usual cargo. The 1789-90 tonnages are as measured by the 'Old Rule,' and it can only be assumed that the general equivalence between burden and measured tonnages found in the merchant fleet as a whole applied to Sussex shipping. The 1841 and 1851 tonnages are 'New Measure,' and the estimated relationship with Old Rule tonnages is: Old = New (1.376-0.002 New).² This formula has been used to inflate the 1841 tonnages to Old Rule for the index at the end of Table 1.

¹ J. H. Andrews, 'Some statistical maps of Defoe's England,' *Geographical Studies*, vol. 3 (1956), p. 43.

² R. Davis, *The rise of the English shipping industry* (1962), pp. 74, 372, 405. W. Salisbury,

'Early tonnage measurement in England, pt. III,' *Mariner's Mirror*, vol. 52 (1966), pp. 334-40. The formula is based on British Parliamentary Papers (hereafter abbreviated to B.P.P.), 1842 (68), xxxix.

TABLE 1. NUMBER AND TONNAGE OF VESSELS ENTERING AND CLEARING THE SUSSEX PORTS WITH CARGO

	Foreign in		Foreign out		Coast in*		Coast out*		Total	
	no.	ton	no.	ton	no.	ton	no.	ton	no.	ton
1701										
Rye	13	349	16	314	21	732	51	1384	101	2779
Newhaven	4	110	10	360	25	895	13	369	52	1734
Shoreham	6	298	6	189	31	1121	71	1776	114	3384
Arundel	—	—	—	—	15	358	58	1674	73	2032
Chichester	25	884	29	1075	48	1135	149	3140	251	6234
Total	48	1641	61	1938	140	4241	342	8343	591	16163
1789-90										
Rye	9	862	10	329	189	8426	127	4114	335	13731
Newhaven	12	1417	—	—	121	7367	94	3069	228	11854
Shoreham	64	5566	51	3727	135	9694	90	5747	341	24735
Arundel	3	437	2	121	101	6567	178	10220	285	17346
Chichester	13	811	9	401	161	14073	285	17017	469	32302
Total	103	9093	73	4578	704	46097	775	40167	1655	99968
1841										
Rye	96	2998	84	2430	648	39117	296	13930	1124	58475
Newhaven	89	5881	79	5817	263	29307	111	7885	542	48890
Shoreham	139	12018	47	6046	726	71517	117	6848	1029	96429
Arundel	11	1739	5	559	242	20318	116	8911	374	31527
Chichester	8	348	2	133	345	25196	331	10202	686	35879
Total	343	22984	217	14985	2224	185455	971	47776	3755	271200
1851										
Rye	51	2523	38	1526	644	43418	134	6282	867	53749
Newhaven	268	27064	250	25335	285	30256	49	6800	852	89455
Shoreham	359	22587	318	18173	648	78295	102	7773	1427	126828
Arundel	24	3419	—	—	209	21458	131	9096	364	33973
Chichester	8	248	3	92	275	17592	126	4040	412	21972
Total	710	55841	609	45126	2061	191019	542	33991	3922	325977

INDEX OF TONNAGES, 1789-90=100

	1701	1789	1841	1701	1789	1841	1701	1789	1841	1701	1789	1841	1701	1789	1841
Rye	3	6	29	2	2	27	5	61	358	10	30	130	20	100	540
Newhaven	1	12	62	3	0	60	8	62	285	3	26	82	15	100	489
Shoreham	1	23	58	1	15	27	5	39	341	7	23	35	14	100	461
Arundel	0	3	11	0	1	4	2	38	142	10	59	63	12	100	219
Chichester	3	3	1	3	1	1	4	44	96	10	53	42	19	100	139
Total	2	9	28	2	5	18	4	46	223	8	40	61	16	100	329

*Including traffic with Ireland

Sources 1701: Public Record Office (hereafter abbreviated to P.R.O.), E 190/796-798; to fill gaps in the series for 1701, Shoreham coastwise cargoes are for midsummer 1700 to midsummer 1701, Arundel coastwise cargoes for 1702 (inwards) and for midsummer 1701 to midsummer 1702 (outwards). 1789-90: P.R.O., Customs 17/11, 12. 1841: British Parliamentary Papers (abbreviated hereafter to B.P.P.), 1843 (216), lii. 1851: B.P.P., 1852 (218), xlv.

The average tonnages of cargo-carrying ships may be considered for the light they cast on the physical capacities of the harbours. The averages for 1701 are estimates except for Chichester but are not widely discrepant from other available figures. They conceal that the harbours admitted larger vessels. Ships of up to 70 tons regularly used Chichester harbour in 1701 and of 60 tons used Littlehampton harbour in 1734 before the new cut was opened. Shoreham's shipbuilders were able to launch vessels of around 400 tons in 1696 and 1741, though by waiting for favourable tides. If a loaded vessel of above 50 or 60 tons would not venture into Newhaven harbour in the late 1720s, vessels of that size and larger were beached at Hastings and probably Brighton. Hence the harbours in their unimproved states were able to take ships of twice the average tonnage and upwards.¹

By the latter part of the century the average tonnage had doubled overall, even though Chichester had no artificial works, Rye's were not used, Shoreham's piers had been overrun with shingle, and Newhaven's were soon to be renovated. That there was spare capacity earlier is emphasised. Fifty years later, in 1841, the average tonnage (as inflated) was a further 50% greater. Vessels at Newhaven, Shoreham and Arundel averaged about 100 tons, but only 66 tons at both Rye and Hastings² and in the Port of Chichester—in the last case there being no change over 1789-90. There can be no doubt that the first three Ports, in which there was now little or no beach trade, were reliant on the harbour works in the estuaries for the size of vessel which they could admit. Rye was constrained both by the considerable beach trade and limited works. Chichester seems to have been paying the price of neglect.

The aggregate tonnages year by year of ships carrying cargoes probably reflected the cyclical fluctuations in the national economy, so any comparison between years on the basis of Table 1 should take into account the state of economic activity. The earliest year, 1701, was one of high activity which marked, for instance, the beginning of substantial foreign exports of wheat. The years 1789-90 were near the bottom of a cycle, though they did see some recovery from the depression of the late '80s. Comparison between 1701 and 1789-90 may therefore understate the extent of growth. Also in a period of depression was the year 1841 and in that respect reasonably comparable with 1789-90.³

Subject to all the provisos above, Table 1 suggests that over the 90 years from 1701 the volume of shipping through the Sussex Ports increased at least five fold and in the next period of 50 years about three fold—or at least fifteen fold over the whole period of 140 years. The annual rate of growth was at least 2%, possibly on average rather faster (near to 2½%) after 1790. But the rate of change varied between the four branches of traffic identified in the Customs statistics.

	1701	1789-90	1841
Foreign inwards	10%	9%	8%
Foreign outwards	12	5	6
Coastal inwards	26	46	68
Coastal outwards	52	40	18
Total	100	100	100

¹ Cp. Andrews, pp. 73, 79, 89; and 'The Port of Chichester and the grain trade, 1650-1750,' *Sussex Archaeological Collections* (hereafter abbreviated to *S.A.C.*), vol. 92 (1954), pp. 97-98. West Sussex Record Office (hereafter abbreviated to *W.S.R.O.*), MF 36, Littlehampton Harbour Dues book 1733-44. H. Cheal, *The ships and mariners of Shoreham* (?1910),

pp. 57-58. T. Cox, *Magna Britannia et Hibernia, antiqua et nova*, vol. 5 (1730), p. 526. *The travels through England of Dr. Richard Pococke*, ed. by J. J. Cartwright, vol. 2 (1889), p. 101.

² B.P.P., 1835 (116), xxiv, pp. 404, 439.

³ T. S. Ashton, *Economic fluctuations in England 1700-1800* (Oxford, 1959), pp. 140, 166.

The proportion of foreign trade seems to have dropped by the end of the first period and have shifted towards imports, though undoubtedly foreign exports were much higher in mid-century than before or after on account of corn shipments which brought foreign clearances to nearly 14,000 tons in 1751.¹ More striking is the change in the coastal traffic. The inwards traffic may have increased near to fifty times over the whole period, whereas the outwards traffic rose at most fivefold in the first period but only by 50% in the second.

The rate of growth also varied between Ports. Their shares of the total traffic were:

	1701	1789-90	1841
Rye	17%	14%	22%
Newhaven	11	12	18
Shoreham	21	25	36
Arundel	13	17	12
Chichester	38	32	13
Total	100	100	101

'Redistribution' was clearly more significant after 1789-90 than before. The decline of Chichester is all the more striking in that the 1841 data include shipping at Emsworth while the 1701 data do not. Shoreham's share grew most of all.

The incomplete data for years other than those in Table 1 make it possible to elaborate a little this sketchy outline for individual Ports. First, in the Port of Rye, Hastings appears to have taken a growing share of the Port's traffic. In 1701, Hastings handled only a fifth of the number of cargoes handled at Rye; in 1810-12, it handled three-quarters by both number and tonnage, and by 1830 equal quantities. In the 1830s, Eastbourne's cargoes added 5 to 8% to Rye and Hastings's total. For the Port as a whole, the annual rate of growth appears to have been faster, around 5%, between 1789-90 and 1810-12, as against 2% in the next 30 years, with very little growth in the 1820s.² Newhaven also shows a concentration of growth in the decades around 1800: the annual growth rate was nearly 5% in 1789-90 to 1806-8, falling to 3.5, 3.1 and 1.1% in subsequent periods ending in 1815-17, 1823-5 and 1841, or 2.2% over 34 years.³

In the later 17th century, Brighton handled about 40 cargoes a year as against about 60 through Shoreham harbour. As Brighton grew in population from the 1760s, it is likely that a greater share of the Port's traffic came to the town. But the beach trade declined rapidly once the new turnpike road to Shoreham was completed around 1823-4, and almost to extinction by 1833. However the packet boats continued, weather permitting, to take passengers on at Brighton until 1849. As to the total traffic of the Port, the record of dues collected between 1760 and 1787 suggests that apart from cyclical fluctuations it was fairly stable until 1783 and then rose sharply in 1784-7, to coincide with the Prince of Wales's first visits to Brighton. Indeed the traffic reported in 1789-90 may well have been double that of only six years before, so the annual growth rate may have been 2% over the first 60 years of the century, negligible for the next two decades and rapid from 1784. Later income figures suggest a doubling of traffic between the mid 1820s and 1841 and therefore a lower rate of growth between 1790 and c. 1816 than in preceding and succeeding periods.⁴

¹ British Library (hereafter abbreviated to B.L.), Add. MS. 11256.

² B.P.P., 1835 (116), xxiv, pp. 404, 439. Library of H.M. Customs & Excise (hereafter abbreviated to C.L.), Customs 32/108, 112. I am grateful to the Commissioners for permission to consult and cite their archives. East Sussex Record Office (abbreviated hereafter to E.S.R.O.), Rye MS. 102/4, and S/RH/FAT, Rye Harbour Commission accounts 1798-1856.

³ Based on three-year averages computed from T. W. Horsfield, *The history and antiquities of Lewes and its vicinity*, vol. 2 (Lewes, 1827), app. 4.

⁴ Andrews, pp. 64, 67. C.L., Customs 32/108. B.P.P., 1830 (9), viii. W.S.R.O., SH 9/1/1, Shoreham Harbour Commission accounts 1760-88. *Minutes of proceedings taken before the Select Committee of the House of Lords on the New Shoreham Harbour Bill* (privately printed, 1873), pp. 100*-101*.

The wharves of Arundel seem to have received the great majority of that Port's traffic during the 18th century and Littlehampton probably began to compete only when inland navigation was extended from 1785, in that transfer between ship and barge was most advantageous nearest to the river mouth. In 1824, 80% by tonnage was handled at Littlehampton. Total traffic in 1701 was 73 cargoes and close to the average for the next 12 years, but in the next 20 years doubled, as the average for the peacetime years of 1734-9 was 158. Indirect evidence suggests that traffic was a little below that level until the end of war in 1748, moved ahead vigorously until the Seven Years' War, and by the end of the 1760s was perhaps 70% above levels 30 years before and continued to rise steadily to 1789. In the following decades growth was much less than in the Ports to the east, at 1.5 to 2% a year until 1820-22, zero in the next decade and 1% between 1830-32 and 1841.¹

The figures in Table 1 for Chichester are less consistent than for the other Ports. Those for 1841 undoubtedly include cargoes handled at Emsworth which was strictly in the Port of Portsmouth; those for 1701 do not and for 1789-90 may do. On the assumption that Emsworth was included in 1789-90 and using numbers of cargoes rather than tonnages, the Port's traffic grew less than any of the other Ports', at 0.8% a year from 1790 until 1810-12, at 1.6% for the next ten years and, after a slight decline in the 1820s, at nearly 1% during the 1830s. If Emsworth was not included in 1789-90, with its cargoes comprising nearly 40% of the total in 1841, the traffic of the Port of Chichester may have declined over the intervening years. As to the distribution of traffic within the Port, there is firm information only for one year, 1836: of 795 coastal cargoes, 39% were handled at Emsworth, 28% at Dell Quay, 11% at the Canal Basin, 10% at Itchenor, 4% elsewhere in Chichester Harbour and 8% outside it.²

THE CORN TRADE

Sussex 'is a maritime and corn county' and 'trade and particularly the corn trade is [its] chief concern', Henry Pelham reminded his electors at Lewes in 1753, so much so that abolition of the bounty on corn exported overseas would 'reduce the rent of lands a third in value, greatly lessening the estates of all landed gentlemen, impoverished gentlemen and yeomen of small fortunes, and farmers of long leases must be inevitably ruin'd'.³ Exaggeration apart, Pelham was right that corn production was the major economic activity in large parts of Sussex (the coastal plain, the South Downs and the scarp foot), that production was geared to markets outside the county, including foreign markets, and that sea transport was important in carriage to those markets. But figures of shipments through the Ports are an uncertain measure of Sussex's contribution to the home market. Land carriage was used to meet local deficiencies, and the main external market, London, was close enough for land carriage as an alternative to coastal shipping. Defoe stated that corn went to Farnham market from forty miles away (and so from the Chichester area), thence to mills around Guildford and finally by river to London;⁴ and mills around Croydon may have drawn corn from central Sussex.

But there was a shift in favour of shipping in the 18th century through the introduction of local processing of wheat into flour and its carriage by sea direct to the heart of the market.

¹ M. A. Tierney, *The history and antiquities of the castle and town of Arundel* (1834), p.721. W.S.R.O., MF 25, Commission's minutes; MF 36. B.P.P., 1835 (116), xxiv, p. 175.

² C. L. Customs 32/106, 108, 114. B.P.P., 1835 (116), xxiv, p. 129.

³ D. G. Barnes, *A history of the English corn laws* (1930), p. 46.

⁴ D. Defoe, *A tour thro' the whole island of Great Britain*, vol. 1 (1724), letter II, pp. 70-71; *The compleat English tradesman*, vol. 2 (1727), pt. 2, p. 32.

The merchants of Chichester, Emsworth and district who built granaries and mills on the harbour began the flour trade to London around the turn of the century. At Arundel the trade started between 1714 and 1727, and at Newhaven in the 1760s after three merchants from Chichester and Chilgrove built a tidemill on the old harbour superseded by the new cut of 1731-3.¹

Table 2 covers all the years in our period up to 1823 for which there are export figures for all Ports in both coastal and foreign trades, and even then flour seems not to be included in 1782-6. Nevertheless it does illuminate several points. First, wheat increased its share of the trade. This is consistent with the expansion of wheat production at the expense of barley on the Downs and the decline of malting in Chichester.² Secondly, in the 18th century the further west a Port was, the greater the scale of its wheat and barley exports (with little doubt the inclusion of flour would put Chichester ahead of the other Ports in 1782-6). But in the early 19th century the distribution between Ports was more even, reflecting the concentration of processing at Newhaven (where the tidemill was enlarged in the Napoleonic wars) and the rapid progress of agricultural improvement in the Weald which went so far towards corn production that commentators thought too much was grown in preference to grazing. The exports of oats from Rye declined in sympathy.³ Thirdly, foreign exports were predominantly of wheat but had ended by 1818. Fourthly (but without account for the relative quality of harvests in the different periods nor the incidence of war), corn exports more than doubled between the first and second periods with less growth up to 1818-23.

TABLE 2 AVERAGE ANNUAL SHIPMENTS OF CORN FROM AND TO THE SUSSEX PORTS

Quarters		EXPORTS						IMPORTS
		c. 1702-16		1782-6		1818-23	1818-23	
		coastal	foreign	coastal	foreign	coastal	coastal	
Rye	W	71	44	2718*	—	5694	200	
	B	76	112	77	—	350	1813	
	O	378	—	2672	—	—	1531	
Newhaven	W	330	46	4272*	739*	10017	3380	
	B	289	30	368	214	862	2327	
	O	15	—	129	—	65	956	
Shoreham	W	278	577	5586*	1371*	3923	482	
	B	762	89	416	97	192	1970	
	O	21	—	—	—	94	3267	
Arundel	W	1555	595	8610*	661*	8501	324	
	B	1145	30	3544	267	1281	592	
	O	—	—	8	—	88	1662	
Chichester	W	5078	1948	5703*	1255*	19335	2438	
	B	6426	88	4534	299	628	543	
	O	44	—	143	—	907	1783	
Total	W	7312	3210	26889*	4026*	47470	6824	
	B	8698	349	8939	877	3313	7245	
	O	458	—	2952	—	1154	9199	

W=wheat and flour, except (*) wheat only. B=barley and malt. O=oats. Foreign includes Ireland. There were no foreign exports in 1818-23, but the foreign imports are not known.

Sources c. 1702-16: Andrews, tables 22, 23, 25. 1782-6: B. L., Abbot Collection of Parliamentary Papers (hereafter cited as Abbot), accounts 567-9. 1818-23: B.P.P., 1824 (454), xvii; continuations for 1823-7 and 1836-8 are in B.P.P., 1828 (319), xviii and 1839 (27), xlvi, and give broadly similar pictures though volumes were lower in 1823-7.

¹ Defoe, *Tour; Tradesman*, p. 37. S. P. Farrant, 'Bishopstone tidemills,' *S.A.C.*, vol. 113 (1975), p. 200.

² Cp. J. C. K. Cornwall, 'Farming in Sussex' 1560-1640,' *S.A.C.*, vol. 92 (1954), p. 91, and H. C. K. Henderson, 'The 1801 Crop Returns for Sussex,' in *S.A.C.*, vol. 90 (1952), pp. 52-55. *The memoirs of*

James Spershott, ed. by F. W. Steer (Chichester Papers no. 30 1962), p. 17.

³ S. P. Farrant, p. 201. P. F. Brandon, *The Sussex landscape* (1974), pp. 184-9. E. W. H. Briault, 'Sussex (East and West),' in L. D. Stamp, ed., *The land of Britain*, vol. 8, pts. 85 & 86 (1942), p. 495.

Other information can fill out the picture, first of the coasting trade. At the end of the 17th century, London was the dominant English market for all the Ports, with Devon running second. The French war of 1702-13 saw much of Chichester and Arundel's exports diverted from London to Portsmouth. When war broke out with Spain in 1739, a large part of Arundel's exports were shifted from both London and Portsmouth to the west country. The proportional distributions in consecutive five-year periods were:

	1734-8	1739-43
London	46.2	33.6
Sussex Ports to the east	3.3	1.4
Port of Chichester & Emsworth	10.7	14.6
Portsmouth and the Solent	35.8	17.8
Poole and Weymouth	0.2	10.2
Lyme to Bristol Channel	3.7	21.9
Other ports	0.1	0.5
	<hr/>	<hr/>
Average coastal corn exports p.a. (<i>quarters</i>)	100% 7904	100% 6565

By comparison with 1702-14 the wartime period shows a 143% increase. Similar diversions of the Sussex Ports' trade probably occurred in the French wars of 1793-1814: in 1813 the total exports of the main corns to London from Rye and Newhaven were 10,511q. compared with only 2,652q. from the other Ports. But in peacetime London continued as the main market.¹

In 1702-14 coastal imports of corn were negligible, the main instance being oats and wheat received at Chichester from Arundel. This traffic continued at least into the 1740s. Newhaven also imported, to supply the tidemill, receiving 1,500q. of wheat a year in 1794-1800 and shipping 2,480q.; and in the year beginning October 1820 3,886q. of wheat and 3½q. of flour, and exporting 4,926 and 8,165q. respectively. In the calendar year 1821, it received 15 cargoes of wheat, 10 of them from other Sussex Ports, and sent to London 16 cargoes of wheat and 13 of flour, to Rye one of each, to Portsmouth one and eight, to Southampton one of wheat, and to Plymouth and Falmouth nine and six of flour.² Hence the higher exports of the 19th century were not entirely greater marketable surpluses grown in Sussex.

Though the Ports were still net exporters of wheat and flour in the 1820s, they had become net importers of barley, malt and oats. In 1836-8, barley and malt imported coastwise reached over 13,600q. against exports of 1,600q. Half passed through Shoreham for the breweries of Brighton; most of it came from East Anglia (which, though, was not a supplier in 1780-86).³ As to oats, imports went back at least to the 1750s: Exeter sent oats to Chichester in 1758 (407q.), 1765 (748q.) and 1774 (83q.) and to one or more of Rye, Newhaven and Shoreham in the same years. Newhaven imported French and Dutch oats, and Shoreham French oats in 1788; Irish oats were reported in 1790 and were landed in considerable quantities by 1806; and undifferentiated 'foreign' imports totalled 4,217q. at Chichester as early as 1777.⁴ In Table 3, the quantities for the later years are in addition to the British imports of 6,000 to 9,000q. a year which were usual from at least 1818.

¹ Andrews, tables 22, 24. W.S.R.O., MF 36. B.P.P., 1814-15 (26), v. Rev. A. Young, *General view of the agriculture of the County of Sussex*, 2nd ed. (1808), p. 421.

² Andrews, p. 192. W.S.R.O., MF 36. B.L., Add. MS. 33059, f. 255. B.P.P., 1824 (454), xvii. Public Record Office (hereafter abbreviated to P.R.O.), RAIL 853/12, Newhaven harbourmaster's journal, 1821.

³ B.P.P., 1839 (27), xlvi; 1845 (665), xvi, p. 344. B.L., Abbot collection of parliamentary papers (hereafter abbreviated to Abbot) accounts 438-41.

⁴ E. A. G. Clark, *The ports of the Exe estuary 1660-1860* (Exeter, 1960), p. 211 (covers sample years only). *Sussex Weekly Advertiser* (hereafter abbreviated to *S.W.A.*), 7, 14 Jan., 11 Feb., 25 Aug., 8 Sept., 29 Dec. 1788. E.S.R.O., Langridge MS. 14. Abbot, account 31.

What is not revealed in Table 2 are the tremendous foreign exports of wheat, flour and malt in the middle of the 18th century. For some 30 years, foreign exports were six or seven times greater than at the beginning and end of the century. We can guess that they were equal in volume to the coastwise shipments and gave a strong impetus to the harbour improvements in the centre of the county. Although the boom in corn exports was a national phenomenon, the last column of Table 4(A) suggests that for Sussex the rise to the peak in the 1750s and the subsequent decline were greater than the average. Sussex in the late 17th century did not have an established foreign trade comparable to that of the east coast ports across the North Sea, its corn exports were particularly susceptible to wartime disruption, and its proximity to London ensured that as home demand rose it had a ready market. After 1792, national exports were never again to exceed imports and from then can be dated the end of regular foreign exports from Sussex.

TABLE 3. ANNUAL IMPORTS OF OATS AT THE SUSSEX PORTS FROM OVERSEAS *Quarters*

from	1782-6 foreign & Ireland	Oct. 1806- Jan. 1808 Ireland	Oct. 1824- Oct. 1827 Ireland	1826 foreign	1836-8 Ireland
Rye	—	—	1126	1366	2774
Newhaven	159	1916	7238	3189	6893
Shoreham	9	3981	5310	1406	12210
Arundel	—	—	3935	443	2754
Chichester	396	7261	3840	571	1846
Total	564	13158	21449	6975	26477

Sources Abbot, account 568. B.P.P. 1808 (67), xi; 1828 (319), xviii; 1826-7 (186), xvi; 1839 (27), xlvi.

TABLE 4. EXPORTS OF CORN FROM THE SUSSEX PORTS TO FOREIGN COUNTRIES (INCLUDING IRELAND)

(A) Annual averages, all Ports	<i>Quarters</i>				Wheat & flour as % of all G.B. exports
	Wheat & flour	Barley	Malt		
1705-14	3210		349		2.8
1735-9	29343	2255		5031	8.8
1744-8	24265	1468		12627	8.1
1749-53	49194	2780		24591	8.3
1754-8	20512	470		17192	14.3
1759-63	17504	41		9769	4.9

(B) Distribution between Ports, 1744-63 *Percentages*

	Wheat & flour	Barley	Malt
Rye	1.4	0.1	0
Newhaven	9.8	6.8	1.0
Shoreham	21.3	32.8	16.5
Arundel	12.4	21.0	12.4
Chichester	55.1	39.3	70.1

Sources 1705-14: Andrews, table 25. 1735-9; P.R.O., T 64/277; *Gentleman's Magazine*, vol. 12 (1743), pp. 140, 472. 1744-63: B.L., Add. MS. 38387, ff. 32-51.

At the beginning of the century, when flour was starting to enter the coastal trade, wheat went overseas only as grain. But from Arundel in 1734-43 flour comprised 15% of corn exports (as against 21% in the coastal trade). From Chichester flour went overseas from 1719 and amounted to 32% of all wheat exports in 1731 and 95% in 1777-80.¹ As Table 4(A) shows,

¹ J. H. Andrews, *S.A.C.*, vol. 92 (1954), pp. 101-3. W.S.R.O., MF 36. Andrews, p. 199. Abbot, account 31.

barley was usually malted before export. Chichester's position as the leading Port for overseas exports was undoubted, though in the late 1730s Shoreham's share of the trade was greater than in the following decades and perhaps its relative decline was due to its harbour's deterioration.

As to the destination of these exports, Defoe enunciated the general principle:

'England and Scotland . . . do supply a great part of the trading countries . . . on the south and west shores of Europe with corn, whenever their crops fail, or that by scarcity, or war, or any other means, the price in those countries make it worth while to carry it to them. It is very seldom but in some parts or other the harvest fails . . . and in England lying open by sea to them all, it is very seldom but we have a good vend abroad.'

The trade of the Sussex Ports was with Holland, France, Spain and Portugal (the last two appearing in the first decade of the century), and to a lesser extent with Ireland.¹ For wheat, France was probably the main recipient in peacetime. In 1738 Arundel sent to Havre nine cargoes of 2,000q. of corn and flour and 4,200q. in 1739. In 1776, following a good harvest at home but a bad one in France, Chichester shipped to Havre some 480 tons of flour, more than any other English Port, and Arundel shipped 80 tons. In 1752 and 1753, more cargoes entered from Chichester than any other English Port (and likewise at Rouen in 1750), but there was no regular trade. Indeed up to 1814 corn seems to have been the sole item of legitimate trade between France and the west Sussex Ports. But following the bad harvest of 1789, the corn cargoes from East Anglia far exceeded those from Chichester.²

Foreign imports of oats have been mentioned above. No doubt cargoes of wheat and barley were imported from Ireland and the Continent at times of dearth, but when regular imports of foreign corn began is not clear. In 1789 and 1790 the Sussex Ports received ten and eight cargoes from Prussia which were probably of corn in those years of scarcity, and the records of Sound dues up to 1783 show that, after an intermission of some 40 years, vessels belonging to or departing from Sussex Ports again entered and cleared the Baltic, at an average of one a year from 1768. Wheat from the Baltic was certainly offered to and probably bought by Lewes merchants in 1820-21, and corn from there and from Rotterdam was regularly imported in the 1840s. In 1841-5, foreign (excluding Irish) imports averaged 4,720q., 60% of which was wheat, 24% oats and 14% barley; 52% passed through Newhaven and 24% through Shoreham.³

The growth of production ahead of home demand in the early and mid 18th century directed corn to overseas markets and, necessarily, through the Ports; when home demand caught up, the corn was not entirely redirected to coastwise shipping, but some travelled by road or inland navigation. The Wey and Arun Canal was opened in 1816 and though its traffic was never great it apparently conveyed wheat from the coastal plain to the mills at Guildford. In 1836, three mills to the north of Lewes were reported to send 2,620 tons of linseed oil and flour to London by land carriage which by then cost only about twice as much as sea transport and was safer and more reliable. But in the harbours, foreign imports to some extent replaced the lost exports.⁴

¹ Defoe, *Tradesman*, pp. 34-35. Andrews, p. 201. L. M. Cullen, *Anglo-Irish trade 1660-1800* (Manchester, 1968), p. 90.

² W.S.R.O., MF 36. P. Dardel, *Navires et marchandises dans les Ports de Rouen et du Havre au xviii^e siècle* (Paris, 1963), pp. 342, 576, 614-15.

³ Abbot, accounts 31, 569. P.R.O., Customs, 17/11, 12. N. E. Bang & K. Korst, *Tabeller over*

skibsfart og varetransport gennem Øresund 1661-1783 og gennem storebælt 1701-1748, vol. 1 (Copenhagen, 1930), tables A, E-E. B.P.P., 1821 (668), ix, p. 56; 1842 (167), xl, and subsequent annual returns.

⁴ B.P.P. (Lords), 1836 (195), xxxiv, Brighton Railway Bill minutes of evidence, pp. 782, 882, 977, 986, 988, 996.

THE TRADE IN TIMBER AND UNDERWOOD

The trade in timber through the Sussex Ports had two distinct branches: the coastal export of oak and other local timber, and of underwood, and the import of Scandinavian (and later Canadian) softwoods, either direct or via larger English ports.

The exports of timber in 1694-1716 were almost entirely concentrated at the Ports of the coastal plain, where the annual averages were: Shoreham 279 loads, Arundel 739 and Chichester 130 (a load of oak weighs about 1½ tons). That the Ports of the Weald, where the timber grew, did not dominate the trade was because much of the eastern Weald was more accessible to the Thameside dockyards by way of the River Medway than by coastal shipping, and because the search for shipbuilding timber was being pushed westwards and had reached Arundel's hinterland which was also supplying the new dockyard at Portsmouth. Much of the timber barged down the Adur must have been used in Shoreham's shipyards, so Arundel's leading position was further accentuated. The Navy was not the sole recipient: just over half of Shoreham's shipments went to London, 20% to Chatham and 14% to Portsmouth; Arundel sent 19% to London, 13% to Chatham, 42% to Portsmouth and 22% to Plymouth; Chichester's exports went half to London and 30% to Portsmouth.¹

After restocking at the end of the war with France, the naval yards stopped buying, but Arundel's total shipments were higher in the 1730s: 1,485 loads a year in 1734-9, of which 1,148 went to London. With the outbreak of the Spanish war in 1739, the Navy re-entered the market, and in 1740-3 shipments rose to 1,803 loads a year, with 825 to London, and 650 to Sheerness, Rochester, Chatham, Portsmouth and Plymouth. In most of these ten years, Arundel also sent London 'shoultrees', or spade handles, and bark; the latter occasionally went to Ireland.²

It was the Seven Years' War which is said to have finally decimated England's stock of naval timber, but the evidence for Sussex is not clear cut. On the one hand, Marshall and Young in 1791 and 1793 saw little naval timber still standing, and Young hinted that much oak was being felled young to meet the great demand for bark. On the other hand, reports on the Ports' trade in 1754 and 1759-63 mentioned timber but placed no special emphasis on it, and answers to the questions of the Board of Inland Revenue in 1792 did not suggest the degree of attrition found in other counties within living memory. Possibly the last fellings of large timber were following on the improvement of river navigation which began in 1785 on the Arun. Coastwise exports of timber and bark from (probably) Arundel averaged 954 loads and 91 tons a year in 1763-7, rose with short-term fluctuations to around 1,500 loads and 200 tons in the early 1780s, and from 1786 shot up to 3,929 loads and 529 tons a year in 1788-92.³

Whatever the truth, both local shipbuilding and timber exports continued in the 19th century. In the vicinity of Hastings there were several large sales in the second decade. Exports of plank averaged 265 loads a year in 1779-89, and of timber including plank 284 loads in 1806-10. They then shot up to 15,522 in 1811, ran at 1,372 loads for the next six years and fell back to 529

¹ Andrews, table 38, pp. 245-54.

² W.S.R.O., MF 36.

³ B.L., Add. MS. 9293, survey of trade of exports, 1759-63. *Travels . . . Poccocke*, pp. 99, 101, 103. *Journals of the House of Commons*, vol. 47 (1792), pp. 314-47. Young, 1st ed. (1793), pp. 84-85; 2nd ed. (1808), p. 422 (the 1st ed. was based on a tour in Sussex started in Aug. 1793: B.L. Add. MS. 35127, f. 289, Lord Sheffield to A. Young, 18 Aug. 1793). In a reference I owe to my wife, the

Rev. A. Young, 'A tour through Sussex 1793,' *Annals of Agriculture*, vol. 22 (1794), pp. 538, 565, gives the same quantities of timber exports for both Arundel and Chichester in 1770-92, with figures for 1763-9 only for the latter; the bark tonnages are different. In Young, 1st ed. (1793), p. 85, he follows the Chichester table but does not name the Port; that it was Arundel is more probable. W. Marshall, *The rural economy of the southern counties* (1798), vol. 1, p. 127.

loads in 1818-23. Newhaven shipped ten cargoes of timber in 1821 and 21 in 1826, about two thirds going to north east England, 19 cargoes a year in 1833-5 and 25 in 1841. Shoreham's oak exports amounted to 40 cargoes in 1835. All of Rye's exports in 1841 were return cargoes for colliers, and the 33 cargoes of timber went mainly to the north east and 22 cargoes of bark mainly to Leith.¹

Underwood products no doubt entered into the coasting trade but are not much in evidence, perhaps because of high local consumption as fuel in the 18th century and because overland carriage was, by the 1830s relatively important. From the centre of the county, bark, hoops, faggots and charcoal went by waggon to London and, in the case of faggots, to the military bakeries at Deptford. But hop poles, in so far as they were not locally grown, remained in the coasting trade: Rye received 17 cargoes from Chichester in 1841.²

Imports of softwood direct from Norway were made on a small scale before the 1680s when about 90 hundreds of deals (equivalent to about 350 tons) were landed annually in Sussex. In 1714-31, the quantity was a little over 100, which may have represented about five cargoes. No Port was clearly more important than the others in both periods. Direct importation seems to have declined in the middle decades of the century: Arundel received all its deals (about 700 a year) in 1734-43 from London, while Newhaven, Shoreham and Arundel between them had only five cargoes from Norway in the five years 1759-63. Imports may then have grown again from the 1770s, especially to Shoreham for building in Brighton. Table 5(A) gives some indication of the trade's scale around 1800.³

	ESTIMATED TONNAGE OF SHIPPING SPACE OCCUPIED BY ANNUAL FOREIGN IMPORT OF DEALS, MASTS AND UN-CUT TIMBER				NO. OF CARGOES OF TIMBER FROM FOREIGN AND COLONIAL COUNTRIES			
	1790-2	1799-1801	1802-4	1805-7	1830	1835	1839	1845
Rye	408	848	1346	1479	0	10	1	7
Newhaven	1255	627	1469	1415	3	14	7	8
Shoreham	1338	743	1681	2586	17	23	14	22
Arundel	284	37	517	269	5	3	3	5
Chichester	945	726	617	442	2	1	2	1
Total	4230	2981	5684	6191	27	51	27	43

Table 5(A): B.P.P., 1802-3 (138), viii; 1808 (333), xi, converted by the method in Davis, p. 182, except that no allowance is made for other classifications of timber, which may mean that the figures are close to the actual weight of timber landed; all masts are assumed to have been small.

Table 5(B): C.L., Customs 32/106, 109, 112, 114.

The numbers of cargoes from Norway and Denmark in 1790 were, respectively, 3, 6, 7, 1 and 3, in vessels averaging 114 tons. The Ports receiving the greatest quantities were those serving the growing towns. Some timber continued to come via London and, for the western Ports a little later, Southampton. The timber for the new County Hall at Lewes, for instance, was selected on Thameside by the Clerk of the Peace in 1808, shipped to Newhaven, made up in rafts and poled up the Ouse. Indeed around 1820 Lewes merchants were reverting to coast-wise importation, and in 1821 Newhaven received 11 cargoes of timber from London, as against only one each from Memel, Christiana and Quebec (the last being a sign of the beginning of

¹ *The Hastings guide*, 1st ed. (1794), p. 64. W. G. Moss, *The history and antiquities of the town and port of Hastings* (1824), p. 145. P.R.O., RAIL 853/12, 13. C.L., Customs 32/109.

² *Sussex Advertiser* (hereafter abbreviated to S.A.), 1841. A. Young, 2nd ed. (1808), p. 432. B.P.P. (Lords), 1836 (195), xxxiv, pp. 793, 803, 927, 1056-7. S.A., 1841.

³ Andrews, table 55. W.S.R.O., MF 36. B.L., Add. MS. 9293.

North American imports). But Table 5(B) shows substantial, if variable, levels of imports in 1830-45. In 1835, Newhaven and Shoreham's imports occupied about 2,850 and 4,500 tons of shipping space.¹

THE COAL TRADE

Even before 1700, coal was the largest single import of the Sussex Ports, a reflection, though, more of the low level of imports than of an extensive use of coal, for no English county was further by sea from the coalfields. For Sussex around 1700, it was not true that coal 'had become almost the universal fuel for the innumerable lime kilns which served the husbandman in the country and the builder in the towns.' Lime was extensively used as a manure in the Weald from at least the early 17th century, but agricultural writers at the end of the 18th century still found most kilns fired with wood or furze, even including some of the large commercial works. Similarly, it is improbable that by then 'most English brickmaking . . . was undertaken with the help of a coal or cinder fire': even up to 1968 a wood-fired kiln was operated commercially in the Weald, and brick was a popular building material in the region from the late 16th century. If coal was carried far inland to heat the houses of the great, woodland growth was the fuel of the common people in the Weald, so much so that a traveller across the Kent/Sussex border in 1788 remarked that 'in this part of the county, they use a wood kitchen fire, as most of the Kingdom did formerly when wood was plenty; and a common cook here wou'd not know how to manage a coal fire.'²

The marginal nature of coal consumption around 1700 is suggested by the marked effect of war and increased freight costs. The total imports (all from the north-east) on the Sussex coastline averaged rather over 4,000 tons a year in 1689-97 and 1,000 in the war years 1702-13, but recovered to 3,700 in the following five years. Later wars, however, did not see such large cut-backs in supplies. Imports rose to some 8,000 tons in the course of the 1720s, then levelled off in the next two decades, but seem to have risen to about 15,000 tons during the Seven Years' War.³ In 1780-2, imports were over 22,000 tons a year, and after the end of the war with France rose rapidly to 40,000 tons in 1788.

Thus in the course of 70 years there was a ten fold increase, with the fastest growth in the last decade. Improvements in inland navigation lay in the future, and the only industrial application of coal which may have appeared in the period was in malting: smokeless anthracite from Pembrokeshire was first imported to Chichester in 1716 and was being received at Arundel in the 1730s. Domestic consumption was probably mainly responsible for the increase. More coal may have been carried further inland: Henry Champion used some 38 tons a year during the 1750s at his house, Danny Park, which was nine miles from navigable water at Bramber, and by 1766 the living rooms and kitchen at Sheffield Park (11 miles from Lewes) had been

¹ P.R.O., Customs 17/12. A. T. Patterson, *A history of Southampton*, vol. 1 (Southampton, 1966), p. 125. R. F. Dell, 'The building of the County Hall, Lewes, 1808-12,' *S.A.C.*, vol. 100 (1962), pp. 6, 8. Horsfield, vol. 1 (1824), p. 338. B.P.P. (Lords), 1836 (195), xxxiv, p. 831.

² J. U. Nef, *The rise of the British coal industry*, vol. 1 (1932), map facing p. 19; pp. 205, 218. A. Young, 'A tour in Sussex,' *Annals of Agriculture*, vol. 11 (1789), pp. 235, 247. Marshall, vol. 2, p. 143. K. C. Leslie, 'Ashburnham estate brickworks 1840-

1968,' *Sussex Industrial History*, no. 1 (1970), p. 2. M. Holt, 'Early brickmaking in Sussex,' *S.N.Q.*, vol. 17 (1968-71), pp. 164-5, 207. J. L. M. Gulley, 'The great rebuilding in the Weald,' *Gwerin*, vol. 3 (1961), pp. 10-11. *The Torrington diaries*, ed. by C. B. Andrews, vol. 1 (1934), p. 352.

³ Most tonnages are estimated from Customs dues collected. Andrews, tables 45, 46; p. 293. B.L., Add. MS. 9293, assuming the figures are of annual imports in Winchester chaldrons.

equipped with coal grates. In 1793 Young found some labouring families consuming around 10 bushels a year. So far as the distribution of the imports between the Ports indicate, no part of the county clearly increased its consumption faster than other parts: between 1714-18 and 1788 Rye increased its share, but mainly at the expense of its neighbour Newhaven.¹

TABLE 6 ANNUAL IMPORTS OF COAL TO SUSSEX PORTS

Tons	1714-18	1750	1780	1788	1807	1820	1829
Rye	439	1489	4404	9407	22134	34521	32616
Newhaven	834	2059	4796	6592	16718	27567	27280
Shoreham	925	2457	3873	9512	22100	43341	59981
Arundel	490	1320	2579	3821	13425	20332	21826
Chichester	1037	2223	5632	9207	12141	*21537	*22872
Total	3725	9548	21284	40894	86518	147298	164575

*includes Emsworth

Sources *Calendar of Treasury Books* 1714, pt. 1, pp. ccclxxvi-xxxi; Andrews, table 46; Abbot, account 139; *Universal British Directory*, vol. 1 (1790), p. xxviii; B.P.P., 1808 (69), xi; 1830 (9), viii; (Lords), 1830 (118), cclxxvii, p. 262.

In the next 40 years, the rate of growth was nearly as great as that of the 1780s, with a four-fold increase to 165,000 tons in 1829 (Table 6). Shoreham saw the greatest increase, nearing 60,000 tons in 1829. The slowest growth was at Chichester, in part because the Portsmouth & Arundel Canal did not extend its hinterland for coal. Rye and Arundel expanded their imports roughly in line with each other, Newhaven rather more; the hinterlands of the last two were much extended by inland navigation. Of Rye's total a fairly consistent one-third was landed on the beach at Hastings; probably significant quantities were now landed at Eastbourne.²

The decades around 1800 saw the introduction of coal to industrial and commercial activities which were to be large consumers. Coal replaced furze in limeburning, and the navigations allowed not only coal to be carried to the chalkpits, but also the lime to be more widely distributed and so consumed in greater quantity. Referring to the Rother and Arun navigations, Young reported in 1808 'that land which is at present used in cultivating furze, can in future be sown with grain, according to the distinction which nature has drawn, that the bowels of the earth should warm us, and the surface feed us.' The tripling of coal imports at Newhaven between 1794 and 1805 was attributed principally to the general use of lime as manure. But the substitution of coal in other trades was evident during a serious shortage of underwood in 1792. The brickmakers on the Dicker resolved to use coal in future, and those in the neighbourhood of Lewes who did likewise found a saving of one third in the expense of burning and had only half the trouble in controlling the kiln's heat. Mr. Figg, baker of Lewes, was induced to heat his oven with coal, 'by which he will experience a very considerable saving and perform his business equally well'; if other bakers followed him, faggots would be saved, their price reduced and the poor relieved. The infant gas industry began to make calls on coal supplies from 1818 (Brighton) and 1822 (Lewes). The steam engine made its appearance in Sussex (a brewery in Brighton had one installed in 1807), and steam boats were running across the Channel from Brighton from 1822.³

¹ Nef, vol. 1, p. 215. W.S.R.O., MF 36. E.S.R.O., Danny MS. 2201, ff. 69, 71-72. F. W. Steer, 'A Sussex mansion in the eighteenth century,' *S.A.C.*, vol. 94 (1956), pp. 19-31. Young, 1st ed. (1793), p. 92.

² Moss, pp. 144-5. C.L. Customs 32/106, 107.

³ Young, 2nd ed. (1808), p. 423. *S.W.A.*, 3 Mar. 1806, 21 May 1792, 7 Jan. 1793, 23 Jan. 1792, 14 Mar. 1807.

Though there is much less statistical information for the period 1830-66 than for the preceding and succeeding years, a description of coal distribution immediately before the onset of railway competition can be attempted.¹

The scale of imports at Eastbourne, Hastings and Rye is indicated by the numbers of cargoes received in 1830 (54, 116 and 121 respectively), when the total for the Port was about 33,000 tons. Coal from Rye went up the Rother to Bodiam Bridge and by land at least as far as Robertsbridge; a special local use was of Welsh coal for drying hops. Hastings' share of the Port's total in 1830 was 12,000 tons; seven years later it was up to 17,600, in 169 cargoes. Of that, though, 2,400 tons were landed just west of the town, perhaps to avoid the local dues, 2,200 tons in 17 cargoes at St. Leonards and 1,400 tons in 18 cargoes at Bexhill. Some coal also passed through the town to outlying areas: in 1852, when the railway brought little or no coal, about 19,000 tons came by sea and a third went outside the town. Eastbourne may have supplied inland to Hailsham. In 1836, Newhaven imported 36,000 tons; most was barged to Lewes. Places as far away as Cuckfield to the north and Hawkhurst to the north east were said to be supplied by road, but much coal must have passed onto the Upper Ouse Navigation for Lindfield and the intervening district, and (by road from the upper reaches) occasionally Reigate. Reigate lay at the limit of the London market and there coal was at its dearest; hence, a dealer said, wood was used in many instances. The occasional collier may have beached at Seaford (there are references for 1793 and 1848). The Cuckmere valley at least as far as Alfriston got coal by barge from Newhaven.

Brighton was said in 1824 to receive 'very considerable supplies' from Lewes, but this traffic is unlikely to have survived the improvements to Shoreham harbour and to the coast road, and its demise may account for the temporary decline in Newhaven's imports in 1827-9. The Shoreham improvements ensured the transfer of the bulk of Brighton's beach trade to the harbour by 1830. Of a little over 60,000 tons landed in the Port each year in the mid 1830s, some 4,000 seem to have passed over the beach at Worthing, but the balance entered the harbour unless there was direct importation to the gasworks at Black Rock. From Shoreham, 45,000 or so tons went to Brighton, and some 10,000 tons up the Adur Valley, to Steyning, Bramber and Horsham (the last consuming 5-6,000 tons). Arundel's hinterland was wider still. Of, say, 30,000 tons entering Littlehampton (where at least 80% was discharged) in the early 1840s, at least half was transferred to barges: some 4,000 tons passed through the Wey & Arun Canal to the Wey Navigation, for Guildford and Godalming, perhaps a similar amount to places near the Wey & Arun, while Midhurst, Petworth and other settlements near the Rother Navigation took some 6,000 tons. The only colliers to pass up river were likely to be those with cargoes for Arundel itself or for land carriage from there.

The Port of Chichester's imports were probably landed at more points than in the other ports. For the supply of Chichester itself, the 5,000 tons landed annually at Dell Quay, and the same amount at the Canal Basin, in 1848-50 may represent a peak. Most of the Selsey peninsula was probably supplied through Itchenor and Sidlesham. Town dues were paid on some

¹ Particular use is made of: B.P.P., 1847-8 (728), li; 1851 (689), liii; 1854 (11), lxxv; (Lords), 1836 (195), xxxiv; C.L., Customs 32. Also: Sussex Archaeological Trust, CO/c225, Rye & Robertsbridge canal prospectus; B.P.P., 1837 (238), xxviii; (Lords), 1854, xxxiii, p. 28; Hastings Museum (Muniments Room), H. 149; G. F. Chambers, *East Bourne*

memoirs (Eastbourne, 1910), p. 51, plate 50; P.R.O., RAIL 853/12, 13; E.S.R.O., Langridge MS. 14; LH 4, 30 May 1848; LH 17, 5 June 1848; Horsfield, vol. 1, p. 338; W.S.R.O., IN/Arun/F4/1, 5; P. A. L. Vine, *London's lost route to the sea* (Dawlish, 1965), p. 152.

1,600 tons a year at Bognor in the later 1840s, which were landed on the beach. Half a dozen other places received the occasional cargo, but the most important single landing place was Emsworth (around 10,000 tons), with a relatively wide landward distribution.

OTHER EXPORTS

Corn and timber in their various forms comprised the great majority of the outward cargoes of the Sussex Ports. But there were exports in other commodities for which Sussex was as famed.

One of these was wool. By the 1720s, smuggling of it from the vicinity of Rye to France was in decline though it continued until the 1790s.¹ Probably more significant in volume was the legal coastwise trade. This was mainly from Rye and after considerable expansion in the previous 60 years averaged 108 tons a year in 1714-19 and 397 tons in 1735-43. Except for a small trade with Southampton built up in the 18th century, Rye's wool went about equally to London, probably for onward carriage to the north, and to Exeter for the serge industry. Exeter's share had increased since the prohibition of imports from Ireland in 1693 and reached 261 tons in 1743. But in the second half of the century less was going to Exeter which drew increasing quantities from Dover, and more, at least in 1758-64, was going to London. Though Exeter still received 128 tons in 1784, the traffic did not survive the collapse of the overseas serge trade from 1797. A cargo of 14 tons to Hull in 1775 does not seem to have been part of a regular trade.²

Information from the early 19th century is lacking though continuance of shipments can be assumed. A new branch of the trade developed by about 1832, to France and Belgium, usually with at least 30 cargoes a year. By 1840 it was concentrated at Nieuport. Newspaper reports of 1840-1 refer to no other shipments in those years, but wool may have continued to go to London under the guise of general cargo.³

The wool shipped through Rye was the longer clip grown on Romney Marsh and so mainly in the county of Kent. The wool more associated with Sussex was the highly esteemed short-staple fleece from the South Downs which made Sussex one of the leading wool producing counties by 1700. In 1792 some quarter of a million sheep and 80,000 lambs were kept on the Downs within ten miles of the coast. Although the fleeces were not processed locally, negligible quantities passed through the Ports until a trade developed at Chichester in the 1730s where exports averaged 37 tons in 1735-43. By the 1780s production in the Chichester area had fallen to 60% of the level 70 years before so probably the exports were not maintained. Although Lewes was the market centre for the area where the greatest results were achieved in improving the quality and quantity of wool produced and although it had ready access to Newhaven most of the clip was evidently carried overland. Eight or nine cargoes cleared Newhaven coastwise annually in 1833-5 and in 1841 Hull was sent four cargoes. The fine quality wool was one of those commodities which, with its fairly high value to bulk and liability to damage from damp, and the relative distances by land and sea from west of Beachy Head, could bear the higher transport costs. 'Large quantities' went by road from Chichester in 1784 to London and onwards to

¹ P. J. Bowden, *The wool trade in Tudor and Stuart England* (1962), pp. 194-202, 212-13. Defoe, *Tour*, p. 51. Abbot, reports 82-85, 87, account 456.

² Andrews, pp. 209-10, table 28. Clark, pp. 139, 215. B.L., Add. MS. 9293. W. G. Hoskins, *Industry, trade and people in Exeter 1688-1800*

(Manchester, 1935), pp. 35, 170-5. G. Jackson, *Hull in the eighteenth century* (1972), pp. 364-5.

³ J. D. Parry, *An historical and descriptive account of the coast of Sussex* (1833), p. 297. C.L., Customs 32. S.A., 1840-1.

Yorkshire, and in 1812 a Chichester carrier's business with three wagons was offered for sale with the recommendation that the considerable quantities of wool sent to London gave a good uploading.¹

Hops were again mainly an export through the Port of Rye and production further west in the county may have relied more on land carriage. On an average in the second half of the 17th century Rye shipped 18 tons a year and the other Ports six tons. Two thirds of the former went to London and a third to Devon where most of the latter went. Later information on the trade in hops is very limited, but it was probably further concentrated at Rye and Hastings with large increases in volume by the 1830s. Hastings's exports averaged 24 tons in 1790-4 and 231 tons in 1833-7, and Rye in 1841 dispatched 36 cargoes, all to London and all in the seven weeks between 21 September and 6 November.²

Another export principally of the Port of Rye was cured herrings which were almost the only fish distributed by sea. The surviving Port Books show shipments from Rye and Hastings, mainly to London, up to 1714 (59 and 56 barrels of 1,000 fish a year on average for the previous 50 years), and from Hastings to western ports, particularly Portsmouth and Poole, at later dates up to 1750 (e.g., 250 barrels a year to Portsmouth in 1718-20, and 409 to Poole in 1726-32). Hastings and Rye also had foreign exports which averaged 68 and 11 barrels in 1668-1728 and, for the entire Port, nil in 1762-70 but 131 barrels a year (all red herrings) in 1771-96. The quantities in the Brighton and Shoreham Port Books are minute, and though it was said that the greater part of the catch was cured and mostly sent to foreign markets, exports from the Port of Shoreham were nil in 1762-70 and 1787-96 and averaged only seven barrels a year (all red) in the intervening period. Hastings's total production for market was given in 1794 as 1,500 barrels which may well have included fish caught by Brighton boats but landed at Hastings.³ But in the war years that followed privateers in the eastern Channel and the contraction of foreign markets afflicted the fishery, and certainly there was decline in the decade following 1815. A Hastings shipment of 900 barrels to Venice in 1816 appears to have been an isolated attempt to revive foreign exports, and the trade in herrings at Brighton was reported 'very much declined' in 1818. On the south coast in 1821 fishermen at only Dover and Portsmouth received the Government's herring bounty.⁴

The bulk of products of the Wealden ironworks ensured that carriage by water was preferred, but inland navigation to the Sussex harbours was improved too late to be used by them before the industry's final extinction in the early 19th century. Hence ironworks in west Sussex, such as Warren and Gravetye in 1761, used land carriage, and most seaborne iron passed through the east Sussex ports. In the last Port Books, 1702-13, Rye shipped 210 tons a year, Hastings 3 tons and Newhaven 88 tons: less than half the later 17th century levels. Almost all the iron went to London, the guns to the Tower for proving. The Ports of both Rye and Newhaven were still shipping ordnance in the years 1746-64. Hastings exported 278 tons a year in 1779-83 but only 84 tons in the next five years and almost none in 1788-9. Some small shipments

¹ Bowden, pp. 34-6, 40, 51. Young, 1st ed. (1793), p. 57; 2nd ed. (1808), pp. 301-2, 311, 351, 360, 375. Andrews, table 28. C.L., Customs 32/109. *The Chichester guide* (Chichester, ?1784), p. 57. *S.W.A.*, 6 Jan. 1812.

² Andrews, p. 215, table 29. J. M. Baines, *Historic Hastings*, 2nd ed. (Hastings, 1963), p. 245. *S.A.*, 1841.

³ Andrews, pp. 232-4, table 35. Abbot, account 921(1). A. Relhan, *A short history of Brighthelmston* (1761), p. 17. *Hastings guide*, p. 61.

⁴ *S.W.A.*, 8 Jan. 1816. C. Wright, *The Brighton ambulator* (1818), p. 97. *B.P.P.*, 1822 (39), viii.

of guns and shot in 1809 and 1812-13 from Newhaven to Portsmouth may have been the end of the traffic.¹

Finally we may note two items extracted from the beach and cliffs, neither of which was recorded in customs statistics but both of which were probably greater in volume than any other exports mentioned in this section. First, from at least 1768 chalk was brought from Beachy Head to lime kilns at Hastings. In 1794 the amount burnt was given as 120,000 bushels, which would have needed some 750 tons of coal. The kilns stopped working in 1816. Chalk was also supplied to kilns at Rye and Bexhill, and the total extracted was given in 1793 as about 350,000 bushels or 633 sloop-loads with 14 sloops of 30 to 40 tons employed for seven or eight months of the year. Lime from the Dallington kilns of the Earl of Ashburnham was at the same date stated to be exported to London via Hastings.²

Secondly, a large-scale trade in 'boulders,' or flints picked off the beach, dated from the early 19th century at Newhaven, whence the boulders were sent principally to Liverpool for use, after grinding, in the potteries of Staffordshire and the glassworks of Runcorn. The traffic was not evident in 1811, but in 1819 Newhaven shipped nearly 4,400 tons and a thousand more in 1823; cargoes averaged around 80 tons and often went in vessels which had entered in ballast from London where they had perhaps discharged outward cargoes of salt from Liverpool. In 1826, 13 out of 50 cargoes were for Newcastle or Sunderland in returning colliers, but that was an uncommonly high proportion. The trade was still at that level in 1841. From at least 1852 Rye shipped flints which in 1863 were named as a principal export.³

OTHER IMPORTS

Second to coal, the main import, came a variety of animal products. That the trade in these grew to any size only after about 1770 suggests that previously local demand was met by the predominantly pastoral economy of the Weald but that the extension of corn production (and rising demand) opened the way to imports.

First, there was dairy produce. At least as early as 1760, Lewes merchants offered Warwickshire and Cheshire cheese and York butter for sale. Derbyshire cheese appears in 1774. Some of these products may have been redistributed from London: London merchants in 1751 claimed to supply part of Sussex by land with cheese and butter from counties north of the Thames. But 60 tons of cheese did come to Newhaven by sea from Hull in 1775. Dutch cheese and butter were on offer in 1769 and were directly imported at least from 1790. The quantities received in 1820 were described as large, and in 1826 amounted to eight cargoes, a level apparently maintained up to 1841. Ireland was the third direction from which butter came, being on sale in Lewes in 1770, along with Irish bacon. Such imports would not have predated the suspension of the Cattle Acts in 1758. The existence of a local newspaper carrying advertisements allows

¹ Andrews, tables 39, 40. W. P. Breach, 'Extracts relative to Sussex ordnance from a carrier's account book, 1761,' *S.A.C.*, vol. 46 (1903), p. 53. *Travels . . . Poccocke*, p. 99. B.L., Add. MS. 9293. M. C. L. Salt, 'The Fullers of Brightling Park, ii,' *S.A.C.*, vol. 106 (1968), pp. 80, 87. *Hastings guide*, p. 64. C.L., Customs 56/19.

² Baines, p. 246. *Hastings guide*, p. 65. [M. M. Howard], *Hastings past and present* (Hastings,

1855), p. 36. T. Pennant, *Journey from London to the Isle of Wight*, vol. 2 (1801), p. 35. Young, 1st ed. (1793), p. 31.

³ B.P.P., 1824 (364), xviii. Horsfield, vol. 1, p. 338. P.R.O., RAIL 853/12, 13. *S.A.*, 1841. E.S.R.O., S/RH/SO4, 20 Jan. 1853. J. W. King, *The Channel pilot*, vol. 1, 2nd ed. (1863), p. 220. Jackson, pp. 372-3, records a cargo of 25 tons from Newhaven to Hull in 1775.

that much to be said in respect of Lewes. Unless Brighton was supplied through Newhaven, we can expect that Shoreham was building up a similar trade, and likewise Chichester.¹

Nevertheless the volume of such Irish imports cannot have been large in that the total Irish traffic recorded in Table 7 included that in oats (see Table 3 above).

TABLE 7 VESSELS ENTERING SUSSEX PORTS WITH CARGOES FROM IRISH PORTS

	1790		1811		1823	
	number	tonnage	number	tonnage	number	tonnage
Rye	—	—	—	—	10	509
Newhaven	9	678	11	693	24	1437
Shoreham	4	308	12	537	27	1375
Arundel	7	328	—	—	6	379
Chichester	12	850	18	1217	8	403
Total	32	2144	41	2447	75	4103

Sources P.R.O., Customs 17/12. B.P.P., 1824 (364), xviii.

Thirty one and 56 of the cargoes in 1811 and 1823 came from Waterford.

At the end of our period the volume of cheese imports from across the Channel (probably in the main from Holland) is known. Possibly trade on the scale indicated in Table 8 dated back to about 1830 at Rye and Newhaven, but to later elsewhere. Thanks to the railway, it was short lived: imports to Chichester ended in 1845 and fell sharply at Rye (which had a twice monthly steamer service with Rotterdam in 1839 but no longer in 1841).²

TABLE 8 IMPORTS OF CHEESE AT THE SUSSEX PORTS FROM EUROPE

Tons	1835	1841	1846	1851
Rye	?	486	322	74
Newhaven	319	473	410	292
Shoreham	179	263	322	244
Arundel	?	—	—	—
Chichester	?	41	—	—
Total		1263	1054	610

Sources B.P.P. (Lords), 1836 (195), xxxiv, p. 829; 1842 (184), xxxix; 1847 (414), lix; 1852 (412), li.

Another source of fresh provisions was France, particularly from 1814 when small boats appeared at Hastings, Newhaven, Brighton and Shoreham with a great variety of produce: poultry, eggs, butter, fruit, walnuts, etc. As the trade became established, the main items emerged as eggs and fruit (particularly apples). Newhaven received 42 cargoes, all from Fécamp, in 1821, but none in 1826, probably having lost the trade to Shoreham where vessels of 20 to 39 tons brought 104 cargoes in 1835 including 6 million eggs (about 200 tons) and 15,667 packages of fruit (of which at least 80% went to London). Rye Harbour received around 18 similar cargoes a year in the 1830s.³

There was also some traffic in livestock. In 1821, several cargoes of sheep were brought from Totnes to Shoreham, for Brighton market, but more often the traffic was cross-Channel. Two Dutch vessels were at Rye selling cattle and hogs in 1814, while cows from the Channel Islands were on sale in Lewes in 1822 and 1840. Rye also imported animal feedstuffs besides oats; oil cake, either ready crushed or as seed for local processing, was a regular import from the South Baltic and France in the 1830s, along with woollen rags (particularly from Hamburg)

¹ *S.W.A.*, 24 Nov. 1760, 28 Nov. 1774, 29 Aug. 1806, 27 Mar. 1769, 29 Oct. 1770. *Journals of the House of Commons*, vol. 26 (1751-4), pp. 273-4. Jackson, pp. 376-7. E.S.R.O., Langridge MSS. 14, 42. *S.A.*, 1840-1.

² C.L., Customs 32/106. *Robson's commercial directory . . . for 1839*, Sussex section, p. 101.

³ *S.W.A.*, 18 Apr.-28 Nov. 1814. P.R.O., RAIL 853/12, 13. B.P.P., (Lords), 1836 (195), xxxiv, Opp. 811, 829-30. C.L., Customs, 32.

which manured the hopfields and also came from London as a return load in hop wagons. The volume of these two imports was given as 15,000 tons in 1834, perhaps in error for 1,500 tons, as the number of cargoes was 18 in 1833, rising to 38 in 1844. One or two cargoes of cake and seed came to Newhaven in the 1830s, five in 1844 and seven to Shoreham in the same year.¹

The most important mineral import after coal was salt. Up to 1688 over half came from France, Spain and Portugal, but thereafter reliance was entirely on supplies from north-east England and Hampshire, with the latter meeting all Shoreham, Arundel and Chichester's needs in 1702-13 (with annual averages of 75, 71 and 118 tons). Newhaven drew its 18 tons from the north-east while Rye had no imports and presumably used salt from local evaporation pans. From the early 19th century all these sources of supply were being supplanted by Cheshire's brine and rock salt, shipped via Liverpool. At Newhaven the change began between 1821 and 1826: in the former year, Lymington sent ten cargoes in the *Happy Return*, 30 tons, and in the latter year five, but four further cargoes came from Liverpool.²

The absence of quarryable hard stone in coastal Sussex meant that there were steady imports of building stone. Littlehampton received stone from Portland and paving stones from Poole in the 1730s. Newhaven in the 1820s drew supplies also from the south-west—Paignton, Plymouth and Falmouth—and received slates from Bangor. In the decade 1811-20 annual imports of slates in the county were valued at about £1,700, with 38% going to Shoreham, 36% to Newhaven, 17% to Arundel, 6% to Chichester and 2% to Rye, a distribution reflecting both the demand of building in Brighton and the availability of clay for tiles in the Weald. In the year 1829-30, the numbers of slate cargoes landed in the Ports were, in the same order, 6, 3, 5, 1 and 2.³

Manufactured goods were imported throughout the period but they are difficult to identify as to type and quantity. Many items arriving in small parcels were concealed under the description 'general cargo' and came from or via London (see below). But there is evidence of a small but regular trade at Newhaven in metal goods from Hull, from at least the late 1750s; in 1775 the rather larger than usual number of six cargoes carried not only re-exported Baltic goods, such as Russian and Swedish iron, pitch and tar, but also bundles and parcels of ironmongery, bags of nails, iron pots, bundles of scythes, shovels and spades, and boxes of tin plates. By 1821 Newhaven also obtained iron from south Wales. Bottles came from Newcastle and Sunderland to Littlehampton in the 1730s and '40s.⁴

Manufactured goods also came from the opposite side of the Channel, particularly in conjunction with the passenger traffic which will be the subject of a separate article and is therefore only briefly mentioned here. By 1700 the earlier regular service through Rye to France had probably ceased and none operated from the Sussex coast until 1763, and then between Brighton and Dieppe. That route was served during the summer months in peace time by a rising number of sailing boats, reaching 13 in 1820. Some were based at Newhaven, the majority at Shoreham. Two years later steamers started quickly to displace the sailing boats. In 1825 the General Steam Navigation Co. acquired an interest in the service and soon had a monopoly, at first with its two boats based at Newhaven (where in 1828 the Customs officers reported a new trade in

¹ *S.W.A.*, 26 Sept. 1814, 30 Aug., 17 Sept., 5 Oct. 1821, 11 Feb. 1822. *S.A.*, 1840, espec. 5 May. Sussex Archaeological Trust, CO/c225. B.P.P. (Lords), 1836 (195), xxxiv, p. 996. C.L., Customs 32.

² Andrews, tables 50-52. P.R.O., RAIL 853/12, 13.

³ W.S.R.O., MF 36. P.R.O., RAIL 853/12, 13. B.P.P., 1822 (161), xxi; 1830-1 (354), x.

⁴ Jackson, pp. 348, 376-99. P.R.O., RAIL 853/12, 13. W.S.R.O., MF 36.

'fancy goods' from France) but after five years at Shoreham where a special landing stage was constructed. From 1823 passengers also landed and embarked at Brighton's Chain Pier.¹ Attempts to start services from Rye, usually to Boulogne, are evident in 1814, 1818, 1823 and 1838.²

The Newhaven Customs officers in 1820 were convinced that smuggling and not passengers were the main support of the cross-Channel boats. Indeed it was estimated that in (probably) 1780-2, 350,000 gallons of spirits and 1,000 tons of tea were annually smuggled from the Continent to the Sussex coast. The actual quantities may have been about double, giving a total of 5,000 tons when illicit trade was flourishing, perhaps greater than ever before but not as extensively as after 1793. Though the tonnage probably exceeded that of all goods legally imported from foreign countries, it was small by comparison with the coastal trade, the goods were not such as otherwise would have been imported through Sussex, the vessels operated on short routes with a rapid turnaround, and generally avoided the landing places of legal trade. Probably smuggling was on the decline from 1817 when the Coastal Blockade was instituted.³

Apart from the trade with Scandinavia and the Baltic there was some overseas contact beyond the English Channel. A few cargoes of corn went to Portugal and the adjacent coast of Spain and less frequently still, into the Mediterranean. From the Peninsula came wine. Small importations around 1760 are recorded in all five ports and may well have begun in the previous thirty or so years, prior to which all wine had been received via London. The introduction of the bonding system in the second decade of the 19th century encouraged the traffic to provincial ports, and Shoreham became the main centre on the Sussex coast.⁴

Possibly more extensive overseas links lay behind the sparse references to cargoes of corn outwards and wine inwards: return cargoes may have been carried to London. Kept no doubt for its description of the Portuguese earthquakes of the previous month, a letter of December 1755 from Thomas Bean, on board the brig *Bean Blossome* at Faro, to Jarvis & Carden, its Lewes owners, shows that Bean had at some stage called at Madeira and hoped to leave Faro soon with a cargo of cork, oranges and lemons, and to find a market for a small quantity of Madeira wine on his way up the Channel. There is also evidence of trading ventures further afield: in the same year of 1755, subscriptions were invited for shares in a capital of £5,000 to fit out a vessel from Lewes. At least two cargoes were sent in the next two years to Barbados, in the *Lewes* and the *Warren*, which may have carried corn from England and wine from Madeira and returned with sugar, rum and, again, Madeira wine. An advertisement of 1772 offering Jamaica rum made by the seller's son suggests that Lewes then received West Indian cargoes direct. And Young noted a kiln constructed near Petworth, probably in the early 1790s, for making bricks for the West Indies.⁵

¹ Dardel, pp. 344-5, *S.W.A.*, 1764-92. B.L., Add. MS. 33658, journal of Rev. J. Skinner, 7, 19 Feb. 1821. *Brighton Gazette*, 23 May 1822. L. C. Cornford, *A century of sea-trading 1824-1924* (1924), pp. 7, 27. C.L., Customs 32/104. W.S.R.O., SH 7/7/195.

² *S.W.A.*, 18 Apr., 16 May 1814. H. W. Hart, 'Two early cross-channel passenger services,' *J. Railway & Canal Hist. Soc.*, vol. 11 (1965), pp. 3-4. Extracts from *Lloyd's List* kindly lent by David Robinson, Colchester.

³ C.L., Customs 56/1, 23 Nov. 1820. A. L. Cross, *Eighteenth century documents relating to the royal forests, sheriffs and smuggling* (Ann Arbor, 1928), pp. 227, 241. W. A. Cole, 'Trends in eighteenth century smuggling,' *Econ. Hist. Rev.*, 2nd ser., vol. 10 (1957-8), p. 405.

⁴ B.L., Add. MS. 9293. *Brighton Gazette*, 1 Mar., 27 Sept. 1821. H. E. S. Fisher, *The Portugal trade. A study of Anglo-Portuguese trade 1700-1770* (1971), p. 77.

⁵ Sussex Archaeological Trust, DM 281. E.S.R.O., Shiffner MSS. 2721-6. *S.W.A.*, 24 Feb., 6 July 1772. Young, 2nd ed. (1808), p. 436.

THE COASTING TRADE WITH LONDON

Though it was part of many of the commodity trades described above, the traffic to and from London was so extensive and so regular that it deserves separate treatment. By early in the 18th century there was, in all probability, a couple of ships owned in each Port which were employed almost solely in sailing between one or two points on the Sussex coast, and London. Thus at Arundel in 1739, five Arundel vessels carried all the 20 cargoes received from London, the majority coming in the *Arundel* (24 tons, 6 cargoes) and the *Providence* (16 tons, 7 cargoes) which traded to no other ports, while the *Thomas and Elizabeth* (26 tons, 5 cargoes) made only one other voyage, to Newcastle. The outward cargoes were more numerous, 49, so more vessels were involved, but the same three carried 22 of them; a further 23 went in five other Arundel vessels, nine of them in the *Edward and Mary* (40 tons) which was presumably employed in bringing coal to somewhere else locally, as it never entered Arundel with cargo. The imports were almost exclusively groceries (some 200 tons) and timber (say 20 tons), and so largely foreign produce being distributed from London: groceries included sugar, wine, raisins, tea, coffee, etc., and the timber was deals and spars from Scandinavia. Thus London's dominance in the foreign import trade was underlined, a dominance which was only slightly weakened as the century proceeded.

The main commodity sent from Arundel to London was timber (principally oak), followed by wheat and flour, and then by lesser quantities of bark, bran and a host of other things in small lots: some raw materials (for example, ochre, horsehair), others manufactured (soap, beer, and spade handles among them).¹

The trade in the other Ports was broadly similar, though (as has been seen above) the relative importance of corn and timber as exports varied, and other commodities made an appearance such as wool, hops and iron from Rye. If the increase from about five inward cargoes a year at Arundel in the second half of the 17th century, to 20 in the 1730s, was typical, then the trade had grown substantially. As to exports, 210 cargoes from Sussex Ports were entered at London in 1728: from Rye 31, Newhaven 26, Shoreham 37, Arundel 43, Chichester 73. The excess of exports to, over imports from, London probably lasted until the last quarter of the century.²

The way in which the traffic was organised is reflected in an advertisement of 1772:

Notice is hereby given that Benjamin Bossom and Thomas Massy, Masters of trading sloops from Newhaven to London, have mutually agreed to take in lading for the future at Hilditch's Wharf, Southwark, only; and it is particularly desired that all merchants, traders and others, will give directions to their correspondents, that their goods may be delivered at the said wharf, within such a number of days as will be notified from time to time, by the Common Cryer of Lewes, for that no goods, after the expiration thereof can be taken on board the said vessels; the said Thomas Massy and Benjamin Bossom having confined themselves to sail always agreeable to such notice as shall be so given by the said Cryer.

In 1790, three vessels were trading to Rye, three to Hastings, two each to Newhaven and Shoreham, and four in all to Arundel and Chichester. Not until after 1815 were the vessels announced as sailing at regular intervals, normally weekly (one vessel doing a round trip in a fortnight). The number of vessels increased, with, in 1839, eight trading to Rye, ten to Hastings, two to Lewes, five to Shoreham and four to Chichester. By then the coasting vessels to Arundel had been superseded by Seward & Co.'s barges down the Wey & Arun Canal, which carried an average of 2,662 tons from London to Arundel, and only 1,594 tons in return, in 1836-9. New-

¹ W.S.R.O., MF 36.

² Andrews, table 56. W. Maitland, *The history of London* (1739), p. 621.

haven received between 40 and 50 cargoes in 1821 and 1826, and also in 1840, and dispatched rather fewer. The steamboats which were operating to the west country in the 1830s called off Hastings and Brighton for passengers only.¹

If any branch of seaborne trade was affected by competition from improved inland transport, it was that with London. The Wey & Arun Canal has been mentioned in respect of Arundel, but for the other Ports any effect is less easy to define. However, the substantially greater number of vessels regularly trading to Rye and Hastings reflects the relatively shorter route compared with land, to the eastern ports as against the western: Hastings was 70 miles by land and 125 by sea, while Shoreham was 60 by land and 170 by sea and the roads to Brighton were the best in Sussex. The rather cryptic figures for existing traffic presented by early railway promoters show, in 1835, 5,200 tons of general goods carried between London and Brighton by road (in 18 hours) and 3,380 tons between London and Shoreham by sea (in seven days). A leading Lewes merchant implied that about two-thirds of the town's traffic with London was by road, even though it cost twice as much as by sea.²

CONCLUSION

The Sussex Ports have few if any rivals among the Ports of England in the poverty of their official records surviving from the 18th and early 19th centuries, whether Port Books, Customs records or harbour commissions' papers. There is little likelihood of further records coming to light which can add substantially to the description of traffic presented above. The direction of further research should thus not be to elaborate the details of seaborne trade but rather to elucidate the changes in the local economy at which the evidence above hints. In particular, traffic through the Ports appears to have risen ahead of the county's population growth which seems to have started in the 1760s, and grew fastest in c. 1785-1815 which was not the period of fastest population expansion. Secondly, a major characteristic of the changes in the composition and volume of traffic was the demise of local self-sufficiency and the rise of dependency on imports. What is worthy of research is how Sussex farmers varied their outputs, both to produce the greater exportable surpluses in the earlier 18th century, and then to respond to expanding population and competing imports; and how the new urban centres were provisioned not only with foodstuffs but also fuel and building materials.

¹ *S.W.A.*, 30 Nov. 1772. *Universal British directory*, vol. 1 (1790). *Pigot & Co's London & provincial new commercial directory for 1823-4*. *Robson's* . . . 1839, pp. 958-69. *W.S.R.O.*, IN/ Arun/F5/1. *P.R.O.*, RAIL 853/12, 13. *S.A.*, 1840. National Maritime Museum, L 60/11, sailing bill.

² *B.P.P.* (Lords), 1836 (195), xxxiv, pp. 882, 985-95.