THE SCOTTISH LINEN INDUSTRY 1707-1775 WITH PARTICULAR REFERENCE TO THE EARLY HISTORY OF THE BRITISH LINEN COMPANY

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Abstract

The manufacture of linen was the leading industry in Scotland during the first three-quarters of the eighteenth century. Output, as reflected in the amount of linen stamped for sale, rose from 2.2 million yards in 1728 to 12.1 in 1775. This thesis analyses the development in the light of such factors as the Union, the work of the Board of Trustees for Manufactures, and the export Bounty on linen, and examines in detail the experience of one large firm within the industry, the British Linen Company.

The first section deals with the twenty years immediately following the Union. Although there was unrestricted access to the English and Colonial markets, which was a necessary pre-condition for expansion, the short-term effects were to expose and focus attention on the defects of the industry. In 1727 was formed a Board of Trustees for Manufactures and Fisheries, part of whose funds was to be devoted to the encouragement of the linen industry. The work of the Board and developments within the linen industry during the period 1727 to 1775 are discussed in the second section. After examination of the Board's policies, it is suggested that some were less efficacious than has been commonly supposed, and with the exception of the regulatory network of stampmasters, much of its work may have had only a marginal effect on the long-term development of the industry. A study of the outlets for production indicates that a leading role in the expansion was played by English and Colonial demand, and that the advance of the industry, both quantitatively and qualitatively, was based not on home but extra-domestic demand.

In the final section, a close study is made of the history of the British Linen Company for those years between 1746 and c. 1766, when it was primarily and integrally concerned in the promotion of the linen industry in Scotland. Many of the problems with which it was confronted were common to the whole of the industry, although the extent of its

capital resources and the size of its operations were quite untypical in an industry dominated by numbers of small, domestic producers. In the fostering of the Osnaburg fabric, and the diffusion of spinning into the Highland areas of the North-East, the Company made distinctive contributions to the development of the industry. It is suggested in conclusion that the withdrawal of the Company to banking after 1765 demonstrates the extent to which the industry had grown and become self-reliant.

Preface and Acknowledgements

No full-scale exhaustive study has as yet been made of the Scottish Linen Industry during the eighteenth century, although several writers have dealt with aspects of its development. The standard history remains A.J. Warden's "The Linen Industry, Ancient and Modern", which was published in 1864. This thesis has, therefore, been based largely on primary sources, which - in marked contrast - are available in almost embarrassing profusion, and in the examination of which I have incurred a great many debts.

For the first chapter, which is concerned with the twenty years immediately after the Union of 1707, the Records of the Royal Convention of Burghs were of great value, and I am indebted to the Archivist of the City of Edinburgh, with whom the records are lodged, for access to miscellaneous bundles of papers presented to the Convention. For the next three chapters, which deal with the work of the Board of Trustees, and the markets for Scottish linen, the services of the staff of the Scottish Record Office were much appreciated in respect to the provision of various manuscript and archival material.

The final four chapters examine the work of the British Linen Company, and I am greatly indebted to the British Linen Bank for permission to study the early records of the Company. The courtesy of their Secretary, Mr. D.G. Antonio, was unfailing even during the throes of merger with the Bank of Scotland, and, with this completed, it is to be anticipated that these valuable archives will receive the arrangement and preservation which they merit.

Few students could owe more to their supervisors. Professor T. C. Smout first aroused my interest in Scottish economic history, and directed me to this topic, and Mrs. R. M. Mitchison has sustained much of its subsequent development by her contagious enthusiasn and critical surveillance. Many others have contributed in lesser degree, and to them all I offer my thanks.

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GLOSSARY

(A) Fabrics

Bengal	A fine linen fabric made in imitation of the cotton commodity of this name imported from India.
Britannias	A name given to a species of fine linen made in the West of Scotland, and therefore also called "Irvine linen".
Buckram	A kind of coarse linen, gummed for use as lining.
Cambric	A very fine, bleached linen, made in imitation of the French fabric made around Cambrai, and hence sometimes called "French lawn" in Scotland. Renamed "Carolines" by the Board of Trustees.
Carolines	See Cambric.
Check	A cloth of varying quality, but usually in Scotland a fairly coarse fabric, with a simple pattern obtained by crossing stripes of dark and light colours in the warp (q.v.) and weft (q.v.) to produce a chequerboard effect.
Cravat	Neckcloth made of Muslin (q.v.). Called 'Paisleys" by the Trustees.
Crocus (Croacus)	A very cheap, coarse, unbleached cloth made in Germany.
Damask	A cloth of good quality with a distinctive design, often used for table-cloths.
Daiper	A linen fabric with a characteristic design of lines crossing diamond-wise with the intervals variously filled up. Usually in Scotland a medium value cloth.
Dornoch	A kind of table-linen.
Dowlas	A coarse, low-priced linen.
Edinburg(h)	See Osnaburg.
Garlix	A fine, bleached linen made in imitation of the Continental fabric of the same name.
Glasgows	See Muslin.
Hagabag (Hucka-bag, Hucka-back)	Originally a stout, coarse fabric with the linen threads thrown up alternately so as to form a rough surface suitable for towelling, but imitated in linens of better quality. The British Linen Company made hagabag from diaper cloth.
Harden (Harns)	A very coarse cloth made from tow (q.v.) yarn. Also known in Scotland as "West Country Linen".

Hessian	A strong and coarse material used for packing and wrapping bales, etc. Called after the linen made in Hesse.
Holland	A fine linen made in imitation of that imported from Holland.
Inkle	A kind of very narrow linen, used for tapes.
Kentings	A fine linen fabric made in West of Scotland, often with a few spots of cotton for ornament.
Lawn	A very fine fabric of the Cambric (q.v.) type.
Muslin (m)	A very delicately woven, fine linen fabric. Renamed "Glasgows" by the Trustees.
Osnaburg (Osnabrigg)	A coarse linen fabric, mostly made in the East of Scotland, particularly in Dundee and region. It was an imitation of the popular German linen made in Osnaburg (Osnabruck). Renamed "Edinburg" by the Trustees.
Paisley	See Cravat.
Platillo	A kind of coarse Silesia (q.v.).
Pomerania	A fabric made in imitation of the German cloth of the same name. Rather coarser than Silesia (q.v.) but finer than Osnaburg (q.v.).
Silesia	A fabric rather coarser than Holland (q.v.) made in imitation of the German linen from Silesia. Generally in Scotland a medium quality cloth.
Tick (Tyck, Ticking)	A strong, closely woven linen fabric used for bed sheets and covers.
Ticklenburg	A strong coarse fabric similar to Osnaburg (q.v.), but slightly superior in quality and higher in price.
Tweel	A very low-priced coarse linen.
Valiencienne	A fine cloth made in imitation of the French fabric from Valence.

(B) Technical Terms and Measures

Beetling	Flattening of the fibres in a finished fabric by beating it with wooden mallets, either manually or mechanically.
Bobbin	A wooden spool on which yarn or thread was wound.
Brown	Unbleached.
Distaff	Short stick used in spinning which held the unspun fibres.
Drawboy	A boy who assisted the weaver of figured cloth such as diaper by lifting up the warp (q.v.) threads to allow the passage of the shuttle (q.v.)

Green	Unbleached
Heckle	The toothed, comb-like instrument used to dress flax preparatory to spinning, (hence heckling = to comb out the flax fibres).
Grist	The thickness of the yarn; often expressed in weight per spindle.
Measures of Yarn	1 spindle of yarn (14,400 yards in length by official regulation) contained 24 heirs of 600 yards each; or 4 hesks (or hanks) of 3600 yards each or 48 cutts of 300 yards each. A cut was supposed to contain 120 threads exactly.
Reed	That part of a loom like a closed comb, in which the warp threads are separated in weaving, by means of a straight row of evenly spaced wooden, reed or later metal blades. The interval (or "dent") between the blades is lessened in the finer cloths, and when the "sett" of the reed is designated, it refers to the number of hundreds of "dents" in the reed per 37". (34" and 40" respectively in the case of Cambric and Holland). The reed is also used to push the weft thread up to the previously woven cloth.
Reel	That on which the yarn from the spinning wheel was wound. In Scotland, by law, the reel had to be 90" in circumference.
Scutching	Preceding heckling, this is the process of beating the flax by which the wooden parts of the flax were separated away from the fibres.
Shuttle	An instrument which holds the weft (q.v.) thread, and which is passed or thrown between the threads of the warp in weaving.
Tow	The coarsest part of the flax first heckled out.
Warp	The threads stretched in parallel on the loom before the weaving is begun. On simple looms the length of the loom determined the length of the warp, but as the British Linen Company paid its weavers for "warping and winding", it is clear that their looms were equipped with a warp beam on which the warp thread could be wound, and therefore lengths of cloth much longer than the loom could be woven, the finished cloth being wound on rotating cloth beam at the front of the loom. It was important to ensure that the warp threads were at the same tension and of the same length, and carefully threaded through the reed.
Web	The woven piece of cloth.
Weft	The threads which cross from side to side of the web, at right angles to the warp threads with which they are interlaced.
White	Bleached (hence to whiten = to bleach).

LIST OF ABBREVIATIONS USED IN THE TEXT

B.O.T.M.	Minute Books of the Meetings of the Board of Trustees for the Manufactures and Fisheries (Scottish Record Office: NG 1/1).
B.O.T.L.	Letter Books (outgoing) of the above Board (Scottish Record Office: NG 1/3).
C.R.B.R.	Records of the Conventions of the Royal Burghs of Scotland (deposited in the Edinburgh City Archives). Citations have been made from the published extracts from the minutes, Minutes of the Royal Burghs 1525-1775 (7 Vols.), ed. J.D. Mackie.
Ec.H.R.	The Economic History Review.
E.U.L.	Edinburgh University Library.
N.L.S.	The National Library of Scotland.
S.H.R.	The Scottish Historical Review.
S.M.	Scots Magazine.
S.R.O.	The Scottish Record Office.

NOTE ON SPELLING

Several of the surnames cited in the text had variant spellings, e.g. MacCulloch (McCulloch), John Christy (Christie) of Ormiston, Sandieman (Sandeman). The place name, Salton (Saltoun) was consistently spelt "Salton" in the eighteenth century, and therefore appears in that form in the text. The manuscript collection cited in the footnotes has taken the modern form, viz. Saltoun MSS.

DECLARATION

I hereby declare that this thesis has been composed by myself.....

(ALASTAIR JAMES DURIE)

First Section

Chapter One: The Immediate Post Union Decades 1707-1727

"This is the only manufacture in Scotland left to maintain the Poor."

Petition to the House of Commons in 1719

" ...it would be considered, if the Flaxen and Hemp Manufactories be not preferable to all others, so as to deserve the first Encouragement, since we may make them properly and intirely our own, and the Staple of this Country; they nowise interfering with the Staple of South Britain: the Bent of the People seeming already to run that Way, which gives Reason to hope for a greater and quicker Success in them than in any others."

General Heads and Questions touching the Manufactories and Fisheries of Scotland (1726)

The manufacture of linen had long been established in Scotland, and a trade in Scottish linens to England developed during the seventeenth century which had, however, little apparent effect on the traditional basis of production, the customary weaver, who depended for his work on being commissioned by households to weave up their yarn, and whose poverty curtailed his ability to lay in yarn for his work. Production was therefore geared closely to the domestic market, and weaving along with spinning were generally part-time occupations in the country. The Union did not immediately transform the situation: in 1719 a pamphlet emphasised the contrast between the organisation of this domestic industry and the English woollen industry: "The Linen Manufacture of Scotland is not managed as the Woollen Manufacture is in England by master manufacturers employing servants and taking apprentices and putting out the lint to be spun and woven and so make the linen making a trade...but by single families in proportion to the hands and the time they have to spare. Linen is bought and sold as an Adventure...the market does not control production."[1] This picture is undoubtedly (and understandably) overdrawn to secure the sympathy of Parliament, and while this may have been true in general of the rural areas, in the towns production was organised on a basis such that linen was manufactured and sold not just for the home market but also for the English one, though, admittedly the staple linen was coarse and low-priced.

During the seventeenth century it appears from the fragmentary statistics that have survived that exports of Scottish linen to England grew considerably. In 1599-1600, 18,000 ells of Scottish linen were entered at London; by 1700 this had increased to 650,000 ells.[2]

1 N.L.S. 'The Case of the Printed Linens of Scotland' (1719)

2 T.C. Smout Scottish Trade on the Eve of Union p. 233. This paragraph draws heavily on pp. 233 ff.

In the decade prior to the Union, total exports to England overland and by sea down the East and West Coast routes reached between 1.2 - 1.8 million ells of linen, plus yarn, striped linen and cravats. Smout consequently concludes, "If this is correct, the growth of the seventeenth century linen trade appears in its own perspective to have been scarcely less surprising than the more famous 'take-off' of the eighteenth century."[3] Not unexpectedly, linen along with black cattle dominated much of the attention and economic argument of the pamphleteers in the debates prior to the Union. The pro-Union writers stressed the value of the English market and the promise of free access to the Plantations and implicitly held out the threat of no export markets at all. This economic reasoning made sense, which the anti-Unionists could not refute effectively, although they complained with some justification that the English took only coarse low-priced textiles. Their suggested alternative (if the English market were closed or restricted) for coarse linens was Europe e.g. Spain, a desparate suggestion which surpassed credibility either in the light of seventeenth century or subsequent experience. Not only did the Union offer the prospect of an open market and an end to duties such as those of 1698 which the English had placed on coarse textiles to cut back imports, but the unpalatable truth was that the Scots needed the English market whereas the English did not need the Scottish.

The Union did not result in an immediate transformation overnight for Scotland; the doors opened wide to the English and Plantation markets also permitted a fierce blast of unhindered competition from the Continent and Ireland in even the Scottish market, let alone at London. What little existed of an indigenous fine linen industry soon perished. Some Dutch linen had always been worn by the better-off in the seventeenth century:

3 Smout op.cit. p. 233

in the first decades after the Union the Dutch linen now admitted more freely carried the day with its quality and colour. A pamphlet of the 1750's lamented in retrospect that, "Soon after Queen Anne's Peace when the Navigation from Holland became attended with little or no risk, the Dutch linens were imported in greater quantities, and became by degrees in a few years thereafter the wear of most people of fashion."[4] A fair amount of French cambric was either smuggled into Scotland or entered as "Dutch" under "trifling duties". The result was "to destroy completely that branch of the manufacture". If German and Dutch linens competed strongly in the fine and medium ranges of linen, the Irish also challenged strongly in the latter kind of fabrics.

It seems, therefore, that after the protective barriers were dismantled only in the coarser fabrics did the Scottish linen industry manage to preserve its home market and also export some, under the name of harns or West Country linen, to the Plantations. "The linens of our manufacture were...worn only either by the more frugal or less gay kind of people at home or else carried abroad to Virginia and the West India Islands". The trade in coarse linens to England continued, although not without difficulties. Arbroath petitioned the Royal Burghs in 1711, giving "Reasons why its tax should not be heightened", which in essential attributed its problems to lack of demand at London for its linens. "Although it can be made appear by the Customs House Books that our inhabitants did not export any linen cloth these seven years bypast excepting 15,000 ells last year for London, yet out poor people were in some measure supported by manufacturing the same to trading merchants in our neighbouring burghs, who are now so discouraged by the small demands therefore at London that they cannot afford any price whereby poor weavers may have bread which has

4 "History of the Linen Trade in the West of Scotland" (1755) S.R.O. Seafield MSS. GD 248/954/1.

occasioned many of them turn soldiers of late."[5] It is reasonable to assume that if a slump in demand at London could afflict the East Coast with low prices and unemployment, the export trade through Perth and Dundee was of more than minor significance.

Between 1711-1717 a duty on British linen exported was imposed, which R.H. Campbell considered to be a cause of this depression. "Progress in the linen industry, especially in increased sales to foreign markets was discouraged immediately post-Union when in 1711 a new duty was laid on Scottish linen exports...(but)...the tax did not ruin the industry."[6] It appears from the House of Commons Journals that a duty of 6^{d} per piece of 40 yards was imposed in 1711 and lifted in 1717. This duty was an irritation and as such a proper object of the attention of the Royal Burgh, but in 1715 it is unlikely to have been of such consequence. By contrast, the duty imposed by Parliament of 3^{d} per sq. yard on all printed linen in 1715 and the duty imposed by the Irish of 6^{d} per yard on all imported linen were of much greater importance. The former evoked bitter protests from the main centres of supply for linen sent to England for printing, Glasgow and Perth. This duty amounted to a 30% imposition on the average price of such linen which generally was valued between 6-10^{d} per yard before printing. In 1719 the London Weavers (of silk and wool) petitioned Parliament to prohibit the wear and use of Printed Linens, which caused grave anxiety to the Scottish producers and dealers, focused by the Convention of Royal Burghs who prepared a petition[7] for presentation by the Scottish linen factors at London to the Lords Commissioners of Trade.

5 C.R.B.R. Records 1711-38 ed. J.D. Marwick, p. 13.

6 R.H. Campbell, "The Economic Consequences of the Anglo-Scottish Union", Economic History Review 1964, p. 470.

7. The Humble Representation of the Merchants, Traders and Factors...and many thousands of Poor employed in the Making of linen in that part of Britain called Scotland. C.R.B.R. bundle 230.

The substance was that "we have no consumption or use for Scots White linen but only by printing it (as) the Trade of dyeing Scots linen is quite lost, and the Using it White is altogether cut out by the Importation of German and other linen", and the only outlet for this linen was to send it to be printed and sold at London.[8] A reply argued firstly that the linens could be dyed instead of printed; secondly that even if it were true that this printed linen was so important to Scotland, it could not be reasonable to preserve it if "the whole woollen manufacture of England be ruined"; and thirdly, while the yield of the duty on printed linen had averaged £12,633 p.a. since 1716, most of the linen printed (c. 1 million yards p.a.) had come from Germany or Ireland, with perhaps only one quarter from Scotland - why make a fuss over this small quantity? Apparently the Scots managed to carry their case, and the matter dropped, but if their opponents were prepared to allow that 250,000 yards were sent annually from Scotland to be printed in England, the true figure may well have been higher.

Two years later in 1721, the Convention of Royal Burghs attempted to raise again the matter of the duty on printed linens with Parliament. "North British linen used for printing is very much clogged by the heavy duty...and this duty seems exceedingly heavy when it is observed that the most of the linen used for these purposes is no more in value than from 6-10^{d} yd."[9] This had no success, and the duty continued to be exacted. The effect may have been to restrict the rate at which the sale of printed linens expanded; despite the wails of the Scots, quantities of Scottish linen continued to be sent South for finishing.

On the positive side, Parliament did intervene to get the Irish duty

8 N.L.S. "The Case of the Printed Linens of North Britain"

9 C.R.B.R. Records 1711-38 p. 295.

of 6d a yard imposed on British linen imported into Ireland lifted in 1717 - not that this was of any real consequence for the Scots, as little linen went to Ireland - and linens for exportation were exempted from export duties. Not all the competition after the Union was destructive in its effects: the West was induced to diversify into new branches of the manufacture, thin checkt hankerchiefs, striped and checkt linens, white boarded hankerchiefs and the coarser kinds of striped and spotted muslims. Paisley became a centre for plain, spotted and flowered lawns, a finer fabric. There was expansion as well as diversification: in 1726 the Glasgow Incorporation of Weavers claimed that "within the liberty of the said corporation" 2000 looms were at work in the linen manufacture, "some branches whereof they have brought to very considerable perfection, such as fine cambrics from 16d - 6/- a yard, chequered napkins of all sorts, 6-24/- a dozen, Striped and Chequered Bengals from 12d - 2/- a yard besides white linen, cravats and muslims."[10] In the East, the town of Dunfermline was establishing a reputation for damask weaving, introduced from Drumsheugh in Edinburgh by one James Blake, who by feigning simpleness was allowed to study the construction of the loom and technique of working, with which knowledge he then decamped to Dunfermline. In 1723 a description said, "in the burgh are a great many weavers constantly employed in working damask, diaper, tyckings and bengal."[11]

The comforting presence of statistically demonstrated growth after 1727 should not be allowed to shroud under a sheet the statistically silent period of 1707-27. There was the continuance of the exports of coarse linen from the East Coast to London, and bleached linens from Perth and

10 C.R.B.R. bundle 230 Misc. Petns. "Bengals" were a kind of fine, thin linen.

11 J. Fernie History of Dunfermline pp. 179-182.

Glasgow for printing. Although competition was too strong for the fine plain linen in the first decade of the Union, the growth of the manufacture of thinner and decorated linens in the West, and diaper and damask - which varied greatly in quality and price - provided the basis for continued expansion, and a re-emergence of an indigenous fine linen sector.

There were four distinct groups concerned in the Linen Trade: the Glasgow merchant community, particularly the Plantation trades: The Scottish linen factors resident at London: the gentry and aristocracy: the Royal Burghs. The merchants were concerned for their livelihood, the gentry for their rents and income, the Royal Burghs for their taxes. On certain occasions, e.g. in 1719 and 1726-27, the Annual Convention and its derived Committees focused the interests and aims of the commercial community of Scotland, and acted virtually as a Scottish Advisory Committee, involved with both the initiation of Parliamentary legislation and its outworking. The Royal Burghs attempted on occasion to lay out its own regulatory legislation, or to secure the enforcement of existing laws, in response to pressure from interested parties, such as the Scottish linen factors at London. These factors sold cloth on commission at London in competition with Dutch and German linen factors. This group, a tight-knit community petitioned the Royal Burghs in July 1723 about the poor measure and quality of Scottish bleaching or whitening, as a result of which Convention circularised the Burghs and J.Ps. and Gentlemen "in whose lands the Linning Cloth is made" to put into effect the laws against bleaching with lime, etc. of which the factors had complained, "a pernicious stuff to the ruin of the cloth",[12] and to ensure the cloth was evenly wrought as well as whitened, "that it may be in reputation abroad". The optimistic order to makers of linen to thicken their cloth was as quickly disregarded as the

12 C.R.B.R. Act anent Linning-Cloth & Woollen Manufactures; 10 July 1723 Records 1711-38 p. 334

tirade against bleaching with lime. In fact, virtually all the legislation passed during the period was ineffectual; the Acts of 1711, 1712 and 1714 "to prevent abuses in the making of linen cloth and regulating the length, bredth and equal sorting of yarn for each piece made in Scotland" and forbidding the use of pigeons' dung, etc. in bleaching were disregarded, both because of the nature of most of the industry based on the customary weaver, and because no effective mechanism existed for enforcement.

The Glasgow community divided into two groups: the exporters to the Plantations and the suppliers of linen for the chapmen and peddlers to take south each year. The former were not in the same position as the London Scottish linen factors, who depended on the sale of Scottish linen for their livelihood. In making up their outward commodity cargoes, they had the choice of Irish, Dutch or German linens as alternatives. They were, like the factors, aware of the deficiencies of Scots linen at first-hand, although in certain fabrics - the very coarse linens or handkerchiefs - the Scottish merchants could meet the exporters' needs at competitive prices. The merchant community as a whole in the West was well aware of the example of their near neighbour, Ireland, to where, gallingly, so much yarn was exported to be worked up. "Great parcels of linen yarn are carried to Ireland by the working up of which many of our own poor might be employed, our manufacture improven, and our export increased."[13] The yarn trade had its benefits for the yarn exporter and the spinner, keeping up the stock of spinners, and the demand for yarn in the West from both Ireland and England generated much employment if it also raised the price of yarn to the home manufacturer.

The growth of the Irish industry was linked in Scottish minds with the foundation of the Irish Board of Trustees in 1711 as the Irish response

13 C.R.B.R. - bundle 230.

to the common experience of the Post-Union years. Charged with the supervision and execution of the laws regarding linen duties and internal standards of production, the Trustees extended their scope further in 1719 by setting up a network of lappers or stampers - usually merchants or bleachers - to inspect and measure white (bleached) cloth only and then stamp it in return for a fee per piece. Scots, only too conscious of the deficiencies of their linen manufacture and the inability to enforce what legislation there was, were particularly taken with the regulatory possibilities of a national stamp. During the twenties, a town stamp was voluntarily adopted by some of the Scottish burghs (e.g. Dundee burgh and Aberdeen) concerned with keeping up the standards. The stamp of the Scottish Board was to be its main weapon in regulating standards. The debt Scotland owed to Ireland during the first half of the century was considerable: its example, and imported men, imitated skills and institutions were the backbone of change. But, in fairness, even during the transitional years the traffic was not entirely one way: the Scots extended their stamping regulations to unbleached (brown) linens, so that all linen made for sale had to be inspected and stamped. This extension the Irish took note of and in 1733 made a corresponding addition to their regulations.

The gentry and aristocracy were interested for both financial and political reasons. Their rents and income were enhanced by a healthy linen industry in the counties, and the employment it generated was a guarantee of peace. "Idleness breeds disaffection" was the national maxim, and the linen industry was the biggest employer of labour after agriculture. It was thought that between 5-7 women were needed to spin enough yarn to supply one weaver, and after allowing for yarn exports it is clear that many households benefited from the income from spinning. The gentry, as predicted by the factors, were active in promoting the manufacture. "We

cannot but think they will concur with their utmost Efferts to have our Linen Manufacture encouraged...since many of them know that their Rents are paid by our Linen Manufacture."[14] Their activity expressed itself in several ways: in vigorous support of the manufacture at County and Parliamentary level - where the North British M.Ps. voted as a bloc on this question, and in participation financially, and as part of the Improving urge several devoted their time and purses to acquiring knowledge of, and setting up linen works. A prime example of the dabblers was Lady Salton, who in addition to patronising a fine linen manufactury, went to Haarlem under pretence of taking the country air and gained access to a Bleacher's house in order to acquire the secret of Dutch bleaching, "but was too soon discovered by appearing too inquisitive and was forced to decamp while she could make an honorable retreat".[15] An early example of a partnership drawing on commercial and landowning capital was the Linen Manufactury set up in 1718 by contract between Sir John Kennedy of Collean, John Vans, merchant in Ayr, and Nicolas Dunbar, son of a sail officer at Turnberry:- the scale was small, initially employing only 3 looms but was expanded to include a bleaching business in 1720. Vans bought the yarn locally, Dunbar managed the manufactury, and Sir John provided one-third of the capital.[16] While he was probably not stretched to provide £30, bigger enterprises required more capital and either the merchant community or the land-owners were the likeliest source for obtaining capital. There is clear evidence of a flow from the former e.g. in the West after 1727 (although it may well have existed before) into linen copartneries, and the latter were conspicuously

14 Postscript to the Humble Representation of 1719.

15 Select Transactions of the Hon. Society of Improvers prepared by Robert Maxwell (Edinburgh 1743) pp. 317-18.

16 S.R.O. Ailsa Muniment GD25 box 44.

represented by Barclay of Urie. Starting in the 1720s he had made by 1726 in Aberdeenshire an essay for the improving of linen cloth for several years "building houses and experimenting" and claimed to have "attained to a greater perfection in making linen for the mercat at London than any previous in the country", which he had sold to the Aberdeenshire dealers. He had given employment "to several hundred poor people employed in spinning, weaving and whitening". The snag for him along with many others was that the dead stock of looms, houses, utensils and materials lay very heavily on him such that he was "almost too advanced to continue".[17]

The linen manufacture was not very capital demanding: some stock was needed to purchase flax and materials, and to tide the maker over the period until his goods were sold (and paid for in cash). The one major exception to this was the bleaching side: to set up a bleaching field as distinct from bleaching at the burnside required considerable capital. It is a sad commentary on the poverty of so many weavers that once their customary work had dried up, they were unable to afford to keep themselves in sufficient yarn to tide them over in work. Hence the strategic inputs of even a little capital would go a long way in the manufacturing side towards establishing a merchant with a stock of flax for spinners and yarn for the weavers, and give him a position of considerable power. While inputs of capital were important from the gentry, the great immeasurable is how much was generated from within. The evidence - which is scanty - seems to indicate that some later quite substantial merchants and manufacturers started their rise from the ranks of the weavers in this period.

One of the seminal forces making for change was the Honorable Society of Improvers in the Knowledge of Agriculture founded in June 1723. Many of the ideas this Society produced were followed through into execution by

17 C.R.B.R. bundle 330.

the Trustees, which is not surprising in view of the number of Trustees which belonged to the Society of Improvers, and indeed the foundation of the Trustees was largely a fruit of the Society's labours, or so its Secretary claimed.[18] The Society had amongst its members many of the leading land-owners in the country - the Dukes of Athole, Hamilton; Lords Cathcart, Milton and Kames; noted improvers such as Hope of Rankeillor and Cockburn of Ormiston. In November, 1723, it was represented to the Society that Penalties in the several acts regulating the measure of linen had not been effectual - which everyone knew - and a Committee appointed to consider this made several proposals, including (1) a clause in the Land Tax Act to raise a fund for prizes to be distributed to the best weavers (2) that a meeting be held with some of the Edinburgh merchants and a correspondence be opened with the merchants and factors at London as to how best to regulate trade, with a view to making an overture to Parliament, and (3) Gordon of Cluny was to write to Rouen to see if some weavers, bleachers and spinners could be persuaded to come to Scotland to instruct in their skills. The Society also published its own Directions for propagating and dressing lint and hemp, and Directions for bleaching yarn and cloth. The former were culled from a contemporary pamphlet circulating.[19] Correspondence was also opened with Ireland and Holland, to get information from the former as to their relevant Acts and in what manner they had made their application to Parliament for money.[20] "A Letter from Holland" published in Feb. 1725 outlined the main deficiencies in the Scottish manufacture, with some recommendations.

18 Robt. Maxwell in the Select Transactions p. 442-43 - The Trustees named were "almost all chosen and chief members of the Society".

19 This may have been by Crommeline Lewis: the Grays claimed that in 1725 they had printed an abstract of a book by one Crommeline "Essay towards improving the Linen and Hempen Manufactures".

20 Transactions pp. 316-21.

There was mismanagement in virtually all stages; Scots grown flax was pulled before it was ripe. The yarn made was well spun but suffered because "your Scots houses as well as Spinners' fingers are not so clean as here" (another indicator of poverty). While the fine weaving was good, such as that done at Lady Salton's, the greatest difficulty was that of poor bleaching, which resulted of necessity in fine linen being sent to Holland for bleaching, and the use of lime; it was necessary "to give a check to liming of cloth which so often has destroyed yours, and put that Trade out of its Channel which when once done, it is not easy to bring it back again: yea impossible, but by underselling for some time as well as by improving".[21] The writer did not hesitate to recommend the bribing of some good Dutch bleaching servants to come to Scotland with their knowledge of the secret.

It was the fear that Trade's Channel was silted up which brought all the interested parties together in 1726. The initial move may have come with the petition of the Dunfermline magistrates ("where so much of the linen manufacture is made") to the R.Bs. in July 1725 complaining of a decay in working all sorts of linen cloths such as the Damask, Dornoch ticking..."occasioned by want of due powers and authority in the magistrates of the Burghs". They made a series of suggestions for an application to Parliament for regulation of the breadths of cloth and a public stamp on linen exposed to sale.[22] This was touching on what everyone knew was necessary: the need for regulation was blatant and the competition pressing, the deficiencies painfully apparent. The Society in Feb. 1726 presented a letter to the Scottish M.Ps. and sent George Drummond to argue the case for appropriating the Equivalent funds[23] to encourage the Manufacturers.

21 Transactions p. 320.

22 C.R.B.R. bundle 239.

23 See Campbell's Introduction to the "States of the Annual Progress of the Linen Manufacture" p. V.

Article XV of the Treaty of Union had provided a compensation (the Equivalent) of £2000 p.a. for seven years in return for the Scottish assumption of part of the responsibility for the larger English national debt. An Act in 1718, and the Malt Tax of 1724, had provided additional funds which lay accumulating and unused in London. It took all Drummond's powers of persuasion to win over the Lords of the Treasury. He argued from the example of Ireland; "not many years ago that country provided itself in linen from other places: they were allowed to cess their country in £10,000 p.a. to be applied to the encouragement of this manufacture. Now they annually export £150,000 worth". By contrast, Scotland's linens which used to make a considerable return yearly had now lost all reputation at the foreign markets. The Lords of the Treasury were convinced: the debate in Parliament on the action to apply the funds swayed until Robert Walpole spoke. He argued that it was unreasonable to say that if Bristol or Liverpool throve in trade it was not England that throve even though those places were remote from London; therefore, Scotland's prospering was to the advantage of Great Britain. He also made the telling point that the last rebellion had cost the country dearly, and now the Scots were quiet it was only reasonable to make any just concession to keep them so.[24] He could have added that recent events in the Lowlands - the Shawfield riots - had shown how sensitive feeling was there at the moment, and how in this setting it would not be amiss politically to do something for this area as well as giving £1000 p.a. for schools in the Highlands.[25] The motion duly passed and the next step was a letter from the Crown about the

24 C.R.B.R. ... report by George Drummond on Walpole's speech, "the finest I have ever heard in the house". 19 March, 1726.

25 On this point see R.M. Mitchison, "The Government and the Highlands", especially pp. 34-35 in Scotland in the Age of Improvement, ed. N.T. Phillipson & Rosalind Mitchison.

application of the funds, formally inviting the Royal Burghs to outline proposals.

Both the R.Bs. and the Improvers appointed Committees to consider the matter, but the running was made by the latter's, which included such notables as Hope of Rankeillor, Lord Cathcart, Sir John Dalrymple and others. They consulted informed persons - Mayor John Carmichael of Stenhop's dragoons, whose essay had made a general stir the previous year.[26] Most importantly, a circular, called General Heads and Proposals concerning the Manufactures and Fisheries of Scotland, was drawn up and sent to the Burghs and counties for comment and suggestions - e.g. Sir John Clerk received a copy from Thomas Hope of the "several heads for forming of a Plan for imploying the public money promised for encouraging the manufactures and fisheries in Scotland."[27] Undoubtedly the aim was to get general agreement and harmony in the laying down and execution of an impartial plan. The Heads outlined suggestions as to how funds could best be used to improve each stage of the linen manufacture: a premium in money could be given on well-managed lint, spinning schools set up, foreign bleachers settled to diffuse that mystery "in which Scotland is mostly deficient". It was assumed that a Board of Trustees would be set up on the Irish model, with a competent number of stampmasters at convenient places near the public markets "who shall mark, seal, and lap all merchantable cloth".

The Royal Burghs Committee received the replies to this circular and in addition considered the state of the relevant existing Scottish legislation and carefully enquired into the methods of the Irish Board, during September and October of 1726. All the replies received were

26 Entitled, "The reasons for the Slow Progress of the Scots linen manufacture compared with that of the Irish". I have not been able to find a copy.

27 S.R.O. Clerk of Penecuik MSS GD 18/5888.

enthusiastic: from the Ayrshire freeholders; the Kincardineshire barons and freeholders "met at Laurencekirk"; the Forfar Gentlemen and the Perth freeholders. The fullest and most specific reply came from the Elgin freeholders, and their Fife counterparts suggested the bringing across of weavers from abroad. Kincardineshire claimed "that this county already manufactures for sale upwards of 300,000 ells annually" - which judging from the stampmasters' figures from 1727 onwards was a gross exaggeration. (Only the Galloway Memorial was doubtful: they had had very little experience in sowing lint and would have preferred wool to be encouraged).[28]

In the words of the Kincardineshire answer, salaries "are requisite to be given to a competent number of trusty and knowing men for the overseeing of the bleaching greens (which by reason of several other counties sending their cloth to this to be bleached are more numerous than any other shire we know of...)": they emphasised the need for competent stampers to measure and mark the webs "which would liberate the Country people from the temptation of them weaving and extremely stretching their webs to compensate the unreasonable measure taken from them by buyers which is one of the most destructive things which attends the making of our linen and renders it most despicable to foreign markets". The claiming and application of the Equivalent was universally agreed: "Nobody can claim better right than the public for it to be employed for the purposes mentioned since it belongs to Scotland."

Replies were not confined to the gentry and freeholders: the Glasgow Weavers' Corporation raised another point, the removal of the duty on printed and stained linen (which Perth and Forfar also mentioned), and called for an alteration in the duties and drawbacks on foreign linens. Individuals volunteered replies: Barclay of Urie, and two memoranda written

28 All these replies, and others referred to later in the text are to be found in C.R.B.R. bundle 230.

by private Lords, one of which was undoubtedly by Milton.[29] He mentioned the value of Carmichael's Essay, but stressed that as "not everyone can be instructed by books" teachers of weaving and spinning would be needed in every market town. Rather than attempt to create new branches of the manufacture, he sensibly advised that the Scots at first concentrate on improving existing branches:- "there are many branches of the manufacture, coarse linen, diaper, middle sort, Holland, Cambrick, thread, lace, sail cloth, ropes and sacking - but coarse linen and diaper ought to be pushed first. We can bleach them sufficiently and they are in some measure peculiar to us and might be much more so. The Irish improvement has no influence on this branch for we find our market for coarse linens and diaper within these three years has increased by more than 20%." He did suggest the encouragement of cambric at Glasgow "the properest place for it". Milton was to have ample opportunity of following through his suggestions, as a Trustee.

The Committee of the Royal Burghs which had superseded the Improvers' subcommittee - although in practice it was largely the same group with a different hat - considered the evidence and set out its views in a General Plan presented to an Adjourned General Convention of the R.Bs. held in Edinburgh on 2 November, 1726.[30] It analysed the causes of the decay of the industry - the fact of present depression seems to have been accepted by all - which were (1) that the making of cloth was not regulated to prevent abuses, (2) that where laws did exist, they were ignored or ineffectual, (3) the quality of Scots flax was poor, due to bad management, (4) the bleaching side was totally inadequate. It proposed specifically that there be new laws, officers appointed to stamp linen, premiums

29 A draft exists in his personal papers. Saltoun MSS box 327.

30 C.R.B.R. 1711-38 pp. 408-34.

awarded for flax growing, small premiums for spinners and weavers, charity schools for spinning set up, etc. The omission of any explicit reference to encouragement for the bleaching side - which all had stressed was essential - was deliberate, caused by uncertainty as to the extent of the surplus of the malt tax available. Aid to this, and the introduction of the manufacture of cambrics were high on the short list of priorities. The Committee further suggested - and this was the one thing not later adopted - that the trade would gain if the peddlers and packsmen, "...the ordinary instruments of country trade", were brought under the Trustees' supervision through a licence system.

The Convention drew up a particular plan for the distribution of the funds with an accompanying letter to be sent to the King. This started with the appointment of a certain number of Trustees "who shall be vested with power to distribute the funds provided", but proceeded to the subsequent chagrin of the Trustees to limit their freedom of manoevre by a series of specific ways in which the funds were to be allocated, e.g. premiums for the spinning schools, salaries for riding officers and 40 stampers, £1050 to be distributed in premiums at 15/- per acre to landowners for growing flax. This last proposal caused dissent by James Fall of Dunbar as to the size of premium: in retrospect Sir John Clerk thought this premium had been a sweetener to the landowners. "The Royal Patent has tied our hands over the premium. How it was first concerted I know not...I am told it was a proposal from the Royal Burghs insisted on by Gentlemen who hoped to reap advantages to themselves and their tenants."[31] In addition to this plan for the utilisation of the funds, the Royal Burghs also considered what laws and regulations were necessary, and while the Plan was submitted for the Royal Patent, two Acts were submitted to Parliament; one for the

31 S.R.O. Clerk of Penecuik MSS GD 18/5901 (Dec. 1738).

appropriation of the funds for the Trustees, and the other for the establishment of the Trustees and various regulations. The principal regulations sought were the inspection of imported linseed, the prohibition of the frauds of short measure in yarn and cloth, the standardisation of the lengths and breadths of cloth, and the ban on the use of lime in bleaching continued. "These are the principal articles which the Committee believe will, if they are enacted into a law regulate and carry to perfection the linen manufacture (but) are submitted as the rude lines only of regulations which they hope will be in the best manner adjusted and concerted to the advantage of the intended manufacture." The adjustment was left to George Drummond and Patrick Lindsay, who were sent to London to present the Plan in the Royal Burghs' name to the King, and to concert arrangements for the Acts with the Scottish M.Ps. Charles Erskine and Duncan Forbes brought in the first, "a Bill for Encouraging the Fisheries and other Manufactures in Scotland", which provided the promised and necessary funds on March the 25th, and on April 14th the Bill for the Better Regulation of the Linen and Hempen Manufactures in Scotland was introduced. The delay in presenting the latter was due to the long time taken to draft the bill. Both Acts received the Royal Assent on the 15th of May, 1727.[32]

As a result, the Board of Trustees was instituted, and the first Trustees were appointed by a commission under the Great Seal received in Edinburgh on the 18th of July. On what basis or by whom they were chosen is not certain but of the twenty-one originally chosen, the heirs to the peerage were easily outnumbered by the lawyers, land-owners and merchants. Amongst the most prominent were Lords Milton, Monzie and Cathcart: Baron Clerk, Thomas Hope of Rankeillor, George Drummond and Patrick Lindsay. It was a nice blend of influence, interest and practical experience. The

32 13 Geo 1 cap 29,30

size of the group proved much more efficient than the unwieldy 80 of the Irish Board and meetings were much better attended.

The first meeting of the Board was held on the 20th of July, to set up subcommittees on the linen, wool and fishing industries. To each of these the Board was to devote some of its funds, although the main application was to the Linen Industry. Nevertheless, it intended, and to some extent realised, a broader approach to the problems of Scottish development than just to concentrate on linen. On the subcommittee for linen Monzie, Paterson, Hope and Lindsay were placed, soon joined by Milton and Drummond. Their initial concern was to decide where the network of stampmasters should be placed. The Trustees were held up from executing their Plan because of the Treasury dragging its feet over the sending of the warrant for the funds. Not until 5th December, 1727, was this received, and the 40 stampmasters formally appointed, although stamping started on 1st November. The first Secretary was David Flint, a young merchant, and as proof of their interest in the affairs of the Trustees, the Royal Burghs provided £60 annually for his salary.

The foundation of the Trustees was the result of much careful and hard work as well as pressure, which, if maintained, augured well for the industry. There is considerable justice in Robt. Maxwell's claim that the Society of Improvers had played a major role. "It evidently appears, how much the country owes to their careful and diligent endeavour with regard to the Fisheries and Manufactures as well as to husbandry."[33] The patent inadequacy of existing legislation, and the difficulties experienced at the London market, coupled with the example of Ireland, were the underlying causes leading to the foundation of the Board. The Board's task was onerous; not that it was creating an industry from nothing - the industry

33 Transactions, p. 322.

was important and export-orientated in some regions - but while it did not have to transform the situation overnight, the difficulties were many. John Drummond wrote Milton from London on November 7th, 1727:

"I am sorry to acquaint your Lordship that not only our black cattle but also our linen cloth sell very ill this year...the chief reason of the low price offered for our linen is the cheapness of the German, Irish and Russian linens, neither the money of the flotilla or Galleons being yet at liberty: all trade to Spain and the West Indies is died, so that the great demand for German linens is at a stand there, and its over stockt here without any other consumption besides the home use and our plantations which are all so bare of money by the interruption of trade with the Spanish West Indies, for Perth linen that three years ago was sold at from 9-12 pence is now offered at 7-9 and little or no demand; and Dundee and Montrose linens go off very ill. These two articles of linen and cattle failing us so much and no demand for any sort of woolen goods must drain our poor country of money considering our taxes, our luxury and the constant expenses of our countrymen here and in Holland and France and that we now have so few regiments quartered in Scotland which was the only return of money we have from England."[34]

Born of and in this Depression, the causes of which largely lay without its control, the Trustees could not be expected to do very much in the short run for Exporters, but the Board and its allies had the responsibility of attempting to raise the standards of production in all the stages of the manufacture by stamping, regulations, teaching and inputs of capital. Standards had inevitably succumbed to the slump in prices, which resulted in Scottish linen gaining an unenviable reputation for short measure and uneven quality. With this task before it, the Board at least was assured

34 N.L.S. Saltoun MSS, Box 12.

of the support and the interest of the country, a support on which it continued to draw. Overall the trade was already sensitive to the situation in England and Plantation markets, indicating that while the general basis of production was the work of the domestic and customary weaver for the home market, the export sector was far from unimportant. The trade in yarn and thread, linens for printing and coarse harns was considerably dependent on other than home demand, and this was already inducing some changes in the organisation of the industry, changes to be accelerated during the next twenty years.

Second Section

Prologue and General Survey 1727-75

"This Trade shall turn to Account, and to a very Great Account."

Lindsay: Interest of Scotland p. 98 (1753)

Between 1727 and 1775, the amount of linen stamped for sale in Scotland rose in volume from 2.2 to 12.1 million yards, and in estimated value from £103,312 to £561,528. Although the lack of any comparable dats for this period about the output of either the Irish or the English linen industries prohibit any direct comparison,[1] it may help to place this expansion of the Scottish industry in perspective, by noting that exports of Irish linen to Great Britain rose from 3.8 million yards in 1730 to 19.7 million yards in 1770.[2] The volume of Irish linen exported to Great Britain was, therefore, larger than that of the total amount of linen made for sale in Scotland.

The growth of the Scottish industry came in a series of surges (see Graph 2.1); after an initial spurt between 1728-30, production apparently stagnated at around the $4\frac{1}{2}$ million mark for around ten years. After 1743, continuous expansion was the rule, and depression an irregular and unwelcome visitor, e.g. in 1775 and 1773-4, but fortunately its visits were brief. The expansion tapered off in the later 1770s, but during the period under review the statistical momentum was impressive.

Table 2.1

Linen stamped for sale

1 On the level of output in the English and Irish industries, see P. Deane and W. A. Cole, British Economic Growth, 1688-1959, pp. 53, 202-3.

2 L. M. Cullen, Anglo-Irish Trade, 1660-1800, p. 60.

	Million Yards	Estimated Value (£'000)	
1730	3.75	£131	
1740	4.6	189	
1750	7.6	362	
1760	11.7	516	(see Graphs 2.1
1770	13.0	634	and 2.2)
1780	13.4	622	

The statistical data of the Trustees also shows the degree to which production was concentrated in a very few counties, although spinning was much more widely diffused. Five counties dominated the production of linen: Fife, Forfar and Perth in the East, and Lanark and Renfrew in the West.

Table 2.2

Leading Counties ('000 yards stamped)

	Fife	Forfar	Lanark	Perth	Renfrew
1730	444	144	444	535	165
1740	1080	1210	767	601	268
1750	1299	2033	1390	814	566
1760	1817	3820	2240	1063	949
1770	1821	4871	2371	1573	807
1780	1873	5380	1714	1437	1642

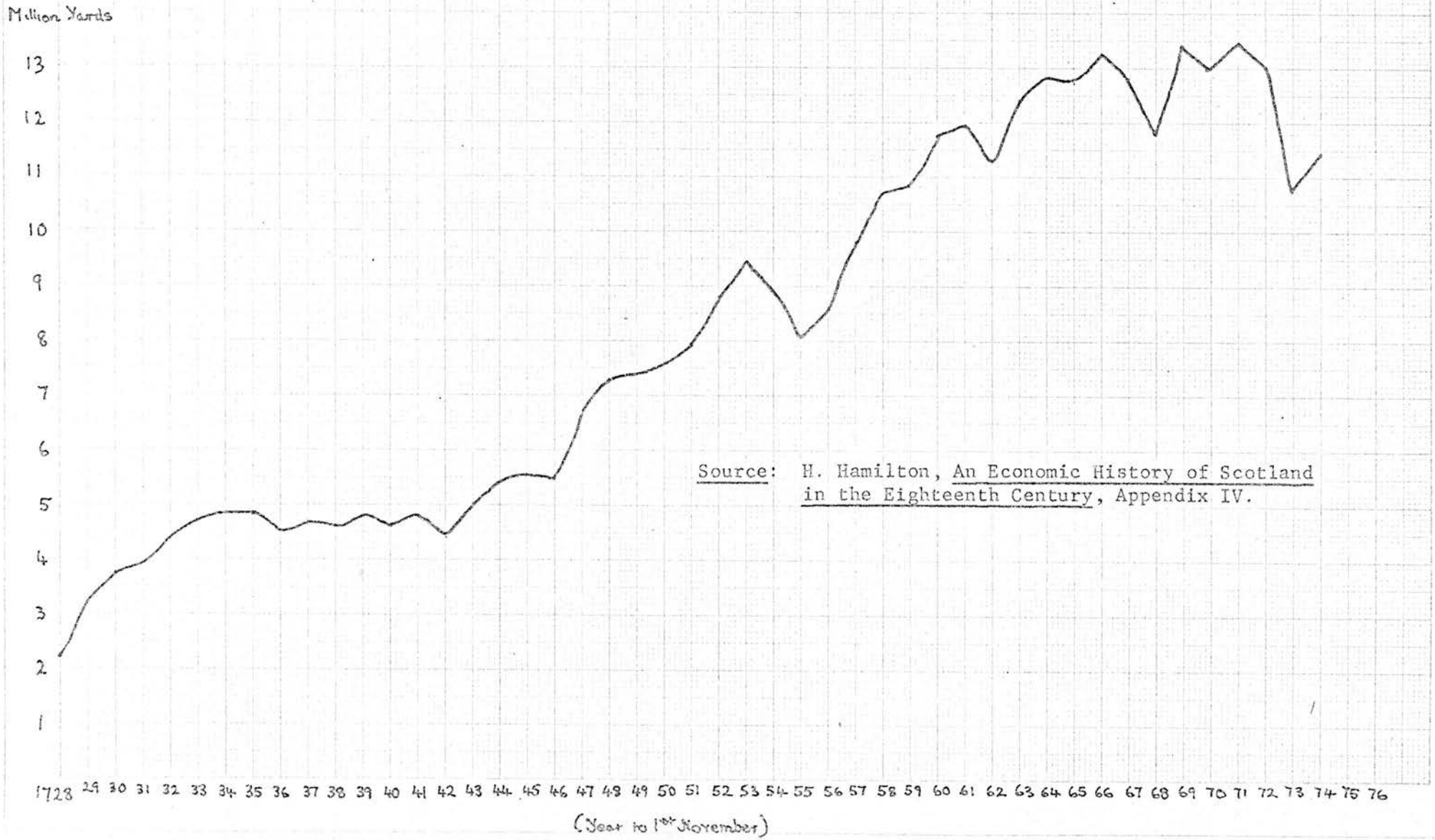
Table 2.3

Leading Counties - estimated value of linen (£'000)

	Fife	Forfar	Lanark	Perth	Renfrew
1730	18.5	34.9	21.3	18.4	6.2
1740	37.4	28.2	42.9	19.8	14.4
1750	53.8	54.4	74.2	31.3	45.4
1760	76.3	124.9	106.2	46.1	63.7
1770	70.5	125.3	193.5[x]	63.5	80.7
1780	71.7	145.1	136.2	70.1	112.4

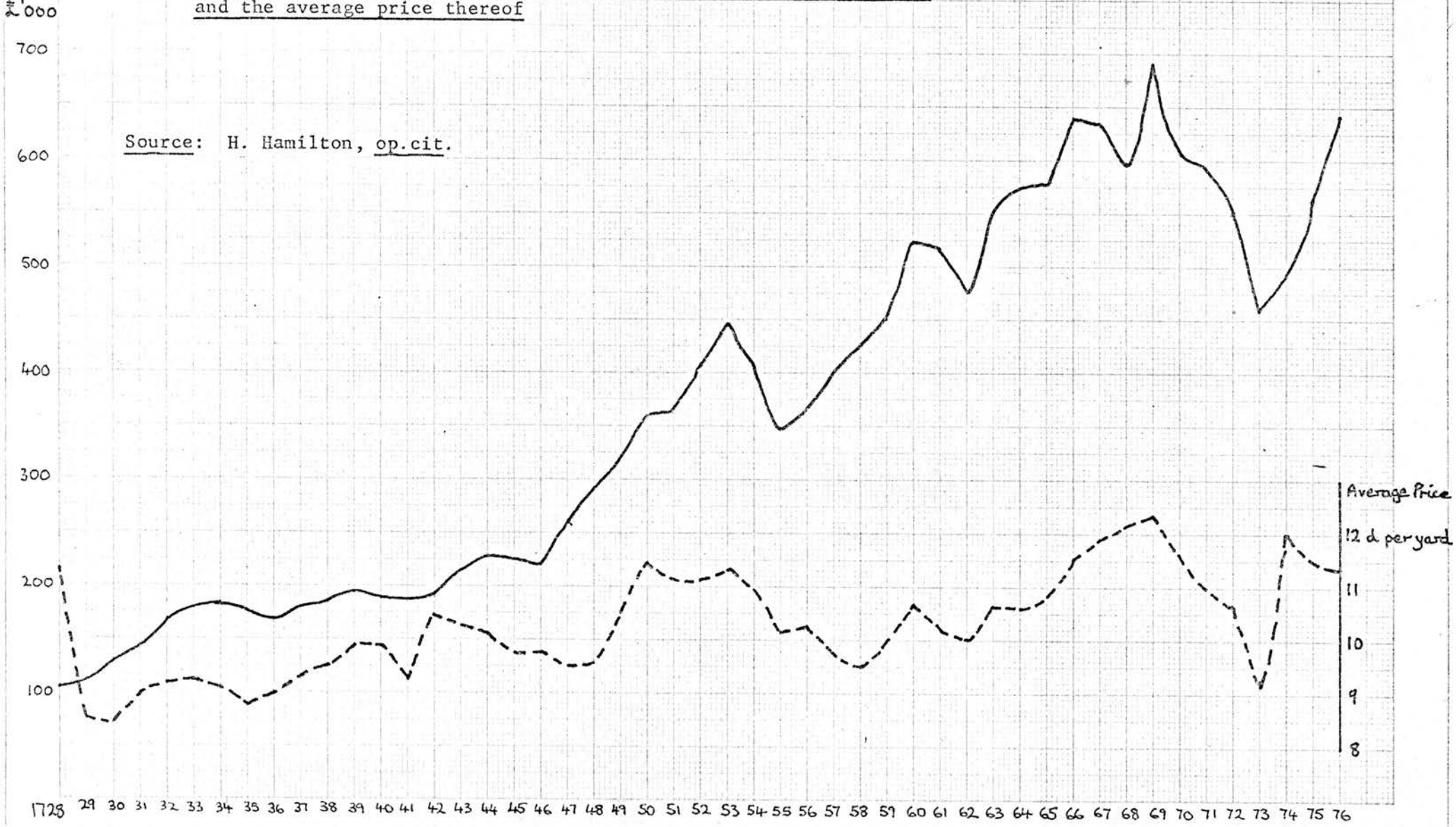
x see text for qualification

Graph 2.1 Linen Stamped for Sale in Scotland 1728-1776



Source: H. Hamilton, An Economic History of Scotland in the Eighteenth Century, Appendix IV.

Graph 2.2 Estimated Value of Linen Stamped for sale in Scotland, 1728-1776, and the average price thereof



Source: H. Hamilton, op.cit.

Edinburghshire (Midlothian) made a sustained challenge from 1748 to 1763 when with 792,000 yards it overtook Renfrew with 716,000, but thereafter production fell away sharply. In 1771, the zenith year, during this period under review, for production, 12 counties made over 100,000 yards and in 11 counties the value was assessed at over £10,000. But in terms of value and yardage, the former five continued to dominate production.

The average price per yard in each county gives a clear indication of the location of the various sectors of the manufacture. Forfar was emphatically the centre of low-priced production, the average price of which varied between $5\frac{1}{2}$-$7\frac{1}{2}$ a yard. Perth ($7\frac{1}{2}$-11) and Fife ($8\frac{1}{2}$-10) ran a little higher. In the West the figures were affected by an undervaluation of the cambric and law fabrics, which was remedied in 1765; up to then the average price of linen stamped in Lanark was between 10-$13\frac{1}{2}^{d}$ per yard and in Renfrew from 10-22^{d}: thereafter the respective figures were 18-$20\frac{1}{2}$ and 23-26^{d}. It is possible to trace shifts in the various counties; until 1746 the average in Renfrew was around 10-15^{d} per yard, but with the increased duties and prohibition of the wearing of French cambrics in 1745 and 1749, the manufacture of fine linens in the West increased markedly, and the average per yard in Renfrew rose to 20-25^{d}, indicative of the response. The division between the fine sector in the West and the coarse in the East was blurred only in Edinburgh, where a temporary boom in the production of coarser linens (due in the main to the activities of the British Linen Company) in the period 1750-63 increased the yardage but lowered the average price. After 1763, however, the fine linen manufacturers were left in more or less undisputed control, and while the yardage decreased, the average rose sharply from the 10-14^{d} range to 22-30^{d}. (See Graph 2.2)

The figures provided by the stampmasters' returns must, however, be

treated with some reserve. The apparent jump in production from the 2.18 million yards in 1728[3] to 3.23 million in 1729 is more likely to have been caused by the expansion and increased efficiency of the stampmasters' network than a "real" increase in production.[4] Secondly, and this is a very serious handicap, the stampmasters' figures record only the amount of linen that was made for sale and do not include the large quantities of linen made on commission for private use which, if it were not exposed to sale, did not have to be stamped. "A very large quantity of the linen of the finest quality which is made in most families for private use is not stamped. In several shires the quantity of it is probably not less than equal to the half of what is made for sale and stamped."[5] One of the initial effects of the stamping system was certainly for some spinners to sell their yarn rather than for them to make up unsaleable cloth, but during the century some of the apparent "increase" in production may have been still caused by not an increase in overall production but in the amount of linen stamped, and a proportionate decrease in the linen made for private use. The concentration and specialisation of certain parts must have accentuated the decline of private weaving anyway, as the economy became more developed and regions less self-sufficient. The increase in production in the country may now, therefore, have been as large as the statistics of linen stamped would seem to indicate.

The assessed values are equally open to question. There was no onus

3 The year ran from 1 Nov. to 1 Nov., i.e. the first year was from 1 Nov. 1727 - 1 Nov. 1728; when a year is referred to, it is the twelve-month period up to 1 Nov. of that year.

4 An interesting cross-check might be provided by figures for the exports of Scottish linen, but neither the Scottish port books nor any aggregate figures have survived for this period.

5 D. MacPherson Annals of Commerce Vol 3, p. 336 (1756). This calls into very serious question, the negligible allowance made for Scottish subsistence (i.e. unstamped) output of linen by P. Deane & W. A. Cole, op.cit., p. 202, in their attempt to calculate Scottish and Irish output in 1770. The amount of linen made privately in Scotland probably declined after 1750, but was not non-existent in 1770.

on the dealers to declare the true value of the cloth they presented for stamping and the stampmasters' assessment by fabric might well be in error, especially in the finer linens. The revaluation of cambric and lawn in 1765 was with one eye to the propaganda battle; the Trustees had long suspected that the fine linen manufacture made a poor showing in the accounts because of an underestimate of the true values of the cloth, but whether their revaluation distorted for political reasons the true value or just properly corrected an underestimate cannot now be ascertained.

None, as far as I am aware, of the individual stampmaster's books now survives, and for the period generally only the aggregate totals for the counties of yardage and assessed value still exist. But for the period 1727-54 the manuscript volume "The States of the Annual Progress of the Linen Manufacture", prepared in 1755 during the depression, by the Trustees, does preserve some additional statistical data, viz. a breakdown of the yardage by fabric (e.g. White and Brown Linens, Harns, Cambrics, etc.) and a similar breakdown of the assessed values into 5 categories of 6^{d} per yard and under, to above 2/6.

Table 2.4

('000 yards of the principal classifications) See Graph 2.3

	White	Brown	CH	CL + B	
1730	1,551	1,399	325	142	
1735	1,644	1,938	479	396	
1740	1,249	1,588	701	638	
1745	1,279	2,436	1,018	490	O'burg
1750	1,040	2,041	1,116	529	649

The significant emergence in the late 1740s was of the growth fabric "Osnaburg", a coarse linen made in imitation of the German fabric made around Osnabrück, but unfortunately after the year 1754 no further statistics exist of its production. The signposts to its take-off are at least preserved

in this document. (See also Graph 2.3)

Table 2.5

Linen stamped by value ('000 yards) See Graph 2.4

(Price per yard)	6d & under	6-12d	12-18d	18-30d	30d +
1730	1,212	2,164	458	32	26
1735	1,534	2,806	354	145	42
1740	1,049	2,971	230	218	142
1745	1,545	3,435	229	91	237
1750	1,165	4,816	593	554	444

That much of this expansion in the period after 1745 was influenced by the bounty on coarse linens exported, which provided its greatest stimulus to the fabrics between 6-12d in range, and to the Osnaburg fabric in particular, was shown by the effect of the withdrawal of the bounty in 1754.[6]

Table 2.6

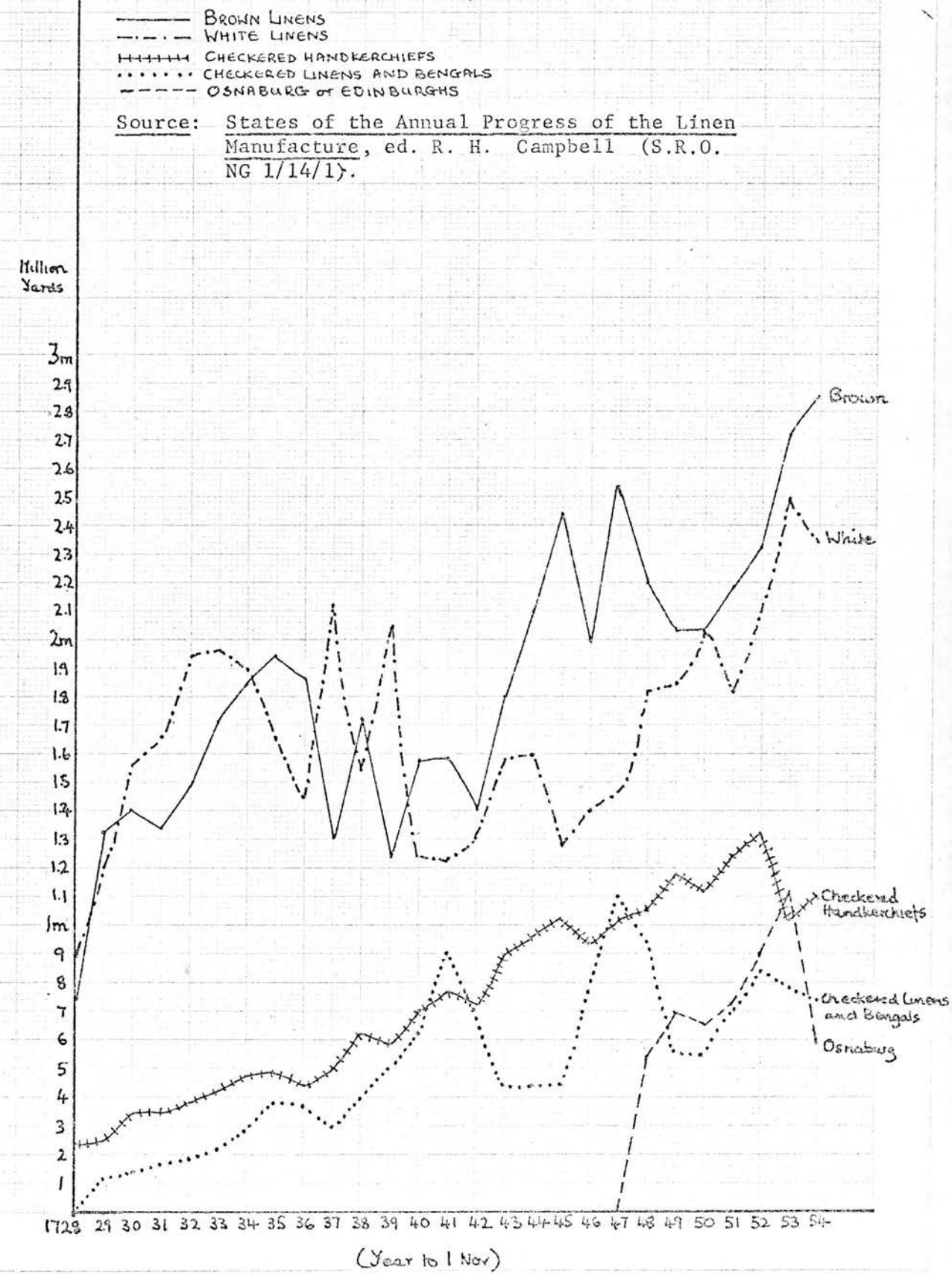
Linen stamped for sale in Scotland, 1752-1754
Volume in each of the principal price ranges and of Osnaburg linen stamped ('000 yards)

Est' Value per yard	6d and under	6-12d	12-18d	18-30d	over 30	Osn'g
1752	1,250	5,728	663	731	389	758
1753	1,337	6,361	528	542	655	1,113
1754	1,912	5,366	454	730	453	586

As more data of this kind does not now exist, it is unfortunately impossible to continue the analysis in this detail with respect to the extent of the depression in 1755 and the speed of recovery in 1756 after the restoration of the Bounty. The severity of the recession during the period when the Bounty was withdrawn is, however, clearly demonstrated for one major - if not entirely typical - firm in the industry, namely the British Linen Company, whose production and sale of linen was more than halved in 1755 from its level prior to 1753. (See Chapter Six, for a full discussion of this).

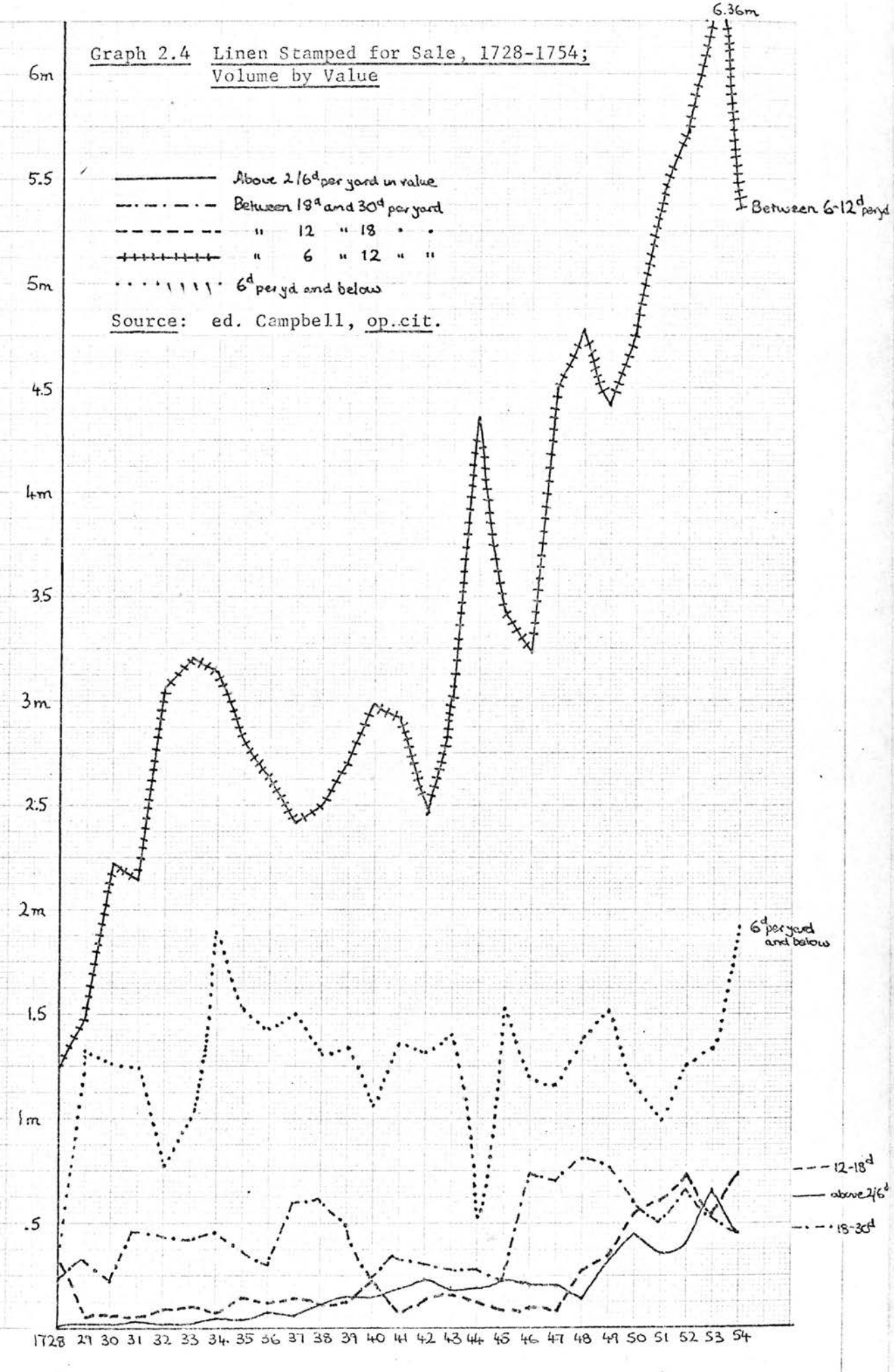
6 For full details of the Bounties conferred by the Acts of 1742 and 1745 See infra, p. 79.

Graph 2.3 Leading Fabrics of Linen Stamped for sale in Scotland, 1728-1754



Source: States of the Annual Progress of the Linen Manufacture, ed. R. H. Campbell (S.R.O. NG 1/14/1).

Graph 2.4 Linen Stamped for Sale, 1728-1754; Volume by Value



Source: ed. Campbell, op.cit.

During the period under survey, it is clear that from the statistics of stamped linen that the commercial output of the Scottish Linen industry did expand considerably, which induced both changes in the organisation of the industry and an increase in the numbers employed, but resulted in very little mechanisation of any of the processes of production. The salient features of this period 1727 to 1775 are the foundation of the Board of Trustees in 1727, the Bounty on coarse linens exported, conferred by an Act in 1742, raised in value in 1745 and extended to striped and checked linens in 1770, the formation of the British Linen Company in 1746 and the end of the Jacobite rebellion in the same year. It has seemed reasonable, therefore, to examine the work of the Trustees and developments in the linen industry in this period in two chapters; from 1727 to 1746, and from 1746 to 1775 when both the increased bounty and the British Linen Company became important factors in relation to the linen industry of the East of Scotland in particular.

The foundation of the Board of Trustees, and its subsequent operations, has generally been regarded as an event of importance for the development of the industry. The Board did not operate in isolation from the industry; the Trustees were under constant pressure from, and in frequent consultation with interested parties within the industry. Representations and advice were received continuously from Societies in the linen trade, e.g. the Glasgow Linen Society which was founded in the late 1720s, and also the Convention of Royal Burghs. The application of the Trustees' funds was, therefore, in the final control of the Board under the Crown, but at least guided by the more vocal sections of the industry.

The income of the Board of Trustees was derived from several sources. By Article XV of the Treaty of Union, an annuity of £2000 had been set aside for 7 years to encourage the manufacture of coarse wool, and another annuity

of £2000 was provided by an Act of 1718 (5 Geo 1,c20), to be used for the encouragement of fisheries, manufactures and improvement. The Malt Tax Act of 1724, (12 Geo 1c 4), stipulated that if the Malt Tax raised a sum exceeding £20,000 in any one year, the surplus was to be applied to the same purpose as the above annuity. Varying sums were paid over to the Trustees for many years, with some in which nothing was paid, until 1791, depending on the yield of the Malt Tax. The accumulated funds of the two annuities, amounting to £30,000, were made over to the Trustees on their appointment in 1727, and £20,000 of this was immediately put out on loan. In 1737 another £20,000 accumulated from the surplus of the malt tax, was also invested.[7]

The annual income of the Board, for use in the encouragement of the linen, woollen and fishing industries, consisted therefore of the annuity of £2,000 in terms of the Act of 1718, such surpluses as might arise from the Malt Tax, and interest on the above funds invested. In addition, for use with respect to the linen industry alone, an annuity of £3000 for nine years was paid to the Trustees in terms of an Act of 1753 (26 Geo 11 c 20) to promote the linen manufacture in the Highlands. An Act in 1770 (10 Geo 111 c 20) established a fund to encourage the growing of flax and hemp in Great Britain. Payment of the Scottish share of this fund began in 1773, and the Trustees had expended just over £14,000 from this source by the end of 1775.

In the years 1728 to 1775, the Trustees' expenditure on the linen industry (exclusive of that under the Highland and Flax funds) averaged £3,168 per annum[8] with a fair degree of fluctuation from year to year, from a minimum of £1,810 in 1746 to a maximum of £6,360 in 1752. The variations

7 This section is closely based on the Introduction to the Index of Records of the Board of Trustees in the S.R.O.

8 This calculation of the expenditure of the Trustees is based on S.R.O., NG 1/22/1-2; Account of moneys issued by the Receiver-General and Cashier by virtue of sundry warrants.

derived primarily on the income side from the irregular existence and variable size of the Malt Tax surplus, and on the expenditure side from a variety of factors, such as the amount of saving made on various items in the Plans (for expenditure), which were formed in fair detail on a triennial basis for Crown sanction.

In this section of the thesis, an examination will be made of the policies of the Board of Trustees in relation to the development of the Scottish linen industry. Their resources and expenditure may be set in the perspective of the estimated value of the commercial output of linen, which in this period rose from roughly £150,000 p.a. in the early 1730s to over £600,000 p.a. by the latter 1760s. (See Graph 2.2) It is not possible to make an overall assessment of the efficacy of the Board's expenditure because in the case of many of its policies, it is impossible to establish what the rate of return was in either economic or social terms. It is possible to identify certain policies as completely or partially unsuccessful, in the sense that the expenditure failed to realise to any extent the objective set by the Trustees, either because the objective set was to ambitious for the Trustees' resources, or the means chosen proved faulty. In such a case, where the rate of return was patently nil or very low, it is at least likely that an alternative use of the money would have yielded a higher return. Where the objective of the Trustees was realised to some extent, one difficulty is to evaluate whether this was due solely to the expenditure of the Trustees, and another is to judge whether the same capital would have yeilded a higher rate of return for the linen industry if invested in another policy. The Trustees were not, for political reasons, generally at liberty to switch the allocation of their funds from one policy in the linen industry to another in support (say) of the woollen. Their performance has, therefore, to be evaluated policy with policy within the linen industry alone. If the

Trustees had any one dominant principle by which they governed their expenditure, it was to assist the development of the industry by a series of short-term inputs of capital and skill which would assist the industry to stand on its own feet, and not - with the exception of the regulatory network - to become committed to permanent subsidies. Success is, of course, only relative to the extent of the difficulties encountered. The obstacles to development faced by the Board in 1727 were very great, given the difficulties not just of diffusing better and more efficient methods of production with limited financial resources in a country "innured to traditional though inefficient practices"[9], but of knowing which were the better methods to adopt.

9 States of the Annual Progress of the Linen Manufacture 1727-1754, ed. R.H. Campbell; introduction, p. viii.

Chapter Two: The Trustees and the Linen Industry 1727-45

"Linen is our Staple...but it has been wofully neglected."

Lindsay - Interest p. 143

The intention of the Trustees to operate on a broad front, and their consequent involvement in virtually all the stages of production should not be allowed to obscure the fact that their funds were too small for their efforts to make more than a marginal impact. Much of the industry developed with little or no help from the Trustees. But an important general weapon of the Trustees was the netowrk of stampmasters established as soon as the funds arrived from London in November 1727.

Initially 40 stampmasters were appointed, recruited from the ranks of weavers and small linen dealers. This number was quickly recognised to be inadequate "for the Service of the Country" and 15 more were appointed, bringing the number up to 55.[1] Ideally the network was to be extended so that no weaver or clothmaker was put to the inconvenience of carrying his cloth too far from home to be inspected and stamped, but in practice there were too few to cover more than the main producing areas in depth - Fife, Perth, Angus, Lanark and Renfrewshire.

In theory, the stampmaster was to examine every piece presented to him and measure the length and breadth before stamping it with his personal stamp, which bore his name, the place of the office and the length and breadth. Such cloth as was found to be insufficient because of bad workmanship was to be cut into unmarketable pieces and given to charity. A particular abuse which it was hoped "to stamp out" was that of putting the best of the cloth on the outside of the roll and much inferior cloth on the

1 This was not sufficient - cf. Lindsay, Interest, p. 183, "the stampmasters are at present rather too few in number for the service of the country" (1733).

inside. Equally the stampmaster's measure offered not just a guarantee to the buyer but protection to the seller. Buyers of brown or unbleached cloth were in the habit of insisting on an allowance for shrinkage in the length when bleached; this was standardised at an inch in the yard. All unstamped cloth which was offered for sale was liable for seizure. With this heavy penalty and the relatively light fees asked for the service of measuring and stamping, the Trustees wanted to ensure that all cloth offered for sale would have to undergo the surveillance of the stampmasters, who were intended not just to regulate but to advise and help by pointing out mistakes.

The stampmaster in the more important centres (e.g. Edinburgh or Glasgow) were given the fees in lieu of salary. The others were guaranteed a salary of £10 p.a. if the fees did not amount to much. In addition the Trustees did occasionally license a stampmaster without salary whose fees were not supplemented, e.g. in Orkney, for the convenience of the weavers there. The amount of work varied by area: the stampmasters were supposed to attend the local fairs but not to poach on another's territory.

Stampmasters were not allowed to deal in the cloth they had stamped themselves because of the temptation to impose false measure. This was clearly illustrated when the Inverbervie man, James Linton, was dismissed in 1735 for an abuse too often practised in the country areas: he had been in the habit of "imposing wrong measures on the Country People especially in markets when those who buy cloth reward him - the sellers lose two yards every score of ells which the buyers gain and when sold at Edinburgh is allowed by the merchants there to the sellers".[11] On the other hand, when the rule was complied with this was both a hardship to stampmasters and a deterrent to more skilled recruits. It was circumvented; James Johnston, the Glasgow stampmaster, pointed out that stampmasters' wives had to keep shops for the retail of linens "to aid their small salaries and fees for a

11 Saltoun MSS box 327.

livelihood"[12] - as his wife did. The Trustees decided to allow them to retail cloth and to buy linens for others in the country villages where no buyer resided: where there were local resident merchants the stampmasters were not allowed to act as an agent or factor for others.

Measure always continued to be a very vexed point with buyer and seller alike. The London Factors in Scottish linens complained bitterly to the Trustees in 1729, "that the generality of our linen cloth is short in measure of its stamped quantity whereas the Irish and Foreign keep proper length."[13] The alarmed Trustees issued a stiff warning and a measuring table, designed by Richard Holden, to all their stampmasters and asked the London men to appoint one of their number to buy up Scottish linen insufficient in quality or marked length. Faulty stamping could be traced by the stamp to the respective stamper concerned, for appropriate retribution. It was not always possible for the Trustees to act too harshly; the press of business in the offices at Dundee and elsewhere made it quite impossible for the stampmaster to check every piece inside as well as out. The "pernicious practice"[14] of the seller putting the best of the cloth on the outside was never eliminated, judging from the frequent complaints made right into the 1770s.

In the country districts much cloth made privately by the customary weaver escaped the stamp, and many a piece must have been passed for local sale without too searching an inspection. The over-zealous stampmaster was likely to find his neighbour less so; Cockburn of Ormiston maintained, "It is a common practice at Glasgow and elsewhere that, when a web is bad and the nearest stampmaster is scrupulous, it is taken to one known to be ignorant or rogue, which poisons our trade and reputation."[15] He alleged that the network was

12 B.O.T.M. March 1736.

13 B.O.T.M. 30 May 1729.

14 Ibid.

15 Clerk of Penecuik MSS GD 18/5904.

not functioning well; "I wish I could say the public stamp had any credit."[16] This was an exaggeration, as the abuses of a few tended to discredit the whole. The remedy lay with the buyers: the Trustees took all complaints seriously and investigated them quickly. The stamp, by guaranteeing length and uniform quality, or redress if these were lacking, must have contributed to some extent in restoring the confidence of English purchasers, and in raising the reputation of Scottish linen from its position of sad discredit, and after the 1730s, complaints about measure from London seem to have declined. The system was extended to cover all the fabrics of linen - buckrams, table cloths, checked hankerchiefs - during the early thirties.

In addition to the regulatory network, the Trustees were also directly involved in the various stages of the production of linen; flax-growing and preparation, spinning, weaving and bleaching. We now turn to an examination of each of these aspects in the light of the Trustees' contribution over the period 1727-46. Significant though the work of the Trustees was, it is suggested that the yield of their effort was not always very great in comparison to the benefits apparently obtained through the stamping system. How much regulation alone contributed to the raising of standards cannot be statistically assessed. It is worth noting, however, that Gulvin attributes part of the blame for the absence of improvement in the quality of Scottish woollen production after 1727 to the failure of the Board of Trustees to establish an effective network of stampmasters for the woollen industry on the lines of the linen. "The board palpably failed to bring about the stricter regulation of the industry by insisting on the stamping of cloth exposed for sale...Their measure of success in the linen sector...suggests that more could have been done to regulate the woollen."[17]

16 Ibid.

17 C. Gulvin, "The Union and the Scottish woollen industry, 1707-1760". S.H.R. 1971, p. 130.

THE TRUSTEES AND FLAX

"We know for certain that all our bad cloth is owing to the badness of our home-grown flax, arising from our mismanagement of it".....Lindsay - The Interest of Scotland Considered (1735), p. 171.

The flax used by the Scottish industry was either grown at home or imported from Holland and the Baltic, and home flax was generally grown from imported seed, usually Dutch in the 1730s. Contemporaries thought that less than half the flax used by the Scottish industry was in fact home grown and that the quality of Scots flax was low, with resultant damaging effects on the yarn and cloth prepared from it. The famous bleachers, Greys, charged a higher price for bleaching cloth made from Scots flax, in the 1730s; they found linen made of "lint raised of the growth of this country...so ill that there was no possibility of bringing it to that beautiful white so much desired until abuses were reformed."[18] The result was that as the industry expanded, so imports of rough or undressed flax rose. (See Table 3.4)[19] The fine linen sector in the West[20] seems to have been more dependent on imported supplies than the coarse linen sector in the East, which used more locally grown flax.

Various explanations were advanced for the low quality of Scots flax.

18 Caledonian Mercury Advertisements.

19 Infra, p. 101.

20 History of the Linen Trade in the West of Scotland. "The undertakers of the fine linen trade...having got their linen woven with all necessary care yet they soon found that as the same was made up of our own country yarn made of many different sorts of Flax of our own growth, it was impossible for the bleachfields to bring the whole to a proper colour... Several such repeated trials and losses at the bleachfields obliged the manufacturers to send to Holland for the flax they wanted and thence forth chiefly to spin their own." (S.R.O. Seafield MSS GD 248/954/2).

The poor quality of seed used was blamed - there were frequent complaints that the Dutch only exported their rubbish; the lack of skill in managing flax, not knowing when to pull it - "You folks in Scotland reap too soon, without giving it time to ripen"[21] - or how long to leave it to steep, or how hard to heckle the flax into fibres for the spinners. One root cause was undoubtedly the way in which flax was grown; in small lots, an adjunct to a backward agricultural system. The Trustees tried a variety of techniques to improve the quality of Scots flax; by importing better lintseed, encouraging the growth of more flax by the premium, engaging flaxmen from abroad to supervise the growing and preparation of home flax. Riga lintseed was imported in an attempt to improve the quality of seed; this was either sold at cost price or distributed free. But the Trustees could not sustain this financially; what was missing was merchants willing to deal in quantities, instead of the mere trickle of barrels which ignorant shipmasters brought across from Holland. The Trustees agreed with the Glasgow Linen Society - "the only way to have right lintseed will be to get some people to work it into a business and not a bywork as is the practice in your country".[22] By the 1740s, lintseed importing was a flourishing business, imported to the East Coast or at Boness for carriage to Glasgow.

The Trustees offered a premium of 15/- per acre from 1728,[23] intended both to encourage the growth of more flax and, because it was only given to those who had sown ten acres or more, to persuade farmers to take up flax-growing on a larger (and hopefully more efficient) scale. In fact, although the money expended did result in an increasing number of claimants for the premiums, it is extremely unlikely that it had much effect in increasing the acreage grown, let alone in raising the quality. Between 1728 and 1745 on

21 Transactions p. 316. See also Lindsay Interest p. 153 "In the West... the people are rivetted in a most pernicious Conceit, that unripe Lint makes the finest Flax."

22 B.O.T.L., Trustees to James Dougal, Preces of the Society, 8th October, 1734.

23 Supplemented in the West by premiums given by the Glasgow Society.

average 219 acres received the premium,[24] depending both on the season and the severity of the inspection of claims. Only in the late 1740s did the acreage jump sharply, to 2188 acres in 1749, when the Trustees had to discontinue it or use all their funds in this branch alone of the manufacture. The continuing use of the funds in this way was sharply criticised; John Cockburn alleged it was a put-up job by the gentry in 1727, as Clerk - himself a Trustee - had to concur; "The Royal Patent[25] has tied our hands over the premium. How it was at first concerted I know not for of the Trustees none were advised. I am told it was a proposal from the Royal Burghs insisted on by Gentlemen who hoped to reap advantages to themselves and their tenants."[26]

There were two main criticisms. Firstly, that the premium did nothing to improve the standard of flax grown. "We do not want to raise flax as much as we want to raise good Flax."[27] Secondly, the money could have been better employed. "Our lint is not despicable but worth the Trustees' attention for if from bad seed (compared with the Riga) and indifferent management in other respects, the flax in Scotland turns out when well watered as (Keysar's)[28] does...it is capable of being improved would our Trustees lay out the premium thrown away for sowing rubbish on improper soils and bad managed lands, upon bringing right Riga seed and giving it at a low

24 Varying between 543 in 1734 and 77 in 1735.

25 The Royal Patent approved the use of funds per a general plan, which limited the Trustees' room for manoeuvre. The plan could be altered every so often, e.g. for rewards, but major reconstructions took time.

26 Clerk of Penecuik MSS GD 18/5904.

27 Lindsay Interest p. 171.

28 Keysar was a flax-raiser, brought over by the Trustees from Holland in 1737.

price to proper hands."[29] Lindsay argued that the money would be better employed in engaging more flax-raisers.

What improvement did come was due to the activities of the Dutch flax-raiser, Keysar and his apprentices. By 1739 there were 12 flax-raisers in the Trustees' employ at £8 10 each p.a. Some were less satisfactory than others in teaching the locals how to grow and prepare flax; a survey in March 1740 found that very few were performing as the Trustees intended - i.e. Patrick Mackie seems to have sauntered from one place to another without special orders. Keysar did manage to lay the myth that good flax could be grown in Scotland by raising very good flax in the Carse of Gowrie: Cockburn drew the moral that, "Good seed, right soil, proper watering and dressing would make the Scots flax far exceed the notions we have of it, if not to equal the Dutch."[30]

The attention given to the raising of Scottish flax, even if it were from Dutch or Riga seed, was justified. Not only did "vast sums"[31] have to be laid out annually to purchase Dutch or Baltic flax, but as Clerk observed, "all our linen manufacturers will be precarious if they must absolutely depend upon foreign flax";[32] war, for instance, could greatly affect both the amount available and the price. The foreign flax was either imported direct, or bought at London. It seems possible that as home demand grew, more of the flax was imported direct from the Continent. Scottish houses rose into prominence after the 1730s - like the famed Hopes of Amsterdam, and Shairp of St. Petersburg - dealing in all the imported materials of the linen industry, flax, ashes and lintseed. Some bought on commission for

29 Clerk of Penecuik MSS GD 18/5901. Letters of Cockburn to Tod Dec 9.

30 Ibid.

31 Clerk of Penecuik MSS GD 18/5904.

32 Clerk of Penecuik MSS GD 18/5901.

importers; others were linked in partnership with a home firm, e.g. the firm of Thomas Allan of Leith and St. Petersburg: he himself commuted between the two. There were only a few large East Coast wholesale importers of flax and lintseed, and they also dealt in other commodities. Charles Addison of Bo'ness imported lintseed in bulk; this was then broken up into lots of twenty or so barrels which were then sold to retailers or at the fairs. Flax was sold by the ton to manufacturers who dressed it themselves, or to flax-dressers who heckled the flax and gave it out to be spun, or sold it to spinners. Typical of this class were the Wrights, located in Glasgow, and the Sommervilles in Leith. They ran "lint and yarn" manufacturies; selling lint dressed and undressed, tow and yarn. Flax was given out to be spun, and the spinner paid for work done. The poor town spinner was often tied by her poverty to a "giver-out".

Dressing flax involved scutching and heckling. Steeping and scutching were preliminary processes by which the husk was loosened before the heckle combed the fibres out. The Trustees thought that, "the art of preparing flax for the heckle was little known in Scotland",[33] and sent James Spalding[34] of Bonnyton Mills, Edinburgh to Holland in 1729 to study the techniques there. After his return in 1730 he constructed a scutching or lint-mill driven by water; the Board were so delighted that the paid him £230 for his expenses and invention - rather prematurely, as the Christmas Report (1731) had to confess, "the art of breaking and dressing by the lintmill being not yet brought to sufficient perfection".[35] After modification, several more were built in the 1730s, of which the model was Thomas Hope's of Rankeillor's.

The lint-mills' machinery consisted of scutchers or mallets made of hard wood which were fixed on a centre beam driven by water power. This beat

33 B.O.T.M. 18 July, 1729.

34 Spalding was a protege of Lord Milton whom he pestered unmercifully. After frequent dabblings in all stages of the linen manufacture, he went bankrupt in the 1750s.

35 B.O.T. Report Christmas 1731.

off the outer shell of the flax. The danger was of over-beating and the widespread acceptance of the lint-mill was retarded by the crudity of the mill and the difficulty of finding enough wrights and mechanics to erect and keep them in working order. After scrutching, the flax was then heckled or combed by hand to the appropriate fineness: the heckles were wood or stell combs. There were six sizes, but for the very finest yarn and flax could not be heckled but brushed, a tedious and costly occupation. Hecklers were located close to the mills where the tenants brought their flax to be dressed. Sometimes the miller bought the flax himself.

If, and in the 1730s this would be the rule, there were no adjacent mill, the alternative was to dress the flax entirely by hand. The lint was bruised with a hand mallet, and scutched with a hand swingle. The low cost of doing this by hand may have been another deterrent to the spread of mills. Poor heckling did not improve the standard of Scots yarn and the Trustees tried to encourage heckleries under trained men with good implements, and distributed heckles gratis in country areas. By the 1740s there was some evidence of a growth of tenant interest in growing better flax and improving the techniques of preparation; by 1746 flax production was said to flourish; several of the small tenants in Glenderule paid their rents entirely in lint and yarn.[36] But much of the flax grown in the Wast was still in the penny-lots, poorly raised and badly dressed.

Yarn and Spinning

> "Spinning is the chief support of the manufacture: and as this article requires and employs the greatest number of hands, great care should be taken to diffuse and extend it over the whole country."
>
> Lindsay: Interest p. 171

36 Saltoun MSS box 328.

Few figures are more common in eighteenth century Scottish Literature than the spinner. "All our ordinary women spin, and spin tolerably well"[37] and it was an occupation not just for weavers' wives but for households, rich and poor, part-time and full. Above all it was the staple of the unmarried woman ("spinster") and the widow, the Mrs. Malcolms of the day; "from morning to night she sat at her wheel spinning the finest lint".[38] Spinning brought in money: woe betide the household if this source were cut off:-

> "My father couldna wark, my mither couldna spin;
> I toiled day and nicht, but their bread I couldna win."[39]

Woe betide the household too if the wife "kent neither spinning or carding",[40] or would not work at it. Most of the spinning was concentrated in the Lowlands and the East coast, but during the 1730s and 1740s there was a significant extension into the West coast and Highland areas.

The crucial relationship for the spinner was the way in which the dressed flax was obtained. Some households in the East grew and heckled their own flax. Others could afford to buy dressed flax which they worked up for sale to the local weavers, or to the packmen who took lots of 20-30 spindles to the local yarn markets for sale. The poorer spinner was dependent on being given-out dressed flax to work up at an agreed price: the undertaker supplied the flax and took the yarn. During the 1730-45 period, the terms on which the spinner obtained her yarn became increasingly important.

The weaver had to ensure himself of a sufficient supply of yarn, but at the yarn markets he was competing not just with agents buying for the

37 Lindsay Interest p. 147.

38 Galt Annals of the Parish.

39 Lady Anne Lindsay "Auld Robin Gray".

40 Alexander Ross, "Woo'd and Married and A'" - an example of looks deceiving.

town manufacturers, but also with merchants securing yarn for export to England and Ireland. This kept yarn prices up and encouraged more women to spin, but worked against the independent weaver, unless his own household could spin enough yarn. The coarse linen weaver of the East using yarn spun from flax raised in his garden was in a much more independent position that the fine linen weaver of the West, who was dependent on purchasing yarn. The demands from abroad and the expansion of the home industry had two major consequences; firstly, spinning spread geographically and secondly, manufacturers and yarn merchants developed the giving-out system to tie the spinners to themselves. The poverty of the average spinner and the need in the West to buy imported flax accelerated the process. Through controlling the supply of flax, the yarn merchants could tie the spinner to working for himself only. As the industry spread to areas like Bute, Kintyre, Argyleshire and further North, the giving-out system became paramount, because the venture was usually that of a merchant undertaker through whom the supplies of flax and yarn were channelled. Manufacturers - those with more than 10-20 looms under their control - followed suit, employing agents to give out flax. What the fine linen manufacturers of the West pioneered in the 1730s the British Linen Company was to follow in the late 1740s, in an attempt to guarantee their yarn supplies, and by extending the spinning into new regions both to get cheaper yarn and peg back the price of Lowland yarn. The control of the yarn supplies began to seriously affect the independence of the small weaver and in the fine linen sector of the West the manufacturer began to dominate production.

In a contemporary pamphlet, "Directions concerning the Linen Manufacture"[41], the manufacturer was advised to give out lint and take in yarn himself, as the surest check on the spinners. The lint given out and the yarn taken in

41 Saltoun MSS box 328.

was weighed to prevent any embezzlement,[42] and any inadequate yarn was to be returned to the spinner. He should buy no sale yarn and use only yarn made from his own lint. Prices for spinning should be reduced to each spinner not buying or taking their lint from him, to discourage them from using their own, which they tended to overspin. Prices given for spinning should be varied according to the spinner's ability. The more spinning he had done, and the greater the distance of the spinner would increase the use of agents who had to be skilled. Some of the Glasgow manufacturers had agents not just on the West Coast but also in the East. The impetus from the West owed much to the competition engendered by the agents of the exporters.

The organ of the Fine linen manufacturers of the West, the Glasgow Linen Society, suggested several times to the Trustees that a ban be put on the export of yarn. The two main markets were Ireland and Manchester; the Irish "buy up large quantities of our fine linen yarn in the West, as do the manufacturers of Manchester and Kendal yarn of a coarser staple in other parts which is a great loss to us."[43] The main routes to England were by land through Dumfries from either Glasgow or Lanark or Falkirk where the main markets for yarn were held, or from Montrose[44] and the East coast by sea to London, and by sea from Glasgow to Ireland. English merchants came to the main yarn markets to buy each year or employed agents to buy for them, and some Glasgow merchants specialised in the unpatriotic pursuit

42 This was the general practice for amny years; e.g. David Flint to the Dean of Guild at Inverness where flax was being spun up, "there can be no difficulty in dealing with your commons for spinning - the method which I believe is much the same everywhere is to weigh the lint to the spinners and the yarn when returned." B.O.T. letter 1744, 29 Oct.

43 Lindsay - Interest, p. 101.

44 E.g. in 1734 a cargo of 30,000 spindles was shipped to London from Montrose. B.O.T.M. Jan, 1734.

of buying yarn for the Irish. The Trustees saw some benefit; because the price of yarn was kept up more spinners were attracted. "The exportation of our linen yarn to Ireland and other parts continued to raise the price which was some disadvantage to the Manufacturers of cloth, but had this good effect, that it encouraged the poorer sort of people to learn to spin from which it was to be hoped the country might in time be stocked with good spinners which could not fail of being a lasting benefit to the Manufacture."[45] If English demand fell off, the price of yarn might fall considerably, as happened in 1735.[46]

The Glasgow manufacturers contined to protest loud and hard; their sense of grievance was increased by the difficulty of increasing the number of spinners of fine yarn. In the 1740s they argued that although the number of fine linen weavers had been increased, "The manufacturers find themselves straitened for proper yarn for Hollands and hankerchiefs".[47] They responded in several ways; by calling for an outright ban on the export of yarn to Ireland, or at least harassment of the yarn exporters on legal technicalities; by importing foreign fine yarn, and a drive further afield to extend their hold over yarn supplies before they came on to the market. The Trustees could do nothing about prohibiting the export of yarn; "however detrimental the Trade, there's no law against exporting yarn to Ireland."[48] The yarn trade and its sister the thread trade were established export staples in their own right by the late 1730s,[49] which did encourage the diffusion of spinning.

45 B.O.T. Annual Report 1733.

46 For a fuller discussion of the English market and yarn prices see infra, Ch. 3 pp 157-165.

47 B.O.T.M. Letter from the Glasgow Linen Society. 11 Nov., 1743.

48 B.O.T.M. Minute reply 11 Nov., 1743.

49 See the "Scots Magazine" 1739-41 for occasional lists of thread and yarn exported from Leith to London.

Duncan Forbes put the position to Tweedale in 1742: "Our Spinning, which is the basis of the Manufactures, is so far advanced beyond that of our neighbours, whatever they think fit to give out to the contrary, that very large quantities of our yarn are bought up and transported by the Irish; which though it lessens the quantity of our cloth, yet proves an encouragement to the spinning and therefore be fitly winked at for some time, tho' at last it ought to be prevented because tho' we with great pleasure see great quantities of linen yarn carried to Manchester and other parts of England to be wrought up into different sorts of goods, and hope that this trade, which is of advantage to the whole island shall continue; yet we flatter ourselves to have in due time the favour of the legislature on our side, to hinder our rivals in trade from raising the mercat of our yarn so high as to spoil our trade."[50] On balance, the high level of demand for yarn from England and Ireland may have hindered the expansion of the home manufacturing of linen - and the fine linen sector suffered most - but did lead to an increase in the numbers of spinners, which provided the basis for the expansion of the late 1740s.

There was certainly an expansion in the spinning trade. Glasgow merchants were trading to Montrose and elsewhere in the East Coast for yarn, probably intended for export.[51] The manufacturing areas were looking further afield for their supplies of yarn. From the complaints made by the Dunfermline Weavers' Incorporation in 1732, the Perth and Angus Traders in 1737 and the Glasgow Linen Society in 1739 about the bad tale of Northern yarn ("it generally wants 10-25% in measure"),[52] it can be inferred

50 Letters of Duncan Forbes of Culloden - Culloden Papers No. CCXXV p. 188-89.

51 E.g. the seizure of some falsely reeled yarn from two Montrose merchants in 1733; they said they had bought it for William Dykes of Glasgow, an exporter.

52 B.O.T.M. 23 Nov., 1739.

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how important the Northern supplies were as a supplement to those of the Lowlands. Control over yarn supplies and the increase of the giving-out system were notable by the 1740s; John Forrester was a typical such undertaker, travelling a circuit in the Bridge of Allan area, giving out lint and collecting yarn on a weekly or fortnightly call to a circle of spinners.[53] It was a shortage of spinners that led the manufacturer to develop his giving-out system; it was his control over the supply of flax and their poverty that compelled the spinner to accept the relationship. The position was nearly static; the increase in spinning kept yarn prices down as the demand from the English market and the home sector kept the prices up. If prices rose, it was axiomatic that the spinners took advantage of this by working less (and any lessening of the wearisome labour must have been welcome indeed), but in the longer run the numbers of spinners increased. If prices fell, it was virtually impossible for the spinner to spin more to compensate; the effect was not more yarn but fewer new spinners and a contraction in the spinning generally.

In the early 1730s paradoxically it was the increased regulation of linen which led to an expansion in the quantity of yarn offered for sale; the reason was that "a great many housewives in the West country who before the Linen Regulatory Acts were in use to cause their own to be workt into linen now chose rather to sell their yarn which is become very insufficient (overspun) with false knots, lumpiness, etc."[54] In other words, instead of making bad cloth they now sold bad yarn. This necessitated some extension of the Trustees' surveillance to yarn on sale as well as linen. Robert Arthur, a merchant of Falkirk, testified, "that of late the spinning of yarn

53 See S.R.O. Spinning (Wages) Book of John Forrester.

54 Glasgow Linen Society to Trustees. B.O.T.M. 16 May, 1729.

for sale has become a very considerable article of trade; it was formerly made for cloth. While spinners continued to make their yarn into cloth themselves there was little occasion for any regulation as to the method for making up the cuts or hanks...they could get no more cloth than the yarn afforded. Now there is sale of yarn to be manufactured by others regulations are used."[55] The Trustees issued various edicts as to the regulation size of the reel and measure of yarn, and the stampmasters were sent to the yarn markets to seize any badly made yarn. The problem was that even if the Stampers could have inspected and measured every reel of yarn presented for sale much of the yarn made never came on to the market, being used by weavers or collected by the undertakers. This meant that although sale yarn could in part be controlled, much bad yarn became cloth without the Trustees being able to intervene. The most common reasons for bad yarn were the quality of the flax used, unskilfullness and overspinning - i.e. the yarn was spun too fine for the quality of the flax.

While the Trustees' efforts to encourage spinning were made along several lines, a high priority was given to the instruction of spinners. A meeting was held in October 1727 with several of the more important yarn dealers including Donaldsom of Drumsheugh, and they urged that the Trustees encourage the spinning of both coarse and fine yarn. Milton suggested that three spinning schools be set up,[56] at Edinburgh, Dundee and Perth. Though a semi-charitable motive was present, the primary economic objectives were to raise the standard of spinning and increase the numbers of spinners. It was hoped that these aims could be realised by the spinning schools and

55 Court of Session Cases 71/5 R. Arthur v. Wilson 1765. Wilson, the Trustees' stampmaster, had made a seizure of some of Arthur's yarn for being improperly reeled. Arthur made the defence that as he bought several hundred spindles of yarn from many hands, it was impossible for him to check the whole.

56 See I.F. Dean Scottish Spinning Schools.

by 1731 ten had been set up. Their effectiveness depended on the quality of the mistress and on local interest. Not all the schools were successful: the one at Ayr was soon abandoned and the mistress moved to Elgin. The one at Ormiston was highly commended by Cockburn, who wrote that "some kept to it all last harvest instead of going after the shearers which is the great school for pilferers in our country."[57]

Under pressure from the Glasgow Linen Society, the Trustees awarded prizes for good spinning in the West of fine yarn, and persuaded the wife of one of the Picardy weavers to go through to Glasgow in 1730 as an instructress in the art of spinning cambric yarn.[58] While her efforts were much appreciated officially, due to the lack of recruits, the school had to be closed. In general, the schools in the East fared far better than those in the West. The schools taught how to spin with both hands on the new kind of spinning wheel, and this may have been their most important contribution.

The Trustees were also concerned about the correct washing of yarn, to remove impurities and dirt before weaving. Usually the yarn was boiled depending on the yarn and flax: it then had to be rinsed and wrung out, and finally dried on poles. This process was incidentally a very good test of the quality of the yarn; the best lost very little in weight. Many of the poorer folk skimped on this process, contenting themselves with just a cursory washing. James Blair recommended that the yarn should be rinsed and pressed after boiling, but as "every country weaver cannot have (a press) so wringing in a chain is next best, and shaken dry in a garret. Dressing the yarn right expedites coarse linen making."[59] The grants made by the Trustees to yarn bleaching fields, e.g. £25 to Richard Johnston at

57 Clerk of Penecuik MSS: GD 18/5904.

58 B.O.T.L. January 1730.

59 The Manufacturer's and Weaver's Vade Mecum by James Blair.

Tipperlin in 1729 to lay out a ¾-acre field for the whitening of yarn,[60] made a start, and virtually all bleachfields also handled yarn and cloth. Yarn boilers worked full-time in the major centres. Some were independent, others linked to manufacturers. The drawback as far as the poorer weaver was concerned was that they charged 1½d per lb. of yarn, which made it virtually prohibitive for the coarse linen weaver. The major problem lay in the country districts, where the cost and the inconvenience and the small quantities deterred the country weaver from cleaning his yarn properly. But a retailing network did grow up to make supplies of ashes available in the small quantities desired. The Trustees were always on the look-out for possible improvements; they gave John Gammel, a yarn-boiler of Edinburgh, a prize in 1740 for his discovery of a new and cheaper way of washing yarn.[61]

The ill-cleaning of yarn was one handicap to good weaving; the ill-sorting of the spindles another which made the even weaving of cloth impossible. Yarn sorting required a very nice judgement for sizes of yarn, but the main deterrent for the small weaver was his lack of stocks. Most yarn was wrought up without sorting; sorting cost money and few could afford to keep large stocks of yarn on hand. James Donaldsom was sent by the Trustees to buy some common sale yarn at the Perth harvest market in 1740; in the 600 spindles he bought there were at least five sorts of yarn, usually unwashed or unboiled. The Trustees, to facilitate the development of the coarse linen sector in the country regions, decided to finance Yarn Sorters, who were to buy up the common sale yarn and sort it into its proper grist, for resale at reasonable rates to the common weavers who, "principally for lack of stock", were unable to provide themselves with sufficient quantities of sorted yarn.[62]

60 B.O.T.M. 11 Feb., 1729.

61 B.O.T.M. 6 Feb., 1739.

62 B.O.T.L. to Robert Whyte of Kirkcaldy, July 1745.

The Yarn Sorters, who were to be "skilled persons of sufficient stocks",[63] were to buy up proper quantities of the yarn of the country, sort it properly and sell it thus sorted to the poorest of the weavers at reasonable rates. This bold policy started rather poorly in the early 1740s, when initial appointments were made for one year only at Perth, Dundee and Kirkcaldy. Robert Whyte of Kirkcaldy, in return for a modest commission of £10 p.a., agreed to undertake "to provide and always keep a stock of Sorted Green yarn, for the use of weavers to the extent of £60 stg. and to provide and always keep a stock of White yarn to the extent of £100 stg.",[64] i.e. to keep stocks of sorted unwashed and washed yarn. The Yarn Sorters were modestly effective; the subsidy was well placed, given that lack of capital prevented the poorer weavers from sorting their own yarn or being able to buy sorted yarn except at a subsidised rate. "Poorer manufacturers are not in a condition to provide each for his web sorted yarn but wrought up any they could come at however unequal."[65]

The Trustees did not intend this to be a permanent crutch: they hoped that as spinning improved, and the grists spun by the spinner became less uneven, and the habit of sorting spread, the subsidy would become unnecessary. The basic problem, as in all stages of the industry, was poverty. Milton in 1744 blamed "the small state of stocks as the chief obstacle to developing the Linen Trade - viz. small assortments and lack of stock. Small men only buy yarn for one or two webs (find it) impracticable to sort it (which results in) varied web sizes and especially quality."[66]

Another aspect of the Trustees' work to encourage better yarn was the appointment of yarn inspectors, to inspect yarn offered for sale. John

63 B.O.T. Report Christmas 1740.

64 B.O.T. Misc. Bonds NG 1/13/1.

65 Saltoun MSS box 328.

66 Saltoun MSS box 350.

Anderson of Perth, John Chalmers at Aberdeen and John Given in Lanarkshire were experienced yarn dealers, paid £10 p.a. for their part-time work in this respect. The yarn inspectors were welcomed by the Lowland merchants and their ranks were supplemented by various unpaid inspectors operating in the Trustees' names, e.g. at Glasgow on the nomination of the Glasgow Linen Society. In July 1744, Tod and McCulloch, "merchants and manufacturers", in Edinburgh, wrote to the Trustees about Frauds in the Sale of linen yarn, especially in Aberdeenshire, and indicated that some considerable dealers there were offering to appoint some people to inspect the markets without a salary.[68] The Trustees were happy to agree to this arrangment, so obviously for the good of the industry and all buyers and manufacturers of yarn. During this period there must have been a considerable increase in output from the spinners, to meet both the demands of the home and of the foreign markets. This may have been met in part by a switch from part to full-time employment, but there was clearly an expansion in the total numbers of spinners, both within the Lowlands and by permeation into the Highland areas, where yarn production could take advantage of the pool of female labour. Transport charges and the unskilfulness of the spinner must have gone far to offset the cost advantage.

The increase in spinning for sale was accompanied by the growth of the giving-out system, particularly in the more distant areas. Data on what spinners actually earned is sadly scarce;[69] the earnings would depend on both the skill of the spinner and the kind of the yarn being spun and the state of market demand. When flax was given out to spin in Kintyre in

67 B.O.T.M. 13 Jul, 1744.

68 Ibid.

69 For a fuller discussion of this topic see Ch. 3 section pp. 158-163 and William Sandieman's table of yarn prices paid between 1734-55.

1744 the undertakers were paying 14^{d} for a pound of 5-6 hand yarn and 16^{d} for 8 hank yarn. A good spinner doing $1\frac{1}{2}$ spindles a week (containing $\frac{1}{2}$ lb. of flax) might earn between $7\text{-}8^{d}$ a week. But there were wide regional variations. The only safe generalisation is that the income from spinning made a useful addition to any household's income, achieved at the cost of long monotonous hours of work.

Weaving, Manufacturing and Marketing

"Our weavers were formerly in no esteem, and their Business little understood or regarded by any Body."

Lindsay: Interest, p. 166

The increase in the quantity of linen woven in Scotland was due on the supply side both to an increase in the numbers of weavers and also to a rise in individual productivity, as weaving became a full-time occupation. The diversification, specialisation and concentration in a wide range of fabrics from hankerchiefs to lawns is evidence of an improvement in the quality. The traditional basis of production was "customary" work; the weaver being employed to weave up a household's yarn. "Many of the better weavers wrought only for private use, as servants rather than manufacturers."[70]

Nearly all the country weavers and many of the poorer of the town weavers continued to be at least partially reliant on customary work, either from households or given out by merchants. Customary work tended to fall off later in the season (i.e. in the spring) at the same time as yarn prices rose. Some of the weavers were unemployed for this period, as their poverty prevented them laying in enough yarn to keep themselves in work. The poverty that led them to be dependent on customary work condemned them to this hungry gap when it dried up. William Cheap, an Edinburgh manufacturer, observed in 1743 that, "the poorer sort of weavers about this place are starving for want of work at least four months in the year, and are glad of any sort of work."[71] The smaller master-weavers, with 2-3 looms under their control, were equally distressed; "at present (after the

70 Lindsay The Interest of Scotland Considered p. 83.

71 Saltoun Mss Box 327. "Scheme for Encouraging Linen Manufacturers around Edinburgh."

harvest) our manufacturers cannot answer all the country work they have at this time of year, but they who have not some stocks to make a little for themselves in the dead time come to be in a poor condition and their journeymen have difficulty to find work whereas now the masters have difficulty to find journeymen."[72]

The difficulties of the dead time were caused both by the rising price of yarn and the lack of demand for cloth; Cockburn blamed this latter factor. "Our weavers cannot get work the whole year round for want of buyers of green linen";[73] the demand for cloth was dullest in the summer until the autumn trade revived demand, and spinning restarted after the harvest, which lowered yarn prices. The weaver's year commenced after the harvest, when both demand and yarn supplied were buoyant, languished in the early months of the new year until the spring demand for linens to be bleached and exported revived business, and then fell away again. Most weavers seem to have betaken themselves to the harvest and even in the towns weaving came to a complete stop during the latter part of August until midway through September. The irregular spurts of demand often left the weaver ready to sell at a low price for ready money, to a hawker - any webs he might have on hand. In the country districts the hawker, who might buy 10-12 webs for resale at the more distant fairs or markets, played a valuable role in bringing the cloth to market. The inevitable result of the fluctuating demand was that the price for weaving was high during the rush after the harvest to compensate for the dull months and the temptation to skimp on materials, plus the poor sorting and loom of the average weaver,[74] combined

72 Clerk of Penecuik MSS GD 18/5904. Letter of John Cockburn of Ormiston 29 Jan., 1739.

73 Ibid.

74 Lindsay Interest, p. 166. "They were and still are very ill appointed for looms; their Reeds were bad, and they had no variety of them, which put them under a kind of necessity of working different staples of cloth in the same Reed."

to depress the standard of the cloth woven. Cockburn pointed out that, "constant work would help much to reduce the price of weaving."[75]

The weaver in his poverty was vulnerable to the thraldom of the yarn merchant, and the lure of steady work provided by the giver-out or manufacturer, who in turn expected a lower price for the weaving. The essence of the difference between the two was that increasingly the manufacturer brought his weavers together into a factory - i.e. a place where 5-10 looms were located in the one building. Manufacturing work, as opposed to customary, was responsible for both an increase in productivity, through the switch out of part-time work, and of skill, through tight supervision, as well as economies on the supply side. But, unfortunately, it is impossible even to guess what proportion of the total numbers of looms in Scotland, were located in these manufacturies, save that it seems to have been increasing manufacturies.

In the towns, the Incorporations of Weavers retained some importance, and membership was necessary to practise the trade. The traditional structure of the weaving organisation was to start as an apprentice for five years, then serve as a journeyman for two years more, and finally graduate as a master-weaver, permitted to set up on his own. In the Burghs the Incorporations charged entry money, which was used for their poor box, at every stage. In Glasgow as entry money for a weaver the Incorporation charged a stranger weaver £8 6/8^{d} stg.; an apprentice £2 and a free master's son or son-in-law 20/-. Other Incorporations had similar charges, weighted heavily in favour of restricted entry (preferably from their families) in the name of quality. Cupar Incorporation had certain bye-laws of their own making: each applicant for entry had to submit samples of his work so that "none but sufficient tradesmen can be admitted".[76]

75 Clerk of Penecuik GD 18/5904 29 Jan. 1739.

76 C.R.B.R. bundle 330.

The Incorporations in the larger towns were beginning to have trouble enforcing their rule. The Incorporation of Glasgow, which claimed in 1726 that there were 2000 looms "within the liberty of said corporation",[77] had considerable difficulty with the suburbs: in 1734 they asked the Royal Burghs for support in a process between them and the weavers in Caldow and Blackford. They complained "of the many encroachments made by the inhabitants of their suburbs upon the priveleges of craftsmen in the free burghs and for making void contracts and agreements betwixt incorporations of craftsmen in free burghs and craftsmen in the suburbs thereof."[78] The Trustees suspected on the one hand that the Incorporations fostered collusive agreement to restrict entry to the crafts, and thus keep prices up, but on the other hand were aware that the penury of skilled weavers would not be solved by destroying the powers of the Guilds.

The Trustees did want to keep the standard of weaving up - or they wanted to prevent it from falling any further, and feared the consequence of permitting journeymen weavers to set up for themselves too quickly. The Incorporations claimed that, "their entry fee was very moderate, and triffling annual payments", and the apprenticeship system enabled thorough training. But as Adam Smith pointed out, "the institution of long apprenticeships can give no security that insufficient workmanship shall not frequently be exposed to sale...Quite different regulations are necessary...The sterling mark upon plate, and the stamps upon linen and cloth give the purchaser much greater security than any statute of apprenticeship."[79] Apprentices in Glasgow were bound to serve 5 years with freemen of the Incorporation, and then two years more for meat and fee (which ensured the master weaver some

77 C.R.B.R. bundle 230.

78 Ibid.

79 Adam Smith, The Wealth of Nations, Vol. 1 p. 110 (Everyman edition).

cheap labour), after which time he could secure entry as a weaver and set up on his own. The Linen Act of 1727 had laid down "that no weaver should set up for himself as a master-weaver until he give security (to the local JP)...that neither he, nor any persons to be employed by him shall weave any cloth for sale otherwise than by the Rules requires",[80] but this was a dead letter from the start. In 1729 the Trustees observed, "that one of the chief causes why the linen cloth is not brought to the conformity that the law requires is that the Weavers have not found security to weave in terms of the Act of Parliament."[81] Faced with the complete failure of their nation-wide scheme, the Trustees were wary of undermining the Incorporations.

The particular danger feared was of accelerating the flow of journeymen setting up as weavers. A practice adopted by the Trustees of giving looms as prizes for good weaving to journeymen was sharply criticised by Cockburn: "it tempts them to set up as Masters and possibly they get customary work for 5-6 months of the year and then they starve and are not able to go on as Masters and believe it below them to return to Journeymen. Makers Beggars too soon Masters is to be guarded against. At present Journeymen seldom outlive a year in one shop."[82] "The great complaint here is that there are too many masters and too few journeymen."[83] It may be that the single most important factor for the journeyman in the decision to leave

80 13 Geo I cap 26 sec. 8, sharply criticised by Cockburn, viz. "The new weaving regulations are difficult to comply with, like finding security for continuing journeymen for 6-7 years - they're not setting up for themselves until 26 years old and them employing a certain stock in business and also providing for good behaviour." S.R.O. Clerk of Penecuik MSS GD 18/5904.

81 B.O.T. Letters Board to Royal Burghs, 18 March, 1729.

82 Clerk of Penecuik MSS GD 18/5904. Letter 15 Dec., 1738.

83 Ibid.

his master and set up for himself was not the Incorporation was not the Incorporation and the entry money, but whether he could afford to buy a loom as well.

The master-weaver provided his journeymen with their looms, materials and work[84] in return for between one-half and two-thirds of the journeyman's wages. This could be varied; when weaving Holland, the Journeymen took two-thirds and the master one-third, but it seems to have been common for the Master to take one-half. "When master-weavers were employed by private people they are indeed in use to exact the half of the journeyman's wages on account of their own dues, but it also appeared that when one weaver employed another, the Master-weaver's part being considered as one-half of the journeyman's wages, was divided, and the person employed had half thereof or one-quarter in regard of the journeyman's wages and the Employer retained the other one-quarter in regard of his advance of the yarn and risk of the sale."[85] In customary work the weaver did not have to sell the finished web but merely return the piece to the customer who had provided the yarn: but the master-weaver could either contract o make cloth or sell it on the market, which put him at more risk. In the towns, the journeyman had several options at the end of his apprenticeship. He could set up independently to do customer work as commissioned, if he could afford the yarn; he could work for a master-weaver who supplied a loom, yarn and work in return for a deduction from his wages for rent, etc., or he could contract to work up yarn given to him by a manufacturer either in his own house or at a factory.

In the fine linen sector, the emergence of the manufacturer is the crucial development of the period. Sir John Maule in 1747 defined a

84 E.g. Hugh Brown, Master-weaver at Piccardy in 1745, had 4 cambric looms and 2 new broad looms, and was employing 3 apprentices and 1 journeyman as well as working a piece of linen for himself. B.O.T.M. 2 Aug., 1745.

85 B.O.T.M. 1743.

manufacturer, "by common usage, as one having six or more looms at work."[86] A manufacturer differed from a master-weaver in that he did not weave himself, but organised the supply of yarn, supervised the production, and handled the sale of the finished linen. Some manufacturers had "factories" - basements with several looms in them owned by the manufacturer, where production could be closely supervised;[87] but others did not. They instead gave-out yarn to be woven by weavers on their own looms at an agreed price, or alternatively, having agreed specifications and a price per yard, advanced the weavers some money to buy yarn and pay wages to their journeymen, if any.

Some manufacturers, like Donaldson of Drumsheugh and Cheap of the Canongate, started in the ranks of the master-weavers. Originally they had gathered several looms together into one factory or shop to work alongside the other weavers and supervise their work, but as the number of looms grew, the master did little or no weaving himself but left the factory under supervision of a foreman - in Donaldson's case, an Irishman - while he bought yarn, and handled the sale of the finished products. The limiting factor was stock or capital to buy and sort the yarn, pay wages, carry unsold webs, etc.; the advantages lay in the improvement in the quality of production through the sorting of the yarn and supervision. The full-time employment, although perhaps at lower wages, attracted the weavers from the vagaries of customary work.

Another entry to the ranks of the manufacturers was from the Retail or Wholesale side; David Spence of Fountainbridge, later to be one of the leading fine linen makers in the East, advertised in 1744 that he intended to set up a factory in Edinburgh, having thrown up the business of shopkeeper.

86 "Difficulties following the Bounty Act" Saltoun MSS box 328.

87 There was however no power driven machinery, etc.

The two other sources of capital for larger scale manufacturing came from commerce and the landowners. This was crucial - "the turning of the cloth making into men of some stocks who make a business of it will be a great means for getting credit for our linen."[88] In the West the extraordinary Shuttlefield factory for the weaving of Holland and Cambric linen was set up in 1741 by a partnership of Glasgow merchants, Laurence Colquhoun, Andrew Craufurd and Thomas Dunmore (all tobacco dealers). In 1742 this enterprise was emplying 70 looms constantly in a large factory, as well as several private weavers as need occurred, and the partners claimed to have sunk, "...£10,000 in stock."[89] Provost Aiton and his partner had a factory making over 15,000 yards of Holland annually. By 1741, there were at least 16 manufacturers of fine linen with factories of at least 20 looms, mostly in Edinburgh and Glasgow.[90]

In the East there were two outstanding examples of manufacturies set up by landowning capital. The pioneer was the Cupar Linen Manufactury and Bleaching Company set up in 1727. This ambitious enterprise had 26 paid-up proprietors, who had subscribed over £1500 by 1729, to encourage spinning and weaving, as well as laying out a bleachfield. The weaving side was disbanded after one of the London factors to whom the cloth had been assigned went bust in 1733, and the looms were sold off.[91] William Dalrymple's Cranston Manufactury, started in 1738, employed over 50 looms in fine plain

88 Clerk of Penecuik MSS GD 18/5904.

89 This factory, after the Bounty in 1742, turned its attention to the production of low-priced linens for the Plantation market. B.O.T.M. 3 Dec., 1742.

90 B.O.T.L. 17 Dec., 1741. The Trustees were proposing to settle the Dutch weavers individually at factories with at least 20 looms, and wrote to that number of manufacturers deemed eligible.

91 Bruce of Arnot Maniments, S.R.O. GD 242, box 40. ~~S.R.O. Bruce of A GD 242.~~

linen, and others in cambric.

It would be a mistake to exaggerate the factory's importance; the bulk of production still came from the house-based weaver. The factory was still the exception; unusual and progressive, and confined to the fine linen sector. Overall, reflecting the location of the main centres of the fine linen manufacture, factories were most common in Glasgow and the West, with a few in Edinburgh. The supervision raised quality and enabled specialisation in one fabric. "A greater uniformity would be of great advantage to our national trade."[92] The manufacturer, with or without a factory, was in a position to dominate the supply of fine yarn in the West as the dependence on imported flax grew. Just as he gave out flax to be spun, so also he gave out the yarn to be woven.

The strength of the partnerships and companies was that they were in a better position to face the demands of foreign trade. Foreign trade had too many hazards for those with little capital who were unable to carry the burden of waiting for a sale. The significant development in the 1740s was of copartneries to carry on the manufacture of coarse linen with a view to export. Milton wrote in 1744, "some copartneries have had tolerable success in the fine linens, but the coarse linens remain on the old bad footing."[93] Some attempts had been made, but the copartneries had failed for lack of honesty and knowledge, and "too great dead stocks."[94] The most famous of these enterprises was to be the Edinburgh Linen Co-partnery, later the British Linen Company, but it had two significant precursors at Arbroath and Montrose.

92 S.R.O. Seafield MSS GD 248/954/2.

93 Saltoun MSS Box 350. Letter from Lord Milton to John Goodchild of London, October 1744.

94 Ibid.

These East coast towns had a well-established market for coarse, brown cloth at London, and to improve the flow and quality of cloth, the London factors and the East Coast manufacturers combined in the setting-up of manufacturies for coarse linen. Given the competition from the Irish and the German linens in the middle and fine linen ranges, it was obvious that the main Scottish opportunity lay in the coarse linens. The Bounty given on coarse linens from 1743 further stimulated the development, recognised by the Trustees as they switched their support from the fine to the coarse sector. The Arbroath Company, Wallace Gardyne and Co., started operations in 1739 and despite early losses, had firmly established a large business by 1746. Their speciality was a species of low-priced linen in imitation of German Osnaburgh, and they claimed to employ yearly in the different branches (heckling, spinning, weaving and bleaching) 1500-2000 hands, including 100 looms, most of which were located in a large factory. The Montrose Company was founded in the early 1740s to make coarse linens and sail-cloth. Initially there were six shares of £600 each, making a capital of £3,600 in all. Two of the shares were held by local merchants, Robert Ouchterlony and Patrick Straiton; two by London Scots, George Ouchterlony and David Barclay, merchants and linen factors. The Ouchterlonys had been concerned in the linen trade for several years, and one had gone to handle the sales at London while the other had stayed in Montrose. In 1732 the latter had been employing a great many looms in the town and area. The company was well based in experience and aimed, with the capital resources it had, to expand production and to integrate all the processes into its control. Flax was purchased at Montrose or London, wherever it could be had cheapest; flax-dressers were recruited and an expert overseer induced to leave Sir William's service, one William Bruce, who supervised the weaving side. The cloth was sold unbleached (although a bleachfield was constructed in Montrose) by consignment to George Ouchterlony

or, if on equal terms, in Scotland. The venture ran into early difficulties; "the country people did not spin the yarn fit",[95] and the Company had to engage a spinning mistress "to teach spinning with both hands on the new-fashioned spinning wheel",[96] and distribute spinning wheels. Thirty looms were employed to weave up the yarn at the factory. William Bruce seems to have been a native Scot of considerable ingenuity; in 1747 the Trustees awarded him £50 for the invention of longshade spinning, etc. on condition that he explained the details to other sail-cloth manufacturers.[97]

The Montrose and Arbroath manufacturies led the way for others to follow, and two factories were set up in Dundee at about the same time. In the country areas, the giving-out system continued to predominate, and it was argued that once the standards of the country weavers had been raised, they would be able to undercut the factories. The factory was more characteristic of the fine linen branch, usually with a foreign foreman, Dutch or Irish. Shuttlefield had a Dutch master-weaver for the fine linens, and when it began to switch its attention to lower-priced linens for the Plantations, a weaver was brought from Manchester to improve technique. After 1745 the wind of change began to blow strongly: not just that new enterprises in the coarse linens were being set up, but some of the fine linen factories began to switch. The weathervane, Sir William Dalrymple, was talking of converting Cranston into coarse cloth production, "as it was more to the general interest of the country had turned his thoughts that way."[98] He found himself with a great many useless Dutch looms on his hands. The movement did not indicate a general decline in the production of fine linen; numbers of smaller manufacturies proliferated in the fine

95 Saltoun Box 328, Petition.

96 Ibid.

97 B.O.T.M. Dec., 1747.

98 B.O.T.M. March, 1746.

plain linen branch. Some branches of the manufacture were little affected by factories; the independent weaver dominated the production of hankerchief and diaper.

How important was the contribution of the Trustees to the development of the weaving sector? They had two main lines of attack, regulation and instruction, and also to a lesser extent, incentive, i.e. giving prizes for good weaving. The usefulness of the Stampmasters' network has already been indicated. The Board launched in this period two large-scale projects to instruct weavers in the best methods of making the finer linens. The first established a colony of foreign cambric weavers at Piccardy in Edinburgh; the second recruited Dutch weavers who were seconded to various manufacturies in Scotland to teach their journeymen in the method of weaving Holland cloth. The principle of the former seemed excellent, to transport a colony of skilled French cambric weavers to Scotland to teach and train local weavers in this most valuable fine fabric, of which large quantities were imported to Britain each year. One Nicolas Dafsauville was brought across from France (St. Quentin) for a reconnaisance in 1727 and he agreed to bring his and twelve other families across to settle, but on his return to France the authorities heard of his plans and threw him into prison. This delayed his departure until 1729, when he and the other weavers and their families - 33 in all - finally arrived at Leith in October. By the time they were installed in Piccardy Place in Edinburgh, over £2000 of the Trustees' funds had been spent. Sadly the colony never flourished. The weavers complained with justice of the quality of Scots yarn with which they were supposed to work; Scots flax was pulled before it was ripe; the yarn was not spun in the French fashion and the spinning schools could not persuade their pupils to spin cambric as opposed to normal fine yarn.

Above all, the end product was expensive and could not be sold, with

the result that the weavers were forced to appeal to the Board, which appointed its secretary, David Flint, to the post of Warehouse Keeper at Piccardy in 1732. He handled the administration, buying French flax, giving it out to be spun, paying the weavers and receiving the woven cambrics. The Piccardy weavers blamed French competition for the lack of demand for their cambrics,[99] and only when heavy duties and ultimately prohibition in 1747 were laid on foreign cambric imports did the trade revive. French cambrics could undercut Scottish, the Piccardy weavers alleged, because the cost of "living and Journeymen's wages were by the crying up of money in France considerably lower than in this country."[100] Another reason for their lack of sale was that the weavers for some reason made their cambrics narrower and thicker than the foreign, so "they would not answer for the uses of cambrics",[101] e.g. napkins.

Eventually, after a great deal of trouble and annoyance,[102] the Board handed over the Piccardy business in its decaying state to the management of two young traders, Ebenezer McCulloch and William Tod, in return for the warehouse keeper's salary of £100 p.a. They started in January 1743, having given a promise to keep and extend the work at Piccardy, "to bring that manufacture to a sure and lasting footing."[103] In fact a survey in 1745

99 Accompanied by a system of stamping home linens, which made it harder to smuggle in foreign cambrics, although by no means impossible.

100 B.O.T.M. Nov., 1741.

101 Letter of Sir Wm. Dalrymple to Duncan Forbes, 23 Oct., 1740, More Culloden Papers Vol. 3 p. 163-165. He intended to open a warehouse in London for Scots Holland, and asked for a few cambrics. "It is not for the sake of the profit that I desire these goods may be sent - I know they are made so thick and consequently so coarse for the money that they will not yield a profit."

102 A few years previous the same Sir William had attempted to rent some of the Piccardy vaults, and caused a near riot there by trying to evict Claud Polain, "whom he abused". He then lodged a series of complaints against Flint over the management of the Cambric funds, which were comprehensively rebutted after a lot of enquiry by the Trustees (B.O.T.M. August, 1738).

103 B.O.T.M. Jan., 1743.

found that in the 13 weavers' vaults were 31 cambric looms, 17 of which were employed by Tod and McCulloch, 10 were empty, and 4 were being worked by the French people on their own account. The undertakers were employing many of the apprentices to weave not cambric but Holland, which defeated the Trustees' intention to increase the number of cambric weavers, but was entirely realistic, as journeymen weavers trained at Piccardy had not been weaving cambric but had been leaving to set up in other branches. The real stimulus to the cambric (and lawn) manufacture came not from Piccardy but from the action of the legislature.[104] In terms, therefore, of fulfilling the Board's objective of establishing the manufacture of cambric in the East of Scotland, it seems reasonable to adjudge the Piccardy project as an almost complete failure, and the £9000 expended on this scheme as wasted. But, in fairness to the Board, the objective was a worthy one, and no contemporary voices were lifted in criticism of the project initially, and once the French weavers had been brought across, the Board was morally committed to support them. Where criticism is justified is with regard to the length of time that it took for the Board to accept their failure and wind up the cambric manufacture in favour of permitting the French weavers to work other fine fabrics.

In addition to this large-scale project, the Board also aimed to increase the quality and quantity of Scottish weavers by recruiting Dutch and Irish instructors, and sending young Scots abroad. The Board on occasion subsidised private ventures which had recruited a foreign master-weaver, and also brought across skilled Dutchmen themselves in the 1730s, who were placed with manufacturers for three years to instruct and train journeymen. Scottish manufacturers had long been aware of the need to import skill from either Ireland or the Continent (especially if foreign

104 Increased duties in 1742; Prohibition of the weaving of French cambric after August 1745, and a Further Act enforcing this in 1747.

fabrics were to be imitated successfully; e.g. Donald Cowan of Glasgow had a "Dutch servant" at his manufactury in 1728, and John Lind received a grant in January 1731, "to retain an expert Dutch weaver as an instructor."[105] From 1731 apprentices were presented for instruction in the name of the Board to these Dutchmen and in 1732 the Trustees were offering trained journeymen to the fine linen manufacturies at Rethill near Dunkeld, Petrie's at Strathbogie and Baillie Hossack's at Inverness, to diffuse the art to the North. The Board must have been well satisfied with the effects of the two Dutch instructors, for in 1735 they recruited two more Dutchmen, "to quicken the progress of the fine linen manufacture."[106]

One was placed at Ormiston, where he instructed four journeymen that year, and another at Cranston. By 1740 six Dutch weavers were on the Plan, placed at factories with more than twenty looms: three in Edinburgh, two at Glasgow, one at Ormiston; each was instructing four journeymen, some of whom came from far afield - e.g. William Reid of Caithness, who returned to his own country in 1746 after his instruction - and the Rebellion - was finished. In addition to salaries amounting to about £240 p.a., the Trustees also gave setting-up grants in the form of utensils and looms to each instructed journeyman, "the Trustees finding that in order to carry on the Manufacture of Fine Linen after the Dutch manner, a kind of houses and accommodation better and different from the Common Weavers in this Country, was requisite. They therefore proposed to give some encouragement to some of the most ingenious of the young men who had been bred with the foreigners in order to induce them to build proper houses for carrying on the Fine Manufacture, and to set up a considerable number of looms to be in these houses under their own inspection; from which it was hoped that considerable improvements would be made in the fine linen manufacture."[107]

105 B.O.T.M. Jan., 1731.

106 B.O.T. Annual Report (Christmas 1735).

107 B.O.T. Report Christmas 1736.

This policy was continued until 1745, when it was discontinued: "the art of weaving fine linen was now so thoroughly known in the Couth Country that the Trustees found it unnecessary to retain the Dutch weavers there any longer."[108]

The Trustees' weavers were valuable in diffusing the requisite skills for the weaving of fine cloth,[109] but equally important for the establishment of the fine linen sector, was a complementary movement of private capital to permit the formation of larger-scale enterprises, and manufacturies where good equipment and careful supervision could be supplied. This seems to have happened in the West of Scotland after 1727, along with the development of bleachfields able to whiten fine cloth in the Dutch manner. "Except for some triffling quantities, the Glasgow manufacturers never engaged in the making of fine plain linen till the year 1727 when several persons, partly moved by publick Spirit and partly by hopes of a profitable business, sett to work in erecting Manufacturies and procuring proper looms and other utensils for breeding weavers and making linens after the Dutch method."[110]

There was some increase, therefore, in the amount of fine linen made in Scotland after 1727, and the imported weavers, copartneries and bleachfields all contributed in some measure to this, although Lindsay's optimism in 1733 was premature ("of late we have begun to save a very heavy article - I may say now entirely - of fine linen which we have of our own manufacture since the late improvement and if the Cambric shall go on as it promises..."[111]) The competition was formidable from foreign linens, and the guarded optimism[112]

108 B.O.T.R. Christmas 1746.

109 Clerk of Penecuik MSS GD 18/5904 John Cockburn commended these weavers in a letter (29 Jan., 1739). "I think the Dutch weavers have made a great improvement on our first beginnings...and I wish their method was more universally understood."

110 History of the Linen Trade in the West (Seafield MSS op. cit.)

111 Lindsay Interest p. 99.

112 E.g. B.O.T. Report Christmas 1738: "fine linen increasing much quicker than coarse"; Report Christmas 1740: "fine linen continued to thrive - the circumstances of those who delat in the fine cloth were better; their workmen, bred up mostly at the Public Expence or instructed by those who had been so, were better..."

of the Trustees' Reports up to 1746 gave way to gloom in 1747: "the Trustees observe the manufacture of fine linen is now decreasing and has been for some years."[113] This turned out to be only a short-term depression, in part due to the disruption of the rebellion, when over one hundred looms in the fine linen manufacture were laid off in Edinburgh alone. The yardage stamped of higher-priced linen did increase thereafter.

Table 2.7

Linen stamped in Scotland of assessed value between 1/6 - 2/6 per yard, and over 2/6 per yard.

(Yards)

	1/6 - 2/6^{d}	Over 2/6^{d}
1730	46,178	11,174
1735	145,287	41,980
1740	218,091	141,874
1745	91,095	236,758
1750	553,882	444,090

(Source: States of the Annual Progress of the linen manufacture)

Imports of Dutch fine linen withered away, not just because of import substitution but because the German industry began to finish its own cloths, and cut off the supply of brown linen to the Dutch bleachfields.[114]

The work of the Trustees also included sending young Scots abroad for instruction: Yaxly Davidson, son of the Dean of the Weaving Incorporation of Edinburgh, was sent to Holland. Generally, however, skilled men were imported to teach the needed techniques to the Scots, rather than Scots going abroad to learn there. In addition to the Dutch weavers, a reedmaker brought from Holland, was supported by the Trustees from 1735, who was paid £30 p.a.

113 B.O.T. Report, Christmas 1747.

114 C. H. Wilson, Anglo-Dutch Commerce and finance in the eighteenth century, p. 61.

to train apprentices. An Irish diaper weaver, Charles Thompson, reputed to be one of the first weavers to work without a drawboy, was lured to Scotland in 1732, and sent to Dunfermline. In this centre of the diaper manufacture, a comparative trial was held between Thompson and a weaver with a drawboy, which he won so convincingly that the town hired him to teach to all his method, which unfortunately is not described in any detail. Richard Holden, who described himself as a linen-draper, but who was a jack-of-all-trades, came across from Warrington in the North of Ireland in 1728 and secured a lucrative position on the Board's field staff at £130 p.a. He did design several useful machines, including a rolling press, and an instrument for examining and measuring cloth which was distributed generally to the Stampmasters, but he either had little teaching ability or little to teach, because the town of Dunfermline complained in 1733 that he had taught them nothing, which confirmed the Trustees in their resolve to allow his contract to expire. Ironically, he soon thereafter went to Dunfermline to set up a bleachfield!

The coarse linen sector was the object of much attention but little cash; the size of the Trustees' funds left little surplus after the cambric and flax allocations had been paid. Campbell is surely right to attribute this strategic decision to encourage the fine linen industry rather than the coarse, to the fact that the latter was "so often subsidiary to agricultural occupations and so more resistant to innovation and change."[115] But attention was translated into a limited degree of action in 1738 when, after the House of Commons Committee on the Linen Trade, a bale of foreign linens producted in evidence was sent to the Trustees by a London linen factor, George Cuningham, with the comment that, "The crocus and brown rolls seem to be made of such yarn as they use in Fife and Perthshire for packing or sail-cloth."[116] Samples from the assortment in the bale were

115 Campbell, States op.cit., p. ix.

116 Saltoun MSS Box 328.

sent to Montrose and Dunbar, where it was thought they might be imitated. But the matter seems then to have lain fallow until 1740, when the experienced manufacturer, James Donaldson, was sent to Perthshire to buy some of the local yarn, to be woven into imitation "Osnaburg". Samples of his weaving were sent to the Glasgow Linen Society. "The Trustees having had under consideration the improvement of our coarse linen yarn and low-priced linens... directed some pieces to be made in imitation of Hessians and Osnaburgs for which its alleged there is a very great demand in the Plantations."[117] The aim was for the Society to get their "most experienced and knowing traders or Supercargoes to view and compare them with the foreign and to return an answer as to what use they are put to, what qualities are desired - softness or lastingness - and if they could be sold as cheap as the foreign what would be the demand?"[118] The dealers at London were also consulted: the Trustees' verdict on the Scottish cloths was that, "They would wear better though not as eye-sweet as the foreign."[119]

Both the London factors and the Glasgow Society reacted favourably, and demand clearly existed for such linens, but the coarse linen sector of the industry was in a state of depression; the Report of the Trustees at Christmas 1740 blamed this on the severe frosts, "which made it impossible for the weavers of coarse linen cloth who are commonly but ill accommodated in houses to carry on their work",[120] and the high price of provisions, which had led many to leave their employment and enlist as soldiers. Besides the handicaps imposed by the poverty of the weavers, the development of the coarse manufacture was further hindered by the scantiness of manufacturers' stocks and the export of yarn.

117 B.O.T. Minute and Letter of Nov., 1740, to James Campbell, Preces the Glasgow Linen Society.

118 Ibid.

119 Ibid.

120 B.O.T. Report Christmas 1740.

In July 1741 the London factors wrote a strong reminder letter to the Trustees, urging that the manufacture of Osnaburgs in particular ought to be encouraged, and proposing a bounty of $\frac{1}{2}^{d}$ per yard on all linen made in imitation of this German fabric. The Trustees made further enquiries as to how to improve low-priced linens as "to cause it to suit the London market and to answer for the Plantations abroad."[121] Because the Trustees considered that yarn used in the manufacture of coarse linen was seldom sorted properly, it was decided to subsidise yarn sorting, and also to switch the prizes awarded for the weaving of fine linen to the weaving of coarse, low-priced linens in the counties of Angus, Perth and the Mearns only. The prizes were partly money, and partly looms, "to supply by degrees good tools."[122] The Magistrates of Perth, Dundee, Arbroath, etc. were asked to supervise the competitions. "In order that it may be known how these cloths are made and whether or not this kind of manufacture will answer the English market and for preventing discouragement to the manufacturers for want of a ready sale,"[123] the stampmasters were each to purchase 600 yards at the best prices, a pledge yhat the Trustees honoured from their own pockets. Twenty-nine looms were made at 35/- each by Andrew Brown Wight in Dundee, and distributed in prizes,[124] which may have had some effect and were continued.

Another form of incentive came with the passing of the Bounty Act of

121 B.O.T.M. 7 Aug., 1741.

122 B.O.T. Letter to Jas. Fauld, M.P. at London 19 Nov., 1741.

123 B.O.T.L. 14 Nov., 1741.

124 One of the prizes was won by the servant of James Hill, Weaver at Brechin, who wanted not the money but the loom; this was refused, as the loom was deemed to be the property of the master-weaver, as was the piece of cloth.

1742, which gave a bounty of $\frac{1}{2}^d$ per yard for cloth under 6^d a yard in value, and 1^d if between $6\text{-}12^d$, upon exportation, financed by an additional duty on imported cambrics. This gave some stimulus to the exporter and the manufacture of low-priced linens, and equally some help in the home market to the cambric manufacture.

But the backwardness of the coarse sector was not to be overcome in a night, and the bounty was not large enough to enable Scottish linens to oust the German, or so at least the exporters said, till it was raised in 1745, so that linen valued at under 5^d per yard received $\frac{1}{2}^d$ per yard on export; between 5^d and under 6^d, 1^d per yard, 6^d and not exceeding 1s.6^d per yard, $1\frac{1}{2}^d$ per yard. But the general state of backwardness in the coarse sector was as much responsible for the lag in response as the size of the 1742 bounty. William Dalrymple's acid description of the state of the Scottish manufacture in 1744 was that, "Fife checks were at $6\frac{1}{2}^d$ for $\frac{3}{4}$ broad, the meanest 4-6; a trifle of table linen is made at Dunfermline and Inverkeithing; Melrose and Strathbogy linen gone to nothing - all declining save Fife."[125] This exaggeration is near enough the truth to explain why the break-through was long delayed. But, unlike the cambric, at least expansion in the coarse linen sector was possible on the basis of an existing indigenous staple.

The necessity for manufacturers and merchants with stock was increased as Scottish perspectives widened beyond the home horizon. The traditional mechanism for sales at home was for the country weaver to sell his web to either a merchant or a chapman, who gathered 10-12 webs in this way for sale at the fairs to the bigger Lowland merchants or English buyers for the English market. At the Glasgow Fairs, droves of peddlars came to stock up with linens to be taken through the North of England. Glasgow,

125 Reported by Tod and McCulloch to Lord Milton, Saltoun MSS Dec. 14, 1744.

Edinburgh and English buyers alike competed at the big fairs in the East, e.g. at Perth and Falkirk. The local merchants were not averse to breaking town rules, that linen should only be sold at the fairs, by buying up stamped linens before the fairs and "then artfully heightening the price so that strangers could not buy on a footing with them."[126] The Perth merchants were notorious for this; "the English buyers complain more of Perth than any other town."[127] By the 1740s the English buyers had ceased to come and the initiative in Scotland had passed entirely to Scottish merchants, who handled both the home and foreign trade. The established practice on the East coast was for the linens to be consigned to a factor at London who charged a standard commission of 2½%. An alternative vent was via Glasgow, and Glasgow merchants had agents at the Fairs in the East or bought direct from the manufacturers.

The English and Plantation markets became increasingly important. "We begin now to export considerable quantities of linen cloth especially into England and indeed it is happy for us that it is so..."[128] But selling outside the home market, posed new problems for Scottish linen merchants. Firstly, Scottish linens inevitably came to the English market - especially London - more expensive in price than at home, because of transport charges, insurance and commission,[129] and were there exposed to the full blast of

126 Complaint by a Glasgow merchant, John Jamieson, to the Trustees 25 July, 1732.

127 Ibid.

128 S.R.O. Clerk of Penecuik MSS GD 18/5897, "Observations", printed in Miscellany of the Scottish History Society, vol. X, 1965, ed. T. C. Smout.

129 Cf. History of Linen Trade in the West:- "...whilst the fine linens manufactured in Scotland were all consumed by themselves, the manufacturers only behoved to be maintained by the profits; and no Intermediate person was made use of to sell them out to the wearer, But when it became necessary to carry off the surplus to England, then another set of dealers must be employed whose profits however reasonable, as well as expence of carriage, make these goods turn out just so much dearer to the English consumer than to the wearer in Scotland." S.R.O. GD 248/954/1.

competition from Irish and German linens. As far as exporting linen to the Plantations was concerned, this may have contributed to the growth of exports through Glasgow. There was some distinction between the market conditions for linen in England and in the Colonies, viz., that the duties imposed on foreign linen offered some protection in the English home market, but most of these were drawn back on re-export with the result that there was no such shelter in the Colonial market.

The second problem related to the degree of competition, was that the exporting merchants in Glasgow and London could and did demand long credit from the linen factors, up to 12-15 months. This was of course passed on to the manufacturer. The delay in payment added further to the needs of the manufacturer for capital, principally circulating, to supplement the demands of his manufacture for materials and wages. From where this capital came is obscure in detail, although much must have been generated from within the trade, and several linen merchants rose through the ranks during this period to a position of considerable wealth. Typical of this class of entrepreneurs may have been John Young, of whom a brief biography is appended at the end of this section.[130] In Glasgow some of the capital came from the Plantation traders themselves through copartnerships in manufacturing concerns, such as the Shuttlefield Factory. To minimise the amount of capital tied up in goods sold on long credit, most linen manufacturers offered purchasers of linens for export quite substantial discounts off the selling price if they paid cash instead of buying the goods on credit.

In the 1730s several areas became identified with specialities for the English or Plantation market, and the factors were not slow to emphasise to them through the Trustees the need for improvement in relation to the competing foreign fabric. One habit of which the London factors complained, was of that of a fall in quality as demand and output increased; e.g. in

130 Infra, pp 82-85.

1731 the London and Edinburgh dealers complained that, "The quickened demand for Bengals, ticks and checkt and low-priced linens had led the makers in Fife, Perth and Forfar to make them again too thin and unequal."[131] The London men always pressed for better quality; e.g. again in 1731, the Provost of Dunfermline was written that the Trustees had been informed "that the table linen made in this country for sale is dayly losing its reputation in England and its Plantations chiefly by our neighbours the Irish finishing that commodity better wrought."[132]

The London factors also suggested various variations on the linen patterns and fabrics - usually imitating the foreign -; e.g. in 1738 the Montrose manufacturers asked the Trustees for samples of the foreign linens in their possession, "their manufacturers being directed by their friends to essay the imitating of the making of them",[133] and the spread of Osnaburg manufacture was hastened "because their factors at London sollicit them to try the making that sort and at the same time the price of brown linen is fallen."[134] The London and the Plantation markets provided both the great opportunity ("we can never stock the English market with too much cloth; their consumpt will stand any...)[135] and the acid test, and not surprisingly the Scottish found most success in sales of the lowest quality cloth, although the wider market did permit the specialisation and concentration of towns in one line, e.g. Dunfermline in tablecloths.

The Trustees feared a premature attempt on the export market.[136] They

131 B.O.T.M. 6 March, 1731.

132 B.O.T.M. 22 March, 1731.

133 B.O.T.M. 7 Sept., 1738.

134 B.O.T.L. to Donaldson at Perth, 3 August, 1745.

135 Clerk of Penecuik GD 18/5951.

136 See Lord Deskford to Henry Home (Lord Kames) Sept. 10, 1738 (GD 24/1/552) for a forceful exposition of the view that the English market should be the prime object of attention where the Scots and Irish "could sell three times the quantity they sell at present if they could manufacture it."

preferred to raise the quality of home production first, and then market an improved commodity. Slow progress but sure being their motto, they said, "Though the Country made very quick advances in making good cloth, yet the quantity manufactured increased but slowly owing to the smallness of the stocks of our dealers - this slow progress was looked upon by the Trustees as no disadvantage in the main, because had great stocks been invested in the Trade before themanufacturers had been sufficiently skilful it might have made a great show and raised high expectations, but the insufficiency of the cloth would at last have destroyed the Credit of the Manufacture and the Adventurers might have lost their stocks without doing any service to the country; whereas Adventurers entering upon and extending the Trade in proportion only as the country was filled with good artisans, were in no danger from the insufficiency of the Manufacture nor of losing the credit of their cloth in foreign markets by the exportation of insufficient goods which nevertheless must have been the case had large stocks been vested in the Trade before the country was sufficiently stocked with expert tradesmen."[137] On the other hand, the continuous interaction with the demands of the export markets did stimulate imitation and improvement, and impetus to overcome the deficiency of "small stocks".[138] Of the examples of those who from a small beginning became rich, John Young stands out.

Appendix A (Source: Saltoun MSS, Box 328)

Report by James Donaldson in 1747 on John Young, a merchant at Coupar, Angus, who carried on a profitable trade in buying, making and selling cloth to exporters.

"He seems to be under 40 years old and from a very small stock to begin with he is reckoned to be worth £3-4,000. The method he takes is to give

137 B.O.T.R. Christmas 1737.

138 A much fuller account of the nature and mechanisms of the markets for Scottish linen will be found in Chapter Four, passim.

out yarn to as many poor weavers as he can find to be woven by them not by the ell but by the spindle; the rate he gives is not fixed but as they can agree. The lowest I think he ever gave was $5\frac{1}{3}^{d}$ per spindle, the highest $6\frac{2}{3}^{d}$ - for this they take out his yarn, they give it a sort of washing with very cheap materials; they wind warp and weave it...As he weaves his cloth so likewsie he purchases his yarn in the most frugal manner; he goes not to the great town to buy it but to the small villages and single houses and has the weavers he gives work to as so many agents scattered up and down the country to bring and send small parcels of yarn to him at easie rates so it may reasonably be supposed that he can purchase his yarn from 1^{d}-2^{d} per spindle cheaper than the merchants in the great towns can purchase theirs.

It is noticed that it is only the poorer sorts of weavers for ordinary who take out this kind of work. The Richer sort...who have one or two looms of their own and are able to purchase yarn and maintain themselves while working it chuse rather to work for their own account and take their hazard of the minute. But even from their sort of folks he is a considerable purchaser. As far as he gives out yarn to work he is reckoned a manufacturer and in as far as he buys and sells again he is called a Cloth Couper.

The people who deal in this way keep the poorer sort very dependent on them. They get or give them Credits for meal, butter, cheese, hardfish, coals, Lint, lintseed and such like things and take their payment in small sums out of every web or small parcel of yarn they bring them. By this means the poorer sort are thirled perhaps for life to the richer sort and dare dispose of nothing they have to sell but to them only. By this means the richer sort run risk and sometimes must lose by the credit they give them but then the profit they have on the things they furnish will do more than satisfy them for the interest of that part of their stock laid out and make up that

loss too. Besides the advantage they have in point of trade which is the main thing they have in view in trusting these poor people...My conjecture is that if the medium of that short of yarn is from 22-23^{d} spindle in the great towns he has his at 21^{d}..."

This information was furnished by James Donaldson in response to a query from the Trustees as to how the Makers and Coupars of coarse linen cloth could make so much profit. As well as John Young, Donaldson referred to others who had become rich from a small start, "Mrs. Murray of Dundee now dead, John Bethune living 3-4 miles North of Scone, the Brothers Cocks of Dundee." Their profits were made by depressing the wages of the poorer weaver and spinner alike.

Bleaching

> "The Art of Bleaching and Whitening. A Branch of the Linen Trade in the Knowledge of which this Country was at this time mostly deficient."
>
> (B.O.T. Report Christmas 1727)

In no stage of the Linen Manufacture was capital investment more necessary than in the bleaching.[139] All the sources agree that Scottish bleaching was lamentably deficient in relation to its competitors in 1727, and for quite some time thereafter, so that fine cloth was sent either to Harlem or London to be bleached, and coarse cloth went South in great quantity to be printed in England. The only bleaching done in Scotland was low in quality, part-time burnside work, carried on by either the weaver or the housewife. Quite apart from the waste of time, the cloth often suffered from the unguarded use of lime, which although corrosive, was

139 A detailed account of the processes of bleaching will be given in Chapter Eight.

cheap and fast and hence popular. The Trustees early acquired a justifiable dislike of the bad bleaching done by the country people, which led them to a consistent but misplaced zeal "without knowledge" against the use of lime, which was the basis of Irish bleaching. It was the unskilfulness, rather than the lime, which was at the root of the trouble.

The Trustees launched a drive against the use of lime, accompanied by a search for suitable home-made substitutes - ferm or kelp ash - which would obviate the need to rely on the expensive, imported foreign ashes. The failure of this search resulted in an increased dependence on foreign materials, although despite periodic prosecutions, there is no reason to suppose that the use of lime was ever more than damped.

In addition to the burnside bleaching, there were some small bleaching greens where some webs were done, and some imitation of the Irish example. "In Ireland most manufacturers have their own bleachfields and they work partly customary work and partly for themselves."[140] There were very few, if any, full-time bleachers, and the manufacturers tended to sell their cloth unbleached to London because of the absence of Scottish fields. The poverty that prevented them from setting up their own fields to finish their cloth, also increased the pressure on them to sell.

The distinctive novelty of the period was the erection of several large-scale bleachfields with a full-time professional staff. There were two kinds of bleaching, the Dutch and the Irish, for fine and coarse cloth respectively (the essential difference being that the Dutch method employed more labour and was more expensive) and the Trustees, in line with their early preoccupation with the fine linen sector, encouraged the setting-up of some Dutch bleachfields with grants towards the costs of erection, of £50 per acre; £2,000 was distributed in December 1729 "for extending the bleaching

140 Clerk of Penecuik MSS GD 18/5901 Cockburn to Tod, Dec. 9, 1738.

of fine linen especially so that it may hold equal pace with the weaving of that sort of linen."[141]

But the Trustees' grant, while generous, was generally awarded after the field was set up, and met only part of the costs of erection. On the proprietors lay most of the onerous task of finding the capital, getting the land, digging the canals, laying out the houses, purchasing the boilers and equipment and providing for the running costs, wages and materials. Dalquhurn Bleachfield, near Dumbarton, started operations in 1728 in the Dutch manner: it received a grant of £600 towards the laying-out of its 12 acres, but taking into account the inevitable early losses, the Proprietors must have still been well out of pocket. The Company, reflecting the need for pooled resources in this kind of large capital undertaking, was formed by Glasgow merchants, Richard Graeme, Andrew Buchanan and John Graeme of Douglaston, and managed by Patrick Seton, who had been instructed in Holland, and who had recruited a Dutch bleacher to perform the actual bleaching operations. Cameronfield, at Loch Lomond, was owned by Donald Govan of Cameron and John McFarlane, merchants in Glasgow, and John Parkhill, merchant in Edinburgh. Usually the establishment of a "Dutch" bleachfield required the resources of a co-partnership behind it, as well as the services of a Dutchman to run operations. The only exception - and a considerable one - was that of Grays' Green in Glasgow, run by the brothers Andrew and William Gray, who apparently found their own capital. It is likely that Andrew had spent some time in Holland as an apprentice; the Grays claimed to have acquired considerable knowledge in Flanders and Holland.[142]

141 B.O.T.M. 20 Dec., 1729.

142 For this section I have drawn on the Trustees' record of grants and the contemporary newspapers. See also Enid Gauldie "Scottish Bleachfields 1718-1862", B. Phil. Thesis St. Andrews 1966-67.

None of the early fields, except Cupar, which outlived the weaving side of the business, was integrated with a large-scale weaving enterprise: they relied on customary work, advertising their rates for bleaching in the newspapers. A network of "takers-in" (or agents) collected the cloth in the main nearby centres. There was a steady increase in the number of these "public" fields from the three earliest, Dalquhurn, Cameron and Cupar, to 6 in 1731, 9 in 1735, 15 in 1740 and 17 in 1745. Not all used the Dutch method; several of the later fields were using the Irish method for coarse and middle-priced linens.

The pioneer field in this line was Ormiston in East Lothian, set up in 1731 with the support and capital of the Improver, John Cockburn of Ormiston, and by John Drummond and John Christy (or Christie) from Ireland. Christy was an experienced Irish bleacher who had operated for about 15 years before he came to Scotland, and this Quaker was to be the doyen of Scottish bleachers. The field was originally only 7 acres, and was expanded in 1734. The Trustees gave grants of £100 in 1731 and a further £250 to help towards the costs and provide a Dutch press, but "the proprietors have been above £1000 out of pocket above what they have had."[143] In 1732 the field was estimated to bleach 1000 pieces (24,000 yds.); after the expansion in 1734 the quantity of cloth bleached that year was c. 50,000-60,000 yds. The Trustees took a particular interest in Ormiston; "your bleaching and general dispatch have given so much general satisfaction."[144] Patrick Lindsay noted that, "At the bleachfield of Ormiston the last year there was employed for the space of six months in the year near an hundred labourers."[145] He

143 Clerk of Penecuik MSS GD 18/5899.

144 B.O.T.M. Report Anent Ormiston Bleachfield July 1734.

145 Lindsay "The Linen Manufacture of Scotland" (1735) p. 60. This account can be compared with that in Saltoun MSS Box 327 "Letter about Ormiston Bleachfield" (1732) where it was stated that there were commonly 26 men at work and 3-4 women.

had already referred to the field in his earlier treatise; "we have already one Bleachfield...where the Irish method of bleaching is practised... and it succeeds very well in whitening of middling cloth at such rates as these kinds of goods can bear...the colour given in this way is sufficient for all our shirting and sheeting. Bleachfields of this kind ought to be established over the Whole country for our great staple (2^d - 2/- yard cloth) which goes mostly to London for printing."[146]

From 1733 the Trustees turned their attention to the encouragement of fields for the bleaching of coarse linen. Discussion had been held with the Dundee magistrates in 1732, and Robert Holden - still then in the Board's employ - had been seconded to give advice in the erection of a field. The estimate obviously deterred them and the traders, but Holden offered to carry the project through if the grant of £250 which the Trustees had allocated for the field was given to him. The Trustees agreed and the field was in operation by 1734, when the bucking house was finished (which contained two mills for "beating and cleansing the cloth").[147] Mills were the rubbing board machines operated by water, a distinctive feature of the Irish method which John Christy had first brought to Scotland,[148] but was almost certainly known to Holden anyway. Holden experimented with the use of kelp, which caused a storm because it left a yellowish tinge in the cloth.

Both Dunfermline and Perth soon acquired fields, in 1733 and 1735 respectively. In the former, the initiative was taken and sustained by the town, conscious of the benefit of getting its staple bleached cheaply and

146 Lindsay, Interest, p. 176.

147 B.O.T.M. 28 Dec. 1733; see also Enid Gauldie "Mechanical Aids to Linen Bleaching in Scotland" Textile History Vol. 1 p. 133.

148 John Christy Directions (Saltoun MSS): "The model of this mill I brought from Ireland in 1731 and set up in 1733 which I believe was the first in Scotland made use of in a bleachfield."

well, and the Trustees supported the town with a grant of £200[149] towards the cost of £838 for setting-up the field and by arranging with Ormiston for a master-bleacher there, one Meredith Quin, to go to the field. At Perth, Alex Christie (a brother of John?) started operations in 1735 with the aid of generous grants of £600. Other fields - which received much less or no grant at all - followed both in the Dutch and the Irish styles: e.g. Roslin (Wm. Neilson), long reckoned to be the best field after Grays, and Clockmiln near Duns, erected by several gentlemen and merchants and managed by Peter Vandermaes from Holland.[150] A clear advantage soon shown was the standardisation of colour; previously because the bleaching of cloth had been in so many hands, this had resulted in a variety of shades of white, piece by piece.

Very little innovation in bleaching took place, as the Scottish imported the foreign techniques unchanged, and, despite the increase in the numbers of fields, there was little apparent reduction in the price of bleaching, e.g. fine linens were charged at 5-6^{d} yard in the Dutch method; coarse, at lowest, 1^{d} yard, which was a handicap to the Scottish competitive position. The quality of bleaching did rise; "At every public field Quantities of fine cloth have been brought to as good a colour as any whitened in Holland",[151] but the drawback was that the bleaching was slower and more expensive. Cockburn blamed their oligopolistic position; "the bleachers being so few charge extravagant prices - what with clear weaving and bleaching and lying so long the makers' profit is quite swallowed up. I know one who last year bought some green linen and sent some to Holland, some to Grays

149 For which bond was given in Feb. 1733 in the name of John Wilson, present Baillie of Dunfermline; Wm. Wilson, Dean of Guild and Adam Roland, Clerk to the town. Bleaching Bonds NG 1/13/1 B.O.T.

150 Caledonian Mercury Advt. 1737.

151 Lindsay Interest p. 173.

and part to Dumbarton - it was six weeks back from Holland before the other two were in sight."[152] It is difficult to avoid the conclusion that the few Scottish bleachfields with plenty of work for the secure home market, kept up their prices behind a smokescreen of the climate, the water and the expence of imported materials. But there were losses in the first few years because of unskilful labour, and perpetual problems with the high winds which tore the cloth pinned out to dry.

The Trustees' desire to reduce the price of bleaching by expanding the number of fields was not helped by the instructors they appointed to teach apprentices the art and mystery of fine bleaching. The supply of bleachers from Ireland made the provision of coarse linen bleachers less urgent, but the difficulty and cost of getting a Dutchman, as well as the rewards of having an entirely indigenous fine bleaching industry, emphasised the need for Scottish apprentices to be trained. In 1738, after prolonged discussions, the Trustees agreed to pay the Grays £1000 and a further £1800 between 1737-46, despite the fervent opposition of Sir William Dalrymple; "the President is like to commit a prodigious blunder, to apply for £1000 for Grays",[153] and the doubts of Cockburn, who would have preferred to send apprentices to Holland.

On paper the Grays' qualifications were impeccable. They were an entirely Scottish concern, and generally thought to be the best in the West. They had a field which ran to 50 acres of drying green and canals. But although a number of apprentices were trained, the Grays were not as co-operative as the £100 might have led them to be, and the Trustees were deeply disappointed in their hopes. The apprentices must have found their training of value, as they did not hesitate to advertise their tuition,

152 Clerk of Penecuik MSS GD 18/5901.

153 Clerk of Penecuik MSS GD 18/5902.

but not to the amount the Trustees paid. The term "apprentice" is rather misleading: most were experienced bleachers sent for a season's tuition or post-graduate degree from established fields; David Barclay from Cupar, Wight from Ormiston, Dickson from Haddington. To make sure that the training was not wasted, the Trustees stipulated that the "apprentice" had to be a partner in a bleaching field; e.g. Samuel Robertson of Kelso (another Quaker incidentally) had to make his twenty-year old son a partner in his business before he was accepted for training.

Had the money been invested with another field, or switched into pushing the bleaching of coarse linen, it might have yielded a much better return. The bleaching of coarse cloth enjoyed rather mixed fortunes; in 1738 the Irvine bleachfield was delayed a grant for the fitting-out in the Irish method because the Trustees thought "the Irish bleaching grows yearly less in request and therefore the Trustees are to apply what funds can be spared for a better method of bleaching the fine and another and distinct for the coarse."[154] The Trustees' prejudice against the Irish method did not prevent its expansion; Irish bleachers were easily brought across, and the fields were smaller, requiring less capital to set up and less labour to run, and as no alternative method for coarse or middling linens was found, the Trustees were forced to change their attitudes. But the big public bleaching field tended to be much more characteristic of the fine linen sector; in the East a myriad of small bleaching greens[155] and burn-side bleachers continued their low-cost, low-quality, part-time ways. For them the Trustees concentrated on regulation through the stampmasters and instruction through the Riding masters.

154 B.O.T.L. to Provost McTaggart of Irvine, 4 April 1738.

155 Data on either the capacity of fields or their workforce is lacking; for a field, as opposed to a green, over a hundred pieces a season might justify a full-time bleacher. Lanark in 1744 bleached c. 500 pieces (20,000 yards).

One other process gained some attention from the Trustees; that of pressing and wrapping the bleached cloth as to present it more attractively at market. Dutch presses were supplied to Grays at Glasgow and to Ormiston during the 1730s; by the 1740s there were at least two private companies which specialised in the lapping and pressing of cloth for the London market at Edinburgh and Glasgow.

Chapter Three: The Trustees and the Industry 1746-1775

General Survey 1746-1775

The real take-off of the linen industry came after 1746: in thirty years the quantity of linen stamped doubled in amount and trebled in value, with the fastest rates of growth in the late 1740s and late 1750s.

Table 3.1

Linen stamped for sale in Scotland 1746-1776

	Quantity (million yards)	Value (£'000)
1746	5.5	223
1751	7.9	367
1756	8.5	368
1761	12.0	516
1766	13.2	637
1771	13.5	620
1776	13.6	639

Although there was some geographical diffusion of the industry and in 1771 twelve counties achieved an output of more than 100,000 yards, including Inverness,[1] production continued to be dominated by the traditional counties in the East (Fife, Forfar, Perth) and in the West by Lanark and Renfrew.

The expansion of the towns as centres of production was marked, although precise figures are sadly lacking. At Glasgow the 2000 looms claimed in 1727 had increased to 4000 in the 1770s, with 500 more at Anderston. The growth of Paisley was similar.

Table 3.2a

Linen stamped at Glasgow

	Quantity (yds.)	Value (£)
1728	266,214	9,467

1 The list also included Aberdeen, Ayr, Dunbarton, Edinburgh, Haddington and Kincardine shires.

1740	625,200	31,383
1757	2,032,000	87,875
1771	1,921,643	452,557

Table 3.2b

Linen stamped at Paisley

	Quantity (yds.)	Value (£)
1744	353,407	15,877
1748	413,660	23,672
1758	649,998	43,665
1768	529,022	54,665
1777	1,194,639	82,555

(Source: for Glasgow, Saltoun MSS, Box 330, petition for another stampmaster, and J. Gibson "History of Glasgow"; for Paisley, D. Loch, "Essay on Trade").

In Paisley at the Union there were 100 looms weaving muslin (a thin, fine linen). A census was taken in October 1766 and a total of 855 linen looms in operation were reported; in the depression of 1773 a census taken on December 20th found that 557 looms were at work and 579 empty. By 1776,[2] with recovery, in April there were 1360 looms employed on lawn and cambric in the town and suburbs. The fine linen industry was early concentrated in the urban centres of the West, but the coarse sector followed suit to a certain extent, although much of production was still dispersed in the villages in 1775. Loch reported that at Dundee there were 2,800 looms, mostly making low-priced Osnaburgs; Perth had 600, Forfar, Arbroath and Brechin 300 each, and there were 600 in checks, etc. at Dunfermline, and innumerable villages in Fife and Forfar with 50-100 looms. Expansion and concentration were matched by specialisation in one fabric, not that this was unknown prior to the "take-off". Dundee -

2 See D. Loch, Essay, quoting from two articles in the Edinburgh Weekly Magazine by one W.C. in 1775-76.

where in 1770 over 2 million yards[3] were stamped - was the centre of Osnaburg manufacture; Perth, Silesias and Sheeting; Kirkcaldy, checks and ticks; Dunfermline, table-cloths, diaper, damask and checks.

The industry was not untouched by depression. The export-led slump of 1755 hit the coarse linen sector of the East particularly hard. The withdrawal of the bounty from March 1754 to March 1756 caused severe cut-backs in production in the export-orientated production areas, as can be seen from Table 3.3.

Table 3.3

Linen stamped 1753-57

	Shire of Forfar		Shire of Edinburgh	
	Quantity (yds.)	Value (£)	Quantity (yds.)	Value (£)
1753	3,058,644	87,826	660,383	37,062
1754	2,802,454	77,197	455,278	28,222
1755	2,298,846	58,808	285,294	15,190
1756	2,389,091	61,941	364,306	19,299
1757	2,840,311	72,072	627,309	31,348

In 1773-4 the cause of depression was both foreign competition and overproduction, which combined to glut the English market. The result was that production slumped in both the East and the West, which alike were reliant on English demand. The whole industry suffered two years of unemployment for both spinners and weavers, causing riots at Dundee and at Perth, where the value of linen stamped had fallen from £48,266 in 1766 to £23,810 in 1772 - tumults born of hunger and distress.[4]

The main determinants of the growth of the industry were the increasing demand from both the home and English markets, the stimulus of the Bounty to exports to the Plantations, and in some degree the work of the Trustees facilitating the development of the home industry.

3 In 1747, 817,416½ yds. were stamped at Dundee (Source: B.L. Co. Letter Book 1761)
" 1759, 1,275,689 " " " " "

4 Report from the Committee Appointed to enquire into the state of the Linen Trade in Great Britain and Ireland, 28 May 1773. House of Commons Reports, Vol III, pp. 99-133.

The Trustees and the Regulatory Network

The public stamp played a major part in raising the quality of linen production, and in execution compares very favourably with the Irish Linen Board's network. It was a standing rule of the Scottish Trustees that, "None but bred weavers be appointed stampmasters...because he is required to take notice of the faults and neglects and can talk to them in the language of the craft."[5] The stampmaster was intended to have an instructional role to complement the regulations. The standard of regulation was kept high by the surveillance of buyers and the Trustees: should a stampmaster stamp a piece of cloth with the wrong measure or of inferior quality on the inside, the buyer could obtain redress against the stampmaster. The efficacy of the system was in the hands of the buyers. The Trustees did launch from time to time campaigns against the sins of short measure and insufficient linens, which suggests that the state of perfection had not yet been reached. Stampers were reprimanded or sacked. Some were certainly corrupt, e.g. John Sutherland, the stampmaster at Falkland, who was given to drinking, supplemented his commission by extortion, "taking advantage of poor and ignorant weavers and shopkeepers and oppressing them by seizing the weavers' goods for triffling faults and remnants of napkins and the like from country shopkeepers and threatening them with heavy prosecutions unless they compound and pay him large fines."[6]

Another fault in areas where there were too many stampmasters was the practice of undercutting on the legal fees so as to encourage business, or of not taking too close a look at the cloth, and in 1764 several offices were suppressed where they had been set up within 5 miles of an older one.

5 B.O.T.L. 13 July, 1765.

6 B.O.T.M. 1768

In 1775 another purge dismissed 7 stampmasters[7] and suppressed another five offices. On the whole the network served - by eighteenth century standards - remarkably well and honestly. One reason was the knowledge of the stampmasters appointed; another the close check and financial reward offered by the steady discharge of the office. In 1760, 8 officers drew over £50 in fees for stamping (Perth, Kirkcaldy, Arbroath, Dundee, Edinburgh, Kirriemuir, Paisley and Glasgow). When the Board attempted to farm out some of the stamping to relieve the strain on the town stamper, the result of putting the private manufacturer on trust was not encouraging. After some successful experiments around Edinburgh, in 1766 the Board agreed to allow bleachers and manufacturers who did extensive business and were of well-attested character and credit to stamp their own linen, and in some places to stamp linen for the less considerable weavers and manufacturers around them.

Quite a number of stamps were issued, e.g. to Charles Raitte, manufacturer at Dundee for his own manufacture, "who makes £1200 of linen yearly and has a good reputation."[8] By 1772, however, too much evidence was emerging of irregularities for the Trustees to remain inactive. Two of the senior officials of the Board - the Edinburgh stampmaster and Sommervel, the inspector - were sent to inspect all the factories, shops and warehouses in the Perth, Forfar and Fife towns. After a month of inspection they reported that of the 704 pieces of Osnaburg that they had measured, no less than 160 were short in length and many more were faulty in quality. Osnaburg was the worst fabric in these respects because of the very long pieces made, but the root of the trouble was the decision to allow manufacturers their

7 Including one John Foulis, who kept a public house and "frequently intoxicated himself when doing business" as a stamper. B.O.T.M. 1775.

8 B.O.T.M. 19 Feb., 1772.

own stamps, "which has contributed to render them more careless, etc. than if they had been stamped by neutral persons."[9] Seven Dundee dealers were fined and had their stamps recalled and, in consequence of the withdrawals, the Trustees had to appoint a second stampmaster for the town. Some dealers were merely fined and allowed to continue to use their stamps. The network of stampmasters continued in use until 1820, when significantly much of the impetus to abolish the system came from Dundee. During the eighteenth century, it is suggested that this system of public inspection played no small part in the development of the industry and its sales.

The stamping of linen grew increasingly more complex; the Paisley stampmasters had to check where the handkerchiefs were square. Regulation was the primary activity of the Trustees in relation to the manufacturing side of the industry; their other direct efforts were limited to the prizes for weaving, and a concentrated drive to boost the manufacturing of coarse linens suitable for the Plantations, after the passing of the Bounty. William Tod, manager of the British Linen Company, had his expenses paid by the Board when he went on a snooping tour through Germany to acquire knowledge about the method of making Osnaburg. During the years 1745-49 the Trustees also gave prizes on coarse and Osnaburg yarn, and financed in 1749 a scheme to lower the price of Osnaburg yarn spinning,[10] which - it was claimed by the manufacturers - was too high, and retarding the production of this fabric.

Of course, in respect of this coarse fabric, the granting of the Bounty was the major factor; the Bounty, not the Trustees' efforts, led the expansion. The Board's efforts, and rightly so in their view, were limited to short-term imputs of capital and long-winded exhortation and

9 B.O.T.M. 23 Nov., 1772.

10 This scheme is discussed in more detail, infra p.109 , and in Chapter 5, pp. 234-236.

regulation. During the late 1750s the prizes offered by the Board on the manufacture of Soldier's Shirting in large lots did encourage the manufacturers to prosecute this fabric for the war contracts; once established, the premium was withdrawn. In 1762 the Trustees subsidised Ely bleachfield by meeting the expense of hiring a Manchester foreman to teach the proper method of dyeing checks, from which Kirkcaldy and region benefited, as they also did from a grant to a Dyehouse in Kirkcaldy for coarse checks - both of which enterprises were warmly commended in the Scots Magazine for 1763 (despite the fact that both works were carried on by South Britons).

The work of the Board was less important as the century wore on, and indeed the members of the Board became much less assiduous in their attendance after 1765; by 1770 only Henry Home, Lord Kames, was a regular, and many of the original members who had provided the driving force were dead - Lord Milton - or decrepit - David Flint. In contrast to their forceful contribution to the debate over the renewal of the Bounty in 1755, the Board, though consulted, took less and less part in Parliamentary affairs, and adopted a much more passive role. During the important negotiation for the extension of the Bounty in 1770 to checked and striped linens, which gave the Kirkcaldy and West manufacture a stimulus, the Board did not even send agents to London. The industry was much better fitted to stand on its own feet, and had to do so. Much of its development had been internally generated, and the contribution of the Trustees marginal on the manufacturing side. Most of the Trustees' funds went to the preliminary processes - flax-growing and spinning, and little to the manufacturing.

Flax Supplies 1746-75

"The Linen Manufacture is an exotic that is not able to stand without support nor walk without crutches...exceedingly precarious inasmuch that three-fourths of its original materials, upon an average, are of foreign growth."

David Loch Essay on Trade 1778, Vol. I, p. 112.

The expansion of the linen industry placed supplies of flax under severe pressure during the period. The dependence on imported flax was both expensive and vulnerable in time of war, as in 1762 when prices rose very sharply, but imports continued to grow, which lent considerable force to the criticisms made by Loch.

Table 3.4

Imports of flax to Scotland

(tons; average over 5 years)		
	1742-46	686 p.a.
	1755-59	2065 "
	1760-64[x]	2618 "
	1765-69	3326 "
	1770-74	3382 "

x 4 years only; 1763 figure missing

In addition to imports to Scottish ports, some Baltic or Dutch flax was bought at London for Scottish use. Flax bought via London may have exceeded direct imports into Scotland. The main sources of foreign flax were Holland and Russia, who on average supplied about half each of the foreign flax imported to Scotland directly. The extent of importation was a source of worry; in the 1750s the fine linen manufacturers claimed it as a strong point in their favour that at least half the flax used by them in their branch was home grown, whereas the coarse was overwhelmingly reliant on imported flax. Although the proportions were hotly disputed, the fact of reliance was not.

The Trustees continued to devote much attention to the encouragement of home flax. The premium of 15/- per acre of lintseed sown was superseded after 1749 because the payments under this head threatened to exhaust all the Trustees' funds, and though the awards were popular and diffused amongst many of the gentry, while the acreage increased, the quality did not. The traditional expedient of imitation was tried; this time the Lint-boor system, modelled on the Dutch, was encouraged after 1743 in an attempt to get the production and processing of flax into the hands of larger operators. The Lint-boor had to own a lint-mill, purchase at least twenty acres yearly of flax, and agree to break, bruise and dress flax at a set price (@ $1/2^{d}$ per stone Amsterdam weight). For a few years the Trustees were quite optimistic; e.g. the 1747 Report stated, "There was a much greater quantity of flax raised in this Country this year than ever there was in any former year, which was attributed to the spirit that has been raised by means of the Lint boors whom the Trustees were not setting up in different places."[11]

In 1747, around Edinburgh, William Hog and Wm. Ruthven in company secured 40 acres scattered at Paison, Niddrie, Braid, Liberton and Pentland; as these men were experienced importers of foreign flax, this was highly significant and emulated elsewhere in the Lothians. "It will be of advantage to get some of these merchants to employ part of their stock in raising Scots lint in place of the Dutch which some of them formerly did - the great Quantity they have sown this year has lowered the price of growing flax throughout the Lothians."[12] In 1748 there were 39 applicants, including such notable improvers as Wight of Ormiston and Grant of Monymusk, but the reports by the surveyors on 17 of the lint-boors and their situation

11 B.O.T. Report Christmas 1747.

12 Saltoun MSS Box 328.

for the previous year deterred the Trustees; while Robert Hunter at Perth had two lint-mills in operation and had personally employed a flax-raiser for 9-10 years, with the result that there were over 200 acres of flax growing in his neighbourhood, most had not enough lint or no miln in operation. Nearly all the lint-boors failed either totally or partially to implement their contracts with the Board and the heavy capital expenditure of the Board in grants to the lint-boors for the growing of flax and the erection of lint-mills suffered as much waste as the premium on the sowing of lint. The premium for sowing lintseed was discontinued after 1749, and payments to the lint-boors ceased after 1751.[13]

The cost of transport, and the scattered fields of flax were blamed, as well as mismanagement: in 1761 when there was some talk of reviving the lint-boor scheme, the Board refused to consider it; "this was a favourite project of the Trustees some time ago, but they came to understand that this business cannot be carried on so conveniently here as in Holland and Flanders where great quantities of flax are propagated."[14] The funds were released mostly for use in bleaching grants, but the number of flax-raisers was increased from 20 to 27, and their salaries raised to £15 per annum to include the training of apprentices. This more modest programme bore more fruit in the long run.

The premiums on flax-growing were restored for five years in 1758 for the counties of Perth, Forfar and Fife alone; the Trustees reckoned that the quantity grown of home flax had so far increased as to "give sufficient

13 Payments to lintboors for building lint-mills, purchasing and managing a certain number of acres of lint yearly and also lintseed premiums.

In 1747	to 5 lint-boors	£700 - sowing lintseed	£367
1748	7	£980 - " "	£702
1749	5	£700 - " "	£820
1750	5	£700 - " "	cancelled
1751	2	£310 -	"

Source: States, op. cit.

14 B.O.T.L. to the Perth Society for Agriculture, 2 Feb., 1761.

employment to the bulk of the lintmills that have erected,"[15] therefore the premiums to the possessors of lintmills were to be stopped and given to flax growers instead. The Trustees insisted it was their duty to encourage the growth of home flax; "Flax-raising is the principal object of our attention...no manufacture can be established while it is dependent upon foreigners for its material."[16] The premiums did have some effect; in 1762 there were 85 competitors for the premium in Perthshire alone and the Trustees thought flax-growing to be established in the East.

Prices of imported flax, and demand, rose sharply in the 1760s. The manufacturers complained that, "The manufacture was in great distress at present by the rise of the price of foreign flax which within these 7 years has been no less than 50%",[17] and application was made to Parliament for a bounty on flax-raising to be financed by a further duty on foreign linen. The memorial presented to the House of Commons stressed that the fundamental defect was that flax (and hemp) was grown in but very small quantities at home and "the success which the culture of flax has met with in Ireland is alone sufficient proof they might also be cultivated to advantage in Great Britain. The hopes of the bounty (this branch of the manufacture is still in its infancy) will induce persons to employ part of their lands..."[18] The move succeeded; an Act was passed placing additional duties on foreign linen which, however, did not come into effect until 1st August, 1767, and further time had to be allowed for the fund to accumulate. The shareout, of which the Scots were to get 7/15, came in 1772 when the Trustees received £9,190 from the proceeds of the duties between 1767-70. The first

15 B.O.T. Report Christmas 1758.

16 B.O.T. Report Christmas 1762.

17 B.O.T.M. 4 Dec., 1766.

18 C.R.B.R. Records 1759-1779; Memorial pp. 210-219.

expenditure from this fund was made in 1773.

A premium per stone produced was suggested in the counties where flax-growing was established; in the West of Scotland and Perth, Forfar and Fife, and lintseed was also distributed. It appears from the list of competitors that the premium was extended in area, but when the flax-surveyors reported on the numbers,[19] in July 1773, the majority were in the above areas. Of the 490 entrants in 1776, only 170 returns arrived, and of these 58 were up to the quality required. The fund continued to be applied in this way, and after a whole ought to have had some effect in increasing the acreage of flax.

The question remains as to how far Scottish growing flac increased, "rendering the linen manufacture permanent by having the first materials raised at home."[20] In the early 1760s the only areas where flax was grown in quantity were in the West and Perth, Forfar and Fife. "Our only staple manufactures are in the shires of Perth, Forfar and Fife and in the West country where the bulk of the flax is raised by the people themselves."[21] In some areas little flax at all seems to have been grown; i.e. in Aberdeenshire in 1763 Alex Fraser of Strichen reported, "In this neighbourhood

19 B.O.T.M. 28 July, 1773.

Surveyor for	Lanark, Dunb., Stirling, Kinc., Dunblane	133 comp.
"	Perth, Fife, Kinross, Clackmannan	129
"	Lothians and Borders	14
"	The South-West	24
"	Forfar, Kincardine, Aberdeen	75
"	Banff, Moray, Nairn, Inverness	18
"	Ross, Cromarty, Sutherland, Caithness	9

comp. = competitors.

20 C.R.B.R. bundle 27. Letter to Sir Lawrence Dundas, 16 July, 1767.

21 B.O.T.M. 23 Jan., 1762.

the poorer sort are employed in spinning yarn and weaving linen...but (the cultivation of flax) is neglected by the gentlemen farmers. Not one stone of flax is raised in the County while 50,000 spindles of yarn and 59,000 yards of coarse linen are wove up for sale, all of foreign flax, and this quantity and above of the flax for linens for home consumpt."[22] To meet this demand flax had to be imported at Aberdeen (205 tons) and Portsoy (142). The premiums and encouragement did little to spread the growth of flax further afield but concentrated and increased it in the traditional counties. It may be that the great difficulty that the Scots had with flax - in contrast to their neighbours, the Irish - was due to their lack of skill in management, as opposed to a climatic reason, to its too often being grown in small lots and handled by unskilled labour, but it is hard to see why the Scots, given the financial incentive, did not acquire the necessary skills to manage and prepare flax. It may have been the troublesome nature of flax as a crop (said to scour the land), or the lack of financial return in the years when Continental supplies were not disrupted. But the fact that flax was grown successfully in parts of the West and the East underlines how curious was the failure to establish self-sufficiency in flax supplies.

A pointer to the state of home supplies may lie in the statistics of imported lintseed. Scottish flax was largely grown from supposedly superior foreign seed, from Holland, and briefly, during the crisis year of 1761, from American seed.

Table 3.5

Imports of Lintseed to Scotland 1742-1774[23]

22 Saltoun MSS Box 330.

23 For the figures of 1742-47 see B.O.T. NG 1/16/1 - Trustees' extracted figures from the Customs books; they include the figure 64,971 bushels for the importation in 1745, a figure so high in compairson with any until the 1760s as to render it implausible.

(average importation - bushels)

1742-47	37,003	p.a.	
1755-59	38,973	"	
1760-64[x]	52,535	"	x 1763 missing
1765-69	58,777	"	
1770-74	41,020	"	

The jump in the amount of lintseed imported may indicate a similar expansion in the amount of home flax being grown, but it is difficult to know what to make of the decline in the first years of the 1770s. It is unlikely that the acreage contracted at home; is it possible that the quality of home seed had been improved so far as to render the foreign less necessary?

The numbers of lint-mills did increase markedly, helped by refinements in the machinery. The early mills by thier "promiscuous beating did so dischevell and rustle the flax that the yield decreased by 6-8% worse... than that beat by hand."[24] This, and the capital costs of erection, deterred their widespread use, despite generous grants from the Trustees in the late 1740s. In the early 1760s a variety of modifications were made by, amongst others, Robert Macpherson, and the numbers steadily increased in the main flax-growing regions. Their development was hindered by lack of skilled millwrights who understood the new construction of Macpherson, whose "perpendicular" construction was reckoned to be much superior to the old, requiring less water, and being more easily worked, with less dust.

The main trouble with the lint-mill was the crudeness of the rollers and hammers, which broke down the flax to too great a degree. If by 1770 there were 246 working, their concentration in the coarse linen areas like Perthshire (73) may be significant testimony to the roughness of their operations. It appears that the importance of the lint-mill as a stage in the mechanisation of the linen industry should not be exaggerated, in

24 Saltoun MSS Box 329. Memorandum re Mr. Hog's Flax-dressing machine (c. 1752).

1772 at least; if McLain's production figures are accepted, a large proportion of home grown and imported flax continued to be manually scutched.[25] Heckling continued to be entirely manual, sometimes attached to the lint-mill but mostly independent. Occasionally the lint-mill was combined with a hecklery, and in addition to working flax brought to him at a set charge, the miller bought flax from the raiser. No evidence has emerged to show that the lint-miller then extended into the giving-out of flax. His line of reference was to the farmer; heckling lay on the far border. Most of the larger yarn merchants kept heckleries to prepare their flax.

The lint-mill was all too often responsible for a tragic form of industrial accident; men who lost arms when feeding in flax to the rollers. One such victim, McGlasham, who lost his left arm while working at the rollers of the Durie lint-mill in Fife, was taken on by the Trustees at £6 p.a. to give directions about flax-raising in the Highlands, "he being master of the Irish language."[26] Another danger was that of fire, a hazard shared with the heckleries: the Trustees insisted on insurance before they would give any grant to a lint-mill.

The period does see some investment in the lint-mill, but its effect should not be exaggerated, though significant. Its location was determined by supplies of local flax (or at the ports) and water supply and labour. About the extent of flax supplies to the linen manufacture the picture is not clear, even to the extent of being able to say whether home production expanded to the same degree as imports. The growth of imports suggests that it did not keep pace with the expansion of the Linen manufacture, but the rise in price per ton of imported flax leaves an unresolved dilemma as to why it did not.

25 N.E. McLain "Scottish Lintmills 1729-70" Textile History Vol. I, No. 3 for a full discussion, especially of the 1772 survey with regard to wages, etc.

26 B.O.T.M. 13 April, 1757.

Spinning 1746-75

The Trustees' attack on spinning was conducted through the media of the Yarn Sorters, Yarn Inspectors and Spinning schools. The offices of the Yarn Sorters were continued on the East Coast, although in 1750 the Sorters at Dundee and Kirkcaldy were discontinued; the service was, however, continued at Cullen, Brechin and Perth. The most ambitious expression of this plan to aid the poorer weavers was in the Edinburgh Yarn Staplery, a subsidiary of the British Linen Company, founded in 1750. This grew out of a plan, to lower the price paid to the spinners for spinning Osnaburgh yarn, by a combination of the manufacturers, who pleaded that the spinners were gaining extertionate wages. The scheme had no more than a short-term effect on yarn prices,[27] but the Staplery arose out of the ahses and did a considerable trade in the 1750s, sorting and selling yarn, handling not just Lowland but Highland yarn.

Yarn Inspectors were appointed in 1748 at a salary of £10 p.a. (the job was part-time). Their business was to search for improperly made or made-up yarn, and this was made an instrument in the harassment of the export of yarn to Ireland: it was no coincidence that the Glasgow Inspector was ordered to make "diligent search of places where linen yarn may be laid up for export and seize any not properly made up."[28] The Yarn Inspectors' care was exercised in favour of buyers, i.e. manufacturers, confirmed by additional instructions that the inspector was not to trouble any manufacturer about the yarn for his own weaving. "The Spinners principally by every way that you can come at them, and next the dealers in buying and selling yarn

27 This topic, and the history of the Yarn Staplery, is covered in Chapter 5.

28 B.O.T.M. 6 Nov., 1747.

are your proper objects."[29] The inspectors travelled out to the fairs for yarn, and perhaps one-third of their year was spent in this work. They sent in reports as to the number of days they had worked and the amount of yarn they had inspected; the Perth Yarn Inspector - William Blayde - claimed in 1770 to have personally inspected 64,388 spindles;[30] (the Trustees were a little doubtful). How important their work was is difficult to assess, but it is another indicator to the growth of the trade in yarn, both internally and externally.

The Spinning Schools played a minor role after 1750; when the Trustees were considering how to diffuse the spinning to the Highlands to tap the pool of cheap labour available there, they were doubtful that the spinning school would be as effective as it had been in the Lowlands, where the population had been much more concentrated.

The general maxim of the Trustees was that expansion of yarn supplies was to be achieved only by the increase of the numbers of spinners. Technical improvements to raise productivity per spinner were strictly limited - possibly because they were little desired while the pool of unemployed remained and spinners' wages were so low - the "capital Improvement" of the exchange of the rock and spindle for the spinning wheel, which Adam Smith thought doubled productivity, seems to have been a fait accompli by the 1740s in the Lowlands and its acceptance in the Highlands was helped by the distribution of wheels and reels by the Trustees and others.

The expansion of the industry's demand was met by increasing the number of spinners, and to a certain limited degree by the importation of foreign yarn. This was facilitated by the cutting and then removal of the duty on imported yarn. In fact, just as demand from the English

29 B.O.T.L. 31 Oct., 1764.

30 B.O.T.M. 3 April, 1772.

market put a minimum price on yarn, so the foreign yarn prices put a ceiling on Scottish prices. Only in years when domestic yarn was very high-priced did imports ever amount to very much.

Table 3.6

Imports of Raw Linen Yarn 1755-1775

(lb. to Scotland)

1755	357	1766	86,864
1756	7,768	1767	82,409
1757	10,215	1768	122,800
1758	12,334	1769	241,491
1759	30,790	1770	130,230
1760	256,665	1771	144,320
1761	270,606	1772	238,618
1762	33,506	1773	157,087
1763	27,587	1774	110,010
1764	46,923	1775	128,045
1765	72,799		

(Source: B.O.T. NG 1/16/1 and RH 2/4)

Thus the jump in importation of foreign yarn was due to the very high home prices in the years 1759-60. The price of Perth yarn rose from 2/- per spindle in 1758 to 2/5½[d] in 1759 and 1760. The steady increase of the 1760s may well be linked to the revival of the fine linen sector in the West. Supplies of domestic fine yarn appear to have been left behind and the West became increasingly reliant on supplies of French yarn for one-quarter to one-third of its total needs.[31]

Generally the expansion of the industry led to attempts by the manufacturers to strengthen their control over yarn supplies, not just by giving-out in the Lowlands, but by establishing links with Highland supplies and the North-East. William Cheap, the Edinburgh manufacturer travelled North in 1747 to establish a correspondence for yarn and the spinning of

31 David Dale, originally a weaver at Paisley, Cambuslang and Hamilton, went to Glasgow as a young man, "and became a dealer in linen yarn, tramping the country and buying in Pickles from farmers' wives. From this small beginning he developed a large trade in impor ting yarn from the Low Countries." J.O. Mitchell, Old Glasgow Essays p. 123.

coarse yarn, "being desirous of adding to his manufacture the lower-priced or coarse linen."[32] The example on the grand scale was that of the British Linen Company with its spinning undertakers in the North-East.[33] The North-East became an important source for yarn. In 1747 Messrs. Forsyth and Mcveugh of Huntly complained that the local stampmaster, by searching too diligently, was disrupting their yarn trade to the South. Huntly was one centre for yarn merchants and dealers, with their extensive giving-out organisations; Perth another, and the distaff side was well covered by the attentions of the giver-out in the North.

The yarn trade was extensive from the Lowlands to the Highlands; and the role of the yarn merchants important. Even the Glasgow and West manufacturers took to making links with yarn dealers in the East: the Cumbernauld Factory near Glasgow, and the Ayr Linen Manufactury alike commissioned their yarn from a Perth merchant. The question remains as to how much the spinner benefited from the demand, if at all, and how wages altered during the period. Some illumination can be gained from an examination of the discussion attendant on the abolition of the duty on imported yarn.[34]

32 B.O.T.L. 16 Sept., 1747.

33 See Chapters 5-7, passim

34 See infra pp. 156-165.

The Thread Industry

An important subsidiary industry was Threadmaking, which had been established since the 1720s in Paisley (sewing thread) and Linlithgow (tailor's thread). The technique spread rapidly and in 1732 there were compalints that white thread could not be sold at London, blaming "the unskilfulness of many who have set up."[35] The basis of production was the twist-mill, supposedly brought from Holland by one Mrs. Millar, in 1722,[36] which enabled linen yarn to be twisted by hand in the mill into thread - a laborious exercise - and then bleached or dyed blue, red or green, etc. The twist-mill was cheap and the industry dominated by woman power, but the business did attract bigger operators: William Sandieman set up in 1751 a thread-making subsidiary; his mill with 3 sets of bobbins, could work over 2,500 spindles of yarn a year, and it cost only £6.[37] He employed 3 women and 1 man to keep the mill going for 6 months in the year and during the summer used the work force to bleach the thread made in the previous winter.

Various experiments were made with twist mills driven by water, and a reliable one was advertised by the Trustees in 1762, "capable of turning not less than 2,000 spindles in a year (which when fully manufactured is worth £500)", and required "only one girl, instead of strong women, to perform two-thirds more work with an easier motion."[38] These mills and large companies began to dominate production. By 1762 there estimated[39] to be

35 B.O.T.M. Jan., 1732.

36 M. Blair, "The Paisley Thread Industry" p. 20.

37 Seafield MSS, GD 248/954/1

38 B.O.T.M. 3 July, 1762.

39 Ibid.

about 200 thread mills employed in Glasgow, Paisley, other places in the West and some in the East. The hand twist mills hung on for a while; a survey of Edinburgh in 1763 produced a list of 34 thread mistresses, besides apprentices and servants, "which will double that number."[40] In contrast, Dalquhurn, the famous early bleachfield in the West, switched into the large-scale manufacture of thread from 1760, with a large house containing 8 thread milns, "all of which wrought with one water wheel."[41] This was the prototype of the company later typical; in Aberdeen in 1767 no less than 12 Thread and Bleaching Companies existed (including Leys Still & Co. and Baby Lumsdens and Sisters!) - those not in this class "make only small quantities of thread."[42] At Dundee 39 mills were in constant use; one firm, William Morrison and Co., had 12, and John Wemyss had 8. In June 1763 Dalquhurn reported that it was "making coloured, white, Osnaburg and stitching thread using water brought from the Leven and has built a large miln containing 7 thread milns of 48 spindles each twining thread and 10 beating mauls for softening and glossing the same."[43]

Significantly, the enterprise was having difficulty in securing yarn supplies; it had used German yarn but was hoping to tap Highland supplies. The supply of yarn presented the larger manufacturers with some problems both in quality and availability. The yarn had to be evenly spun and quite strong. Some mistresses and firms alike hired their own spinners rather than buy the common sale yarn; e.g. Dalquhurn set up its own heckling house near Bo'ness where flax was given out to be spun. The demand from the thread

40 Saltoun MSS Box 330. "A list of Thread-Makers on the Water of Lieth; in Edinburgh and Leith, mostly within a mile of Bonymills."

41 S.RO. Forfeited Estates Papers E 728/18/2.

42 B.O.T. NG 1/13/1.

43 Forfeited Estates Papers, op.cit. infra

industry for linen yarn was considerable in aggregate; in 1766 Lord Kames estimated that £100,000 of yarn was used in the industry.

By the 1770s the industry was of major significance in its own right; in 1771 Glasgow claimed to make £30,000 worth of thread. In December 1775 and early 1776 a series of articles appeared in the Edinburgh Weekly Magazine by one W.C., who commented on the growth of the thread industry in Paisley. He estimated that there were 500 machines taken up in twining thread in Scotland, each of which employed 6 people in twining and twisting, and in all, including spinners, bleachers and packers, "36 industrious poor". If this estimate were near the truth, 3,000 people were directly - and 18,000 in all - employed in making thread. Output at £350 per machine would mean that £175,000 of thread was manufactured in Scotland each year. Paisley had no less than 100 thread mills, and made white thread to the value of £35,000 annually. Loch, in his Tour, added some detail about the other centre of the thread manufacture, the North-East. In Aberdeen there were two major companies, the long-established Gordon-Mills Company, and Milne, Cruden & Co., which used 3,000 cwts. of Dutch flax annually, and employed many hundreds in spinning, etc. At Banff the Thread Company (Geo. Robertson & Co.) made £40,000 of thread p.a. and employed 50 flax-dressers, using 3,500 cwts. of Dutch flax annually, and paying out £70 per day to spinners. Dundee excelled in coloured threads and the same process of concentration was far advanced there: each "manufactury" contained several twist mills, up to as many as 24. At one, 132 men, women and children were employed indoors and 1400 spinners outside. It is clear that the twist mill and the thread manufactury were the basis of the "Factory" in the sense that not just were all the processes of manufacture concentrated in the control of one company, but mechanisation made a substantial contribution in raising productivity, and in this case water

power was the power source for the group of twist mills. The manufacturers did combine temporarily in 1767 to ask the Trustees to extend the stamping system to thread, and some were already stamping their own thread voluntarily. The issue became bogged down and not until 1772, when a deputation from Paisley had waited on the Trustees, did they issue regulations: thread was to be stamped in three classes - "Ounce Threads, Stitching and Pound Thread". The system never worked very well and fell into desuetude quickly. It was framed with a view to the English market.

As early as the 1730s considerable quantities of thread were being exported via Leith to London,[44] and this market continued to be of paramount importance, supplemented by the Plantations. "Thread is much wanted at home and for export from Glasgow to North America and the West Indies."[45] Lydia and Helen Thompson's manufactury at Inverness sent virtually all their thread for sale by consignment to London in 1762-63,[46] and Robertson's at Banff in 1776 claimed to send much of their production to Nottingham. Strathmeigle ounce threads were equally orientated to the English market. The export of thread must have been an important subsidiary earner in the English and Plantation markets for the Scottish Linen Industry.

44 See S.M. 1739 passim.

45 E 728/18/2. Dalquhurn Petition.

46 Forfeited Estates MSS E 728/18/2. This manufactury was a special case as it lay so far North.

The Highlands

Various attempts were made to extend the Linen Manufacture in general and the spinning in particular into the Highland areas, which were defined as the area North of the Tay and West of Aberdeen. The abortive Rebellion of 1745-6 added edge to those who stressed the importance of teaching the natives how to sustain themselves in peaceful activities. Early private schemes nibbled first at those areas most proximate to the sea: some were the products of commercial drive, others of the landowners; in 1746 the Earl of Morton and his doers were trying with some success to introduce into the Orkneys the method of spinning coarse yarn; and elsewhere Proprietors alive to the prospects of increased rents bestirred themselves in various parts of the Highlands. The Encouragement of the Linen Manufacture and the Civilising of the Country were very closely connected in private and official mind alike; and it was hoped that Industry would keep the Highlands quiet. The Banff Clergy tactfully reminded the Duke of Cumberland that the chief cause of so many men rising in the North was their poverty and idleness. The pump of official patronage was at least primed by Culloden.

The Board of Trustees and later the Forfeited Estates, to a more limited extent, devoted some funds and attention to the development of the linen industry in this area, assisted by landowners such as Morton and Lord Deskford (Deskford) in the North-East. Private enterprise also contributed, from the numbers of yarn dealers, who penetrated into the Highland areas from Perthshire and Aberdeen, giving-out flax and taking in yarn. The most ambitious scheme was promoted by the British Linen Company, who, with patronage of the local landowners during the years immediately after the Rebellion, set up a network of undertakers (agents) for the giving-out of flax and spinning of yarn on the East Coast at Kirkwall, Cromarty, Tain

and Inverness. They intended to tap the pool of cheap labour available, with the secondary objective of keeping down the level of prices for Lowland spinning, which threatened to rise sharply as the industry expanded.[47] In the West, the Duke of Argyle assisted an ambitious scheme to expand spinning and weaving in Argyleshire, which as it was accessible to Glasgow had both a ready market and a tradition of flax-growing and spinning established. The difficulties were very much greater in the interior, because of the unskilfulness of the labour force and the high cost of carriage, especially of flax, which virtually vetoed any economic penetration there, even of spinning. What spinning there was, was circumscribed by proximity to supplies of flax at the ports where it could be imported direct from the Baltic, as the British Linen Company did on the East Coast to supply its agents.

The Trustees helped as their funds permitted: giving prizes on spinning, donating wheels and reels for free distribution by the undertakers. In 1751 they proposed to apply £600 of their funds to be used for spinning schools and setting up heckleries (to dress the flax) at Logierist and Inverness. The heckleries, in the hands of William Sandieman (later Robert Lyon) and William MacLean and Company, performed a useful service throughout the 1750s, although Sandieman insisted on - and obtained - a subsidy of £5 per ton heckled; he succeeded in extending spinning into the Highland areas of Perthshire.

The number of spinners - as opposed to weavers - did increase from 1746 quite sharply, in the Eastern seaboard and North-East rather than the Highlands proper, that is. The British Linen Company claimed to employ 5 - 6,000 full-time spinners through its undertakers by 1753, and some had recruited staff so quickly that it seems likely that in addition to training spinners from scratch, they were poaching them from other undertakers'

47 See infra Chapter Five, passim.

service. John Mackay at Tordarroch in Sutherland certified that his spinners had increased in number from 20 in January, 1752 to 1,078 in August, 1753, which was a supernatural rate of increase. By 1755 he employed 1,650 spinners.

A pamphlet, "A State of some facts with regard to the Linen Manufacturers", circulated in 1753, noted that, "In the countries bordering on the Highlands and from Inverness Northward to the Orkneys the West towards Argyleshire they have no looms but have begun to spin the coarse yarn which is wove in the Low Country into Osnaburg linens for clothing Negroes - North of this is a large tract of country where thousands of people are totally idle and uncivilised."[48] During the debate over the renewal of the Bounty, the Scots made great play of the possible consequences to the Highlands if the coarse linen manufacture were restricted, and a responsive Administration responded not by continuing the Bounty, but by awarding the Trustees an Equivalent of £3,000 p.a. for 9 years to start from the expiral of the Bounty (in 1754), "For Encouraging and Improving the Linen Manufacture in the Highlands of Scotland". Equipped with the promise of this fund, which so greatly enlarged their resources - and their responsibility - the Trustees promptly advertised in the Edinburgh and Glasgow newspapers for suggestions, and received 41 proposals in reply from Gentlemen merchants and manufacturers,[49] covering a good deal of ground (the need for inns, roads, post-offices and to discourage the Erse tongue), most of which the Trustees politely ignored, in favour of consultation with experienced manufacturers, including Tod and McCulloch of the British Linen Company. When the Linen Committee of the Trustees met in December 1753, all were agreed with Milton that, "The intention of the Act will be better answered by doing something effectually at a few

48 Seafield MSS GD 254/954/1.

49 E.g. The Gentlemen of Ross, ditto Sutherland, the JP's of Nairn and Argyle, William Sandieman, Tod and McCulloch...

stations than by dissipating this encouragement in small sums over the Highlands."[50] It was decided for the first year's plan to concentrate on spinning and flax-dressing. The problem with spinning was that although it generated employment it did so for the women, not the men, hence the desire to establish stations where not just spinning but flax-raising, heckling and ultimately weaving could be taught.

In retrospect this decision to build stations in the inland regions was a tragic error, which paid very little dividend and lost virtually all the principal of the fund. What funds were devoted to subsidising the undertakers in the East yielded far more in lasting employment: there the British Linen Company's agents were allowed a premium of 1^{d} per spindle to offset their carriage charges; the contractors at the inland stations received double that. But the reasoning of Milton was clear; the intention of the Act was to encourage the Linen Manufacture in the Highland parishes (defined as the disarmed parishes where Gaelic was spoken), and that could be best effected by stations to which the natives could come, and at which colonies of instructors settled. Moreover, instead of many small-scale subsidies, most of which from experience the Trustees had found to have little or no effect, a large-scale project could be tightly supervised. In practice, the main difference was that instead of the fund seeping away, it disappeared the more rapidly.

The main use of the Fund was to build and support 4 stations located on the recommendations of the very experienced William Tod and Richard Neilson, who undertook a personal tour of the Highlands.[51] On their shoulders must rest some of the responsibility. The stations were built at Loch Carron, Loch Broom and Glenmoriston in 1755-56, where 12, 45 and 107 acres respectively

50 B.O.T.M. 21 Nov., 1753.

51 See "Linen in the Highlands 1753-62": Edinburgh College of Commerce Publication by A.S. Cowper.

were purchased, and the fourth at Glenelg was laid out in 1756. A small allocation was made of a premium of 1^{d} per spindle to contractors for Highland spinning (mainly the British Linen's agents) who had over 7,000 spindles spun annually, which was supplemented by a distribution of free wheels, reels and prizes to the contractors and stations alike.

The Stations were placed in the hands of experienced linen merchants: John Ross of Dingwall to Loch Broom; Alexander Shaw of Elgin to Glenmoriston, and Ninian Jeffrey all the way from Kelso to Loch Carron. The difficulties faced by the stations were daunting: the high costs of constructing the buildings and carrying the flax (Shaw complained that the local boatsmen were charing extortionate prices for carrying flax and yarn and asked for a boat for the station) were supplemented by the unskilfulness and auspicion of the natives. The stations did some business, but nothing equal to the attention and sums expended on them, and the Trustees became heartily sick of them. Accordingly, they were more than happy to accept the offer of the British Linen Company to take over the business of supplying the stations with flax, and taking the yarn at a suitable premium. The undertakers for their part were to be allowed in addition to their salary a bonus on the amount of yarn spun. The stations continued to operate: Alex Shaw actually succeeded at Glenmoriston in raising flax, dressing it and getting considerable quantities spun locally. Loch Carron became well established, Loch Broom less so, and Glen Elg not at all.

The crisis came in 1762 when the Trustees decided to switch the use of the fund from the stations for the ninth and final year of its life, to the West instead of the North Highlands, which cut off the funds available for the British Linen Company's contract, which was thus discontinued. After assuring themselves that there was no prospect that further funds would be made available, the Trustees turned the stations out to tend for themselves,

but did provide a reference for the undertakers to the Board of Annexed Estates: "The natives are now coming to relish these improvements so much that they are coming from all parts to provide themselves with flax."[52] The commissioners did respond by making considerable funds available for several years to Glenmoriston and Loch Carron, which were finally leased to their undertakers in 1770 for 19 years.

The static approach did not yield much in the way of results; much more was generated by the ceaseless peregrinations of Duncan Gray, who as the Board's servant in the Highland areas of Badenoch, Strathspey and Forres taught spinning and heckling and gave out flax to be spun. In 1761 he reported that he had taught 160 girls in Badenoch to spin, and in 1763 he taught 197 girls in Strathspey through his schools, incurring the displeasure of the local gentry, who found "spinning makes their servants still scarcer and heightens their wages."[53] This intelligent and energetic manufacturer received his expenses from the Board (generously estimated at £140 in 1761), which was money well spent, in that, having been assisted to develop spinning in these areas, his operations continued after the withdrawal of the subsidy, and the result of this capital input was longer-term employment than that mostly generated by the stations. But this must be supplemented by observing that Grant (and Alexander Shaw), did continue to receive some assistance, from a different source, the funds of the Annexed Estates Board.

The Trustees decided to use their funds in the West to encourage the spinning in Bute, operating indirectly through a Glasgow firm, Blackburn and MacKay, who were given a premium of 1^{d} per spindle spun, and a flax-raiser, subsidised lintseed, free wheels and reels. The Board continued to honour this contract for several years more out of its ordinary funds, approving

52 B.O.T. Minute sent to the Board of Annexed Estates, Feb., 1763.

53 B.O.T.M. 21 Jan., 1761.

of the Company's intention to concentrate on spinning alone, instead of weaving (which initially had been a long-term objective). The contract was taken over by J.D. Cross and Co. in 1772, which managed to raise the amount of yarn spun to over 5,000 spindles per annum until 1776, when the quantity dropped and the firm gave up.

The record of the Board of Trustees (and the Annexed Estates) in relation to the Linen Industry in the Highlands was far from distinguished. Spinning was developed by a number of enterprising merchants around the eastern perimeter,[54] but not in the interior regions for any length of time. The stations were deserted and the Trustees concluded by 1770 that, "The plan has utterly failed."[55] The obstacles were too great - distance from markets, cost of transport, and the backwardness of the people. But spinning, both full- and part-time, did flourish in the hands of the merchants of Elgin, Huntly and Inverness, who imported flax and gave it out through a network of agents in the interior, to be spun.

In no Highland area was weaving more than a brief visitor and male unemployment remained virtually untouched. In the North-East in Banffshire weaving reached its official maximum in the early 1730s, when yearly over 100,000 yards was being stamped, but thereafter never regained that level, despite its favourable position for access to yarn supplies and the keen support of some of the local gentry. In Orkney, German cloth was far too readily available - one contemporary remarked in 1745 that, "It is doubtful if any inhabitant has worn a Scottish shirt or even stockings."[56] Brave

54 Insurance & transport costs to the smaller seaports on the East Coast (e.g. Cromarty) were much higher (see B.L. figures) than to the main ports, Aberdeen, Dundee & Leith, for flax from the Baltic, despite it being roughly the same distance. This applied also the transport of yarn.

55 B.O.T.M. 20 Feb., 1770.

56 Saltoun MSS Box 328.

attempts were made by Brown and Ferguson in Orkney, but with little success. All of which makes the growth of Invernessshire as a weaving centre after 1770 the more unexpected, to over 250,000 yards in 1778. Yet some at least of the preconditions were present, due in part to the work of the Trustees in increasing the pool of spinners, and in encouraging some of the entrepreneurs. But the main factor in extending spinning into various parts of the Highlands in the 1750s was the pressure on yarn supplies and the rising price of yarn in the Lowlands.

With the benefit of hindsight, it is tempting to argue that in view of the failure of the settlements and the amount of capital simply tied up in land and buildings, the Trustees could have used the Highland Fund better than they did. But, in defence of the Trustees, it must be recognised that the objective of the Fund, determined not by them but Parliament, to establish the manufacture of linen in the Highlands was simply not realisable, given the lack of skills, distance from markets and difficulties of communication. Moreover, the policies which the Board adopted in pursuit of this objective, were formed after careful consultation with people experienced in the linen industry, and who had knowledge of the regions concerned. That the Fund failed to realise the long-term establishment of the linen industry in the Highlands - except for some increase in spinning - cannot be denied, but the responsibility for this does not rest entirely on the shoulders of the Board of Trustees.

The Fine Linen Industry

During this period the Trustees devoted far less of their funds to the fine linen sector, and what development there was took place independently of their activities. The contracts of the Piccardy weavers were cleared from the Board's hands, and an indemnification in part paid to McCulloch and Tod for the £2,500 worth of unsold and probably unsaleable cambrics on their hands. In the 1750s the Board did offer some prizes for weaving fine linen, and in the next decade grants were awarded to apprentices in the manufacture of fine lawn. The major point of involvement for the Trustees was in the series of applications to, and negotiations with Parliament. Yet there were very considerable developments in the manufacture of fine linen, which was far from being moribund.

In the 1740s there were various indicators that the industry was not thriving, which was blamed on a variety of causes, from the price of bleaching fine linen to the smuggling in of imported linens. David Flint, the Secretary to the Trustees, gloomily worte in 1749 to the Provost of Glasgow, Andrew Aiton, that he did not expect Parliament to help: "Our fine linen manufacture makes such a poor appearance in the accounts sent up (to London) that we can expect no encouragement for it; on the contrary it will confirm the arguments of our enemies for prohibiting the use of our fine linen on the pretence it is cambric and smuggled from England."[57] The Scots were also up against very severe, legitimate competition from Dutch hollands, German lawns and French cambrics in the highest-priced range of linens, and from the Irish in the middle. It was assumed by all contemporaries that it was axiomatic that German linens could undersell the Scottish in open competition; e.g. "They can undersell us in all kinds of linens, considering their cheaper living and smaller wages, and also their

57 B.O.T.L. 4 May, 1749.

having all materials more within themselves."[58] Yet by the 1760s the fine linen manufacture in the West and even its sickly sister in the East were thriving; in 1766 the Trustees estimated that in Scotland the making of cambric and lawn was carried on annually to the extent of £300,000 and employed 30,000 people. By the 1770s the cambric manufacturers had outstripped their domestic supplies of yarn, and because they found it difficult to get girls to spin cambric yarn were forced to import between one-quarter and one-third of the yarn needed from France - an expense estimated at £50,000 p.a.[59]

One of the main reasons for the growth was legislation: the acts prohibiting the importation and wearing of French cambrics, passed in 1748,[60] and the measures laying extra duties on imported foreign linen (1759 and 1767). The effect of the former was undoubtedly diluted by circumvention - entering the French cloth as Dutch as the Customhouse or by smuggling (mostly through England, the Scots maintained). Smuggling was only increased by the total ban imposed; "Never were so much French and Dutch linen run into the country as at present, which is a heavier stroke upon our manufactures than if they were admitted to entry and pay duty."[61] Two schools of thought emerged: the one was for continuing the ban and enforcing it by rigorous searching and seizure of any unstamped cambrics as French; the other favoured admitting cambrics under duty, which would at least cut out the smuggling, and ensure some protection in the home market. Generally

58 History of the Linen Trade in the West. Seafield MSS, op.cit.

59 Chas. Morteir L'Aimee of Cambres in Flanders v. Brown & Carrick, merchants at Glasgow. Court of Session Papers, 165:36 (1777) L'Aimee supplied French yarn for these manufacturers for which they had refused to pay, not only because it was bad yarn, but he had had it packed en route alongside some strong-smelling cheese.

60 18 Geo 2; 21 Geo 2; 32 Geo 2; 7 Geo 3 etc.

61 Saltoun MSS undated letter c. 1749.

the Scottish manufacturers regarded with fear the prospect of repeal which "would tend to ruin that branch of the manufacture now brought to great perfection in Scotland, particularly in the counties of Lanark and Renfrew."[62] The system of stamping home-made cloth provided a mechanism by which foreign cambric could be excluded, although stamps could be forged, and of course cloth from England bore no such stamp. This caused the Scottish manufacturers great bitterness; a running sore was the leakage of cambrics awaiting re-exportation (which was permitted) from the English Customs houses in which they were stored. In 1769 the Glasgow manufacturers demanded a more effectual application of the laws against smuggling, and made an agreement with the Trustees to employ men jointly through the Agent Sporriswoods at London to make searches for smuggled cambrics in the Port of London. It is sad to relate that although the searches were effective and large seizures made, the Glasgow manufacturers reneged on their share of the expenses involved, which sundered relations between them and the Board. The official support of the Trustees for the continuance of the ban had caused in 1766 the dismissal of William Tod as their agent in London; he was one of those who doubted the efficacy of the prohibition and personally advocated the admission of cambrics under duty because smuggling voided the Act's value. When the question of repealing the Act was under discussion, without instructions he was "at pains to represent the repeal as a proper measure and to propose the duty on French cambric be employed for promoting the raising of flax and hemp in Great Britain".[63] The Board promptly sacked him, and disassociated itself from his views.

Of value though the Act was thought to be by the manufacturers in Scotland, there were other ways of evading the law and indeed the duties

62 C.R.B.R. Records, 1759-1779, p. 217. 17 Nov., 1766.

63 B.OT. Letter Book December 1766.

than by smuggling alone. A common practice was to enter the French or Dutch cambrics and lawns as German lawns or "Narrow German", and there were a whole series of variations on this theme to avoid the prohibition or pay a lower duty; abuses which relied on the inability or unwillingness of the average Customs officer to distinguish between the various fabrics of linen and their origin. The advantages were considerable; e.g. Flanders Holland cloth which should have paid a duty of 8^d an ell was commonly entered as Broad German which was charged at only 3^d per ell. The plethora of scales, denominations and duties afforded ample opportunity for this kind of manoeuvre; hence the Scottish desire for simplification of the Book of Rates. An updated version was also called for as the actual duties imposed tended to bear an uncertain relationship to the real value of the cloth, since they were levied pro rata on the assessed value of the fabric per the Book of Rates, which, as it dated from the time of Charles II, was grossly out of date. The Dunfermline manufacturers of diaper complained of the low assessment on foreign diaper table cloths, and other groups had their own particular complaints. "Wrong denomination" and "false assessment" were two major and continuing grievances.

The prohibition clearly afforded some stimulus in the manufacture of cambric, but what seems to have been the most important general factor in the growth of the fine linens sector was the increased protection given by the extra duty of 5 percent imposed on all imported linens in May 1759. Even the ailing manufacture of fine holland in Edinburgh and region saw a chance to reverse the trend which had seen the 1,000 - 1,500 looms employed in that branch in the early 1750s decrease to only about 150.[64] Certainly the manufacture did revive in the East, although it was always of much less consequence than that of the West, and Messrs. Biggar, Spence and MacViccar

64 B.O.T.M. Dec. 10, 1760

(who had the three "fine holland Factories about this place of Established Credit and Skill"[65]) featured prominently in the debates of the period as spokesmen for the Scottish Fine Linen Manufacture. In 1773 Walter Biggar, giving evidence before the House of Commons enquiry into the State of the Linen Trade, stated that the number of looms employed in the manufacture of shirting and long lawn had decreased from 1500 to 5 - 700 looms in Edinburgh; but even this latter figure marks a considerable increase from the number in 1759, and the growth during the 1760s was certainly shared by the much more important industry in the West. The reasons for the dominance of the West in the manufacture of fine linen are several: the techniques of the making of fine linen had long been established in Glasgow and Paisley, and the supply of home-grown flax in the West was more suitable for fine linen, and the Western manufacturers claimed that, unlike the coarse, at least half the flax they used was grown locally. A further reason was the ability of the weavers in the West to switch in times of depression out of fine linen into silk, e.g. in 1761 the Trustees reported that because of a slump in prices, up to one-third of the manufacturers in and about Paisley "have left off making Glasgows and are now employed in making plain and figured silk gauzes".[66] The regional diversification and specialisation, for whatever reasons, had been long established.

In the West, the growth was accelerated, not caused by the duty of 1759.[67] The depression of 1755, which a contemporary pamphlet estimated to have cut the number of looms making Hollands by 3/5ths and lawns by $\frac{1}{3}$rd, proved to be almost fatal in the East to the manufacture of Fine linens,

65 Ibid.

66 E.U.L. Laing MSS, Annual County Returns of the Linen Manufacture, 1727-83, to which are added, by an anonymous hand, comments on fluctuations in some years.

67 Histroy of the Linen Manufacture in the West...Seafield MSS, op.cit.

but only a temporary interruption to the mushroom growth of the West's manufacture. In the 1730s only a few thousand yards of the fine linen, Muslin (called Glasgows), had been made each year, but the quantity leapt each year after 1748,[68] reaching the maximum of 335,000 yards in 1753 before the depression. The Trustees were asked for a third stampmaster for Glasgow by 1757 because of the increase of business. As already mentioned, in 1766 the Trustees estimated the manufacture of cambric and lawn in the West to be worth £300,000 annually and to employ 30,000 people. Table 3.7 illustrates this growth, and the rise in average price per yard is highly indicative of the growth of the fine linen sector in Glasgow.

Table 3.7

Linen Stamped at Glasgow

1728	266,214 yards	Value	£ 9,467	Av. price per yd. 8.5
1740	625,200 "	"	£ 31,383	12.1
1757	2,032,008 "	"	£ 87,745	10.4
1771[x]	1,921,643 "	"	£156,456	19.5

(Sources: Petition for a third stampmaster [Saltoun MSS] and J. Gibson History of Glasgow.)

The strength of the West lay in the variety of fabrics and finishes it produced within the fine linen range, which the Trustees underlined with their attempt to rename the fine cloths with Scottish titles in 1748. "The fine linen of the manufacture first begun at Piccardy now carried on at Glasgow the thinnest kind of which was called clear lawns is to be named Carolines: striped, Checked, spotted and flowered Muslims Glasgows: white muslim or lawn hankerchiefs Scots Muslim Hankerchiefs: Muslim neck clothes Paisleys."[69] The value of the variety of the allied ranges lay in times

68 Muslims or Glasgows stamped ('000 yards: source Campbell, States op.cit., passim.)

1746	3	1749	76	1752	181
1747	14	1750	108	1753	335
1748	37	1751	75	1754	283

69 B.O.T.M. 4 Aug., 1748.

of depression when the weavers could switch into lines in more demand, e.g. in 1755 the looms which had been making lawns were switched into checked goods.

Glasgow and Paisley were the main centres in the West, and the former not only looked to the Plantations and England for its markets but even managed to build up a trade in Kentings (lawns with a few threads of cotton in for ornament) to Ireland, the first of the mixed cloths. In 1759 when the Irish laid a prohibitive duty on imported linens "with the least spot of cotton in them", the West was stung to vigorous protest; "This may lose us entirely a trade worth £50,000 p.a.",[70] which led to the Trustees making a strong representation - and a successful one - to the Treasury to intervene. While the trade in "mixed" linens grew in importance, the cuckoo fledgling was far too weak to expel its brother until the 1780s. Cotton was primarily for decoration, and the Muslim and Bengal fabrics were essentially linen.

For 1771 Gibson cites figures for Glasgow that appear to have been extracted from the stampmasters' books. In addition to the finest linens, Carolines (with an average price of 32^{d} per yard), there was quite a range of middling-priced fabrics, from between 8 - 10^{d} per yard.

Carolines	548,061 yards	Value £73,369
Glasgows	13,513 "	" £ 1,351
Checkt HK's	612,410 "	" £23,842
Bengals, etc.	432,676 "	" £16,760
Lawn	26,159 "	" £ 3,379
Cambric	50,401 "	" £17,357
Long Lawn	18,472 "	" £ 2,462

The depression of 1773 aroused a call from all sections of the Scottish Linen Industry for yet more duties on foreign linen imported and the fine linen manufacturers were particularly vociferous, e.g. the makers of Damask

70 B.O.T.L. Dec., 1759. Flint to Provost Murdoch of Glasgow.

and Diaper petitioned that all imported diaper be subject to the (high) level imposed on Dutch diaper, to which opponents objected that the duty was already high enough, and, "should the Duties take place, it would be productive of smuggling, to the lessening of His Majesty's Revenue",[71] and made the point that, "Every branch of our Linen Manufacture has grown up more successfully under moderate duties which have been fairly collected than under exorbitant Duties and Prohibitions."[72]

The Scots made equally forcibly before the House of Commons Committee the point that a high protective duty had been responsible in several cases for allowing the development of a home fabric: Walter Biggar quite frankly stated that there were no fabrics of linen in which the Scots had succeeded except when the same foreign fabric had been subjected to a high duty on importation, and cited fine plain linen, clear and long lawn and holland as examples of this. Several gave evidence as to the effect of the Depression. John Colvill stated that in 1766 there had been 3,200 looms employed in the making of clear lawn within 12 miles of Glasgow, which had since decreased; John Mackenzie, an experienced Glasgow manufacturer, said the number of looms in clear lawn had declined by 4/10ths within the previous eight months. They rested their case for extra duties on the proven slump and depression. Opponents conceded that while 2,500 out of 6,000 looms in the Glasgow and Paisley district might well be unemployed, this had been caused by domestic overproduction for the last two years and not by foreign competition, and the slump was due to the coincidence of home overproduction and a slump in the foreign demand, which would clear as soon as home production and stocks were reduced for a while. Further protection was not only undesirable, as the industry was no longer infant and the consumer

71 Observations on the Report of the Committee: (Printed Pamphlet: G.R.B.R. bundle 27).

72 Ibid.

would bear the burden of a further subsidy to it, but unnecessary. This view carried the day, and was verified when recovery came the next year.

Statistical evidences as to the absolute size of the Fine Linen manufacture are absent; odd snippets can be gleaned from the Trustees' Reports: in 1761 the quantity of Glasgows or muslim stamped decreased by 312,410 yards; in 1766 they commented on the increase in the quantity of lawn, 364,000 (£46,000) more than the previous year. The changes were not so alarming as it appears; they were more in the nature of switches; e.g. in 1761 into plain and figured silk gauzes, in 1766 away from fine, thin goods mixed with cotton which decreased by 270,000 yards. This adaptability and responsiveness to demand was a great asset in the West. It is clear that the Linen Manufacture of the West was of great value: a fact underlined by the Trustees' revaluation of the assessed value of lawns and cambric in 1766. This was intended with an eye to its propaganda value, and it succeeded.

Table 3.8

Linen Stamped in Lanarkshire

	Yards	Value	Average price per yard
1764-65	2.1m	£118,000	1/1^{d}
1765-66	2.2	167,000	1/5
1766-67	2.0	167,000	1/7

Other counties where fine linen was made showed a similar increase, (e.g. Renfrew and Dunbarton).

In addition to duties and Acts, one other factor was important from time to time in assisting the fine linen manufacture - the disruption of competitors by war. The manufacture of fine linen in Scotland "was accidentally assisted by a war breaking out with France in the year 1743

by which the Dutch manufacturers were almost ruined by the several armies."[73] Equally for the years between 1756 and 1759 the stampmasters' summary of returns bore the relevant comment, "War rages in Germany".

The development of the fine linen sector during the early 1760s did much to confirm the competitive ability of the industry in the medium and medium fine cloths where previously the Germans and the Irish had held sway. At the very finest level the Scots never succeeded in ousting the German diaper and damask, which continued to control the top end of the market.

Labour troubles there were; in 1767 the Trustees recorded a decrease in the amount of cambric made, "...occasioned by a difference between the Masters and Workmen which threw the workmen idle for several months".[74] But on the whole the weaver in the West could preserve a greater independency than his colleague in the East, and his wages were correspondingly higher. The alternative work in not just several allied linen fabrics but also in silk and cotton provided some insurance against depression in one branch.

73 History of the Linen Trade in the West, Seafield MSS, op.cit.

74 B.O.T. Report, Christmas 1767. For a fuller account of this struggle, see pp. 152-155.

Bleaching 1746-75

There was a considerable expansion in the number of commercial bleachfields during the period 1746-56 when many new fields came into operation, both in the Lowlands and in places as far flung as Ferry Town of Cree and Inverness. This was reflected in the numbers of fields advertising in the "Evening Courant" or the "Caledonian Mercury"; the numbers rose from between 10-15 in the 1740s to 25-30 in the 1750s. Nearly all the new fields used the Irish method of bleaching, and although a self-proclaimed aristocracy of bleachers continued to use the Dutch method to bleach fine linens, their position came under pressure as the rubbing-mill (the distinctive element in the Irish process) underwent modification in the 1760s to allow it to do finer linens without injury at less cost. Even the famed Grays' Green field had to confess that its business had greatly declined since the Irish method had prevailed.

In addition to the large-scale full-time bleaching fields there were still great numbers of much smaller enterprises, "the burnside bleachers", whose activities were part-time and cheap. Also there were a multitude of bleaching greens, serviced by a very small permanent force. The distinction between the public fields and the others became of significance after 1751 when a clause in the Linen Regulatory Act of that year stipulated that, "All persons who practise the Trade of Whitening or Bleaching of Linen cloth in the piece, so as to bleach or whiten a Quantity of cloth which shall be of the value of £500 stg. in the year...shall first give security to the Trustees to the extent of £100 for every such bleacher...and also for making good any damage which may arise to their respective Employers by any Neglect or Want of Skill in the Exercise of their Trade". After receiving the security, the Trustees were to issue a licence without which the bleacher could not practise.

This device was conceived by the Trustees involved in the drafting of the Act, as a way of regulating the large fields in the interests of the manufacturers who had been complaining frequently about the quality of bleaching, and the tardiness of compensation for damaged linens. It also served to reveal the numbers of large commercial bleachfields, for £500 worth of bleaching meant at least 20,000 yards of fine linen bleached and 40,000 of coarse annually (assuming the mean price paid per yard to be 6^d and 3^d respectively). The numbers of fields to which these licences were granted, rose steadily from 29 in 1752 to 46 in 1755, and 51 in 1757. Not all of these were new fields coming into operation; there seems to have been a general expansion in the capacity of fields during the 1750s which would necessitate their giving security in terms of the Act. Statistics as to actual yardage bleached are rare; Lanark did 20,000 yards in 1744 and Lawton 30-40,000 in 1753. These fields may have been much more typical than the only other two fields for which figures have survived, Salton and Luncarty, both of which were very large fields by contemporary standards, and indeed Luncarty was undisputedly the largest in Scotland by 1760. In 1750 Salton bleached over 118,000 yards, and in 1761 288,000; Luncarty did over 100,000 yards in 1753 and 360,000 in 1760.

Something also about the expansion of the capacity of the public bleachfields may be inferred from the amount of drawback paid on soap used in bleaching, which after 1751 was confined (and opened) to all the licensed fields. The amount repaid, which had averaged between £25 - £35 from 1732 to 1741 and thereafter declined, rose sharply from 1751 to average over £400 p.a. for the next decade.[75] Not too much reliance can be placed on this drawback as a guide to the amount of bleaching done; repayments by the Exchequer were often dilatory in the extreme, and two or three years' arrears

75 S.RO. E 904/3. Yield of Excise: Drawback paid on Soap consumed in whitening linen.

would be paid at the one time.

There seems little doubt that, despite the expansion in the numbers of the public bleachfields, and the supervision exercised by the Board, much of the bleaching of linen was still carried on at the burnside and at small bleaching greens run by weavers themselves, who could bleach small quantities more cheaply than the large fields. The latter were more interested in quantities, offering discounts on the advertised rates to manufacturers who sent a large amount of cloth. MacGillvrie, the Board's surveyor of Bleaching, reported after a 15-week tour in 1763, a great number of burnside bleachers in the Shires of Perth, Kincardine, Forfar, Fife and Kinross, and that he had seen them bleaching "41,263 pieces of linen cloth and 31,260 spindles of yarn made into thread".[76] Undoubtedly many of them used lime when they could escape supervision by officialdom.

The existence of this network of much smaller fields - the private bleachers - can be comfirmed from the evidence given in a legal case in 1749.[77] Paterson, who was a dealer in ashes, bought some Muscovia ashes from one Aitken, their importer. Subsequently he refused to pay for them, alleging that the ashes had either been useless or positively harmful in their effect. Most of the witnesses he produced were either weavers or small retailers; e.g. Thomas Alison, Candlemaker in Pathhead, who had bought 1000 lb., "in order to retail the same in the way of business he has been accustomed to for about 12 years past amongst the bleachers in the neighbourhood",[78] had had several parcels returned to him as insufficient. Aitken had sold some of the same ashes to three of the public bleachers, John Young of Lanark, John Christy of Ormiston and Ranken of Haddington, whom he called to testify

76 B.O.T.M. 25 Feb., 1763.

77 Bruce & Aitken v. Paterson Ct. of Session Papers 33/63 (1749).

78 Ibid.

to the quality of the ashes, which they duly did, but as Young said, "If they were not used right they can be most hurtfull", and, "The manner of using muscovia weed ashes is not well understood by private bleachers".[79] What Paterson had demonstrated by his witnesses was not the insufficiency of the ashes ("Given the Fact of their Utility to the Great Bleachers"[80]), but the lack of skill in handling them by these smaller bleachers. The case also showed something of the network of retailers who sold ashes in small lots to weavers, for them to bleach their own cloth. The very act of breaking the ashes down into small parcels lessened gravely the efficacy of the ashes, which travelled in very large barrels containing, however, far too much for the small consumer to take on his own.

The emphasis on, and consequent dependence upon, imported ashes created continuous problems and discriminated against the smaller bleacher. Ashes had to be imported in large, air-tight barrels from Holland or the Baltic, which the public bleacher could do by direct contract. The smaller man found these, when supplied through a local retailer, both expensive and of mixed quality. They, not unnaturally, gave preference to the use of lime, against which both the law and the Trustees were ranged. Seizure of pieces bleached with lime was common; e.g. on MacGillivrie's tour in 1762 (referred to above) he seized 32 pieces for being bleached with lime. The Trustees were not oblivious to the problem and its solution, which was to find a low-cost alkali suitable for bleaching coarse cloth at a low price. A petition from the Manufacturers of linen in Dundee in 1751 that, "Low-priced cloth cannot be as well bleached except by pure lime water",[81] forced a further enquiry into the well-entrenched prejudice against its use.

79 Ibid.

80 Ibid.

81 B.O.T.M. 22 May, 1751.

They consulted James Wright of Lawton, a practising bleacher, who wrote Milton, "If I had but had the honour of your Lordship's acquaintance 12 months ago I would have said very much in commendation of lime, but I am less in love with it and besides if it were allowed the cheapness of it makes the use of it Dangerous as It's like putting a sword into the hands of a madman. Innumerable mistakes are committed by the vulgar in liming; they only know in general its a think that whitens cloth cheap and easily purchased."[82] Doubtless these assets were sufficient attraction for the housewives and weavers to use lime as often as they could; despite the strong stand of the Trustees against it, they could only strictly enforce this at the public fields. Experimentation with alternatives was encouraged at intervals by the Trustees; Dr. Cullen observed and Dr. Francis Home Experimented, but the practical results were negligible; kelp ash left a yellowish tinge in the cloth, and fern ash was too dirty, unless twice burnt when it became too expensive. Joseph Black re-examined the use of lime in 1762-63: his conclusion was, "I feel that lime water will still be found a ticklish bleaching material."[83] Experiments were also made on the acid side, with sulphuric acid as a substitute for buttermilk or bran, at the instigation of Samuel Garbet; the principal objection was not to its action - it greatly speeded the whole process - but fear of what careless or unskilled workmen might do, as the cloth would be ruined irretrievably by an error. A few bleachers did use it consistently by the 1760s (e.g. Samuel Hart at Ford), and its use spread by the 1770s. On the alkali side, the burnside bleachers continued their "malpractice" (although subsequent events were to prove them right) and the public bleachers their expensive dependence on imported ashes. Not until Tennant's and Berthollet's discoveries was the industry emancipated.

82 Saltoun MSS Box 328.

83 E.U.L. Gen 873; Correspondence of Joseph Black, Vol. I (1763-1783), letter to Dr. Ferguson, 14 Oct., 1763.

Too little is known about the sources of finance for the bleachfields. Most of the new and expanding fields during the period 1750-52 were assisted in a small way by the Trustees through a grant towards the cost of erection, and indirectly, through the training of apprentices to manage them. The premium of £50 per acre which had been given since 1728 to bleachfields to help them set up, was paid after 1746 only after the field was set up, and then not by right, but according to the merit of the case. This was "because so many private persons of late have been fitting up fields at their own expense",[84] and the Trustees' funds were exhausted. The Trustees insisted that bleachers receiving the premium, were bound to allow manufacturers rates for bleaching cloth 5 percent lower than for other people, which, in practice, most would have adopted as standard commercial practice anyway. For some years in the 1750s no grants were made, and when in 1761 the Trustees turned their thoughts again that way, they decided sensibly not to issue grants, but loans without interest, which could be recalled to prevent a rather too common abuse: they had found that on several occasions when they had given a large grant to a bleachfield, "The proprietor has afterward sold the same to the highest advantage or set it at the highest rent whereby the real manufacturer for whose ease the public money was intended has been burdened with the whole outlay on the subject."[85]

The total cost of erecting a field varied according to size; in the 1750-52 period some of the smallest fields (Ford and Gifford) cost between £300-400, most were in the £700-800 bracket (Anderston and Annathill) and a few cost much more. At Lucarty, William Sandieman spent between October 1752-53 £1,225 in levelling and laying out a 12-acre field and bleaching house; by 1760 he had spent £2,487 on fixed works and machinery and in the next year expanded a further £1,030 in improvements. This extraordinary undertaking

84 B.O.T.L. to Alex Aberdeen 3 Oct., 1750.

85 B.O.T.L. to John Millar of Gray's Green 31 Jan., 1761.

received several grants from the Trustees totalling £275 by 1761, but the majority of the capital he must have raised himself; in the Luncarty Company he held two-thirds of the shares. The most likely explanation is that the expansion was internally financed out of profits, but as he was involved in so many allied linen enterprises, the contribution of bleachfield profits alone cannot be estimated. Other fields were financed by capital from commercial copartneries (around Glasgow the bleaching company as such was common), or with assistance from the landowners. Lord Deskford was an enthusiastic supporter of bleachfields in the North-East, e.g. Cullen bleachfield laid out in 1752 by John Christie, the renowned East Lothian bleacher. This Irish Quaker was the inventor of the single most significant addition to bleachfields in the period, the drying-house, designed to deal with cloth during wet days, a valuable invention in Scotland, which was rewarded by £200 from the Trustees, and speedily diffused throughout the country. Virtually every public field had one by 1760; as the costs of erection varied from £91 to £147, despite a grant in part from the Trustees, this must have represented a significant addition to the fixed capital of the smaller fields.

At Cullen John Christie planned the layout of the field; 4¾ acres for the Bleaching grounds, canals and houses, and a 5½ acre drying field. The main house (85 feet by 24) contained a Rubbing mill driven by water, 4 boilers, sower and bucking basins (or "kieves"). The canals were 200 yards long, 6 feet wide and 4 feet deep, to carry the water used in washing out the cloth to remove the alternate courses of acid and alkali (hence the advertisement for Dalhousie bleachfield showing a man scooping water over cloth lying on a plot with the motto, "Well-watered"). The expenses amounted to £554; £271 on the field, £201 on the houses, £82 on the utensils and boilers. The construction work was not initially done to John Christie's satisfaction, which necessitated further work. Not until 1755 was the field in full

operation, bleaching both linen and the local speciality, thread. The partnership to run the field consisted of Christie, two linen manufacturers, and two local merchants, with the land leased at a low rent from Cullen house.[86]

Raising the necessary capital both to outfit the field and maintain its works and water supply was one major problem; finding a competent bleacher another. In the short run bleachers had to be imported from either Holland or Ireland while Scottish bleachers were trained up. The Trustees concentrated initially on increasing the number of skilled bleachers in the Dutch method, and after a final dispute with Wm. Gray in 1749 switched to the British Linen Company's master-bleachers at Salton for the training of apprentices in both the Irish and the Dutch methods.[87] In the long run this bore fruit, but there was plenty of employment in the late 1740s for Irish bleachers and foremen, some of whom settled permanently in Scotland. Not all were competent; Flint wrote sourly in 1748 that, "Multitudes of such are coming yearly and none of them have the skill wanted",[88] but John Christie for one earned every penny of his fare and wages. Some had had a series of jobs: Daniel Skelly was brought over in 1728 to Ormiston bleachfield by a fellow Irishman, Alex Christie; he was in charge at Carberry during the 1740s, but left under a cloud to go to Huntly, and from there to Elgin, and to Inverness, where unfortunately for him, a fire destroyed his effects and some of his patrons' linens in October 1760. He then returned to the service of Hugh McVey at Huntly until he was no longer able to work, due to old age and infirmity. On McVey's death, his family would not support him; and destitute, aged 78, he had to ask the Board for "Elementary Provision". It is nice to record the Trustees' gift of 3 guineas.[89]

86 S.R.O. Seafield MSS GD 248/654/3.

87 This appointment and its effects are discussed in some detail in Ch. 8 pp. 354-356.

88 B.O.T.L. Feb., 21, 1748.

89 His petition was passed on to the Forfeited Estates; E728/17/6.

The need for Dutch bleachers declined as the numbers of bleachfields using the Dutch method did not expand after 1750, and none are recorded after 1747 as coming to Scotland. Another source of bleachers was England, either from the London area, or the Manchester region, which specialised in the bleaching and dyeing of checks. Ely Yarn field had a foreman from Manchester, who was recruited to dye yarn specially for Kirkcaldy checks. Generally, however, after 1750 Scottish-born and bred bleachers dominated the industry - another indicator of development. By 1760 Scottish bleaching enjoyed a fair reputation: it took longer to cut out the English than the Dutch from the finishing processes, but by 1775 virtually all linen made in Scotland was bleached there, to the enrichment of the home industry as a whole.

One curious fact does stand out: the role played by Quaker bleachers: e.g. the Christies, and the Robertsons of Kelso. There were several Catholics, reflecting the Irish element (although the Christies came from Ireland).[90] Ebenezer McCulloch allowed himself a poke at his acquaintance, George Swan, the bleacher at Perth; "All men are liable to mistakes (your good friend the Pope accepted)."[91] To William Sandieman and Hector Turnbull fell the honour of being pillars of the Classite church, later known as the Sandiemanians.

Nearly all the bleachfields in addition to bleaching cloth, cleaned yarn as well as a service for weavers, e.g. John Christy advertised that "he would boil and prepare yarn for weaving at $1\frac{1}{2}^{d}$ per spindle to manufacturers and 2^{d} to private persons"[92] and that he would pay the carriage on a horse load. One or two fields specialised in the bleaching of yarn or the preparation of yarn or thread for weaving into checks (e.g. Ely which received a glowing

90 See E.R. Green, The Industrial Archaeology of County Down.

91 B.L. Letter Book. In the absence of corroboration it is possible that the remark might bear a diametrically opposed interpretation!

92 Edinburgh Evening Courant, 1745.

commendation from an anonymous writer in 1753).[93] Yarn or thread fields were more common in the East; Glasgow was by contrast the centre of the print fields. Printing was a stage beyond bleaching, i.e. the linen and cotton had to be bleached before it was printed, and the increase in the numbers of printfields is equally an indicator of the raised standards of Scottish bleaching. (Cf. Pollockshaws advertisement, the cloth "unless it be well whitened before printing the colours will never be good..."). The original centres were around London where in the 1720s the Scottish cloths were sent unbleached; hence all of the early Scottish printfields had English printers - Gorgie, Bonnyton and Pollockshaws. What is not clear is whether this indicates a movement of English enterprises North, or just recruitment of skills by domestic firms. The early movement was to the East around Edinburgh; the later firms were set up in Glasgow and the West, e.g. Pollockshaws founded in 1745 by Alex Ingram and Company.

The number of printfields increased steadily after 1745, offering an increasing variety of colours and patterns, e.g. at Gorgie James Reid advertised that he would print linens and cottons for garments and household furniture, "in the following colours black and white, Reds, Chine blues and Blue Hankerchiefs"[94] and that patterns could be viewed. Printing was not confined to linens; the same field would also print cottons and linen calicoes. Much of the produce went to London, and ultimately to export; Pollockshaws sold its own printed goods "(at London prices) at the Warehouse of Ingram and Glasford".[95] During a case involving the tangled affairs of

93 Scots Mag. 1763 p. 650, "Letter on the Present State of the Linen Manufacture in Scotland".

94 Caledonian Mercury, 1755.

95 Caledonian Mercury, 1745. Pollockshaws was set up by "Andrew Buchanan, calicoe printer from London in Company with Archibald Ingram."

William Robertson, who was allied with several prominent Glasgow merchants (Wm. Bogle and Thomas Hopkirk) in a series of copartneries owning printfields at Woodside and Kirkintilloch, it was stated in evidence "that a great deal of the produce was sent to England".[96]

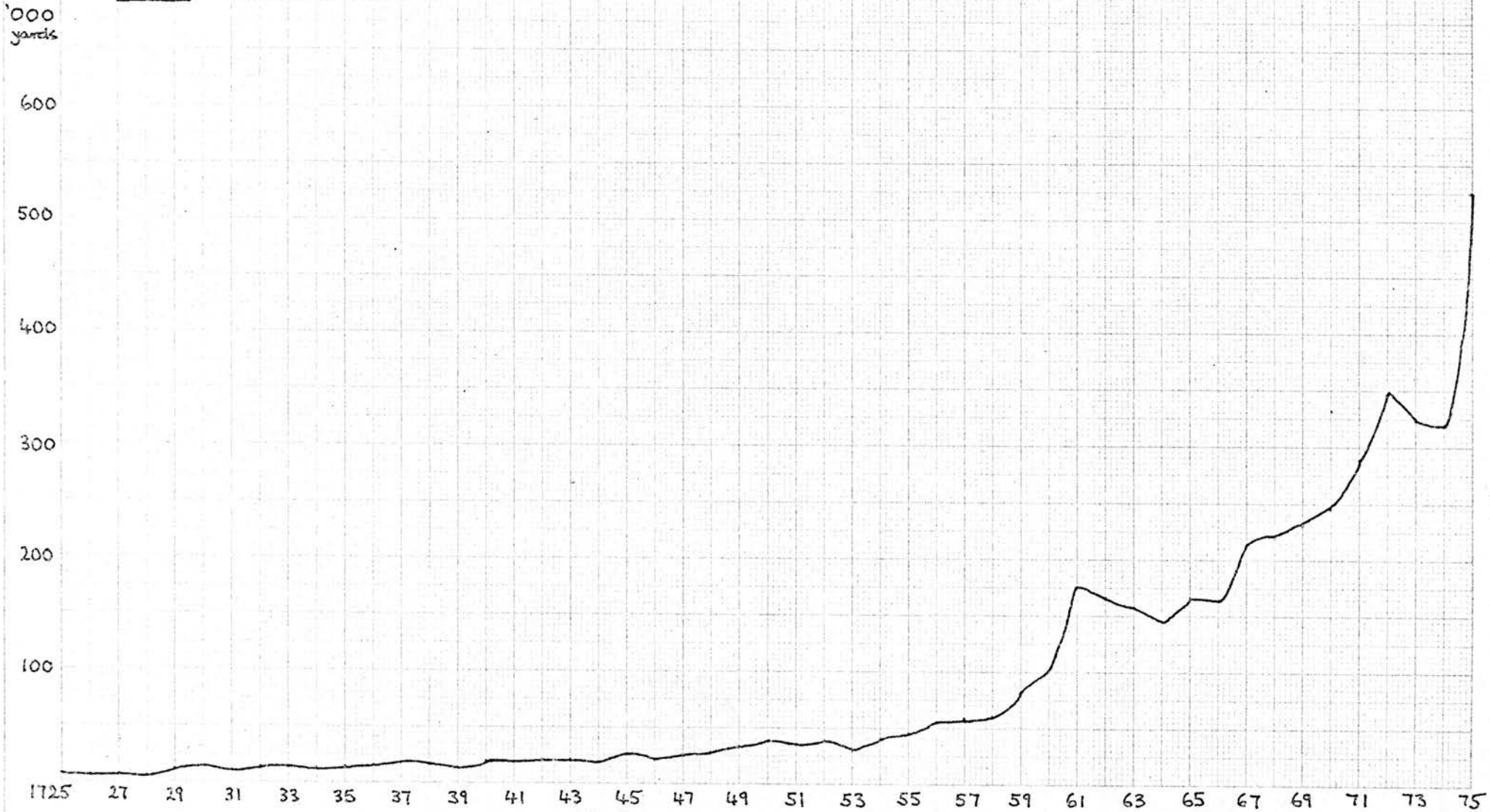
From the returns in the Exchequer records of the yield of the two duties totalling 3^d a yard on printed linen, it is clear that the real period of growth of home printing was after 1753, with a tremendous surge in the late 1750s and again after 1766 (see Graph 3.1). The scale of the output was, however, insignificant when compared with later eighteenth century figures. Exports from Scotland of printed linen, did not increase by anything like the same factor, and whereas between 50-75% of output was exported in the 1750s, this fell to 20% in the 1770s. This situation was radically affected by the award of a bounty on printed linen after 1780.

Printfields were located in the East (Perth and Cupar) and in the South-West (Dumfries) but the bulk of production was in Glasgow and region, where the works of William Stirling and Company were especially famed. The growth of the quantity of linen printed in Scotland is the clearest indicator of the strength of the home finishing industry, an industry no longer reliant to the same degree on imported skills and techniques, which was indeed to become a technological creditor, instead of debtor to all around.

96 Hamilton v. Wm. Robertson and Co. Ct. of Session papers, 345:2, (1768).

Graph 3.1 Linen Printed in Scotland, 1725-1775, on which the duty of 3d per square yard was paid

Source: S.R.O. E 903/2-5.



Labour: Corporations, Combinations and Wages

"The weavers were once a numerous and ancient body but the Act of Parliament for the encouragement of the Linen manufactures which gave liberty of trade to all engaged in any of its branches rendered the Corporation of little value..."

G. Penny, Traditions of Perth (1836), p. 207.

During the first half of the eighteenth century, the guild or incorporation of Weavers continued to play an important part in the regulation and organisation of the urban weavers. Entry to membership - without which no weaver could work within the jurisdiction of the guild - was through a carefully supervised pathway of five years' apprenticeship[97] and a further two years as a journeyman and finally the payment of a fee to the guild. The prime aim of this system was to prevent dilution. In addition, an aspirant weaver might be required to give security to the magistrates in terms of the 1727 Act, but in most places this had never been enforced or had fallen into desuetude.

In 1751, however, by a clause in the Act amending the Linen laws in Scotland the powers of the Incorporation were broken. This clause allowed "every Weaver, Heckle maker, Dresser of Flax etc...to exercise their respective trade within any city, town, Corporation or Burgh without any tax or entry money or other duty whatever for following such trade".[98] Why did the Trustees obtain this? Undoubtedly their opinion in 1750 was that the current shortage of weavers and the resultant high price of weaving was caused in part by the restricted entry and long apprenticeship policies fostered by the Incorporations. Of the contemporary high weaving prices

97 Apprentices had to serve 5 years, with two more as Journeymen. They were generally "set" as boys (12-14).

98 24 Geo II section 23.

there was no doubt; e.g. David Doig was complaining of the prices he had to pay "For the Encouragement of Journeymen"..."It is indeed monstrous they earning, if they work, 9/- a week some 12-14/- - but these their wages can never be reduced till the number of journeymen be increased by instructing apprentices...Journeymen are scarce so every Adventurer ought to stock up with apprentices".[99] The long period before being able to set up independently, and the lower earnings as a journeyman were supposed to be a deterrent to entering the profession, in the towns at least.

The Incorporations were also wary of allowing "stranger" weavers to join and thus practise within the Incorporation; - "stranger" being defined as a weaver who had not served an apprenticeship within the Burgh or Town, or who was not the son or son-in-law of an existing member. A much higher fee for entry money was demanded of them. For these reasons, several of the Trustees became extremely critical of the Incorporations and of any regulation or fee covering entry to weaving in any locality. Deskford, for instance, wrote in 1750, "The privileges of corporations do great harm to the Linen Manufacture. Before a man can set up in a town he must first have the freedom of the town from the Magistrates which is often refused for political reasons - I know two tradesmen drove out of Banff because they were great Whigs and were in concert to insist upon the giving of Oaths to the Victors at the Election of a Deacon of the Weavers. They must also be freemen of the craft - by which means the linen manufacture is hindered, if this were removed it would have many advantages in the towns which it has not in the country, for these good houses which is absolutely necessary to the manufacture of Fine linen could be had at an easier rate than in the country...There the weaver could specialise...Besides artisans gathered

99 Seafield MSS GD 248/954/1, David Doig Scheme.

together compete and share their skill".[100]

The Act carefully stripped the Incorporations of their power, and despite a series of petitions to the Trustees and the Royal Burghs both bodies refused steadfastly to take any action to repeal the clause and the former upheld it at every opportunity; e.g. in March 1753 a Cupar weaver complained to the Trustees about "sundry hardships put upon him by the Incorporation of Weavers there because of his having taken the benefit of the Act of Parliament allowing weavers to exercise their trade in any burgh without chargeable entry money or any duty".[101] The Magistrates of Cupar were written to intervene on his behalf. When as late as 1762, the Royal Burgh of Lanark sought the advice of Convention as to "how far John Haddow who had set up a manufactury of linen cloth, could be allowed to manufacture the same not singly on his own account but for behoof of others without entering into the Incorporation of Weavers"[102] any restriction was dismissed, after considering the Act, as improper and illegal.

The Incorporations did not surrender without a fight. In 1753 the Incorporations gave notice of their intention to seek Parliamentary redress, to prevent the annihilation of the Crafts in the Burghs, stressing that the entry money had been applied for the upkeep of the poor, and that standards of weaving would fall. The virtue of the old system had been that only skilled weavers could become Masters, which maintained standards, whereas the Act had had a disastrous effect on young Tradesmen who "now free skipped from place to place through pure wantoness and levity".[103] "The law has

100 Seafield MSS GD 248/954/2.

101 B.O.T. Minute Book 1753.

102 C.R.B.R. 1762 Records 1759-1779 p. 115.

103 C.R.B.R. 1753 bundle 27.

encouraged great numbers of Weavers to exercise their trade without being entered as Burgesses, without any acknowledgement to the Weaver trade, and very few apprentices are now bound to service with freemen of the incorporation".[104] But the Trustees stuck to their position that to admit journeymen without fees, and allow them to set up for themselves without let or hindrance, was the best way of overcoming the then shortage of journeymen, which raised the price of workmanship, and of remedying the existing situation in which their "working 3-4 days a week leaves them enough to debauch with for the rest".[105]

From time to time the crafts tried to reopen the issue. In 1761 they attempted to revive their rights indirectly by reminding the Trustees that in terms of the Act 13 Geo 1st sec 8 "No weaver is allowed to set up as Master until he gives security before a JP".[106] In 1767 their simmering discontent reached the surface; the Dundee and St. Andrews Weavers petitioned the Convention of the Royal Burghs "that the late act...allowed weavers to set up and practise their business in any burgh of Scotland without let or hindrance which had encouraged some ignorant people to set up as manufacturers to the great prejudice of private familes".[107] They argued - unsuccessfully - that the Act was not meant "to extend further than to empower any manufacturers to work up linen designed for the public market or exportation...and was not meant to interfere with the privileges of Incorporations in serving the lieges in such manufacture which they should have use for in their families".[108] Unable to sustain even this area as a preserve, the crafts gradually withered

104 Saltoun MSS - Memorial for the Incorporation of Hammermen, Weavers, Cordiners etc. of Glasgow 1754.

105 Saltoun MSS 1754 - Notes on Apprentices.

106 B.O.T.M. 4 Dec 1761 Petns from the Aberdeen, Dunfermline, Linlithgow, Glasgow, Rutherglen, Paisley, Irvine, Ayr and Lanark Incorporations.

107 C.R.B.R. Records 1759-1779, p. 260.

108 Ibid.

away, although they continued to function as a focal point for the master-weavers, whose interests were most affected by the increased fluidity and decreased control over entry to their ranks, which was to prove such a tragic weakness in the days of their decline. In the 1760s and 1770s, there was more than enough work for the Hand-loom weaver.

Wages drifted upwards during this period, although a series is absent. Undoubtedly while the 1751 Act permitted more mobility and easier entry to the weavers' ranks, it altered the bargaining position of the journeymen vis-a-vis their masters, which accounts for the frequent complaints of their conduct and the wages needed to settle them in a shop. Combination, as such, was outlawed by an Act in 1749,[109] which had extended the laws, against any combination to advance wages or lessen the usual hours of work, in the woollen manufacture to the linen industry. The Act also outlawed payment in truck, of which there seems to have been little trace in the Scottish Linen Industry. In 1762 a report reached the Trustees of Weaver Combinations to raise wages in Selkirkshire and elsewhere in the Borders. The Surveyor of the Manufacture, Robert MacPherson, was sent to make a careful enquiry. He isolated several factors involved. Firstly, journeymen were scarce, and their wages rising with Northumberland weavers advertising for men; secondly, yarns were poor and rising in cost, which meant it was more difficult to provide enough of a stock to ensure continuous employment in addition to a general rise in the cost of living and firing. Another factor cited was that housewives who had formerly given the Weaver a tip (Customer's Goodwill or Baintieth - a peck of meal, or cheese) now no longer did so. Demand for linens was, on the other hand, rising. Faced with rising costs, shortage of labour and a favourable market, the master-weavers decided on a general concert to raise prices up to what they called the

109 20 Geo 12 sec 12.

"Trustees' prices"; i.e. those fixed by the Edinburgh manufacturers many years ago for much more skilled weavers. The achievement of such a general concert was no easy task: there were numbers of master-weavers in the area (500 in Duns and neighbourhood, 300 at Kelso, 200 at Jedburgh). The initiative stemmed from Duns, with the Jedburgh Incorporation a noisy second behind, but almost all the weavers in the area were involved; "not a little village but had meetings on the subject";[110] combinations were formed and contracts signed. MacPherson talked with them and found them willing to drop their ideas, confirmed by an advertisement of the Trustees threatening to prosecute, which broke up a meeting called by the Jedburgh Incorporation with deputies from the others. Birgham and Kelso had been particularly keen, "but the stampmaster put an end to that".[111] The combination voluntarily dissolved itself meekly.

Undoubtedly the master manufacturers were "as intent to keep down the wages of their own weavers as the earnings of the poor spinners",[112] and the incorporation continued to serve as an instrument of their interests, as a tacit combination. "We rarely hear...of the combinations of masters, tho' frequently of the combinations of workmen. But whoever imagines upon this account that the masters rarely combine is as ignorant of the world as of the subject. Masters are always and everywhere in a sort of tacit but constant and uniform combination not to raise the wages of labour above their actual rate."[113] One dispute between the Masters and the Journeymen did clearly reveal the sides ranged in opposition. This was a Glasgow dispute which went as far as the Court of Session in 1768 with no peaceful or meek dissolution of the Journeymen's combination. The background to the

110 Saltoun MSS, box 330.

111 Ibid.

112 Adam Smith, Vol. 2, p. 139 The Wealth of Nations.

113 Smith, op.cit., Vol. 1, p. 59.

dispute lay in the resolution of the London Drapers in 1766-67 to ask for a repeal of the Act prohibiting the import of French Cambrics. This was hotly opposed by the Glasgow manufacturers for fear that it would open the gates to foreign cambrics and lawns. Faced with an allegation by the Drapers that very little cambric was made in Scotland, and that the majority of "Scottish cambric" was in fact smuggled from France and only bleached in Scotland, the Glasgow manufacturers through their delegates gave an undertaking to supply half the home market in 2-3 years, and the whole market soon afterwards, if the repeal were dropped. Having granted this concession - which it was made clear was conditional - Parliament passed an Act that cambrics must be stamped before coming out of the loom, which would cut out smuggled cambrics entirely and reveal authoritatively the extent of home production.

This presented both an opportunity and an ultimatum. If the Glasgow manufacturers could produce sufficient cambric they were assured of a monopoly in the home market, without competition from smuggled cambrics; if however they failed to honour their undertaking, the Act would be repealed with damaging effects on the whole fine linen manufacture in the West. There were several thousand weavers of lawn in Glasgow and district. The manufacturers decided to induce some of these to switch into making cambrics instead as "every man who can weave a lawn, can weave a cambric with no difference of fatigue or dexterity".[114] To implement this changeover, the manufacturers decided to lessen the wages on the finer finds of lawns a little and increase the prices on cambrics considerably. They proposed wages much

114 All the relevant information relating to this incident is drawn from the Court of Session case, Geo. Brown and 20 master-manufacturers v. David Nicolson and 15 journeymen. Inevitably the manufacturers' case is rather more fully presented - which distorts the evidence. Court of Session Cases; 135:9; (1768).

greater than had been paid either at Piccardy or at Glasgow during 1746-52, when an abortive attempt had been made to establish the manufacture of cambric in the West. This General Plan necessitated a Concert with set prices for the region which was settled by the master-manufacturers and came into effect on 18 June 1767.[115]

The manufacturers claimed that the weaver was at a considerable advantage over the old prices, and that the scheme involved more incentive than the opposite; prices for clear and long lawns were only reduced slightly; e.g. the price per ell on 1500 clear lawns was reduced by $\frac{1}{2}^{d}$ per ell to 8^{d}. Most journeymen and weavers were happy with the new arrangement, and the effect of the manipulation "has been to entice vast quantities of workmen into the cambric manufacture and establish a new and solid branch of the manufacture". But one David Nicolson, "with deep views beyond his station in life", had buzzed about with the argument that the rise in cambric prices was only temporary while the cut in lawn prices was permanent. He had formed an association of 200+ journeymen with a common stock purse to agitate, but "the mischief did not stop here". The mutinous journeymen went in bodies to the workhouses where the peaceable journeymen had accepted the new prices. While the latter were at work the former cut their webs out the loom and beat them up. The truth is too long buried for us to find, but manufacturers' careful display of an apparent rise in wages took no

115 Prices paid for cambric (per ell)

Hundreds in the reed	Edin. Ps[x]	Glas. 1746+	Glas. 1767	Gain to Weaver
1600 on 34 inches	0 9d	0 9d	1/1	4d per ell
1700 "	0 9½	0 9½	1/3	5½
1800 "	1/-	0 10½	1/6	6-7½
1900 "	1/1½	1/-	1/9	7½-9
2000 "	1/3	1/2	2/-	9-10
2500 "	2/6	None made	3/6	1/-

x Prices paid by Edinburgh manufacturers
+ Prices paid by Glasgow manufacturers in 1746

account of the rise in the cost of living, a fact recognised by a factory in the 1760s which had paid higher wages for cambric than those offered by them. Nicolson had been in Ireland ("to sell in Ireland with secrets of the lawn manufacture") where combinations of journeymen were much more common, and however small or large in number his supporters amongst the journeymen, there is little doubt that nearly all shared the suspicion of the manufacturers' motives. The strike that resulted seriously disrupted the fine linen manufacture, and production of cambric fell rather than rose, as was confirmed by the Trustees; "The manufacture of cambric decreased in the West....occasioned by a difference between the workmen about wages which threw the workmen idle for some months."[116] Probably the Glasgow dispute only shows the tip of the iceberg of discontent that simmered below the surface. Unlike the Borders affair, where the combination was directed against the consumer, the Glasgow dispute involved combinations on both Master and Journeymen's side. The particular concern of the Court and the law was the drawing-up of a compact in writing: in a similar situation in 1768 the weavers around Auchterarder were reported by the stampmaster to have agreed together to raise their prices. The Trustees would take no action - "it does not appear that there is any agreement amongst them in writing and the Committee are of the opinion this impropriety of conduct is an evil that will cure itself".[117]

The main concern of the law and the Trustees was to prevent combinations in writing to raise prices; the Board refused to go any further than the strict letter of the law. In 1761, for instance, William Cheap, a prominent Edinburgh manufacturer, had got an order from the Magistrates to confine to a House of Correction for one month a journeyman who had left his engagement

116 E.U.L. Laing MSS Volume: Linen Stamped for Sale in Scotland, Comment on year 1767.

117 B.O.T.M. Dec 1768.

with Cheap, "whereupon great numbers of journeymen weavers had entered into combination to suspend the sentence of the magistrates".[118] Such journeymen solidarity was always more likely in the urban centres, and extremely effective when work was in demand. In 1777 the Trustees, after some initial qualms, gave a grant to buy utensils to a society of Weavers in the Parishes of Auchterarder, Blackford and Trinity Gask. This Society formed by c. 200 weavers kept up a stock of reeds, and help to it was quite legal. Combination and Society were nevertheless suspected to be close allies. Probably the rising demand for weavers was the most important single factor in ensuring a steady rise in their wages over the period.

Combinations to raise the price of weaving did occur; the ability of the master-weaver to switch his looms into any of several related fabrics ensured that he could take the optimum advantage of market demand, some of which benefit had to be passed on to the journeymen, who after 1751 had room to obtain bargaining strength by their mobility, either to another shop or by setting up for themselves. The Incorporation served as a focal point for the tacit price-fixing of the masters vis-a-vis the market, but no agreement thus made was legally enforceable. Overall, despite increased demand, perhaps neither manufacturer nor master-weaver nor journeyman had much capacity to raise the price of weaving; the unrestrained entry to the profession and the large pool of country and customary weavers kept a low ceiling on prices. Only the skilled had a strong position.

Spinners' Wages and the Controversy over 1751-55

It was an axiom of the Linen Trade that as the price of spinning rose and spinners' profits increased, they worked less.[119] Equally a fall in

118 B.O.T.M. 31 July 1761.

119 The relationship between the cost of provisions, and spinners' output is discussed fully in Appendix "H", pp. 396-402.

the cost of "vitals" would result in a falling-off of the long hours worked by the household spinners. During the late 1740s the problem became particularly acute as yarn prices rose sharply, because of both increasing home demand and also English demand. Great quantities of yarn were exported to England which pleased the spinners but not the Scottish manufacturers. In this situation when higher prices seemed only to stimulate a lower level of production per spinner - although this was partly compensated for by an increase in the total force - a proposal originated from the Manchester linen manufacturers in 1751 to reduce the duty on imported yarn from 3^{d} per lb to 1^{d}. They hoped in this way to check the rise in yarn prices in England, and by implication those in Scotland. "It is a certain fact known to everybody that great quantities of yarn are carried yearly from Scotland to England, and I have been told by some manufacturers of credit that near half the yarn spun in Scotland for sale is carried to England, and therefore the price for yarn in Scotland is regulated by the English market price".[120] This in turn would be regulated by the price of German yarn. Not surprisingly, the Scottish manufacturers welcomed the proposals while the yarn merchants and spinners did not.

The reduction in the duty took place with effect from 25 March, 1752, and imports of German yarn rose sharply, with inevitable consequences for the price in Scotland, e.g. the Trustees' Riding Officer (Douglas) reported that prices in Aberdeenshire had fallen sharply, chiefly due to little demand from England.

Table 3.9

Yarn imported to England Christmas 1750-Christmas 1753

	Raw linen yarn	Irish
Christmas 1750-1751	882,069 lb.	2,732,738 lb.

120 Seafield MSS GD 248/954/2.

Christmas 1751-1752	2,037,995 lb.	2,795,384 lb.
" 1752-1753	1,991,087 "	2,695,936 "

(Source: NG 1/16/1: in this account the latter is in addition to the former: Table XV of E.B. Schumpeter, English Overseas Trade, 1697-1808, p.50. The two would appear to be combined under the heading of Raw Linen Yarn in Table XV.)

During the autumn of 1752, extraordinary quantities of foreign yarn were brought to London which led to such a fall in the price of yarn there that "several merchants here who, according to their usual custom sent the ensuing winter large parcels of Scots yarn to London were obliged to sell it cheaper than they bought it" (around Strathbogie).[121] During the next spring, the price of yarn fell 4^d-6^d a spindle. "Sale yarn went for 26^d per spindle in January 1753, fell in April and May to 22^d". The price of spinning fell 2^d per spindle - and for some kinds 3^d - which made a savage inraod into the spinner's earnings. "At Huntly the spinners at present do not earn above $1\frac{1}{2}^d$ per day".[122] Prices rose slightly thereafter, but the depression of 1754 lowered both yarn prices and spinners' earnings to the lowest level since the Rebellion.

The depression was caused by the withdrawal of the bounty on coarse linens exported. To get English support for Parliamentary agitation to restore the bounty, the Scots were forced to agree to the Manchester price, which was the total abolition of the remaining duty on yarn. This left several of the Trustees in a real dilemma: the choice seemed to lie between no bounty or no duty. No bounty would gravely depress the manufacturing side and hence the spinners indirectly; no duty would suit the manufacturers but would further depress yarn prices and spinners' earnings. Deskford was fully aware of the situation, and was conscious of the implications for the yarn-spinning areas of the North-East in particular. He favoured the

121 Seafield MSS GD 248/954/1.

122 Ibid.

retention of the duty at the expense of the bounty. The "Plantation market does not seem to have that consequence to our manufacturers that is commonly assumed, nor such as we would make any great sacrifice to have access to, and though the bounty is very right thing, it opening the Plantation market to us, yet it appears to me that taking off the duty on foreign yarn will have infinitely worse consequences to Scotland than the loss of the bounty will be".[123]

He based his argument firstly on the numbers of spinners involved. "Suppose there are 1 million Scots, 215,000 females fit to spin - 180,000 at any one time to gain $2\frac{1}{2}^{d}$ a day by their spinning".[124] The employment generated by spinning was much more important that that by weaving. Secondly, the consequences if the duty were taken off. If the London price of yarn regulated the Scottish, then both would fall by the amount of the abolished duty, i.e. 1^{d} per lb., which meant that the Scottish spinner (whose yarn on average weighed 2 lb. per spindle) would get 2^{d} per spindle less - and yarn prices were already depressed. A good spinner spun about $1\frac{1}{2}$ spindles in the week, so for her diligent 12 hour day of spinning she would get 3^{d} per week less. "At present a spinner can gain between $15\text{-}16^{d}$ a week, but the price of corn - 3^{d} a peck - leaves a woman 1^{d} a week for clothing, firing, house rents, etc therefore she must half starve. I am sure that no manufacturer in Scotland will say it is possible for spinners to subsist if the price is lower. If German yarn were 1^{d} per lb cheaper then no weaver who could get German yarn would buy Scots".[125] Inevitably the "total destruction of Scots Spinning must be the consequence of it". In Evidence given to the 1751 Parliamentary Committee on Yarn, an estimate

123 Seafield MSS GD 248/954/2 Papers on Linen - "Observations on the proposals to abolish the duty on foreign yarn imported". It is not established whether this pamphlet was in fact printed for a more general distribution but undoubtedly the arguments adduced here were used by Deskford to his fellow Trustees during their considerations on the issue.

124 Ibid.

125 Ibid.

had been presented by a London merchant that if the duty were reduced to ½d per lb the German Trade would increase 7-8 times - "therefore how can anybody in Scotland want the duty abolished if it leads to the destruction of Scots spinning?"[126]

He followed this up by reminding the Trustees of the danger of lowering prices and cutting employment in the Highlands. "Keeping the women busy has kept the men out of trouble, they help to dress the flax, go to the market town for it and when the yarn is spun the men reel it and carry it to the market town to be sold".[127] The spinning had not spread very far yet in Argyleshire and the Western Highlands, but in Perthshire, Ross and the Eastern parts it had made considerable progress. This spinning did not exist "until the late high prices of spinning"[128] and the efforts of the Trustees introduced it amongst them, and if the spinning stopped, "the most effectual method for introducing industry amongst an uncivilised people will not spread...and the men will fall back into their former idleness and villany".[129] Population and rents alike would fall. He also feared the possible monopoly of foreign yarn supplies by the British Linen Company, whereas at present "almost everybody spins, and there are people in every corner who buy yarn so that whoever has use for its finds it everywhere".[130]

Much of his detailed information was provided by two prominent merchants in the yarn trade, William Gillies of Brechin and William Sandieman of Perth. The former stated that he reckoned that the most a spinner in his part of the country could earn was 1$6^{d}$ per week.[131] The latter corroborated this; "to make good yarn a woman is generally supposed to spin 1½ spindles a week -

126 Ibid.

127 Ibid.

128 Ibid.

129 Ibid.

130 Ibid.

131 Seafield MSS GD 248/954/2, Letter 18 Feb., 1755.

so two years ago she could make 1/9 to 2/6 a week: since then only 15-16½ per week. "The lowest a woman can be supposed to subsist on in an ordinary way is 20^{d} per week (oatmeal 7½ a peck = 10^{d} per week + 3^{d} for milk etc)".[132] The present earnings were therefore an absolute minimum for the spinster (although the household spinner whose earnings were supplemental to her husband's would be less badly off) and any further reduction in the price would disastrously reinforce the temptation to the spinner to overdraw the flax and spin bad yarn, given the very restricted opportunities to earn money in other ways. Sandieman - though involved in large-scale manufacturing of cloth himself - felt the retention of the duty was essential, as German labour costs were lower (which seems unlikely) and flax cheaper. In Scotland the simple work was exactly what was required for the unskilled labour force[133] and "It is a maxim that as your Employment is for People so many will your People be".[134]

To illustrate his position, Sandieman drew up a table showing the actual prices paid for Perthshire sale yarn from which he estimated the spinner's gross earnings per week (what he euphemistically called the spinner's profit), assuming them to spin 1½ spindles per week, and also holding the price of flax constant, when in fact for the spinner not attached to a giver-out the price of flax would vary quite markedly, and might eat further into her net earnings. It is, therefore, not possible to infer

132 Seafield MSS GD 248/954/2, Letter 29 Oct 1755 "answering queries". John Munro of Banff was also written; he thought that the spinners were making on average 12^{d} per week. "A woman can live on 6^{d} of meal 2-3^{d} for milk, the overplus for clothes". Deskford seized on this statistic for his pamphlet.

133 In 1761 a complaint was received for some of the Ross-shire Gentry that "spinning makes their servants still scarcer and heightens their wages". Spinning competed directly with domestic service as a source of employment. (B.O.T.M. 21 Jan., 1761.)

134 Seafield MSS, op.cit.

from this data what the actual net earnings of the spinner were, given that both the price of flax and the level of output varied to an unknown degree, or to test how output and net earnings were affected by the cost of subsistence.[135]

Table 3.10

Prices paid for Perthshire Yarn and estimated Spinner's Profit Thereon

Year	Price per Spindle (d)[1]	Spinner's Profit (per week)[2]
1734	22-23	18-19½
1735	20-21	15-16
1736	20-21	15-16
1737	20-21	15-16
1738	19-20	13½-15
1739	22	18
1740	22	18
1741	19	13½
1742	19-20	13½-15
1743	22-23	18-19½
1744	24	21
1745	21-22	16½-18
1746	21-22	16½-18
1747	23-24	19½-21
1748	24	21
1749	25	22½
1750	25	22½
1751	27-28	25½-27
1752	27-28	25½-27
1753	26-27	24½-25½
1754	24	21
1755	21	16½-18

1 The yarn price is that of the spring "when the chief part of it is sold".

2 Each spindle is estimated to contain 1 lb of flax at 10^{d}. Assuming the spinner to spin 1½ spindles a week, from the sum received must be deducted the cost of 1½ lb of flax (15^{d}) to find her net earnings.

Sandieman made several specific observations. On at least two occasions within his knowledge the price of spinning had been reduced below what was possible for subsistence, e.g. in 1740 for a while the Spinner's Profit had fallen to 7½-9^{d} per week as the price of yarn fell to 15-16^{d} per

135 See Appendix "H", pp. 396-402.

spindle, while the price of victual had doubled[136] - although it later recovered - and similarly at the end of 1745 and the beginning of 1746. In such situations the spinner was almost starved, "multitudes of beggars appear, the merchant finds bad payments"[137] and dismal effects abounded. He was against any attempt that threatened to reduce prices to what they were 20 years ago which "behoves greatly to discourage that large branch of the manufacture",[138] as the prices of everything else had greatly increased since that date. "Since 1743 when the profits on the spinning increased, how much more did the spinning increase in the country".[139]

He insisted on the value of the English market for yarn to the Scottish spinner "½ or even two-thirds I say goes to the English market and this market has been of great value in keeping up the price when otherwise it would have fallen too low to encourage the spinner" - unlike many of the Scottish manufacturers he saw the value of the minimum price level which the English market provided; "spinning for the British market cannot be put in the balance with weaving cloth for the West Indies market - and besides spinning is the work best for employing the poor".[140] What he did not seem to appreciate was that it was an "either-or" situation, because he was in favour of also regaining the bounty while resisting the abolition of the duty. "During the continuance of the Bounty its benefit circulated to every spinner...the application for the bounty on our linens will protect the spinning".[141]

The Scottish manufacturers argued that the renewal of the bounty on coarse linens would lead to a considerable expansion of the demand for yarn, which would at least keep the spinners' earnings above subsistence level,

136 This statement is corroborated to a large extent by the price for oatmeal. The index price of oatmeal, by measure, (1758 = 100) rose from 104 in 1739 to 155 in 1740 and back to 94 in 1741.

137 Seafield MSS, op.cit.

138 Ibid.

139 Ibid.

140 Ibid.

141 Ibid.

but the importation of German yarn would check yarn prices from rising too high. "It is necessary for us to keep our labour at least as low as to enable us to sell in the London market as cheap as foreigners".[142] The strength of the manufacturers' case and their patrons ensured their view carried the day with the Trustees'[143], and they supported the motion for the renewal of the bounty and the abolition of the duty on yarn, which came into effect in March 1756. Imports did rise slightly, but wars in Germany seriously disrupted both the supply of yarn and cloth from there for several years, which, when coupled with the expansion of the output of the home industry, led to no decline and even a slight increase in the spinner's earnings. Nevertheless, as Smith observed, "they earn but a very scanty subsistence who endeavour to get their entire livelihood by spinning. In most parts of Scotland she is a good spinner who can earn 20^{d} a week".[144]

He personally emphasised the importance of spinning as opposed to weaving for the employment of people. "In the different operations a great deal more industry is employed in making linen yarn than in the subsequent operation of preparing linen cloth from linen yarn. To say nothing of the industry of the flax-growers and flax-dressers, three or four spinners at least are necessary to keep one weaver in constant employment",[145] and went on to attack the avarice of the master manufacturers who had been responsible for the abolition of the duty, whose greed for profit had led them to encourage the importation of foreign yarn

142 Seafield MSS GD 248/954/2 Memorial "Observations on the Bounty on Coarse Cloth".

143 E.g. The British Linen Company, who argued that if there was not bounty, their production of coarse cloth would have to be cut and their Highland spinning with it.

144 Smith, op.cit. vol. 1, p. 106. In Evidence to the House of Commons Committee on the State of the Linen Trade, John MacKenzie, a Glasgow manufacturer, stated that a spinner "gets at present 3-4^{d} a day if employed". Spinners of fine yarn in the West always earned more than those of coarse in the East.

145 Ibid, vol. 2, pp. 138-139.

"and thereby bringing it into competition with that which is made by our own people, they endeavour to buy the work of the poor spinners as cheap as possible". The abolition represented another victory of the strong and the powerful over the weak and the poor; "our spinners are poor people, women commonly scattered about in all different parts of the country, without support or portection".[146] Lord Deskford had a distinguished supporter.

146 Ibid.

The work of the Trustees

It is now necessary to "tie all the threads together" by asking how successful was the work of the Board of Trustees in relation to the linen industry during the period under review. It is difficult to select the appropriate criteria by which to evaluate the contribution of this semi-public body. For instance, achievement can be assessed only in relation to the potential of the achiever and how does one assess the "potential" of the Scottish Linen Board? One can make a sort of comparison with the Irish Linen Board, to observe how much more active the Scottish seems to have been, and equally how more diligent in their application to the problems before them the Scottish Trustees as a body were. One can also point out how many were the problems which confronted the Board, and the relative scantiness of their funds in relation to the value of output. It is also rather easier to identify "failure", i.e. when a policy of the Trustees failed to realise its declared objective, or any substantial part thereof, than "success", because the realisation of that objective might have been the result of other causal forces than those exerted by the Trustees.

In the wider economic sense, "failure" may be defined as the failure to achieve as high a rate of return on the capital invested as would have been obtained if the capital had been invested elsewhere. This yardstick as to the efficient use of the funds entrusted to the Trustees could be applied in two ways. Firstly, even assuming that the rate of return on the capital that the Trustees invested in the Linen industry could be established, would that same capital have yielded a higher rate of return if applied (say) to the woollen industry, as many contemporaries urged? Secondly, would the capital applied to one aspect of the linen industry have yielded a higher return if applied to another aspect, or in a different way?

It is directly relevant to enquire as to what extent the progress of the Scottish woollen industry was retarded by lack of assistance from the

Board through shortage of funds. The most recent work on the Scottish woollen industry suggests that the "existence of the Board had little effect on the health of woollen manufacturing in Scotland; its aid was niggardly and ill-directed"[147] and argues that the "board palpably failed to bring about the stricter regulation of the industry by insisting on the stamping of cloth exposed for sale".[148] "It must be admitted that in this sphere of operations also the trustees acted under severe financial and administrative constraints."[149] But while this would seem to imply that the devotion of more of the Trustees' expenditure to the woollen industry would have facilitated its development, Gulvin is at some pains to point out that "the major factor in the board's attitude was that the encouragement of woollens ran counter to what was considered to be the overall economic interests of the nation. In singling out the linen branch for special attention, the trustees merely practised the logic of the union."[150] In other words, the trustees' political capacity to switch funds was strictly limited, and even if they had, Gulvin is doubtful that growth would have resulted. "Growth depended on fundamental agricultural improvements leading to higher grade wools and on a buoyant demand stimulated by rising real incomes."[151] This suggests a prima facie case for dismissing the first alternative as unreal.

The second line of enquiry runs into insurmountable difficulties in that it is impossible, in the majority of the Board's policies, to establish what the rate of return was, let alone what the rate of return would have

147 C. Gulvin, "The Union and the Scottish woollen industry", S.H.R., 1971, p. 131.

148 Gulvin, op.cit., p. 130.

149 Gulvin, op.cit., ibid.

150 Gulvin, op.cit., p. 132.

151 Gulvin, op.cit., p. 135.

been if the expenditure had been utilised in another way, or to another end. But it can safely be assumed that any scheme on which the return was negligible can be regarded as a "failure" or misallocation of resources, in that if the same moneys had been otherwise applied, the return would not have been lower, and probably might have been higher. Into this category clearly falls the expenditure on the Piccardy Place manufacture of cambric in Scotland, and the money devoted to this project was wasted and reduced the Trustees' capacity to assist the industry.

Attempts to lessen the dependence of the Scottish industry on imported flax, and improve the quality of flax preparation in Scotland absorbed 22% of the Board's total expenditure on the linen industry, between 1727 and 1775, amounting in all to just under £43,000 including £14,000 from the Flax Fund. In no area of the Board's work were its hopes more often disappointed, e.g. over the lint-boor scheme, and the variety of policies tried reflected the frustration of the Board. Temporary increases in output could be botained under the stimulus of subsidy, but the Board's resources were limited, and the situation in 1775 was still that a large proportion of the raw material used in the Scottish Linen industry had to be imported. The lint-mill, object of hope and attention, cannot be said to have achieved a position of dominance in the scutching process when a large proportion of flax continued to be dressed manually.

R.H. Campbell has concluded that - with reference to the period 1727-1754 - the encouragements and instruction of the Board were "least effective at the two ends of the process of production, on the one hand in the preparation of the flax and on the other in bleaching and finishing linen for the customer".[152] Between 1727 and 1775, the Board spent £20,490 on the encouragement of the bleaching sector. The value of this is uncertain as much of the expansion in the number of bleaching fields

152 R.H. Campbell, Introduction to the States, p.ix.

was independent of any subsidy from the Trustees, and grants towards the setting-up of bleachfields usually covered only a fraction of the total cost. Moreover, while the Board paid such eminent scientists as Cullen and Home to investigate the possibility of making ashes in Scotland, the practical results were virtually nil, and commercial bleachers had to continue to import foreign ashes.

Failure to attain an objective may be a function of incorrect policies in pursuit of that objective or the faulty implementation of the right policies, or quite simply an inevitable consequence of unattainability. In nine years, the Board spent a total of £27,000 in pursuit of the objective set by Parliament, to encourage the linen manufacture in the Highlands only. Neither flax-growing nor weaving was established, and the Fund served to provide a short-term stimulus to spinning in the Highland areas. Yet, as has been argued already, the lack of results shown by the Board was often not its own direct responsibility. Its objective was set for it, and its policies were determined after close consultation with experienced representatives of the linen industry.

The Board spent over a quarter (£43,000) of its total expenditure between 1727-1775 on the linen industry (excluding that from the Highland and the Flax funds) on the administrative and regulatory side of its activities, i.e. on the stampmasters, the riding officers and the yarn inspectors. While the extent by which regulation alone raised the standards of linen production in Scotland cannot be assessed, it is clear that it did make some contribution, and that stamping raised quality and guaranteed measure for the buyer (and weaver) in a way that the market would not have done naturally. The results of the Board's experiment when stamps were issued on trust to private manufacturers would seem to confirm this.

On many of the lesser areas of expenditure, and on other policies not

already discussed, no verdict can be returned as to the efficacy of the Board's work. For instance spinning schools were supported by the Trustees, but data is lacking as to the numbers of spinners trained at any school. It is possible that, through the effect in the community of seeing one trained spinner making money, the result would be an expansion in the numbers of potential spinners, and schools had a considerable spin-off effect in terms of the number of spinners. But the primary factor in this case, and indeed in all the expansion of the industry, appears to be the state of demand.

It is, therefore, to an examination of the nature of the markets for Scottish linen and yarn, and the role of demand in stimulating the development of the linen industry's output that we now turn. It is not surprising that exports came to play such an important part in the development of the linen industry when it is appreciated that after the Bounty of 1745, the level of subsidy to linen exports was about £6,000 per million yards exported, and that in 1770, for instance, when the expenditure of the Trustees on the linen industry was £3,108 - which was about average - the bounty paid on Scottish linens exported from Scotland was about £10,000.[153] Increasingly, therefore, the work of the Trustees became of less significance as their resources failed to keep pace with the state subsidy being given in this other way to the export sector of the industry. But that the Board's work - and capital inputs - in relation to the linen industry made some contribution to the expansion of output cannot be denied, and it is probable that without encouragement from the State through the Board and the Board's work, the industry would not have expanded its output as fast it did during the eighteenth century. While no categorical judgement can be made on the total impact of the Board's work, it is fitting to remember Sir John Sinclair's spirited defence: "As to the

153 S.R.O. RH 2/4/550: "Account of linens exported from Scotland, Christmas 1769-70, with Bounty paid".

moderate sum, laid out under the directions of the Board of Trustees, nothing can be more unjust, than to exclaim against it as misapplied. Its amount, in a national point of view, is insignificant, while its effects are important, as it tends to keep up attention to a manufacture of a very complicated nature, which has many difficulties to struggle with".[154] There is certainly no evidence to suggest that the funds would have been applied with more care by any other group in Scotland.

154 Sir John Sinclair, Analysis of the Statistical Account of Scotland, (1825), p. 340.

Chapter Four: The Markets for Scottish Linen

"The Demand for low-priced cloth, skilfully manufactured, is endless, not only to supply your Majesty's American Colonys, but to prevent the Importation of such sort of cloth from Abroad into England"

(Report of the Board of Trustees to the King, December 1739)

The relative importance between 1730-70 of the home and export markets in stimulating industrial growth is matter of some controversy. During this period, in Scotland the amount of linen stamped for sale jumped dramatically from 3.7 million yards in 1730 to 7.6 in 1750 and 13.0 in 1770. By 1773 at both Dundee and Glasgow over 2 million yards were being stamped annually. The concern of this chapter is to discuss by which markets this increase was absorbed, and in particular attempt to assess the relative importance of the home and the export markets. The textbook writers have stressed the overwhelming significance of the home market and dismissed the export as being of comparatively minor importance. Thus Hamilton, using the year 1755 as the base and norm, concluded, "The domestic market was the main one, absorbing some 90% of Scotland's output."[1] R.H. Campbell is rather more cautious; "...from the mid-1750s, when information on Scottish exports first becomes available, until the mid-1770s perhaps only 10-15 percent of production was exported."[2] In both cases the reference is to direct exports from Scottish ports. The argument offered in this chapter is that these writers have neglected exports of Scottish linens from English ports, and also in considering Home demand, English consumption of Scottish linens is not properly "domestic". While it is arguable that home demand can be considered as the residual category of what is not exported from Scotland and England, this is not the same thing as Scottish demand. There are, therefore, three major markets for Scottish linen; the export, the English and the Scottish, the latter two constituting "home" demand. This chapter looks at the size of these markets

1 H. Hamilton "An Economic History of Scotland in the Eighteenth Century" p. 142.

2 R.H. Campbell "Scotland since 1707" p. 41. In an article in the S.H.R. April 1967, he wrote that the success of the work of the Board of Trustees "was reflected in Scottish linen exports, especially in the unknown quantity which went to England". ("The Industrial Revolution: A revision article", p. 48). "...went to England" is not, however, the same as "was exported through England".

and also at the direction and mechanism of the Scottish Linen Trade up to 1775.

Within the Scottish home market, the question is whether an increase in Scottish domestic demand could have accounted - ceteris paribus - for much of the increased production. While the population did increase in the period under review, it is of itself nothing like a sufficient explanation.[3] The home industry did succeed in squeezing out the foreign competitors - the Dutch and the German - from the home market, but this substitution and displacement while qualitatively important, is not a sufficient quantitative explanation. Certainly the "Domestic Revolution" and the proliferation of low-priced fabrics for clothing, furnishing, etc. must have resulted in a deepening of domestic demand, but much of this could have been met by the output of the private weaver. A caveat must be placed against the equation of linen manufactured in Scotland with that stamped for sale. Linen made privately which was not exposed to sale did not have to be stamped. Some, therefore, of the growth evidenced in statistics of linen stamped may be apparent rather than real, reflecting the decline in domestic production as the industry became increasingly commercialised under the control of the manufacturer and the merchant.

In estimating the amount of Scottish linen that was exported either from Scotland or England, or the amount of Scottish linen that went to England for the home market there, the main problem is the absence of customs or other figures for the amount of linen that went to England from Scotland. The Port Books which survive from 1743[4] and the Inspector

3 Webster's estimate (1755) of a population of 1.265m can be compared with the 1.608m of the first census (1801).

4 Scottish Port Books: Collectors' Quarterly Accounts E504 S.R.O.

General's Series[5] from 1755 provide data and aggregates respectively for Scottish linen exported from Scottish ports, but do not record movements of Scottish linen coastwise to England, or give any help in estimating the quantity re-exported from there to the Colonies. The Collectors' Quarterly Accounts give details of cargoes entered outwards from each port in Scotland, and by addition the total of Scottish linen exported from Scotland can be compiled for the years 1743 to 1755, and also for the two years 1763 and 1769 missing from the Customs 14 Series. The ports books accounts were taken over the year from 5th January in order to match the Customs 14 Series, and in theory, since the totals in Customs 14 must have been compiled from the port books, the two series should be identical. In practice, however, they are not: for the years 1755-58 the divergence is minimal but for 1759 and 1760 the totals derived from the Port Books exceed those in Customs 14 by 6 and 11 percent respectively. Given the kind of long and monotonous work involved, the divergence is not perhaps unexpected, but it may mean for the purposes of the present discussion that the figures for 1763 and 1769 supplied from the Port Books may be "high"; alternatively it could be argued that Customs 14 Series is prone to persistent under-addition of exports. Table 1 lays out the two series for exports of linen from Scotland. (Note: Irish linen exported from Scottish ports was carefully distinguished in the accounts).

5 R.H. 2/4 & 20/2 etc. (Copy of P.R.O. Customs 14 in the S.R.O.)

Table 4.1

Exports of plain, striped, cheq'd and printed linen from Scottish Ports ('000 yards), 1743-75.

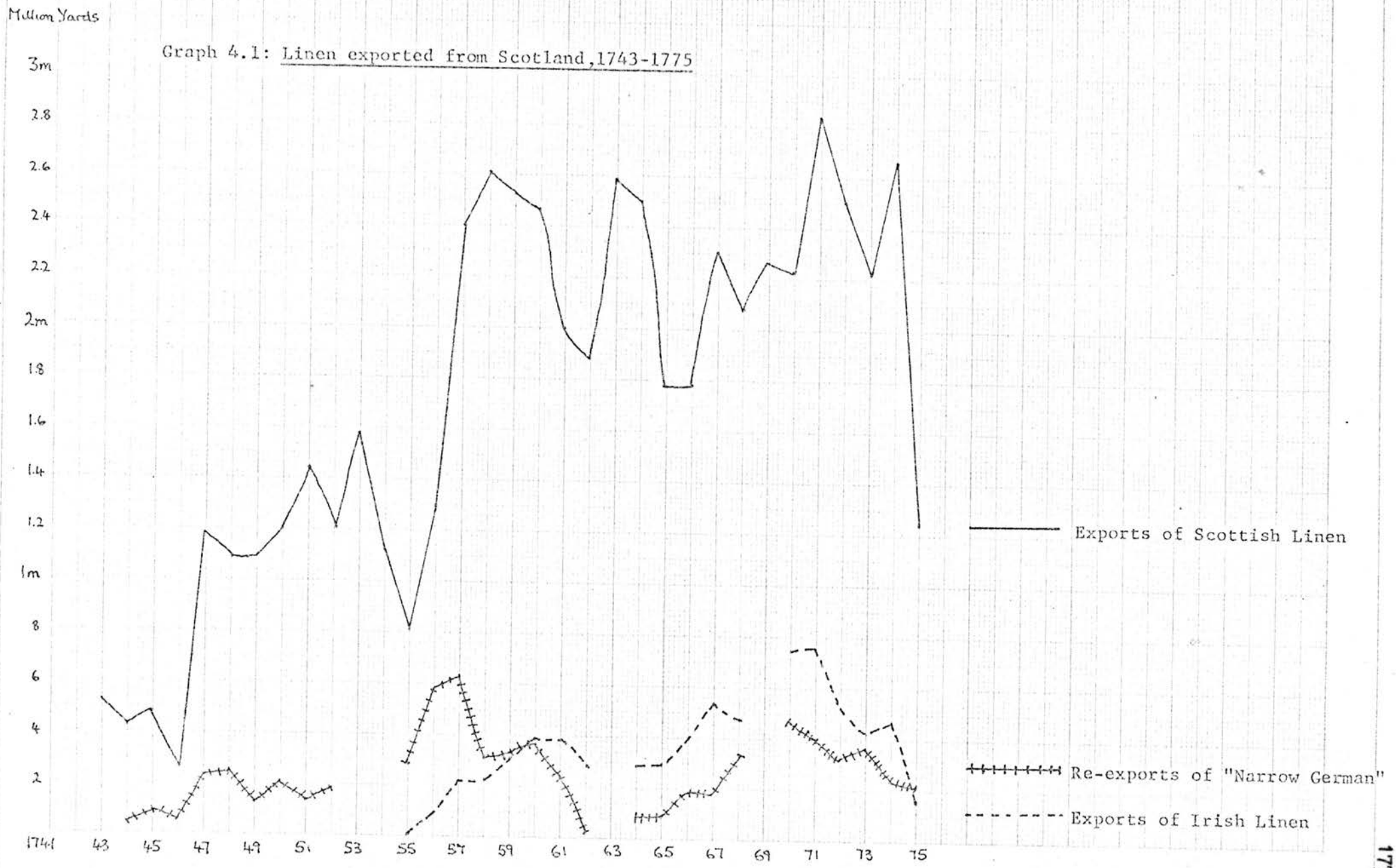
Year	Port Books Total	Customs 14	Year	Customs 14 (contd.)
1743	538		1761	2,014
1744	419		1762	1,881
1745	480		1763	2,585[x]
1746	256[+]		1764	2,518
1747	1,168		1765	1,777
1748	1,078		1766	1,853
1749	1,088		1767	2,308
1750	1,208		1768	2,092
1751	1,441		1769	2,253[x]
1752	1,216		1770	2,237
1753	1,473		1771	2,858
1754	1,116		1772	2,511
1755	841	880	1773	2,229
1756	1,322	1,314	1774	2,648
1757	2,378	2,359	1775	1,252
1758	2,617	2,600	1776	1,564
1759	2,528	2,375	1777	2,405
1760	2,477	2,204	1778	1,296
			1779	2,065
			1780	3,391

+ Port Books incomplete

x Supplied from the port books, as C 14 misg.

(See Graph 1 which follows the Port Books' Totals for the years 1743-60, and Customs 14 thereafter, with the exceptions of 1763 & 1769).

Graph 4.1: Linen exported from Scotland, 1743-1775



It should be noticed that the above Customs 14 series differs from that offered by Henry Hamilton culled from the same source.[6] The explanation is that his table, while purporting to be of Linen Exports is in fact of Linen Exports to the Americas and West Indies only. While these were the major markets for Scottish Linens exported out of Scotland, this results in a consistent underestimation which in certain years badly depresses the apparent level of exports, e.g. in 1775, when his figure of 915,288 yds. should be amended to the correct one of 1,252,000 yards - 27% out! Using these figures, it is possible to calculate a series,

Table 4.2A

Percentage of home production exported through Scottish ports 1743-75

1743	10.7	1757	24.1	1771	21.2
1744	7.6	1758	24.3	1772	19.1
1745	8.6	1759	22.0	1773	20.7
1746	(4.7)	1760	18.8	1774	23.2
1747	17.5	1761	16.8	1775	10.3
1748	14.7	1762	16.6		
1749	14.8	1763	20.8		
1750	15.8	1764	19.5		
1751	17.7	1765	13.9		
1752	13.7	1766	14.0		
1753	15.6	1767	12.9		
1754	12.6	1768	17.8		
1755	10.9	1769	16.4		
1756	15.3	1770	16.9		

Note: after 1754 I have used the C 14 series, which ensures that the percentage figures are at a minimum level.

6 "An Economic History...Appendix VI"

assuming that the linen exported was in fact made in the same year,[7] the percentage of Scottish Linen stamped which was exported from Scotland. It has to be emphasised that this is not the same as the percentage of Scottish-made Linen exported from Britain.

Table 4.2B

Average Percentage Exported (5 year periods)

1743-47[x]	11.1	1763-67	16.2
1748-52	15.3	1768-72	18.3
1753-57	15.7	1773-77	16.4
1758-62	19.7		

x excluding 1746

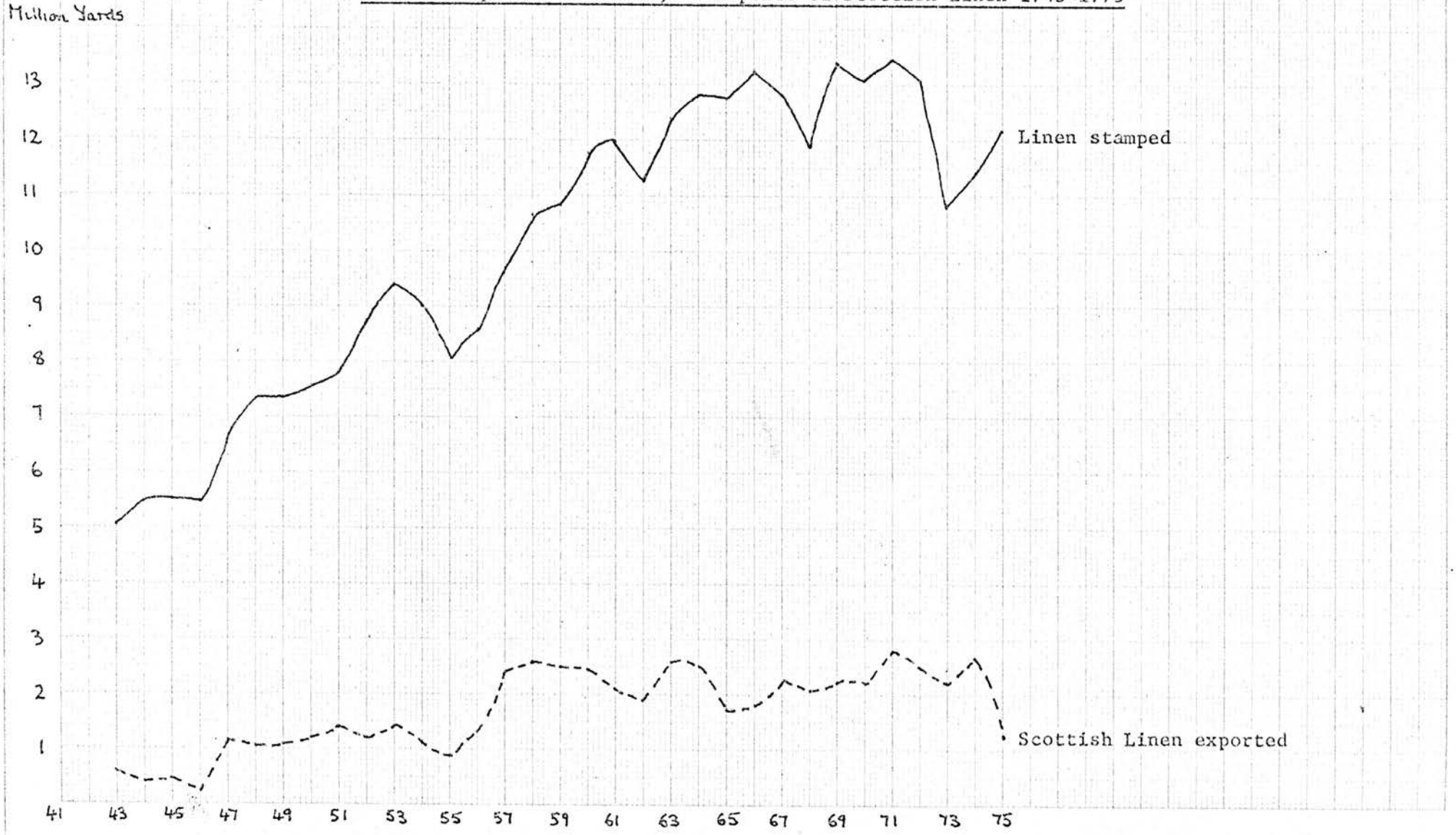
See Graph 2: Linen stamped in Scotland and Linen exported from Scotland.

The definite upswing in the late 1740s stemmed from the effect of the Bounty on exports of linen, and after 1757 the percentage of home production exported from Scottish ports seldom dropped below 15% except in years of depression in the export market, e.g. 1775 and 1755 (the year that Henry Hamilton chose to regard as the norm!)

The major missing link is the absence of any statistics which would enable the determination of how much Scottish linen went to England for either the home market there or re-export through English ports to the Colonies. It is clear that the English home market was of very real significance because of its size and the protective duty on foreign linens, a duty which was largely drawn-back upon re-exportation to the Colonies. Scottish and Irish linens, therefore, enjoyed a degree of protection in the

7 The stampmasters' books run from 1 Nov - 1 Nov; the port books from 25 Dec - 25 Dec, and then 5 Jan to 5 Jan. The time lag corresponds to the realities of the marketing situation: the linen after stamping for sale would take some further time to be exported.

Graph 4.2: Linen stamped in Scotland, and Exports of Scottish Linen 1743-1775



home market which they did not in the Colonial. In the 1730s and 1740s the Trustees opposed the attempts to have the drawback reduced because they regarded such a move premature until the Scottish and the Irish could supply English home demand. "The Scottish and the Irish could sell three times the quantity they sell at present if they could manufacture it."[8] Deskford agreed that, "German linen is upon importation subjected to a duty that raises it to rather a higher price than that at which the Scottish and the Irish are able to sell their linens but upon the re-exportation of that German linen...the duty is drawn back which enables them to sell their linens at a cheaper rate than the Scotch and the Irish can sell theirs and consequently excludes the Scotch and the Irish entirely from this market in the Plantations..." but argued that there was no benefit in opening this market by cutting the drawback unless the Plantation market were more profitable than the English which, large and protected, lay on their doorstep. The only effect would be to lay "the Plantations under disadvantage by raising the price of linens there". As both the Government and the Trustees accepted this line of reasoning, this indicates the existence of a large domestic market in England for Scottish linens, and undoubtedly large quantities of linen were sent there for English domestic consumption as well as for export through the English ports. Two of the Trustees estimated in 1765 that that value of linen sent from Scotland to London might amount to £300,000, i.e. over one-half of the

8 Ld. Deskford to Harry Home of Kames, Sept. 10, 1738. Abercairney MSS GD 24/1/552.

9 B.O.T.M. 4 Dec., 1765. Report by George Drummond and George Clerk to the Trustees on the question of establishing a Linen Hall at Edinburgh. Both were Trustees themselves and men of integrity, experienced in Linen affairs. It would appear, therefore, that this was genuinely disinterested estimate as opposed to a propaganda exercise, as neither they nor the Trustees stood to gain personally in any way.

estimated value of linen stamped for sale that year, and since much was of the cheaper fabrics, a higher proportion of the yardage manufactured. From what few statistics exist of Scottish post-Union trade to England,[10] this orientation towards London was traditional but the scale had greatly enlarged.

It is possible after 1743 to infer something about the size of exports of Scottish linens through English ports. In that year a Bounty on linen exported to the Plantations (under 12^{d} per yard in value) came into operation. In 1745 the Bounty was raised to cover all plain linen under 18^{d} per yard. The Planters who had opposed the removal of the drawbacks for fear that the price of linens in the Colonies would rise were quite happy to support the giving of a bounty on British linen exported. From 1743, therefore, accounts were kept of the amount of bounty linen exported from England and Scotland. In English accounts, "British" Linen was carefully distinguished from Irish (also eligible for bounty) and the crucial question is how much of this "British" linen was in fact Scottish, and how much English. The accounts themselves, unfortunately, make no such distinction. The staple linens of Scotland sent to England did lie in the price range eligible for bounty, and much of the linen sent to London by the British Linen Company went for sale to the exporters as bounty linen.

An argument from silence may provide corroborative evidence as to the amount of Scottish linen exported as "British" from England, i.e. that apart from the Manchester region the production of the English Linen

10 e.g. D. MacPherson Annals of Commerce Vol. 2 p. 217; "There were imported into the Port of London on the 23rd of October 1738 151,219 yards of linen manufactured in Scotland and 3000 spindles of yarn" and from Leith alone in 1740 some 400,000 yards also of linen were shipped to London (S.M. ii 1740 passim).

Industry about which little of substance is known[11] seems to have been orientated almost entirely to the home market. Certainly after the 1730s, there is no trace of English linen being exported from Scotland, and if the experience of the British Linen Company is valid, while Irish and Continental linens were strong competitors against the Scottish linens at the London market, English linens do not feature at all. During the great debates in the years 1754-56 over the Bounty, a major problem of the Scottish and Irish lobby was to obtain petitions from England in favour of the Bounty to broaden their front. In 1772-74 when the question was under consideration of imposing a further duty on imported foreign linen or cutting the drawback on re-exported linen to aid the home industries, of the 50 or so petitions to Parliament, of those in favour 16 came from Scotland and only 5 from England, whereas over 30 were sent in opposition from English Woollen Manufacturers and other trades fearful of Continental retaliation. All this seems to indicate that although the English Linen Industry may not have been insignificant, little of its attention and production went to the export market. The Manchester region, which took considerable quantities of Scottish yarn, stands out as the exception, but its staple was the manufacture of check, which was not eligible for the Bounty until 1771 when the Bounty was extended from plain linen to chequered, striped and printed linens (10 Geo II c. 38)... The Scottish and Irish always sought alliance with the Manchester merchants during the Bounty negotiations, but significantly, the price of co-operation in the 1750s was a united front to secure the lowering and abolition of the duty on imported

11 See P. Deane & W.A. Cole British Economic Growth 1688-1959 pp. 201-3 where an estimate of the size of the English Industry is made by the doubtful expedient of applying a conversion factor to the quantity of yarn imported. This seems unreliable because an unknown amount of yarn was used for other purposes, the making of thread, in "mixed" linen-cotton fabrics, which would make their estimate too high: on the other hand this would be compensated for to an unknown degree by imports of Scottish yarn to England.

yarn as well as the renewal of the Bounty. Just as the preoccupation of the Scots and Irish with the Bounty reflected their interest in the export market, so Manchester's preoccupation with yarn reflected its concern with the home market.

It is, therefore, surely not overpresumption to assume that a substantial proportion of the "British" bounty linen exported from England after 1743 was in fact Scottish. It is interesting to calculate, on the basis of the assumption that one-half of this British Bounty Linen was Scottish, what effect this would have had on the statistics of Scottish linen exported and what impact would be made on the traditional assumption that the export market was of little significance. From this calculation are excluded all non-bounty linens exported from England. (Checks, which were eligible after 1771, are also excluded because it is known that Manchester checks were exported).

Table 4.3A

Scottish Linen Exported (million yards)

Let E = total exports of Scottish linen; i.e. exports from Scotland (Column 1) plus one-half of exports of British Linen from England.
" I = one-half of British Bounty linens exported from England.
" P = Linen manufactured for sale in Scotland.
%age = percentage of Scottish production exported

Year	E	I	P	%age	Year	E	I	P	%age
1743	.566	.026	5.1	11.2	1760	2.9	.7	11.7	24.7
44	.44	.025	5.5	8.0	61	2.6	.63	12.0	21.2
45	.51	.028	5.5	9.2	62	2.8	.88	11.3	24.4
46	.34	.088	5.5	6.2	63	3.7	1.15	12.4	30.1
47	1.29	.119	6.7	19.3	64	3.6	1.06	12.8	27.8
48	1.25	.165	7.4	17.0	65	2.8	1.04	12.7	22.0
49	1.29	.207	7.4	17.5	66	2.9	1.15	13.2	22.3
50	1.49	.294	7.6	19.7	67	3.5	1.22	12.8	19.7
51	1.66	.264	7.9	21.0	68	3.4	1.34	11.8	28.9
52	1.41	.264	8.8	16.0	69	2.9	1.52	13.4	21.6

1753	1.79	.321	9.4	19.0	1770	3.8	1.6	13.0	29.2
54	1.75	.64	8.9	19.6	71	4.8	2.2	13.5	36.0
55	(bounty discontinued)		8.1	-	72	4.2	1.7	13.1	32.3
56	1.50	.19	8.5	17.5	73	3.8	1.6	10.7	35.0
57	2.86	.5	9.8	29.3	74	4.9	2.3	11.4	43.3
58	3.57	.97	10.6	33.6	75	3.0	1.7	12.1	24.3
59	3.23	.85	10.8	29.8	76	3.0	1.4	13.6	21.8

Sources: For the figures relating to exports of bounty Linen from England

1. British Linens eligible for bounty exported from England 1743-71 Evidence Presented to the House of Commons Committee on the Linen Trade 1773-74 C.J.
2. E.B. Schumpeter English Overseas Trade 1697-1808 Table XI.

For the Scottish: as per Table 1 following the port books' totals to 1754; thereafter Customs 14.

Table 4.4B

Average Percentage Exported of Home Production from Scotland and England

1743-47[x]	11.9	1763-67	24.4
1748-52	18.2	1768-72	29.6
1753-57	19.2	1773-77	30.2
1758-62	26.8		

(x omitting 1746)

If this line of reasoning is accepted, the significant result, on the basis of one-half of the British Linen exported from England being Scottish, is that after 1747 the percentage of Scottish-made linen production exported from Britain seldom dropped below 20-30%, and on occasion reached 35-40%.[12] This is likely to be an underestimate, not just because it is possible that the percentage of Scottish linen exported as "British" from England was higher than 50%, but because no account is taken of linen not eligible for bounty,

12 The average on this basis between 1747-75 (excluding 1755), was 25%, varying between 16-43%. If only one-quarter of the British linen was Scottish, exports would then have averaged 21% of Scottish production; if three-quarters, 31%.

viz. linens over 18^{d} per yard in value, checks, diaper and printed linen. Checks did become eligible for bounty after 1771, but as the Manchester region did make this fabric for export, it has been excluded from the calculation.

It is possible in this way to gain some idea of the size of the Colonial market for Scottish linens. There seems, however, no way of estimating the extent of the consumption of Scottish linens by the English home market, which may have been of more significance than the export. The question remains unresolved and is probably irresolvable. The decline in the position of foreign linen in the English market is certainly related to the expansion of the Scottish and Irish industries, aided both by war and increased duties. Re-exports of Narrow German linen from England to the plantations reached a peak of 7.9 million yards in 1759-60, and thereafter slipped back to stagnate for the next ten years at about 5 million yards.

There are various sources of data about the amount of foreign linen imported to an re-exported from Scotland, dogged by a full quota of copyists' errors. A grave problem is that foreign linen was entered in a variety of denominations according to the supposed country of origin and nature of the fabric, each of which had its own species of measurement (e.g. "pieces", "Bolts", "cwt", ells and yards) which makes the preparation of an aggregate total very complicated. It is possible, however, to convert one important denomination, Narrow German, to yards for comparison with Scottish and Irish linen. Under this category, on which there was a low import duty, in most years between 80-90% of all foreign linen was entered (rightly or wrongly). In 1749, out of a total of 332,096 yards of foreign linen imported to Scotland 313,028 were in this category, and of the 155,389 yards re-exported 138,714 were of narrow German.[13] It is, therefore, a significant

13 B.O.T. Misc. Records N.G.1/16/1.

indicator both to trends and the absolute level of imports and re-exports of foreign linen. (See Graphs 1 and 3, and Table 4).

The corresponding figures for the import and re-export of Irish linen from Scotland can be obtained for the years after 1755 from Customs 14. Between 1747-49 of all linen exported from Scotland 73% was Scottish; 13.5% Irish and 13.4% Narrow German: between 1757-59 the respective proportions were 72:10:17 and between 1766-68 75:17:8. The share taken by Scottish linen in a rapidly increasing total of linen exported remained remarkably constant. The surprising thing is not that the share taken by Narrow German declined, given the imitation by the Scots of range of coarse and medium-priced fabrics and the assistance of the Bounty, but that the competition of Irish linens, which were also eligible for bounty on export, was held off so successfully. The decline in the German position owed much to the disruption of the war years of 1756-63, although the immediate effect of the outbreak of war was the movement of large quantities of German linen to Scotland out of the way of the armies, which depressed prices for home linen in the export market just as the home industries were anticipating some recovery in 1756 with the restoration of the Bounty. Thereafter the development of home production and the increase in duties, coupled up with a tighter system of supervision, steadily squeezed "Narrow German" into a position of less significance in both the home and re-export markets.

Table 4.5

Narrow German and Irish Linen Imported and Re-exported 1744-1775

Narrow German	Imported ('000 yards)	Re-exported (8000 yards)
1744	54	42
1745	41	88
1746	61	54
1747	323	230
1748	129	245

1749	313		139
1750	156		216
1751	212		148
1752	71		196

	German	Irish ('000 yards)	German	Irish ('000 yards)
1755	573	168	279	2
1756	578	483	590	88
1757	539	833	632	218
1758	460	583	328	225
1759	254	466	335	324
1760	291	674	377	394
1761	144	463	248	395
1762	137	409	30	279
1763	61	1,022	missing	
1764	86	572	78	297
1765	121	404	87	301
1766	240	513	195	403
1767	130	704	191	536
1768	414	157	341	471
1769		missing		
1770	462	1,221	474	744
1771	502	1,159	408	752
1772	375	761	338	536
1773	223	381	370	434
1774	172	617	237	470
1775	302	286	216	67

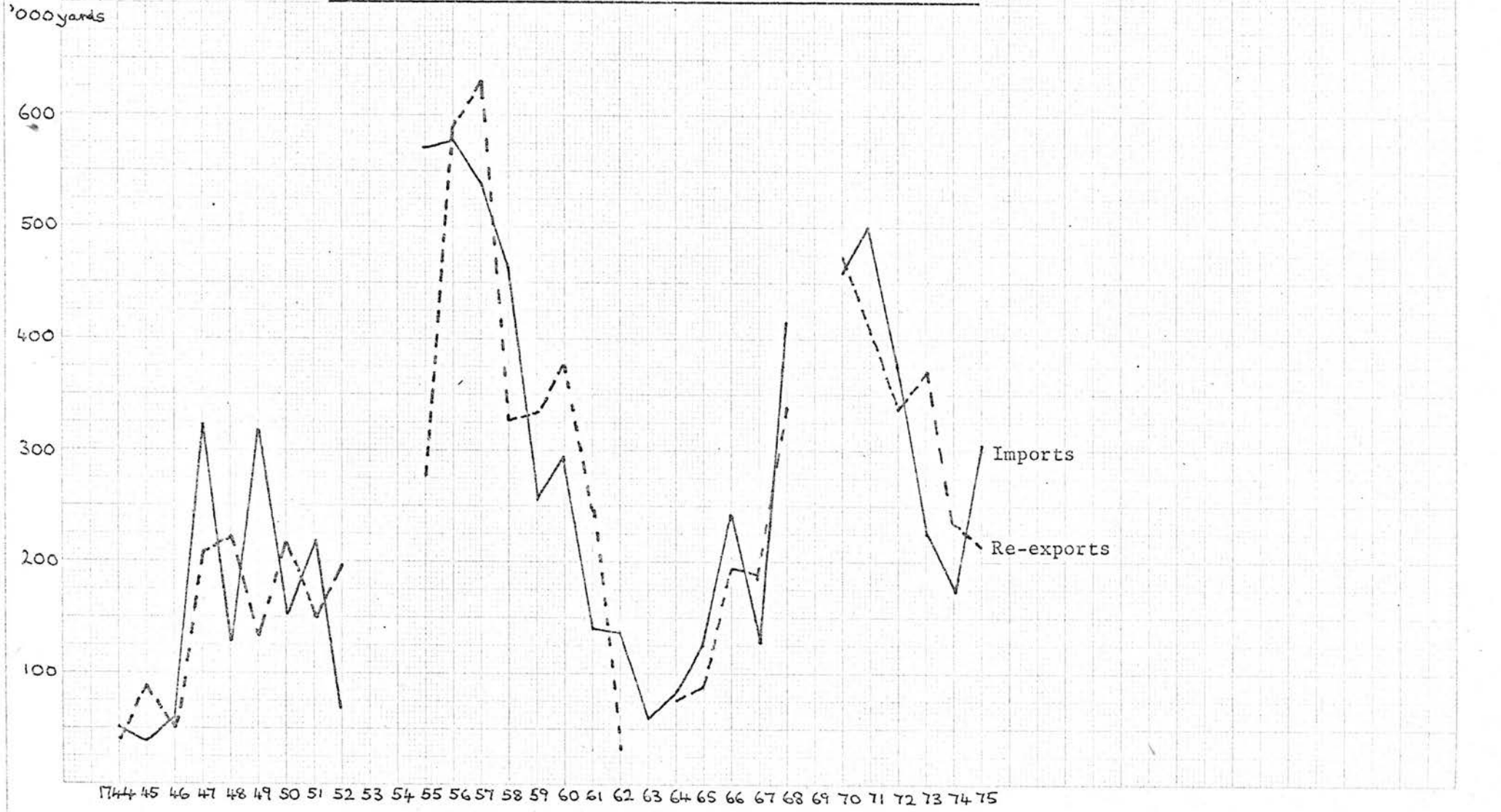
Sources: Records of the Board of Trustees (NG 1/16/1)
Inspector-General Series (RH 2/4: RH 2/20)

Both use the measure "cwt., Qrs., and ells", and I have converted this into yards by using the key provided in NG1/16/1 that one cwt. equalled 120 ells or yards.

See also Graphs 1 and 3.

Some discussion can now be made of the nature and mechanism of the Scottish Linen Trade in relation to its external markets, the English, the Colonial, the Irish and the Continental. The last can be dismissed quickly, as in the 17th century the Scottish never succeeded in selling much linen anywhere on the Continent for any length of time. During 1759-61, while the German industry was disrupted by war, a serious attempt was mounted on the Spanish market, from Leith, and over 80,000 yards were exported there in 1761, but as soon as the trade in German linens revived, the sale of Scottish linens collapsed immediately, bringing down at least

Graph 4.3: Imports and Re-exports of Narrow German Linen 1744-1775



one house in the process. A quite useful trade on the other hand was developed to Ireland (which was rather like selling coals to Newcastle) in Kentings, lawns and gauzes in the 1750s.[14]

The Colonial or Plantations market dominated exports of Scottish linen from Britain. 90% of all linen exported from Scottish ports went to America or the West Indies. Virginia and Jamaica took the largest individual amounts (hence the impact on Scottish exports when the Virginian market was sealed on the outbreak of the Revolution). Linens constituted a major element in the outward cargoes of commodities shipped out to the Colonies in the tobacco and sugar ships, e.g. clothing for the planters and slaves, which were varied in weight and colour according to the region. The Jamaicans preferred brighter and lighter linens for their use, and the coarsest possible for their slaves; the Virginians liked a duller colour and a harder wearing fabric.

Table 4.6

Linen exported from Scotland to Virginia and Jamaica (plain linen: yards)

	Virginia	Jamaica
1762	700,000	150,000
1767	890,000	410,000
1772	700,000	250,000
1777	(none)	760,000

Source: Customs 14

In 1771, 1.3 million yards or 45% of all Scottish linen exported from Scotland that year went to Virginia. The quantity of linen sent to

14 Exports of linen to Ireland ('000 yards)

	Kentings	Lawns & Gauzes
1756	54	1
1766	126	12
1776	288	109

Jamaica steadily grew until in 1777 it took 40% of all Scottish linen exports after the collapse of the Virginian market.

It is apparent from the Scottish figures that exports of linen expanded markedly after 1745 from 0.5 m. yards to 2.4 m. in 1760 and 3.4 m. in 1780. Coupled with growing markets in the Plantations, the key factor was undoubtedly the Bounty of 1745. During the decades after the Union, the Scottish and Irish pressed on several occasions for the duty on foreign linen re-exported to be cut. The Government, under pressure in Parliament from both the Hamburg interest and the Planters' spokesmen, hesitated to raise the duty which would increase prices for the home consumer and might provoke retaliation from the Continent against English exports, or to cut the drawback which would lead to a price rise of linens in the Plantations. The Bounty Act of 1742 was a careful compromise: it awarded bounties of $\frac{1}{2}^{d}$ per yard for all linens under 6^{d} per yard in value and 1^{d} per yard for those between $6\text{-}12^{d}$, which were exported to the Colonies, payable to the exporter. The fund to pay these linen debentures was financed by an additional duty upon French cambrics imported, and the bounties on British and Irish linen came in operation from the 25th of March 1743. These bounties were not, however, considered sufficient to enable the home manufacturers of coarse linens to compete with the German, "where Flax is so much cheaper", and a further attempt was launched to raise the duty on imported linen and cut the re-export drawback. "Experience has shown that going to the market at home by means of the duty 15% or to the Plantations 13% cheaper than others is not sufficient encouragement to the manufacturers of Osnaburg".[15]

Parliament responded by extending and increasing the Bounty in 1745 to $\frac{1}{2}^{d}$ per yard for plain linens under 5^{d} per yard in value, 1^{d} per yard for

15 S.R.O. Seafield MSS GD 248/954/1 Memorial (1743) on the Linen Manufacture

those between 5-6^{d} per yard in value, and 1½^{d} for those between 6-18^{d} per yard.[16] This bigger bounty did have a marked effect on exports of linen from Scotland, particularly on linen between 6-12^{d} per yard in value.

Table 4.7

Bounty Linen Exported from Scotland ('000 yards)

	Total Exports		Linen 6-12^{d} per yd. exp'd
1743	61	Ladyday 1743-44	55
1745	120	" 1744-45	47
1747	291	" 1745-46	61
1749	553	" 1746-47	144
1751	670	" 1747-48	219

(Source: B.O.T. NG 1/16/1)

One fabric which exemplified the Scottish response to the Bounty was Osnaburg, a coarse linen made in imitation of the German. Some experiments in making this linen had been made in the early 1740s at Arbroath and elsewhere, but what transformed the production of this fabric was the larger bounty, as Osnaburg (or Edinburghs, as they were patriotically renamed[17]) generally was valued at about 7-9^{d} per yard. Aided by the Trustees in various ways (such as subsidising an espionage trip by William Tod of the British Linen Company to study the German methods and techniques), after the Rebellion had subsided the manufacture of this kind of linen for the export markets at Glasgow and London really got under way. The amount of linen in the price range eligible for the bounty showed a steady increase over the same years, but the manufacture of Osnaburg was the dynamic element in the situation. The effect of the bounty in this price range was to

16 18 Geo II cap XXV

17 Pamphlet entitled "Reasons for Continuing the Bounty on low-priced Linens" (Seafield MSS GD 248/954/1)

cheapen these linens in the Colonies, e.g. linen valued at 8^{d} per yard in Scotland could with the bounty be sold at 12% less.

Table 4.8

Osnaburg Linen Stamped for Sale in Scotland 1746-54 and Linen Stamped for Sale in Scotland of value 6-12^{d} per yard

	Osnaburg ('000 yds.)	Linen 6-12^{d} (m. yds.)
1746	14	3.2
1747	4	4.5
1748	529	4.8
1749	692	4.4
1750	649	4.8
1751	712	5.4
1752	758	5.7
1753	1,113	6.4
1754	586	5.4

(Source: States of the Progress B.O.T. NG 1/14/1)

The export of bounty linens with the benefit of what was in effect a subsidy made heavy demands on Exchequer revenue. The Trustees and others defended this expenditure and stressed the implications for other branches of the economy and employment. "The exportation of our coarse linens has promoted a trade between Scotland and the Sugar colonies chiefly for the purchase of rum...the last two ships from Jamaica paid upwards of £5000 stg. for duty. During the nine years the bounty has been continued many poor people in the low countries have been bred to the linen manufacture. But also in the Highlands and along the sea coast from the Orkneys to Inverness are employed 5-6000 persons formerly idle".[18] In the long run, the nation was no loser by the money laid out in bounties. "The whole expense of

18 B.O.T.L. 26 March 1753, to William Tod, their agent at London.

bounties on British linens exported has been more than repaid to the public by the addition to the Revenue of Excise and Customs from the importation of Rum and other commodities in returns for home-made linens exported to America and also by the revenue arising on the consumption of the persons employed in that manufacture and who on the failure thereof must turn a burden on the Country till they can shift for themselves. The Manufacture is a Staple Influence and Connection in the support of many other branches of trade".[19]

The prospect, therefore, of losing the bounty dismayed the manufacturers of coarse linen and the Trustees, and a desperate attempt was made during 1753-54 to avert the expiral of the bounty at the end of the Parliamentary Session. The Glasgow merchant, William Craufurd, wrote in 1753 that "if something is not done soon, the country will undoubtedly lose the branch of coarse linen exported to the Plantations as the Scots Osnaburgs do not stand their ground as to cheapness with the German and when the bounty is withdrawn, we shall not be able to send a piece."[20] Instead of the renewal of the Bounty, the negotiations secured a supposed equivalent, a subsidy of £3000 for nine years to be applied to encouraging the manufacture of linen in the Highlands. The Scottish agents had made much during the negotiations of the value of the bounty in supporting the extension of coarse spinning into the Highlands, which would keep them peaceable: Parliament took the point but with the wrong result as far as most of the Scottish were concerned. "I know no Scotchman to be satisfied with this equivalent - many of them are angry and I am sure that it is not equal to the Bounty but it is the most that could be made of it."[21]

19 Ibid.

20 Seafield MSS; GD 248/954/1

21 Tod to Lord Milton 12 April 1753, Saltoun MSS.

The consequence appeared to be exactly those the Trustees had feared. The quantity of Osnaburg made fell by one-half, and other bounty linens were similarly affected: exports of linen from Scotland fell by one-third to 0.8 m. yards, and the Trustees' information was that the slump put between one-half and one-third of all the looms in the East of Scotland out of work. Parliament could not remain unmoved, especially as the situation was worsened by large quantities of German linen entering the market. The Bounty was restored from April 1756 and recovery was aided further by the disruption of German competition. "War rages in Germany" was noted by the Trustees on the abstract of Stampmasters' returns as a factor of major relevance to the Scottish Industry. Despite the occasional rumbling, the Bounty was thereafter renewed as required during the period under review, and extended in 1771 to striped, chequered and printed linen to the further stimulus of exports.

Undoubtedly the fortunes of the Linen trade were closely linked in Scotland with those of the Tobacco and Sugar trades, and it appears from the experience of the British Linen Company that some of the effect of a depression in either of these colonial staple trades at Glasgow was passed on to the supplier of linens through delays in payment and reduced orders. Making sales at Glasgow was considerably easier than securing payment. The exporter was in a strong position in relation to the supplier of linens. Competition amongst the Scottish manufacturers, and the supplies of Irish and German linens readily available at warehouses in Glasgow, and the oligopsonist position of the exporters enabled them to force profit margins down. A common practice was for the exporter to insist on a discount of 5% for cash payment from the selling price or long credit of 12 months on linens purchased. The Glasgow exporters were benefitted by the supply of cheap linens at hand in their trades.

If the Colonial market was of major importance to the coarse linen sector of the industry in the East of Scotland, much also went from there to London for export and printing. After the late 1740s there was a marked expansion in the quantity of linen printed in Scotland. The mechanisms of sale varied. In the West, large quantities of linen were sold to the Scottish chapmen and peddlers at the Fairs to hawk down through the North and West of England. Their activities came under threat of prohibition several times from Parliament.[22] Increasingly control of the Linen Trade in Scotland and from Scotland was consolidated in the hands of Scottish merchants and dealers. The practice once common of English merchants coming North to buy linens at the Fairs seems to have died out during the 1740s in part because of collusive action by the Scottish Merchant community who pre-empted the linens for sale and would only offer them at a mark up to their Southern Brethern.[23] Whenever possible, Scottish merchants aimed to make sales direct or obtain specific commissions for linens from the wholesalers and exporters in England rather than trust to a factor. Distance from, and fluctuations within the English market meant that the trade in linens to England became predominantly a consignment trade.

Linens were consigned to a factor at London from the Scottish dealers (who had bought up the cloth at the Fairs or from the manufacturers) for him to sell on commission of 2½% on the gross receipts. The seller, not

22 E.g. in 1730. Much of the opposition to the peddlers came from the wholesale dealers. (Kames The Progress of Flax Husbandry in Scotland S.M. 1766).

23 B.O.T.L. 25 Jul 1732 for a letter from John Jamieson of Glasgow, complaining that the merchants in Perth picked up stamped linens before the sales and then artfully heightened the price so that strangers could not buy on a footing with them ("probably an idea of the Town to enhance the whole to the exclusion of the English buyers especially who complain more of Perth than any other town").

the factor, bore all the risks of transport, of the goods lying unsold or loss on the sales. Some of the factors did advance money on the goods awaiting sale (on interest) to ease the liquidity position of the dealer or manufacturer. There were, inevitably, many complaints against the factors: one allegedly common abuse was for the Factor, to prevent himself being inconvenienced by having money advanced on unsold linens for too long, to sell off the goods in his hands for any price which could be obtained. But the London factors in Scottish linens (usually Scots) were a tightknit community operating in a fiercely competitive market, and from them stemmed a great deal of concerned and informed advice as to how the quality of Scottish linens should be improved, and what fabrics were in demand or likely to come into demand.

The importance of the English market, and the dominance of the factors, was pronounced by the 1760s, which prompted various schemes to set up a Linen Hall at Edinburgh on the model of the very successful Dublin one to which English buyers flocked. The hope was to bring the market back to Scotland, and transfer the onus of the shipping and insurance to the buyer as well as to permit the Scottish merchants to keep a closer eye on the sale of their goods. A hall was duly erected in 1766 with a subsidy from the Trustees, but failed to make any appreciable impact on the flow of trade. During the discussions preceding the erection of the hall, two of the most experienced Trustees, George Clerk and Drummond, prepared a memorial on the present state of Scottish Trade with England.[24] "The greatest part of the linens manufactured in the East parts of Scotland, being as soon as ready, (are) shipped off by the Dealers by consignment to factors in London and a great proportion of the thin and fancy goods manufactured in the West Country (are) sent to the same market". They estimated that the value of the linen sent to London annually from Scotland might amount

24 B.O.T.M. 20 Nov. 1765.

to £300,000 (i.e. over one-half of the estimated value of linen stamped for sale in 1765 - £579,228).

There seems little prospect of getting nearer to the true size of the English demand for Scottish linen than this informed guess, but the orientation of the Linen Trade is confirmed by the behaviour of two of its subsidiaries, the yarn and the thread trades. In the 1750s it was estimated that one-half of all the linen yarn made in Scotland went to England, which encouraged the diffusion of spinning although it raised the price of yarn to the home manufacturer. Linen yarn was also used in the thread industry which expanded fast in the 1760s with the advent of the twist mill. Much of its production went to the English market: in 1766 Lord Kames estimated that £100,000 of yarn was exported and a like amount used in the thread industry, much of which was exported. He had no hesitation in regarding London as the main market for Scottish linen products.[25]

Given that so much of the production of the Scottish linen industry went to either the English or the Colonial markets, the importance of the home (i.e. Scottish) market was certainly not paramount. It was the demands of the colonial market that stimulated the development of the Osnaburg fabric, and pressure from external markets that induced a wide variety of imitation and diversification in fabric, colour and design in the cloth made in Scotland. Linen was undoubtedly a staple industry on which much in the economy rested: in addition to the foreign exchange earned by the trade, the trading position of Glasgow was facilitated by the supply of cheap linens, and the employment and income generated by the industry very considerable.

Some estimates can be made of the numbers employed in the industry. One contemporary guess, which is probably overgenerous by a wide margin,

25 S.M. 1766.

was that of Lord Deskford in 1755, who when considering the numbers of women employed in spinning, suggested that if there were 1 million Scots, of whom 215,000 were females fit to spin, 180,000 at any one time might thus be occupied, "to gain $2\frac{1}{2}^{d}$ per day by their spinning."[26] We might check this against a calculation, of the minimum numbers of spinners, on the basis of data - admittedly scanty - relating to the 1750s as to the amount of yarn used in the manufacture of cloth and the productivity of the spinner.

An estimate presented to the Convention of Royal Burghs in 1754,[27] was that 176 yards of Osnaburg cloth could be woven from 24 spindles of Osnaburg yarn, a ratio of 7.3 yards of cloth to 1 spindle of yarn. This tallies very closely with the actual production experience of the British Linen Company. Between Feb. 1st and May 30th, 1758, 11,147 yards of Osnaburg cloth were woven from 1502 spindles of the Company's Osnaburg yarn, a ratio of 7.4:1, and 140,835 yards of coarse cloth from 19,208 spindles of coarse yarn, a ratio of 7.3:1.[28] The finer the fabric, the lower this ratio, and an estimate in 1750 for the manufacture of shirting cloth to be sold at about 2/- per yard, calculated its costs of production on the basis of a 2:1 ratio.[29] It seems reasonable, therefore, given that much of the production of the Scottish linen industry was of coarse linen, to apply for the sake of hypothesis a conversion ratio of 5 yards of cloth per spindle of yarn, to infer a figure for the quantity

26 Seafield MSS, GD 248/954/1.

27 S.R.O. Craigievar Mitchell MSS, RH 2/5/11.

28 Journal of the Edinburgh Staplery of Yarn, 1758; preserved in the archives of the British Linen Bank. For a full discussion of the work of the Yarn Staplery, see infra, chapter 5, pp. 234 - 245

29 Seafield MSS, GD 248/954/2; "An estimate for a manufacture".

of yarn required in the manufacture of linen stamped for sale. In the later 1750s, the volume of linen stamped for sale was about ten million yards per annum on average, which would imply an annual consumption of at least two million spindles of yarn.

We can also make some estimate of the annual output of a spinner. Sandieman, a yarn dealer and linen manufacturer of experience, based his calculation of a spinner's earnings - to which reference has already been made[30] - on the basis of a weekly output of 1½ spindles per spinner. How much she spun in any one year would obviously depend on the level of employment, and, allowing for some interruption, it is unlikely that even a full-time spinner would work more than 48 weeks in the year - if that - which would suggest an annual output of c.70 spindles per spinner of coarse yarn, which would certainly be less for the spinner of fine yarn. To supply, therefore, the two million spindles of yarn annually required for the production of Scottish stamped linen in the later 1750s, it may be suggested that, at 70 spindles of output annually per spinner, the number of full-time spinners employed in Scotland was at least 30,000. But it is absolutely certain that this understates the real number of spinners in Scotland by a very large margin because many spinners were part-time rather than full, owing to lack of inclination or lack of opportunity, and also because much of the yarn spun in Scotland was not woven into cloth stamped for sale. An unknown amount was used in private (i.e. unstamped) production of cloth or the thread industry. Even more was sold to England: it was suggested by Sandieman that at least one-half of all the yarn spun in Scotland went to the English market.[31]

Hence, on the basis of this series of suppositions, it may be

30 Supra, p.

31 Supra, p.

suggested that the true number of spinners in Scotland in the late 1750s may be at least twice and possibly even more than the minimum estimate of 30,000 made above, i.e. 60,000 and upwards. It is unlikely, however, to reach Deskford's estimate of three times this latter figure.

A tentative calculation, again on the basis of scanty evidence, can be made of the numbers of weavers employed in the latter 1750s, by way of an estimate of the annual output of the weaver. Output per weaver varied greatly, depending on the skill of the man and the quality of the fabric he was working. From various sources, mostly be inference,[32] it appears that a weaver of coarse linen, if fully employed, could weave anything between 900 to 1500 yards per annum, but, the finer the cloth, the lower the output in yardage. For instance, the annual output of a loom employed in the shirting manufacture already referred to above, was estimated at about 420 yards of the cloth valued at 2/- per yard, 265 yards of cloth valued at 2/6^{d} per yard, but 780 of that at 1/6^{d}.[33]

Any estimate of what was the national average annual output per weaver is clearly in the light of these variations very much of a guess, but if it were 1000 yards per annum, then at least 10,000 weavers would have been engaged in the manufacture of the ten million or so yards of linen stamped for sale in the later 1750s. It is certainly an under-estimate of the total number of weavers in Scotland, not just because of the mode of calculation, but because it omits any consideration of the

32 Saltoun MSS, box 328; letter from Donaldson of Drumsheugh, 16 Jan., 1747; Monymusk MSS (Monymusk House), bundle 92; "Notes on a proposed manufacture of Osnaburg" (N.D.); British Linen Company estimate in 1757, infra p. 294. A good weaver of yard-wide check could work c. 45 yards of cloth per week (half a piece) in Manchester in the 1750s, and output per weaver was probably similar in the Scottish check-weaving areas. A.P. Wadsworth & J.L. Mann, The Cotton Trade and Industrial Lancashire, 1600-1780, p. 350.

33 Seafield MSS, op.cit.

many weavers whose output was never offered for sale, and whose linen therefore was not stamped.

It is difficult to find any reliable contemporary estimate of the numbers of weavers employed in Scotland in the period up to 1775. David Loch, however, on the basis of his travels through the trading villages and towns of Scotland in 1776,[34] did attempt to secure detailed figures for the numbers of weavers in many of the places that he had visited. By aggregating these figures, there were over 12,000 looms at work on linen. This again is very much of a minimum figure, in that there were manufacturing centres which he did not visit, or where he did not specify the numbers of linen weavers - e.g. Edinburgh and Cupar, where he merely noted that there were many manufacturers of linen -, or where he did not distinguish whether the looms were working linen or wool. Indeed, he reported that in the Borders it was common for the looms to work wool in the winter and linen in the summer. These weavers have not been included in the aggregate provided above.

In summary, therefore, it is suggested that in the later 1750s, there were at least 10,000 weavers and perhaps 60,000 spinners whose production was orientated to the commercial (i.e. other than subsistence) sector of the industry. Some allowance must also be made for those employed in the preparatory and finishing processes of the manufacture. In relation to Webster's estimate that the population of Scotland was 1.26 million in 1755, making no allowance for the subsistence sector of the industry, the proportion of Scots who derived their employment from the linen industry was at least 6%, and probably much higher. It must be stressed how tentative a conclusion this is, resting as it does on a series of assumptions and a paucity of data. But what is certain, however, is that many of the Scottish spinners and weavers owed their employment to demand from the English and Colonial markets.

34 D. Loch, A Tour through most of the trading towns and villages of Scotland (1778).

Chapter Five: The Foundation of the British Linen Company and the Early Years

"His Majesty having been most graciously pleased, at the Desire of sundry of the Nobility, Gentry and Merchants of Great Britain, to grant them his Royal Charter, incorporating them into a Body Politick, for the more effectually promoting the Linen Manufactures of the Kingdom, by the Name and Stile of the BRITISH LINEN COMPANY....."

Advertisement in the Edinburgh Evening Courant of 11th August, 1746, calling a meeting of the Proprietors.

The British Linen Company[1] was born out of the Edinburgh Linen Society or Copartnery set up in March 1745 by the noted linen enthusiast and Trustee, Lord Milton, in association with two young merchants who had recently taken on the management of affairs at Piccardy for the Board, William Tod and Ebenezer McCulloch. Intended from the outset to be a large undertaking, the original deed of copartnery drawn up in July 1744 had provided for 80 shares of £250 to make a total capital stock of £20,000 to be employed in the "Cambric and Linen Manufactury in and about the City of Edinburgh".[2] Milton persuaded several of his fellow Trustees to subscribe, and subscriptions were sought from some of the Scottish Linen factors at London, to enlist both their money and their support. Several of the most prominent declared themselves friendly and meetings were held there by Claud Johnson, Whyte, Auchterlony, Corrie and Hope "anent the grand manufactury"[3], and by February 1745 both a deed of copartnery and an outline of activities had been agreed between the Edinburgh and the London interests, and the Copartnery came into formal existence on the 28th of March 1745. 67 shares were taken by a cross-section of the Scottish gentry and commercial community at London and Edinburgh: the Duke of Argyle took four as did Lords Milton, Strichen, Tinwald, and Sommervell, George Gordon, and Tod and McCulloch. A 3/10ths call was made on the subscribed capital which provided the Copartnery with £5025, supplemented by a loan of £2000 arranged with the Royal Bank.

1 Much of the material in this section of the thesis has been drawn from the archives of the British Linen Bank (now in the possession of the Bank of Scotland). In particular, the outgoing letters of the Managers have been of great value, and all quotations not otherwise acknowledged are from this source.

2 N.L.S. Saltoun MSS box 56.

3 Saltoun MSS box 350.

Some potential subscribers at London hung back for fear of being held liable for the debts of the Copartnery should it fail. Milton had attempted, in consultation with the advocates Grant and Armour, to draft in the constitution a clause (13!) designed "to save every particular person from being affected with the Company's debts to a greater extent than his share or shares paid in", but had been unable to convince his legal colleagues of its validity.[4] To further the aims of the Copartnery, a larger capital was needed, which left the promoters with only one option, to secure limited liability by making the Copartnery into a Body Corporate under Royal Charter.[5] A start was made in the summer of 1745 when a formal petition was presented, but the Rebellion stopped further consideration that year, although ultimately it may have eased its passage. Not until the 5th of July, 1746, did the Royal Charter for the British Linen Company (note not the Edinburgh Linen Copartnery) receive the King's signature. Much, undoubtedly, was owed to the Duke of Argyle who was closely linked with Milton in political affairs, and who assisted the passage of the Charter with his patronage. He became the first Governor of the Company.

When the books were opened for subscriptions to the Company after news was received of the Charter, capital was certainly forthcoming. By June 1747, £52,700 had been subscribed, £26,750 at Edinburgh and £29,950 at London, where amongst the subscribers were the famed Colonial merchants, William Beckford and Richard Oswald. It was a vivid example of the attraction of limited liability to the investor. The Copartnery was wound up with the subscribers receiving their paid-up capital back, plus a dividend of 5%, most of whom transferred this to the Company. The

4 C.A. Malcolm History of the British Linen Bank p. 7. The position under Scots Law of the unincorporated joint-stock company with respect to limited liability was in a position of some uncertainty at this time. See R.H. Campbell, "The Law and the Joint-Stock Company in Scotland", in Studies in Scottish Business History, ed. P.L. Payne, pp. 136-151, particularly pp. 140-145.

5 Text printed in full in op.cit. pp. 231-33.

subscriptions were gradually called up, 10% at a call; the sixth call was made in February 1747.

The Operations of the Copartnery

The first meeting of the Proprietors appointed Milton and two experienced Edinburgh merchants, Thomas Allan and Alexander Sharp, as the Directors, and Tod and McCulloch the Managers, who were to be allowed ½% and 2% respectively on the capital paid-up for their services. Tod undertook a secret[6] trip to the Continent to study methods of production there for future use in the coarse linens, and an experienced Irish cambric weaver, Robert Boyd from Dundalk, was recruited to supervise the manufacture of fine linens. A network of agents to buy yarn was established, fine at Linlithgow, Hamilton and Renfrew and Coarse from Aberdeen and Huntly. At the latter place, Walter Nicol bought over 3900 spindles for the Copartnery in 1745 for between 2/2 and 4/- per spindle. Considerable quantities were also bought locally. Payment for yarn was either by cash or three-month bill normally, but after the spring of 1746, when the Company had bought flax at Leith, it offered a mixture of cash and dressed flax. This was motivated by a desire to prevent the common fault of heckling the flax beyond its natural limits, to ensure that the spinners used the right quality of flax which "would cut down the vast number of thumb knots we are plagued with in your yarn".[7] McCulloch's experience with bad yarn must have contributed greatly to his desire to rid the Company of reliance on sale yarn, and establish his own giving-out system.

The yarn bought was sent to be cleaned by the Yarnboiler Gammels, and then sorted into the appropriate grist for the fabric required, and finally given out to be woven up by the weavers at an agreed price per ell for

6 "Least our good friends the Hamburg merchants should take care to prevent him having any instruction of benefit by this journey". McCulloch to Goodchild 18 Jul 1745".

7 McCulloch to Gillies of Linlithgow 4 Aug 1746.

winding and weaving. During 1745 most of the copartnery's production was concentrated in Edinburgh or nearby Fife in the manufacture of brown linens, lawns and hollands. Between March 1st and December 31st, 1745, 15,176 yards of brown linen were made from £1936 of yarn, at a cost of £1453 for weaving. A few experimental contracts were made with some manufacturers of linen in the Country (e.g. at Ceres and Errol) to weave up coarse linens from Company yarn, but unfortunately the cheaper weaving rates were more than offset by the lack of skill and the poor equipment of the country weavers. The Company had secured over 100 looms in Edinburgh for the manufacture of fine linen when the Rebellion broke out. When Aberdeenshire was cut off, most of the fine linen looms were immediately laid off as only a little expensive West Country yarn could be bought, and "since Sept. 1st, there has been no correspondence with the people on the other side of the Firth where all our coarse manufacture is made".[8] Trade with London was paralysed save for the odd convoy, and the "plaguey Rebellion"[9] stopped the Charter negotiations. Worse was to follow, the occupation of Edinburgh by the Highland Army. McCulloch did not enjoy this, "lying at the mercy of a parcel of lawless, robbing Highlanders",[10] and was forced to use his own money to support the manufacture because "the principal supports of our Company were obliged to flee the Country as well as our banks to be carried to the Castle".[11]

During this period, with sales at a very low ebb, the Company found itself severely straightened financially, which was to hinder the rate of recovery after peace had been restored. After the quashing of the Rebellion, the momentum lost was not easily regained, for until sales picked

8 McCulloch to John Goodchild (London) Jan 16, 1746.

9 " " David Knox April 7, 1746.

10 " " Alex Christie Feb 6, 1746.

11 " " Claud Johnson (London) 25 Oct, 1746.

up the Company was short of cash, and no further calls on the stock were to be made in view of the anticipated charter for the British Linen Company, which would require a fresh subscription sheet. McCulloch had grave difficulties during the months immediately prior to the Charter: "I need cash from you as sundry bills are now due for yarn to keep our looms in employ...the loss due to the delay of this charter has put me in a fix".[12] The Charter did ease the situation, and two significant experiments were made. The first was the manufacture of Osnaburg, a low-priced fabric made in imitation of the German of the same name, eligible for bounty on export. The first steps took place under the supervision of Tod, returned from Germany: 818 yards made at Leith by Bell & Murray in 1746. The second was the initiation of a correspondence for yarn spinning in the Far North. The Company urgently needed more coarse yarn, and particularly Osnaburg yarn, and was therefore receptive to an approach from Lord Morton of Orkney (in August 1746), who wished to employ his poor in a useful manufacture. The Directors agreed to risk sending a large parcel of dressed flax and two North to be spun into yarn, and engaged a spinning mistress to teach the spinning of Osnaburg yarn. 42 spinning wheels (@ 3/4^{d} each) and 3,700 lb. of dressed flax were sent to Morton's Steward, Andrew Ross. Much was to come from this small beginning in the North.

After the Charter had arrived, a general meeting of the Proprietors was called for the 17th of September in Edinburgh. The Directors had met already on the 2nd of August and decided to open books for subscriptions at both Edinburgh and London. A cash credit account with the Royal Bank was opened for £3000 and, as the Managers had stressed the need to place orders for the importation of flax intended for the manufacture of Osnaburg linen ("so much wanted for exportation"[13]), the Directors ordered 200 tons of Russian flax from one of their number, Thomas Allan. Some Dutch flax was

12 McCulloch to Tod (London) 14 May, 1746.

13 Directors' Minute Book 2 Aug 1746.

also ordered for the fine linen manufacture. Shares were quickly taken in the Company: the subscription books were fittingly headed at London by the Duke of Argyle and at Edinburgh by Lord Milton[14] and amidst the ranks of the subscribers were many important names, Lords, Landowners, merchants at London and Edinburgh, Scottish linen factors and bankers at London.[15] As an expression of national aspiration and identity, it bore some resemblance to Darien, and considerable hopes were placed in it.

Table 5.1

Copartnery Production

Fabric	Period	Quantity made (Yds.)	Yarn Used Sps	Yarn Used £	Cost of Weaving
Brown Linen	Mar-Dec '45	15,176	9,231	1,936	614
	Jan-Jul '46	21,689	13,202	1,707	839
Brown Lawns	Mar-Dec '45	1,937	1,021	214	94
	Jan-Jul '46	3,988	2,075	459	191
Brown	Jan-Jul '46	3,154	1,975	424	206

The pattern of the Copartnery's production can be seen from the table above. whWhile the Company mostly followed the pattern established by its predecessor, one new line "holland" started in January 1746 proved so

14 Both of these had been active in securing the Charter, and, in the conduct of the Company's affairs, Milton was undoubtedly a driving force and the Duke far from a mere figurehead. "Nothing is done in it without his Grace the Duke of Argyle's advice. It is lookt on here as the most National thing that has been devised for the good of our country...it is well known that your Lordship is the sole author of it". (Tod to Milton 13 July 1746; Saltoun MSS - letters). This support was to be sustained by both in the interest of the nation. "Your Lordship (has) pointed out the best way of making rebels good subjects and poor people happy. If the Company has success it will do more service than all the acts of Parliament that can be made". (Tod to Milton 9 June 1747; Saltoun MSS - letters). While his praise was fulsome, it was not just mere flattery.

15 There were 48 subscribers at Edinburgh, and 35 at London, including Wm Beckford, George Drummond, the Duke of Queensferry, Richard Oswald, George Auchterlony, etc. For a full list of the original proprietors, see Malcolm, op.cit. Appendix 2, pp. 234-36.

successful that the Company decided to switch the Piccardy looms from making cambric into this allied branch. Dealings with the Edinburgh weavers set out above were mostly on the giving-out pattern usual for the finer linens, i.e. the weaver was given the yarn to weave up at an agreed price per ell. The Company paid its weavers in a mixture of cash and materials such as flax and yarn as they desired. But a different pattern would be needed further from Edinburgh and the Company advertised that it was willing to give credit to manufacturers who would contract with it for brown coarse linen and Osnaburg. Some linen was made in the Country to the Company's order and small lots bought in the open market from time to time to see how they would sell at London.

Most of the linen was sold at Edinburgh, e.g. of the 36,865 yards of brown linen made between March 1745 and July 1746, 11,598 and 23,053 yards were sold there (unbleached and bleached respectively), while 14,736 yards were sent to London. The results were not encouraging of the latter course. Goodchild sold £3,678 of linens at London during the copartnery's existence but his commission and charges for bleaching the brown linens proved "a very heavy tax on the Company's profits"[16] and McCulloch started to think about an alternative, a warehouse at London under the direct supervision of one of the Managers.

The modest expansion of 1746 was meant to presage much greater things. On the fine linen side, Dutch flax was to be imported direct from Rotterdam to be heckled by the Company at Leith and then given out to be spun in the hope of cheapening and improving the yarn used in the manufacture of lawn and holland. In the meantime fine yarn had to be bought from Glasgow. The major object of attention was the manufacture of coarse linen; the fine and middle suffered from German and Irish competition, particularly in the

16 McCulloch to Milton, 26 Nov 1745. Saltoun MSS - letters.

export market to the Colonies where the former received the drawback and the latter the Bounty. The manufacture of cambric was undermined by smuggling which led to a switch into making lawn in late 1746. "We are attempting to enlarge the Number of hands in this branch of the manufacture and are just now to erect some more looms for that fabric about this city."[17] The broad lawns made in the summer had sold well at London and the Company claimed that their Edinburgh lawns, priced between 3/- to 9/- per yard, were indistinguishable from the French Valenciennes "but by the alteration in the length and breadth".[18] The supply of yarn seems to have been the main problem; "the thing to be studied is to have the yarn spun of such flax as will stand the bleaching...the danger of fine light cloth is that it purifies on the bleachfield as to appear too bare".[19] The yarn agent at Glasgow was instructed to buy only good yarn from skilled spinners; "such as you could trust with flax we would think of providing with a constant supply of Dutch flax and pay you an appropriate premium".[20] Demand from Ireland in the spring of 1747 resulted in the price of fine yarn rising by 10% in April,[21] which constricted expansion as much as the difficulty of training weavers in the art of weaving fine cloth.

Coarse linen, and the Osnaburg fabric in particular, being eligible for Bounty upon export to the Colonies, was the object of much attention. But both the Highland spinning and the manufacture of Osnaburg were held back by the delay in placing the orders for Baltic flax. While Dutch flax

17 McCulloch to the Trustees 28 Nov 1746. (B.O.T.M., same date)

18 Tod to a London linen draper, Mrs. Grant of Lancaster House 27 Nov '46.

19 McCulloch, Remarks anent cloth, 28 Oct 1746.

20 McCulloch to Rennie 9 Sept 1746.

21 This was a frequent source of grievance to Scottish linen manufacturers See Supra, chapter two, p 49 , and Infra, chapter six, p 249.

could be shipped across almost regardless of the season of the year, the Baltic ports were ice-bound over the winter months, which delayed the shipment of flax till the late spring. The Company preferred to wait for this flax which, because it was ordered in bulk, would be cheaper, before pushing the manufacture of Osnaburg. A start was made in training the weavers, using Russian flax bought in Leith after finding out the prices at London and Hull. This was given out to Bell & Murray, manufacturers at Leith, to be woven up into Osnaburg under the supervision of Tod, in the method which he had observed in Germany. The number of looms employed was only 20 in late November, but this was gradually expanded. Customers in August were offered "white linen as good as the Irish or foreign at 9-18^{d} per yard, and in 2-3 months...Osnaburgs (the bounty on which is 1½^{d} per yard)".[22]

The relationship with the weavers of fine linen followed a standard pattern. The Company gave out the yarn, and paid the weaver so much an ell for weaving, proportional to the sett, the finer being paid more, with an allowance for cleaning and sorting the yarn.[23] But the poverty and carelessness of the weavers of the coarser linens forced the Company to do the sorting and cleaning itself before giving out the yarn, to avoid the criticism so often made to the weavers, "Your piece is made of different yarns and ought to have been better cleaned".[24] The indigence of most of the weavers led the Company to look for intermediaries such as manufacturers to buffer its capital against their poverty. It was willing to give credit for yarn and cash to those who could provide reasonable security, but otherwise was most unwilling. A series of applications from weavers at Falkirk

22 McCulloch to Chalmers 25 August 1746.

23 Prices paid to the Edinburgh master-weavers ranged from 1½^{d} per ell for 900 sett to 3½^{d} for 1200, etc. One ell in twenty was deducted from payment because the cloth was not bleached to allow for shrinkage during bleaching. This standard imposition on the weaver was met by stretching and other devices.

24 McCulloch to Chalmers 25 August 1746.

was turned down; "We cannot trust so many hands...we suggest a man of money in your town should buy and give out yarn to be wrought and we would give him ready money for the cloth, or alternatively we could advance on your security £30-£40 to be lent in small sums to buy yarn".[25]

The Company did start to issue cash credits in October 1746 when a manufacturer at Errol, David Know, who was to contract for brown linen, was given one. By the end of the year nearly £100 of cash credits had been granted in sums ranging from as little as £6 to as much as £400 to weavers and manufacturers at Leven, Errol, Kinross, Dunbar, Kelso, etc. They were only given to those working for the Company on security, e.g. James Lawson and Patrick Given, "sober, industrious people",[26] who had several looms at Leith working holland for the Company, were loaned £10. Cash credits were not lightly issued, and lay in the prerogative of the Directors, not the Managers, who carefully scrutinised the applications. John Watson at Ceres was refused his application for a credit of £100. The credits helped to lubricate the production process and by alleviating some of the weaver's financial burden it was hoped that the standard of weaving would rise. They served the secondary purpose of tying weavers and manufacturers more closely to the Company.

Sales for the linens were sought primarily at Edinburgh, Glasgow and London, although samples were sent to Ralph Carr at Newcastle, a friend of the Company. An attempt was made at London to bypass the factors and sell direct to the exporters and drapers. Several of the latter were sent samples of linens offered on nine months credit or with a 4½% discount for cash. "The Charter has set us up for more expansion...we have no reason to doubt our meeting with suitable encouragement from you gentlemen in the

25 Tod to Cuninghame, 29 Aug 1746

26 Directors' Minute Book 13 Nov 1746.

wholesale trade, seeing as how we circulate to give bread to our own poor, not France or Germany's..."[27] Some were unmoved and returned the goods and it was clear that while the Company might be able to supply goods on equal financial terms with any, the quality as yet was not sufficiently competitive.

The Company's sights were firmly set on breaking into the export trade; "This Company will do all in its favour to establish a correspondence from Gentlemen in the American trade".[28] But the Managers were careful; Henry Kennan of Carolina who ordered linens worth £100 after inspecting them at London was requested politely to find a guarantor resident in Britain for his payment - "Because you are not living in Britain, you need to have a friend or agent at London as we are quite unacquainted with the laws of your colony".[29] Well-founded suspicion of colonial courts made the Company resolve never to consign goods to persons resident in the Colonies without having someone from whom payment was more easily recovered.

Early in 1747 the decision was taken to cease to employ the factor Goodchild in favour of a company warehouse at London. The Proprietors there were consulted by Tod at a special meeting as to the best method of making sales; they felt that the advantage of a warehouse was that "drapers would come with far fewer prejudices to look upon and buy directly from a Company than they would from any neighbouring Dealer or Factor".[30] Better assortments could be displayed, and some saving could be made on the charges of commission, although clearly the Clerk in charge would have to be paid a salary commensurate with the responsibility of the post. What caused some hesitation was the unavoidable tying up of capital in stock, and the difficulty

27 McCulloch to Henry Leigh, draper at London. There were some reductions in prices because of the saving in factorage fees.

28 McCulloch to Henry Kennan 12 Dec 1746

29 Ibid.

30 McCulloch to Pringle at Dumfries Feb 1747.

of obtaining cash from certain merchants at London, "not at all practicable with the West India traders".[31] But it was decided to open a warehouse, and some of the London proprietors were asked to constitute a supervisory committee. A place was rented at Westminster in St. Martin's Lane, and the advisors nominated one Nathaniel Child to be Clerk in charge from September.

Tod, who had spent the summer at London during these deliberations, was sent large consignments of linens (including hardens, checks, ticks and the first Osnaburgs[32]) in May and September, with a view to the export market. Further large assortments were sent to Child in November, totalling 3254 pieces valued at £4,072.

The Company was also trying to increase sales to the Scottish exporters; the first large sale came in March to Robert Ferguson of Dumfries, who took a parcel of Osnaburgs for export. Dumfries merchants took several more orders, which may have been due to the good offices of Ebenezer McCulloch's brother John, himself an exporter resident there. A copartnership of John Corbet of Glasgow and three Dumfries merchants took £490 worth of Osnaburgs, harden and country linens. This encouraged the Managers and they looked for sales to expand. McCulloch wrote one of the Dumfries exporters that, "Our fine linen Hollands are much improved...we have a great many looms making Osnaburg fabric which enjoys great ease of sale - 7^{d} per yard, with the drawback $5\frac{1}{2}^{d}$ to the exporter. These different branches we can carry on to much better purpose than every by our being Managers in a Company erected for that end with a capital of £10,000 and names, in which many of the most noted West India merchants are concerned. We are in hopes to provide the merchants either for home or foreign consumption and likewise to afford them time or credit on the goods bought which you know from the

31 Saltoun MSS, box 327; Proposal for a Warehouse to be erected at London.

32 8,165 yards in May at $6\frac{1}{2}^{d}$ per yard, and 12,743 yards in September.

smallness of our stocks in this country we never could before".[33]

Both the manufacture of coarse and fine linen was increasing: fortunately for the latter supplies of Dutch flax were readily obtained from Craufurd in Rotterdam even during the winter when Baltic supplies were cut off, e.g. 105 matts[34] were imported to Leith on January 3rd, 1747. The bulk of the flax required from Holland was imported in September (146 cwt) and in January 1748 a further 257 cwt, indicative of the expansion. Once when Craufurd had complained that the Dutch had forced up the price of flax the Company bought a cheaper parcel at Leith, which questioned the assumption that the cheapest way to buy flax was directly from a factor. The Factor in Holland played an important financial role for the Company, acting as agent for the bills drawn by the Baltic houses for flax payable at Rotterdam, for which service he charged between $4\frac{1}{2}$-$4\frac{3}{4}$% agio.

Two houses were employed in the Baltic to buy flax for the manufacture of coarse linen, that of Thomas Allan at St. Petersburg[35] and Thomas Mudie's at Riga. Their flax - 44 and $41\frac{1}{2}$ tons respectively - did not arrive until September, with further smaller shipments even later. Included in the cargo was iron, used for kiltage or "mast-fasting". This iron, generally Swedish, proved only a nuisance to the Company, although essential to the mariner. Quite large quantities were imported, e.g. in the ship from Riga in September 21 tons.[36] The Company also imported a cargo of ashes from Alex Coutts & Co. at Danzig, intended for cleaning yarn and for Salton bleachfield with the surplus for sale on the open market. Coutts suggested,

33 McCulloch to Pringle (Dumfries) 14 Feb 1747.

34 A matt of Dutch flax contained exactly 1 cwt. A matt of Baltic flax was of no fixed weight and could contain up to $2\frac{1}{2}$ cwt.

35 Allan was a Proprietor of the Company, and spent at least part of each year in a visit to the house at St. Petersburg.

36 The prime problem was lack of demand in Scotland; the iron had to be sold in Newcastle and London. The Company eventually stipulated that the shipmaster must take the iron on his own account.

and the Company adopted, the "best practice" for buying ashes, which was to contract in January, paying half the price then, and the balance on delivery.

Some of the Dutch flax was sold undressed to manufacturers who had their own heckler, but most was heckled by Norman McLeod and his assistants at the Company's hecklery at Leith and then given out to be spun, or sold to the spinners, whose yarn the Company bought. Several spinners regularly bought heckled flax and sold the yarn back to the Company,[37] although the giving-out arrangement was more common. From time to time, the Company was obliged to supplement its supplies of fine yarn by buying from Glasgow.

The Company employed its weavers of fine linen in making holland and lawn with a little sheeting, diaper and cambric. The looms could be switched from one fabric to another as demand varied. The weavers worked in their own houses, or in their master-weavers' shops or factories, and were paid by the yard, usually by every 20 yards from which one yard was deducted to allow for shrinkage. (Hence most of the weekly totals are multiples of 19). The absence of any production in August is probably explained by the harvest which drew the weavers away from their work. August had normally been a dead time for sales, but the habit once formed died hard even when there was ample work for them at this time.

Table 5.2

Production of Finer Linens by the Company's weavers: July-October 1747[38]

(yards)

37 Some of the payments set down were to men; did they spin or merely collect the flax and sell the yarn on behalf of their wives?

38 This table is drawn up from the Account book of the Edinburgh Linen Co-partnery. The form of the entries was standard, e.g. "September 29, Hollands yard wide, paid winding and weaving this week £25 19s. 8d.: 380 spindles of white yarn manufactures this week which produced 17 pieces containing 629 yards, the value of the yarn being £53 8s. 9d".

	July	Sept 8	15	22	29	Oct 6	13	20
Hollands	629	516	554	481	629	517	961	738
Lawns 7/8 wide	190	171	114	114	57	95	152	95
Lawns yd. wide	76	19	57	19	76	38	-	76
Cambric	19	-	-	-	19	38	19	-
Sheeting	+	-	30	-	-	60	30	-
Diaper	-	-	24	-	29	-	-	-

The production of the coarser fabrics was based on other arrangements. The first was the expansion of the Highland spinning. Conversations were held with several Gentlemen in the North with the objective of making "Advantagious Contracts with the more considerable persons in the Highlands for a term of years certain, for the delivery of large quantities of coarse linen yarn".[39] The progress of the Orkney experiment was encouraging, and by the summer of 1747 several more contracts had been signed with merchants underwritten by the gentry; Lindsay at Orkney, Erskine also at Orkney, Reid at Tayne, John Urquhart at Cromarty. The Company supplied wheels, reels, and heckles to the agents and a spinning mistress to Tayne as well as flax. The Company contracted to keep the agent supplied with fit flax and bear all the costs of spinning, freight, sea-hazard, etc; the agent was to supervise and pay the spinners on the Company's behalf, and was to be paid a premium of 1^{d} per spindle for his trouble. The scheme was not confined to the North: the Earl of Hopetoun agreed to support an agent at Leadhills to supervise spinning there. Supplies of yarn began to flow in quantity from the North after October. The quality of the spinning initially left much to be desired. The Company approached the Trustees unsuccessfully to see whether they would make any grant to offset the "extraordinary"[40] charges

39 Directors' Minute Book 7 Mar 1747.

40 Saltoun MSS, box 328. British Linen Company Memorandum.

of transporting the flax and yarn to and from the North.

The provision of ample supplies of yarn was an essential pre-requisite for the expansion of the manufacture of coarse linens and Osnaburgs. The manufacturing side was encouraged by the Company offering cash credits to weavers "who had agreed to manufacture large parcels of Osnaburg and low-priced linens conform to the Managers' Directions".[41] Cash credits granted totalled £3,407 by December 1747, most of which were to manufacturers of Osnaburg, at Perth and Arbroath, e.g. James Fauld asked for a credit of £400 in August as after some trials of making Osnaburg he intended to employ 100 looms in that line. The Managers were well satisfied with the effect of the credits as the flow of linens increased from the manufacturers who drew on the credits[42] to pay their weavers and buy flax and yarn, returning in time cloth. The larger manufacturers took their flax undressed which they then had heckled and given out to be spun, e.g. Bell & Murray, who took 13 tons of Russian flax, and Cheap and Neilson bought ashes as well to clean their yarn after it was spun. The Company had not intention of dealing exclusively in flax; the quantities it imported were for its own use, directly or indirectly.

An interesting proposal was made to the Convention of Royal Burghs in July. The Company pointed out the benefits conferred by its cash credits on linen manufacturers - "they draw out money as they have occasion for it and pay it back in linen cloth"[43] - the result of which was that some "putt more cloth through their hands in six months than they were formerly in use to do in twice that time".[44] The Company offered to give any Burgh which

41 Directors' Minute Book, 26 Mar 1747.

42 The distinctive element of the cash credit was that no interest was paid, except on the amount actually drawn.

43 C.R.B.R. Records 1738-1759 p. 240; Proposal to the Royal Burghs Saltoun MSS box 328.

44 Ibid.

so desired an agreed credit "upon condition of their employing what they draw out in the manufacturing of coarse linens and offering them to the Company at equal price".[45] The Burgh could train up its indigent children, the girls to spin and the boys to weave. This plan would raise a "stock of working Poor", and through "the Additional Demand for all the necessaries of life (benefit) every artificer and workman".[46] The Burghs, however, failed to react.

As yarn started to flow from the North, the Company began to sell it to the manufacturers of coarse linen at Leith, Dysart and Arbroath. Unlike in the manufacture of fine linen, coarse yarn was never given-out by the Company to be woven. Those manufacturers of Country linens that the Managers wished to encourage were given cash credits on which to draw. The overall strategy was to have a nucleus of Manufacturers working on contract, tied by yarn or credit, and only if demand was exceptional or a fabric needed to complete an assortment did the Company buy in the open market. During 1747, however, some quite large purchases were made to test the London market, e.g. yard-wide from Dunfermline, Dysart and Errol linens and Kirkcaldy checks,[47] etc. Some manufacturers whose quality seemed satisfactory were asked to send their linens direct to London without inspection at Edinburgh, e.g. George Young at Coupar Angus. The majority were sent from the contractors

45 Ibid.

46 Ibid.

47 Both purchasing and contracting incurred a great deal of hostility from the local linen dealers who accused the Company of pushing up prices. The Managers defended it by saying that they had offered to employ the local dealers to buy for it if they had reduced their commission from 2½%, but as they would not the Company had switched to buy linens on contract from the Arnots at Dysart, which produced linens "better than the common run of goods, and by employing the manufacturers, got the goods better and cheaper". (McCulloch to Home 25 June 1748). Over £1500 of checks and stripes were bought in the year June 1747-48, and to the dealers this represented a not insignificant loss of earnings through commission.

to Edinburgh where they were checked. The Company could and did send back badly-made linens, or discount something from the price, which was a valuable option in the early days when the standard of weaving was low. This could not be done with the finer linens where the yarn had not been sold but given-out and woven by, in effect, their employees.

Most of the linens were bought unbleached, and prior to the opening of the Company's own field at Salton[48] if the linens were bleached in Scotland, the fine were sent to Andrew Wight at Ormiston and the coarse to Alex Christie at Perth. The fine linens were beginning to make some impact at London on competitors, as one Dutch dealer complained; "the market is at present too much overstockt for the Drapers and Venders will not buy them as the Scotch are now and have for sometime been greatly employed in making a kind of linen in imitation of the clear Sluyers which I am informed will be much cheaper than those of the manufacture of Silesia".[49] But the Company's profits reflected the difficulty of getting a foothold in such a competitive market. The profits on the year's trading up to the 12th of January after deducting all charges came to only £142.

The stocks of linen, yarn and flax on hand helped to depress the financial performance. At London there were over 3000 pieces on hand awaiting sale valued at £10,817. Over 14,000 spindles of Osnaburg and 1227 of Cambric yarn lay at Leith along with 135 tons of Russian flax valued at £4,138 and 14,939 lb. of dressed Dutch flax. 23 tons of the flax was intended for Thomas Lindsay in the Orkneys when the weather permitted its shipment. This quantity of stock and materials was only to be expected in the early stages of expansion. The Managers estimated that the Company had over £44,000 employed in the trade by March 1748, as opposed to £16,745

48 Salton bleachfield - see Chapter 8. Reference to the Company's bleaching activities will be kept to a minimum here for fuller treatment there.

49 Letter of Ralph Dochsey, 4 Dec 1747, cited in C.H. Wilson, Anglo-Dutch Commerce and Finance in the eighteenth century, p. 59.

in June 1747.

1748 turned out to be a year of no more than mixed fortune when most of the Company's profits came on flax not linen. Total sales increased from £8,223 in 1747 to £29,344 in 1748, and the profits from £142 to £1156 which was well up to expectation. What prevented a larger profit was the fall-off in sales at London in the latter part of the year. £1273 of linens were sold by the warehouse between 1st July - 30 August, but the November-December sales which should have been much higher amounted to only £341. The prime cause was lack of demand from the West Indies "on account of the low price the Sugars from thence bear at your market".[50] A wide variety of fabrics was being offered; hardens at 5-6½d per yard, Osnaburgs or Edinburghs[51] at 6½-7⅜, white Perthshire linens at 7½-9, hollands "of the Company's own make at 2/6 to 8/-", etc. Sales of the Holland were poor and Child managed to sell those made in 1745-46 only by June 1748. This fabric, on which such hopes had been placed, proved such a drug that as a last resort they were consigned to Jamaica and the looms switched into making lawns, which were selling well.

The standard of middle-priced linens being made for the Company outside Edinburgh was improving, although an exact imitation of the Irish fabric had not quite been realised; "Our Irish fabric is rather too strong made and will appear rather coarser in the thread than the real Irish linen that is made more for show than real service".[52] Two sorts of Osnaburg were now being made in response to colonial demand; a well-made finer fabric of a brighter colour for the West India market, and a coarser, duller kind for

50 McCulloch to Child 18 Oct 1748.

51 Osnaburgs had been patriotically renamed Edinburghs by the Trustees. See Supra, p.29.

52 McCulloch to George Lookup at London, 15 Oct 1748.

the American Plantations. The difficulties presented by Scottish bleaching, high prices and uncertain colours, had to be overcome and to have the whole threatened by lack of sales was especially trying. "The spinning of coarse yarns for Edinburghs increases so fast in Orkney, Inverness, Ross and Cromarty that we will be obliged to check it for want of hands here to weave it up... at least until more sales are made at London".[53] The Company was caught in an awkward position as the Highland spinning was increasing and the manufacturers of Osnaburg had been bullied so hard that at last they were weaving the fabric properly, "if we stop purchasing, the manufacturers will throw up".[54]

The necessity to increase sales was paramount. The Dumfries merchants placed more orders and provided the Company with introductions to exporters at Hull and Whitehaven, to whom samples were promptly sent. Given that there seemed to be nothing to do at London but wait for trade to improve, the main hope was Glasgow. The Oswalds, who were proprietors, did their utmost, but despite letters to 40 merchants, sales remained small until the Directors authorised an extension of the normal period of credit from 9 months to 12 for such exporters "who shall order quantities to introduce a sale of some consequence"[56] in Glasgow.[55] Such a step was not possible at London: "we incline much to sell goods to Drapers - giving longer credit to the West India merchants we are persuaded would induce many more to buy at our ware-

53 McCulloch to Tod, 8 Sept 1748. In the same letter he wrote that "if the Osnaburg linens would sell readily in London, we could increase the manufacture in a most surprising manner and reduce the price".

54 McCulloch to Tod 26 July 1748.

55 The normal terms were 3-6 months to buyers in the home market, and 9 to exporters, with a substantial discount for cash payments.

56 McCulloch to Johnson 17 Nov 1747.

house, but would offend the Drapers".[57] This dilemma did not exist at Glasgow where the Company was in a much stronger position and less disposed to be tender of the Drapers selling to the exporters. It was confident that it had control of better supplies of Osnaburgs than the other drapers who got theirs from the North-east; "there are but two tolerable manufacturers beyond the Forth (and) several others whose linens we refuse (so) we are not afraid of that affecting our sales with you".[58] Competition from the foreign linens was feared much more than that from other supplies of domestic linens.

The Company had already made some allowances for encouragement's sake to one Glasgow exporter by offering to allow his bills to lie over on interest. "As the goods go for America, whence we know returns are not very punctual, in case you are straightened when the bill falls due, we will allow it to lie for some time ere demanded".[59] The formal extension took effect from October 1747 and had the desired effect on sales in Scotland, "our sales here have been pretty quick".[60] The Company took into consideration the possibility of opening a warehouse at Glasgow and in the interim offered James Johnston the job of supervising sales there on commission. The longer credit rather than his activity boosted the sales, but had the undesirable and unavoidable side-effect of tying up more of the Company's capital: it was estimated that from the order of flax to the receipt of payment for its linens, the Company was two years out of its money.

Partly in consequence, the Company did consider in April 1748 whether to give up the importation of flax on its own account and instead purchase flax in Britain, or leave the manufacturers to get their own, but the proprietors decided that it "was not advisable for the Company to quit in the least with any connections or dependencies that the makers of linen may

57 McCulloch to Michael Herries at Glasgow, 6 Oct 1748.

58 Ibid.

59 McCulloch to Corbet 5 June 1748.

60 McCulloch to Child 4 Dec 1747.

have on the Company seeing that the weavers might then be left at liberty after all the risque and charge we have had to bring them into a right fabric".[61] Fortunately, having made that decision, both the cargoes of flax from the Baltic arrived safely. Much was hoped of the St. Petersburg cargo as the flax importers had persuaded the Russian Government to appoint a Braak there as at the other Baltic ports. This was a government administered system of grading and sorting flax, and preventing various kinds of fraud such as mixing kinds of flax. But when the cargoes were examined the St. Petersburg flax was found to be much inferior to the Riga, and some was totally useless. Dealings would have been terminated with the house responsible but Allan and Shairp[62] had, however, drawn on their credit with the Company to such an extent that the Managers had little option but to accept a further cargo of flax from them. The flax was imported either to Leith for the Company's manufacturers or to the distribution ports in the North, Orkney and Cromarty, for the spinners.

While the Leadhills spinning declined, the Highland expanded, and Lindsay alone took 50 tons of Riga flax in August. While one agent, Urquhart at Orkney, gave up, other agents were recognised, at Inverness (Wm. McLean & Co.) and Cromarty (Wm. Forsyth), who took 10 and 16 tons of flax respectively. John Reid at Tayne took 26. There were two forms of relationship: either the Company supplied the flax, paid the spinners' wages and employed the agent to collect the yarn and supervise the process on commission, or the agent bought the flax and sold the yarn at agreed prices for both. Reid followed the latter method, which shifted more of the financial onus from the Company to the agent, buying his flax on 7 and 14-month bills, and selling the yarn at a price based on the value of the flax in the spindle[63] and an allowance of $9\frac{1}{2}$d for the cost of spinning and

61 Proprietors' Minute Book, April 1748.

62 Shairp's history can be followed in the Shairp of Houston MSS (S.R.O.)

63 E.g. $4\frac{3}{4}$d per lb. of flax for 7 cutt yarn to $5\frac{1}{2}$d per lb. for 18-20 cutt yarn.

supervision, which left him at liberty to fix what prices for spinning he could. He employed riders to take flax and collect yarn weekly from the spinners, who were paid on the spot. McCulloch recommended to McLean this method, which also catered for Highland susceptibility; "...you might sell the flax rough or dressed in small quantities and buy their yarn when spun which might answer people whose mistaken pride may induce them to think spinning for hire too mean a thing".[64] McLean & Co. were provided with a heckler from Edinburgh.[65]

Output began to expand, and as yarn was accumulating at Leith the Directors decided to accept no more contracts for spinning. The Managers did give their advice freely, and requested that the main agent be sent to them for instruction, whenaa similar venture was planned in the West by David Campbell of Dunoon on behalf of the Duke of Argyle. The scheme was to employ over 600 spinners, and establish the manufacture of Osnaburg in Argyleshire. Such generosity was consonant with both the patriotic aims of the Company and the Duke's office in it.

The flax that went to Leith was sold to the Company's contractors and manufacturers at Edinburgh, Dundee and Arbroath. The Managers did say, "When we mention manufacturers making their goods of flax imported by the Company, we do not mean to exclude our home growth, on the Contrary we will always give preference to cloth made of Scots flax if well wove whoever may have been the vender",[66] but there is no evidence of this admirable sentiment ever being put into effect. It was alleged by some that the Company was monopolising the supply of Osnaburg yarn, and also would only deal with manufacturers who bought their flax from it. The Company agreed "that

64 McCulloch to McLean 3 Nov 1748

65 To be paid 2/6 to 3/6 per cwt. of flax dressed depending on the fineness of the heckle; 21/- per apprentice trained and basic pay of 8^{d} per day if no work was provided, plus a free house.

66 McCulloch 5 July 1748.

ere the Edinburgh manufacture become general, yarn must be sold in the public markets...but it's natural for the Company to buy from such as take their flax from the Company".[67] The advantage of the special relationship was that it ensured the quality of the flax as well as permitting the Company to take a profit on the sale of flax.

Faults in weaving plagued McCulloch. "Nothing on our part is wanting to bring these fabrics to what you would wish but the difficulty of accomplishing this in a Country where manufactures are yet in their infancy is greater than any can imagine who has not been here to observe it".[68] McCulloch constantly sent out instruction and advice, but the difficulty of making improvements by letter led him to urge two of his contractors at Bo'ness and Dysart to move to Edinburgh, "as you would there infallibly have your yarn well purified and much greater certainty of Good hands to weave the cloth".[69] He considered standards at Edinburgh to be much higher than those in the country - "the best spinners and weavers in the Country"[70] -. Two of the Company's major manufacturers, Bell & Murray, and Wm. Sheap, were located at Edinburgh, and the expansion in the amount of linen stamped in Midlothian from 90,000 yards in 1747 to 237,000 in 1748 reflects the stimulus given by the Company's activities.

The slowness of sales confirmed McCulloch's intention to accept only well-made linens, and he exercised frequently his right to refuse any inferior, a particular advantage inherent in selling the flax to the manufacturers instead of giving-out yarn. Gellatny of Arbroath had his ill-woven and badly coloured linens returned with the advice that he should only make a little until he was thoroughly master of the fabric, and that getting

67 McCulloch to Barclay (Dundee) 22 Nov 1748.

68 McCulloch to Child 12 May 1748

69 McCulloch to Arnots (Dysart) 27 April 1748.

70 Ibid.

the quality right was an essential precondition to expansion. A fault of which he - and others - was guilty of making a few yards of the piece better than the rest and folding that good section on the outside. "We find very few pieces thoroughly answerthe outside".[71] Another and special crime was to make linens with breadths too narrow to qualify for the Bounty.

The Company continued to make some fine linens - mostly lawns and cambrics - but both this and the manufacture of coarse linen was severly handicapped by the poor quality of Scottish bleaching, "the colour of Edinburghs grows daily worse".[72] In addition the price of yarn in the West was rising,[73] and in consequence the price of Country linens had risen 5% since 1746. It was decided therefore to delay venturing in the manufacture of two new fabrics, imitation Silesia and Shirting linen until the Company's own bleachfield was ready, and more yarn from the North. Alex Adams was sent directions for making a few pieces of the latter fabric so that any faults observed could be amended before any quantity was woven up. The general dullness of trade, and the low quality of goods offered, led the Company to decline many approaches from manufacturers for contracts. Some Perth printing linen was bought in August to be sent to London for sale; the Managers intended to see if the Company could break into this trade which had long been engrossed by the Manchester and Glasgow merchants, without arousing too much jealousy.

A major consequence of the decision to continue to contract for flax was that the Company found itself straitened for cash when the Baltic bills fell due. In September, therefore, the cash credits of the Company were assigned to the Royal Bank with the Company providing corroborative security

71 McCulloch to Gellatny 19 May 1748.

72 Tod to Milton 30 Oct 1748 Saltoun MSS - letters.

73 Partly because of Irish demand, but also because Campbell's scheme in Argyleshire was occupying many spinners whose yarn otherwise would have gone to Glasgow for sale.

for the £3900 laid out in this way. The credits had caused much trouble, being too often used as a loan and not for promoting the linen manufacture. The Arnots at Dysart were warned in April that they had not been making returns in cloth equivalent to the cash withdrawn. The Company considered that its proper business was not to lend money, "it being quite out of the load of a Trading Company to lend money on interest".[74]

The Company's transport costs for flax benefited from the fall in shipping prices from the Baltic[75] and insurance rates after the news of peace in May. If possible the Company tried to make the flax deliveries direct to the larger ports in the North, but invariably an inconvenient residue had to be supplied to the smaller agents located in the less accessible places, e.g. Tain, to where the flax had to be shipped in very small boats from Cromarty. The difficulty of Northern waters meant that shipping and insurance rates from the Baltic to Cromarty were higher than those to Leith, and the lack of return cargoes except for some yarn also contributed.

Linens sent to London always went in normal times by sea, and in September a contract was signed with the Edinburgh Shipping Company "to take our linens at 2/- per barrel bulk for all fine goods in boxes and 6^{d} stg per 100 yards of coarse linens".[76] Private ships were also used as they offered. Cartage rates to Glasgow fluctuated between 14-18^{d} per cwt. depending "on retour", but except to Salton the Company were not tempted to set up their own carting service. The cost of overland carriage and then coastal shipment proved an unsurmountable obstacle to trade from Edinburgh

74 Directors' Minute Book Sept 1748

75 E.g. "During the heat of the war, ships were freighted from this place to St. Petersburg to return loaded with flax and hemp at £3 8/- per ton and to Riga at £3 2/-. We were this day offered at 5/- discount per ton from these prices but we apprehend it may be done for 10/- per ton less than in war time". McCulloch to Ralph Carr May 17, 1748.

76 McCulloch to the Edinburgh Shipping Company 17 Sept 1748.

to the English ports in the West, e.g. the cost of transport to Whitehaven added between 3-5% to the cost price of the Company linens. Moreover, linens sent via Glasgow seemed to be subject to delay and damage.

Sales to the exporters in 1749 were difficult; the spring and autumn markets were depressed by a "general stop" of trade between Britain and the West Indies, and the slowness of tobacco sales at Glasgow. John Corbet, who had bought linens from the Company, was short of cash "as are all who deal in tobacco at this time"[77] and his bills were allowed to lie over on interest. But this situation was not attractive to the Managers who enquired in January 1750 whether there was any prospect of trade reviving "with respect to the sales of tobacco to France as we would like to get in some of the money owing".[78] While exports of linen were adversely affected by the colonial trades' situation, sales at London and Edinburgh seemed to have been sustained by buoyant home demand. From January 1749 to May 1750[79], £16,794 of linens was sold at London (a quite exceptional figure even allowing for the longer period) and £9,464 at Edinburgh.

To allow for long credit the Company aimed to sell its linens at 10% above cost price, terms largely dictated by the trade. Child at London sold either to whole sale drapers or directly to the exporters: "the wholesale Drapers do not take it amiss that we sell to the exporters providing we keep to the rules of the trade by not selling less than 2000 yards at a time and not under the price at which he or any person can furnish the goods for".[80] A scheme was proposed by Tod which evoked little response, to offer the drapers deliveries of Osnaburg four times a year at

77 McCulloch to Johnston 10 Oct 1749.

78 Ibid.

79 The financial year was altered to finish in May when it was hoped that it would be easier to strike the Balance.

80 McCulloch to Dunsmore 13 April 1749.

a discount if they would take quantities. Sales of Osnaburgs were growing though they were still not as profitable as anticipated. The Managers experimented with some bleached Fife linen and diaper, "bought white whereby we are not as long in advance as in our own manufacture"[81] which were sent to London dressed "in the manner such linens go to the Scots factors".[82] The main sales of linen at London were of Edinburghs, checks and Hollands.

At Glasgow the position was very difficult. Early in 1749 the Company found the Edinburghs - its main export hope - being undercut in price by Thomas Dunsmore & Co. They were selling Osnaburgs made by Gairdner of Arbroath "with a view to beat the Company out the market".[83] McCulloch suspected the true motives of both: he thought that Dunsmore who imported large quantities of German linens wanted only to discourage competition from Scottish linens, and that Gairdner was resolved to be even with us ... for refusing what of his goods were ill-made or inferior to the pattern pieces by which we contracted".[84] Nevertheless, prices had to be cut, e.g. best Edinburghs from 7⅜ to 7½ per yard.

While the Company was urged by many of its friends to open a warehouse at Glasgow, the fear of arousing hostility from the wholesale drapers and the difficulty of finding a suitable agent deterred them until April when Robert Colquhoun was appointed jointly with James Johnston. Instead of a factor's commission of 2½%, he was offered a guaranteed income of £60 p.a. or 1% on the sales if that were larger. The response was as feared; the importers of German and Irish linens threatened to swamp the Scottish linens and a warehouse for foreign linens was opened in July "which gives us some

81 McCulloch to Child 12 Sept 1749.

82 Ibid.

83 McCulloch to Johnston 15 Feb 1749.

84 Ditto, 2 Mar 1749.

concern".[85] Hostilities opened with a skirmish of words in the newspapers. A "letter from Virginia" pointed out that foreign linens notoriously were 25% worse on the inside of the roll than the outside which was something that the Company had nearly stamped out, and an unsolicited letter from a Mr. Weir (factor for the Oswalds in Virginia), which commended Scottish linens, was inserted in October.

The Scottish Osnaburgs could hold their own with the foreign as far as the fabric was concerned but they were still inferior in colour. The middle-priced linens, from 20^{d} to 2/6^{d} per yard were undeniably "too coarse to compare"[86] with the Irish which could not be entirely concealed under the ascription of "superior in strength", and equally suffered from poor colour, which was common to fine and coarse fabric, town and country manufactured alike. The bleachers blamed the bad weather for the colour and the delay in returning the linens from the fields on high winds which prevented the laying-out of the cloth. But an encouraging amount of the fine hollands bleached that season were quickly sold to the drapers at London and elsewhere in England, Liverpool, Hull and Durham. Where the fine led, the coarser might follow, and prices were pared to establish the foothold. An alternative way to reach the English market was through the pedlars and packmen who came North to Glasgow in June to stock up with linens. The warehouse agent was warned to be alert to the prospect of making sales to them <u>on cash terms only</u>. Every effort was made to promote sales at Glasgow, e.g. when McCulloch heard that Johnston was involved in a venture to Africa, he promptly offered some shirts made up from fine linens torn at the bleachfield "which would sell to great advantage".[87] Sales at Edinburgh were firm; these sales were both to

85 McCulloch to Child 10 Jul 1749.

86 McCulloch to Child 10 Jul 1749.

87 McCulloch to Johnston 23 May 1749.

local dealers and also the the South-west, which were handled through Edinburgh rather than Glasgow, to avoid paying commission to the agent there.

The sales situation, and the uncertainty as to the renewal of the Bounty in the early part of the year, resulted in the Company rigorously rejecting all unsatisfactory linens from the manufacturers outside Edinburgh and limiting production from the two Edinburgh manufacturers. Both manufactured about 25 pieces a week and they were instructed not to exceed this between 20 February and 20th May. The Dundee and Arbroath manufacturers of Osnaburg were fully instructed as to the defects in their linens piece by piece ("bad made", "ill-wove", "ill-coloured", "poor yarn") and they were told to forbid their weavers to better the linen which put a glaze on the cloth and concealed uneven weaving - "it is not advantageous to the linen and is at best but putting a cheat on the buyer".[88]

The manufacturers did not mend their ways and the Company had to take firmer measures in March. "As there is yet no resolutions of the manufacturers here have been kept as to their mending their colours and fabric of Osnabriggs I have just now intimated to all that I am to receive in no goods that are not of the best kind and any inferior ones to be taken only in the proportion of two low priced for twenty good ones".[89] The easy treatment given in the early stages of the manufacture "has just encouraged the manufacturers to continue making bad goods which hurts the credit of the Company and Country alike".[90] When this policy was put into effect a storm of protest went up, "complaining of ill-usage and ungenerous dealings on the part of the Company having refused giving cash for goods",[91] and blaming the

88 McCulloch to Gellatny 16 March 1749.

89 McCulloch to Tod at London, 17 Mar 1749.

90 Ibid.

91 McCulloch to Barclay (Dundee), 16 Mar 1749.

Company's flax, with which the Managers had not been pleased, for the bad colour of the linens when bleached. This new tough policy led the Managers to go further than just to reject inferior linens (instead of taking them even at a lower price). They threatened to have the stamp-master who had stamped the Arbroath linens reported for negligence, a threat which they carried out on another occasion when they had him "broke". This had a salutary effect, and after a satisfactory delivery of Osnaburgs in November by the firm of Barclay, Lamb & Co., a further order was placed with them. They took £300 worth of flax and yarn for which payment was offset against the value of the linens received: "our method is to give half the value of the parcel received and keep the rest in credit till the next parcel of linens is sent".[92]

But even when the Osnaburgs were well-made, it was disturbingly apparent that there was little profit to be had on the sale unless the price could be lowered. Hence the Company became involved in a scheme conceived by Milton and Drummond to lower the price of Osnaburg yarn. Some Osnaburg manufacturers had petitioned the Trustees "that unless the price of Edinburghs is considerably lowered, and that immediately, they will all be cut out by the foreign linen of that fabric".[93] They proposed that the price paid for spinning be lowered by 2^{d} per spindle as the spinners were "earning above 20% more by spinning Edinburgh yarn than by spinning yarn for other linens",[94] which would reduce the price per yard by $\frac{1}{2}$^{d}. The manufacturers would agree only to pay the lower price for the yarn, but the question remained of what to do about the stocks of yarn on hand which would be needed immediately at the lower price while the spinners might take a while to accept the lower wage for spinning.

92 McCulloch to Barclay, Lamb & Co., 30 Nov 1749. This firm was a recent amalgamation.

93 B.O.T.M. 21 July 1749.

94 Ibid.

The Trustees agreed to subsidise the scheme by providing a premium of 2^d per spindle to be paid on all yarn lodged in a special warehouse at Leith which would then sell it at the lower price. Before receiving any premium or yarn from the warehouse, the manufacturer had to subscribe to an agreement to lower the price he paid for spinning thereafter. The yarn could be lodged at either Edinburgh till the 10th September for Southern-spun yarn or at Aberdeen till the 10th November for Highland yarn, or alternatively a certificate duly witnessed could be forwarded that the yarn was in stock. This represented a deliberate attempt to depress the earnings of spinners in the interests of the manufacturers, although if this enabled the fabric to get established, both would benefit. When the accounts were added up, 60,982 spindles had been lodged or certified on which the Trustees paid £508. Virtually all of the 16 manufacturers who lodged Osnaburg yarn were associated with the British Linen Company, which underlines how intimately it was associated with that fabric.[95] The Company itself lodged 12,295 spindles, Bell & Murray 11,960 and Cheap 13,500; the Northern agents were obliged to certify some, e.g. Reid of Tayne (3260 spindles) and Forsyth at Cromarty (1,205).

The Company's spinning agents were not happy with the scheme as they feared that the reduction would cause some spinners to give up, but they were overruled because the Company wanted cheaper yarn, and was prepared for a fall in the short-run in production, as this would prevent the threatened accumulation of yarn at Leith. The agents were informed in August of the reduction and that the Company would now offer $7\frac{1}{2}^d$ for the price of spinning, per spindle, 6^d of which was for the spinner's wage and $1\frac{1}{2}^d$ for the agent in commission. The agents protested strongly and Lindsay earned himself

95 For a full list see B.O.T.M. 13 Dec 1749. The only real exception was Sir Wm. Dalrymple who certified 4,733 spindles for his manufactury at Cranston. One or two of the others had had only irregular dealings with the Company.

a sharp rebuke; "the spinners can well afford the reduction - your obstinacy is allowing the spinners to run away with extraordinary profits",[96] and he was reminded of the £1281 owed by him and Ross for flax. The Company did agree to allow 8d per spindle, "the highest the Trade or agreement with the Trustees will allow of".[97] The smaller agents fell into line after this, with less trouble; Anderson at Wick was rather rudely told, when he protested that the reduction would decrease his spinning, "Your difference is not great when the quantity of flax sent you could be spun up by 16-20 spinners in a year".[98] The Managers insisted that the spinners were not being harshly treated; "We are certain the spinners will have good bread at the prices proposed".[99] Within 2-3 years prices had crept back up, which suggests that the manoeuvre at best provided only a short breathing space for the Osnaburg manufacturers at the Trustees' expense.

This did not affect the Company's arrangement with Alexander Shaw at Elgin. He had suggested in February that the Company establish some coarse spinning in his area. The Managers had enough coarse and Osnaburg yarn and the current need of the Company was for waft yarns for the Company's looms and those of its contractors. Prices were high in the West - "the Irish are the cause of enhancing the yarn prices"[100] - and yarn bought by Scott & Forsyth at Huntly had been poor in quality. Shaw was engaged to establish the spinning of waft and fine yarn at 10d per spindle, including 1½d of commission as the price of spinning. The spinners took time to recruit and train, and further purchases had to be made at Huntly. It was,

96 McCulloch to Lindsay, 28 Sept, 1749.

97 " " Forsyth, 4 Sept, 1749.

98 " " Anderson, 23 Sept, 1749.

99 " " Barclay, 19 Sept, 1749.

100 " " Rennie, 9 Nov, 1749.

nevertheless, significant that the Company intended to supply itself with all kinds of yarn from the North to take advantage of the lower wages for spinning in the North, about 2^{d} per spindle as against the Lowlands, which was more than sufficient to offset the cost of transport on the scale on which it was operating. During the year all the contractors were placed on the same basis, that they took the flax on their own account and sent the yarn to Leith, the price of the flax and the price of spinning being fixed and the commission guaranteed which stabilised prices and profits. One of the agents, Wm. Forsyth of Cromarty, wanted to launch out in weaving as well, from which he was dissuaded by the Managers pointing out how great their difficulties had been in the East of Scotland where they had at least been a long-established tradition of weaving.

The flax contracts caused deep thought as the Company found to its dismay that it was being undersold by English merchants getting rid of large stocks of the previous year's crop which obliged the Managers to discount 2½% off the flax's price to the agents. "The bad success in our importation has in some measure staggered our resolutions as to this year's orders from abroad",[101] but 80 tons were ordered from Mudie in the Spring of 1749 and 50-60 tons from Allan & Shairp to extinguish the debt they owed to the Company by having over-drawn on the credit provided in Holland for flax. For Dutch flax, two houses were used, Craufurd and Lionel Allan & Sons at Rotterdam.

The correspondence with Mudie was much hindered by his illness, but the flax received from him during August at Leith and Orkney was good in quality. In the same month the Company came under fire from some other dealers in flax who alleged that the Company was aiming at a monopoly of the importation of Baltic flax, to which it replied that it did not import any appreciable proportion of the total brought into Scotland and that its main objective was to stabilise the price of flax for its agents and manufacturers.

101 McCulloch to Mudie 18 Mar 1749.

In the autumn the demand was for the lowest-priced linens, and checks and diapers also sold well. The checks were bought at Kirkcaldy where in August an order for 12,000 yards of undressed checks was supplied by McGill and Whyte, which yielded sufficient profit for the Managers to place several more orders. The manufacture of checks was a staple at Kirkcaldy and so production could be increased without the sort of stresses attendant on the Osnaburg fabric. Acting on advice from London, the production of other kinds of low-priced linens was also pushed. The shirting linen scheme postponed from the previous year was launched in December 1749 by the Company advertising that it would contract for quantities to be delivered over the next eight months. Directions were provided to some Stirling and Kirriemuir manufacturers for them to make a few trial pieces.

With the Company's bleachfield in operation, the Managers promised all the manufacturers of linens intended for bleaching that the price paid them would be raised if 94-95 out of every 100 pieces proved good after they were bleached, which was intended to encourage them to use well-spun yarn from good flax. The overall pattern of buying and manufacturing, reflecting the Company's desire to break into the export market was to select the best linens for that market and sell the inferior at home. Patrick Craufurd of Errol, who had a small factory for coarse linens, was told that, "Your Edinburghs excite no extraordinary demand yet are gaining a reputation abroad",[102] and was offered 6½d per yard for them on condition that he picked out the worst and sold them at Perth, "where they are not so nice".[103]

An important by-product of the Osnaburg yarn scheme was the establishing of the Edinburgh Yarn Staplery. The Trustees had been devoting attention to the provision of sorted yarn at reasonable prices to the poorer weavers, and during the Osnaburg manipulation a meeting was held with David Doig, who

102 McCulloch to Patrick Craufurd 30 Oct 1749.

103 Ibid.

was in charge of the Yarn warehouse, to discuss the erection of a Yarn Staplery to buy, sort and clean yarn. This yarn was then to be sold to any weaver and the Trustees hoped that the small weaver as well as the manufacturer would be benefited by this store of good yarn, carefully sorted at reasonable prices. The Edinburgh Yarn Staplery was formally constituted on the 1st of January, 1750 with a capital stock of £6000, of which the Company provided 5/6ths and Doig the remainder. He was to receive £80 p.a. as Manager and 5% of the free profits. The Trustees for their part provided an annual grant of £225 (later cut to £150).

The Company kept the supply of flax and the Highland contracts in its own hands but handed over to the Staplery the business of receiving and examining the yarn from the North on arrival at Leith, and also the business of sorting, grading and selling the yarn. Doig also established a supply of yarn from the Lowlands with a network of agents to give out Dutch flax and receive in yarn, e.g. at Ratho and Falkirk. These finer yarns were returned on a weekly basis and the network was gradually extended from the Edinburgh region to the Borders, e.g. Melrose and Lauder. Some coarse yarn was spun locally to avoid complete dependence on Northern supplies. Flax was dressed at Leith by the Staplery and a yarn-boiler engaged at Bonniemills to clean the yarn. A small factory was set up in the Canongate to experiment with new fabrics.[104]

The initial success of the Company was encouraging. Yarn was sold in varying quantities to small weavers and large manufacturers alike, e.g. in February 1750, 849 spindles were sold to 32 buyers, who took between 9-170 spindles. The purchases of Osnaburg yarn tended significantly to be larger and concentrated in the hands of a few buyers from as far as Dundee. It was alleged to the Trustees in January 1751 that, "Doig either refused to

104 In 1754-55 the factory used 12,630 spindles of yarn and made 514 pieces.
" 1755-56 " " " 7,252 " " " " " 309 "

sell yarn to anyone but the weavers who wrought for the British Linen Company and if he did sell yarn to others he gave them bad or higher priced",[105] but on investigation this was found to be without foundation in fact.

The volume of the Staplery's business in yarn grew throughout the 1750s despite the effect of the depression of 1754-56, which caused the Staplery great difficulty just when it seemed to have overcome the initial handicap of a load of badly spun Highland yarn acquired in the early days of the Northern spinning. It continued to operate until 1760 when it was would up after the withdrawal of the Trustees' grant and departure of Doig. Disputes with Doig as to the amount of capital which he had actually subscribed (settled at £890) delayed the final closure of the accounts until 1766, when it was found that after paying back the capital there remained a profit of £4,704. While the Staplery was not an autonomous subsidiary of the British Linen Company, it did deal with a wide range of manufacturers and weavers, many of whom were not working for the Company (see Appendix to this chapter) and had some freedom of manoeuvre.

Table 5.3

Sales of Sorted Yarn by the Staplery

	Edin. Yarn		Linen Yarn		Total		P/Loss
	sp	£	sp	£	sp	£	
1750 Jan-Dec	27,158	4,157	23,887	3,083	51,045	7,240	+ 386
1751 "	34,509	5,435	32,031	x	66,540	x	
1752 "	39,521	6,008	35,332	4,776	74,853	10,784	
1753 Jan-Oct 31 x	x	x	x	x	70,675	10,391	
1754 " x	x	x	x	x	60,706	8,369	
1755 " x	x	x	x	x	67,702	8,559	
1754-55 May-May	43,574	4,487	25,814	3,022	69,388	7,519	- 137
1755-56 "	49,013	6,857	26,635	2,921	75,648	9,780	- 235
1756-57 "	52,683	7,524	32,860	3,728	85,543	11,252	- 75

x Figures missing

Sources Sundry accounts presented to the Trustees, and for the years 1753-55 the Account Books of the Yarn Staplery in the archives of the British Linen Bank.

105 B.O.T.M. 23 Jan 1751.

Conclusion

The progenitor of the British Linen Company was the Edinburgh Linen Company for which a Charter was sought only because of the inability to attract sufficient capital without limited liability for the shareholders. The size of the capital raised was reflection of the declared objectives of the Company, to give employment to the poor of Scotland and to break into the export market with Scottish linen. The Bounty provided much of the stimulus and basis for hope, and though the Company was involved in the manufacture of both coarse and fine linens, its most important contribution was in the development of the Osnaburg fabric which was almost entirely attributable to the Company's instructions and orders. This fabric was to prove the export staple of the Scottish Linen Industry.

This development necessitated a long struggle with low weaving skills, poor equipment and quality, and on the sales side much effort to establish a foothold in the highly competitive export markets at London and Glasgow. Only a Company with the resources and capital of the British Linen Company could have sustained its drive. Most of the integration of the Company stemmed from the desire to improve the quality of its linens, which could only be done in these early days by close supervision. The use of imported flax, instead of Scots, was necessitated by the need to improve the quality of the yarn used for weaving, and to further this end the Company found itself forced to directly supervise all the spinning and yarn preparation processes as well. The reliance on imported flax had considerable locational significance for the Company's ambit of activity; flax was "25/- to 35/- a ton cheaper in the East than in the West"[106] which reinforced the tendency of the Company to have its manufacturing and spinning in the East.

The spinning in the North established by the Company was another step of major consequence to the industry. The aim was to exploit the pool of

106 Tod to William Duff at Ayr, 1750.

cheaper labour in the North and North-east to bring into existence a whole new source of yarn supplies for the Lowland manufacture. Without this, the expansion of the manufacture might have been restricted, although there is no way of knowing what percentage of total Scottish yarn production this constituted. It certainly provided employment and income for several thousand spinners.

A prime objective on the manufacturing side was to raise the standard of weaving in the Country. The Company did have factories at Leith and the Canongate to produce superior cloth under supervision, but these were meant only to be an interim measure until the weavers in the coarse fabrics could be instructed. Attention was, therefore, devoted to the master-weavers and manufacturers in the Country, to urge them to instruct their weavers in factories under supervision but to allow them to work at home thereafter. Experience was inducing a split between the Managers on this point: McCulloch whose particular responsibility was the weaving side, was being convinced that only weavers working under supervision in a factory would keep up a reasonable standard of weaving, whereas country and house weavers could or would not. But this brought linens to the market just that bit higher in price, and Tod, whose responsibility marketing became, was aware that in the sector of coarse linens lower price was more attractive to the exporter than a better-made but more expensive fabric. This was to be a bone of contention in the next few years.

Involved as the Company was in flax importation, spinning and weaving, bleaching and marketing, its major and recurring problem was shortage of cash. This was most acute when the Baltic bills for flax fell due, and the Company had to try to keep down the amount of its capital tied up in raw materials and stock. Slow sales, or lagging payments could seriously embarrass the Company. If trade was dull for the tobacco or sugar importer, the Company

suffered through fewer orders and prolonged payments, and its fortunes were closely tied in the export market to theirs. The tobacco and sugar trades were not enclaves in the economy as far as the Company in particular and the Linen Industry in general were concerned.

Appendix: General account of the sales of yarn made by David Doig and Co. from 1 Nov 1754 - 1 Nov 1755 distinguishing the different counties in which, and the names of some of the Most considerable manufacturers to whom the same were made; As also the several fabrics into which the yarns were chiefly wrought up.

	Sps	Value (£)[x]
Midlothian		
To Wm. Cheap, Deacon Fairly, Neil McVicar, Beatson and Co., etc, all the piccardy, and almost all the private weavers - for linens, lawns, sheetings, diapers, damask, checks, white thread stockins etc.	3779	496
Shires of Lanark and Renfrew		
To Thos John, Stewart and Millar, Robt Barbour (Paisley), James McNair, Hart Smith and Nisbet, Orr and Young, John Davidson etc... - for linens stript and flowered lawns of all sorts...	10939	1209
East Lothian		
To David Aitken, Wm Cockburn, John Paul, James Niven, Robt Robertson, Thos Oman, Gilbert Handyside, Wm Hogg - for various kinds of coarse linens.	6856	969
Linkton of Kirkcaldy, Arnot, Pathhead		
To Provost Whyte, Baillie McGill, Thos Junor, James Beveridge, John Fergus, John Robertson, James Murray, Peter Speedie, Peter Balfour, David Pringle, James Pringle, James Duncan, John Gilmore, Andrew Kidd, James Pringle etc - for Linens, checks, tykings, napkins, stript hollands, coarse linens etc.	17201	2127
Fifeshire		
To Thos Hume, James Hume, David Tod, John Watson, Harry Scott, Wm Borthlet, John Inness, Andrew Hutchison, John Christie - for linens, check, tykings, stript hollands.	7225	822
Dundee		
To Duncan and Moodie, William Walker, James Craufurd, Robt Leighton, Alex Craufurd, etc - for various kinds of coarse linens.	15510	2154

	Sps	Value (£)[x]
Arbroath		
To Thos Arnot, for various kinds of coarse linens.	4002	584
Dunfermline		
To David Campbell, John Robertson, John Wilson, William Stobie etc - for linens, diaper and tweelings.	1755	197
(N.B.) The demands from Dunfermline were not so considerable in the last year as in the preceeding, nor as they purpose to make them for this ensuing year.		
	67,267	£8559

David Doig and Co.

Dec 16 1755

x rounded to the nearest £

Note: This Account was presented to the Trustees; beautifully drawn, the original or a copy is in Saltoun MSS (N.L.S.) box 350, "The British Linen Company".

Chapter Six: Expansion, Contraction and Recovery: 1750-57

"One of the principal advantages to this country from the British Linen Company...was their establishing a warehouse at Edinburgh...for Export merchants which proved most beneficial to the Company in supporting it against a very hurtfull trade with London, the bankruptcy of, and losses sustained by the weavers on withdrawing the bounty anno 1754 and a still more hurtfull affair in its consequence - the Company's engagement with the Yarn Staplery..."

Draft prepared to present to the B.L. Court
by George Drummond c. 1763-64.
(Abercairney MSS)

The British Linen Company seemed in 1750 to have surmounted its initial difficulties with some success, and to be set fair for development. Events for the next three years justified this hope until the withdrawal of the Bounty on exported linens rendered the export market virtually dead during 1755, a situation further complicated by an influx of foreign linens and the outbreak of war. The effects of the depression were particularly felt by the Company because of its orientation towards the export sector, and when demand did revive and the Bounty was restored in 1756, it was not easy to restore production to the level it had been prior to 1753. On the marketing side, the problem of securing payment for the sales made became overshadowed by the question of providing just the right kind of linen in demand at the markets and, if possible, anticipating the nature of demand. Whereas the need had formerly been to improve the quality of the linens manufactured, it was argued by some within the Company that the key objective was to produce cheaply, even if this meant some lowering in standards. This had implications for the method of production: viz., whether the Company should rely on the supposedly improved and certainly cheaper weaving of the country and cease to use factories in which production was supervised.

Given the complexity and burden of the Company's management, it was fortunate for the Managers that much of the day to day yarn business had been hived off to Doig's care in the Staplery: from the beginning of its operations in 1750 he immediately had his hands full with a dispute between two of the Highland agents over the alleged poaching of spinners and a general revolt over the price paid for spinning. The agents were adamant that the Trustees' scheme would force wages too low, and put pressure on the Company by refusing to order flax from it in any quantity. The Managers were anxious to have the master-spinners place one large order annually which

could be imported direct from the Baltic[1] instead of small monthly orders which had to be supplied from Dundee or Leith. Doig had to travel North in person to talk to the agents, and, en route, to purchase some cheap brown linens at Arbroath and Dundee, and give out patterns to any capable weavers to be found. His prime role, however, was to persuade the agents to place their orders for Baltic flax, and he was allowed latitude to raise the price of spinning. "You must raise the premium offered to the master-spinners otherwise we are sure you will have little spun and if you are thrown on the common market your yarn will be both dear and bad".[2] Thomas Lindsay, a very independent agent who had been opposed to the scheme from the start on the grounds that it could not be enforced without losing him spinners, was allowed in April to raise his price to the spinner to 7^{d} per spindle rather than lose his hands, and a general settlement followed on the same line, with each agent being allowed $1\frac{1}{2}^{d}$ per spindle commission. Higher rates were given on the finer yarn; e.g. John Reid at Tayne was offered 11^{d} per spindle for the price of spinning and commission.

1 The Baltic flax imported for the Highland spinning was consigned direct to two ports in the North for distribution, Kirkwall and Cromarty. The latter was used as the main centre in the North-East from whence the agents at Wick and Tayne were supplied.
Over the period 1750-60 the following amounts were imported.

Year ending 30 May	Tons	Year ending 30 May	Tons
1751	72	1757	131
1752	210	1758	137
1753	169	1759	72
1754	106	1760	140
1755	107	1761	126
1756	200		

The wide fluctuations were less because of factors on the demand side then those on the supply side, e.g. the capture of shipping, etc. The average importation over the decade, $134\frac{1}{2}$ tons p.a., probably reflects fairly accurately the annual consumption of the B.L.'s Highland spinning.

2 McCulloch to Doig 10 March 1750.

Rising yarn prices in the Lowlands reinforced the Company's desire to have its yarn from its own agents in the Highlands. Demand from Ireland and Manchester in the spring pushed up the price of the finer yarns and this increased the costs of production by 5-8%. Doig did attempt to lower the price of the Company's Lowland yarn by dealing direct with spinners in the villages instead of dealers, but in the long run, as the Managers intended to have all its linens made from yarn of its own spinning, an expended supply "without heightening the price of yarn"[3] was only feasible in the North, and both fine and warp yarn, as well as coarse could be spun there. MacKenzie of Coul contracted to spin up 20 tons of flax into finer and warp yarns at a suitably higher rate. Doig was confident that the estimated 2,800 spinners at work in the North for the Company could be increased quickly: Lindsay promised to raise 2-3,000 spinners in the Orkneys alone, providing each had a wheel and reel given them, and other agents were equally optimistic. The Trustees, sensitive to the benefits of industry in these parts, were induced to make grants for this purpose in November. The spinning in the North was handicapped by the costs of sending flax and receiving yarn, and the Company absolutely refused to deal with the North-West because of transport costs, recommending one Hector McLean of Skye to Provost Cochrane of Glasgow on the grounds that "carriage prevents our employing him...(and) it would be much more benefit to your city of Glasgow to establish a colony of spinners in that country".[4] One unfortunate by-product of the raising of the price of spinning was competition amongst the agents at Cromarty for the same spinners, which raised the price of spinning, out into their profits and weakened their capacity to pay for flax. Although the Company resolved for future reference to appoint only one agent in any given area, it refused to adjudicate from Edinburgh in the dispute, and appealed to the agents to

3 Tod to Child April 28 1750.

4 McCulloch to Cochrane 21 April 1750.

be reconciled; "We cannot see what these gents will gain".[5]

Supplying the flax finally ordered by the agents for the Highlands was not without incident. The Company had intended to import about 100 tons direct from the Baltic but one of its ships from St. Petersburg with 90 tons for the Orkneys was stranded near Cronstadt in August, and, while the cargo was insured, the Company were unable to collect a substitute cargo from Danzig, and another ship had to be diverted from Riga to provide flax for Orkney and Cromarty. This flax was more expensive and created difficulties with the agents as the price had to be raised. In addition, there was not enough to satisfy the contracts and so a proportional distribution had to be made. The irony was that the Company had had a surplus of flac on hand in March at both Leith and Kirkwall which had been sold off to Liverpool. About 30 tons of Dutch flax had been bought early in the year, which was fortunate as prices rose sharply later, and proved very satisfactory in quality.

The Baltic purchases were dogged by trouble. The Directors had, after much thought, divided their orders between several ports and factors: 90 tons from St. Petersburg, 120 tons from Riga and 60 from Danzig, and some on trial from David Barclay at Konigsberg. Because the Company had 130 tons on hand in Scotland, and the factors advised that prices would fall, the orders for flax for the Highland spinning and the Lowland manufacturing[6] were delayed until May, when the state of the Baltic and home crops and the probable size of demand from the linen and sailcloth manufacturers were known. The lateness of the orders left little room for manoeuvre and an additional order placed on learning that the price of flax had fallen at St. Petersburg could not be met. Nor could Carr, who handled most of

5 McCulloch to Gilbert Barclay 22 Nov 1750.

6 Bell & Murray at Leith and the Kinnears at Dundee took between 5-10 tons each some months - for example.

the Company's shipping arrangements, provide another ship[7] to fetch flax after Cuff's was stranded. None of the Company's flax on this ship was salvaged though some of the Leith Roperie's was. As this flax had been at the bottom of the hold, its recovery gave rise to some suspicion.

Whereas the flax from Danzig was expensive but good, the Company found that it had been ill-served by its Riga factor as flax-dealers at Dundee and Arbroath obtained better flax from the same place. The Managers switched their orders from Messrs. Cornwall, Greathed & Co. to the son of their former factor who had gone out to Riga in the summer to take over his deceased father's house. Thomas Mudie[8], therefore, received the first of the firm orders for flax that the Managers placed in the late autumn, for 80 tons of flax and also 50 of lintseed,[9] to be shipped the next spring. In addition to this, other orders were placed elsewhere in the Baltic to ensure that the Company did not have - to employ a rather incongruous metaphor - too many eggs in the one basket. 80 tons from Riga, 120 from St. Petersburg, 30 from Danzig were ordered, and also 25 tons of Dutch flax each from Craufurd and Allan. The significance of the timing was that the Directors had decided to place their orders in advance rather than wait for information from the factors. The Company

7 The outward cargo for the flax ships might be coal; "masters generally take out coals to one or other of the Danish or Swedish lighthouses," (McCulloch to Carr 8 May 1750). The ships could otherwise try for a cargo at the Dutch ports for the Baltic. Shipping charges for flax to the North were raised both by the difficulties of navigation and of getting a return cargo once the ship was unloaded at (say) Cromarty. By the terms of the charter party, the Company was obliged to pay the masters for the days spent loading and offloading the flax, usually to a maximum of 30 and 10 work days respectively.

8 Trained and educated by the London bankers Messrs. Campbell & Bruce.

9 The Company was at this time probing to see whether a profitable trade in importing good lintseed to Scotland was possible. The Managers were also negotiating for some seed from Philadelphia.

was too far distant, and communications too imperfect, for the Directors to avoid the necessity of trusting to the judgement of the men on the spot. The factors were entreated, therefore, to send only the best flax as it was to be used by the Company itself.

On the manufacturing side, the Company was starting its own manufacture of certain established fabrics such as diaper and hagabag[10] at Dunfermline. McCulloch's intention was to raise the quality of this staple by careful supervision of the weavers and engaged a young manufacturer, David Campbell, to settle there in July. Campbell at first bought some diapers made on commission, but was also supplied with yarn to be given out to reliable weavers: "the goodness of your yarn will attract the best weavers to make cloth for London"[11]. The Company undertook to purchase all linens that were well-made, and pay him commission on each piece. A manufacturer called Johnston had been engaged in March to perform a similar function at Pathhead of Kirkcaldy with regard to the making of sheeting and other linen. He was sent yarn sorted at the Staplery and instructed that "it will be necessary that you visit these weavers pretty frequently to whome you shall give out yarn to be wove and examine their utensils: the most effectual check is to assure them that unless the piece is thoroughly well-made, you are resolved to make them pay for the yarn".[12] An identical scheme was intended for checks, but Thomas Junor of Cromarty who was to settle at Kirkcaldy was delayed in the North, and instead the Company had to purchase checks from a local manufacturer John Rymer. The advantage hoped from this kind of scheme derived from the better quality of sorted yarn supplied and the supervision given, and the improvement in

10 Diaper was a medium-weight linen fabric with a simple pattern, and hagabag was diaper cut into pieces for table-cloths and napkins.

11 McCulloch to Campbell 27 Oct 1750.

12 McCulloch to Johnston 26 Mar 1750.

the standard of weaving when the weavers were able to concentrate on the one fabric. But any such progress was delayed as usual by "the weavers having mostly all betaken themselves to reaping their harvest",[13] a practice common in the country areas and shared by many of the town weavers during August.

Some parcels of linen were still bought on commission, e.g. Fife linen in June at Ceres, coarse linen at Brechin where the agent was told to watch that the linens were not bleached with lime, ticks and other linens from Strathmiglo, Crieff, Alloa and Irvine. A fundamental step was taken in July when the Company began to supply its agents with its own notes, designed to circulate like those of the banks. "We doubt not their currency in all respects be equal to the bank notes as the security is so good",[14] and the Commissioners of Excise were persuaded to accept them in payment. Initially the Company sent its agents a mixture of its own and Royal Bank notes, but soon only the former. Most of the parcels bought in this way were either to test demand at London or to provide an assortment for the Exporters at the warehouses which enabled them to make up all their cargo from the one place.[15] By November, the Company was able to offer Edinburghs at $6\frac{3}{4}$-$7\frac{1}{2}$d per yarn, and a finer kind ("Ticklenburgs") at $7\frac{1}{2}$-8d; checks, ticks, Hollands, tweels, diaper, table-cloth, white linens in imitation of Garlix and a variety of sheetings. The demands of the export

13 McCulloch to Campbell 13 Sept 1750.

14 McCulloch to Walker (Strathmiglo) 21 Jul 1750.

15 "At Glasgow there was a shortage of such big warehousemen as at London to the evident embarrassment of the trade. An ordinary merchant about 1760 might have to deal with a dozen linen drapers or small warehousemen simply to buy the several varieties of linen he needed for a single shipment to a single store". Jacob M. Price, "Capital & Credit in the British Chesapeake Trade 1750-1775", p. 31 Proceedings of the 27th Conference in Early American History, ed. V.B. Platt and D.C. Skaggs.

markets induced variations in colour and quality in the fabrics: i.e. Jamaica buyers wanted a full thread and a strong fabric for their Edinburghs, and the Virginia merchants a cream-coloured instead of a white fabric. Richard Oswalk recommended that some finer Osnaburgs be made for the planters and white men as well as the normal coarse kind for "slaves, sailors and small sails".[16] Some Edinburghs were sold at London for dyeing.

At the Balance on May 19, 1750, sales at Glasgow proved to have been smaller than the previous year despite the warehouse, and those at London were still disappointing, and, moreover, it was owed £4,171 and £6,440 respectively at these places, which was not easy to get in. "We are sensible all Gentlemen in the Virginia Trade have met this year with disappointments in the sale of goods which has affected this Company's payments".[17] The Company was willing to allow some of its friends' bills to lie over on interest for two or three months, but it refused to offer credit in general or to accept lieu of cash even at a discount linen debentures which were several months behind in payment. The more important merchants were in a strong position to protract payments (e.g. Johnston was told to remind William Bogle tactfully that a bill of his was four months overdue) or to demand that the Company take London bills which were at a discount of 1-1½%. Long credit, and the costs of carting, chipped away the profits at Glasgow, and, to cope with the liquidity crisis, in June the Company had to borrow £2,000 @ 3% from the Trustees.

The quality of the finer linens offered was so far improved that the Company confidently promised to refund the price and pay £5 stg. damages if any piece made by it were found insufficient by the buyer. Prejudice in favour of Irish linens was blamed for the failure to break into the Glasgow market with these finer linens: "we have sold thousands of pounds

16 McCulloch to Mudie (Dundee) 27 Oct 1750.

17 McCulloch to Ferguson (Dumfries) 24 March 1750.

of linen above 2/6^{d} per yard to London or Country linen drapers with no complaint as to fabric or colour".[18] The friendship of a few could make a great difference in helping to spread the Company's linens and reputation. Ralph Carr proved his friendship by ordering £508 worth of checks and Edinburghs in March, and, although that consignment was damaged in transit, several other parcels during the year.[19] When McCulloch travelled to the North and West of England in June to introduce the Company's linens, he started by visiting Carr at Newcastle, who introduced him and his samples to Drapers at Newcastle.

McCulloch also went to Darlington, Hull, Wakefield, York, Liverpool, Leeds and Whitehaven, and did secure some orders for Osnaburgs and Hollands. Great hopes were placed on the orders from Liverpool for Osnaburgs, which were supplied from Edinburgh, but the carriage costs were high and Port Glasgow a bottleneck for shipments. To help increase sales, some linens were sold direct to merchants in the Plantations (upon sufficient security) and the opinion of all was sought as to the quality of the Company's linens. Most of the Company's linens sold well, and a Dublin draper took 100 pieces of striped lawns, but there were exceptions. Some Fife linens sold in December at London at only a 5% markup on cost price, which, considering that the Company had paid cash for them and Child had sold them on 12 months credit, was not an adequate return and they could have been sold in Edinburgh on only 6 months credit. But the verdict of London was the decisive one for the Company: if a fabric aroused or met demand, the Company was prepared to respond - if not, to drop it, hence the strategy of only buying linens on speculation initially. If they sold well, or looked to have a market if improved, contracts were placed with manufacturers for

18 McCulloch to Colquhoun 20 Mar 1750.

19 For an account of Carr's subsequent attempts to sell them see an article by William I Roberts III "Ralph Carr: A Newcastle Merchant and the American Trade" Business History Review 1968 pp. 271-287.

further supplies. Thus Campbell was asked to make towelling with the bird's eye pattern much in demand at London, but to delay launching out in tweel until information had been received from London as to their saleability. Thomas Mudie at Dundee was instructed to switch his looms from makingyard-wide linen, of which sales had been poor, to 7/8 wide, and Sandieman at Perth was asked to make a trial 5-6000 yards "after the Silesia manner". This fluidity and degree of response to the markets must have played a major part, along with the upturn in trade, in the marked increase of sales in the New Year at London.

Table 6.1

Sales at London 1750-51

1750	Pieces	£	1751	Pieces	£
Jan 1 - Mar 31	788	1,791	Jan 1 - Mar 31	1,440	3,118
Apr 1 - May 15	?	1,078	Apr 1 - May 15	574	1,261
May 15 - Aug 30	944	1,891			
Aug 31 - Sep 30	857	1,273			
Oct 1 - Dec 31	517	1,125			

Sales from Jan 1st - May 15th, 1751 totalled £4,379 as against £2,869 for the same period the previous year. This was led by a revival in exports, "apparently the Jamaicans have found a way to the Spanish coast which is the occasion of demand here and at London",[20] and sales were also so brisk at Glasgow that enough carts could not be obtained to carry across the bales. During the early months of 1751 another pressure existed in that Parliament was debating whether to withdraw the Bounty or cut the Drawback which necessitated pushing sales as much as possible. Competition from foreign linens in the export markets was already stiff; the Glasgow warehouse was warned in February that, "Messrs Coats & Co have a fresh cargo of German linens for your market by way of Leith sometime next month".[21]

20 McCulloch to Milton 9 April 1751 Saltoun MSS.

21 McCulloch to Colquhoun 2 Feb 1751.

At the Balance in May 1751, sales of linen were well up to just under £14,000 worth of fine (bleached) linens, and £13,000 of coarse, at all the markets.

Table 6.2
Sales 1750-51 (£)

	London	P/L	Glasgow	P/L	Edinburgh	P/L
May 1749-50	5,286	+84	3,657	+67	14,050	+2,340
1750/51	8,936	+ 1	5,264	+198	15,115	+2,440

P/L = profit/loss

But while sales had increased, profits had not, and the performance at London received a sharp rebuke, "We were much surprised to find a loss... instead of some hundred pounds of proft that might have been expected on the sales made by you".[22] What also depressed the results was that some of the "bad" debts from which no payment was likely were finally written off.

Grumbling against the Company's importation of flax continued on the grounds of attempted monopoly, but how far short the Company came of doing this is shown by a rough comparison of the 182 tons imported between May 1750-51 with the total directly imported to Scotland from Europe from Midsummer 1750-51 of 1711 tons.[23] During 1751, the import of flax continued to cause the Company trouble. The shortage of Russian flax for the Northern spinning until the first flax ship arrived necessitated buying some at Newcastle, but the ship chartered to bring it North sank in harbour. A cargo of 15 tons of Dutch flax from Rotterdam, on which unfortunately only partial insurance had been made, was lost in transit in October. Good cargoes were imported from Riga and Konigsberg but that from Thomas Allan was rejected as totally inadequate, a judgement sustained by two experienced arbitrers. While the money was refunded with interest, this left the

22 McCulloch to Child 23 May 1751.

23 S.R.O. N.G. 1/16/1.

Company short of flax for the expanding manufacture in the Lowlands. Between May 1751-52, 210 tons of Baltic flax were delivered directly from the Baltic to the Highlands spinning agents, but as this was on contract, the Company could not transfer any to meet the anticipated shortage in the Lowlands.

The flax bought in 1750 had cost 20% more than in any other year, and in an attempt to reduce prices, six houses at St. Petersburg and Riga were written to ask them to quote for flax if the Company were to provide one-half of the payment in advance and the remainder on delivery. The quality of flax had to be guaranteed, as the Braaks were ineffectual. An offer from Allan of 130 tons at £31 per ton on these terms was accepted (somewhat surprisingly in view of his last cargo), and also those of Mudie at Riga and Baron Wolff at St. Petersburg.

Production costs were under pressure from the rise in the price of yarn, caused by a rise in cost of spinning. "As the increase of weaving in Scotland (besides the great demand for England) has been much greater than the increase of spinning, the price of the latter has risen gradually for some years bypast, till it has now at last exceeded the value of flax".[24] McCulloch had also been forced to allow the manufacturers more for weaving Holland at Edinburgh and diaper at Dunfermline, and this rise in costs threatened to undermine the competitive position of the Company's linens. The Managers were, therefore, in complete agreement about the desirability of reducing the duty on imported foreign yarn[25] to which Parliament agreed in 1751 to take effect from the 25th of March 1752. The price of yarn did fall during the summer but thereafter rose, contrary to expectation. The

24 McCulloch to Loch 21 Jan 1751.

25 Tod travelled to London to give evidence before the House of Commons Committee on the Yarn Trade. See also Supra chapter 3 pp. 157-158.

Northern agents took particular advantage of this; they met together in November and refused to take flax[26] from the Company unless the price of spinning were raised, which caught the Managers in a dilemma: not only were quite large quantities of flax on hand, but they thought that both the price of flax and yarn must fall in the near future, which made them keen to sell the flax and at the same time unwilling to be committed to receiving yarns at higher fixed prices. New contracts had, however, to be signed, but in return the Company insisted on its right to reject bad yarn. Some of the other manufacturers of Osnaburg were by now spinning up their own yarn, which necessitated improvement in the Highland yarn. The yarn market did fall in the spring of 1752 by 2^{d} a spindle after the reduction of the duty had taken place.

The enlargement in sales put additional strain on production, and the Company found that "as soon as a thing has been brought to a bearing, the makers have as soon begun to debase the quality of the fabrics wanted."[27] Osnaburgs were a case in point; the Dundee manufacturers greatly frustrated the Managers by inadequate supplies and poorly-made linens just when it seemed that they had mastered the art of producing this fabric for which

26 After the negotiations they ordered 100 tons divided thus; 28 tons to Gordon and Forsyth, 22½ to Gordon and Lindsay, 12 to James Millar, 5 to James Cuthbert, 15 to Reid of Tayne, 3½ to John Mackay of Tordarroch, 7 to Ross & Co. of Dingwall and 7 to MacLean of Inverness: Wm. Anderson of Wick ordered 16 tons in March 1752 and Thomas Lindsay consistently took the largest individual quantity, e.g. 28 tons in December 1751.

The difficulties increased with distance from the ports of Kirkwall or Cromarty. John Mackay of Tordarroch petitioned the Trustees in 1755 for some relief for the extraordinary transport costs he was obliged to bear by having to carry all his flax from Cromarty which was thirty miles away: "interests occurred for no other reason than the opportunities of sending yarn to Edinburgh were seldom and I cannot send yarn in open boats to Cromarty in Winter", Saltoun MSS box 329. Nevertheless he did persevere and opened a station at Brora.

27 McCulloch to Watson 15 Oct 1751.

demand was almost unlimited. In the autumn of 1751, a Dundee manufacturer, James Craufurd, was appointed to supervise at Dundee for the Company the production of 50-60 looms making low-priced Osnaburgs. He was sent patterns, flax and yarn, and was to act on commission in an arrangement similar to that with Campbell. The latter's table-cloths were initially disappointing as their quality appeared to differ little from those that could be bought anywhere at Dunfermline. "We are disappointed notwithstanding all our care to improve the fabric of diapers to discover that they bear no better character with you than the Common Manufacture at Dunfermline",[29] but either the fabric improved, or the buyers altered their opinion, with the result that demand increased and he was told to engage more weavers without hesitation, for the common table cloths. A brisk demand for ¾ wide linen led to McCulloch signing a contract with a linen manufacturer at Forfar, Alex Adam, for delivery of 1600-1800 yards of this fabric every six weeks at Dundee for London, at a basic price of $6\frac{1}{2}$d per yard to be varied as the price of yarn rose or fell. Fixed agreements like this could not be discontinued at will, but did ensure a guaranteed supply. By contract in August, little sheeting could be obtained as "this is the time when weavers are working for private families but we are encouraging people to set up entirely for the manufacture of these goods".[30]

28 Campbell was involved in an irksome action to recover some yarn which a weaver had embezzled. McCulloch suggested that in future he should try to get the weavers to pay for the yarn, but understood that "common weavers are seldom able to pay the yarn in a web in case it should be spoiled in the weaving". (McCulloch to Campbell, 23 June 1751). If a weaver did run off because of debt, to avoid litigation, he advised Campbell to take two strong men along with him and cut the web out of the loom before the other creditors arrived. This advice was duly followed.

29 McCulloch to Child 11 Nov 1751.

30 McCulloch to Child 8 Aug 1751.

The scarcity of checks on the open market, and the difficulty Junor was having in engaging looms during the autumn to manufacture checks for the Company, led the Managers to discuss the possibility of appointing an agent in the villages nearby Kirkcaldy to purchase them: "We are told that in some places there are 40-50 looms constantly employed in making cheq'd linens".[31] Town-made checks, which were of a better quality, cost 2^{d} per yard more than those made in the country, but nothing materialised of this porposal, as Junor's production did get under way. By 1752, the Company was contracting for Osnaburg, diaper, check, Holland, Silesias, yard-wide and Sheeting (although the last was dropped in April because of the expense) and met extraordinary demand by buying in the open market. Some of Sandieman's Silesias were sent to be bleached at London and others in the same parcel were done at his own field in Perth; the results confirmed that the linens could not be bleached as cheaply and well in Scotland, by contrast with the early experience of the Company. More bleached linens were sent to London, some of which were done at the Company's own field.

A significant experiement was made on the marketing side when in February 1752 David Sandieman (brother of William) purchased some linens at Perth which the Company sold at London: the Company advanced half of the purchase price, and both parties waived their commission on buying and selling respectively to divide the profit equally. The return of 7% on the money advanced encouraged similar ventures. During the year, some of the fabrics sold very well. "We think the Edinburghs now sent are an exceeding good manufacture and will answer for your home trade as well",[32] an opinion that the London demand confirmed. Child was commended for taking the opportunity to sell off sundry parcels of old linens, and it was resolved to be careful about allowing large quantities of any fabric to amass. While

31 McCulloch to Watson 15 Oct 1751.

32 McCulloch to Child Nov 1751.

sales did increase at Lond, the Balance revealed an alarming increase in the stock of fine and bleached linen: £17,719 had been bought and only £11,917 had been sold, whereas £14,073 of the Coarse or unbleached linens had been bought and £14,473 sold. Profits at both Edinburgh and Glasgow were low.

Table 6.3

Sales of Linens May 1751-52 (£)

London	P	Edinburgh	P	Glasgow	P
10,813	+88	12,816	+2,246	5,485	+202

P = Profit

Information as to the breakdown by period of the sales at London and Glasgow is fragmentary, but shows a marked increase in the autumn sales of the previous year but a decrease in the spring sales of 1752. 1751 seems to have been a year of strong demand and some quite large orders were placed with the Company by exporters: Cuninghame took £891 of linens for North Carolina in July 1751, Andrew Elliot of Philadelphia £837 worth in December, and the masters of outgoing ships frequently took linens to sell on their own account. Sales of Osnaburgs and Holland continued at Liverpool, and an agent was appointed at Whitehaven to sell British Linen Company linens on 1½% commission to the exporters. But making sales to the exporters was one thing; getting payment quite another.

Very few would pay cash for linens even with the 5½% discount offered, and a pyramid of credit was erected with British Linen Company capital as the base. Whenever the exporters were short of cash, the Company felt the effect in protracted debts, and the amount of debt outstanding at Glasgow was a fair index of the fortunes of the Tobacco trade. By September 1751 the Company was owed over £2,000 at Glasgow and amongst its debtors were virtually every tobacco and plantation merchant in town, Syme, Dunlop,

Craufurd, Jamieson, etc. The Managers were forced to allow them 4-6 months extra credit or take linen debentures in payment. By May 1752, £1,600 worth were on hand for which the estimated payment date was in nine months' time. "There will not be as many pence as there are pounds paid in six months to come".[33] Colquhoun was instructed to take only debentures issued on Company linens exported, and even those at a discount. Bankruptcies or "stops" hit the Company, e.g. Matthew Bogle in May 1752.

At London the amount of outstanding debt was as large; £2,785 in February 1752, and Child was instructed to collect cash as McCulloch feared a shortage. This was done with some success; John Goodchild's stock in the Company was sold in payment of his debts. The other response to the crisis was for the Directors to institute in January 1752 a Saving Fund, comprised of 1/5th of the dividend which was reduced to 4%, 1/5th of the Managers' premium on sales which they surrendered, and the Directors' fees. The purpose of this fund was expressly to safeguard the Company against bad debts. The financial stresses of these years were usually caused by the arrival of the Baltic bills for flax, coupled with the support of the Company's manufacturing and marketing activities, and its circulation of notes which had reached £4,100 by November 1751.[34]

Five ships were freighted by the Company to the Baltic in the summer of 1752, and one, the Rachel, delayed too long at St. Petersburg and was frozen in. As its cargo did not arrive till the following spring, the Company's importation of flax during the year came to 85 tons of Baltic and

33 McCulloch to Colquhoun 12 May 1751.

34 Lord Milton was most helpful in spreading the circulation of these notes, e.g. in November on a visit to Inverary he took with him £400 of British Linen Company notes. Unwittingly, because he was both a Director of the B.L. and the Royal Bank, he was the cause of the B.L. being identified with the Edinburgh banks during the bank war of 1751 when its notes were refused in Glasgow.

32 of Dutch to Leith and Dundee, and 135 and 27 of Baltic flax to Cromarty and Kirkwall respectively. As the agents again complained that the price was too high, McCulloch went to pains to demonstrate that "the Company's intended profits for sea hazard, Bankruptcy (or in the smoother word del credere) of 15 months outlye of money was not about 11%."[35] But the agents did establish that the quality was not up to specification and secured a rebate from the price of 30/- per ton. The Managers, although accepting that the year's crops in the Baltic and Holland had been poor (which accounted for the small amount of Dutch flax imported), were far from satisfied with the service that had been received from the Baltic factors under the fixed-price contract system. Some alternatives were discussed; "the French East India Company purchase considerable quantities yearly of flax, hemp and masts at Riga, and the Masters and Supercargoes of their ships sent there in summer buy these goods on arrival. The method in England and Holland is to employ a factor at Riga to buy these goods in winter by contracting with the Borvers to deliver their several quantities at the shipping season and advancing a part of the purchase in ready money. In this case the purchaser runs the risk - unless he insures it at so many per cent, but then he buys his goods 10% cheaper in Winter than at the Shipping season."[36] The Company decided to take a direct stake in the purchase of flax in the Baltic by establishing a copartnery with John Mudie at Riga, to commence in January 1753, and to run initially for five years. Each party was to pay in 2000 Rix Dollars and provide credit with a house in Holland for a further 12,000 R.D. The Company sent out a clerk, William Weir, to keep the books, and the profits were to be equally divided. This integration backwards undoubtedly was a most ambitious step in the attempt to get good flax at a reasonable price: most of the flax dealers in Scotland seem to have bought their Baltic flax at London.

35 McCulloch to Reid 14 Sept 1752.

36 McCulloch to George Campbell (London) 3 May 1754.

It was not easy to decide how much flax to order for 1753 in view of the likely withdrawal of the Bounty and the substitution of a fund to encourage the Linen Manufacture in the Highlands of which some, it was anticipated, would be used to encourage spinning. The Managers suggested to the Trustees various ways in which the experience of the Company could be utilised, i.e the Company to import a quantity of flax for spinning in virgin areas if the Trustees would indemnify it against any loss,[37] or for a subsidy to be paid on flax imported to the Highlands to enable the price of Highland yarn to be reduced as a sop to the Lowland manufacturers. The Managers agreed that the Fund was not equivalent to the Bounty and feared that demand for Highland yarn would fall as indeed would production of coarse linen in general. Mudie at Riga was informed in April that the Bounty was to be stopped and the Highland fund substituted, "which must affect your market for neither the Irish or the Scotch in general can consume so great a quantity of flax as formerly. This alters our channel of trade - I imagine our import of flax to the Highlands will greatly increase next year",[38] and although the Directors would have preferred to wait until the Trustees' plans for the £3000 provided annually from 1754 were known, an order for 100 tons of flax was placed with Mudie.

Calculations about the demand for coarse and Osnaburg yarn in the light of the withdrawal of the Bounty were matched by discussions over supply. During 1752, 56,531 spindles of yarn were spun from 77 tons of flax and sent to Leith and the agents' orders threatened to double this, and as demand for yarn was high the Company was happy to take all the yarn it could from the North. But early in 1753 the flow of yarn from the North began to slacken

37 Flint, Secretary, feared that if the Trustees were to be too closely identified with the Company in any scheme, there would be charges of self-interest, etc.

38 Tod to Mudie 26 April 1753.

which puzzled the Managers. "It seems odd to us that the spinning in your country should now decline when in this and every other Country in Scotland it is now increasing, and no doubt owing to the dearness of provisions which we should imagine to be a reason for it increasing with you likewise".[39] The Managers were baffled: "we do not know what to make of the undertakers for spinning in the North. Mr. Forsyth thinks it is decreasing. Mr. McKay says he loses £10 stg. for every ton manufactured - but everywhere else the high price of provisions has led to a great deal of spinning."[40]

This was all the more galling, in view of the "great demand at Glasgow for Edinburghs for which article we are like to be run out for want of yarns - but from the Northern accounts we don't know how much to order from the Baltic and now is the right time",[41] and frustrating because this extraordinary demand would continue only as long as the Bounty ran, and disappointing considering that the yarn now spun was of a consistent quality. The Company remained loyal: McCulloch forbade Campbell to buy sale yarn for his weavers; "we can by no means agree to laying out the Company's money for yarns at the Perth market because it will prejudice the spinning of our own flax in the Highlands and Orkneys".[42] The true reasons for the decline remain obscure. The agents may have been to blame - the agent at Cromarty for the distribution of flax, Gilbert Barclay, was sacked for dilatoriness and dishonesty - or the steady rise in spinners' wages exceeded the rise in the cost of living which resulted in less spinning (confirming the contemporary maxim that spinners only worked when they had to).

After the end of 1752, it was decided to run down the production of

39 McCulloch to Forsyth 15 Feb 1753.

40 McCulloch to Tod (at London) 24 Feb 1753.

41 Ibid.

42 McCulloch to Campbell 18 April 1753.

fine linens by one-half, partly because of the poor quality of Dutch flax but mainly because of poor sales, e.g. Child had managed to sell only 10 pieces of Holland in two months. McCulloch concurred with Tod's suggestion; "I quite agree the Company should diminish their purchases of fine linens and for that end have intimated to our manufacturers that only one-half is to be received",[43] and they were asked to switch into making medium-priced linens in the Irish fabric. Sales might revive but the Managers had no desire to accumulate an expensive stock of unsold fine linens. Production of the Silesias by Sandieman was expanded; 20,000 yards were ordered for the spring, to be sold for brown waist-coats or the lining of light, summer waist-coats. Other lines were doing well: Campbell was asked to expand further his production of table-cloths. Most, however, of the Managers' attention was devoted to the Edinburghs.

In the spring of 1752 a drive had been held on the Dundee manufacturers to induce them not to use common sale yarn - ("we wonder your people cannot pick neat, even-spun yarn"[44]) -. Most importantly, the nature of autumn demand was anticipated correctly, i.e. for low-priced (6-6½d) and mill-coloured Edinburghs, and the Managers had engaged to make them not just its regular contractors but seven others at Dundee. The size of demand at Glasgow from September onwards, exceeded all expectations, however, and the Dundee manufacturers were asked to weave all they could, and Campbell at Dunfermline was asked if he could engage looms there to make Osnaburgs. As it was a new fabric to him and his weavers, detailed instructions[45] were

43 McCulloch to Tod 2 Jan 1753.

44 McCulloch to Craufurd (Dundee) 11 June 1752.

45 The instructions advised Campbell to follow the general practice of taking the woven cloth and laying it in folds on a smooth stone to be battered thoroughly without chaffing the cloth, by which "the cloth is thickened and the thread flattened, the colour brightened", and the unevenness of the yarn and weaving lessened. This was exactly the practice that McCulloch formerly had condemned as a cheat on the buyer: clearly circumstances had forced him to be less principled.

sent. It was always difficult to expand production quickly; looms were not easily engaged and the individual weaver could not increase his output much without lowering the standard. Rises in the price of weaving were generally a reflection of demand for weavers, which forced the manufacturer to pay his looms more in order to retain them but had little effect on productivity, hence there was a high premium on correct anticipation of demand which, in the Company's case was a function of the information it received from the warehouses.

Silesias, diaper and Edinburghs all sold well at London and Glasgow.

Table 6.4

Sales at Glasgow by Colquhoun (£)

1752	May - Sept	1,019	1753	Jan - Mar	1,379
	Oct - Dec	2,071		Apr - May	2,206

and sales at each market (London, Edinburgh and Glasgow) increased by about £2,000 over the previous year.

Table 6.5

Sales of Linens May 1752-53 (£)

London	P	Glasgow	P	Edinburgh	P
12,399	+291	7,720	+303	14,638	+2,851

P = Profit

Profits at the two export markets were still disappointing. One curious facet of the Company's trade was the way Edinburghs sold at Glasgow but not to the same degree at London. At one stage during August, Child had actually wanted to lower the price of the Edinburghs sent him and was told to wait: "at the worst Event they could be returned here where we could sell 10 times the quantity manufactured".[46] One reason may have been Child's lack of

46 McCulloch to Child 18 August 1752.

ability, another simply that the Glasgow market was less competitive than the London, or the Company's willingness to accept linen debentures in part payment for its linens which certainly helped to boost Colquhoun's sales to the Exporters, reflected in the figures above. This last factor must not be exaggerated; debentures were only taken at an increasing discount ($2\frac{1}{2}$-6%) and not in total payment, and only for some special friends,[47] and those for its linens alone: "we see no reason why the Company should become security for a whole country for payment of a bounty granted by the Government on the exportation of goods whereby the Company had no profit".[48]

Payments, as ever, lagged sadly in arrears during 1752, - "no money is to be had from creditors at Edinburgh or Glasgow"[49] - but Glasgow was especially bad. Fortunately the situation eased in early 1753 as there were better returns from the Colonies and the Tobacco trade picked up. A Mr. Drax organised a compact amongst the Jamaican Planters to buy British linens only which gave the Company some hope as its linens were gaining a good reputation there.[50] Some large orders were sent out to Jamaica, one of which was sent on the Company's own account on learning that the potential exporter had suffered some losses in trade of late. "It is not advisable for you to Adventure in the Jamaica trade from whence returns are not only slow but

47 e.g. Dunlop & Peters who purchased about £1,000 worth of linens during the year. They were allowed to pay in part with some Irish linen debentures which was kept very quiet.

48 McCulloch to Speirs & Co. 22 Feb 1753.

49 McCulloch to Milton 7 Oct 1752 (Saltoun MSS).

50 e.g. Tod reported to Milton that a ship had just arrived from Jamaica: "she brings with her orders for a greater quantity of Edinburghs than we can supply just now. We are informed that Merchants from the Spanish main prefer the linens with the Company's stamp to all others... Would it not be a great loss to this country if we lose the Bounty when we are just beginning to know the trade?"

30 Sept 1752, Saltoun MSS.

precarious".[51]

Sales of the coarser linens were accelerated by the news that the Bounty was not to be renewed which meant that these linens were as cheap to the Exporter as they were ever likely to be in the near future, especially as the high price of flax was forcing up production costs. This boosted exports to Virginia and Philadelphia where some quite large orders were sent (if guaranteed). Export linens and some white hollands were sent in 1753 as an experiment by the Company to the half-yearly sales at Bristol: "there is great demand for linens; together with quantities of Scotch cloth carried there from Glasgow each year, plus the resort of Scots and English peddlars to these fairs".[52] They sold so well that the Company considered that something substantial might be done by sending a trusty supercargo with a quantity of linens to the Fairs or by establishing a warehouse with an agent. "Until we are better known the goods must go to the market, instead of the market coming to the goods".[53]

The debenture position intensified the Company's liquidity problem when in October the Baltic bills fell due, and the Company was forced to ask George Cheap to arrange a loan to tide them over till debts could be called in. This situation exactly repeated what had happened the year before, and equally the £2,000 owed at Glasgow, some much overdue, was a prime factor. The usual drive to call in debts prior to the Balance, obstructed by a recession in trade in the spring of 1753, however, took place: Tod reported that several traders in London had stopped payment and in Scotland the position was even worse. "Money is so scarce here that we can scarcely get 1/20th of what is owed the Company - and the drain of specie for

51 McCulloch to Forbes 16 Feb 1753.

52 McCulloch to Tod 13 March 1753.

53 Ibid.

purchasing will make it worse",[54] not that shortage of cash deterred the Exporters from placing orders for linen. "At present we can't supply the demand from Glasgow and London for Edinburghs and therefore cannot see any hazard of having a dead stock on hand".[55]

News from Tod that the Bounty would expire at the end of the Parliamentary session in March 1754 forced a series of decisions in April 1753. All Scottish manufacturers of coarse linen feared that the effect would be greatly to lessen colonial demand for these linens, and soon after the news reached Dundee the price of coarse linen had fallen by 10%. The Company informed its Dundee manufacturers, "We are afraid that the withdrawing of the Bounty will lessen the manufacture of Edinburghs for export: at least this Company will lessen its purchases and from this time forward we will receive only the one-half of what we were in use to purchase from you...in and about Dundee".[56] Some coarse linen was still to be made "which may sell for wear in England in case of not selling for export. But other kinds we dar say will not."[57] To avoid having a stock of unwanted Osnaburg yarn on hand, as much of that as possible had to be woven up. The Company was, therefore, walking a tightrope. The loss of the Bounty undoubtedly cast a shadow over the trade of the British Linen Company, and during 1753 the Company cut back on its manufacture of both coarse and fine linens by 50%, although the latter reduction was independent of, and prior to the news about the Bounty. The real impact of the withdrawal of the Bounty fell in 1754, but even in 1753 yarn and coarse linen prices fell in anticipation.

Only the promised Equivalent, the £3,000 p.a. to be applied for nine years to the encouragement of the Linen Manufacture in the Highlands only,

54 Ibid.

55 McCulloch to Tod 6 Mar 1753.

56 McCulloch to Bowman (Dundee) 28 April 1753.

57 Ibid.

to start from the expiral of the Bounty offered any hope. But the Trustees conducted only general discussions as to its use in 1753 without forming any plan, and the Managers were pessimistic about the Company's prospects. "The only comfort is that Parliament has put the small funds they have thought proper to bestow into the hands of the Trustees...but a stop from this Company in employing the poor in these places where it has already been begun might prove of very bad consequence. We are resolved to continue the spinning on the same conditions (except) we must have our yarns to be mostly 16-24 cutts per lb...by reason that these grists of yarn can be turned into some cloths for home consumpt; but we are afraid it can never be made a General Trade or for Export unless the Bounty is renewed".[58] The Managers wrote all the Highland agents in this tenor: it did no harm to appear as gloomy as possible in order to forestall the claims of the agents for higher remuneration. "We are sorry the yarn spinning has not answered the undertakers more than the Company and are truly afraid the £3,000 will not answer them".[59]

Despite the financial difficulties that some of the agents were experiencing the Company insisted that they order their flax well in advance or do without, to avoid the Company having to store flax at Cromarty till bought. Some of the agents petitioned the Trustees with an eye to the £3,000 for assistance. Lindsay's petition was suitably endorsed by McCulloch and he rightly qualified for an award. John MacKay presented a verified petition that the number of spinners in his control in the Eastern parishes of Cromarty had increased from 20 in January 1752 to 1,078 in August 1753 (and subsequently to 1,420 in August 1754) and, by implication, claimed to have trained these himself. If this was in any way representative, it is clear why the allocation of some of the Highland fund to these agents was

58 McCulloch to MacKenzie of Coul 7 June 1753.

59 McCulloch to the Northern agents 30 Aug 1753.

quite proper and consistent with the aims of Parliament.[60] But the grants were not immediately forthcoming, and some of the agents decided to give up, e.g. John Millar & Co. at Dingwall after August 1753. The £1500 they owed for flax was eventually recovered. John Reid at Tayne hung on till the spring of 1754 when he went bankrupt, and in extinction of part of his debt asked the Company to take back their flax. The losses apart, the reduction in the spinning did not displease the Managers unduly; the contraction on the manufacturing side and the expected fall in the price of yarn made it desirable to restrict production to what could be woven up before the Bounty expired. While the spinning was to be continued, the scale of operations after the Bounty was withdrawn was yet to be determined. After some controversy, a fresh contract was signed by the Directors with Doig "to secure the possession of the yarn and linen trade in the Highlands".[61]

The price of flax was another factor in the situation. The summer that proved so excellent for the bleachers was disastrous for the Scottish crop, and in the Baltic prices rose by 20%, which deterred the Directors from ordering from St. Petersburg and they turned instead to Holland. Craufurd was asked about the Dutch crop; "our advices from the Baltic say that prices have of late risen due to demands from Ireland and this country - the flax crop having failed here for want of rains. And if you have had as dry and hot a season this will make flax scarce and low in quality and dear in price."[62] The Dutch crop was indifferent and high in price, which led the Company to import only 34 tons, half of which remained unsold because of the contraction of the manufacturing side. "500 matts (i.e. 25 tons) will

60 The importance of the Highland trade was underlined by McCulloch. "The value of yarn sent here from Inverness, Ross and Caithness amounted last year to no less than £14,000 stg." McCulloch to Flint 11 May, 1754.

61 McCulloch to Doig 1 Dec 1753.

62 McCulloch to Craufurd 3 July 1753.

satisfy all our demand in order to supply our old customers who heckle for sale, as to our own use I think it will not consume much this year".[63] Little flax was imported from the Baltic save the delayed cargro from St. Petersburg which arrived in the spring, and 66 tons from Riga in the autumn, and for 1754, only 150 tons of Baltic flax were ordered, all from Mudie at Riga. The reports of Dutch flax were so melancholy that it was proposed to substitute Riga flax for it entirely.

The problem about the supply of flax was less serious than it might have been, given the reduction in the Highland spinning and the manufacturing. MacVicar was told in June 1753 that "the Dutch flax is so bad that we have not bought 1/10th the usual quantity...The indifferent sale of Hollands, the quantity on hand, and the bad crop of flax this season have determined us to retrench our purchases of these goods for some months".[64] The correspondence with the manufacturers of coarse linen was equally pervaded by gloom as to the future with no Bounty, and the Company concentrated on trying to get its yarn spun up. It was left with very little Osnaburg yarn on hand when the Bounty expired, but yarn continued to flow from the North to undo the good work. In early 1754 as the date of expiral approached, the price of yarn in Scotland fell sharply, by up to 20% in February as output and demand from the manufacturers decreased.

The main lines of the Company's manufacturing policy were (a) to cease the purchase of linens either by agent or joint-commission unless a sale were guaranteed, (b) to reduce the production from the Company looms, and switch some into working linens suitable for the home market, (c) to establish a Sailcloth and Sacking Manufactury. Adherence to the first was rigid. "London says that if the Bounty is not renewed, they will be quite out out by the foreign therefore nobody cares to but more than to just fulfil their

63 McCulloch to Craufurd 15 Dec 1753.

64 McCulloch to MacVicar 28 June 1753.

orders - we will give none for low-priced linens",[65] and no purchases were made until after the New Year when prices had tumbled. Some Dundee manufacturers were allowed to consign their linens for sale by Child on their own account, the Company advancing 2/3rds of the value upon interest till the sales of goods put them in cash. The only exception was when some linens were bought jointly with George Young of Coupar Angus in December for sale at London because the locality's biggest factor at London (Mr. Johnson of Fotheringham) had become bankrupt which had "not only stopped the currency of the demand but the capability of their dealers to give money to the poor manufacturers for their linens".[66] The Managers ventured £300 to pick up some linens at bargain price.

The Dundee manufacturers were instructed in July 1753 to make only very low-priced Edinburghs (@ $5\frac{3}{4}$-$6\frac{1}{2}^{d}$ per yard) until January, when they were told that no more linens would be taken after the 20th of February, and those at a 5% discount. As a concession some were allowed to return flax and yarn instead of cloth. The expected general dullness of trade after the withdrawal of the Bounty affected non-bounty goods as well. Campbell was advised not to push the manufacture of table linen too keenly because, while it was liked greatly, it sold slowly, as part of an assortment for export or in the home market, and in April he was forced to reduce the number of looms he had by half to 45. Only those linens made for the home market were exempted from the policy of retrenchment; Alex Adams and the Kinnears were kept at work, "as their linens are for the most part sold for inland sale (home consumpt)".[67] The irony was that the Kinnears went bankrupt in February, leaving the

65 McCulloch to Faichney (Perth) 28 June 1753.

66 McCulloch to Tod 1 Dec 1753.

67 McCulloch to Tod 20 Feb 1754.

the Company unable to fulfil orders for their linens.[68] The sort of Osnaburg in demand was designed for the English market, and brown linens to be sold for dyeing at London employed a great many looms that otherwise would have been idle.

The establishment of a Sailcloth and Sacking factory at Cranston in the spring of 1754 when depression was setting in, seems at first sight absurd, but it was in fact a shrewd move to circumvent the absence of the Bounty and weave up some of the surplus yarns at the Staplery. The factory, taken over from Sir Wm. Dalrymple in part payment for a large debt, was put under the charge of Richard Neilson with 10-12 looms initially to make a linen fabric called "Sailcloth Number 10" on which there was still a bounty of 2^{d} per ell exported. "This sailcloth is of the same fabric with what our best Edinburghs were made of...and the bounty is 7% better than the linen bounty".[69]

The focus of attention on the sales side was succintly outlined to Child in August 1753, "to clear our hands of all goods that depend upon the Bounty for sale...we do not intend to crowd you with many goods without prospect of sale",[70] and the deadline fell at the end of April, 1754. Payment of the linen Bounty was, incidentally, lagging over 12 months in arrears, and, against this backcloth, it is revealing how desperate the Managers were to dispose of the Hollands (which were not bounty goods) that they were willing to accept debentures in payment for them. Sales during the autumn were quite brisk.

On the 20th of December the Managers reported to the Directors about the situation: they expected on March 1st the Company might have about £5-6,000

68 They owed over £2,500 including £600 to the Company, which seized a bale of linen in the Kinnears' warehouse, claiming that it was consigned to them, which gave rise to a legal battle with the other creditors. See Milne v McCulloch & Tod Session Cases F 15:15 (Signet Library).

69 McCulloch to Neilson 11 March 1754.

70 McCulloch to Child 7 Aug 1753.

of goods on hand at Edinburgh for which there was no forseeable sale, including about £3-4,000 of Osnaburgs ("half of which from the bright colour are only fit for the demands of the Sugar Islands and the other half being purposely made of a buff or brownish colour are entirely adapted to the demand of the North American Colonies"[71]). It was unlikely that they could be sold in Scotland considering the dullness of trade and scarcity of cash, and the spring demand for linens would not come on till March, by when it was expected that Parliament would have risen and the Bounty expired. Therefore, the extraordinary step had to be taken to consign the linens wholesale to America, which was risky and could incur loss, but which could not be "equal to the certain loss this Company would sustain in not sending them".[72] The Directors agreed to hold this in reserve as a last resort, while sales were pushed at home. The Oswalds were asked whether they could provide a suitable supercargo as an alternative to consignment, but nothing materialised of their suggestion that the Company could buy a ship to take the linens and bring back the produce of the Islands - cotton, indigo, rum and sugar - if bills could not be obtained.

Sales at home were aided by a delay in Parliament rising. Tod, in London on business for the Trustees, hastened sales at the warehouse there to McCulloch's satisfaction. "I am glad you have made such good sales of our bounty linens - there are 1500 pieces here on hand all of which I heartily wish were sold at London on the like terms".[73] Buying in the belief that linens would rise in price in the Colonies after the end of the Bounty, the Exporters at Glasgow still forced the Company to offer discounts of 5% and 7½% to those who took £500 and £1,000 of bounty linens respectively, and credit of 15 months in a few cases. Beyond this the Company would not

71 Directors' Minute Book 20 Dec 1753.

72 Ibid.

73 McCulloch to Tod 5 Feb, 1754.

go, as Colquhoun was told: "the instance you mention of other dealers in Osnabriggs giving larger discounts can have no effect on the Company's determination as their goods are both better in quality and credit given much longer than with the Arbroath people who are the only folks now to compete with us".[74] Speirs took £500 worth, Glasfurd 10,000 yards of Osnaburg and Dunlop & Peters £1,200, which went far to complete sales at Glasgow. The Company was offered tobacco for linen (which its Charter forbade): Dunlop, Syme & Co. offered to purchase £1,000 worth of Edinburghs providing the Company could engage Wm. Alexander to buy 500 hogs-heads of their James River tobacco "how soon he shall receive any commission for buying tobaccos for the French market".[75] A deputation from the Directors went to see Alexander who was a shareholder in the Company, and although he was doubtful of receiving any more orders that year and had 1500 hogsheads on hand, he agreed to take Dunlop Syme's tobacco if he did, which apparently satisfied them and they took the linens.

Most of the Company linens were sold in Britain but in March a cargo of unsold Edinburghs (£1200 worth) was consigned to a reputable and wealthy merchant on James River, one James Millar, who sold by September 388/485 pieces sent him for £1498 of currency, which was a satisfying return. Another cargo of unsold linens worth £1203 was sent per the Wilmington in the same month to Jamaica for sale by the Master on commission; he brought back bills and £404 of rum and sugar. Returns were generally slow from the Colonies but the blame did not lie entirely on that side of the Atlantic as the Managers took the opportunity to clear a great deal of rubbish as well as good linen. Such was the lot of the unfortunate Murrays of South Carolina. John Murray, Secretary to the Province, was led by his cousin James to stand security for £1000 worth of Company linens bought by him which were sent out in late 1753. He himself was in London over the next

74 McCulloch to Colquhoun 6 Feb 1754.

75 McCulloch to Tod, 1 Mar 1754.

few months where he met Tod, who advised him to order an additional assortment as the Bounty was about to expire. He was induced to buy a further £15-1600 worth to be shipped from Leith on the joint-account of the Murrays, and was in fact sent about £2000 worth. He had to take a warehouse in Charleston and hire a clerk; the price of Edinburghs and coarse linens slumped, and when "the bales were opened, we found many of the finest were rotten and otherwise damaged in the bleaching"[76] and the fine Hollands were so unsaleable that he sent them to Jamaica, where they were sold at a discount by 1756. Despite all this, the Company firmly demanded its money, which it finally received in 1757. One feels that the unfortunate Murray was the victim of some sharp sales talk by Tod and his own gullibility; he knew nothing of the Linen trade and his cousin, who did, died before he could share his knowledge.

The hectic rush and scramble of the last few days before the Bounty expired was succeeded by a deadness in trade. The empty warehouse at Leith for Osnaburgs was used by Doig as a spinning school in the use of cotton, with which a brief experiment was made to imitate the "mixed" fabrics of the West. Some sales were made at London of low-priced linens for dyeing, but the Managers found little else saleable. They retained a lookout for linens to be developed when times were more propitious; i.e. they were offered some very good checks for which McCulloch resolved to contract when trade revived, and the Provost of Kirkcaldy was written to enquire what had happened to the town's proposal to build a dyehouse for checks. "The mean colour of your checks - both blue and white - does not even stand washing. Without something of this kind be done speedily our Check trade will fall off and centre entirely in the hands of the Manchester dealers."[77]

At the Balance, the Sales looked healthy enough on paper, although one legacy of the rush to sell off the Bounty linens was that the Company had

76 S.R.O. Murray of Murraythywaite MSS; G.D. 219.

77 McCulloch to Whyte 15 Feb 1754.

over £4000 worth of debentures on hand, the last of which was paid in August 1755. But not only were there many debts outstanding, but during the next financial year manufacturing and sales were so severely depressed that total sales fell from £38,000 of linens in 1753-54 to £14,000 in 1754-55, and including flax, from £47,000 to £22,800 of which £7590 was sold in the last three months (i.e. Jan-Mar 1755), as opposed to £15,230 in the previous nine. What sales were made in 1755 were almost entirely to the home market.

Table 6.6

Sales of Linens May 1753-55 (£)

	London	P/L	Glasgow	P/L	Edinburgh	P/L
May 1753-54	16,881	+503	6,427	+297	13,909	+3793
" 1754-55	6,882	-239	734	-146	6,775	+ 972

P/L = Profit (+)
Loss (-)

The Glasgow warehouse was in fact virtually discontinued from February 1755. McCulloch had had the axe prepared for some time, and Colquhoun had been warned in July 1754 to exert himself, "otherwise the Sales with you will make a poor figure as the Osnaburg trade is laid off".[78] But the Plantations were flooded with linens and his chances of making sales were further dimmed by the Tobacco trade also being in the doldrums with much unsold tobacco on hand. Dilatory payments were the corroborative symptom of this: £3,000 overdue at Glasgow in Aug 1754 and throughout the autumn and winter a steady stream of stops and bankruptcies, including the Leggats, the Rowands, Andrew Craufurd (who paid 5/- in the £) and in December James Johnson, the joint-agent with Colquhoun for the warehouse. At the root of his troubles was the £24,000 owed him in Glasgow which he could not collect: to pay off his debts of £16,000 he had to sell his estates in America. The effect of this stoppage was particularly felt by the Company, and McCulloch

78 McCulloch to Colquhoun 9 July 1754.

was utterly tired of Glasgow. Tod had suggested selling off some linens there, but he would hear nothing of it; "I am tired of that place both on account of the general bad payments and the too many bankruptcies that have fallen out there to our share".[79] He proposed to supervise sales there in person to "some good folks but nothing more in the way of Warehouse or Chance sales".[80] His humour was little improved by a recurrence of trouble with the Glasgow banks which instigated an order from the Board of Excise to its collectors not to accept the Company's notes, which brought the circulation to a halt until Kames and Drummond could get the order reversed.

The slump exposed deficiencies of Child: in extremis with the Hollands the Company had experimented with another factor who managed to sell them successfully. Child blamed his lack of sales in admittedly difficult conditions on the Company linens being too highly priced, which caused McCulloch to worry. "The Edinburghs are too high priced for profit, but some of the makers complain the prices we pay them are not cost price, yet from the prices at which they are sold at London we cannot sell them at more."[81] A large quantity of checks purchased at Kirkcaldy as a bargain (30-33,000 yards @ 1/6^{d} per yard) in February had to be sent to London, "for here at present I cannot sell one yard and what they will do at London I cannot tell for everything seems as dead as here".[82] Tod went to London and took the warehouse under his wing in the spring when sales at last began to revive. One Hull firm put in an order for Bounty linens,

79 McCulloch to Tod 10 April 1755.

80 Ibid.

81 McCulloch to Child 25 Feb 1755.

82 McCulloch to Whyte 25 Feb 1755. The linens were paid for in a mixture of cash, flax and yarn, which helped to reduce the stock of yarn at the Staplery.

apparently not realising that it had been stopped.

During this time, the Company felt free to consign its linens to other linen factors at London as well as the warehouse, e.g. Grant & Robertson, who sold a great many of the table-cloths, which was encouraging as so much attention had been devoted to establishing that branch of the Company's manufacture. Confident in the quality of their product, McCulloch and Campbell began to diversify into different sets and patterns of table-cloths and napkins: "upon the whole we must have a woman to direct us in this affair".[83] But when demand did revive in 1755, it was not easy for the manufacturing side to respond. In March Tod wrote of an opening for low-priced wide Hollands, but McCulloch could only find 12-14 looms to make about 180 pieces a year: "having discontinued that business we have very few tolerable weavers, many having joined the army".[84] The slump and dislocation of the linen manufacture was not easily set right, fulfilling McCulloch's prophecy in 1754; "the grain harvest is good this year and at present neither weaver nor spinner has a reasonable price for their labour - so many will turn idle and the quantity made next year will be inconsiderable".[85] Turned idle or driven by poverty to join the Army, all contemporary accounts are agreed on the sharp decrease in the number of looms at work after the cessation of the Bounty.[86] At the nadir perhaps one-half or two-thirds of the looms in the East of Scotland were unemployed, and the prices of weaving and spinning fell by 15%, tempting McCulloch to make th odd purchase in the belief that the market was near its bottom.

83 McCulloch to Campbell 8 Oct 1754.

84 McCulloch to Tod 27 March 1755.

85 McCulloch to Claud Johnson 19 Oct 1754.

86 e.g. "It's believed there are not now in many places of Scotland perhaps one-third of the looms employed there was 12 or 18 months ago, and we are told and have good reason to believe, things are no better in Ireland". Lord Milton, Memorandum to the Directors, Directors' Minute Book 3 March 1755.

The Yarn Staplery suffered severely during the slump. The need to find outlets for the supply of Northern yarn became desperate as the price of yarn. Some was manufactured, but despite efforts to sell to Manchester (which met with some success) and an overall increase in sales,[87] stocks began to amass at Leith. Especially serious was the quantity of fine yarn on hand. The Company refused, however, to restrict production in the North, fearing the consequences of dislocation. "With regard to the yarns, the Company you know resolved even when the Bounty was discontinued to keep up the spinning introduced in the North. This was no doubt more of a Patriot than a mercantile resolution as we have been loaded with an unnecessary dead stock...Many of these yarns were ill-spun and other of a Staple different from what you found to be the proper kinds for the manufacturers chiefly wanted for Sale at London".[88] Prior to going to London in 1755, Tod travelled North to see the agents, and secured fresh contracts with them that lowered the price of spinning by 1^{d} per spindle, but production levels were maintained and by April 1756 70,000 spindles were on hand unsold. This situation was not eased by the Trustees awarding wheels, reels and money to those agents whose spinners spun more than 7000 spindles in a year, from which Lindsay, Wm Forsyth and John MacKay benefited in 1755.

During 1754 three ships arrived safely from the Baltic with flax and the importation of 216 tons was really rather large considering the depressed state of production and the Company was only lured to increase its original order by the supposed good value of the purchase. McCulloch was, therefore, very annoyed to find that the cargo of 80 tons for the Highlands was of mixed quality and a bitter complaint went to Riga. "In opening matts we found in the same packages flax different in quality to the value of £5 a ton...the colours varied and we had to discount £2 10/- per ton to our North Country

87 The Staplery sold 67,702 spindles of yarn for £8559 between Nov 1754-55, which was an increase of 7000 spindles over the previous yr.

88 McCulloch to Tod 14 Sept 1758.

undertakers. Can we not buy best flax from a Bower or Burgher?"[89] Ironically the Company had just lavishly recommended Mudie to several other merchants. Some 15 tons of Dutch flax was needed and McCulloch urged that more Dutch flax be imported than usual for sale - "the quality of it is the greatest temptation; this year's crop in Holland is 40% better in price and quality than any before".[90] He urged this course especially if war came, "which we expect here, freight and insurance will run so high".[91] Tod and the Directors preferred to import large-scale from the Baltic via Mudie, and placed in February 1755 an order with him for 150-180 tons of best Riga flax, two-thirds of which was intended for the Highlands. In retrospect this proved to be a mistake, as the crop was of a lower quality, as the Clerk Weir reported: the Directors, however, chose to believe Mudie and sent two ships out for the flax in the hope that the reduction in demand from Scotland would lower the price of flax there. In fact, because of the fear of war, much of the Baltic crop was sent to London by the factors, which raised prices to the Company at Riga. One of the cargoes was good, but the other for the Highlands was not, which inevitably precipitated controversy with the agents.

For the next year (1756) Tod suggested that the Company follow the market and contract at London for flax and several of the Directors supported this as Mudie's accounts failed to materialise, while he nevertheless exhausted his credit at Amsterdam. McCulloch resisted this firmly; while the Company wanted such large quantities of flax, the best chance of obtaining good flax was by purchasing it through a factor in the Baltic. Doubts over Mudie and the political situation led the Directors to postpone ordering any Baltic flax until the summer of 1756. "The Directors decided

89 McCulloch to Weir (Riga) 5 Oct 1754.

90 McCulloch to Tod 23 Jan 1756.

91 McCulloch to Tod 11 Feb 1756.

to order no more flax from Riga till the summer seeing there is a great prospect of war with France which will cut the price of flax abroad and augment the charges of importation whether we buy these goods cheap or dear".[92] Sufficient was in store and a few tons were ordered from London to supplement this, to enable the Company to wait for prices to fall, which it felt they must.

There was, however, another variable in the situation - the renewal of Bounty. War would lower the price of flax in the Baltic but push shipping and insurance costs up, whereas the renewal of the Bounty would increase home demand for flax. During 1755, to secure the support of the Manchester merchants, the renewal of the Bounty had to be tied to the abolition of the last remaining import duty on foreign yarn. The opposition included patrons of the British spinner and the Hamburg importers of foreign linens ("these gentlemen are become the guardians of the British spinners"[93]) and some of the manufacturers of Fine Linen in Scotland, who opposed the Bounty because it was confined to coarse linens. Attack was concentrated on the Yarn question because if that were defeated the Bounty would fall to the ground with it and only after long and heated debate did the Linen Bill pass the crucial third reading on March 16th, 1756. "All parts of the Ministry supported us and the Head of the Opposition, with some of his friends. The members in the City, some of the Yorkshire gentlement and most of the Tories were our opponents. This has been the most debated and troublesome bill of trade that has been in Parliament for so many years".[94] The Bounty was to restart on the 24th of June and production could be expanded in the expectation of a revival of sales to the Exporters.

In anticipation, some tentative steps had been taken to restore the

92 McCulloch to Mudie (Riga) 15 April 1756.

93 Tod to Milton 13 Jan 1756 (Saltoun MSS - letters). The two were in constant communication during the negotiations.

94 Tod to Milton 16 March 1756.

manufacturing side in late 1755. McCulloch had his eye on the Spanish market for which he thought that Irvine linens (named Britannias) would be ideal; ..."if the Bounty is renewed these would be of general demand for export to Spain for their West Indies".[95] After some searching, he engaged a manufacturer at Ayr to provide on contract 120 pieces of 56 yards each between April and August 1756. A large order for table-bloths was placed with Campbell in December for 1780 dozen by August 1756, and 24 looms were being employed at the turn of the year in the production of low-priced Hollands. Sampel Country linens and Silesias were commissioned from Adams and George Young. But it was not easy to rebuild production; ..."the weavers formerly employed were dispersed, the young and healthy having generally become Soldiers, the more elderly day labourers and Barrowmen; such of them as were collected were for some considerable time very inexperienced in their former business".[96] The effects of the slump are patent in the schedule of the Company's output: Production fell between 1754-56 by over one-half from

Table 6.7

Linens Manufactured for the British Linen Company 1751-56

	Fine (Bleached) Linens		Coarse Linens	
	Pieces	Value (£)	Pieces	Value (£)
May 1751-52	7102	17,719	4869	14,863
1752-53	6781	18,814	6303	17,050
1753-54	2956	14,139	5022	15,402 x
1754-55	3406	6,067	1919	5,063 ϕ
1755-56	3678	6,046	1462	5,153

x (501,976 yds)
ϕ (158,388 yds)

its former level, and sales were similarly reduced. Sales of coarse linens fell by 4/5ths while, with the aid of decreased production and price-cutting

95 McCulloch to Wm. Duff, Sheriff of Ayr, 24 Jan 1756.

96 Report of Lord Milton to the Directors; Directors' Minute Book 4 July 1757.

to reduce stocks, sales of fine and bleached linens fell by only one-half.

Table 6.8

Linens sold by the Company 1751-56

	Fine (Bleached) Linens		Coarse Linens	
	Pieces	Value (£)	Pieces	Value (5)
May 1751-52	6227	11,917	5123	14,471
1752-53	6902	15,498	6102	16,439
1753-54	9029	19,301	6084	17,698 x
1754-55	3992	8,454	1707	4,199 ø
1755-56	4360	6,957	1013	3,867

x (585,836 yds)
ø (129,274 yds)

Until the Bounty was restored, sales did not encourage the Company to revive its production, and what sales were made seem to have been to little profit. The Directors decided to ask Tod to settle permanently at London to supervise the warehouse, and that sales were to be pushed there with caution rather than at Glasgow. "I dare say there is not a man of them but is satisfied of the error of pushing sales in this country. What sales are made should be only to such as are extremely well known and in good circumstances".[97] Rather than leave sales to agents, they were to be put under the personal control and supervision of the Managers. The Balance sheet made dismal reading in May 1756.

Table 6.9

Sales of Linen May 1755-56 (5)

London	P/L	Edinburgh	P/L	Glasgow	P/L
8687	-591	3437	+531	111	-25

In no sector did the Company suffer more than in the Yarn Staplery. In June 1755, 62,086 spindles had been on hand with more to come from the North, and the Directors had decided to retain the coarse yarn instead of

97 McCulloch to Tod 1 April 1756.

selling it to England, in the hopes of working it up when the Bounty was renewed. This tied up capital in dead stock, and left unsolved the problem of what to dowith the fine yarn for which there was little demand. "This stock, and its debts, and the quantities which come daily from the North, has so drained the Linen Company which is obliged to support it that the Staplery is now in possession of ⅓rd of the Company's capital".[98] The first priority was to lighten the Staplery of the load of 70,000 spindles of coarse yarn on hand by engaging in April, immediately after the news about the Bounty was known, looms at Dalkeith, Musselburgh, Kirkcaldy, Dundee and Arbroath - 488 in all, to weave up this yarn.[99] The bulk of the looms were employed to make Edinburghs for export. At least a start had been made, although "we cannot depend on two-thirds of the (488) being fully employed for us - during the spring and summer seasons many of them take in customary work, and harvest reaping".[100] Edinburghs began to amass at the Edinburgh warehouse, which until the export trade should revive were dead stock still, although in a different form. Not surprisingly, as there had been little enough work in the last two years, the standard of weaving was mixed. "The Dundee weavers make poor linens carelessly; they are sent to Leith unstamped and 20% on preliminary examination are sent back".[101]

Doig hurried North in the spring to try to persuade the agents to abate the flow of yarn. Sir Alexander MacKenzie of Coul had given up the spinning and dismissed his agent, John Ross, and applied a premium from the Trustees to help extinguish their flax debt. Doig forbade the spinning of any more fine yarn, and any extension of the spinning, and warned the agents that no

98 Memorandum 1756, Saltoun MSS box 350.

99 On the basis of this Doig was later to petition the Trustees for assistance to the Yarn Staplery on the grounds that it had employed 4-500 weavers "who had neither credit or work but what they received from it. It has kept weavers these last two years who otherwise would have left on account of the exceeding badness of trade", Saltoun MSS. As the bulk of the looms were only taken on after the Bounty was restored, this was a distortion of the facts.

100 McCulloch to Tod 27 April 1756.

101 Ibid.

inferior yarn would be accepted at Leith. The grumbling that this aroused was met by a blunt assurance - but a bluff - that "the Company are preparing to be as independent as possible by carrying on the Spinning nearer our Door".[102]

In summary, the main problems caused by the loss of the Bounty were the dislocation on the manufacturing side, the loss of sales, (although the customers who had switched to German linens could be regained in time) and the stock of unsold yarn and linens. The amount of linen on hand at the London warehouse at the Balance rose from £5572 in 1752 to £11,882 in 1756. The renewal of the Bounty, and the revival in the export trade were the main restorative factors. This time the Bounty was guaranteed for 14 years, and as a slight bonus to the industry, the minimum bredth of linens eligible for Bounty was lessened from 26" to 25", which necessitated fresh instructions to all of the Company's weavers.

A legacy of bitterness was left amongst the manufacturers of fine linen against Tod and the Company, for the failure to secure a Bounty which extended to their linens. With its own large stock of fine linens, the Company would have welcomed any such extension, but it was unobtainable. With some justice Tod appealed to them that "we surely want a bounty on linen of 2/- to 2/6 per yard...but if it's impossible, is it reasonable to reject what we can get?"[103] They were little mollified, and took their revenge in June, 1756, when warfare again broke out between the Edinburgh and the Glasgow banks, by alleging that the Company had been party to the run organised on the Glasgow banks. This slander earned the Company some hostility in Glasgow, and McCulloch, after asking one of his Glasgow friends if it were true that "sundry of your principal merchants have formed a resolution not to deal with or buy goods from the British Linen Company"[104], had

102 McCulloch to Forsyth (Cromarty) 12 Nov 1756.

103 Drummond to Milton 29 Dec 1755: Saltoun MSS - letters.

104 McCulloch to John Herries 15 June 1756.

to emphasise that the Company was completely neutral. Fortunately some merchants were willing to scotch the slander and confirm their support by buying large parcels of both fine and Bounty linen, i.e. Jamieson who ordered 30,000 yards of Edinburghs in June. James Dunlop Jnr. proved of assistance in cultivating a correspondence with the Exporters. A public trial was arranged at the Company's expense of its linens in comparison with its German and Arbroath rivals: the general judgement was that its linens were much better made for the price. "We are resolved to beat the foreign goods at the Virginia market".[105]

An additional indicator that the Company's linens had acquired a good reputation was that whereas some drapers had preferred not to have it known where they bought their linens, several now insisted that the Company's seal be displayed on its linens. By August 1756, McCulloch was more optimistic than he had been for some years: "as the Bounty is again renewed, we find the Company's trade for Exportation goods returning."[106] This upturn was particularly marked in the early months of 1757. Sales of linen amounted to £11,560 between May 31 - December 15, £7,430 in the next three months, and £3,100 between March 15 - May 30. Sales for the year 1756-57 totalled £14,000 at London, and £8,100 in Scotland - about £10,000 up on the previous year.

Though no profit was made on the sales at London, at least no loss was sustained, and part of this improvement was due to Tod's taking over the warehouse in place of Child, who was dismissed in March 1756. Tod immediately mounted a campaign to pare down the costs of running the London warehouse - £200 p.a. - and recommended that the Edinburgh establishment do likewise. It cost £319 p.a. including £199 in salaries. "I think the Company have too

105 McCulloch to James Dunlop 11 Jan 1757.

106 McCulloch to Maxwell 31 Aug 1756.

many horses, carts and servants."[107] While he was not pessimistic about the Company's long-term prospects, and attributed the difficulties at London "part to Mr. Child, more to the war, and to the unexpected turn to the Linen trade which occasioned large imports of foreign linens"[108] and at Edinburgh to the "large quantity of yarn which the Company reasonably imagined would have been an advantage (and) has turned out to their loss"[109], he recommended that no dividend be paid in order to strengthen the Saving Fund. He argued that the Company needed a general plan of trade so as to avoid the usual seasonal shortage of cash.

There was much of value in his case, but even at this distance of time it is apparent that his tone was becoming sharper - even bitter. Although McCulloch and Milton did everything possible to consult him, his distance from Edinburgh undoubtedly gave him the feeling that he was effectively isolated from the important decisions. The Company consequently -after enduring much stress from without - had to face increasing tension within its Management. The first major manifestation of this came in a controversy over Mudie when the Managers took opposite sides.

The accounts for 1755 had finally turned up in June 1756, and from them the Company calculated that it was owed about £3800 by Mudie. Henderson, a trusted clerk, was sent out to Riga in August with the ship to collect the 120 tons of flax promised in payment by Mudie. He was to check on the books (and on Weir), and none of Mudie's bills were to be honoured till this was done. In the meantime, the captains of the flax ships were given strict instructions to check on the quality of the flax loaded. Captain Wilkie of the Planter was reminded that "the last cargo was put on your ship to the great detriment of the Company and the contractors for spinning at Cromarty

107 Tod to Milton 1 Jan 1757: Saltoun MSS - letters.

108 Tod to Milton 26 Mar 1757: Saltoun MSS - letters.

109 Ibid.

and elsewhere".[110] Wilkie's ship brought 133 tons safely, but the other only 68 tons, leaving some 30 tons behind to load his own flax, for which he was sued and forced to pay damages, as the shortage meant the Company had to purchase some flax at London in the winter of 1756.

The orders for 1757 were spread, 40 tons from Konigsberg, 100 tons from two houses at St. Petersburg, and only 90 from Mudie, which was intended to extinguish his credit with the Company. He had been in Britain during February 1757, and although the Directors were insistent on taking proper security from him or even of arresting him, Tod supported him and pointed out that, by English law if he were arrested, the Company would then be liable for all the debts of the copartnery, including what he owed them. Tod proposed that security be taken from him for the £1000 payable in 1757 and "then I think there is little danger of him shipping £1500 of flax in 2 Months (to someone else)".[111] This was left to Tod, who seems to have done nothing effective.

The war pushed up freight and insurance charges from the Baltic in 1756; the Planter had to wait at Elsinore for a convoy and then take the risk of leaving it to go to the North of Scotland. Coast-wise shipping was severely disrupted; in July 1756 the Company seriously considered sending its linens to Newcastle by cart and shipping them from there to London as convoys from Leith were so irregular. Ralph Carr was written, "We would rather chuse to ship our linens for London by way of your port than directly from Leith, as your ships being so strongly built, and generally sailing in convoy together don't make for such great delays for a convoy as the Leith ships commonly do. They must, however, be kept clear of coal culm..."[112] But the Leith convoys after some petitioning became more frequent, and the idea was dropped. The

110 McCulloch to Wilkie 12 July 1757.

111 Tod to Milton 12 April 1757 Saltoun MSS - letters.

112 McCulloch to Carr 18 June 1757.

main difficulties lay with privateering further North, disrupting the flow of linens from Dundee and yarn from the North as well as the flax-ships.

1756 saw several major developments on the manufacturing side, and also the winding-up of the Trustees' aid to the cambric manufacture at Piccardy. The stock was divided amongst the producers, with McCulloch and Tod getting the lion's share,[113] and the looms were switched into other fabrics. The Trustees did decide to follow the Irish example and award premiums to manufacturers rather than small weavers, and it may just have been coincidence that the fabric they chose to encourage with a view to Army contracts was "Soldiers' Shirting", a strong coarse fabric about which McCulloch had been having talks with Sandieman at Perth and Young at Coupar Angus and for which Tod had secured some orders at London. After some modification, the Trustees offered prizes of £75, £50 and £25 to the best three lots of not less than 10,000 yards. The Company promptly contracted in December 1756 with Young, Sandieman and James Smith at Brechin on the basis that while the Company would advance money on the goods made, and the manufacturers were to be allowed 2½% on the cost price as their commission, their joint-return was to depend on profit and prize money. Tod warned them to keep their hopes and prices down initially. "This may be a good branch if we get into it gradually as we have the diapers but if pushed too far may turn out like the Hollands".[114]

The diaper manufacture was flourishing, and the neatness and skill of Campbell's weavers, and the variety of their patterns were noticed at London. In January 1757 a large order was placed for 700 pieces of 7qr wide diaper (each piece containing 6 cloths) which had to be ready by August. To meet this Campbell had to take on weavers as far away as Inverkeithing.

The Company was having trouble with its Dundee contractors and the circumstance of war made it desirable to have its manufacturing activities located nearer Leith for convoy shipment. In December 1756, McCulloch

113 See B.O.T.M. 17 Dec 1757.

114 Tod to Milton 1 Jan 1757 Saltoun MSS - letters.

asked Alexander Flemming to settle at Kirkliston where he was to take over the Earl of Hopeton's factory and contract with the Company for linens. In the factory the weaver was provided with good yarn and equipment and his work was supervised. Factory work meant regular payment for the weaver. In January 1757, Richard Neilson was put in charge of a coarse linen factory in Edinburgh to be "answerable for quality and to be allowed 2/- premium per piece over the costs of yarn and weaving, (plus) the usual allowance of 1/- a piece from his journeymen for finding looms, utensils, etc."[115] Soem of the yarn was to be supplied by Doig at a slight discount, but some local spinners were to be recruited as well. McCulloch estimated that the locational savings would outweigh the higher cost of weaving. The following estimates are presumably based on the current prices the Company was paying.

Table 6.10

Charges and Commission on Making a piece of Osnaburg

	At Dundee	At Kirkcaldy	At Dalkeith
Commission	1/6	1/6	1/6
Shore duties & Freight	9½	9	carriage 6d
Insurance	1/1		
Weaving	10/10	13/-, 13/6	12/-

(It was hoped that the price of weaving would be 12/- at Edinburgh).

Source: McCulloch to Tod 25 Jan 1757.

Neilson intended to make a start with 20-30 hands, each of whom it was estimated would weave 20 pieces a year worth £3 each (= c 2000 yds. of Osnaburg?), but had difficulty in recruiting weavers, who feared to come to Edinburgh because of the hotness of the press, despite a theoretical exemption for

115 McCulloch to Tod 25 Jan 1757.

weavers from it. Neilson had to buy protection for the hands he enlisted in Fife, Perthshire and Angus. By May he had 45 looms employed at the factory in the Canongate (soon increased to 60), Flemming had 20 at Kirkliston, Doig 60 at the Leith factory, and 40 more were employed at Cranston.[116] In addition to the factory looms, the Company also employed between 80-90 of the Edinburgh master-weavers.

This factory system was the result of two needs, to engage enough looms and to raise the standard of weaving. It was better to use small factories or Master-weavers "possessed of 4 looms instead of factories of 40-50 looms (but) at present we can get but few weavers on any terms. It is certainly right were this country masters of the manufacture and possessed of either tolerable houses or utensils but in the present state it becomes necessary to gether them together into large factories fitted for the purpose with proper utensils. This people in a year or two may be branched into different places in the Country and Suburbs and employed in the way... of master-weavers - the Truth is that we have experienced of late that most of the weavers bred up during the bounty deserted it on its discontinuance; upon our offering to employ them who remained (80-90 looms within 6 miles around only) we had our coarse linens very ill made owing to their houses and utensils and want of practice whereas those linens made in large factories with good utensils under the direction of Mr. Neilson or Doig proved not only well made but cheaper than the others".[117]

At least one other of the Company's contractors followed suit; George Young was awarded a grant by the Trustees to set up a weaving factory or "school" at Coupar Angus for 20 looms. On the other hand, Campbell at Dunfermline employed the independent weavers only (70+ by 1757) and did not

116 From the Staplery books, it appears that between May 1757-58, 79,683 yards were made from Staplery yarn around Edinburgh, of which 55,932 yards were "made within ourselves", i.e. at the Leith factory.

117 McCulloch to Alex Maitland & Anderson (London) 24 May, 1757.

set up a factory. By November 1757, the number of looms employed by the Company in the manufacture of Osnaburg had reached 400 but this was cut back by 100 as production threatened to run ahead of demand, with the master-weavers the first to be laid off and some from the factories. The centralisation of production enabled McCulloch to keep a close and critical eye on the performance of the various factories, e.g. "the Leith Factory is still behind the others...the Dundee people are better but not comparable with the three factories...worst of all are those made by small Master-weavers. Osnabriggs are only made from our Highland, Leith and Cranston spinning; if these are too much we must retrench the quantity of flax imported and the contracts with the Northern undertakers".[118]

But recovery from the slump was complete as can be seen by the production figures of the Company for linens manufactured and bought. More linens were being made by the Company and fewer bought.

Table 6.11

Linens Bought and Manufactured (£)

	Fine Linens	Coarse Linens
May 1755-56	6046	5,153
1756-57	7208	12,299 x
1757-58	8410	17,127 ϕ

x (380,551 yards)
ϕ (601,203 ")

While the general picture was of expansion, the Managers did not hesitate to axe any line not selling after a period of trial. Adams' linens for dyeing proved too slight for either home or foreign demand and, despite the pains it had cost to improve the standard of its weavers, the linens "too nigh ressembles the common country fabrics",[119] and so the looms were laid off. But when the Managers turned their attention to the provision of low-priced

118 McCulloch to Tod 11 August 1757.

119 McCulloch to Adams 21 Jan 1757.

linens for the Jamaica market, both Adams' and Neilson's looms were employed in that way, and the factory hands were soon producing 3000 yards a week. The main difference between the Osnaburgs made by Adams' country weavers and those made in the factories was the wide variation in quality of the former, but the cost of weaving was lower without the factory's overhead costs. In effect, when opting for the factory the Company were chosing to have better-made but more expensive linens, a policy to come under increasing question from the market.

The expansion on the manufacturing side necessitated a very large importation of flax and during 1757, 337 tons of flax were imported from the Baltic, 151 from Riga, 141 from St. Petersburg and 50 from Konigsberg, and also 26 of Dutch. During the Company years ending in May 1757 and 1758, 131 and 137 tons were imported for the Highlands, and 230 and 291 for the Lowland manufacturers and for sale. The Leith factory, Neilson, Campbell and Flemming all took over 30 tons each annually, and the total import of flax in these years was the highest level the Company attained, representing somewhere about 20% of all flax imported to Scotland directly from the Baltic and Holland. It is questionable whether this is very significant in view of the large and unknown quantity of Baltic flax which was imported to England and shipped coastwise to Scotland. Whereas the principal dealers in Dutch flax in Scotland did import their flax direct from Holland, this does not seem to have been the case with regard to Baltic flax, which was a prime motive in the Company making such determined efforts to build up its importation of Baltic flax.

The war did push up the prices of shipping and insurance, although flax was cheap, and one flax ship from Konisberg was captured with 58 tons on board and another had to be ransomed, with the result that the Company marked up its flax prices by 2½%. The last cargo to arrive from the Baltic was not sold but stored, which turned out to be a most prudent move, as in

1758, 5 out of the 7 flax ships sent to the Baltic were lost.

In many ways, despite the first signs of the dissension that was to rack the direction of the Company, 1757 was the happiest year that the Company experienced, with a successful importation of good flax (and an end to the copartnery with Mudie), and the Highland spinning at last producing a steady flow of cheap and well-made yarns. The production of linen was increasing and diversifying in response to the degree of market opportunity and increasing demand, and reaching and sustaining new levels of production and standards. After the tribulations of 1754-56 the fortunes of the British Linen Company were much revived. But the loss of the Bounty for two years was undoubtedly a grave blow to the Company, which severely depressed trade in general and the Company's production and sale in particular.

It could be argued that the Managers should have taken steps to anticipate the effects of the withdrawal of the Bounty and cut back on the production of yarn in the North. It is apparent that the reasons why this was not done were firstly a lingering hope even into 1754 that the Bounty might after all be renewed (there had been as much political heat over the last renewal), and a semi-patriotic desire not to reduce employment in the Highlands. The loss of the Bounty was ill-timed just when the Highland spinners and the Lowland weavers seemed to have acquired the art of making linen in demand for the colonial market, a knowledge dearly purchased by the Company, and which was not easily restored when the Bounty was. Profits throughout the pe riod suffered from the commitment of the Company to the colonial markets at Glasgow and Edinburgh, characterised by bad debts, long credit and fierce competition. Sales could have been restricted to the safer home market, and that they were not was another expression of the Company's extra-commercial motivation. Moreover in the Linen Trade, there were seldom as in other areas of commerce "great gains to recompense great

loss".[120] The path of recovery was laborious, by "minute attention to small savings and care in keeping up the fabrics when once got".[121] But during the period, the Company made some contribution towards securing "the quiet of the rest of the Island from the Insurrections of the Highlanders, by the introducing industry and manufactures among them and thereby making their circumstances easy and comfortable at home",[122] and developing fabrics which were in demand in "our American Colonys, as well as those fit for the consumpt of England, both which were great objects".[123]

120 Tod to Milton 4 Oct 1756 Saltoun MSS - letters.

121 Ibid.

122 Court of Directors' Minute Book, 5 July, 1762.

123 Ibid.

Chapter Seven: The Years of Questioning and Disengagement

"I have long been against their pushing the manufacturing of linen to a great extent...What I propose is that the Company assist all it can in introducing new fabrics and when they will go in to the common weavers let them go but follow them, by being concerned with proper people, to buy up such fabrics when made. Drop the factories..."

Tod to Milton 19 May 1759

(Saltoun MSS - letters)

"I am clear that the only effectual method we have for promoting the Linen Manufacture which is the great view of our charter is to lend money to manufacturers upon pledges at 4%. Traffic whether foreign or domestic is best in the hands of private dealers attentive in every way to their interest and that any sort of commercial dealing is altogether improper for a Public Company such as the B.L. Co..."

Henry Home to Milton 1763

(Saltoun MSS - letters)

The questions as to by what method and to what extent the Company should manufacture linens were to prove the divisive issues in the management of the Company after 1757, culminating in the complete withdrawal from any manufacturing after 1764, when it turned to banking instead. What first brought the manufacturing policies into question was the discovery in 1757 that, despite the disruption of foreign competition which kept sales at home brisk, the Company's linens were being undercut in price in the Edinburgh fabric and especially in the diapers. Of the latter 1326 pieces were on hand in May 1757, and while Campbell's weavers had made a further 1218 by December, only 196 had been sold which left a great number on hand. McCulloch blamed slack demand and reacted angrily to a suggestion that others were selling diaper more cheaply; "this must be a misinformation, for none made in Scotland are equal to what is made by this Company...nor is now made except the ill-coloured and ill put together stuff made at Dunfermline".[1]

But this experience was confirmed at Glasgow, where the Company's Osnaburgs were being undercut by Scottish-made Edinburghs. McCulloch foresaw as early as June that there would have to be changes: "sales were pretty considerable to Glasgow last year but nothing in proportion to their exports - the merchants there go for low price rather than strength to which we have too rigorously adhered".[2] Part of the cause was the spread of country weaving of Osnaburg, which was low in cost and quality, and another was the structure of marketing at Glasgow. "The Merchant Exporters chiefly supply themselves from what are called the furnishing shops or warehouses, with Osnaburgs etc., for export, except in some particular instances where the Merchants have an opinion of and purchase at this house. The owners of these shops are sharers in almost all the shipping adventures - sometimes 1/16 or 1/32 of the cargo - by this they draw in the Trade almost wholely to centre in themselves. Such Osnaburgs as we sell at 12 months for 6½ they

1 McCulloch to Tod 6 July 1757.

2 McCulloch to Tod 6 Jun 1757.

are furnished from Dundee and other places at 6½ to pay in two months of delivery whereof they can sell on a par with us to the Merchant Exporters".[3] The Company tried to meet this competition by offering discounts if a large quantity were taken, "but there is no prospect of a general trade because merchants and shopkeepers are seized by every weaver who can make up 6 pieces to make a horse load which he hacks from place to place...and sells below our prices".[4]

Tod confirmed that a similar undercutting was taking place at London. "Before I left Edinburgh, I did all I could to impress the people concerned in the Company that their linens of all sorts wanted improvement and were inferior to others at the market. When I came here, I found I was too much in the right. I was daily told of goods sold cheaper than ours - I saw them and found some of our oldest and best customers leave the warehouse. I pushed at all hands for new customers and was obliged to sell large quantities of goods under the first cost...to induce merchants to retain their orders".[5] This challenge at both the Glasgow and the London markets brought the traditional policy of sending the inferior linens to the former and the best to the latter under review. The Company's factory linens were, although better made with good yarn and weaving, just too expensive at Glasgow as "the general run (9/10) of exports from Glasgow is of very mean brown linens, - poor quality and low-priced".[6] McCulloch was forced, therefore, to lower his standards and permit inferior tow yarn to be used in weaving up linens for this market to reduce the price. "The Directors are of the opinion that whatever objections may be as to the quality of these goods as must be produced from tow yarns, seeing it is an article in demand and recommended

3 McCulloch to Tod 18 Oct 1757

4 Ibid

5 Tod to Milton, 22 Dec 1758, Saltoun MSS - letters.

6 McCulloch to Tod, 14 Jan 1758.

by you as necessary for an assortment, it will be proper to prepare a part of the manufacture in this manner".[7] Some looms were accordingly switched to use tow yarn from January, 1758. Even the Company's "seconds" were better made than the general run offered for sale at Glasgow, but the moral seemed to be that at Glasgow what counted was cheapness.

At London the position was equally serious, because the Dundee and Arbroath dealers seemed to be able to provide linens of the same quality at a lower price. The underlying factor was their use of country weavers as opposed to factories, and as their standards of weaving had risen, the latter became uneconomic; "it appears that no factories can compete in cheapness with the common weavers once these attain a knowledge of the fabrics".[8] This was not fully apparent in 1757, nor was McCulloch ready to accept that the country weavers had improved significantly, but, in an effort to cut the cost of supervision in the factories, neatly woven, light linens were abandoned in favour of lower-priced and coarser goods. But the supervisors were not made entirely redundant as some of the best weavers were put onto the making of pale-coloured Osnaburgs which Tod intended to offer to the Navy, or, which failing, use for the Jamaica market or dyeing.

In March there were 314 looms in the Company's factories, most of which used yarn supplied by the Staplery. This was sharply criticised by Tod; "The Staplery may be made most useful to the Company, but in time past, the ill-sorted yarns that were bought, negligent reception etc...at last produced such a quantity of bad yarns on hand that even a most extravagant profit on yarns sold could not answer the interest of dead stock".[9] Some of the Company's contractors complained that the Staplery yarn was better-sorted but too high-priced, and Doig in turn blamed the price of the Company's flax. The yarn he obtained from the North was as cheap as that the Dundee men used,

7 McCulloch to Tod, Ibid.

8 Tod, Observations on the Company's affairs, Sept 1759; Saltoun MSS, box 350.

9 Tod to Milton, 23 Mar 1758; Saltoun MSS - letters.

which made it difficult to understand why Doig's own factory linens were more expensive than theirs.

Much of Tod's ammunition against the Staplery was supplied by Neilson, who was becoming increasingly dissatisfied, as, when the Company settled accounts with him, his net profit for supervising the labour of 70 or so weavers was only £30, and in view of the alteration in the Company's manufacturing policy it seemed even this might be reduced. McCulloch gave him an additional allowance of 5% in the expectation that production would rise in the factory's second year of life, but refused anything further. While Neilson's factory linens were 10% better than the normal run, "the question is whether these well-made goods of his will bring the price at market".[10] Accordingly, late in 1758, Neilson decided to set up for himself at Dundee as a linen manufacturer, contracting with the Company.

While the standard of weaving elsewhere was improving, the Edinburgh weavers were so unreliable that it was decided in May 1758 to "drop entirely the weaving out of house by Country weavers - there being neither profit nor pleasure carrying on business with the generality of them".[11] McCulloch's response to the news from London was not to turn to the country weavers but to confine all production to the factories, and to those master-weavers who had their looms under personal supervision in "little factories of 15-20 looms".[12] Firm contracts were signed with Hogg at Dalkeith, Flemming at Kirkliston, and Lauriston at the Canongate for them to manufacture linens with the Staplery's yarn of which there was nearly £4000 worth on hand (29,000 spindles). This stock inhibited McCulloch from any attempt to use foreign yarn, or Scottish yarn from other sources had he wanted, but in practice he insisted that the Staplery yarn was worth its higher price because it was well-spun and sorted.

10 McCulloch to Tod, 29 June 1758.

11 McCulloch to Tod, 9 May 1758.

12 Ibid.

One advantage of the factories was that experiments and modifications could quickly be carried out in response to Tod's instructions. Success in ready sales was based on a combination of skill in manufacturing and knowledge and timing the goods for the markets. The interaction of Tod and McCulloch seemed to be bearing fruit as over 85,000 yards of Edinburghs were sold at London during the autumn of 1757, and of the 393,000 yards of linen sold by Tod in the year ending in May 1758, 329,000 or nearly 85% were of the Edinburgh fabric. Some 21,000 yards of check and 24,000 of white linen, and 16,640 table-cloths were also sold. Sales of linen at London totalled £15,900 (profit of £590), compared with £8,251 (+£1366) at Edinburgh and £1,519 (+£78) at Glasgow.

Sales of country linens, purchased from Sandieman and Young, were encouraging, which was another indicator to the improvement in the standard of country weaving. The Directors decided to extend sales on joint-account of this kind of linen by Tod. A senior clerk was sent as a commercial rider through the North of England with samples of the Company's linens, e.g. to York, Newcastle, Leicester and Leeds, with letters of introduction. While orders were secured to the value of £755 for charges of £23, most were small and quite a number ended only as bad debts. The tour's primary objective was, in McCulloch's view, realised; viz. "What we chiefly want is an introduction and quite a number more general acquaintances in the Country of England".[13] While the Directors refused to consider reopening the Glasgow warehouse, James Dunlop was appointed to sell the Company's linens there on 2½ commission. While sales of linens were nearly £10,000 up on the previous year, nobody was complacent about the situation.

It was, for instance, rather ominous that over £17,000 of linens were on hand unsold at London when the Balance was taken, including a stock of fine linens well past their best. Nor were the profits large, or likely to improve dramatically in the short term. "As to profits, we must be content

13 McCulloch to Tod, 13 Sept., 1757.

if they will but suffice for the annual presentations now and look for the surplus profits hereafter when we have learnt the qualities of goods wanted for the London market, got rid of our stock of fine goods, and instead of borrowed money, shall make a more general use of our own circulation",[14] During the year, prices were depressed at London, "occasioned by a large importation from Germany to save the owners' property from contending armies",[15] and the war also pushed up transport and insurance costs; "the Company has spent £850 of Insurance only above the ordinary charge in peaceable times".[16] The early years of the war, did not on balance benefit the Company as they might have been expected to do, with the disruption of German production.

The Baltic trade was especially cramped. Ships were difficult to get: of the 400 sail at Newcastle, 370 were in Government service. Freight and insurance rates were high for those ships which left the Baltic to London convoys for Scotland, as several privateers were operating round the East coast. During the war the Company lost ships on both the outward and the inward trip. Two, at least, were fully laden with flax, the Elizabeth in 1757 and the Cathcart in 1759. The former was carried into Norway and the latter ransomed at Elsinore. In 1758, out of 7 ships freighted by the Company to the Baltic for flax, only 2 returned safely. Two were sunk, two captured on the outward trip, and one refused to load the Company's flax at St. Petersburg on arrival, despite a contract with the owners. In 1759, 2 more ships out of 6 sent were captured.

This inconvenienced the Company considerably. The Directors had talked in 1758 of repeating the large importation of the previous year, and had ordered 255 tons, 126 of which was to go to Cromarty alone. It was

14 McCulloch to Milton, 1 June 1758, Saltoun MSS - letters.

15 Meetings of the Court of Proprietors' Minutes, 17 Jul 1758.

16 Ibid.

envisaged that some could be sold to the Dundee manufacturers, but they refused to place any firm orders without having seen a sample of the cargo, which was fortunate indeed as, with its losses, the Company had none to spare, and was unable to import much from Holland where the crop in 1758 was dear. All the cargoes lost were insured, and the underwriters paid up, but the Company's usual large profit on the sale of flax was reduced, "as no allowance could possibly be expected either for loss of interest incurred or Profits that should have risen on the sales thereof in Britain".[17]

The Yarn Staplery was still laden with unsold yarn on hand. Steps were taken to reduce the Company's spinning in the Lowlands and by September 1758 only one-quarter the former number of spinners were being employed, with a remnant to prevent the Company being left entirely at the mercy of the Northern agents. Tod wanted the spinning in the North also cut back, but for various reasons, including a sense of national responsibility, it was decided instead to try to sell off all the surplus yarn in England, which might amount to £5-6,000 annually. The spinning in the North was, therefore, little diminished,[18] and sales of yarn were made in quite large quantities to two Manchester houses through their Glasgow agents. Some yarn was also sold at London. By November 1759, 35,000 spindles had been sold - some admittedly below cost price - and a further 10,000 lay at Glasgow awaiting shipment to Warrington, but just under 40,000 spindles of Osnaburg yarn were still on hand. The general rule was that if it had been cleaned, it was woven up; if not, sold off if possible.

Despite the sales, it was clearly inevitable that, unless there were a marked expansion on the manufacturing side, some contraction of the spinning was inevitable. This did not, however, deter McCulloch from taking over the Board of Trustees' Highland stations in February 1759. The Board's

17 Meetings of the Court of Proprietors Minutes, 4 June 1759.

18 E.g. Wm. Forsyth had 4,277 spindles spun between 19 Jul - 19 Nov 1754; 3,088 between 19 Nov - 19 Feb 1755, and 9,210 between April and October 1756. B.O.T.M., passim.

attempt to develop spinning in the interior parts of the Highlands had met with little success; the stations at Lochbroom, Loch Carron and Glenmoriston were costing £1200 annually to produce a mere 3000 spindles a year. The agents in charge had given only trouble and the Board "were heartily sick of house building and giving salaries in the Highlands".[19] They were, therefore, glad to hand over to McCulloch the running of the stations, and leave to him the business of diffusing spinning in these regions. McCulloch was to supply the stations with flax, and to receive £50 per agent, 5/- for each woman taught to spin, 1000 wheels and reels to distribute, and a premium of 6^d per spindle spun at the stations, and 2^d per spindle on those spun by other agents in the region. This was later modified to a simple £2 per 1000 spindles spunby any of the Highland agents. McCulloch anticipated that 50-60,000 spindles would be spun by the end of the second year, and "with these premiums this Company will be no losers".[20]

It is clear that the prime objective of the agreement for McCulloch was to secure a subsidy for his own agents and spinning in the North. Right from the outset, he bypassed the stations by appointing several of the Company's agents to cover the interior regions, teaching and supplying flax by horseback. His idea was to plant small colonies of spinners to which the agents came, rather than vice versa. Not surprisingly, the agents at the stations "were to the last degree adverse to the Trustees' plan of increasing the spinning and intend to disappoint the scheme".[21] McCulloch used their opposition as an excuse to free himself of most of the original obligations imposed by the Trustees by applying "to be at liberty to employ agents of my own. The Board agreed and I have entered into a contract with one Hector Scott at Inverness, experienced many years in the Company's employment, to carry on the spinning at Fort Augustus, to pay him 2^d per spindle, carriage free, and

19 McCulloch to Joseph Forsyth (Dingwall), 28 Jul 1759.

20 McCulloch to Tod, 1 Feb 1759.

21 McCulloch to Milton, 5 Jul 1759; Saltoun MSS - letters.

he has engaged to teach 100 girls spinning at 5/- each. Now the prices are settled and I am quite free of these undertakers, I shall endeavour to contract with Joseph Forsyth at Dingwall for supplying the Loch Carron district, and John MacKay for supplying the Loch Broom district from the head of the Dornoch Forth on the same terms".[22]

His system worked well, and while the settlements reaped much less advantage than the travelling agents, at least something was realised from the application of the Highland fund, for the benefit of Country, Company and "natives" alike. Under the terms of this contract, 75,207 spindles were spun in Inverness-shire between 1 November 1758-59,[23] and this level was sustained, judging from what scattered statistics have survived; e.g. between 4 December, 1760 and 13 October, 1761 over 43,000 spindles were spun in Inverness, Ross, Cromarty and Orkney, and a further 9,363 in the interior parts.[24] The resources of the Fund were diverted in the final year of its life, 1763, to the North-West and Bute, which terminated the contract with McCulloch. The stations did not survive long after that, but the agents continued their work, and spinning was to survive in the Highlands for over thirty years more as a valuable supplement to household income.[25] After the withdrawal of the British Linen Company from manufacturing, a certain amount of the yarn was woven locally. After 1765, Invernessshire began a modest expansion in the amount of linen stamped for sale.

The stock of fine linens on hand at the Balance in May 1758 showed little reduction from the previous balance at £7,300. The Directors, who in the absence of Tod were playing an increasingly active part in the management of the Company, instructed him to do all he could to push their sale.

22 Ibid.

23 McCulloch to Flint, 2 Jan 1760.

24 B.O.T.M. 23 Jan 1762.

25 See M. Gray, The Highland Economy 1750-1850, pp. 138-141.

Some were consigned, without identifying marks "to obtain sale without hurting the character of this house",[26] to other London linenfactors, and by August over £800 worth had been sold. In December the Directors finally decided to stop the manufacture of holland entirely, a decision surely long overdue. The affair of the hollands lay at the heart of a controversy between the Managers as to the conduct of the manufacturing side of the Company.

Tod had written to McCulloch in September about not just the hollands but also the flax and yarn situation. His prime concern was that the Company seemed to be tying up too much money in stock. "If you stop the spinning, the yarn may in time be sold off, but as to your hollands the fabric of the goods is out of fashion. I am sorry any has been made these two years. The Arbroath people import what flax they need for the year and spin it up, and have no dead stock - I'm not against people's importing more flax than they spin if they can sell it; nay I am pretty sure that more money will be made by dealing in the materials of manufacture than by following it through all its stages".[27] In other words, he was questioning the value of the integration of all the processes.

McCulloch defended himself by pointing out that no hollands were made except as an assortment to other linens, and that most of the trouble had stemmed from the period that Child was at London when "we laid in so many fine linens in the hopes of a market in this, the only branch of the Linen Manufacture that was then tolerably understood and known in the country. With regard to yarns you know that when the Bounty was discontinued, the Company resolved to keep up the spinning in the North. This was, no doubt, more of a patriot than a mercantile resolution; many were ill-spun and others of a different staple to those discovered by you to be in demand at London. Our other spinning at Leith was for supplying that particular manufacture

26 McCulloch to Tod, 8 Jul 1758.

27 Tod to McCulloch, 14 Sept, 1758.

and as a check to the manner and price of spinning in the North".[28]

Tod wanted the Company to withdraw from manufacturing linens itself. "The Company should manufacture very few goods on their own account. The few looms that they keep should only make such linens as cannot be manufactured by the common weavers and these more employed in making experiments and judging how and at what cost such and such linens may be provided than in hopes of making a great profit by these linens".[29] He argued that as the standard of country weaving had improved, the Company no longer needed to supervise production directly itself in the coarse linens, and the burden could be devolved onto manufacturers and contractors. The proper role of the Company was to supply the raw materials, and help the manufacturers by making sales on joint-account. This change in emphasis would be compatible with both patriotic principle and profit, being attended with fewer risks. If another fabric went out of fashion, the manufacturer, not the Company, would carry the burden.

McCulloch and the Directors accepted much of Tod's argument, and agreed that several of the coarser fabrics, which had hardly been known some years before, were now staples, and from December 1758 commenced to run down the number of looms employed in the factories, to about 220, mostly to be employed in making Osnaburg with a few to experiment with Kenting or Long lawn. The complementary step was to connect the Company further with established linen dealers andmanufacturers by buying on joint-account, with the Company advancing one-half of the value of the linens when bought to the co-buyer, and taking its repayment out of the net proceeds of the goods when sold. The linens were consigned to Tod for sale.

Purchases on joint-account steadily increased after 1758, and also larger contracts were settled with various country linen manufacturers for

28 McCulloch to Tod, 16 Oct 1758.

29 Tod, Observations on the Company's affairs (Sept 1758?); Saltoun MSS - box 350.

Soldiers' Shirting, Silesias and Diapers. The factories made Dowlas or fine Edinburghs while the coarser Osnaburgs were left to the country weavers, i.e. at Dundee and in Angus. The manufacture of Osnaburg was, therefore, carried on in two ways; the better were made in the 200 looms which were the Company's own property and under inspection, and the rest in the looms of the country weavers "after the Dundee manner", i.e. at less charge but with poorer weaving. When the first contracts for Navy linen came, it was the Leith and Canongate factories that were entrusted with the weaving. But with the provision of better reeds, etc. for the country weavers, which the Company distributed, the margin between their weaving and that of the factory's narrowed further. The underlying cause of bad weaving was not so much lack of skill in the coarser fabrics, although it played a part, as poverty, which condemned the weavers to use poor equipment and yarn. The Company retained a nucleus of permanent weavers in the factories, which became all the more valuable as there were periods when master-weavers were scarce, and relied on the pool of country weavers to satisfy further demand.

The first large joint-account venture came in September 1758 after a rumour, partly corroborated by news of bankruptcies, had reached the Company of a depression in the check manufacture at Manchester with 14,000 weavers switching to other fabrics. The Managers reasoned that this should increase the demand for Scottish checks, and accepted an offer from Whyte of Kirkcaldy of 25,000 yards best checks at 6^{d} per yard, on joint-account. The Company was to provide one-half of the purchase money and also advance him one-half of his share until the linens were sold. The linens were sent to London where they met with a ready sale at some profit. Whyte was subsequently engaged by the Company to buy checks from Kirkcaldy at 1% commission.

War demand, for outfitting the Navy or the Army, began to percolate through to the Company, but not all the War contracts were as profitable as legend would have it. In September, 1758, a consignment of Soldiers'

Shirting was sold to an army contractor at London, Mr. Brodie. The 35,000 yards involved had been purchased in February, 1758 at 9^d per yard (total cost, £1312), and had been sold at $10\ ^{11}/_{12}{}^d$ payable at 12 months in September (total receipts, £1458), but after commission and interest @ 5% had been deducted, the net proceed was a loss of £14 16/10 . The long credit demanded, and the time awaiting sale, were what made this contract unprofitable.

Tod secured, to the delight of the Directors, an order for best Osnaburg from the Navy Board in December 1758. "We congratulate you on your success with the Navy Board. No pains will be spared to make it properly".[30] The first order was for 30,000 yards @ $8\frac{1}{2}{}^d$ which was followed by others in 1759 for Osnaburgs and also checks. Patterns were sent from London by Tod for the factories at Leith and the Canongate. The pressure on production meant more demand for yarn and the Staplery's stocks began to fall as low as they had once been high.

War demand was expressed in a brisk trade in linens at London, which served to compensate for the dullness of trade at Glasgow, McCulloch found, after his visit there in the autumn, that "the trade from Glasgow has met with several severe checks this year: the short crop of tobacco in Virginia and the high price of the small quantity coming home will prevent their sending almost any goods there, and the capture of 8 or 9 of their ships for the West Indies, (though insured) has deprived them of proper ships and masters for carrying on that trade, at least so far, from all which we expect but small sales to that place this season".[31] Demand from the West Indies was brisk at London, and an extra 5% duty imposed on foreign linen imported, may have assisted sales to the English home market.

At London Tod sold over 524,000 yards of linen, including 400,000 of

30 McCulloch to Tod, 23 Dec 1758.

31 McCulloch to Tod, 24 Oct 1758.

Osnaburg, and 9,316 table-cloths, in the year ending May 30, 1759. This represented an increase of one-third by volume. Judging from the figures, the autumn and spring demand for the Colonies was particularly high.

Table 7.1

Sales by Tod at London (£)

1758	June	965	1759	Jan-Feb	1237
	July	1448		Feb-Mar	5113
	August	-		Apr-May	1922
	September	948			
	December	7153			

Total £18,376

When sales by other factors were added in, e.g. Alex Anderson & Co. had sold some hollands, £21,882 of linens had been sold at London, for a profit of £541, and £12,268 at Edinburgh for a profit there of £1976, which constituted the best year overall the Company had had. Profits at London, moreover, were depressed by the sale of fine linens, of which the stock was reduced by £4,500.

But in January 1759, there had been a change of major consequence for the Company, namely the resignation of Tod as Manager, to go into partnership with Alexander Anderson as a linen factor at London. His dissatisfaction with the Edinburgh administration and his isolation had made a break inevitable when opportunity offered. This duly came to pass; "a friend has offered to drop his commission business in my favour which brings him £800 p.a. This offer, my Lord, required no hesitation on my part. I have been acting for the British Linen Company for some years without a premium and my name as a manager without power and at 400 miles from the place where things are conducted. The Company's situation cannot afford me a premium as a manager and it will be found that the House here is a much greater expense than if you sold by commission and the more so if you restrict your trade which I think should be done. I have gone into partnership with one Mr. Anderson

who deals largely in the selling of linens by commission from Scotland. I did this partly that I might have the opportunity of managing the Company's business on commission".[32]

This necessitated several decisions, relating to the future of the warehouse. It had cost over the last ten years on average £262 p.a. to run,[33] and the cost of selling the same quantity of linen through a factor on commission would have been similar. The major problem, and one deemed insuperable, was whether "any Clerk or Servant could keep up the yearly sales at the warehouse when the articles are in the hands of so many factors which they were not formerly".[34] The question became, once it was decided to close the warehouse, whether to consign to one house or several. Offers were received from some houses, e.g. Grant & Robertson, to manage the Company's London affairs on the standard terms, 2½% commission on the sale of linens, plus ½% for warehouse rent, etc., insurance to be made without commission and bill business on ½%.

Tod strongly urged that the Company's business should not be divided, to make their interests of paramount consideration for one house, and to prevent the Drapers working the Factors "against each other. When any person's goods or fabrics is divided, the Factor will sell off these goods through fear of missing his market, or through obstinacy, keep them too long".[35] The Directors agreed to send all the Company's business undivided to the new house of Tod & Anderson, with the proviso that, if sales exceeded £15,000 p.a., the commission would drop from 2½% to 2%. After this, and the question of back payments, had been settled, Tod wrote a series of long and blunt letters

32 Tod to Milton, 2 Jan 1759, Saltoun MSS - letters.

33 On average, it was estimated that the factorage fees would have been £330 p.a. But both a new clerk and warehouse were required.

34 "Expences of the London warehouse"; drawn up by Tod in Feb, 1759. Saltoun MSS - box 350.

35 Ibid.

to Milton and McCulloch about the management of the Company, and the need to cut overhead expenses and decrease the manufacture of linen. His cogent, and experienced analysis is worth quotation in extenso.

"I have long been against their pushing the manufacturing of linen to a great extent. It is a truth that, as soon as any fabric gets in to the hands of the common people, no man can carry it to profit in a factory. In infancy it must be nursed there, but the coarser a fabric, the sooner it leaves the factories. In the infant stages of a manufacture, it requires great observation, close attention and judgement to observe the several turns...If a man will carry on fabrics in factories of which people without doors have acquired full skill, be assured he will work to very great loss. If he attempts to push fabrics without the factories and amongst the common weavers before they have acquired the skill, he must likewise suffer great loss. In the Company's trade, the Common weavers made coarse Edinburghs and low-priced diapers much cheaper than the Company - a very few of the finest of each sort factories may make to advantage but not for a long time... What I propose is that the Company assist all it can in the introducing of new fabrics and when they will go in to the common weavers, let them go, but follow them by being concerned with proper people to buy up such fabrics when made, Drop the factories, at least in that article as you find it improve in the country. Whenever you purchase on speculation, let it be of fabrics thoroughly established".[36]

The central point of his analysis was the contention that the standard of weaving in the coarse fabrics had risen so much everywhere in the country that the supervision of, and the factories themselves, were redundant, and the consequence an extension of the Company's role as a dealer in linens at the expense of its manufacturing side. Tod recommended joint-purchasing rather than the use of a network of agents buying on commission. "When

36 Tod to Milton, 19 May 1759, Saltoun MSS, letters.

the Company employ people to buy on commission at Perth, Dundee or Dunfermline, their goods are seldom as well bought as what people buy for their own account. Would it not be, therefore, of use that the Company had only a ½ share of this, that and the other merchant's trade in linens, assisting them with notes? In this way the Merchant will be careful to buy well, as ½ of the goods are on his own account, and the Company's notes would be issued entirely by promoting the linen trade".[37]

The Company were ultimately to follow his advice in full, but while McCulloch may have exaggerated the failings of the country weavers in his desire to make good linens, Tod must have been right in seeing McCulloch's insistence on factory-made linens as the prime cause of the Company's linens being undercut in price at the market. Correspondents were appointed in most of the major manufacturing towns and centres, e.g. at Irvine, Dundee, Kirkcaldy, Perth, Coupar Angus, etc. Some were agents who bought on commission for the Company, e.g. David Kennedy at Irvine; others were merchants or manufacturers who bought linens with the Company on joint-account. George Young, at Coupar Angus, made over 180,000 yards annually, some of which the Company bought outright on contract, and some was handled on joint-account.

In practice, the basic pattern adopted for the joint-purchase of linens was that the correspondent was allowed 1½% for purchasing the linens (or in the case of a manufacturer 1½% above cost price including management charges), and the Company 1½% commission for handling the sale if at Edinburgh, if by a factor elsewhere nothing. After all charges were deducted, such as transport and factors' fees, the profit or loss was then equally divided. This system appealed more to the larger dealers and manufacturers, than the small, who preferred the certainty of contracting for quantities at fixed prices. If the co-purchaser wished, he could borrow the money needed for his share of the purchase at 4¾-5% from the Company.

37. Ibid.

Richard Neilson had settled at Dundee in 1759, to employ the poorer weavers to make Osnaburg on contract for the Company, and to establish the manufacture of a new species of linen called "Pomerania", which was rather coarser than soldiers' shirting and finer than Osnaburg. He also sold flax for the Company, but his sales never exceeded 35 tons a year. But when the Company attempted to purchase linens on joint-account with him, this aroused a storm of protest from the local dealers who feared that the Company, with its resources, intended to monopolise the purchase and marketing of linens to London. This "outcry arises from a belief that the Company is to interfere with their - the Dundee merchants - interests and monopolise the trade. Let them know that you carry on trade for your own accounts, not in the style of an agent or factor for another, except for your being paid commission on your labour".[38] The volume of coarse linen bought with Neilson was to rise steadily thereafter.

The manufacturing activities of the Company were in the process of reduction throughout 1759 and 1760. When in February, 1760 the contract with Doig was terminated and the Canongate and Leith factories surrendered to the Company, only 100 looms were kept on in the manufacture of Osnaburgs for the Navy. The Cranston factory was given up entirely. The venture in soldiers' shirting with Young and Neilson was vindicated by the award of premiums totalling £96 in January 1760 by the Trustees for the best lots of linen offered. This bonus was matched by the news that the war was likely to continue another year, and demand was high at both London and Glasgow, although the latter was for some time apprehensive of a visit from Thurot's squadron. The Navy Board's orders for Navy linens and checks were repeated and the Company, which had contracted for 64,000 yards of soldiers' shirting to be delivered in the spring of 1760, missed sales because the contractors fell behind in their deliveries. With fewer looms under its

38 McCulloch to Neilson, 15 Jan 1760.

control, the Company was more at the mercy of its suppliers, but no penalties for late delivery seem to have been written into its contracts with them.

Sales at Glasgow were much brighter than for some years; McCulloch found on his annual visit in the autumn that the merchants were keen to push their trade to America, and secured £1200 of orders for linens. Cash, unfortunately, was still scarce there, and payments were protracted, which had the result of forcing the Company to borrow £4,000 at 4½%. But shortage of cash had never been a deterrent to the Glasgow merchants, and the demand from there and London was such that the Lapping House at Edinburgh could not keep abreast of the demand for its services in the autumn of 1759. The Company had to report to a potential customer that it had no white Edinburghs on hand, as most of them had been carried off for export. In the spring, the prospect opened of getting into the trade in linens to Spain, which was normally dominated by Continental linens, whose supply line was disrupted by the war. Several Edinburgh merchants were alive to the possibilities, and William Dalrymple, in partnership with the Coutts, placed a large order with the Company for pistol lawns, etc., to the value of £1331, which were shipped in February for Cadiz. This was the first, and virtually the only sale of linens to anywhere in Europe by the Company.

The reasons for the increase in the sales are complex, stemming in part from the war, and a general suspicion amongst buyers that as the war continued, the price of linens would rise. There was a general increase in the price of linens during the winter, which the manufacturers blamed on the good harvest, which had pushed up the price of yarn. The Company was undoubtedly making a major effort to increase sales. McCulloch had adopted the practice of consulting the Glasgow newspapers for notice of a ship setting out for the Colonies. He would then write to the merchants concerned, e.g. "seeing you are now fitting out a vessel for Guadaloupe and St. Kitts, may we recommend

a trial of the Company's goods..."[39] This may have had a contributory effect in boosting sales there. On the other hand, Robertson's third tour in the North of England for the Company in the autumn of 1759 proved to be the last, as all that resulted was a string of small and troublesome orders, "and I don't find serving these small dealers brings any considerable orders to the House".[40]

As much of the sales boom was at London, it must have been due in no small measure to the work of Tod. He, after all, had "got our Osnaburgs introduced to the Navy and used for frocks instead of German, and our Scotch checks to be used for shirts to the sailors as well as the Manchester checks".[41]

But market conditions were very favourable, as he himself conceded in urging that sales be pushed. "It is true goods sell readily just now, and that at first view gives great hopes, but the war will soon be over in a year or two, and then a load of goods will be as bad as ever. The present time should be used to sell off every piece of old stock and make proper regulations such as may establish a solid trade in time of peace".[42]

Table 7.2

Sales at London by Tod (and Tod & Anderson)

	£	Yds.
By Tod, 1759		
31st May - 30th Dec	11,044	266,093
By Tod & Anderson, 1760		
Jan	1,455	48,370
Feb	4,325	110,932
Mar	2,842	68,843
Apr	472	14,192
May	2,190	65,594
Total (inc. sundries)	22,120	573,024

39 McCulloch to Donaldson & MacRae, 1 Jan 1760.

40 McCulloch to Tod, 3 Mar 1760.

41 Tod to Milton, 18 Mar 1760, Saltoun MSS - letters.

42 Ibid.

Sales at Edinburgh for the year ending in May, 1760 totalled £14,400 with a profit of £2,074, and at London £22,547, on which the profit was only £21, after factor's commission of £636 had been deducted. Tod alleged that the reason for the differential between the profit margins in Scotland and at London was that he was sent the inferior linens to sell off. If this were true, all traces of such a policy have long vanished, for the prevailing impression from the Company's correspondence is that McCulloch tried to the utmost of his ability to follow Tod's instructions carefully and provide him with the fabrics he wanted at the right price. The underlying fact may well have been, quite simply, that the London market was much more competitive, e.g. some linens made by Young were divided into two parcels: one sold at 10-12½ profit to the exporters at Glasgow, and the other at London barely realised its cost price.

The rise in yarn prices assisted the sale of yarn to Manchester and Bolton, where 24 bales worth £600 were sent in December. The bulk of the yarns that had been on hand since 1757 were sold off and, with the reduction in the Company's own manufacturing needs, the policy was to sell all yarn immediately that was surplus to current requirements. 75,000 spindles were spun in the North between November 1758-59, and the Company's yarn trade entered a most profitable stage asprices rose in the winter of 1759. Although the Yarn Staplery was wound up, the Highland spinning was continued on the basis of fresh contracts with the agents and the Trustees. The latter offered a subsidy of £2 per 1000 spindles, spun in the Highlands, for between 45 - 75,000 spindles, instead of the former grant to the Yarn Staplery. McCulloch accepted this, and despairing of ever doing much with the stations, asked for a larger subsidy for his agents supervising the spinning in the interior parts. He wanted 5^{d} per spindle, and the Trustees settled on £4 per 1000. The Highland spinning was all the more important as it

proved very difficult to re-engage spinners in the Lowlands, after the cut-back in 1758.

The importation of flax was much more successful in 1759 than in 1758, and over 300 tons were imported, the bulk of which came from Riga. The orders were delayed for as long as possible because of the delicate political position, as it was expected that a fleet would be sent in the spring to the Baltic to support the King of Prussia. Not until this proved to be only a rumour, (which if true would have greatly affected prices and property) were the Directors willing to order. They commissioned in April 1760, 120 tons of flax from both Messrs. Zuckerbecker, and Henderson, the clerk sent to look into Mudie's affairs and who had subsequently been left to conduct the Company's flax business there. As "Mr. Zuckerbecker is a foreigner in whose hands the Company's property would be safe in the event of a war between Great Britain and Russia",[43] the credit for the whole was put in his name.

The news that no fleet was to be sent brought relief in the Baltic, and prices rose sharply at Riga. The Company was, therefore, glad to contract for an additional 60 tons from two houses at St. Petersburg, at the reasonable price of £28 15/- and £27 per ton respectively. The importation was not entirely without incident; one ship was damaged in a storm so that she was in some danger of sinking, and another was chased into Dundee by a privateer. The quality of the flax was only moderate.

For the years 1760 and 1761, the records of the British Linen Company are not so complete as those for previous years, and in particular the correspondence with Tod & Anderson at London is missing. The deficiencies are remediable in part by a Memorial presented to the Court of Directors on the 5th of July, 1762, which surveyed the Company's trade up to May 1761.

43 McCulloch to Henderson at Riga, 26 April, 1760.

It traced the progress of the Company from 1746 through the vicissitudes of the 1750s; the loss of the bounty and the disruption of trade, the mound of bad debts at Glasgow, and the troubles with the bleachfield, to the relative prosperity of the early 1760s where the weavers "are so well instructed that Osnabriggs, dowlas, Pomeranias, Military Shirting, Silesias, Garlix, Britannias and linens in the Irish fabric are now become staple articles of commerce to this kingdom and the diapers come near to the foreign".[44]

The first aspect of the Company's affairs to be examined was the importation and sale of flax. In the year ending May 30, 1759, £10,002 of flax was sold, including £1433 of profit (14%); and in the next year £9,960, profit £1021 or 10%. The slight decline in profits was caused by the rise in flax prices abroad in 1761, which resulted in the Company losing on the sales to the Highland agents, who were supplied at a fixed price, regardless, in the short run, of changes in the cost price. A profit of £804 on this account became a loss of £34 in the following year. But the flax sold on the open market did so to great profit, as there was a severe shortage.

While the profit margin may have been sharply reduced on the flax sold to the Highland agents, the Company was certainly no loser by the sale of their yarns. All the yarn produced met with ready sale at high profit as the price of yarn in the Lowlands had risen to an "extravagant" level. The prime cause of this rise, which also reduced the quantity of yarn spun in the Highlands to c. 60,000 spindles in 1760, was the cheapness of provisions. "The decrease over the previous year is owing to the low price of grain, not to any want of Consumpt or Demand for the goods. The Poor people there, as in most other countries, decline working for any more than what will barely subsist them, so that in cheap years little is manufactured, and what is done, is paid for at a higher rate".[45] The Company sold all it had at

44 Court of Directors' Minutes, 5 July, 1762.

45 McCulloch to Flint, 20 Nov 1760. See on this point a fuller discussion in Appendix "H", pp. 396-402.

profit, and, indeed could have sold much more as McCulloch was solicited on all sides for surplus yarn.

Yarn sales had one distinct benefit over those of linen; viz. that yarn was sold for cash or 3 months credit at most, so that returns were much quicker. The state of the market was reflected in the Company's profits on yarn. Between May 1759-60, £7,973 of yarn was sold, on which the profit was 18½%, and in the next year, £7,668 at 14%. But although the return seemed high, it was no more than a reasonable recompense for the troubles of the earlier years when the margins had been much lower.

Sales of fine and bleached linens from the Edinburgh office totalled £8,524 (profit £594) between May 1760-61. This included a very old parcel of lawns and Carolines, nominally valued at £1365, which were sold off at heavy loss. Of the coarser and unbleached linens, the amount of sales at Edinburgh was £5,876, including a profit of £811. £14,534 of bleached, and £5,267 of coarse linens were consigned to Tod & Anderson at London, who sold £17,208 worth at an average profit margin of 3 5/8%. There were also some profits from sales on joint-account, with Neilson in Osnaburg £287, with Young in yard wide £18, and Sandieman in Military Shirting £47.

The Directors agreed that it was plain that both the import of flax and the yarn spinning should be continued, and that the sale of linen at Edinburgh, which had yielded a 9% profit on c. £14,000 sales, was so profitable that there was no question of the cessation of that aspect of the Company's trade. The real problem was the trade with London, which lay in two main branches of bleached and unbleached linen. The former was relatively less profitable because of the bad bleaching and the long period from purchase to receipt. In 1761, one parcel of shirting from Sandieman had been particularly badly bleached and the profit on their sale at London negligible. The Directors decided, therefore, to drop the dealing in bleached linen for the London

market, and concentrate on brown linens such as Osnaburgs, Pomeranias, Checks and linens for dyeing. A major advantage of this policy was that, without the time-lag necessarily demanded for bleaching, linens could be bought with an actual market in mind, instead of an anticipated or prospective one, and at a price "proportional to what we are advised they will sell for in London on arrival".[46] Both the degree of risk, and the amount of the Company's capital tied-up in line, would be cut back. In general, the purchase of linen on joint-account, which would again spread the load to others, was to be extended, and great care had to be exercised in the selection of the most able and financially well-founded co-purchasers.

The reason for the launching of such a detailed examination was the knowledge that when the war ended, the price of flax and of transport would fall and lower the price of linen. In anticipation of this, demand for linen at both London and Glasgow fell off quite perceptively in the late spring of 1761, and the Company was obliged to cut back its purchases. Both 1760 and 1761, therefore, proved to be difficult years for the manufacturers, as the high price of yarn continued while the price of linen fell. Even although they complained that their profits were negligible, McCulloch had to warn his manufacturing correspondents to restrict their activities in February 1761, as he feared that Scottish linens were too high in price in relation to the Irish. The price of yarn in Ireland was lower, which stemmed primarily from more ample supplies of home-grown flax. The industry in Scotland generally went through a period of recession.

One article which the Company failed to establish was the check fabric. A manufacturer, Thomas Junor, had been appointed by McCulloch to settle at Kirkcaldy in September 1760, to sell yarn and buy what checks he could on commission, and also to engage weavers to work for him to provide checks for the Company. The major problems were the wild fluctuations in price and

46 Court of Directors' Minutes, 5 July 1762.

60-65 tons were ordered from Riga for Cromarty, 20 for Dundee and 4 for Leith in July. In the long run, it was anticipated that prices must rise as so little linen was being made, but much depended on the prospect of the war being continued. Rumours of peace depressed prices, just as absence of news pushed them up. The news of the declaration of war by Spain led to the collapse of the Cadiz venture at the beginning of 1762.

Fortunately for the Company, McCulloch was more deeply implicated than it as he had joined in September a copartnery formed to export linens to Cadiz, for which venture up to £2000 of the Company's linens were to be provided. Luckily for him, the copartnery was able to recover the value of the linens consigned - £1217 - to Messrs. Berwick, Timberman & Hodge of Cadiz. That familiar friend of debt, Sir William Dalrymple, was less fortunate. The Company were obliged to take legal action against him to recover payment for the parcel of Britannias sent in February 1761 to the house of Dalrymple, Duff & Co. at Cadiz, which had collapsed with the loss of all its effects. This was the final discouragement to the group of Leith merchants who had been searching for a way to open a trade during the the war years to this supposedly lucrative market. There was no compensation for them in the news which reached Glasgow in March 1762 of the capture of Martinique, which raised hopes there of a new "vent" for Scottish goods.

When the balance was struck for the year ending May 30, 1762, the sales figures for linen caused further deliberation. At Edinburgh, sales totalled £14,231, in which the profit level was 13½%, but at London a loss of £150 was sustained on the linens sold by Tod & Anderson on the Company's sole account.

Table 7.4

Sales at London by Tod & Anderson 1761-62 for the Company

	Yards	Proceeds (£)
On sole account	257,000	11,033

colour. The first was because the price demanded by the weaver altered every week; "the custom is I fix the prices of the materials at delivery and they the price of their manufactures at current rates (at the time of their being woven up) such goods give, so the price of all coloured goods fluctuates almost weekly".[47] Junor was apparently unable to alter this pattern. The other problem, which prevented any real chance of challenging the Manchester dealers, was the low quality of dyeing, which again reflected the fact that production was not in the hands of a few manufacturers or master-weavers but in the control of numbers of independent weavers. "At present, every weaver, though possessed of two looms, is his own dyer and bleacher - Manchester does good blue for 4^d what Kirkcaldy does for 7^d - until this is reduced the country cannot reap the benefit it enjoys of either situation, cheap weaving or cheap yarns".[48] Tod, who paid a personal visit to Junor while in Scotland during December 1760, submitted a memorandum on the subject to the Trustees, without result.

Tod also conferred with the manufacturers at Dundee and elsewhere, and "the Company having advised with Mr. Tod of London as to the Quantities of goods to be provided for next year's sale",[49] various contracts were placed for linens; e.g. as it was thought that the low-priced soldiers' shirting would meet with a ready sale, 500 pieces of 25 yards each, at $10\frac{1}{2}$-11^d per yard, were ordered from Neilson at Dundee, which were to be made by the 1st of July, 1761. Similar orders were placed with Campbell, for him to make 10-11,000 yards of diaper, and with Young and Sandieman.

An attempt was made to sublet the factories in Edinburgh, which were to be employed to make Osnaburg. On the vexed question of their profitability, Drummond calculated that the Canongate factory made £141 of profit

47 McCulloch to Ebenezer Munro, 15 Jan 1761.

48 Memorandum by Tod; Saltoun MSS - box 350.

49 McCulloch to Neilson, 22 Dec 1760.

on a capital of £91 during the three years January 1759-62, "yet if a person can be got who understands the trade and will give constant attendance, who will purchase the looms, etc., and take his yarn from the Company at a reasonable price, and repay it by the linen he works up (if sufficient)... he may have a premium of 3/6 a piece and the Company may give up this branch".[50] Alex Flemming was offered the Leith factory and the other two "weaving houses" in Cables Wynd, which contained between 96-100 looms, for a rent of £47 p.a. This is another clear indication of the desire of many of the Directors that the Company should devolve more of its manufacturing activity on others.

The recession in the latter part of 1761 was discomforting because during 1760 and the first part of 1761, sales had been very encouraging, especially in March, when "the account of sales from London...was to more profit than any yet with about £5000 for the Company's share at 12-13% profit after deducting commission to the factors".[51] The value of sales of linens on the Company's own account at London decreased slightly over the year ending on May 30, 1761, and totalled £17,675 on which the net profit was £519, an average profit level of only 3%. Sales at Edinburgh were of the same magnitude - £14,356 - at a lower rate of profit than normal, 12½%, which was still well above that achieved at London. Nearly all the sales of linen there were by Tod & Anderson, amounting in all on the Company's sole account to 313,829 yards and 12,782 table cloths.

Table 7.3

Sales of linen by Tod & Anderson

		Yards	Table-cloths	Proceeds (£)
1760	June	22,766	2,090	1309
	Jul/Aug	72,298	1,671	3005

50 S.R.O. Abercairney MSS; GD 18/839/1

51 McCulloch to Milton, Apr 13, 1761; Saltoun MSS - letters.

	Sept			1160
	Oct	33,943		1717
	Nov	4,382		215
	Dec	41,506	220	1639
1761	Jan	26,416	780	1288
	Feb	23,462	1,596	1298
	Mar	38,028	5,921	2380
	Apr	16,571	264	736
	May	52,457	240	2294
	Total	313,829	12,782	£16,991

Sales on joint-account at London, which were playing a much more significant part, amounted to 237,868 yards, from which the proceeds were £9193. Much the largest proportion came from Neilson at Dundee; during the year he purchased on joint-account over 240,000 yards (cost £7,249), of which just over half were consigned to Tod & Anderson at London. 144,437 yards were sold there for £5,593, on which the profit level could have been as high as 25%. 44,000 yards were sold on joint-account with Sandieman, for £1,989. The actual profit figures are, unfortunately, missing, but the results were certainly sufficiently encouraging for the Company to resolve to expand this aspect of its trade to London while restricting its purchases on sole account. In late April, while most of the Company's purchasing was being cut back till it was seen what turn trade would take on the approach of peace, a half share was taken with George Young and James Wright in 63,000 yards of country linen, which was consigned on the advice of Tod & Anderson to the London market. By May, the policy of trading on joint-account was firmly established as the Company's method of dealing with the London market; "the Company now chiefly carry on their trade to London in a joint-venture with people located in the right place for procuring linens in demand".[52]

The price of yarn was an additional complication throughout 1761 and

52 McCulloch to Milton, May 4, 1761.

1762. In the Lowlands "spinning is here more scarce to be had than I almost ever knew it and yarn scarce and high priced",[53] and in the North some of the agents found themselves in difficulty. In August Hector Scott of Inverness had to ask the Company to release him from his contract to spin up 6 tons of flax annually as the scarcity of spinners and the high wages rendered it impossible for him to fulfil his engagement. By the end of 1761, only 5 of the agents were still operating seriously, William Forsyth at Cromarty and his brother at Dingwall, John MacKay at Cyderhall, Gordon also at Cromarty, and Lindsay in the Orkneys. The removal of the Highland bounty cast a cloud over future prospects: preliminary convassing at London made it clear that there was no prospect of renewal, and although an application for help was made to the Commissioners of the Forfeited Estates in March 1762, little hope was entertained.

The production of linen was hard hit by both the rise in the cost of yarn and the dullness of demand. McCulloch, by March 1762, was firmly convinced that "this year there will not be half the quantity made in Scotland as there was last, so that some time hence there must surely make a better return".[54] He made some enquiries amongst the Fife, Angus and Perthshire dealers who confirmed this view. At Coupar Angus, the decrease was by one-half, in Fife all agreed that there was a distinct decrease, and figures for the amount of linen stamped at Perth showed that the quantity had declined from 66,880 yards in the period 30 October - 1st March 1761, to 40,500 in the same period the year following. (But the rather unusual period selected instead of a year, may indicate careful manipulation of the statistics, or there may simply have been some harmless, but unknown reason).

In recognition of the depressed state of the manufacture and the spinning, the importation of flax was severely cut back in 1762, and only

53 McCulloch to Tod, 25 Jul, 1761.

54 McCulloch to Tod, 29 Mar, 1762.

On joint-account, with		
Neilson of Dundee	300,000	7,974
Smith of Brechin	26,236	1,047
Wright of Lawton	11,386	439
Sandieman of Perth	46,778	1,975
Cowan of Kirkcaldy	6,485	243
Walker of Strathmiglo	77,711	2,627
Young of Coupar Angus	83,244	2,451
Pearson of Largo	30,023	919
Total on joint-account	601,863	18,095

Sales on joint-account about doubled in value, and, while no figures have survived of the profits realised, from the mutual recriminations in private and the reflections in public as to the meagre recompense on sales on sole-account at London, it may be inferred that those on joint-account were much more profitable. Tod alleged to Milton that McCulloch would never send any good linens to London if a sale could be secured for them in Scotland, on which he, not Tod, would reap his premium as Manager, e.g. Navy linen, "all the trash is sent here...The Company's manufacture at Edinburgh is the best for the white Edinburghs and Navy linen, which are a ready sale here, but if he will either not make the goods or will rather employ his looms in making goods for the Glasgow market, how can matters be put on a right footing?"[55] What had particularly soured Tod was the failure to retain the Navy contracts; "Grasping at Quantities and neglecting the qualities has been and will be the bane of this Company. The Commissioners of the Navy were induced by interest to take Scotch linens if equal to the foreign - the initial linens were good but then debased..."[56]

Time has obscured much of the truth in this controversy, but, if it were true - and there is no evidence to sustain the thesis - that McCulloch had reversed the former policy of sending the best linens to London, and the

55 Tod to Milton, 10 Nov 1761; Saltoun MSS - letters.

56. Ibid.

seconds to Glasgow, it may have been in the best interests of the Company, although not of Tod. Profits on sale were consistently much higher in Scotland than at London, where competition, charges and factor's fees ate into the profits. If there were a debasement in the standard of the linens sent, this was certainly in spite of McCulloch's efforts, and caused by the continuing rise in the costs of production while prices remained static, and which, while the price of yarn was high and weavers scarce, he could do little about.

The lack of success with the Company's linens and sales on its own account, led to the suggestion by some of the Directors that the Company should cease the manufacture of linen, and confine its operations to the support of the circulation of its notes and to lending money upon pledge of linen, which would help to bridge the gap for the manufacturer or dealer between purchase and receipts. This was linked with a proposal then current to build a Linen Hall in Edinburgh similar to the one in Dublin, at which sales of Scottish linens could be held four times a year. The Company would supervise the sales on commission of 1½%, and advance money on interest on the value of linens deposited at the warehouse. This would ease the liquidity position of the dealers and manufacturers and the Company's capital would be at little risk as the linens acted as security. "The Country will be now as such benefitted as if the Company had a particular share."[57]

Henry Home was one Director firmly in favour of such a policy. "I am clear that the only effectual method which we have of promoting trade - which is the great view of our charter - is to lend money to manufacturers upon pledges at 4%; traffic, whether domestic or foreign, is best in the hands of private dealers attentive in every way to their own interest, and that any sort of commercial dealing is altogether improper for a public Company such as the British Linen Company".[58] The ideological essence of his

57 Memorandum on the Company's affairs, by Tod, c. 1762; Saltoun MSS - box 330.

58 Henry Home to Milton; Saltoun MSS - letters.

position was that the role of the Company was to do what could or would not otherwise have been done by private interests, not to compete with them in established branches of trade.

But this was firmly opposed by another group of Directors, led by George Drummond, who argued that the purpose of the British Linen Company could not be realised just by the Company acting as a supplier of capital on security, however safer and more profitable this might be. "Is the present plan of becoming a Banking Society? Does this deserve merit with the public?"[59] To do so, they maintained, would be an abrogation of the Charter which set up a Linen trading company, not a bank for lending to the linen trade, important though this function was. This was the controversy which was to result in the resignation of McCulloch in March 1763, when the final vestige of the Company's manufacturing side was devolved to a copartnery with the Alexanders under his charge. The issue which hung over the Company's affairs in 1762-63 was "so they buy and sell flax, linen yarn and linen only, or is their capital and credit to be applied otherwise?"[60]

The performance of the Company in these years, therefore, was of major importance in resolving which way it would be aligned subsequently. The depression in demand continued throughout 1762, such that McCulloch had only 16 looms in employment making Navy linen, and in November he was complaining that "about this place...I have not one-third the weavers there was even two years ago, and those remaining from the Army are mostly old people very unfit for making the best white Osnaburgs...What are good are employed in Navy linens, sheetings and Osnaburgs of bleached yarns,[61] most of which are

59 Drafts prepared to present to the B.L. Court of Directors: Abercairney MSS, GD 24/839/1.

60 Ibid.

61 McCulloch had obtained details of a German method for cleaning Osnaburg yarn, which he claimed cut the normal cost of such a process in Scotland by two-thirds.

sold in the warehouse here".[62] When demand revived, the Company was unable to meet orders quickly because of this shortage of weavers. Large orders for Platillos - a kind of coarse Silesia - came received from Liverpool in November. These were destined for the Havannah market, e.g. from Knight & Co for 3000 pieces. This was far beyond the immediate capacity of the Company to supply, and only £938 worth could be sent.

As well as linens manufactured by the Company, increasing quantities of low-priced linens from Angus, and slightly higher priced from Fife, were consigned to London, where sales, unlike those at Liverpool, were most disappointing. Both the Directors and the co-consignors became increasingly dissatisfied during 1762 with the results, and Tod was warned by McCulloch in November that "at almost every meeting (of the Directors) for this long time, something or other has been said amongst the Directors of the unprofitable trade that has hitherto been carried on with London and sundry propositions have been talked over for amending it for the future."[63] The Linen Hall scheme was one threat to Tod because if it were successful, the locus of sales would be transferred from London to Edinburgh. Feeling was swinging against the London market - "the London market is an expensive place of sale - losses or very low profits there",[64] and there was a certain degree of optimism that English buyers would come North.

The failure of George Young was a reinforcing factor in the minds of many of the Directors that the Company should opt out of trade with London. Although the failure which brought him and others down stemmed directly from the collapse of a purchaser in Scotland in 1763, the general factor involved was the uncertainty as to the duration of the war. "This uncertainty of peace or war...continued not less than 7 months to the great hurt of our

62 McCulloch to Tod 1 Nov 1762.

63 Ibid.

64 McCulloch to Milton, 1 Jan 1763; Saltoun MSS - letters.

home trade - Mr. Young of course lost by his sales at London as others did during that period...and therefore sold at home, but the purchaser failed".[65] The point of immediate concern to the Company was that he had had no difficulty in making sales of his linen on joint-account with the Company in Scotland at a reasonable profit; he had sold £2000 worth at 7-10% profit "to Dealers at this Door",[66] but he had suffered severely on the sale of his linens on joint-account at London. One consignment of white linen turned out so disastrously that Young had to beg the Directors to allow him to be quit of it. All this undermined his financial position and forced him into a fatal venture in Scotland.

The volume of trade on joint-account with Young was, however, far less than that with Neilson.

Table 7.5

Sales by Tod & Anderson at London: 1762-63

	Yards	Proceeds (£)
On Sole Account	280,640	11,958
On joint account (total)	506,938	17,171
With Neilson .	326,291	10,834
Smith	2,507	83
Wright	15,300	494
Sandieman	27,960	1,133
Walker	76,965	2,731
Young	41,000	1,400
Pearson	16,915	496

(The profit and loss figures are unfortunately missing)

His voice, therefore, carried considerable weight with the Directors. He wrote to them in March, 1763 that it appeared "absolutely necessary for the

65 McCulloch to Milton, Oct 1763; Saltoun MSS - letters.

66 Ibid.

success and interest of the Company and all concerned with them to have more houses than one for selling their goods",[67] and offered, on that basis, to take a three-quarters share in any future joint-ventures. News was received at the same time of the impending dissolution of the partnership of Tod and Anderson, which made the decision inevitable to consign goods not to one but several factors, including Tod, Anderson, Davidson and Hamilton. With this decision, the Company had finally exhausted every known sales mechanism in its effort to establish a profitable trade with London: warehouse with an agent and then a Manager in charge, one factor and several, selling on contract and on speculation.

But important though this change was, it was overshadowed by the fundamental restructuring of the Company's activities. The Balance sheet presented to the Directors showed that at May 30th, the Company owed £136,480 and was owed £182,767, which included no less than £22,013 of bad debts. "The frightful list of bad debts left a cloud hanging over the Company".[68] Some of the Directors wanted to wind up the Company and distribute the capital, but the majority were in favour of "disengaging from the present method of trade and betake themselves to copartneries and Adventures in Trade with other merchants who should have the Management of the Purchases and sales and insure against bad debts and be paid a commission therefore; the Company advancing all the money necessary for carrying on the joint trade."[69] This was to be effected by hiving off the manufacturing functions and interests of the Company to a copartnery formed with McCulloch and the Alexanders.

McCulloch had handed in on the 5th of March his letter of demission, which had precipitated the crisis, and also a series of proposals to relieve

67 Court of Directors' Minutes; 15 Mar, 1763.

68 Drummond to Milton; c. 1764, Abercairney MSS GD 24/839/1.

69 Meetings of Proprietors' Minutes, 4 Apr 1763.

the Company of all the linens on hand, the manufacturing contracts, the bleachfield, etc, and offering to transact all the home linen business on commission, with the free profits divided equally. The troubles of the last few years made most of the Directors only too happy to devolve yet more of the Company's former functions, and free it for the safer use of its capital, e.g. in lending to manufacturers on security, and underpinning joint-account ventures. It was agreed, therefore, that the Company would advance £30,000 in goods and money, including all the flax, yarn and linen on hand, and make over the factories and warehouses, to this copartnery trading under the name of Ebenezer McCulloch & Co., and generally put the home trade into its control. The British Linen Company Directors retained the right to control consignments of linen, and their permission had to be expressly obtained by McCulloch for each venture. McCulloch was to fix contract with the Highland spinning agents. The Copartnery was to receive 1½% commission on the gross amount of sales of linen, and 1% on flax and yarns, but freight and insurance were to be charged to its account and the Copartnery had to to ensure the Company against bad debts. The Copartnery was to run for 9 years, after a running-in period of 18 months, at the end of which the arrangement could be terminated by either party.

The scheme was adopted by the Proprietors with the exception of the Earls of Galloway and Glencairn, who threatened an action in the Courts as "the Company is altering its form of trade against the Charter".[70] But, almost from the outset, relations between the Directors and McCulloch were strained. The first point of friction was over the £17,000 worth of goods handed over by the Company, which contained much of little real value. The second was the question of the Northern yarns, delivered to E. McCulloch & Co. after the 30th of May when the copartnery commenced, which the British Linen Company argued should be marked up 7% in price, because of the rise

70 Meetings of Proprietors' Minutes, 30 May, 1763.

in the price of yarn. A third was over the flax supplied to the North on contract. McCulloch, with the support of Milton, maintained that his Company had "to supply the undertakers £3,500 of flax laid in at 15% higher than usual which must be delivered them at the ordinary fixed prices, conform to agreement. The saving, therefore, in the price of yarns delivered since the 30th May will hardly compensate for the loss on flax sold them since".[71] The fourth was over the Directors' power to veto consignments, e.g. a proposed joint-venture with Sandieman in December. The British Linen Company was under pressure from other quarters at the time.[72]

The primary reason for the Court stopping the consignment was that Goldie, McCulloch's successor as Manager, had warned them that the Copartnery had already had about £32-33,000 from the Company in goods and cash. The Court told McCulloch that he was not to draw any more on them for the time being, and he was forced to turn to the faithful Milton, who lent £1000. This was a significant move by the Court in view of the fact that the first six months' trading by the Copartnery had been successful, with sales amounting to £24,552. Whether the hostility was personal, or derived from the conviction that banking was the proper objective of the Company, must remain a matter for conjecture. The role of Tod is not hidden, but the extent of his influence is unknown. He was firmly opposed to McCulloch, and Milton had failed to reconcile the two. "My opinion is still this, if his advice and schemes are attended to, the Stock of that Company paid in

71 Memorial (1763); Saltoun MSS, box 350.

72 See Scots Magazine, December 1763 for an attack on the British Linen Company and McCulloch. "The Company has been useful in extending the linen manufacture in the shires of Fife, Forfar and Perth, and introducing spinning into the East coast of the shores of Ross, etc", but as far as linens manufactured for them, "they only took the goods when the humour struck them in the head, and by this means great quantities of goods have been cast as insufficient by their Master of ceremonies". A feeble defence was offered that "if they have failed in their original design, they hurt themselves more than the supposed misapplication of so great a stock could hurt the country".

will not only be sunk, but I, and the other Proprietors must advance 30% more on our subscriptions to pay the Company's debts...I wish the Directors had the management and Mr. McCulloch's schemes restricted, he and his partnership never to consign goods to the value of 1/- (*i.e. over 1/- per yard in value) after this year, either to England or anywhere else, and his trade to be limited to a certain sum, which would be for his own interest, and the Linen Company might yet be saved".[73]

The bare bones of the subsequent developments were that on the 3rd of April, 1764 the Directors called for an examination of the Copartnery's balance sheet at that date, "in order to judge whether it may be for the advantage of the Company to continue in their trade or not".[74] On the 24th of April, before receiving the requested balance, they intimated the Company's desire to terminate the Copartnery at the end of 18 months from its commencement (i.e. on the 30th of November, 1764), as was their option under the articles of agreement.

But behind this there undoubtedly lay some fierce controversy, as both Milton and Drummond were opposed to the dissolution. The latter wrote to Milton, who was seriously ill and confined to his house, that he had had "the severe mortification to observe during the course of the year from 1st June, there has not been that cordiality between the Direction and them which was to be desired. The last conversation I had with my brethern in the Direction, they threw it out that it was absolutely necessary to give the contractors an intimation before 30th inst. in terms of the contract, that the copartnery was to be dissolved in 18 months from the commencement, and they talked of this as a matter they were fully resolved on. By Mr. Wm. Alexander coming into the room, I was prevented saying what I wanted" -[75]

73 Tod to Milton, 2 Dec 1763; Saltoun MSS - letters.

74 Court of Directors' Minutes, 3 April 1764.

75 George Drummond to Milton, April 1764; Abercairney MSS; 24/839/1.

which, despite his age, might have been forceful. What appalled Drummond was the the majority of the Directors appeared to have made up their minds before seeing the balance sheet. He accused them of giving the Copartnery no real chance; not only had McCulloch taken off the Company's hands some very unfit linens, but he had been refused permission to send linens to London when opportunity offered, and "their sales, however, this year will exceed £40,000 and might have been much more if we had not cramped them so greatly."[76]

What "were the true causes for so speedily ending the contract with Messrs. Alexander and McCulloch, so well guaranteed against loss and so promising of success? Was it the want of money, or dislike of persons and interests, or was the Trade itself harmful?"[77] The limited evidence of the balance sheet would seem to show that the last reason was invalid. After commission of £590 had been deducted, a net profit of £1,843 was made on the Copartnery's trading to the 30th of April, which represented a return of 5% on the capital of £40,000 actually paid-in, of which £33,000 was the British Linen Company's. The return to them was actually higher when it is considered that only £13,665 was actually advanced in cash, and the quality of some of the stock handed over.

The Copartnery's sales were in fact excellent throughout 1764, at Glasgow, Liverpool and Glasgow, as demand revived. Platillos for the African market, to the value of £2,928 on the usual 12 months' credit, were sold to two Liverpool houses. One Bristol firm took £514 of Silesias, and at Glasgow there were several large orders from the exporters, e.g. Messrs. Johnston & Bannatyne bought £484 worth for their Jamaica friends. The readiness of sales put McCulloch in a strong position vis-a-vis Tod; "the rule we proposed to ourselves in dealing with you, was to supply whatever goods we could spare at a price so as not to lose thereby, and this on

76 Ibid.

77 Quoted in Malcolm, History of the British Linen Bank, pp. 56-57.

Bleached goods sold on credit, we reckoned to be not less than 11-12%...On average we have 9-14%".[78] The briskness of demand was reflected in the ability of McCulloch to sell, rather than consign, linens to the London factors. Linens were sold to four houses at London, but, apart from one parcel of Hollands, the sales were of "fresh" linens made in 1763 and 1764, and not from the inherited dump.

Despite the impending dissolution, the copartnery continued throughout the summer of 1764 to manufacture and sell to such purpose that the Directors of the British Linen Company appear to have had second thoughts as they talked of entering "into a new contract with us for the purchase and sale of linens only and to employ a capital of £20,000".[79] On the strength of sundry conversations held, the Copartnery did not stop its purchases of linen, although they were cut; "we told manufacturers in May not to expect to supply us with more than half of what the B.L. took from them".[80] McCulloch was confident that, as the Copartnery had established "an advantagious trade",[81] its life would be prolonged, although with a reduced capital. This confidence was misplaced as the Directors first delayed, and then called off. In September, McCulloch had to enquire anxiously of Goldie what was happening; "we have hitherto gone on providing the necessary goods to continue the Trade on the faith of its being our intention to do so. We have, however, been gradually lessening our stock of goods to accommodate matters to proposed diminution of capital, but most know for a certainty your intentions."[82] The minutes of the Court, which appear to have stood the matter on its head, recorded simply that "on application to Messrs. Alexander and McCulloch, they find they have no proposal to make to the Company for a

78 McCulloch to Tod, 14 Nov, 1764; Letter book of E. McCulloch & Co.

79 McCulloch to Goldie, 10 Sept, 1764; E. McCulloch & Co. Letter book.

80 Ditto, 7 June, 1764; E. McCulloch & Co. letter book.

81 Ditto, 10 Sept, 1764; " " " "

82 Ibid.

new contract".[83] Drummond was deeply disturbed by the conduct of the Directors, who, at the very least had not made their intentions clear in time to dispel McCulloch's hopes; "have the Directors preserved faith with their assumed partners in the home trade?"[84]

Neither the delay in making their intentions clear nor their insistence that the assets of the Copartnery be converted into cash as quickly as possible was to the benefit of the Company. Large discounts had to be offered to those who would take the linens which were damaged or inferior, and many of the better goods were sold off hastily for ready money, rather than wait for the mostproper time at the market. The latter end of the Copartnery was devoted to getting-in the outstanding debts, and receiving payment for goods sold on 12 months' credit. The result was that the Company had to wait for its capital. In July 1764, £33,629 of principal was owed to the Company; at 30 May, 1765 £30,581, and at 30 May, 1766, £11,475.[85] Not until May, 1767 were the Copartnery's books finally closed, with a net loss of £380, after all the principal had been repaid, with interest.

In view of the loss caused by the abrupt termination of the Copartnery, it is clear that it ran at considerable profit on current account during the 18 months of its existence. The dissolution cannot be justified from its performance. The factor cited by the Directors was the amount of capital tied up by the Copartnery, which may have explained their willingness to flirt with the idea of continuing it with a reduced capital. There may also have been some fear, implanted by Tod, that more capital would be sucked into an undertaking made risky by McCulloch's direction. The certainty of modest but much safer profits, through the lending of capital on interest with security, was the material incentive to the Directors, and they found that

83 Meetings of Proprietors' Minutes; 3 Dec, 1764.

84 Drummond; Drafts prepared for submission to the Court; Abercairney Mss, GD 24/839/1.

85 Meetings of Proprietors' Minutes, 1 Sept, 1766.

having had "about £35,000 lockt up since May 1763...is extremely inconvenient in a Management which requires a quick circulation of money".[86]

The verdict of Malcolm is that "the majority of Directors were right in dissolving the partnership; they had been wrong in forming it. For in the opinion of a contemporary writer, Scottish linen had no chance of success in competition with German linen fabrics..."[87] This misses the point entirely: the Copartnery proved to be able to make profitable sales of Osnaburg and other linens in competition with the German during 1764, and the Directors were only "wrong" in forming the Copartnery from the perspective of what the Company had to become, i.e. a Bank, not in terms of its origins. Leaving aside the question of whether the direction affairs took after 1764 was strictly in line with the terms of the Charter, it is clear that, from the national standpoint, whereas the active participation of the Company in the Linen industry had been vital for its development, this was by no means so by the 1760s when the industry had grown in scale, skill and strength.

The withdrawal of the British Linen Company from the Linen industry took place over the next decade. In 1764, even after the dissolution of the Copartnery, the Company was still involved in several branches. A short view of the Company's trade,[88] submitted in December 1764, detailed its various commitments. The salient features were that the Company was "in advance" £5380 for the Spinning in the Highlands, mostly for flax; £21,125 was tied up in quarter and half shares in the purchase of linen, and £4,166 was advanced on linens consigned to London. Other advances on security, to manufacturers and dealers in linen totalled £14,289, and £11,918 was employed in the discounting of bills.

It was agreed by the Proprietors that the Highland spinning be continued;

86 Court of Proprietors' Minutes; 3 Dec 1764.

87 Malcolm, op.cit. p. 57.

88 Printed in full in Malcolm, pp. 61-62, op.cit.

"this trade employs about £6-8000 annually of the Company's money, and is of the utmost consequence to the Country as no private Society is equal to the undertaking".[89] One legacy of the dissolution was that the Company inherited the contracts with the Northern agents for flax, which amounted in all to 90 tons for 1765, and as Neilson wanted 30,120 were ordered from Zuckerbecker at Riga. The conclusion about joint-purchasing was that this was not to be dealt in to any degree, "as it requires a long credit, can bring no considerable profit and subjects the Company to risk".[90] The Company gradually diminished joint-purchasing, and advances on linens consigned to London. The decline was fully apparent by 1765 to Tod, who wrote to the Directors in concern. "The Company have of late greatly reduced their consignments of linen to London, and I find several of the Proprietors there are informed that the Company intends to abandon the intention of their Charter and give up all future concerns in the Linen Trade".[91] He induced them to reverse the trend for one year by promising to allow them to draw on him if they were short of cash while the linen awaited sale, but this merely postponed the inevitable, and Tod the Factor ultimately reaped what he had sown as Proprietors in 1763.

During the period of transition from Linen Company to Bank, what was consistent with both the Charter and the intentions of the Directors was the advance of money on reasonable security to manufacturers and dealers in linen. This was part of the function of a bank, as was also the discounting of bills, and the provision of cash credits, which were designed to help maintain the circulation of the Company's notes (c. £80,000 stg. in 1764-65). But these services, which were initially confined to those connected with the Linen Industry and Trade, were soon extended without any such distinction. Cash credits, for instance, were freely granted in 1764 to

89 Ibid.

90 Ibid.

91 Court of Directors' Minutes, 9 Aug, 1765.

dealers like George Young of Coupar Angus, who received one of £5000. (This, incidentally, was quite exceptional, as most were for no more than £500, but must have been used to aid his recovery from bankruptcy in 1763, as already discussed). Within five years, they were being granted quite frequently to those entirely unconnected with any branch of the Linen Trade, e.g. William Cadell of Grange Colliery.

Deposits at 3% interest had been accepted from 1762,[92] and by 1770 it was clear that the Company had completed its transition into a bank in all but name. Lending on interest, discounting bills, and supporting the circulation of its notes, was the staple diet of the Company. The only manifest traces of its ancestry were odd flickers, such as contributing to the petition for the Flax Fund, and permitting Goldie to go to London as an agent for the Scottish Linen Industry in 1773. The Company's warehouse served for a while as the Edinburgh Linen Hall, with Goldie as keeper.

The bleachfield and the spinning were the residues of the former activities which lingered longest. With the decline in the Company's own requirements, large quantities of the Highland yarn were sold on contract to manufacturers at Dundee, e.g. Neilson, who took 20-30,000 spindles annually for his use. The spinning did become subject to increasing losses after 1766, but the Directors had to wait until the contracts expired in the spring of 1770 with the agents before they could free the Company from this "very losing trade".[93] The Company was left with 36,200 spindles of yarn on hand, and a further 13,500 to be delivered, which were not completely sold off till 1773, thus terminating a commercial relationship which had begun in 1746. In the same year, 1773, the bleachfield at Salton was dismantled, and of the once extensive involvement of the British Linen Company nothing but a name remained.

92 Malcolm, op.cit., p. 60.

93 Meetings of Proprietors' Minutes, 7 Sept, 1768.

McCulloch continued to be active in the linen trade after the dissolution of the copartnery. The Directors' treatment of McCulloch for his services was far from generous, which provoked a long and involved dispute, finally settled by arbitration. Their behaviour was in some contrast to his, e.g. his lack of animosity towards his successor Goldie, with whom he commiserated; "we are sorry to hear you should find so much difficulty in your banking department".[94] His firm, E. McCulloch & Co., dealt particularly in fabrics for the export market, and traded successfully till 1769, when the "disturbances and combinations in America...totally stopped all exportation thither, and the Banks in this Country having terminated all cash transactions"[95] he was forced, with no sales at home, to consign his goods to different merchants at London for sale. Failures there, and at home, forced him to declare himself bankrupt, with his Company owing £43,485. He was obliged to surrender his house in Edinburgh, stock in the British Linen Company, his bleachfield and farm at Kevock, and was even imprisoned for a while during the sequestration of his estate.[96] On release, he managed to secure the post of Surveyor for the Trustees of the Linen Manufacture in the East of Scotland, where he had opportunity to pursue his interest in bleaching.[96] He had aspired, without success, to become Secretary to the Trustees on the retiral of Flint in 1771.[97]

Tod was active at London for many years, as agent for the Trustees until 1766, and as a linen merchant. The last mention of him in the records of the Company is that, in 1782, he borrowed £5,400, "in security whereof £12,953 of subscription to, and stock in the Capital of this Company is transferred in trust to the Managers."[98]

94 McCulloch to Goldie, 9 Feb, 1765; letter book of E. McCulloch & Co.

95 Court of Session Records; S.R.O. C.S. 29/732/21. Cessio Bonorum; E. McCulloch v. his creditors.

96 See his "Memorial re the materials used in Bleaching", 8th July, 1782, submitted to the Lord Advocate. N.L.S., Melville MSS, 642.

97 Letter in the Loudon MSS; I am indebted to Mr. Ian Grant of the S.R.O. for this reference per a N.R.A. survey.

98 Cash Credit Book, 1765-85, of the British Linen Company, July 19, 1782.

Chapter Eight: Salton Bleachfield

"Till the Company got their field at Salton fitted up, there was no field in Scotland fit for their purpose, and, without it they never could have carried on their Trade to any valuable extent. Neither will the expence of it be complained of, with justice, when it is considered, That by its being brought to very great perfection, the Company are now enabled without Loss to reduce the price of whitening their Linens there at an average from 4^{d} which it formerly cost them to 2^{d} per yard, and at the same time to bring their cloths to a much better colour than any such fields in the kingdom do".

Memorial offered for the Consideration of the Directors by George Drummond and Patrick Lindsay, 5th July, 1762.
(Court of Directors' Minute Book)

The state of Scottish bleaching proved a severe handicap to the British Linen Company in its attempt to compete with Irish and German linens at the London and Glasgow markets. This added a further burden to the Managers whose problems on the manufacturing side were already considerable, as witness the constant stream of letters demanding improvements and correcting faults in the spinning and weaving. Linen sent to Scottish fields was often bleached poorly at high price and returned late. Prior to the establishment of their own bleachfield, the Company sent its linens between 1745-47 to various Scottish bleachers, Andrew Wight of Craigston, William Neilson of Roslin, Andrew Dickson at Haddington, or, when the linens were intended for the London market, they were sent <u>brown</u> (unbleached) to the Company's factor, to be bleached there. This was exceptional after 1746, and at all times if the linens were intended for the home market, transport costs precluded their being sent out of Scotland for bleaching. Only in one year, 1752 - when ironically the Company's own Scottish field was in full operation - did the Company have recourse to the practice once apparently common for the fine linen manufacturers in the 1730s, that of sending fine linen to Haarlem.[1] The reason was neither quality or cost, but simply that because of the increase in the quantity of fine linen made in Scotland, the Company was unable to get all its fine Hollands bleached in Scotland, nor was the Company pleased with the bill - "the bleacher charged too much".[2]

1 Exports of linen from Scotland to be bleached; from Leith to either Campvere or Rotterdam

1743	1354 yards	1750	231 yards
1744	313 "	1751	661 "
1745	1032 "	1752	20,644 "
1746-48	none	1753	8,698 "
1749	2696 "	1754	2,162 "

None thereafter, and no trace from other port. (Source; S.R.O. <u>Customs Port Books: Collectors' Quarterly Accounts</u> E 504).

2. McCulloch to James Craufurd (Rotterdam) 16 Dec, 1752.

If quality for the fine linens, and low-costs for the coarse were powerful incentives to the Company to set up its own field, availability was another. The "crack" fields like Gray's Green or Roslin had more than enough work. In February 1748 Andrew Gray of Gray's Green did not even bother to reply to an enquiry from the Managers as to what price he would bleach some fine linens for the Company because presumably he already had enough linen for his first "field".[3] With their own field, the Company could ensure the earliest possible start for the bleaching of their cloth which affected its later price at the markets; "the first cargo of Irish linen arrives in London the first week of June - ours don't get there till late in the year when linen is at the cheap and buyers are nice from being stocked with Irish and Dutch linens".[4] Another advantage was that if there should be a sudden demand for a particular kind of bleached cloth, the bleachers could be ordered to give it priority through the bleach - an option to be exercised quite frequently by the Company.

The experience of the Company during the years 1745-47 was certainly such to encourage them to set up their own field. Bleached cloth suffered from both bad colour and damage. The Bleacher at Kelso field who had had some lawns to do was told sharply that "the colours are so extremely bad, they are returned to bring them to a right colour and if otherwise, you'll excuse us if we redress ourselves as we ought".[5] Andrew Wight at Ormiston damaged some coarse linens so badly that the dispute went to arbitration and the linens for shirts to America.

3 Field is both an abbreviation for bleachfield and derivatively of the cloth in the process of being bleached. Normally there were two such "fields" in the year; the first laid down in April and after it was finished the second followed (usually about June).

4 S.R.O. Clerk of Penecuik MSS; GD 18/5904 Letter of John Cockburn 9 Dec, 1738.

5. McCulloch & Tod to Robertson 12 July, 1748.

Cost was another factor. An attempt by the Company to get their coarse linens bleached cheaply backfired badly when the bleacher, Alex Christie at Perth, who had contracted to do 13,000 yards at 1-2^{d} per yard, went bankrupt, and the cloth was only recovered with some difficulty from the creditors. The Company was entitled to 10% discount from the bleaching prices normally charged because of the quantities it sent, but found that the price was still too high given the competition, and the constant pressure from their London factor to reduce the price and improve the finish proved decisive. "Without a saving in that article (of bleaching) they could bring no quantities to the London market at a price equal to the foreign".[6] "Soon after the Company commenced they found it impossible to carry on their trade in competition with foreigners, or with the Irish, on account of the high price paid for bleaching, at this time there being only two fields in any reputation where Hollands were bleached in the Dutch way at the rate of 6^{d} per yard and one or two where bleaching was carried out in the Irish way at 4^{d} yd; ...they therefore found it necessary to have a field laid out and proper buildings erected on it...at Salton."[7]

The Company's bleachfield was the particular concern of Lord Milton, who lent the money for the erection of the field and machinery sited on his estate at Salton (or Saltoun) in East Lothian, waiving the rent of 20s. per acre until such time as the field became profitable, and also interest on the money advanced. This was not the only field which he helped; Salton Barley-Mill bleachfield also lay on his estate. The Company had had some linens done satisfactorily[8] at that field, which may have assisted the Managers - not

6 Minutes of the Meeting of Proprietors, Sept 7, 1747.

7. Minutes of the Directors; 5 July, 1762.

8 Joseph Christie, the bleacher there, asked the Company for a declaration as to the quality of his bleaching: "As you seemed to think our opinion of your colour this season might be of some service we think it reasonable to give you this declaration that we are very well pleased with the colour of the linens you have bleached and returned to this Company and think the price you charge for bleaching very reasonable". (Managers to Christie, 5 Jan 1749). He advertised this in the newspapers to attract custom.

that there appears to have been any debate - to locate their field in that locality.

Work actually started on the field in late 1746, levelling and making a dam head. Local men were used for the slate and masonry work to the dwelling house, milns and bucking house ("Buke" house). The layout of the field[9] seems to have owed much to John Aitken and the Meikles[10] who were paid to make a trip to Perth in July 1747 to view the field there. Robert Meikle did most of the work on the machinery constructed (e.e. the rubbing boards), and by 1748 over £1500 had been expended on the construction and materials. The field came into operation that season but additions continued: by December 1750 Milton had spent over £2120 (not allowing for interest on the capital which was repaid to him by the Company) and the Trustees contributed a grant of £200 towards the setting-up costs. The Trustees also met the cost (£509) of constructing at Salton in 1751 what was to become standard equipment for every major field in Scotland - a drying house, a roofed shed with louvred sides to keep the rain out but allow air to circulate round the cloth to dry it. This was invented by a near neighbour, John Christy of Ormiston, a skilled and respected Irish Quaker bleacher, who received £200 from the Trustees in 1751 for this. Salton, because of its proximity to Ormiston, and contact with the Trustees, was one of the first fields to copy his design.

The field cost about £30 p.a. to keep in repair till 1762. It was reshaped and enlarged during this period; the old low and first drying fields, 2.4 and 1.1 acres in size respectively, were abandoned in 1758 in favour of a new drying field (3.6 acres) connecting the drying house and the windmill field (1.8 acres) with the main bleaching field (8.7 acres) containing

9. See Saltoun MSS, box 350, for a plan of the Bleachfield.

10 The brothers Robert and Andrew; the latter was the inventor of a threshing machine in 1786.

the pond, upper and lower mills, overseer's house, etc. This made the field a total of 14.2 acres in size, which while not as big as Luncarty was probably well above the average size.

Salton bleachfield was in full operation between 1748-1772, in the ownership of the Company the whole time, but during the years 1763 and 1764 it was managed by E. McCulloch & Co. 1772 was the last bleaching season: the field was sold at Candlemass to Andrew Fletcher of Salton for £1700. In December the Trustees received a letter from the stampmaster at Salton, Thomas Pollock, "representing that as business was given up at Salton bleachfield, his employment was at an end"[11] and asking to be placed elsewhere. The history of the field throws some light on the operation of an important field during the crucial period of expansion and development in the Scottish linen trade. Receipts from bleaching done at the field - almost all for the Company - for the period are laid out in Table 1.

Table 8.1

Bleaching Season	Pfs. done Pieces	Value of Bleaching £	Bleaching Season	Pfs. done	Value £
1748	2909	940	1760	NK	1505
1749	NK	NK	1761	NK	1265
1750	4791	1514	1762	NK	1126
1751	4108	1865	1763	NK	1200
1752	NK	1681	1764	-	NK
1753	NK	1900 + 108[x]	1765	1058	1540
1754	6347	1343	1766	NK	NK
1755	3189	800	1767	NK	NK
1756	4071	829 + 111[x]	1768		1044
1757	5690	1112 + 24[x]	1769		867
1758	NK	1167	1770		1037
1759	NK	1274	1771		847
			1772		484

NK - not known

x - bleaching done for other than the Company (distinguished only during 1753-67).

11 B.O.T.M. 2 Dec, 1772.

As the "piece" of linen had no fixed length, although bleachers usually insisted on it being under 40 yards in length for convenience, it is impossible to calculate the yardage of cloth bleached each season at the field, and only for one year is it specifically noted, i.e. in 1750, 118,493½ yards were bleached. For 1761 it may be reasonable to infer that the 288,458 yards beetled at the field that season were bleached there. The increase in volume reflects the orientation of the field to the bleaching of coarse linen, whereas in the early years the field had bleached both coarse and fine linens in the Irish and Dutch styles at prices ranging from 1-5^{d} per yd. This in turn was in response to the shift in the Company's trade, and the East of Scotland generally, away from the fine linens such as Hollands to the coarse, e.g. Osnaburg. The watershed year in this respect at the field was 1754.

Salton was a commercial bleachfield, run by neither "gentlemen adventurers" nor "common bleachers" but by a highly informed and skilled professional staff, with a view to profit, although while the Company was bleaching its own linens, it may have preferred to restrict bleaching charges at the field and to take the profits on the sale of bleached linens rather than on the bleaching. With that motive, the profits may have been kept artificially low during the 1750s, but as the Company's manufacturing decreased this practice, if it existed, must have died out. Experiments were carried out at the field, e.g. by Dr. Cullen in 1752 and by Samuel Hart in the same season. The latter experimented with oil of vitriol in place of buttermilk in the bleaching process, at the request of Doctor Roebuck of Birmingham[12] upon report that some Irish bleachers were using it successfully. Salton concluded that the

12 Roebuck and Garbet had established a vitriol works at Prestonpans in 1749, and were looking for outlets for the sulphuric acid production. See A. and N.L. Clow "Vitriol in the Industrial Revolution"; Economic History Review vol. XV, 1945; particularly pp. 45-46.

bleaching process was appreciably speeded up, "coarse linens were finished in 8-10 buckings instead of 10-15 and at ¾ the usual charge. The principal objection to vitriol is that the objective part being committed to ignorant people, they might be apt to mar the whole thing".[13] In the quest for home-made substitutes for the foreign ashes, kelp and fern ashes were tried. This experimentation was not peculiar to Salton, and was common to all active and curious bleachers in the drive to cut down on costs.

The major significance of the field in relation to the bleaching industry as a whole may not have lain in either the innovations in technique or in machinery that it pioneered, although it was quick to harness the mechanical genius of the Meikles. They were awarded in 1754 a premium by the Trustees for the invention of "a machine for drawing the cloth instead of persons being obliged to pull it by hand through the rubbing mills, the cloth being thereby not by far so liable to be holed or rent, but whitened sooner, cheaper and more safely than formerly".[14] This invention was soon copied elsewhere and adopted generally. The prime contribution of Salton was the training of bleaching apprentices.

The Trustees had been trying for some time to spread the knowledge of the "mystery and art of bleaching and lower the price thereof".[15] From 1738 the Trustees had employed the renowned Grays to train "apprentices"[16] at their field in Glasgow. Two grave disadvantages had become apparent: firstly, only instruction in the Dutch technique was given - for fine linen - and secondly, the continual obstructiveness of the Grays which had greatly

13 "Letter from Salton bleachfield in answer to Mr. Garbet's desire to be informed how far vitriol might be a saving in bleaching" to McCulloch & Tod, Saltoun MSS, box 329.

14 B.O.T.M. 13 Dec, 1754.

15 B.O.T.M. 4 Jan, 1748.

16 The term "apprentice" is misleading in that some were experienced bleachers seconded from their bleachfield for further instruction rather than raw youths.

retarded the flow of apprentices to and from the field. By 1750 the Trustees were utterly fed up and sacked the Grays, after which they turned to Salton to offer it the job of training the apprentices for the three seasons each required. The Company agreed to the Trustees' proposal in November 1750, but indicated that it thought the salary to be given for the instructing - £100 p.a. - might not be sufficient if the Board chose to exercise its rights to the full, i.e. to present 4 apprentices each year, each of whom had to be paid a daily wage of 6^{d} by the Company. Moreover, if the field were to be considered as a "Nursery of qualified bleachers",[17] certain improvements were needed. The Managers specifically observed that the field - unlike many others - had received no public money, e.g. in the form of a setting-up grant. The Board responded along the indicated lines by making a grant of £200 towards the costs of erection, and made a most handsome present of £509 by meeting in full the cost of erecting a drying-house at the field.

Salton was not chosen just because of thepatronage of Milton. It held a major advantage over Gray's because both the Dutch and the Irish methods of bleaching fine and coarse linen respectively were in use at the field, so a good general education in dealing with all kinds of cloth could be offered. The quality of the training was reflected in the ease with which the apprentices from Salton found employment. Of the 16 trained at Salton between 1752-59, virtually all on their departure became masters of bleachfields. Some went to the new fields being set up, and others who had been seconded for further training returned to their former fields to take charge. This can be illustrated from the histories of the eight apprentices who had the courage to petition the Trustees and the Company in 1752 that their daily allowance of 6^{d} per day was inadequate because of the dearth of provisions and high cost of living in East Lothian. (This petition resulted in the

17 McCulloch to Flint 23 Nov, 1750.

Trustees granting an additional penny per day). Hector Turnbull went to Luncarty, James Watson to Deskford, John Park to Arthurly, Robert Nisbet and William Henderson to Inverness, Robert Munor to Culcairn, Charles Baxter to Melrose, and Archibald Horn to Salton Barley-Mill, to a mixture of old and new bleachfields in all parts of the Country.

Most fields possessing a Salton-trained master did not hesitate to advertise the fact, e.g. in the Edinburgh Evening Courant, "Colin Smith, late of Salton, is now at Brechin bleachfield".[18] Although the apprentices were trained in both the Dutch and the Irish methods, few had the opportunity to practice both, as nearly all of the new fields in the 1750s were catering for the coarse linen bleaching.

During the first year at Salton, which might be waived if the apprentice were sufficiently experienced, general instruction was given: in the second more on the techniques, and in the third particular attention was paid to the intricacies of management, including the art of keeping books. That the training was thorough is corroborated in letter by one of the apprentices, David Hart; "I owe whatever knowledge I have acquired in bleaching to the opportunity I have had of being there",[19] and by the speed with which the apprentices found employment. The Trustees were sufficiently satisfied to continue the appointment to 1764 when it was terminated solely on the grounds that they felt that the bleaching industry was well able by then to train its own managers.

It was ironic that the chief instructor at Salton, the master-bleacher James Armstrong, was himself trained by the very Grays whom he superseded. Son of a Dumfries minister, he was engaged by the British Linen Company in late 1746. They petitioned the Trustees on his behalf that he be admitted

18 Edinburgh Evening Courant, 1756.

19 Hart to Flint, 15 Nov, 1753. Saltoun MSS, box 329.

for instruction in the Dutch method of bleaching by Grays. He duly received instruction from them, for one season only, as he returned to Salton to take charge there in the autumn of 1747. Andrew Gray was impressed by him; "he appears an overmodest and a careful young man".[20] This assessment was echoed 14 years later; "Armstrong has natural candor, probity and skill, but is indeed subject to low spirits which draws its origins from an anxiety and vexation produced (by) natural timidity".[21] He was the master-bleacher till 1765[22] when Samuel Sinclair, an Irishman rather too fond of the bottle, took over for three years. On his return to Ireland, an ex-apprentice, Archibald Horn, was placed in charge until the field was closed down in 1772-3.

Armstrong had been trained only in the Dutch method, which led the Company to engage Terence Dugan from Ireland to take charge of the bleaching of coarse linen in the Irish style. He was joint-master of the field until his departure in 1756 to the nearby Ford bleachfield. The arrangement at Salton did not work well - no servant could serve two masters - with the result that the field had to be divided into two divisions. McCulloch had to write sharply to them both, pointing out the bad consequences, "as you have not been able to act in concert with each other",[23] and also to the field's cashier, "For God's sake advise them to consult together like men and let not their character and the Company's credit suffer any more".[24]

The contraction of the manufacture of fine linen by the Company had repercussions on the field; McCulloch told Armstrong "of a shortage of fine

20 Andrew Gray to Flint 1748, Saltoun MSS box 350.

21 Memorandum re Salton Bleachfield; Saltoun MSS box 350.

22 Neither why he left nor what happened to him is known. As he did not become master-bleacher at another field, illness or death is suggested.

23 McCulloch to Armstrong and Dugan, 11 July, 1751.

24 McCulloch to Sam Hart, 18 Aug, 1751.

linens to be done in the Dutch method...what are available are to get the season; for the rest of the time your part of the field and your hands should be employed in bleaching 1200-1600 diapers; for that purpose I favour your keeping the wash and rub men in your part of the field solely to yourself, and Mr. D. do the like at his end".[25] The tensions were accentuated by this, and it may not have been coincidence that Hart left the field that year: it was certainly a relief to all the Dugan departed early in 1756 to leave Armstrong in sole control. By this time the latter was presumably capable in both the Dutch and Irish methods of bleaching, not that in practice the two were so divorced from each other at Salton, e.g. coarse cloth was often taken up in the Dutch method to improve its finish.

The agreement with the Trustees had prompted the Company to draw up contracts, which surprisingly had not been done before, with the master-bleachers, signed in April 1751 to run for three years initially. They were allowed £25 each p.a. in salary, plus £25 of the Trustees' premium divided between them, and ½ of the free profits. This guaranteed both £37 10/- p.a., augmented by free coal, candles and lodgings. After Dugan left, the foreman, David Mackie, was put on a salary of £20 p.a., which was renewed in 1761 for three years. The Company's policy was to have a permanent nucleus of skilled men on salary. A Clerk or accountant was also appointed to relieve the Master of the duties of book-keeping, etc. At many of the smaller fields, for better or worse,[26] the Master-bleacher had to keep his accounts himself.

Samuel Hart was appointed to be Cashier and Accountant at Salton in 1750 with a salary of £35 p.a.[27] He was more than a mere book man; in

25 McCulloch to Armstrong, 16 April, 1754.

26 For an example of this, see Terence Dugan's account book for Ford Bleachfield, S.R.O. U.P. RH/15.

27 He complained, however, that this was insufficient to support his family of eight.

1752 he wrote an explanation of the process of bleaching at Salton for the Trustees[28] and in 1754 he took his own field at Salton Barley-mill on the death of Joseph Christie. His successor as Accountant at Salton, Archibald Horn, was to become the last master-bleacher at the field. He settled with the Company to take 6% of the value of bleaching done at the field in lieu of salary while master-bleacher, which brought him as much as £60 and as little as £28. This arrangement was exceptional as the general practice was for the bleacher, foreman and clerk to be on fixed salary, while the servants or labourers were paid only for days actually worked during the bleaching season.

What took the edge off the apparently large salary paid to the bleacher was his personal liability for any damage done at the field to cloth during bleaching. By the 1751 Act, the Trustees took security from any field done over £500 worth of bleaching per annum, before issuing a licence to bleach, and an obligation was imposed that any client whose cloth was damaged during bleaching had to be compensated. This threw a heavy onus on the bleacher and equally on the Clerk whose job it also was to check the cloth when it came to the field, for flaws, short measure, etc., to make sure that the cloth was not damaged before it was bleached. The Company had litigation with Hart after he had left the field, alleging that he had failed to check the cloth closely enough before it was bleached.

Both the Dutch and the Irish methods of bleaching were practised at the field. "The principal and fixed operations may be reduced to just three: namely Bucking, Souring and Washing, for whatever others are in use (tho' indispensably necessary) are only preparatory to, or consequential to those..."[29] The main difference between the two processes was that in

28 "An Explanatory Introduction to the Journal of the Process of Bleaching as carried on at the British Linen Company's field" (hereafter cited as Introduction) presented to the Trustees in 1752. Saltoun MSS, box 329.

29 Ibid.

the Irish, during the washing of the cloth, a waterdriven mechanical mill with rubbing boards was used instead of two women washing the linen on the edge of a tub. This "answers very well for coarse cloth as two men attending a rubbing mill can rub as many cloths as 20 women will do in a day".[30] It was rougher but cheaper, providing sufficient water was available. Salton suffered as did many other fields from the vagries of water supply, which ponds could only partly alleviate; e.g. drought in 1754, floods in 1749 and 1762 which did considerable damage and left the field sanded.

Other differences lay in the Bucking stage, in the choice of sour, and in the finishing. In general, the Irish method was cheaper, quicker and lower in quality while the Dutch was careful and slower, using hand labour rather than machinery, which made it much more expensive. Coarse linen had to be bleached cheaply, fine had to be coloured well.

After the cloth had been received at the field, the first stage was for two women to sew latchets of yarn at two-yard intervals along each piece of cloth (commonly 30-40 yards long), to enable the cloth to be hung up to dry on the wooden pins in the drying-field. Both this latching and pin-making were essentially auxiliary activities. The unbleached linen was usually dirty and full of dressing so that it had to be cleaned by steeping in warm water and a little bran, or old lye and soap. The cloth was taken out of the close folds in which it had arrived and then done up loosely to be laid in rows in a large vat, being squeezed down by a servant wearing wooden shoes. The vat was then covered and left for 2-3 days, after when the cloth was lifted out, rinsed and dried. This was supposed to render the cloth fit for the final operation proper, Bucking, which "may be justly termed the primary Operation: it is continued from first to last and by it the great and principal change in the linens is affected".[31]

30 Observations on Dr. Cullen's "Remarks on the art of Bleaching or Whitening Linen" by John Christy, Saltoun MSS, box 329.

31 Introduction.

For Bucking, a Lye or lee was made by mixing ashes with some soft soap in a solution. This lye was then thrown on the cloths placed in a large boiler - over 2000 yards of linen could be treated at one time in the coarse linen boiler at Salton which was 480 gallons in volume. After running down through the cloth, the lye was drained off at the foot of the boiler, to be heated in a copper vat and re-applied somewhat hotter until the lye was finally boiling hot; thereafter the temperature was lessened and the lee weakened. The Irish method was simpler; just to boil the cloth for 1-1½ hours "before they substitute in the room of salt the labour of machinery".[32]

The critical component in this operation and for the whole process was the preparation of the lye, the alkali solution. The bleacher had several problems; there were 4-5 kinds of ashes each differing from the other in strength and even within the same kind there was wide variation. At Salton the main ashes used were Cassub (Cassube or Cashub) and Pearl (so called from its appearance) from Holland and the Baltic, Konigsberg weedash, Marcroft and Muscovy blanc, Hungarian Pearl and in the 1760s American Potash. Local substitutes were tried, such as fern and kelp ash; the former were too dirty unless twice burnt (which made them too dear) and the latter left a yellowish tinge in the cloth, which was viewed with grave displeasure by the bleacher and manufacturers alike. The steady rise in the costs of imported Continental ashes caused the Company concern; the factors in the Baltic were constantly asked to provide alternative and cheaper substitutes. Cassub ash, the most popular in Scotland and Ireland, cost 41/- per cwt in 1751, 48/- in 1758 and 66/- in 1762. It dropped thereafter to 42/- when war ended but had risen to between 50/- and 60/- in 1771.

The lee was prepared by pounding and sifting the ashes and then boiling them up over a furnace with a due mixture of soft soap added "to blunt the sharpness of the lees".[34] The difficulty lay in determining the strength

32 Ibid.

33 Directions for Bleaching (No date or author) - Saltoun MSS, box 329.

34 Cullen Remarks

of the solution or the ashes; the bleachers at Salton used their tongue as the most reliable instrument, or a proof ball and hydrometer imported from London, or weighed a certain quantity of water and ashes. Mistakes were almost inevitable, but as the bleacher above all feared corrosion of the cloth, it was safer to make the lee weaker than necessary, which is why soap was added. Mixture of ashes was another safeguard; one local bleacher used Marcroft ashes alone one season, "finding them the strongest and cheapest but to his sad misfortune a vast deal of his cloth was cut into holes... which he had art enough to make the country people believe was owing to a particular kind of worm produced in his field by the wet season".[35] The Company's bleachers used several different recipes. For a lee sufficient to do 10,000 yards of cloth, in 1750 150 lb. of Marcroft ashes and 100 lb. of Muscovy white were added together in the lye boiler full of water (315 Imperial gallons); in 1752 140 lb. of Marcroft and 100 lb. of Marcovy white and 30 lb. of pearl ash were used, and in 1754 200 lb. of cassub and 100 lb. of Muscovy white and 30 lb. of pearl.[36] The trend seems to have been towards the use of stronger lees.

Bucking and boiling were generally performed during the night at Salton so that in the morning thelinen could be put out in the field to bleach in the sun and wind for 2-3 days, a schedule liable to frequent interruption by rain or high winds. The cloth was watered (hence the canals on every field) to ensure that the lees were washed out to prevent corrosion, "better to err in often watering".[37] Finally the cloth was allowed to dry and after 36 hours lifted and returned to the bucking boiler or cave where the course was repeated, i.e. lees applied, etc. This process happened about 3 times a week with the exception of Sundays (bleachers had to be very careful about

35 John Christy used a much stronger lee - over 500 lb. of ashes for 10,000 yards.

36 Observations.

37 Introduction.

Sunday Observance) until the cloth was judged ready for souring. The signs looked for were that the "sprat" or dead shell was cleaned out and the cloth had begun to change colour. There was a high premium here on the good judgement of the bleacher as to the arrival of this point which might be 5-6 weeks after the cloth was first bucked. It was a crucial decision for the cloth and also because it determined whether the second field might be started.[38] At Salton, "as some cloth will come on faster than others", the field was sorted into three divisions at this stage, the quickest to the laggard.

Souring was performed with either churned milk, "buttermilk", in the Dutch method or bran in the Irish. The cloth was laid not upright as in bucking but flat in the boiler and the milk or bran added. The whole was then covered and allowed to lie as long as the bleacher thought the fermentation continued. Buttermilk was inconvenient to use and difficult to obtain, which encouraged the use of bran. About 4-6 pecks of bran were adjudged sufficient to sour 1000 yards of cloth when laid into a sour of warm bran for 2 nights and a day or longer, depending on the weather and the strength of the sour. If buttermilk was used, the cloth was left for 4-5 days in the sour; during warm weather the process was accelerated and equally the risk of curdling increased. The consumption of buttermilk declined drastically during the 1750s as the field bleached less fine linen.[39] Attempts were

38 Ibid.

39 This may have been a relief to McCulloch who had had trouble with the supply of this article to the field. "Mrs. Maxwell of Jock's Lodge has been here this morning and complains that you have not taken her milk this year...and that waiting to serve the Company she has lost her chance to serve Roslin field...that you made some difficulty as to sending carts as formerly to meet the milk on account you imagined it would prevent the country people about you from bringing their milk to the field freee... and had lately taken some from her neighbour Mrs. Baird and met their carts at the Lord Advocate's as formerly with hers. She still offers on sending her in some hogsheads to provide you with 3 h.hds milk in the week. I wish you would clear up this matter...she ought to have the preference as she served the Company last year with large quantities when nobody else could or would serve them". McCulloch to Sam Hart, 1 June, 1753.

made to substitute oil of vitriol or sulphuric acid for bran or buttermilk in the sour and its use while not exclusive certainly increased in the 1760s: while its speed and action were appreciated, its strength was feared.

Table 8.2

Materials Used for Sour at the Field

	Bran		Milk		Vitriol
	Bolls	Value	Galls	Value	
1756	46½	136/5	1226	408/9	
1757	38½	180/10	775	258/4	6½d
1758	40½	157/-	496	156/4	10½lb. 26¾d
1759	35½	97/6	96	32/-	
1760	33½	100/6	38	19/4	
1761	40	120/-	none	bought	
1762	46	163/4	"	"	
1763	43½	149/2	"	"	
1768	x	x			3 bts.156/4d
1769	x	x			95/-
1771	28½	x			634/2d

x Not known Bts. = bottles

After souring the cloth was rinsed and then rubbed either by mechanical boards in the mill in the Irish way or by women with soap in the Dutch. In the latter process, the cloth was carried to tube, 3 feet in diameter where two women seated opposite each other soaped and worked the cloth on the broad edges of the tub. The cloth was then bucked for 3 hours and out out to bleach, andit was thereafter soured, wasted and bucked until quite white. The golden rule of souring was never to put more cloth into the sour "than your women can wash in one day, if you follow the Dutch method, and if Irish...only as much in sour as you mill is able to rub in a day, for there is no way that cloth will sooner tender than out of the sour if they are allowed to be long by".[40]

The cloth was finally run through a mixture of starch, blue and water

40 Directions.

in the blueing vats to give it firmness and cleanness. Some bleachers preferred to boil the cloth just prior to starching it. It was then taken out the bus and wrung out with a mangle and spread on the drying field. While it dried, two women carefully and evenly stretched the cloth. Fine cloth was taken up dry and sent to the Edinburgh Lapping House in the "waterfold" to be pressed and papered until 1762, when a lapping press was installed at the field. Coarser cloths were usually lifted damp and beetled, i.e. beaten with wooden mallets ("beetles"). This part of the finishing process was mechanised as was also the rolling and pressing of the linens. A new beetling machine, driven by water, was installed at Salton in 1760, to be worked by 4 men. This finishing process was most important and the Managers were always alert to new ideas and styles. McCulloch heard in August 1759 of a soldier "who understands putting up linen in the Irish way by clips and by beetling"[41] and secured his release on furlough for 3 weeks to go to Salton by pulling some strings through the Trustees.

The crux of the difference between the Dutch and the Irish methods lay in the use of machinery instead of women at the rubbing stage. John Christy's estimate that a rubbing mill with two men being paid probably at 8^d per day could do as much as 20 women, each at c. $5\frac{1}{2}$-6^d per day, shows how much of a saving the mill offered on running costs. Although the cost of erection was about £500 as labour costs rose, so the scales were tipped against the Dutch method except in the linens where the need for quality was paramount. But with the more extensive use of the Irish method, an additional onus was placed on finishing the cloth well.

In 1760, therefore, under pressure from London, McCulloch ordered that the beetling machines be moved to a place in the field where they would not be a hindrance as they presently were to the other works at the field, and the machinery be altered. What he wanted was "two sets of beetles and

41 McCulloch to Flint, August 1759.

beams proportioned to move if necessary at the same time and with the same outer wheel and these beetles made to strike perpendicular or straitways on the cloth and not aslant as at present",[42] and a Dutch "Calendar" or cylinder, consisting of 5 wooden rollers, "like those Meikle made for me at Edinburgh",[43] capable of dressing cloth 45" wide, also to be moved by the same outer wheel. Meikle was sent to Perth to look at a beetling machine there, and he succeeded in designing a new machine to McCulloch's satisfaction, which was erected with great haste that summer, perhaps too much haste as teething troubles delayed it becoming fully operational till the summer was over.

During the first full summer of use in 1761, it more than met its running costs. Between 1st March 1761-1762 it double beetled 288,458 yards of cloth and 486 table cloths, which the Company calculated would have cost £329 in charges at the Edinburgh Lapping House. All the expenses of working the machinery, making up the linen, etc. came to £91, so £238 was gained on the year, which would allow the cost of erection to be paid off in three seasons. A new press was built at the field by James Gray of Dalkeith Iron Mill, who was experienced in this kind of work,[44] and an experienced lapper from Glasgow, Alexander Gray, engaged to head up this department.

The machinery was becoming increasingly complex and one of the Directors' recommendations after their enquiry into the field in 1762 was that Robert Meikle be engaged on contract to maintain the machinery and utensils at the field. "Utensils" at the field were valued at £362 in 1756 and £410 in 1763, when 10% was deducted for wear, and a thorough revaluation brought this down to £213 in 1764. The fixed works and field (including most of

42 McCulloch to Armstrong, 23 April, 1760.

43 Ibid.

44 vide McCulloch to Gray, 7 June 1760. "You are used to making iron work for Presses used by lappers and as I am just now about setting one up at this Company's field at Salton..."

the machinery) were valued at £3,700 until 1766, when £1729 was written off "to reduce it to its real value".[45] In 1768 the field and fixed works were valued at £2090 and an inventory of utensils made which came to £286.[46] At the lower mill there were soaping tables and women's tubs, two yettling boilers, five round caves and two blueing vats; in the sour house 2 caves or boilers; at the upper mill 3 yettling boilers valued at £10 each and 2 large bucking caves with lead pipes to lead the water from the cave to the boilers. The Upper green where the cloth was laid out boasted a dog and a sentry box; the lapping house contained hand clips and beetles and a press for linens with 11 planks, 4 logs and a tree for setting the press, a windlass and two "new" crisping machines. Neither the windmill or drying house provided much of interest for the inventory. Amongst the sundries were 8,000 pins, some scoops and wooden shoes.

In 1773 when Andrew Fletcher, who had bought the field, advertised the sale of the bleaching machinery, included in the list were 3 water-wheels, 3 washing stocks, 2 sets of rubbing boards, 3 beetling machines, and 2 cylinders or rollers of lignum vitae. Unfortunately how much he obtained for these articles is not known.

Labour and its organisation at the field

Mention had already been made of several skilled men employed at the bleachfield, engaged on contract to retain a skilled nucleus at the field.[47] The Company had had bitter experience of other fields trying to lure key men away. Dugan had to go to Leven bleachfield to recover one Peter Gibb engaged by Armstrong in January 1748, who had gone off there just after the

45 Minutes of the Meeting of Proprietors, 1 Sept 1766.

46 Journal of Saltoun Bleachfield 1768.

47 The Trustees had given permission in 1762 for a servant of the Company to stamp every kind of its linen "as the business of the Stamp Office in Edinburgh has greatly increased of recent years". B.O.T.M. Jan, 1762.

start of the bleaching season proper. "By consequence of his engagement we can by law oblige him to return to his service".[48] Another servant was decoyed away by a Mr. McDowell, "busy trying to carry off our hands to the service of one Cook at Carlisle",[49] but he was recovered. Key men mattered and the Company itself was not above a little allurement when it recruited, as it did as far as Ireland.[50] Alex Gray was working at the Glasgow Lapping House when McCulloch through an intermediary "persuaded" him to leave for Salton, to take charge of the finishing there. "You await my call for coming to Salton bleachfield in order to your taking up, dressing or lapping linens there (and) instructing. James Drummond and you agreed on £20 p.a. wages and 2 guineas for each person instructed...If you shall so act as to deserve the Company's thanks I agree to make you a present for the first year either of a free lodging or 5 guineas in money, as you like best".[51]

In addition to the permanent workers, a number of servants - male and female - were engaged for the duration of the bleaching season, i.e. from the beginning of April to the end of October when they were paid off, as can be seen from a breakdown of the wages (not including salaries) bill at Salton. There was usually some clearing up work after the end of the season proper, and for maintenance and in 1760 and 1761 the wages bill for the winter months was swollen by the payments to the builders of the new machinery and the enlargement of the field. Some of the women were employed to make up torn linens into shirts, and some yarn was cleaned for the weavers. Wages were paid monthly and regularly, and the number of days that the women worked can be inferred from the 1/- per day paid to Mrs. Armstrong to supervise the women at washing.

48 McCulloch to William Hunter, the bleacher at Leven, 25 June 1748.

49 McCulloch to Milton, 17 May 1749, Saltoun MSS - letters.

50 e.g. in 1749 Peter McKenzie was sent across to Ireland to recruit some skilled hands for serving at Salton.

51 McCulloch to Gray, 7 June, 1760.

Table 8.3

Wages paid at Salton — Bleaching Seasons 1756-63

£ stg.

Month[1]	1756	1757	1758	1759	1760	1761	1762	1763
March	-	-	-	-	-	-	-	-
April	-	5	13	16	19	15	11	23
May	9	20	20	21	31	33	24	30
June	27	30	25	27	33	34	30	35
July	30	32	30	35	37	45	45	42
August	29	32	30	32	38	51	57	45
September	41	31	33	35	40	44	46	45
October	52	28	23	36	40	42	45	41
November	16	49	25	35	41	44	50	44
December	-	-	10	31	36	36	40	4
January	-	-	-	-	30	23	8	6
February	-	-	-	-	15	22	14	4
Total (£)	194	227	210	268	359	387	367	316
Mrs. A.[2] Days	162	189½	213	176	216	237	175	?

1 The Wages were paid on the last working day in each month.
2 Days worked by Mrs. Armstrong supervising the women.

Until 1768 nothing is known for certain of the numbers of servants employed at the field except that while the Dutch method was in use, more women were employed than was the case later. In a letter in 1752, an overseer at Salton who was applying for a job at another field, Alexander Barclay, promised that "he could finish with 30 women two-thirds of the work done by 60 here".[52] 60 is at least a plausible figure. In the 1765 season from 50-60 servants were employed, i.e. were paid monthly but this was an exceptional season in terms of the amount of bleaching done. Between 1768-1772 the following numbers were employed. (In 1772 the field was being run down).

52 Barclay to (Flint?), 10 Nov, 1752, Saltoun MSS, box 329.

Table 8.4

Servants employed at Salton: Wages paid (pence per day)

	Numbers employed		Wages paid								
	Men	Women	Men					Women			
1768	21	16	1	5	1	11	3	11	1	4	
1769	15	13	1	4	3	5	2	10	2	1	
1770	18	15	2	4	4	4	4	9	1	5	
1771	14	12	2	2	6	2	2	7	3	2	
1772	8	8	1	3	2	1	1	5	3	-	

In 1768 the foreman, Andrew Rutherford, and his successor, William Thompson, were paid the top day rate of 1/- (the practice of a fixed salary seems to have been abandoned). The watchmen and the buckers were paid 9^d per day, and the rest of the men-beetlers and boardsmen - at $8-8\frac{1}{2}^d$, although when they started at the field for the first month daily rate was $7-7\frac{1}{2}^d$.

One obvious fact to emerge from the wages sheets presented in the Journal of the bleachfield is that the lowest paid worked the fewest days and were the first to be laid off. In 1768 the bucker James Raeburn worked 250 days at 9^d whereas the $7\frac{1}{2}-8^d$ men were laid off after 138 days. The senior field hands worked 299 days. There are some puzzling aspects, how did some men manage to work 330-350 days in a season given that there was no Sunday working unless there was some kind of overtime system?[53] The longest periods were apparently worked by the millers and boardsmen, not the buckers - perhaps 2 shifts were credited as a day each.

The women were taken on at $4-5^d$ per day, eventually to reach a maximum of 6^d per day after as much as three seasons. Employed for the bleaching season of April to late October, they were used to wash and soap, lay out andpin out the linens and possibly in watering them. The men did the bucking, steeping and beetling. Their day wages were supplemented by odd jobs, such as repairs to the field, and tidying up damaged cloth. Once a year, a servants' dinner was held; the menu invariably included beef and

53 Perhaps they were paid for bringing a boy or girl to assist (suggestion of Mrs. R. N. Mitchison).

mutton with spirits and strong ale to wash it down. Bread and ale was occasionally given to the lappers and a woman was excused from her work at 8 and 12 a.m. to prepare meals and hot water for the servants' breaks an hour later under Mrs. Armstrong's supervision.

Her income from supervision, 1/- per day for between 160-237 days, must have made a sizeable contribution to her household's income, further augmented by perks like free coal and candles. The Company made a determined attempt to get these converted to cash in 1762; a compromise was reached which allowed the master-bleacher 12 cart loads of coal free (value estimated at 1/6 per load), and the foreman and latter 6 each, which they had to get carted at their own expense. Housing was provided for them at the field - in 1762 the foreman and lapper were provided with new houses and a free garden in addition to their wages. This was another incentive for them to remain at Salton.

No such provision was made for servants. How their wages and conditions compared with those at other fields is not known, but it is likely that with so many other bleachfields near by, their rates must have been typical for the area and occupation. George Robertson reported that an ordinary labourer in agriculture was paid $6\frac{1}{2}^{d}$ a day in 1750, which rose slowly so that in 1765 a labourer received 7^{d} a day in winter and 8^{d} in summer.[54] This would explain why the bleachfield in the late 1760s had to pay between $8\frac{1}{2}$-9^{d} per day to retain its hands. Wages had apparently risen sharply in the early 1760s, e.g. Samuel Hart at Ford bleachfield advertised in 1761 "that notwithstanding the recent great advance in the price of ashes and of servants' wages, he would continue to hold his prices steady".[55] Despite rising costs, Salton bleachfield's prices for bleaching did not rise in the 1760s in reflection of both increased efficiency and competition.

54 George Robertson Rural Recollections p. 122.

55 Edinburgh Evening Courant, 1761.

There was a hard core of families who worked season after season at the field but a great deal of mobility amongst the rest. In the years 1768-71 (excluding 1772 because of the run-down state of the field) only 6 men out of the 36 male servants employed worked all four seasons; the watchmen, two of the boardsmen, the first bucker and an assistant, and the eventual foreman. This was a higher-paid and more stable group than the less skilled labourers. Of the salaried men, the bleacher, lappers and accountant similarly stayed the entire period.

Of the 26 women employed in the same period, only six worked the four years, five of whom were experienced hands who earned top female rate of 6^{d} per day. Of the day servants taken on each season, the permanent core was constituted by families, e.g. the bucker Raeburn and two women of the same name, John and Jean Harper, the Hendersons, the Whinton family, the three Wilkieson women, Pollock the stampmaster's wife, and William and Marion Woods (on one occasion paid jointly). Children, apart from Andrew Winton who was paid only $3\frac{1}{2}$-4^{d} a day, did not figure at all in the accounts. It is curious that so few of the force were regular. The Company feared competition for the skilled men, e.g. Archibald Howden went to the New Bleachfield at Dunbar, and therefore exerted itself to retain them, but with plenty of labour available locally, the pressure to hold the semi- and unskilled may not have existed, given that training for most of the bleaching jobs was short. Alternatively, the high spin-off rate may be accounted for by the agricultural recruit finding the routine unbearable.

The bleacher was responsible for the management of the work force and also for the carriage of cloth and materials to and from the field. Until 1752 the Company hired carts from Lord Milton as the need arose, but it was decided then to buy two carts and 4 horses and employ two full-time carters at the wage of 8^{d} per day or 4/- per week. One was dismissed after only a

year but the other, William Wood, continued to work for the field until 1762 for certain and probably till 1773. The means of conveyance was an open cart which carried 2-3 bales of cloth at a time; the cloth was wrapped in straw and covered with a packsheet en route. A covered waggon was tried and discarded because "the waggon does not commonly carry one-third of the load of the open cart (which) retards the supply of the bleachfield and heightens the charge of carriage".[56] In 1762 the Company sold all its carts, etc. and agreed with Armstrong the following rates, "for performing all carriages to and from the field...6^{d} for each completed mile out and 3^{d} per mile home for a loading which is to be reckoned 12 cwt for a cart or waggon".[57] This transference of responsibility resulted in the annual charge for carting, which had risen from £46 in 1757 to £107 in 1763, being pegged back at around £75 thereafter.

The main article carried was cloth, e.g. in 1770 3351 pieces of cloth were carried from Dunfermline to Salton at 16/- per 100 pieces, which was either returned to Dunfermline at the same charge or Edinburgh at 12/-. The onus normally lay on the bleacher to pay the cost of transport to and from his field and the distance from which the field was drawing its cloth for bleaching in the 1760s must have been a factor of significance in depressing the profits. The other article carted was coal, e.g. in 1770 1221 loads at 8^{d} each from Sir Andrew Lauder's pit at Winton. Ashes, soap and other materials were also carted, from Edinburgh. The carriage costs out to Salton must have been the motivating factor in the Company's attempt to find an alternative site in Edinburgh. Negotiations were opened with Lord Belhaven for a lease of Grangehaughs in 1750 which were renewed in 1752 when McCulloch was quite optimistic; "we flatter ourselves that the

56 McCulloch to Armstrong, 19 May 1764.

57 Directors' Minute Book 28 June, 1762.

experience of another season will enable us to spare a colony of skilled hands to be transplanted from Salton to Grangehaughs where it is to be hoped we shall go with both Profit and Pleasure in our bleaching".[58] Bad water at the site caused the deal to fall through, fortunately before the Company had invested much capital in its development.

The main debit items in the field's balance sheet were wages and materials. The bleacher was under equal pressure to organise the use of his labour efficiently and materials such as ashes economically. The cost of the materials used in bleaching usually greatly exceeded the wages paid to the servants.

Table 8.5

Expenditure on Wages and Materials and Receipts from Bleaching at Salton (£)

Season	Wages[1]	Materials[2]	Bleaching[3]
1756	194	355	954
1757	226	456	1170
1758	210	479	1167
1759	267	480	1274
1760	359	700	1506
1761	387	655	1265
1762	367	486	1126
1768	200	381	1044
1769	184	299	867
1770	?	374	1037
1771	179	392	847
1772	?	210	484

1 Wages paid to servants (i.e. not including salaries).
2 Cost of Materials used in bleaching.
3 Receipts for bleaching.

The major part of the cost of the materials came from the ashes imported from the Baltic. Scottish bleachers emphasised how much this dependence on imported ashes handicapped them and in time of war Salton experienced a sharp rise in the cost of these materials. After the conclusion of war, prices returned to normal levels.

58 McCulloch to Armstrong, 18 Apr, 1752.

Table 8.6

Prices of Certain Materials used at Salton

Season	Pearlash[1]	Cassub[2]	White Soap		Smalts		Starch	Coals
			Lb	d/lb	Lb	d/lb	d/lb	d/load
1756	37.4	44.6	1695	5.8	402	17.0	4.5	3.5
1757	35.6	50.0	3251	5.5	468	20.1	5.1	3.5
1758	31.6	50.0	3620	5.0	1090	16.2	5.2	3.5
1759	36.7	48.9	3668	5.2	1178	15.5	4.5	3.5
1760	45.6	51.2	4944	5.3	1527	19.1	3.6	3.5
1761	40.4	57.8	4748	5.5	934	16.0	3.3	3.7
1762	(71.0)[x]	66.3	5513	5.4	311	18.4	4.6	3.7
1763	58.0	65.6	5618	5.2	2501	16.6	4.7	3.7
1768	32.9 39.0	42.4	?	5.6	?	14.0	-	4.0

1 Shg per cwt.
2 Shg per cask
x Very small quantity involved.

The prices during the war led to a renewal of the demand that the duties on the import of ashes be lifted and an attempt to use home-made ashes as sustitutes. The price of Baltic ashes was affected by the rise in shipping and insurance rates, and the duties on ashes which varied according to kind added between $3\frac{1}{2}$-7% to the cost price.[59] Soap was also subject to a duty, part of which was drawnback to the bleacher, but this repayment lagged years in arrears and was generally paid in large amounts covering 3-4 years at a time. But the Government was immovable and attention was devoted to finding alternative sources. In 1762 and 1763 as a temporary measure large quantities ($19\frac{1}{2}$ and 23 tons respectively) of kelp were used at Salton, and fern ashes were also tried again. American Pearl ashes made a successful entry to be used in subsequent years.

Scottish bleachfields did have one advantage over their Dutch competitors, viz. cheap coal. Cockburn of Ormiston had pointed out that while he would have been glad to have seen the duties on soap and ashes lifted, "We do have

59 E.g. on a cargo of ashes imported from Danzig in 1760 the Company paid £45 14/8 of duty.

cheaper coals so duties alone don't account for differences in bleaching prices".[60] Salton used both great coal and panwood, to heat the furnace under the bucking boilers and the lee boiler ("the great fire"), which was carted from nearby Winton. The "load" of coal, which may have weighed between 2-2½ cwt. of coal,[61] cost 3½d at the pithead until 1761, when it began to rise in price and by 1770 cost 4d. The cost of transport in that year was 8d per cartload, and as the Company's carts had a capacity of about 12 cwt. of coal, each cart may have contained about 6 "loads" of coal, in which case transport added 25% to the cost of the coal at Salton. But this was still relatively cheap at 4/2 per ton, in relation to the cost of ashes, and coals were quite often entered in the accounts under "Sundries". The master was instructed to be economical in his use of coal; "labourers are to be allowed only coals for the great fire for boiling and making ready their food."[62]

Table 8.7

Coal used at Salton Bleachfield

Season	Loads	Tons[1]	Average Price per load (d)
1756	1356	136	3.5
1757	1481	148	3.5
1758	1132	113	3.5
1759	1390	139	3.5
1760	1800	180	3.5
1761	2180	218	3.7
1762	2179	218	3.7
1763	1925	193	3.7
1768	978	98	?
1769	945	95	?
1770	1221	122	4.0
1771	1159	116	4.0
1772	552	55	?

1 Assuming that one load = 2 cwt., ten = 1 ton.

60 S.R.O. Clerk of Penecuik MSS GD 18/5904

61 B. F. Duckham, A History of the Scottish Coal Industry, Vol. 1 p. 370.

62 Directors' Minute Book, 28 July, 1762; Regulations for Salton Bleachfield.

The bleachfield at Salton enjoyed certain privileges as the British Linen Company's field over other commercial fields. It was generally guaranteed sufficient cloth for both the first and the second fields without the same dependence on advertising and a network of agents to take in the cloth. In contrast, Ormiston, its near neighbour, had "takers-in" at Edinburgh, Leith and Dalkeith who each had to be paid 5% commission for their trouble. This favourable situation altered somewhat in the period after 1763, but even after the Company had foresaken manufacturing for banking, it was still in a position to persuade several of its manufacturer clients to send their cloth to Salton. In an effort to assist the field, the Company enabled it in 1770 to offer manufacturers who sent their cloth there to be bleached an advance for 6 months of two-thirds the value of the cloth sent. The field was not starved of capital for improvement, nor suffered for want of attention, and the pressure of McCulloch left it in the van of Scottish bleaching, "a field remarkable for the goodness of colour and neat finishing for the foreign market".[63]

Costs were kept under constant surveillance; in 1762 it was demonstrated to the satisfaction of the Directors that the costs of bleaching and finishing had been almost halved for certain kinds of cloth during the life of the field. Nor did the field fail to attempt to substitute home-made ashes for the foreign, nor to obtain supplies of foreign ashes as cheaply as possible.[64] While the Dutch may have got their ashes "at a trifle", the Company were persevering in their efforts to reduce the price during the 1750s by trying all the sources of Baltic ashes through Scottish and local factors resident in the region, and using all possible methods of buying ashes. They imported Baltic ashes as cheaply as anyone in Scotland and the failure to reduce prices further was because of the hostility of the

63 Edinburgh Evening Courant, 1765.

64 S.R.O. Clerk of Penecuik MSS op.cit.

established traders and the lack of skill in the factors. That their prices were highly competitive in Scotland is shown by the speed at which other bleachers bought ashes surplus to the Company's requirements.

The field did not lack management - indeed it may have suffered from too much with McCulloch - nor skill bleachers. It survived the transitional period after 1754 as the manufacture of fine linen in the East of Scotland declined, which left that division of the field underutilised. From the Company came a steady supply of linens of which the weaving was improving. The Scottish bleacher had often been able to complain with hustification that bad bleaching so-called was no more than an inability to transform bad cloth into good. By thelate 1750s no such excuse was possible for Salton, and the bleachfield responded to the pressure, as it unashamedly advertised in 1771, "It is needless to say anything in recommendation of this field; universally known to be one of the oldest and the best in the country".[65]

During the first years of its operation considerable damage was caused by the unskilfulness of the bleachers and their servants, and high winds tore the linens put out to dry, on several occasions. By 1754 there were over £1500 worth of torn and damaged linens on hand for which the bleacher had to pay compensation.[66] Floods in 1749 and 1762 severely damaged the field and the vagaries of the Scottish climate did on occasion seriously disrupt the bleaching programme. But none of these problems was particular to Salton nor were they exceptionally onerous after 1765. In some respects, e.g. the supply of water, the field was better off than many others.

The question is, therefore, why the field, having survived all the difficulties of the 1750s, should have demised in 1773. The Company had

65 Edinburgh Evening Courant, 1771.

66 Not all of this had to be written off; some of the fine linens, for instance, were made into shirts, viz. an entry in the British Linen Company waste book October 1751; "1201 shirts were made out of 157 pieces fine linen value £345, they being so damnified at the Bleachfield that they could not be sold in whole pieces".

moved out of manufacturing into banking after 1763, which made the bleachfield like the Highland spinning, an embarrassment. The resignation of McCulloch as Manager in 1763 and the subsequent breakup of his copartnership with the Company, and the death of Lord Milton in 1764 deprived the field of two of its keenest supporters. The crucial factor thereafter was the decline in profits on its operation during the 1760s.

Profits at Salton Bleachfield (£)

Season	£	Season	£
1756	461	1764	249
1757	386	1767	nil
1758	389	1768	nil
1759	241	1769	8 (loss)
1760	71	1770	37
1761	73		
1762	353		

Note: in 1756 the bleachfield, including fixed works, was valued at £3,700; in 1768 it was revalued at £2,090.

The rise in the cost of raw materials was one factor, and another may have been the underutilisation of the field after the Company ceased to manufacture. The field's capacity was between 10-12,000 pieces a season (c. 160-240,000 yards) and without the Company's supplies of linens, the field was unable to secure enough cloth, operating as it was in a highly competitive area while the production of linen in the Edinburgh region stagnated and fell during the 1760s.[67] Some others of the East Lothian fields went out of use and those that survived were smaller scale, e.g. Salton Barleymill to which the Salton bleacher went was operating until well after the turn of the century. The irony is that during the expansion of the 1750s, the Company deliberately limited the price charged for bleaching at

67 Linen stamped for sale in Midlothian ('000 yards):
1740 - 20; 1750 - 466; 1760 - 821; 1770 - 224; 1780 - 176.
(Source: Stampmasters' Returns; E.U.L. Laing MSS).

the field in the interest of the sale of the linens, i.e. it refrained from charging as high prices as some of the other fields in order to take the profit on the sale of the bleached linens. During the later 1760s, when the field no longer had any of the Company's linens to bleach and this limitation on prices no longer existed, because of the shrinkage of the industry in the region and the numbers of other fields competing, the opportunity to raise prices no longer existed.

The dissolution of his copartnership and his subsequent financial troubles left McCulloch in no position to buy the field, and the Directors failed despite periodic attempts to sell the field during the 1760s. The onset of the depression in the linen industry of 1772-73 was the final straw for the Directors, and they accepted an offer from Andrew Fletcher, the son of the late Lord Milton, for the field in 1772, and the field was run down that season. "After trying what the field would produce, the expence on it and loss on the bleaching was considerable and therefore many attempts were made to sell it till it was bought by Mr. Fletcher of Salton at Candlemass for £1700".[68] Fletcher sold off the machinery and twenty years later, the Old Statistical Account recorded that the field which had once employed 100 people was converted into a "delightful" pleasure ground. None of the skilled men had any difficulty in finding other jobs; e.g. James Hill went to Cupar bleachfield.

The history of Salton bleachfield throws some light on the difficulties imposed by climate and the lack of chemical knowledge, and the series of changes in layout, buildings and machinery by which the Scottish bleaching industry overhauled its close rival, the Irish, and which led to a reversal of the traditional flow of ideas from Ireland to a net outflow from Scotland. In this development, Salton bleachfield played a not insignificant part.

68 Minutes of the Meeting of Proprietors, 2 Mar, 1772.

Conclusion

The Linen Industry in Scotland in 1746 was still largely a domestic and household one, in which the basic unit of production was the small master-weaver, with 2-3 apprentices or journeymen in his shop. All stages of the process of production and sale were dogged by shortage of capital, which was reflected on the weaving side by lack of continuous employment and low quality materials, utensils and weaving. In this context, it would have been extremely disappointing if the British Linen Company - with its resources - had failed to make any significant contribution to the development of the industry. By March 1748, the Company was using over £45,000 in the trade, and the scale of its operations was quite unique within the industry - with the possible exception of the Sandieman complex - during the 1740s and 1750s. Few enterprises of any sort prior to Carron, raised and employed so much capital in the Scottish economy. Nearly all of it was subscribed from Scottish sources.

Between 1746 and 1763, the amount of linen stamped in Scotland for sale grew from 5.5 m yards to 12.4 The question is how much of this was caused by the British Linen Company. The amount of linen which the Company either manufactured itself or bought from its subcontractors, fell as a percentage of total Scottish production stamped for sale, from 8.9% in 1751 to 3.2% in 1755, rose again to 5.8% in 1759, and thereafter waned, decreasing sharply after 1762 as the Company withdrew from manufacturing.[1] In absolute terms, although the largest single producer in the industry for at least the first decade, this is not very significant. The contention of this thesis is that the major contribution of the Company came during the seminal years of 1746-53, in relation to the development of certain fabrics, particularly the Osnaburg.

1 See Appendix "E".

The Company can be said to have had two distinct objectives, motivated by both commercial and semi-patriotic ambitions. The first was to develop fabrics new to Scotland in imitation of the foreign, and the second, which was related, was to break into the markets for export at London and Glasgow. These aims were realised in the development of the Osnaburg fabric during the late 1740s, which was to prove a staple of the export sector of the Scottish industry. Equally, it is by using these objectives as yardsticks, that the real contribution of the Company can be assessed. The improvement and acceleration of existing fabrics, and sales in the domestic market, while important, were nevertheless secondary. It was aided by the larger Bounty on coarse linens exported, which was passed in 1745 and provided a substantial stimulus to the export of Scottish (and Irish) coarse linens.

While no statistical verification can be provided, the impression is probably valid that over half of all the linen sold by the British Linen Company went for export. This disproportionate concentration explains why it was so hard hit by the depression of 1754-55, induced - inter alia - by the withdrawal of the bounty.[2] After the restoration of the bounty in 1756, the Company had less of a leading role as others had followed where it had pioneered. The ultimate withdrawal of the Company from active participation in the manufacture and sale of linen, reflected the growth of the industry andits ability to stand unsupported. Increasing competition from other producers within Scotland at both the home and the export markets was the basic cause of much of the troubles after 1757, which in turn reinforced the desire of the Proprietors for safer profits, and induced the shift of power within the ranks of the Directors away from those concerned to promote the Linen trade to those whose objective was banking proper.

As the industry grew after 1756, this forced a revision of the Company's

2 See Appendices "A" - "E", and Graph attached to Appendix "D".

manufacturing policy. The percolation of skills to the independent and country weavers, the more continuous employment and sustained demand, combined to render the strict supervision of the factory unnecessary in the coarser fabrics, and uneconomic as the basis of production could revert to the lower-cost, unsupervised weavers without any serious loss of quality. But this development was also conditional on the provision of adequate supplies of yarn. The establishment of spinning in the North-east of the Highlands by the Company was important both for the region and for the industry, and deserves recognition as one of the most important objectives realised by the Company.[3] The contribution of the Company's bleachfield at Salton was singularly valuable for that aspect of the industry.

The British Linen Company gave, therefore, distinctive and vital assistance to virtually every stage of the manufacture of linen. If little was done to encourage the growth of Scottish flax, and the Company was content to rely on imported flax,[4] it attempted to nurture the advance of indigenous techniques in all the other branches of the industry. The task was onerous and the low level of profits on the sale of linens at London indicative of the degree of competition outside the relatively sheltered Scottish home market. The Company could claim, however, that both it and the Industry benefited from their interaction, and that its motto, "Ditat", was justified with reference to the Linen industry, typified in its seal, if not to the Company itself.

3 See Chapter 8.

4 See Appendices "F" - "G".

Linen and the Scottish Economy: 1707-1775

There is no disagreement amongst economic historians over the place of the linen industry in the Scottish economy during this period. "The manufacture of linen was Scotland's premier industry"[5] wrote Hamilton in 1932, a judgement with which such authorities as Campbell ("Scotland's staple industry")[6] and Smout ("linen cloth, Scotland's premier industry")[7] have subsequently concurred. Although, however, the processes of production and the structure of organisation have been described in some detail, much less has been written about the role of the linen industry in the Scottish economy, except in the light of its parental relationship to the cotton industry.[8] Indeed, it has generally been assumed that this industry was the most important in the economy in terms of the value of its output and employment generated. One would not wish, in the light of this thesis, to dispute the view that the linen industry - especially when it is noted that the linen industry was more than the manufacture of linen cloth and included such important subsidiary elements as the production of yarn and thread - was the paramount industry in Scotland during this period. The difficulty is to set it in context, that is to say how important it was and what were the implications for other sectors of the economy.

It is certainly true that contemporaries thought, and no evidence has yet been produced to the contrary, that the industry was the staple of Scotland, and that the value of output and employment generated was far greater than in any other industry such as the woollen prior to 1775. The difficulty in establishing this beyond doubt, stems quite simply from the

5 H. Hamilton, The Industrial Revolution in Scotland, p. 76.

6 R.H. Campbell, "The Economic Consequences of the Anglo-Scottish Union", The Economic History Review, 1964, p. 470.

7 T.C. Smout, A History of the Scottish People, 1560-1830, p. 244.

8 E.g. R. H. Campbell, "The Industrial Revolution; a revision article", S.H.R. 1967, pp. 44-47.

absence of any comparable statistics of output for any other Scottish industry, during this period. The statistics of the growth of the commercial manufacture of linen cloth are impressive, but the danger is of relegating other industries such as coal whose output is unquantified[9] to a secondary position in absentia. Equally the paucity of eighteenth century Scottish commercial statistics made any estimate of national income impossible and therefore rules out any evaluation of what contribution the linen industry made in percentage terms to national income, and how this changed over time.

The danger stated, it is, however, clear from the output figures of stamped linen alone, that the linen industry was of major importance and that the production of linen yarn, thread and cloth grew at a remarkable rate, with a distinct acceleration from the 1740s. This expansion, par excellence the economic justification of the Union of 1707, was a function of free access to wider markets in England and the Colonies, and of assistance from the government through the Board of Trustees and in the form of a bounty or subsidy on linen cloth exported. Without these, it is probable that, although the spinning of yarn might have increased to supply English demand, the manufacture of cloth would have remained confined to the supply of the home market, which at the very least would have curtailed the rate of expansion. If "the Irish Linen industry was perhaps the most remarkable instance in Europe of an export-based advance in the 18th century",[10] then the Scottish came a close second. When sales of linen to England, as well as exports proper, are taken into account, it is likely that much of the Scottish industry's production of linen cloth was sold outside Scotland.

9 B.F. Duckham, in his History of the Scottish Coal Industry, volume I, 1700-1815, pp. 14-32, discussed the difficulties, and analyses the estimates which have been made for the output - by volume - of the Scottish coal industry in the eighteenth century, but does not attempt any estimate of the value of output during this period.

10 L.M. Cullen, An Economic History of Ireland since 1660, p. 53.

The contribution of earnings from the sale of linen-cloth (and yarn and thread to England) was an important element in easing Scotland's fragile balance of payments position. Although the absence of data as to the volume and value of sales in the English market precludes any estimate of the earnings in that area, between 1755 and 1775 linen-cloth constituted one-tenth to one-fifth by value of home-produced commodities exported from Scotland.[11] This, of course, takes no account of the concentration of linen exports, to the American and West Indian markets, nor of the value of Scottish linen exported from England. The suggestion of this thesis is that, far from the colonial re-export trade in tobacco being an enclave in the Scottish economy with little integration with indigenous Scottish industry, the growths of the linen industry and the tobacco trade were to a certain extent intertwined, in that supplies of "cheap" linens enhanced the profitability of the store system, which was a distinctive feature of the Glasgow organisation, and the fortunes of the tobacco trade governed both orders and payment for Scottish linen-cloth. In a complex manner, the tobacco trade, therefore, regulated the extent of colonial demand for linen.

Unfortunately, very little can be said about the profitability of the linen trade and the extent to which capital generated in this industry spilled over into other sectors of the economy. But it is clear that the expansion of the industry had considerable implications for employment and earnings in Scotland. Division of the processes of production, and specialisation in one function, which already existed with respect to weaving and spinning from time immemorial, advanced little during this period, except in regard to the creation - almost ex nihilo - of a class

11 H. Hamilton, An Economic History of Scotland in the eighteenth century, Appendices VI and VIII. It must be noted that it has already been pointed out (supra, chapter 4, p 178) that Appendix VI understates the volume of linen exported, and therefore also the value.

of full-time professional bleachers. The increase in the commercial output of cloth was met in part by technological innovation, producing a rise in productivity, in part by a shift from subsistence to commercial production, in part by an increase in the numbers of weavers, who in the urban centres were full-time and whose subsistence depended on weaving alone. But the part weaver, part agriculturalist was still a familiar figure particularly in the East of Scotland, where although weaving was the main occupation of the villages, many of the weavers - if not all - had their own patch of ground and abandoned their weaving at the call of agriculture. The rural or village weaver, whose efficiency was so sharply challenged by the improvers ("the weaver must make a bad farmer, and the farmer a bad weaver")[12] because they tried to serve two masters, did hold one advantage over his urban counterpart, in that although his earnings were lower from weaving, he was not totally dependent on that alone, which mitigated the impact of depression for him.

The rise in demand for yarn resulted in the widespread adoption by the 1740s of one important technological change, which may have doubled the productivity of the spinner, namely the adoption of the two-handed spinning wheel for the rock and distaff, but thereafter, during this period, output of yarn was increased simply by increasing the number of spinners. Spinning was a major source of female employment and income for the rural poor, and therefore of rent-paying and purchasing power. "By the industry of the people there (Perthshire) in raising flax and spinning yarn for sale, all the rents as well as the tradesmen's accounts due by the tenants are paid from the produce of linen yarn".[13] After 1740 spinning was diffused geographically in a way that weaving never was, e.g. into the Highlands where

12 The Scots Magazine, vol. 26, 1764, p. 311. An abstract of a pamphlet entitled "Small farms destructive to the country in its present situation".

13 J. Henderson, General View of the agriculture of the County of Sutherland, (1812), p. 207.

no other stage of the linen industry ever took root, and as spinning became commercialised, and more distant from the sources of flax and markets for yarn, it passed increasingly under the control of the giver-out. Some of these entrepreneurs specialised in the production and sale of yarn only, others gave-out their yarn to be woven, regulating production and handling the marketing of the finished product. As demand for yarn increased, it became more important for the manufacturer to establish his own network of spinners, to whom he gave-out flax to be spun, in order to avoid dependence on the open market for supplies. Some manufacturers gave-out their yarn to be woven at home, others - particularly in the finer fabrics - brought production into the factory under supervision.

But the extent to which production passed into the control of the manufacturer is not ascertainable, and probably should not be exaggerated, given that in 1775 there were still large numbers of independent rural and urban weavers. Marketing, however, became increasingly dominated by the merchant, and perhaps here were bred those entrepreneurs who were to exploit to the full the opportunities offered by the new cotton technology, who gained capital and commercial experience from the linen trade.[14] Few, however, of these merchants dealt in the marketing of linen alone; most continued to manufacture some cloth themselves.

The linkages of the linen industry with other sectors of the economy are not easily discerned, and the relationship with agriculture is complex and obscure. Weaving offered an alternative source of income and therefore competition for labour, which would tend to have forced up agricultural wage-rates just as the gentry complained that the alternative of spinning forced them to raise the wages of their domestic servants, but on the other hand agriculture in the East of Scotland may have benefited from the weaving villages as focal points of demand and also sources of seasonal labour, which enabled the retention of a smaller permanent work force.

14 Smout, op.cit., p. 249.

Little can be said about the relationship of linen with other sectors. Generally the linen industry stimulated a range of crafts, reed-making, the construction of looms and other equipment - rather than full-scale industries. It was significant that by 1770, the Scottish industry had become a net exporter of technology and that the importation of foreign skills and skilled men had withered away to nothing. That at least was indicative of progress, just as was the ability of the industry to perform the bleaching and finishing of cloth within Scotland, instead of allowing this valuable stage to pass by default to others. But the development of large-scale bleaching and printing fields in Scotland was less a triumph for Scottish chemistry (of which the achievements have been grossly over-rated) than a maifestation of increased capital resources and investment within the industry, and successful imitation. The one great weakness, which the Scottish industry had not overcome by 1775, was its dependence for some proportion of its raw material, flax, on imported supplies. But otherwise, the industry had proven beyond doubt the claim made on its behalf in 1720, that "the linen manufacture in Scotland (which is the most considerable branch of our trade) is of very great advantage to the subjects of that part of the United Kingdom. That the linen manufacture is in all respects to Scotland what the woollen manufacture is to England. That linen being the staple commodity of that part of the Kingdom...it is the only manufacture in Scotland which maintains and keeps at work the poor".[15]

15 C.R.B. Records 1711-38, ed. J.D. Mackie, p. 227. From the draught of a petition to be presented to Parliament, 2 Jan., 1720.

Appendix "A"

Sales of Linen made by the British Linen Company 1748-62

"State of the annual amount of Sales made by the Company - showing where the linens were sold with the profit or loss on the goods disposed of at the various markets". (Source: Abercairney MSS: GD 24/839/1)

(£ stg., to the nearest £)

Year[x]	At the London Market		At Edinburgh		At Glasgow	
	Amount sold	P/L	Amt. sold	P/L	Amt. sold	P/L
1747			2,501	+ 261		
1749	16,794	+727	9,464	+2365	526	+ 12
1750	5,286	+ 85	14,050	+2340	3,657	+ 69
1751	8,936	+ 1	15,115	+2440	5,264	+198
1752	10,183	+ 88	12,817	+2247	5,485	+203
1753	12,399	+291	14,638	+2851	7,720	+304
1754	16,881	+504	13,909	+3794	6,427	+297
1755	6,883	-240	6,775	+ 973	734	-146
1756	8,686	-591	3,437	+ 531	111	- 26
1757	14,073	- 1	6,050	+1320	1,299	- 28
1758	15,900	+249	8,251	+1366	1,519	+ 79
1759	21,883	+541	12,269	+1977		
1760	22,547	+ 21	14,400	+2074		
1761	17,675	+519	14,356	+1760		
1762	11,033	-150	14,231	+1927		
Total Sales	189,153	+2,044	149,458	+28,222	32,737	+962
Percentage Profit	1.08%		18.88%		2.84%	

P/L = Profit/Loss

x The Company's financial year, which originally ended on the 25th December, was altered to January 31st in 1748 and then the 19th of May from 1749 until 1753, when it was finally fixed at the 30th of May. The year 1747, therefore, represents a period of 13 months from Christmas 1746 to January 1748, and 1749 a period of 16 months ending in the May of the year indicated. This holds true for all the other tables.

Appendix "B"

Goods remaining on Hand at the London market at the annual Balance, which belonged to the Company; May 1749-1762. (Source: ibid.)

Year	£	Year	£
1749	6,907	1756	11,780
1750	6,486	1757	17,352
1751	4,861	1758	12,885
1752	5,571	1759	5,284
1753	7,958	1760	4,079
1754	8,172	1761	6,334
1755	8,381		

Appendix "C"

Sales by Tod (later Tod & Anderson) at London

Year ending 30th May	On sole account		Total	On joint-account	Tota
	Yards	Table-cloths	£	Yards	£
1758	393,603	15,640	14,831		
1759	524,807	9,316	18,786		
1760	573,024	x	22,298		
1761	313,829	12,782	16,991	237,868	9,19
1762	257,000	x	11,033	601,863	17,69
1763	280,640	x	11,958	506,938	17,171

x = missing

Graph of Appendix'D': The British Linen Company; linens bought and manufactured 1751-1763, and linens sold 1751-1762.



Appendix "D" (See also Graph attached)

Linens Bought (including those manufactured by the Company), and Sold by the Company (£)

Year ending 30th May[1]	Fine & Bleached Linens				Coarse & Unbleached Linens			
	Bought		Sold		Bought		Sold	
	£	yds	£	yds	£	yds	£	yds
1751	18773		13953		14391		12958	
1752	17719		11917		14063		14471	
1753	18414		15498		17050		16439	
1754	14139		19301		15402	501976	17698	585836
1755	6067		8454		5063	158388	4199	129274
1756	6046		6957		5153		3867	
1757	7208		11160		12299	380551	13256	414540
1758	8410		10698		17127	601203	16405	575829
1759	12395		12608		10675	378917	12499	406894
1760	19356	386988	15854	263121	11179	354051	11042	349643
1761	18411	340878	33057	509899	10266	309630	11143	339021
1762	9867	13122	14678		10591	329140	9693	297149
1763	10345	174867	x		9340	280149	x	

x = missing

Total Bought and Sold (£)

Year ending 30th May[1]	Bought & Manufactured	Sold
1751	3364	26911
1752	31782	26388
1753	35464	31937
1754	29541	36999
1755	11130	12653
1756	11199	10824
1757	18368	24416
1758	15537	27103
1759	23070	25107
1760	30535 (741,039 yds)	26896 (612,764 yds)
1761	28677 (650,508 ")	34200
1762	20458	24371
1763	19685	?

1 15th May for 1751 and 1752.

Sources: Ledgers of the British Linen Company "E" - "Q".

Appendix "E"

An estimate of the percentage by value of Scottish linen production made by the British Linen Company

Year[1]	Table 1	Table 2	%age
1751	33	367	8.9
1752	32	409	8.2
1753	35	445	7.4
1754	30	407	5.4
1755	11	345	3.2
1756	11	368	3.9
1757	18	402	5.3
1758	26	424	5.8
1759	23	451	5.8
1760	31	523	5.7
1761	29	516	4.9
1762	20	475	4.2
1763	20	552	-

Table 1 = Linen bought and manufactured by the Company (£'000)

Table 2 = Estimated value of linen stamped for sale in Scotland.

%age = percentage Table 1 of Table 2, i.e. percentage of Scottish linen made by the Company.

1 Notes: The main difficulty in the calculation is that the Company's year ended in May (May 15 and then May 30), whereas the Trustees' year ended on 1st of November. Accordingly to form an estimate of the Company's production for the same period, 7/12ths of the Company's total to May were added to 5/12ths of the value of production in the following year. This figure was evaluated as a percentage by value against the Trustees' figures. The necessary crudeness of this manipulation is undoubtedly matched by the fact that the stampmasters' estimates of the value of the linen that was stamped for sale in Scotland was only very approximate.

Appendix "F"

Flax imported and sold by the British Linen Company, including that consigned to the Highland spinning 1751-62 (to the nearest ton)

Year ending in May	To the H'lands Baltic Flax	To the Lowlands Baltic	To the Lowlands Dutch	Total Imported	Total Sold
1751	72	81	29	182	173
1752	210	94	85	389	323
1753	169	85	32	286	x
1754	94	93	35	222	240
1755	107	138	3	248	231
1756	201	100	19	320	226
1757	131	220	10	361	385
1758	137	265	26	428	408
1759	72	45	23	140	187
1760	139	148	10	297	263
1761	126	169	16	311	x
1762	x	23	9	x	x

x = missing

Sources: Ledgers "E" - "Q".

Note: because the Company's year ended in May, the imports of Baltic flax referred to were those which had taken place in the previous calendar year. Some Dutch flax was on the other hand imported in the winter and early spring. The accounts must be read in this light.

Appendix "G"

Principal Ashes imported and sold by the British Linen Company

Year ending in May	Marcoff (Barrels)		Muscovia (Barrels)		Pearl (cask)		Weedash (Barrels)		Total value of all ashes (£)	
	I	S	I	S	I	S	I	S	I	S
1751	-	-	25	3	-	7	204	198	686	574
1752	36	4	2	15	23	12	636	336	2469	1189
1753	-	11	20	14	18	14	1	256	631	1296
1754	-	8	-	13	6	14	123	143	495	786
1755	-	3	-	2	12	5	70	61	142	346
1756	-	1	-	-	4	18	50	58	216	343
1757	-	3	-	-	7	6	2	18	158	265
1758	-	6	-	-	6	7	25	25	396	398
1759	-	-	-	-	41	x	26	26	853	628
1760	-	-	-	-	x	x	x	x	277	782
1761	-	-	-	-	x	x	x	x	x	x
1762	-	-	-	-	x	x	x	x	581	595

Note: the Company also imported smalts and various other kinds of ashes than those mentioned above for use at the bleachfield. The disproportionate amount of weedash imported - as opposed to peral ash - did not reflect either demand in Scotland or the need of the bleachfield, but simply the inability of the Company to import pearl ash - even in bulk - at a competitive price. "There is no general demand for pearl ashes here as for the most part they are supplied by the seafaring people from Hamburg or Danzig in small casks of 112 lb. each as a kind of sailor's privilege on which the duty remains unpaid. Therefore the Company will discontinue importation of that article". (McCulloch to Child, 11 April 1754).

Sources: Ledgers "E" - "Q"

Appendix "H"

A Brief Discussion of the Relationship between Food Prices and Spinners' Wages

Most contemporaries believed that the price of provisions was the decisive factor in determining the output of the spinners. Two examples may be cited from the experience of the British Linen Company. In early 1753 the Managers of the Company were puzzled by a decline in the amount of yarn spun by their Highland spinners, "when in this (Midlothian) and every other Country in Scotland it is now increasing, and no doubt owing to the dearness of provisions which we should imagine to be a reason for it increasing with you likewise".[1] In 1760 McCulloch, in explaining to the Trustees why the output of yarn spun in the Highlands for the Company had fallen in that year, stated that "the decrease over the previous year is owing to the low price of grain, not to any want of Consumpt or Demand for the goods, "and set out a general principle; "The Poor People there, as in most countries, decline working for any more than will barely subsist them, so that in cheap years little is manufactured, and what is done, is paid for at a higher rate.[2]"

The primary relationship suggested in these quotations is between the cost of provisions and output, a relationship which emerged most strongly in years when provisions were either "cheap" or "dear", that is when the cost of living, in which provisions were a prime element, was either markedly "low" or "high".

In years when the cost of living was high, output would increase; conversely in years when it was low, output would fall, which might induce a rise in the wages offered to the spinner. That a fall in the cost of living would lead to "idleness and indolence" was a well-worn theme of

1 McCulloch to Forsyth, 15 February, 1753. Cited supra p. 266

2 McCulloch to Flint, 20 November, 1760. Cited supra p. 323

contemporary Scottish - and other - economic theorists of the time, such as Sir James Stewart. For example, in 1769 he wrote that "In countries where industry is still in its infancy, it more frequently happens that necessity alone forces people to labour; and that every hour over and above what is absolutely necessary for gaining a livelihood will be spent in idleness".[3] In the case of the spinner, this was derived from the fact that her objective was not to maximise her earnings, but to gain merely sufficient for subsistence, and thereafter exercise leisure-preference, and devote the remainder of her time to activities other than spinning. This pattern of behaviour is an aspect of what is known to economists as a backward-sloping supply curve for labour.[4]

In the light of this, Stewart, in his Inquiry into the Principles of Political Oeconomy, suggested that a rise in the price of provisions was in fact positively beneficial to the manufacturer because "nothing but a rise in the price of subsistence, supposing it to be moderate, ever engaged both Farmers and Manufacturers to become industrious".[5] James Anderson, in one of his Letters, agreed that "when at any time from an accidental scarcity provisions are dear, it is found by experience that manufactures can be afforded cheaper than usual; and when on the contrary, there is greater plenty than common, and markets are unusually cheap, the price of manufactures and the wages of workmen rise in proportion".[6] Necessity alone induced

3 G. Frame (Sir James Stewart); Considerations on the Interest of the County of Lanark in Scotland (1769), p. 38.

4 This topic is discussed in depth for the English economy of the seventeenth century by D.C. Coleman; "Labour in the English Economy of the Seventeenth Century", Economic History Review, 1956, pp. 280-295, particularly p. 290 ff., Wadsworth, A.P. and Mann, J. De L., The Cotton Trade and Industrial Lancashire, 1600-1780, pp. 384-395.

5 Sir James Stewart, Memorial on the Corn Laws, 1777, printed in Vol. 2, Appendix "B", pp. 736-738 of Sir James Stewart, An Inquiry into the Principles of Political Oeconomy, ed. Andrew Skinner (1966).

6 James Anderson, Observations on the Means of Exciting a Spirit of National Industry (1777); Letter 13; 30 November 1775, p. 293.

men to work, and a temporary rise in the price of provisions resulted in a "greater spirit of industry amongst the people",[7] but if the rise continued too long, labour would respond by either leaving the industry or by insisting on higher wages.

Another view, in direct opposition to that expressed above, was expounded by, amongst others, the manufacturers of Glasgow, who argued that the cost of provisions determined wages and that the two moved not inversely but in sympathy. Steuart explicitly denied this proposition that "Wages keep pace with the price of oatmeal, rising and falling as oatmeal rises and falls".[8] He allowed that this factor exerted some degree of influence on wages, strongest in those years when the cost of subsistence was "abnormal" but wages were also regulated by movements in other production costs and the demand schedule. "It is the rate of the market for labour and manufactures and not the price of subsistence which determines the standard of wages".[9]

It is not possible, unfortunately, to test the realtionship between the cost of living and spinner's wages. An index price of oatmeal, the staple element in the diet of the spinner, can be constructed from the fiars' prices struck in all the Scottish Counties during the eighteenth century, and can be put into service as a fairly accurate indicator of changes in the price of provisions, and therefore the cost of living, ceteris paribus.[10] What

7 Ibid.

8 Steuart, An Inquiry, Vol. 2, p. 738.

9 Steuart, op.cit., Vol. 2, p. 691.

10 On the subject of the fiars, and trends in Scottish corn prices, see Mrs. R. M. Mitchison, "Movements of Scottish Corn Prices in the Seventeenth and Eighteenth Centuries", Economic History Review, 1965, pp. 278-291. For the purposes of the present discussion it is sufficient to note that Mrs. Mitchison regards the fiars prices as generally reliable as a local record of prices in the eighteenth century, and that while the two staples of the diet of the Scottish labouring poor were oatmeal and bere, the prices of the latter showed a strong tendency to move in sympathy with those of the former. The trend of oatmeal prices is therefore closely synonymous with the trend in the cost of provisions.

is lacking is data relating to either spinners' output or earnings or wages which could be tested for the degree of correlation with either the level of, or changes in, the costs of provisions. Data relating to the price of Perthshire yarn does exist in the form of two series, covering the years 1734-1755,[11] and 1741-1776.[12] The price of yarn is, however, a poor guide to the earnings of the spinner, depending as it did on other elements than just the spinner's wage, e.g. the price of flax and the state of demand for yarn. The price of flax, which constituted just under half of the cost of the yarn, was subject to considerable fluctuation from year to year,[13] depending on the state of the home and foreign crops of flax. Demand for yarn fluctuated seasonally, with prices usually at their highest during the spring.

It is not surprising, therefore, that the degree of association between the index of oatmeal prices in (the County of) Perthshire and the price of Perthshire yarn is low. It is a source of unease that the two series of Perthshire yarn prices, while they correspond closely in most years of overlap, differ by over 15% in the crucial years 1752 and 1753. The reasons for the divergence can only be the object of conjecture; it may be the difference between spring and autumn prices,[15] or prices in

11 William Sandieman's table, cited supra p.162 Sandieman's estimate of earnings was derived arithmetically from the price of yarn, and is not therefore an accurate representation of a spinner's actual earnings.

12 A. Bald, The Farmer and Corn Dealer's Assistant, Edinburgh 1780, pp. 435-6.

13 For instance, the price of best flax was about 13^{d} per lb. between 1751-1753, rose to 14^{d} in 1754 and fell to 11^{d} in 1755. (S.R.O. Seafield MSS, GD 248/641/2; "Rates of Flax for 5 years preceding 1756".)

14 The price of yarn did fluctuate severely during this period; e.g. sale yarn in Aberdeenshire, sold for 26^{d} per spindle in January 1753, fell in April and May to 22^{d}, but rose from this level at the end of the year, to around 24^{d}. Report by the Riding Officer for the Linen Manufacture, S.R.O. Seafield MSS, GD 248/954/1.

15 Sandieman gave the yarn price in the spring, "when the chiefest part of it is sold".

different parts of the county, or between the price of yarn in Perthshire and Glasgow.[16] We have conflated the two series of yarn prices, by using Sandieman's figures for the years 1734 to 1740, and thereafter following Bald's figures, to make one series of yarn prices for the period 1734 to 1776.

After correcting the indices of oatmeal and yarn for their respective trends, the association was strengthened by considering the exceptional years for oatmeal prices (defined as one standard deviation either side of the mean price of oatmeal) in relation to the price of yarn. It was found that there was a slight inverse relationship between the price of yarn and the price of oatmeal. This relationship was strongest in such years as 1759 and 1760 (see graph), when the price of yarn was exceptionally low, while the price of oatmeal was relatively high. But in other years when the price of oatmeal was abnormally high, e.g. in 1740, 1756 and 1766 the price of yarn hardly responded, or if it did moved upwards in sympathy. If the price of oatmeal moved beyond a certain level and demand for yarn was depressed, the spinner, at maximum output, might be unable to increase her earnings sufficiently to compensate. Such a situation clearly obtained in the years 1772-1774 when the spinner was caught between a depression in the Linen industry and high prices for oatmeal and other commodities. Small wonder than that there was malnutrition and meal rioting in the East of Scotland.[17]

A well-known practice in the linen industry was for production to come to a standstill during the period of the harvest while the weavers betook themselves to reaping rather than weaving. On several occasions

16 In Bald, op.cit., pp. 436-7, within the table headed Commissariot of Glasgow Fiars, the price of Perth yarn is placed alongside the fiar prices for Bear and Meal, from whichit may be correct to infer that the listed price was that of Perth yarn at Glasgow.

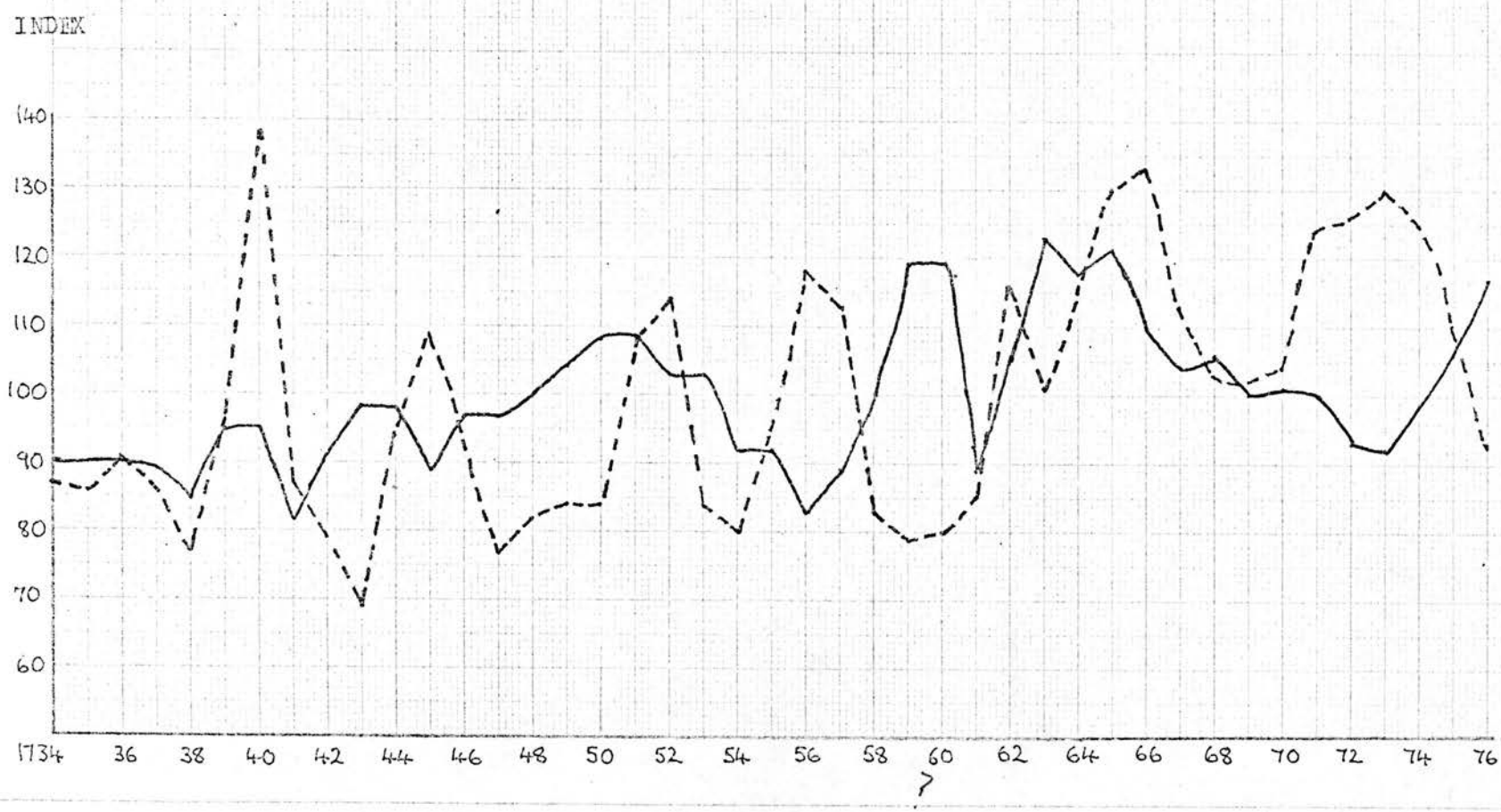
17 S.G.E. Lythe, "The Tayside Meal Mobs, 1772-73", Scottish Historical Review, 1967.

Appendix 'H'

Graph Indices of Yarn prices (Corrected for Trend) 1758 = 100 ..
and Oatmeal prices (Corrected for Trend); 1734-1776

——— Index of yarn prices (Corrected for Trend) 1758 = 100 = price of 24.5d per spindle

– – – – – – Index of oatmeal prices (Corrected for Trend) 1758 = 100 = price of £5 6/- by weight



the British Linen Company was brought to a stop because weavers could not be obtained at this time of year, even though higher wages than normal were offered. The motivation of the weavers appears to have been simply the desire for a short change in occupation, as much as the earnings from harvest work. But at some point in the latter part of the eighteenth century this situation changed. In the Old Statistical Account for the Parish of Kinfauns in Perthshire, it was reported that "Journeymen weavers, who used formerly to reap in harvest, and earn £1 4s. and £1 5s. for 3 weeks' labour, (now) refused to work under 2/- and 2/6 a day, which they could make at the loom."[18] This would seem to indicate a forward sloping supply curve of labour, for them at least at this time. Unfortunately, there seems to be little more than one can say on this subject. Quantitative data for a conclusive examination is simply not available.

18 The Old Statistical Account, Vol. 14, p. 221.

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The survey made of these records by the National Register of Archives (Scotland), No. 273, has been entirely superceded both by the discovery of additional material and the dislocation of removal following the amalgamation of the British Linen Bank with the Bank of Scotland. It is confidently anticipated that the entire collection will be catalogued afresh by the Archivist of the Bank of Scotland. The following is a list of records consulted for the purpose of this thesis:

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(iii) Records of Salton Bleachfield

Journal 1756-64.
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(iv) Records of the Edinburgh Staplery of Yarn

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(v) Records of E. McCulloch & Co.

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