

THE SCOTTISH WOOLLEN INDUSTRY, 1603-1914

by

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"We cannot reasonably expect that a piece of woollen cloth will be brought to perfection in a nation, which is ignorant of astronomy or where ethics are neglected".

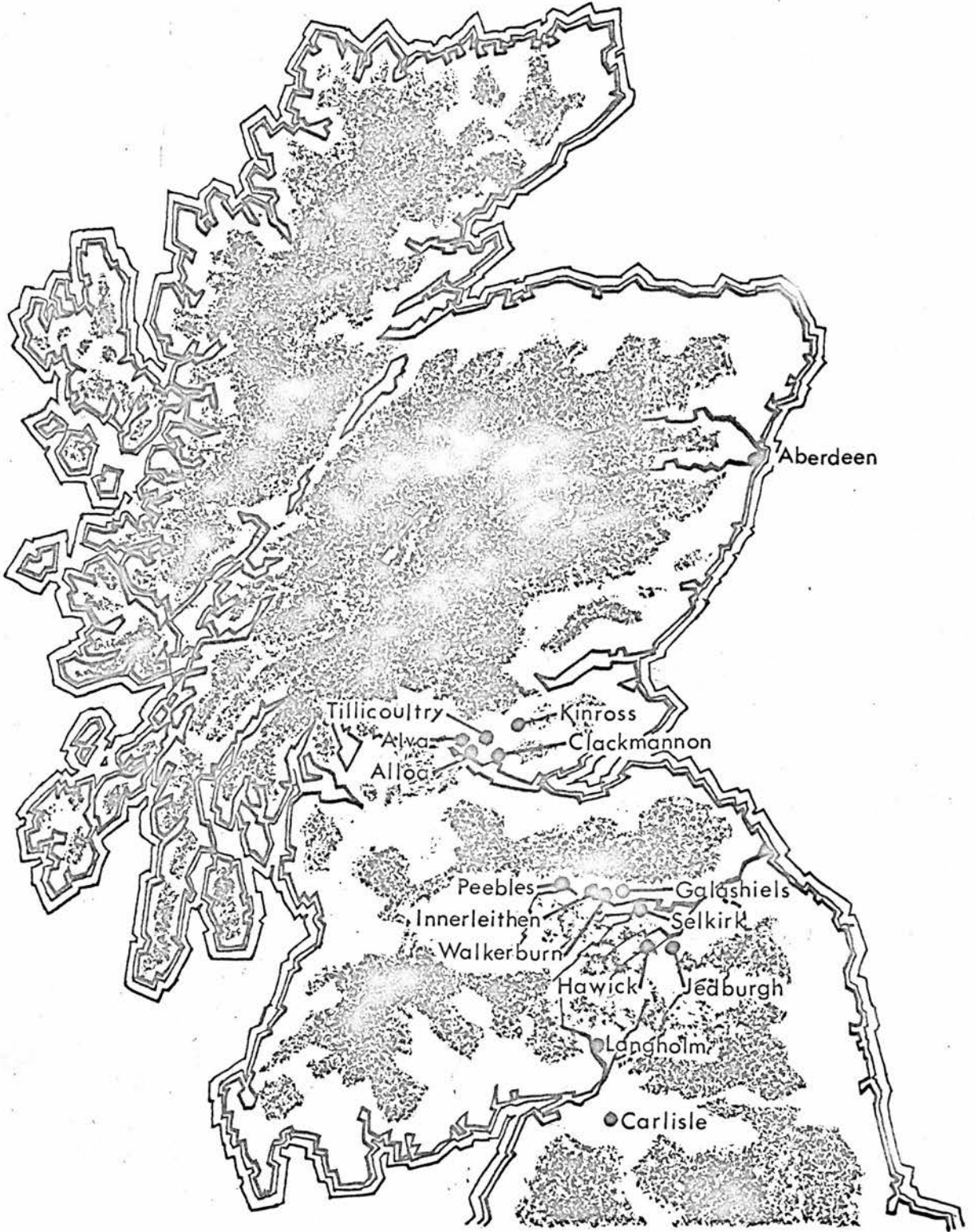
David Hume.

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Principal Woollen Manufacturing Districts
in 19th Century Scotland

Foreword

This study would not have been possible but for the financial help received from the University of Edinburgh and the interest afforded by the members of the department of economic history there. I am especially grateful to Prof. S. B. Saul and to Dr. T. C. Smout.

I owe a further debt of gratitude to many members of the National Association of Scottish Woollen Manufacturers, and to its secretary Mr. Aglen, all of whom have taken an encouraging interest in my researches, and who, where they have been able, have allowed me to study their business records. In this connection I am particularly grateful to the late Mr. W. Ballantyne of Henry Ballantyne and Sons of Walkerburn, Mr. E. S. Harrison of Jas. Johnston & Co., Elgin, Mr. R. A. Lindsay Watson of William Watson & Sons, Hawick, Mr. G. Smith of Blenkhorn Richardson & Co., Hawick, Mr. Ian Brown of William Brown & Sons, Galashiels, Mr. Hugh Dobson of Arthur Dickson & Co., Galashiels, and to Messrs. J. & J. Crombie of Aberdeen, Messrs. Paton & Baldwins of Alloa, and Messrs. G. Harrison, woollen merchants, Edinburgh.

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Needless to say, none of the above is to blame for what follows.

Note Unless otherwise stated the term 'Scottish woollen industry' in this thesis does not include the carpet and hosiery trades. Worsted products are included where relevant, but not factories. Unless otherwise stated the term 'Borders' means the counties of Roxburgh, Peebles and Selkirk. Except where stated otherwise the books etc. referred to in the footnotes are the editions listed in the bibliography.

List of Abbreviations

A.P.S.	Acts of the Parliaments of Scotland.
B.P.P.	British Parliamentary Papers.
E.J.	Economic Journal.
Ec.H.R.	Economic History Review.
G.R.L.	Galashiels Reference Library.
H.R.L.	Hawick Reference Library.
J.B.T.S.	Journal of the Bradford Textile Society.
J. of Ec.H.	Journal of Economic History.
J.R.S.S.	Journal of the Royal Statistical Society.
M.B.T.	Minutes of the Board of Trustees.
N.L.S.	National Library of Scotland.
N.S.A.	New Statistical Account of Scotland.
P.R.O.	Public Record Office.
R.B.T.	Reports of the Board of Trustees.
R.S.P.C.	Register of the Privy Council of Scotland.
S.H.S.	Scottish History Society.
S.J.P.E.	Scottish Journal of Political Economy.
S.P.P.	Supplementary Parliamentary Papers.
S.R.O.	Scottish Record Office.
Scot. Stud.	Scottish Studies.
S.S.C.C.	South of Scotland Chamber of Commerce.
T.H.Ag. S.	Transactions of the Highland and Agricultural Society.
T.H.A.S.	Transactions of the Hawick Archeological Society.
T.N.A.P.S.S.	Transactions of the National Assoc. for the Promotion of Social Science.
Y.B.	Yorkshire Bulletin of Economic and Social Research.

Summary

This study seeks to trace and explain the growth of woollen cloth manufacturing in Scotland from the Union of the Crowns in 1603 to the outbreak of the first world war. Particular attention has been paid to the Borders although areas north of the Forth are also considered. This study has not sought to deal with the Hebridean industry at all. Chronologically the thesis falls into three broad divisions. Firstly the 17th century attempt to emulate the English industry is discussed. The Failure of the Scots in this period to found a fine-cloth branch is traced to the lack of a suitable resource-base; the absence of manipulative skills among the indigenous population; the inability of the Scots to import suitably skilled labour; the vested interests of sectional groups, particularly the wool-growers who were politically powerful; and the weakness of government policies concerning imports of foreign woollens, and the export of wool. At the same time it is shown that political alliance with England and competition from nascent foreign woollen industries gnawed at the old-established coarse cloth trade. Thus well before 1707 the Scottish woollen industry was already in an advanced state of decline which the Treaty merely confirmed.

Secondly the dormant nature of woollen manufacturing for much of the 18th century is investigated, in the light of the provision made under the Treaty of Union of funds to help woollen-cloth making. Public policy favoured linen manufacture after 1707 in which Scotland had a comparative advantage over the English, and funds were largely channelled in that direction. Thus fine-cloth manufacture all but ceased though a few towns near urban centres or on the coast kept up a trade in coarse cloths, plaiding etc. Probably most Scots

continued to be clothed in home produced cloth. Little growth occurred in the Borders, however, the primary wool-growing area. The region became part of the English domestic system during the course of the 18th century, much spinning and some weaving before performed for Yorkshire, Durham and Westmorland manufacturers. The local landowners conducted an extensive wool-trade with England, and some still went abroad.

The third period covers the years between about 1780 and 1914, and is concerned with the establishment, growth and relative decline of the Scottish tweed industry. Its roots are traced to favourable economic factors in the late 18th century especially population growth and improvements in agriculture. Due weight is given to entrepreneurship, local influence, such as Sir Walter Scott, and fashion movements. Expansion was most marked in the period 1830 to 1880 when imported wool largely replaced home supplies, towns grew in the Borders making it the centre of the industry, and the organisation of production on a factory basis was established. After 1880 the problems facing the industry - tariffs, competition from abroad and from England, fashion shifts and internal weaknesses of the tweed industry are discussed in some detail.

Chapters 7 to 11 deal with particular aspects of the industry - merchandising the product, wool supply, the evolution of factory production, and the supply of capital and labour.

Chapter One:- THE SEVENTEENTH CENTURY BACKGROUND

1.

Though the Crowns of Scotland and England were united in 1603 the two nations continued to follow separate economic policies until the full union of 1707. Compared with her southern neighbour, Scotland's economy was less developed, lacking the institutional framework, the productive resources, and the close trading relationships which were gradually transforming the English economy during the period.

The condition of Scotland's woollen industry, both in the wool-growing sector and the manufacturing branch, mirrored the general features of her economy. Whereas in England the manufacture of wool had become the most important industry outside of agriculture, and raw wool growing was reserved entirely for the benefit of native clothiers,⁽¹⁾ Scotland continued to depend on the export of primary products, of which raw wool was one of the most significant, for most of her foreign revenue. Thus the manufacturing branch remained under-developed and in a low state of technical efficiency. Though the bulk of the domestic market for woollen goods was supplied from home production and often a respectable surplus sent overseas,⁽²⁾ the demand for the home clip did not meet the supply for much of the

(1) Charles Wilson, England's Apprenticeship, p. 149.

(2) S. G. Lythe, Economy of Scotland 1550-1625, p. 38.

century. In addition the demand by the merchants and gentlemen for higher-grade cloths was almost entirely met by imports from England and Holland. (1) The time-worn practice of heavily tarring sheep and general ignorance in sheep husbandry were sufficient to keep the quality of home-produced wool low enough to render difficult any noticeable improvement in the standard of the manufactured product. The export of unimproved primary materials was recognised to be the reverse of satisfactory, and the consistent, if sometimes blurred, policy of Scotland in the 17th century was to achieve a shift in the structure and balance of the economy by stimulating the manufacture of woollen goods in general, and fine cloth in particular. In simple terms, Scotland's aim was to emulate the English cloth industry which she saw as the secret of that country's wealth and greatness. (2)

The following is an attempt to describe and analyse these wool-textile developments and to assess their significance for the industry, and for the development of the Scottish economy as a whole.

2.

Several factors combined to render the trade in raw wool important to Scotland in the 17th century. In the first place wool represented one of her few plentiful natural resources. The growing of wool, in the Border counties and Galloway especially, was centuries old and favoured by relief and climate.

(1) T. C. Smout, Scottish Trade on the Eve of Union, p. 91.

(2) cf. D. Black, Essay upon Industry and Trade 1706.

Secondly wool was an invaluable commercial asset providing a simple and speedy means of obtaining much needed specie to finance necessary imports.⁽¹⁾ Within the general European setting there existed a very extensive demand for wool. Supplies of English wool being unavailable, Scotland was well placed to conduct a fruitful trade not only in her own wool but in that smuggled over the English border, and also from Ireland. The progressively unsatisfactory nature of Anglo-Scottish relations, particularly towards the end of the century, caused the wool trade to become a political factor, an irritant to the English, and, at least in the eyes of some Scots, a method of gaining trading advantages from a neighbour who denied them access to the lucrative Atlantic markets.⁽²⁾

Reliable data regarding the size of the wool trade are lacking, the available estimates probably giving only a very approximate picture of the traffic. In 1614 the export of wool was said to be in the region of 10,000 stones. Annual exports to Baltic countries in the 1670s averaged about 820 stones and had increased to around 4,500 stones by 1700.⁽³⁾ Black stated that in 1698 36,000 stones were exported annually to France. Estimates as to the value of the trade are likely to be equally unreliable. In 1614 the annual value of exported wool was said to exceed £50,000. In 1704 the estimates range from £240,000 (Scots) to £540,000 (Scots). It seems clear therefore that the size of the wool trade in 1707 was appreciably greater

(1) S. G. Lythe, op. cit., pp. 83-4; T. C. Smout, op. cit., p. 216.

(2) cf. Anon, A Letter to a Member of Parliament concerning Manufacture and Trade 1704, p. 8. For an opposite point of view see, Anon, A Speech in Parliament concerning the Exportation of Wool, 1704, p.8.

(3) T. C. Smout, op. cit., pp. 215-6.

than that of 1603, though growth was not uniform. Decline set in at intervals, particularly after the Restoration,⁽¹⁾ and between 1701 and 1704 when the export of wool was banned.⁽²⁾ There is some evidence to suggest that decline had set in by 1700, before the prohibition on wool exports, when attention was drawn to the expensive English wool as well as Scottish lying "for the most part unsold at the ports to which it was carried".⁽³⁾ Whatever its value in absolute terms, the wool trade certainly had a high relative significance, though the cattle trade was probably more important by 1700. The agricultural developments in the 17th century, though largely orientated towards grain and cattle production, are likely also to have included an overall increase in the number of sheep, at least in the Border counties.⁽⁴⁾ In 1708 there were over 81,000 sheep pastured in thirty Berwickshire parishes, producing enough coarse wool to fabricate more than 65,000 ells of cloth, (or more than enough to supply the needs of the manufactory at New Mills on its original estimate of output for a year).⁽⁵⁾ Writing later, in 1733, Sir John Clerk contended that "the first and chief branch of the exportation of Scotland (in 1707) was wool".⁽⁶⁾ However, because the wool trade had political implications it possibly received disproportionate attention from contemporary writers.

- (1) D. Black, op. cit., p. 8; T. Keith, Commercial Relations of England and Scotland 1603-1707, p. 2; T. C. Smout, op. cit., 215-6.
- (2) It seems possible that this legislation was more effective than previously, cf. T. Keith, op. cit., p. 83.
- (3) D. Black, op. cit., p. 8; S.P.P. XVII 88 (1).
- (4) T. C. Smout, op. cit., pp. 217n. and 279.
- (5) Tarred Wool Census, Berwickshire, 1708, S.R.O., uncatalogued MSS.; W. R. Scott (ed.) New Mills Cloth Manufactory 1681-1703. S.H.S. vol. 46, 1905, p. 56. For original production estimates of this venture see *idem* p. lxxxvii.
- (6) Clerk of Penicuik Muniments, 5897, S.R.O.

Not all of the wool exported originated in Scotland. Considerable quantities were smuggled across the English border and more came from Ireland.⁽¹⁾ In the absence of an extensive fine-cloth industry in Scotland the better quality Galloway wool is likely to have made up the bulk of the Scottish contribution. In 1698 Black estimated that 50% of wool exported to France was composed of English wool, while in 1700 the value of English imports of wool was estimated at £20,000, much of which owing to the parlous state of fine-cloth manufacture must have been exported.⁽²⁾ The evidence suggests that the proportion of English wool exported from Scotland declined sharply at the end of the century as a combined result of the strengthened English legislation of 1696 and the Scottish Act of 1701. Black estimated English woollen imports in 1698 at 17,000 stones, declining to 7,196 stones in 1700, and to 3,091 stones by 1704. Thereafter exports probably rose again.⁽³⁾

Other evidence corroborates the view that the English content of Scottish wool exports was significant. Government policy in England during the century aimed at maintaining ample and cheap supplies of wool for the manufacturers to ensure cloth could be sold abroad at competitive prices. The English growers, therefore, failing to exert such influence over policy as their Scottish counterparts,⁺ had every incentive to run their wool abroad in order to gain a higher return.

(1) T. Keith, op. cit., p. 111.

(2) D. Black, op. cit., p. 8; Reasons against continuing the Act allowing the Exportation of Wool S.P.P. XVII 88 (1).

(3) D. Black, op. cit., p. 8.

⁺ This was due to the fact that landowners were more anxious in England to protect their market for grain. In Scotland wool was often the chief crop, and thus growers were anxious to protect the wool trade.

Repeated Acts of the English parliament endeavoured to stop the drain. In 1616 the English Merchant Adventurers drew attention to the leakage of English wool through Scottish ports, which afforded help to rival continental industries. In 1622, and again in 1632, the export of wool and wool-fells to Scotland was prohibited by the English parliament, together with fullers-earth and wood-ashes. The importance of the trade to England is also indicated by her attempt in 1623 to control the destination of all wool in Scotland by buying the whole clip herself "that our neighbouring nations may not be furnished with wools.... and thereby be enabled to hinder the vent of our cloth".⁽¹⁾ This move was more an endeavour to remove the temptation to English farmers to smuggle their wool into Scotland, for it is unlikely that English cloth exports would have suffered very much from the export of Scottish coarse wool.

Towards the end of the century the problem had again reached large enough proportions to provoke the English parliament into renewed and strengthened legislation when an Act for "the more effectual preventing the Exportation of Wooll" was passed declaring that "the several inhabitants of the several Counties and Shires of this Realm next adjoining the kingdom of Scotland.... do reap great Profit and Advantage by the Carrying out of Wooll.... into the said kingdom of Scotland, and exporting them into France and other parts".⁽²⁾ Two years later stricter and more localised measures were deemed necessary. Within fifteen miles of the Scottish border owners of wool were required to submit details of all wool stocks and movements to the Riding

(1) T. Keith, *op. cit.*, pp. 18, 24, 38-9.

(2) *Ibid.* pp. 103-4.

Officers. Warships were also sent to patrol Scottish and Irish coastal waters to intercept wool shipments, and, on occasion, vessels carrying wool were seized. At the same time the inhabitants of Ripon were sufficiently worried about the running of local wool over the Scottish Border that they feared for the survival of their market and petitioned the House of Commons. Despite these measures the smuggling continued and may have expanded for in 1704 some Yorkshire woollen merchants and clothiers felt it was causing "Great Decay" in their trading, adding that "Ye offenders have grown so Bold that they come above 50 miles and carry Wooll off in Dispite all the Laws". For their defence against "ye insuelts of ye Smuglers" they advised the Riding Officers to carry fire-arms. (1)

Some of the English wool smuggled into Scotland was not re-exported but was used in the manufacture of fine cloth. This was particularly the case towards the end of the century when fine cloth works were being established in various places. In 1700, for example, it was estimated that of 7,196 stones of wool imported into Scotland only 4,503 stones were exported. (2) Nonetheless, the real incentive was the demand emanating from overseas buyers, for the fine-cloth sector in Scotland remained very small.

The export of wool from Scotland was consistently opposed by the woollen manufacturers there, both the coarse woollen branch and the

(1) T. Keith, op. cit., pp. 104-8.

(2) D. Black, op. cit., p. 8.

makers of fine cloth. Their primary objection to the trade was that the exposure of wool to international demand inflated its price and led to increased costs of production which neither branch was able to afford. "If the Wooll masters design to export or if Merchants buy it for exportation, will any man get an ounce weight of it without paying double price..."⁽¹⁾ Scottish coarse woollens had little to commend them in overseas markets except their price, and in order to maintain that advantage in the face of higher costs further reductions in quality were imperative.⁽²⁾ Moreover the export of wool only served to encourage the establishment of rival industries abroad in the very countries where cloth was sold so that the woollen trade declined. For "When the merchant gets no price abroad (i.e. for woollens) he cannot give a good price at home; when the poor industrious Manufacturer cannot reap half the value its impossible he can make goods sufficient, so the exportation of wool is the ruin of all".⁽³⁾ The wool trade was also felt to endanger supplies to these Scottish manufacturers who were particularly concerned in employing the choicer qualities which comprised the bulk of wool exports. The representatives of the northern counties and especially those for Aberdeen "became very soon sensible that the exportation of wool in the Southern shires would in a very little time deprive them of the necessary supplies...and...utterly destroy their Manufactures".⁽⁴⁾ If the New Mills manufactory was

- (1) The Petitions of the Manufactories of this Kingdom, S.P.P. XIX, 52, 1704.
- (2) Reasons against continuing the Act allowing the Exportation of Wool, loc. cit., It was declared in Aberdeen that wool exports were causing the making of cloth "so slight as renders it unvendable abroad". cf. T. Keith, op. cit., p. 82.
- (3) Anon, Memorial Concerning the State of Manufactures Before and Since the Year 1700. S.P.P. XIX 63. c. 1703; Reasons against continuing the Act allowing the Exportation of Wool, loc. cit.
- (4) Memorial Concerning the State of Manufactures Before and Since the The Year 1700, loc. cit. Clerk of Penicuik Muniments 5897. S.R.O.

typical the fine cloth manufacturers used mainly English and Spanish wool, the export of which threatened their supplies and drove up production costs, jeopardising their chances of obtaining a firm foothold in the home market for quality goods. Not surprisingly, they took vigorous action to prevent wool from going abroad. (1)

The counter-arguments of the wool-masters turned mainly on the fact that the home clip was too large for the purposes of the manufacturers. Thus the export of surplus wool did not conflict with the latter's interests. Also such shipments were important sources of revenue; indeed it was alleged that earnings from the sale of wool exceeded those from cloth. Moreover they argued, the fine cloth manufacturers made little use of Scottish wool, preferring English and Spanish varieties; thus by discriminating against the home clip there was little choice but to export it. (2)

On account of the fundamental clash of interests within the wool textile industry, and in accordance with prevailing mercantilist sentiments, the state sought to regulate the industry, as far as possible, in the interests of the manufacturing branch which would add to the value of the wool and also give employment to large numbers of the population. In this policy the Scottish parliament was hindered by three major factors; the strength of the wool-growers

(1) See below p. 21.

(2) Proposal of Lord Anstruther S.P.P. XIX 52 (7); A Short Proposal Anent the Export of Wool S.P.P. XVII 88 (2); Anon, A Speech Without Doors etc. loc. cit., pp. 4, 7; D. Black, op. cit., p. 7; Anon, A Letter to a Member of Parliament etc. p. 4.

lobby in politics; the chronic shortage of foreign specie, and the weakness of the customs administration. Thus legislation tended to fluctuate between the interests of the growers and the manufacturers, and was in any case largely ineffectual due to evasion.⁽¹⁾ Hence wool textile legislation was commonly re-enacted during the century.

An Act prohibiting the export of wool was passed in 1602. Similar legislation was passed in 1614 and again in 1616. Despite an acknowledged surplus over requirements in 1620 and the rejection of the English offer to purchase the Scottish clip, wool export was again banned in 1623.⁽²⁾ The brief, enforced union with England between 1654 and 1660 made English wool legislation applicable in Scotland, and the export of wool continued to be prohibited, except under Privy Council licence, at least until 1672.⁽³⁾ The protective legislation of 1681 fell short of banning wool exports but increasing pressure from the manufacturers, particularly those in the fine cloth sector, found expression in the Act of 1701, which precluded the export of wool for a period of five years.⁽⁴⁾ However the subsequent decline of wool prices and the presence of large unsold stocks on hand served to vindicate the arguments of the wool-masters and compromise solutions were sought.⁽⁵⁾ The Committee of Trade, after investigating prevailing wool prices suggested that export should only be forbidden

(1) See Appendix to Chapter 1.

(2) T. Keith, op. cit., pp. 23-4; S. G. Lythe, op. cit., p. 221.

(3) T. C. Smout, op. cit., p. 216.

(4) A.P.S. vol. X, p. 275.

(5) Anon, A Short Proposal etc. loc. cit. Anon, A Speech Without Doors etc. pp. 4-5.

when the price on the home market reached an allotted figure for each grade.⁽¹⁾ It was further noted that if the wool stocks could not be manufactured into cloth it would be "a strange imposition on the proprietors to oblige them to turn all their wool... into a Dunghill.." ⁽²⁾ The ability of the wool-masters to speedily bring some relief to the balance of payments problem swayed the Scottish parliament and wool exports were resumed once more in 1704.

3.

The woollen manufacturing industry in Scotland in the 17th century can, for convenience, be divided into its two constituent parts, coarse cloth manufacture and fine cloth production.

The coarse cloth sector made use of local wool and native labour and served the needs of the majority of the population. In addition, considerable quantities were sold to France, Holland and the Baltic and some to the Plantations.⁽³⁾ Production was organised on a domestic basis, the family usually carding and spinning their own wool, and making use where necessary of the village webster. The quality of the raw material was poor, due partly to the practice of liberally daubing sheep with large quantities of tar which, though intended to protect the beast from cold, damp, and vermin, also rendered the wool practically useless except for the basest of products. Moreover, the sophisticated art of dyeing, the monopoly of the Royal Burghs at the

(1) S.P.P. XVI. 94 (undated. c 1702 ?); cf. Proposal of Lord Anstruther, loc. cit.

(2) Anon, A Short Proposal Anent the Export of Wool, loc. cit.

(3) T. C. Smout, The Development and Enterprise of Glasgow, S.J.P.E. (1960) p. 204.

beginning of the century, made slow progress in the rural areas,⁽¹⁾ though mechanical fulling or waulking may have become more common in the Lowlands.⁽²⁾ In short the Scots were not liberally endowed in the art of textile manufacture and it is not surprising that one contemporary observer described their coarse products as being "very nastily made".⁽³⁾ Nevertheless, the goods were competitive due to low living standards and production costs which "balanced or even outweighed the greater technical efficiency and superior organisation of the more advanced cloth making countries".⁽⁴⁾

Though organisation on a domestic basis gave the industry a ubiquitous character the chief areas which produced a surplus above local requirements were the central southern and south-western districts, and Aberdeenshire, which was a sufficiently important centre to be regarded by contemporaries as a trade barometer for the whole country.⁽⁵⁾ Goods for the market were sold at the local fairs to city merchants who often travelled far to purchase them, sometimes in sizeable quantities.⁽⁶⁾

The foreign trade in coarse woollens was considerable for the greater part of the century. In 1614 plaiding and cloth were said to be among the most important of Scottish exports. Discussion

(1) Well into the 18th century most country-made clothes were undyed. See M. Plant, The Domestic Life of Scotland in the 18th Century, p. 194.

(2) R. Hall, History of Galashiels, p. 281.

(3) T. Keith, op. cit., p. 78.

(4) S. G. Lythe, op. cit., pp. 238-9.

(5) Anon, Memorial Concerning the State of Manufactures Before and Since the Year 1700, loc. cit.

(6) T. C. Smout, Scottish Trade on the Eve of Union, pp. 11 and 110.

concerning the most suitable method of exposing plaiding for sale in the 1630s suggests that woollens still remained a significant item in foreign trade.⁽¹⁾ The political upheavals of the 1640s and 1650s seem to have affected the trade to a lesser extent than others, over 73,000 ells having left the port of Aberdeen in 1650/1 for Holland and the Baltic.⁽²⁾ Towards the end of the century the large quantities of plaiding, fingrams and woollen hose formerly sent abroad from the north and from Stirlingshire were regarded with some nostalgia. Exports of 'Galloway Whites' were alleged at their height to have reached 600 sea-packs annually, and fingrams from the north about 600,000 ells annually. Between 1668/9 and 1690/1 woollen exports from the city of Aberdeen alone totalled 138,000 ells to 168,000 ells annually.⁽³⁾ Whatever credence can be given to these figures it is clear that coarse woollen goods occupied a central position in the Scottish export trade for much of the century.

From about 1665 onwards the coarse woollen trade fell into serious decline. By the early 18th century exports of plaiding, fingrams, and stockings from the north were estimated to have fallen by nearly 75% of their former size. The Aberdeen trade was said to have declined to only 80,000 ells annually between 1694 and 1700, at greatly reduced prices. By 1706 the northern fingram trade was reckoned at only one sixth of its former value, and that in 'Galloway Whites' was described as "dead". Reports were made of goods lying

(1) T. Keith, op. cit., pp. 2, 22-23.

(2) T. C. Smout, op. cit., p. 234n.

(3) Anon, Memorial Concerning the State of Manufactures Before and Since the Year 1700, loc. cit.; D. Black, op. cit., T. C. Smout, op. cit., p. 235.

rotting in foreign ports. (1)

The reasons for this decline were partly economic, partly political. Although her union with England was not complete, Scotland inevitably was compromised by her neighbour's foreign policy. The Dutch wars of Charles II, the 1688 settlement with William, and the ensuing French wars, all served to militate against Scotland's trade. At the same time France and Sweden were actively engaged in building up their own woollen industries making good use of the wool imported from Scotland. The import of Scottish cloth into France was eventually prohibited, and Sweden took more Scottish wool at the expense of her cloth. (2)

When due allowance has been given to the practice of exporting wool and to the commercial policies of Scotland's overseas customers, a third, and allied factor should be noted - the continued inferior nature of her woollen products. Coarse woollen goods exported from Scotland reflected the low level of technical ability in the population, even in the most fundamental manufacturing processes. About 1707 it was alleged that Scottish woollens were still made from unsorted wool so that "the hairie part spoils the fyner". Foreign importers complained that the manufacturers were "not dying (dressing and right Up-putting) with bright enough colours" so that Scotland lost "the hog for the half-penny". (3) Moreover the "fabric of manufacture (was) not only worse stuff but worse, and therefore being

(1) Anon, Memorial Concerning etc... loc. cit.; D. Black, op. cit., p. 7; Reason Against etc... loc. cit.

(2) T. C. Smout, op. cit., pp. 112 and 235.

(3) Anon, A Scheme of Scotland's Product and Manufactories, p. 20.

sent abroad, lay as a Drug which could not be sold".⁽¹⁾ As late as 1704 it was claimed that "the coarsest goods (are) the only Goods exported as yet".⁽²⁾ Thus even infant woollen industries overseas could provide adequate import substitutes without great difficulty.

The necessary conditions for quality improvements in the coarse woollen trade were absent. The persistent practice of allowing wool exports resulted in most of the better varieties leaving the country.⁽³⁾ Neither was skilled labour any more plentiful. "The unskilfulness of our awin people heirtoforr, togidder with the unwillingness to suffer ony strangeris to cum amangis thame, has bene ane of the caussis that hes hinderit (the growth of woollen manufacturing), they being unhable, without the help of strangeris quha ar better acquent with that tred to attine to ony perfectioun in that work".⁽⁴⁾ Some attempt was made to encourage foreign workers to settle in Scotland, but the financial considerations, social prejudices and not least the physical difficulty of injecting such labour into a domestically organised industry were usually sufficient to bar its entry.⁽⁵⁾

At the Union, therefore, the once-thriving coarse cloth trade was in an extremely parlous condition. Already other products had begun to appear as substitutes for plaiding and fingrams. Aberdeen

(1) Anon, Memorial Concerning the State etc.. cf. T. Keith, op. cit., pp. 81-2.

(2) Anon, A Speech Without Doors etc.. loc. cit., p. 7.

(3) Anon, Memorial Concerning the State etc...

(4) Quoted in T. Keith, op. cit., p. 21.

(5) S. G. Lythe, op. cit., pp. 38-9.

turned her attention to hosiery; a similar change was occurring in northern Ayrshire.⁽¹⁾ In the absence of new markets for her old products, Scotland began to tempt the old markets with new products. More important, however, was the rapidly expanding linen industry which was to replace wool as the staple export industry, as far as textiles were concerned during the 18th century.⁽²⁾

4.

The more wealthy members of Scottish society in the 17th century not unnaturally disdained to attire themselves in these ill-made goods. Instead English, or French cloths "of pale colour, or mingled (with) black and blue" were worn by merchants while gentlemen dressed in "English cloth and silks or light stuffs little or nothing adorned..."⁽³⁾ The French influence upon fashion was most marked, at least at the beginning of the century. Throughout the century attempts were made by the Scottish parliament to found a fine-cloth industry in Scotland sufficiently furnished with labour, capital and manufacturing incentives to replace foreign cloths on the home market with those of native manufacture. Much legislation was enacted which culminated, at least in theory, in affording the fine-cloth manufacturers a remarkable degree of protection.

The encouragement of such an industry was one of James VI's favourite projects. He forbade the import of "English claith" in 1597 only to rescind the Act in 1599 due to the low level of domestic

(1) T. Smout, op. cit., p. 236.

(2) Ibid, p. 233.

(3) Moryson's Itinerary, 1598, quoted in D. Bremner, The Industries of Scotland, p. 146.

production.⁽¹⁾ Attempts to introduce foreign skilled labour met with much difficulty and opposition, but early in the century a few Flemish weavers were engaged in making serges and broadcloth at Bonnington, Edinburgh.⁽²⁾ Later, in 1623 a Standing Committee for Manufactures was set up whose main concern was to consider methods of stimulating wool-manufacturing in general.⁽³⁾ Nothing effective appears to have emerged from this body, however, and the first real attempt to provide a conducive background for the making of fine cloth came with the Acts of 1641 and 1645. Imported wools were given free entrance along with dyestuffs and other necessary raw materials. All cloth produced was not subject to taxation, and incentives were offered to encourage the immigration of foreign workers. As a result manufactories were established at Bonnington, Ayr, and New Mills, Haddington, but lack of capital, the jealousy of the Royal Burghs, and especially the political upheavals of the period, ensured that any success arising from these enterprises was limited.⁽⁴⁾

After the Restoration, further, more comprehensive legislation was enacted in 1661. The Act of 1661 re-enacted that of 1641 and offered naturalisation to foreign settlers. In a combined endeavour to avoid labour friction, restrictive trading practices, and the shortage of capital the Act encouraged the formation of joint-stock

(1) T. Keith, op. cit., p. 21.

(2) For a detailed account of this venture see W. R. Scott, Constitution and Finance of English and Scottish Joint-Stock Companies to 1720, (1951 ed.) vol. iii, pp. 138-158.

(3) S. G. Lythe, op. cit., pp. 94-5.

(4) W. R. Scott (ed.), New Mills Cloth Manufactory 1681-1703, loc. cit., XXXIV.

companies possessing full powers of incorporation, and the sole right to market their own products. Despite such encouragement the attempt to establish a fine cloth industry continued to be abortive, largely because the home market was not thought sufficiently protected, though some was afforded, in theory if not in fact, by Acts, or patents, of the Privy Council.

The continued importation of luxury cloths served only to worsen the already critical state of the Scottish exchequer. Consequently by the Act for Encouraging Trade and Manufactures 1681 a positive move was made to limit excessive expenditure on such commodities, by prohibiting their importation into Scotland.⁽¹⁾ At the same time further provisions were made to encourage native manufactures especially fine cloth works. Inducements were given to people with capital and technical skills to set up manufactories. Imported raw materials were to be free of duty and public dues.

As a result of this Act and the more peaceable political scene several manufactories for the making of fine cloth were established, notably that at Haddington, the projection of which may have partly occasioned the legislation. Similar ventures were started at Glasgow and Edinburgh, in 1683, and after the interruptions of the 'Glorious Revolution', at Aberdeen, Musselburgh, North-Mills, Berwickshire, and Angus, in addition to two further establishments in Glasgow. The establishment of these firms enabled the manufacturers to increase their influence with the Scottish parliament with the result that in 1701 not only was the wearing of foreign cloth prohibited once more but the export of wool was forbidden.⁽²⁾ But despite the attention paid to

(1) A.P.S. vol. VIII, p. 348.

(2) A.P.S. vol. XI, p. 190.

the manufacture of fine cloth, by 1701 it had made little headway, and could certainly not replace wool in its ability to earn foreign revenue. Cloth sent to Holland by the New-Mills company was sometimes returned and another fine cloth manufacturer, James Armour, failed in his endeavours to sell his cloth to the factor Andrew Russell.⁽¹⁾ Thus the high tide of protection ebbed away; the export of skins bearing wool was permitted from specified ports in 1703 and the wool trade was resumed on its former basis in 1704.⁽²⁾ The coming of the Union in 1707 exposed the few remaining manufactories to unlimited competition from English products. Although a few limped on beyond the Union their demise was not long delayed. The manufacture of fine cloth was effectively laid to rest for a century.

This failure, under seemingly ideal conditions, requires some explanation. In the first place, in a few companies a degree of success was achieved. The records of the New Mills company illustrate well the energy and enterprise with which the business was conducted. A wide variety of dye-stuffs was used, and particular care was paid to the finishing processes, wool purchase, and its correct sorting. Skilled labour was procured, and carefully chosen where possible. In a few years the number of employees had reached over 700, while respectable dividends were paid. In order to keep abreast of demand the latest patterns were ordered from London in 1701. Some cloth was exported, though not on a large scale.⁽³⁾ It is probable that some

(1) T. C. Smout, op. cit., p. 110.

(2) A.P.S. vol. XI, p. 154.

(3) W. R. Scott (ed), op. cit., pp. xxi, xxii, lxxxv, 33-5, 243-4, 337 and note

success attended the enterprises at Musselburgh, and at Paul's Work Edinburgh, together with that of William Cochrane at Glasgow if the number of its employees and the quality of its backing are sufficient criteria. (1)

However, it is easy to over-estimate the significance of the investment in cloth manufactories after 1681. There was never more than a handful of them and the paucity of information concerning them may be indicative of their inconsequence. It cannot be doubted that they failed to make a significant impression on the market. For this several reasons may be offered. Firstly, the degree of protection afforded by the law was far greater in theory than in practice. The policy of farming out the customs resulted in the Scottish government having little control over imports and exports in reality. Furthermore the policy of the Privy Council in granting import licences at its leisure further undermined the effectiveness of the regulations.

As early as 1683 the import of foreign cloth was being permitted in this way, occurring again on several subsequent occasions. (2)

Merchants, in the absence of a good example being set by the state, continued to flout the import regulations. For their part the upper classes continued to surrender to the "Luxury and Itch" to wear foreign cloths and often returned from abroad "stocked for several years". (3) Even under complete protection after 1701 delegates of several wool and silk manufactories felt the need to petition Parliament to "supply what yet may be remaining for curbing the

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- (1) Anon, Memorial Concerning etc. Cochrane's enterprise was probably the largest of those making fine-cloth.
- (2) cf. R.S.P.C. 3rd series, vol. X, pp. 355, et alia.
- (3) Anon, Memorial Concerning etc.

excessive Vanity and Folly of wearing.... Foreign Manufacture... to the Discredit of Public Order and the Ruine of the Kingdom".⁽¹⁾

Wool, too, leaked abroad to the particular disadvantage of the fine cloth makers. As a consequence enforcement of the law became the responsibility of the interested parties. In 1685 the New-Mills company received the power to seize proscribed goods and to sue persons who contravened the Act of 1681, at the same time being given wide powers of search.⁽²⁾

In the second place, the scale of production of the manufactories was not sufficient to satisfy home demand. As late as 1700 promises that "the Nation shall be... plentifully and cheap furnished with all manner of Woollen and Silk Manufactures made within this Kingdom as any of her Neighbours" were still related to the future.⁽³⁾ The claim by the managers of New-Mills in 1696 that they not only made woollen cloth "as good as is made in any other nation (but also) in such quantities as may serve the kingdom and all ranks and degrees of persons within the same",⁽⁴⁾ is hard to accept. Another writer believed that in this period "all the cloth we could make ourselves bore no Proportion to our Consumption".⁽⁵⁾ This fact, again made for the non-observance of the import laws.

(1) S.P.P. VIII, 27 (2).

(2) W. R. Scott (ed.), op. cit., pp. 255, 262, 269, 274.
cf. Supplication by the Incorporation of Taylors in Edinburgh 1684.
R.S.P.C. vol. X, p. 384.

(3) Anon, Memorial Concerning etc...

(4) Petition of the Managers of Newmills, Oct., 1696. S.P.P. XV. 104.

(5) P. Lindsey, The Interest of Scotland Considered. pp. 112-3.

In the third place Scottish fine cloth produced by the manufactories never became truly competitive in price or quality, as a result of which many complaints were made.⁽¹⁾ Production costs were high for two reasons. Firstly, almost all the wool used by the fine cloth makers, (if the New-Mills company was typical,) was imported, either from England or from Spain. Only the coarsest cloth was fabricated from Scottish wool. Thus the cost of obtaining the raw material, especially high when such was also being offered on the export market, would militate against low costs.

Perhaps more important, however, was the need to obtain skilled labour from either England or the continent. It seems apparent that most, if not all, the manufactories depended heavily on imported skills. Apart from that employed at New-Mills, foreign labour began the manufacture of broadcloth at Bonnington early in the century;⁽²⁾ the similar project at Paul's Work, Edinburgh was under the direction of foreign labour;⁽³⁾ William Black employed French workers at North-Mill to make serges and imitation French products; William Hog of Harcarse in Berwickshire, used English labour.⁽⁴⁾ Monetary inducements were necessary to tempt such workers into Scotland. Statistical evidence here is scant, but it is possible that wages paid to immigrant workers were in the region of 50% higher than prevailing English rates, and nearer double those for Scottish labour.⁽⁵⁾

(1) Anon, Memorial Concerning etc...

(2) See above p. 17, (2).

(3) S. G. Lythe, op. cit., pp. 36-7.

(4) A.P.S. vol. XI, pp. 81-82.

(5) W. R. Scott, Joint-Stock Companies etc. p. 148.

James Lyell of Gardine complained that foreign workmen were "very expensive" and planned to train his son to be works manager to save the "dead Sallaries usually given.... to Foreign Overseers".⁽¹⁾ It is doubtful, however, if many such workers settled in Scotland. Certainly they possessed great scarcity value to the manufacturers, as is evidenced by the practice of poaching labour and the lengths to which the masters went to recover runaway men.⁽²⁾ Furthermore, the efficiency of the work accomplished by the skilled workers was affected by internal squabblings with native labour and the management within the manufactories.⁽³⁾

Such problems of manufacture, together with the related questions of adverse exchange rates and the difficulty of importing the necessary appliances from England or the continent, all served to prevent the fine cloth industry from becoming truly competitive. Thus foreign cloth imports were not displaced, and the looming commercial disaster immediately prior to the Union caused the government to abandon protection and allow the wool-masters to export their wool once more. The bid to establish an industry for the making of quality cloth in Scotland was seen to be a failure well before 1707. The Union merely guaranteed that it would not quickly revive.

(1) Petition of James Lyell of Gardin, 1704. S.P.P. XIX 25.

(2) cf. A.P.S. vol. VII pp. 261-2; W. R. Scott, (ed.), New Mills Cloth Manufactory 1681-1703. loc. cit., passim.

(3) Ibid., passim.

5.

The manifest attempt to rival England's cloth industry in the 17th century clearly failed. Ironically, this was due both to the backwardness and the progressiveness of the Scottish economy. In her retarded commercial situation, lacking markets, capital, technical skills, and foreign currency Scotland had to rely on the export of commodities in which she was relatively well endowed or could easily obtain; wool figured prominently among these. Its export, however, was incompatible with the development of a large manufacturing sector. On the other hand, because Scottish trade was increasingly orientated towards England emphasis had to be placed on commodities in which she had a comparative advantage. Increasingly, as far as textiles were concerned, such was seen to reside in the manufacture of linens. Herein lies the key to the understanding of the stagnation of the woollen industry in the 18th century. Fine cloth manufacture in the previous century failed to compete successfully with the priority concerns of the old economy; by 1707 it was in no condition to compete in the post-Union economy against the full blast of English competition.

Decline also appeared in the coarse woollen trade towards the end of the century. To the extent, however, that this sector did not depend on outside labour, capital and raw materials, and maintained control of a large portion of the home-market, decay did not seem so fatal. This old-established industry survived the Union by continuing to produce cheap coarse goods from local supplies of wool for home consumption. More important, it was in this reservoir of growing technical skill, accompanied by parallel developments in agriculture, that the successful woollen industry of the 19th century had its germ.

Appendix

The following document is illustrative of the factors most significant to the 17th century woollen industry. 1. The importance of the practice of exporting wool, both to the merchants, and to the manufacturers who brought the petition. 2. The lax state of the regulations and the ambivalent attitude of the authorities towards them.

"Petition of William Cochran of Ocheltrie and John Hay.. for themselves and in the name of the other Society of Manufactories in the Nation". They complained that much wool was exported "upon pretence of Transporting the same from one port to another". (and) "these abuses are committed through the interest those concerned in the Custom Office may have in such undue Exportations whereof several instances can be given.... In January last there being about 100 packs of wool to the value of 1,000 lib. Ster. put aboard the ship of one George Falconer; the ship set sail, but being put back by contrary winds, the discovery was made of the Wool aboard and Johnstoun Surveyor in Borrowstouness having put waiters aboard in order to Seize the Wool and having gone in to Edinburgh to procure a warrand from her Majesties Advocat or Admiralty for securing the ship, Andrew Crawford, the other Surveyor upon a pretence that there was a bond and Permitt granted for Transporting the Wooll to Aberdeen discharged the waiters and immediately the ship sailed and carried the wool abroad; and the ship is now returned with a loading of Forraign Goods to Aberdeen".

Source:- S.P.P. VIII, 33, c. 1702.

Chapter Two:- YEARS OF STAGNATION 1707 - 751. The Effect of Union on the Wool-Masters

With the passing of the Act of Union in 1707 Scotland became subject to English commercial legislation. It has been shown in the previous chapter that the Scottish fine-cloth industry was not the subject of English fears. Insofar as wool played a part in the formation of Union it was the export of raw wool rather than competition in fine cloth which was the more important factor. Thus the Union affected the Scottish wool-master more than the manufacturer; he was unlikely to accept the new position with equanimity.

In the first place the proscription of overseas sales of raw wool after 1701 had been of short duration, and was intended, at least initially, to operate for only five years; no such limiting factors applied to the English wool legislation. Secondly in pre-union Scotland the wool-growers exercised a considerable degree of economic and political influence in the state so that their interests were never for long ignored; after 1707 this power largely evaporated, for the wealth of England was considered to have largely been gained by the prosecution of an economic policy of providing abundant quantities of cheap wool - a practice diametrically opposed to the interests of the Scottish growers. The latter were unlikely to reverse such legislation and to succeed where English proprietors had failed. Furthermore whereas prior to the Union the Scottish wool-masters had been able to exploit their country's commercial problems by arguing that it was legitimate policy to export wool to cover quickly a large deficit in the balance of payments, they were now integrated into a much larger and wealthier economic unit with no

such chronic and urgent problem of a trading deficit. Finally the Union resulted in a change of emphasis in the commercial policy of the northern kingdom. The 17th century practice of directly competing with England was replaced by one which aimed at complementary economic development, which in effect meant the priority of linen over woollen manufacture.⁽¹⁾ Thus the wool-growers were dealt a double blow in 1707; the export of wool was banned while the manufacture of wool in Scotland was to be regarded as an industry of only secondary importance. It is true that the finer qualities of Scottish wool would find a ready market in England, though because this was the sole market, probably at lower prices than had been obtained on the international market; but the coarse tarred wool so widely grown in the southern counties was not in demand in Scotland except for the cheapest garments of the poorer classes. This wool had always been used for such purposes but supply had consistently exceeded demand; hence a large proportion had found an outlet abroad. With this channel closed the southern growers were faced at the Union with serious financial loss.

It is against this back-cloth that the 15th article of the Treaty of Union must be seen, for the wool-growers were successful in writing into the treaty a clause designed to give themselves some compensation for their loss of markets. In the final draft of the treaty, (though not in the proposals drawn up in London) a sum of £2,000 for seven years was to be used to stimulate the manufacture of tarred wool in those counties where it was grown in any significant

(1) R. H. Campbell, "The Economic Consequence of the Anglo-Scottish Union", Econ. Hist. Rev. vol.16, 1963-4, p. 475.

quantity.⁽¹⁾ Following the Union the responsibility for the administration of this fund passed from the hands of the Commissioners for the Equivalent to the Barons of the Exchequer, and subsequently, to the Board of Trustees on its formation in 1727.

2. The Emergence of a Wool Plan 1707-27

One of the first tasks performed by the Exchequer Barons was the taking of a census of the amount of tarred wool produced in the southern shires of Scotland, with a view to making a proportionate distribution of the equivalent annuity.⁽²⁾ In addition the wool-masters were asked to submit their own proposals concerning the particular method of expenditure in order to stimulate the manufacture of woollen goods.⁽³⁾ Some of the first suggestions emanated from existing manufacturers; in 1708 William Hog of Harcus in Berwickshire, who had switched his production at the Union from fine to coarse woollens, unsuccessfully petitioned the Barons for a subsidy. A similar request, and equally abortive, was presented by Lord Stair, who, in conjunction with the proprietors of the Musselburgh manufactory planned to found a woollen manufacture in Galloway.⁽⁴⁾ The Border heretors, however, had schemes of their own; in 1710 Archibald Douglas of Cavers in company with other land-lords in Roxburghshire asked for the fund to be distributed on account of wool "perishing in their tenants' hands because of the want of

(1) D. Defoe, History of the Union, (1786), p. 444.

(2) S.R.O. Clerk of Penicuik Muniments, 5897.

(3) Edinburgh Univ., Laing Mss., 488 II.

(4) Ibid.

encouragement to manufacture it".⁽¹⁾ Neither were the southern Royal burghs silent regarding the wool fund, petitioning in 1709 for aid in establishing manufactories because of the general decay of trade and the heavy burden of taxation.⁽²⁾ Several other schemes were put forward at this time.⁽³⁾

Pre-occupation with more urgent matters and, perhaps the lack of unity in the proposals put forward concerning the distribution of the fund, may account for the inaction of the Barons of the Exchequer. Eventually, in 1719 they intimated their intention of dividing the wool-fund among the southern counties in proportion to the amount of tarred wool that they produced. Despite the wool census of 1708 it appears that the local land-owners were again required to submit estimates of their wool output as several petitions were subsequently offered including one from the impatient heretors of Selkirk stating their annual production of wool and requesting an immediate grant from the fund which was "lyeing altogether useless.... to the great detriment of all the Woollen Countries".⁽⁴⁾ The Exchequer Barons, however, still persisted in making no payment to the growers largely because of their distrust of the data submitted by them. "No doubt the several proprietors did not lessen the quantities produced in their shires" wrote Sir John Clerk some time later, and though "some

(1) Douglas of Cavers Mss., in Transactions of the Hawick Archeological Society, 1880.

(2) Laing Mss., 488, II.

(3) cf. proposal of William Black, Douglas of Cavers Mss., T.H.A.S. 1880; Douglas also convened a meeting of local heretors at Jedburgh in 1711 to discuss investment in woollen manufacturing on a joint-stock basis. Nothing seems to have resulted. cf. S.R.O. Clerk of Penicuik Muns., 5947.

(4) Laing Mss., 488, II.

shires press'd for their proportions... the Barons very well foresaw that the Money would be squandered away and therefore proposed to have some rational scheme". The Barons proposed, therefore, that some of the growers should take their proportions by way of an interest free loan on sufficient security for repaying the advances "in case the Parliament thought fit to dispose of it in any other way". Although this suggestion was generally approved in principle the Gentlemen concerned differed on the head of finding security for the eventual repayment and so the whole matter lay over.⁽¹⁾ Nothing further was done until the foundation of the Board of Trustees in 1727.

Under Article III of the Royal Patent setting up the Board the accumulated sum of £14,000 for the encouragement of wool manufacture was to be invested to give an annual income of £700 to be distributed in accordance with the terms of Article 15 of the Treaty of Union. This sum of £700 was limited to the counties of Berwick, Roxburgh, Selkirk, Peebles, Lanark, Ayr, Wigton, Dumfries, Edinburgh and Stirling, and the Stewartries of Annandale and Kirkcubright, or to any other county which produced tarred wool in any quantity.⁽²⁾ In July 1727 the Board of Trustees formed a wool committee entrusted with producing a plan to distribute the income from the wool-fund in the most advantageous way possible. Once more the southern wool-masters were invited to submit their ideas⁽³⁾ on how the money might best be spent which drew a reply from the heretors of Roxburghshire containing detailed proposals based on the wool production of all

(1) S.R.O. Clerk of Penicuik Muns., 5897.

(2) Reports of the Board of Trustees, vol. i, pp. 6 & 13.

(3) Minutes of the Board of Trustees, vol. i, p. 3.

the relevant counties. Under their scheme the Board was requested to distribute the £700 at the rate of £8-15s. per 1,000 stones (24 lbs.) produced, in order to encourage the stapling and correct sorting of the wool, to subsidise the cost of carrying the wool to the stapler and to encourage the arts of manufacture prior to weaving, particularly spinning. Local housewives who encouraged this among their neighbours were to be given plaids "to catch their fancies".⁽¹⁾ This detailed proposal appears to have been the only one submitted at this juncture, a fact explained partly by the many previous abortive moves and partly by the fact that most counties stood to gain very little from the fund if it was distributed in accordance with county wool production. Even Roxburghshire, by far the most important wool-growing county, could not expect more than £200 per annum from their own scheme. Thus the Board of Trustees published their own general plan in December 1727 for the distribution of the wool subsidy.⁽²⁾ This allowed for the encouragement of wool staplers and combers to properly sort, dress, and comb wool, and, in addition, premiums were to be offered to such persons who would contract with the Board to manufacture coarse wool and who employed five or more persons in spinning it. Yet another attempt was then made to extract detailed plans for distributing the money from the growers, but the Board intimated that in the absence of any proposals they would proceed "to finish a particular plan for these ends from the best information they can have".⁽³⁾ Thus a period of twenty years delay was finally terminated with the publication in January 1728 of the Board's

(1) Douglas of Cavers Mss., T.H.A.S. 1880.

(2) M.B.T. vol.i, p. 46.

(3) R.B.T. vol.i, p. 60.

"Particular Plan for Wool".

Under the Board's plan for wool a sum of £280 per annum was set aside for salaries for fourteen persons, skilled in sorting, stapling and washing coarse tarred wool. A second amount of £420 annually was to be employed in purchasing the necessary equipment for sorting, boiling, and washing used by the Board's staplers. In succeeding years this sum was to be used for increasing the number of sorting stations or for general encouragement to the industry. Initially wool-stations were to be established at Biggar, Douglas, Edinburgh, Galashiels, Hawick, Jedburgh, Kilmarnock, Kirkcudbright, Lauder, Monyghaff, Moffat, Stirling, Sanquhar and Peebles. It is clear from the minutes of the Board of Trustees that the wool-sorters were not only to prepare the local farmers' material for manufacture by adequate scouring and sorting, but were also, when possible to engage in manufacture themselves, thereby adding to the value of the wool and giving employment to the local populace. Furthermore, insofar as the sorters were made stampmasters in the chief southern burghs, their function was also regulatory.⁽¹⁾

In its general principles, if not in its particulars the Board's wool policy followed the lines set out by the wool-growers in their various proposals submitted at intervals after the Union, emphasis being placed on the proper preparation of the wool for manufacture and the encouragement of a higher level of skill among the inhabitants of the southern counties. By these means it was hoped to arrest the trend of falling wool prices and to make the wool

(1) R.B.T. vol.i, pp. 61-2.

counties a centre of woollen manufacture.⁽¹⁾ Thereby the losses suffered by the wool-proprietors at the Union would be, at least partially, recouped.

3. The Policy of the Board of Trustees

The establishment of wool preparation centres was pursued vigorously by the Trustees, care being taken to appoint sorters who were properly qualified to carry out the functions laid down in the Board's plan. By the end of 1728 twelve of the proposed fourteen stations had been manned and equipped with the necessary utensils, despite the rejection of certain candidates put forward by the local heretors.⁽²⁾ The Board's determination to administer the fund in the most profitable way is also evidenced by their positive encouragement of Englishmen to act as sorters. Thus at Monigaff the expenses incurred in the procurement of an English clothier were defrayed by the Board and ultimately a Leeds clothier was established at Peebles to act as sorter.⁽³⁾

In 1729 a Riding Officer was appointed to make regular visits to the wool-sorters to inspect their equipment, to examine both the quality and quantity of coarse wool that was washed and dressed by the sorters and to enquire whether the sorters were competent and

(1) Douglas of Cavers Mss., T.H.A.S. 1880; S.R.O. Clerk of Penicuik Muniments, 5897.

(2) R.B.T. vol. i, p. 107.
For example the appointment of William Moffat at Lauder was not sanctioned by the Board due to his lack of experience and when the town refused to accept the Trustees' terms for a sorter it was ordered that Haddington should take over from Lauder and an experienced clothier appointed. The local choice of Peebles was similarly rejected by the Board. M.B.T. vol. i, pp. 133, 137.

(3) M.E.T. vol. i, pp. 131-2; 137.

energetic. In addition he was to discover whether the sorter engaged in manufacture when not otherwise employed and if so what sort of goods were made and whether any improvement in quality was noticeable. Lastly, the Riding Officer was to ascertain whether the laws governing the manufacture of woollen cloth were being adhered to. (1)

The initial wool plan of the Board of Trustees operated until 1736 when more vigorous steps were taken to secure the actual manufacture of woollen cloth in the wool producing counties. The plan of that year, which was renewed in 1739, allowed £120 to be given as subsidy to four manufacturers who contracted with the Board to employ a minimum of £400 capital or a certain number of looms in the manufacture of different kinds of woollen goods. (2) The embodiment in specific terms of what had always been the general policy of the Trustees was probably prompted by the spontaneous beginnings of such manufacture in Peebles and Sanquhar in 1734 which the Board then aided. (3) The number of subsidised manufacturers increased after 1736, the four of that year becoming eleven by 1740, the towns associated with these developments being Hawick, Galashiels, Jedburgh, Haddington, Kilmarnock and Sanquhar and Peebles. (4) The goods produced included broadcloths as well as plaidings, coverlets, and blankets.

These early efforts by the Board to directly stimulate cloth manufacture, met however with little success. In 1742 the report of

(1) R.B.T. vol. i, pp.126-7.

(2) Ibid, vol. ii, p. 18; M.B.T. vol. vi, pp. 229-230.

(3) R.B.T. vol. ii, p. 13.

(4) Ibid, p. 96. cf. Reports of Trustees for 1736-42.

the Riding Officer prompted the Trustees to reconsider the nature of their aid to the industry. In that year it was reported that

"the contracts made with the present undertakers to carry on the manufacture of Coarse Wooll... has not hitherto had the desired Success of Extending the Manufacture of Coarse Tarred wooll... nor could the extent of what was actually manufactured be known at any Degree of certainty. Therefore the Committee are of opinion That for hereafter each manufacturer should only be entitled to the Particular Encouragement... in Proportion to the Quantity of Coarse Tarred Wooll they actually manufacture into Cloths, Serges, and other woollen Goods".⁽¹⁾

It is clear that some of these manufacturers had "come short" or in other ways had not abided by their contracts so that in 1742 the Board cancelled some of the allowance due to them. On the basis of the report of the wool committee the whole financial structure of aid to the woollen industry was changed, a system of payment by results being substituted for the annual allowances to the sorters and contracting manufacturers. Thus in the Board's wool plan of 1742 £550 was allowed "to such persons as shall contract with the Trustees to sort, comb, manufacture and dye quantities of Coarse tarred wool" at the rate of £5 per 100 stones.⁽²⁾ More precise terminology characterised the revised plan of 1746 payments only being made for wool "that shall actually be made into goods".⁽³⁾ At the same time a minimum quantity of 100 stores had to be used in order to qualify for the Board's premiums, a limit that was raised to 400 stones in 1749.⁽⁴⁾ In 1752 the wool plan was renewed with the added proviso that £110 was to be set aside for "experimentation in manufacture", the amount allowed for manufacturing being slightly reduced in consequence.

(1) M.B.T. vol.vi, pp. 229-30.

(2) Ibid, p. 233; R.B.T. vol.ii, p. 221.

(3) R.B.T. vol.ii, p 248.

(4) Ibid, vol.iii, p. 91.

Notwithstanding the encouragement of the Trustees, the output of the contracting manufacturers remained very low and even began to decline. In 1752 the Board paid premiums on 7,735 stones produced. The following year on 6,459 stones, while subsequent reports confirm that this was more than a short-term trend.⁽¹⁾ Manufacturing under the Board in the Borders ceased altogether, most of it being concentrated on Haddington and the south-west. Manufacturers regularly had their premiums restricted owing to their output not matching their forecasts to the Board and a general recession is further indicated in the dropping of any minimum level of production for the receipt of premiums in 1755. However, some improvement in quality seems to have resulted, the Board noting two years later that the tarred wool "has in some measure been used in the making of blankets, coverlets and coarse carpeting preferable to any hitherto wrought up in the country".⁽²⁾

The year 1757 marked another turning-point in the policy of the Board towards the woollen industry. Hitherto the emphasis had been placed mainly on increasing the scale of manufacture, though the appointing of sorters was aimed also at improving the goods. After 1757 the Board began to pay more attention to quality than to the amount of woollen goods produced. This shift of emphasis is indicated by the introduction in that year of payments to farmers for improvements in their wool and in their extension in 1761 to improvements in the breeding of sheep.⁽³⁾ At first the premiums for better quality

(1) M.B.T. vol.xi, p. 176; R.B.T. vol.iii, p. 203.

(2) R.B.T. vol.iv, pp. 190, 219.

(3) Ibid, 230; vol.v, p. 159.

wool were restricted to the counties of Berwick, Dumfries and Edinburgh, possibly because they were nearer to the main manufacturing centres, but were later extended to the whole of the southern counties, and elsewhere. A further indication of the Trustees' pre-occupation with quality is afforded by the beginning of allocations from the savings fund for such purposes as "encouraging the first setting up of woollen manufactories at proper places, for making improvements in the methods of manufacturing", and for the purpose of "breeding Woolcombers and wool dyers..." in 1760 and 1761. At the same time the paying of incentives to a few of the larger manufacturers continued. They were encouraged to diversify their products by the offering of premiums for specific categories of goods such as blankets, carpets, and coverlets. Better regulation was attempted in the establishing of stamp-masters in the rural areas.⁽¹⁾ The offering of prizes for good cloth exhibited in the Edinburgh cloth-hall which began in the later 1770s was but a logical extension of this policy of quality improvement.

4. The Failure of the Policy of the Board of Trustees

How effective were the Trustees in their encouragement of the woollen industry in the period 1727-1778? Were their policies suited to the needs of the industry? The Board's plans for the industry indicate that they recognised at least some of its most pressing needs. There is no doubt that from the wool producers' viewpoint there was a great need to increase the domestic consumption of their wool. In order for this to occur it was necessary to encourage persons to manufacture more of it for sale; one of the pre-requisites for this

(1) R.B.T. vol.v, pp. 141, 149.

was an increase in the standard of goods produced. From the outset the Trustees paid attention to the proper preparation of wool for manufacture. Each fleece of combing or clothing wool consisted of several different grades which required to be properly sorted and scoured before it could be correctly manufactured.⁽¹⁾ Unsorted wool discouraged manufacturing generally because the necessity of having to purchase much useless wool along with the quality required, that is, when buying in the fleece, increased costs due to the wastage involved. Alternatively if the manufacturer did not attempt to grade his wool carefully the resultant yarn lacked uniformity which, in turn, led to inferior cloth. That this was one of the basic weaknesses of the industry in the previous century has already been noted in chapter one. In the same way the Board recognised the need for skilled finishing of Scottish cloth, particularly in the Borders where, unlike the Highland areas, there was no traditional skill in the art of dyeing.⁽²⁾ Contemporary opinion confirms the view that poor quality and low levels of technical skill constituted a widespread malaise in the industry which effectively prevented its expansion. "As to our woollen cloths" wrote Sir John Clerk in 1730, "we are in much the same condition now as at the time of the Union... we manufacture... considerable parcels of serges, and these meet with some encouragement in our mercats because they generally make up a part of our habiliments which are least in vieu, otherways

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- (1) At the beginning of the 18th century there were five recognised divisions of both clothing and combing wool. Clothing wool divisions were Head, Thirds, Seconds, Livery, Short Coarse; Combing wool grades were fine, ordinary, Broad Ordinary, Middle Ordinary, Long Coarse. cf. Douglas of Cavers Muns.T.H.A.S. 1880.
- (2) J. Naismith, Thoughts on Industry in Scotland, (1790), p. 485n. cf. Textile Mercury, Aug. 1893, p. 143.

perhaps they wou'd be in the same discredit amongst us as with our broad-cloths". (1)

Despite the Board's correct diagnosis it can hardly be credited with the production of a cure. The evidence suggests that little success attended its efforts to improve the sorting of wool, even though it maintained persons for this purpose throughout the century. In 1774 Anderson was still campaigning for experienced wool-sorters "without which no woollen manufacture can be properly established". (2) As late as 1790 Naismith confessed that "a single stone of fleece wool... can hardly be bought in any of the ordinary wool-markets of Scotland... which might not be sorted into half a dozen different parcels; no two of which ought properly to make a part of the same fabric'. Because of poor sorting combing too was for the most part "very imperfectly performed", for wool of a uniform quality and grist could not be drawn from a "promiscuous mass". (3) As a consequence manufactured goods remained inferior and unimaginative. Cockburn of Ormiston had been moved to complain in 1744 that

"the whole of our woollen manufacturers in this county have hitherto been working like blind men in a mine; the very fabric, nature and kind of several branches are mis-judged so that their goods are in a great measure useless at home and not fit for exporting abroad. Whereas they are offensive to the eye, consumptive of too much wool, and so badly finished that they are not fit for sale.... manufacturers must first lay aside all useless and unprofitable goods, which many of these poor creatures have been in use to make from father to son without reaping any profit for their pains, because they know no better". (4)

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- (1) T. C. Smout, (ed.), Sir John Clerk's Observations on the Present Circumstances of Scotland, 1730, in Scottish History Society, vol.x, 1965, p. 196.
- (2) Sir James Anderson, Observations on National Industry (1777) vol.i, p. 323.
- (3) J. Naismith, op. cit., pp. 482-5.
- (4) Galashiels Weavers' Corporation, Presentation of Relics, 1908. (Manuscript in Galashiels Woollen Technical College Library).

Even in the 1770s David Loch found quantities of unmilled cloth, straight from the loom, being exposed for sale in Haddington, (one of the chief woollen-producing towns and an area where the Board of Trustees had been active). This product had undergone no change in its design of manufacture for half a century.⁽¹⁾ Nor did the Board achieve any significant increase in the scale of woollen manufacturing in the Border counties. After 1745 for a few years there existed a manufacturer in Galashiels who was in receipt of premiums. His output was very limited and in 1750 he was struck off the establishment and ordered to release his equipment. The village was not mentioned as a manufacturing centre in 1766 and by 1774 consumed less than 800 stones of wool annually.⁽²⁾ Similarly, Peebles failed to increase the limited amount of woollen manufacture begun in the 1730s and was more noted as the centre of yarn spinning for the English market in the 1770s than for the production of piece goods. Only 30 looms existed in Selkirk and some of these were used for linen rather than woollens.⁽³⁾ Manufacturing in Roxburghshire, the main wool-producing county remained equally undeveloped; small quantities were produced in Jedburgh under the Board's surveillance at intervals but fewer than 60 looms were in operation there in 1778 with little attention being paid to expanding cloth production.⁽⁴⁾ Only in the burgh of Hawick was anything smacking of progress achieved not all of which however, can be directly attributed to the activities of the Board of Trustees. After spasmodic attempts to manufacture cloth under its

(1) David Loch, A Tour Through Most of the Trading Towns and Villages of Scotland, (1778), pp. 9-10.

(2) Postlethwaite, Universal Commercial Dictionary, 1766, section on Scotland.

(3) D. Loch, op. cit., pp. 61-2.

(4) Ibid, p. 47.

auspices in the first half of the century carpets began to be manufactured there about 1752 by three local gentry helped by a skilled Dumfermline weaver who seems to have met with the encouragement of the Trustees. Almost nothing is known concerning this venture but a measure of success is suggested by the fact that the original stock of £400 had reached £4,000 by 1778. At the same time the beginnings of an extensive yarn trade grew up with England, a development which may have been stimulated by the Board's establishment of a spinning school in the town in 1734 under English direction, and specifically geared to the English market. (1)

It is thus impossible to avoid the conclusion that the impact of the Board of Trustees upon the woollen industry was at the most a marginal one in this period. Faced with its unimpressive record the causes of the Board's failure require investigation. In the first place the failure of the Board, at least initially, can partly be attributed to a lack of confidence in its own methods of applying the wool fund. It is necessary to remember that the inclusion of a clause in Article 15 of the Treaty of Union granting an annuity for seven years of £2,000 for woollen manufacturing was the result of pressure from the southern wool-growers, who "made loud complaints (that) their estates would be visibly sunk". (2) After 1707 the woolmasters naturally claimed an important say in how the money was to be spent and insisted that its distribution should be made to the various wool counties in accordance with their wool production. The early plans of the Board of Trustees were largely based on the desires of

(1) D. Loch, op. cit., pp. 46-47; M.B.T. vol.iii, p. 181.

(2) D. Defoe, op. cit., p. 444; M.B.T. vol.ii, p. 197.

the local heretors who favoured the setting up of sorters-cum-clothiers to stimulate the manufacture of wool locally and to provide employment for the poor, rather than allow existing manufacturers to receive investment grants to extend the scale of their enterprises. The records of the Board afford ample evidence of their own doubts as to the value of these measures. As early as 1731 it notified local magistrates where wool-stations had been founded that "unless something is done it's not to be expected the money will be thrown away for sallaries (to the sorters) any longer" and asked for the presentation of renewed proposals "how the said fund may be laid out to more advantage". Until "some more beneficial methods of promoting manufacture" could be devised "the expence of Sorting, Washing and Dressing and cleaning Coarse Tarred Wool... must continue..." Sir John admitted that the Trustees "tho' they were far from haveing a good opinion of this schem, yet to satisfy the woolmasters they were content to go into it for some years by way of Tryal..."⁽¹⁾ Ten years after the Board's plan was implemented Clerk confessed that he had "never the least reason to be satisfied with any scheme except that of putting as much of the fund as we could in the hands of skillfull manufacturers... But to this the several wool countrys objected".⁽²⁾ Failure to establish manufacturing in the Borders caused the Board to lay a memorial before the Convention of Royal Burghs in 1733 with a view to obtaining better plans, the prevailing one having "not

(1) S.R.O. Clerk of Penicuik Muniments. 5897.

(2) Ibid., 5901.

answered the purposes thereby intended".(1)

The pessimism and disenchantment of the Board with their own operations at this time was occasioned partly by the unreliability and ineffectiveness of the sorters themselves, despite the care taken over their appointment. In 1730 the Peebles sorter was reported as being "inactive and inefficient" and was later dismissed. The J.P.s of Roxburghshire and the Magistrates of Hawick obtained the dismissal of the local sorter in the same year for "indolence" and because of the high charges for his services. In 1731 the sorter at Minigaff was dismissed for embezzlement while his counter-part at Galashiels eloped. That year the Riding Officer reported that the wool-sorters at Haddington, Dumfries, Peebles, Douglas and Lanark had done nothing for three years.(2) Not infrequently stations were closed and where new ones took their place it was often occasioned by long drawn out disputes over the disposal of their equipment. Often the local land-owners refused to accept a local closure and retained the vats themselves. A letter of the Board in 1749 epitomises the failure of the wool-stations. At that date it was stated that Hawick and Jedburgh had never been equipped with vats, those at Galashiels were useless, while those at Selkirk had been abducted by Lord Haining.(3) On the whole, the epithet "yearly pensioners" given to the sorters by Cockburn of Ormiston seems to have been deserved, for their support

(1) A meeting was arranged between the Burghs and the woolmasters but nothing concrete seems to have been achieved. M.B.T. vol.ii, p.122.

(2) Ibid., pp. 88,93-4,97,196-7.

(3) Letters of the Board of Trustees, 6th April, 1749.

from a state fund not based upon work performed encouraged indolence.⁽¹⁾ But the sorters had been placed in difficult positions nonetheless. The state of manufacturing in the southern counties was so unadvanced that the staplers were not able to live by their employment without charging a high price for their services which in itself discouraged farmers from bringing their wool to them. This in turn made the expansion of the manufacture of cloth difficult. Thus the Board had little option but to pay a small salary to them. When this did not have a paralysing effect on the sorter the natural conservatism of the farmers and the absence of labour in the upland areas to engage in manufacture still rendered his task difficult.

Not all the Board's employees failed in their efforts, however. In general more success attended the sorters who were stationed in areas where there was a tradition of manufacturing and where there existed a larger population. Thus James Chrystie at Stirling obtained a pay increase for his good work in sorting local wool and seizing of unstamped cloth. Moreover he was effectual in improving the preparation of the local combing wool used in the manufacture of Stirling serges by obtaining "correct" English combs at places in the county. An expert wool-comber was brought to the area to instruct the local people in proper methods of combing. Chrystie himself made monthly visits to these places to direct the spinning of wool and to attend the weekly markets and fairs to inspect the worsted yarn. In the same way Andrew Boyd, sorter at Kilmarnock, was accorded the credit for introducing the manufacture of imitation Irish flannel to the town as well as for the recovery of the local bonnet and stocking

(1) S.R.O. Clerk of Penicuik Muns. 5901.

trade. (1)

Another factor contributing to the failure of the Board's policies was the very limited amount of financial aid available to the woollen industry. The total annual sum allotted to the industry out of the regular fund over the greater part of the 18th century was only £700 compared with a total expenditure of several thousand pounds. For much of the period, however, not even this figure was actually spent, the average annual sum received by the industry in the forty years from 1728-1768 being only £535. Moreover, a considerable proportion of the wool money was awarded to farmers after 1757 for wool and sheep improvements rather than directly encouraging the manufacturers. Only on one occasion between 1728 and 1792, (in 1742) was the entire £700 spent, although small grants from the savings fund were made from time to time after 1760. Thus the scope of the Board's activities was limited by these financial considerations. Because most attention was paid to the linen industry in this period the wool grant was never increased by drafting appreciable sums from other funds of the Board until the 1780s. (2)

The inadequate resources of the wool committee did little to compensate for the lack of capital at the disposal of the clothiers. Here the policy of the Trustees did little to ameliorate the situation. The payment of an annual salary to a few sorters and combers however much their skills were required, meant that the limited funds available to the Board were tied to a few recipients in the form of annual salary, who, as we have seen, failed in their allotted tasks

(1) M.B.T. vol. ii, pp. 23, 79, 123-4, 196.

(2) cf. Annual Reports of the Board for wool expenditure.

in many cases. Alternatively, had the sum been apportioned amongst existing manufacturers by giving them a once-and-for-all grant to purchase looms or other apparatus, gradually more workmen may have been drawn into the industry. This in itself would have created a demand for the services of the combers and sorters whose ability to earn a living from their operations would also have increased. The payment of an annual salary to a few was not calculated to bring more into the woollen trade. Contemporary comment confirms that clothiers were short of capital to extend their undertakings. Lindsey noted that Scotland had "no stocks equal to so great an undertaking" as rivalling the English manufacturers, and Cockburn concurred. "Our manufacturers and Trades people have seldom any stocks so a help to them once to carry on business is setting them fairly into the world and £60 or £70 will be a very great help towards keeping two looms constantly going... and will be of more service to such than £20 a year (to sorters) for some years running".⁽¹⁾

One of the Board's own excuses for its lack of success was the statutory limitations imposed upon it by the Treaty of Union and the royal patent setting up the Board's responsibilities and powers in 1727. Article 15 of the Union stated that the £2,000 per annum for seven years was to be applied towards encouraging woollen manufacture "within those shires which produce the wooll...", while Article 22 of the patent also laid down the specific counties that were to come within the orbit of the Trustees' aid.⁽²⁾ This, in itself, did not appreciably cramp the Board's activities, however, because the only

(1) P. Lindsey, The Interest of Scotland Considered, p. 108; S.R.O. Clerk of Penicuik Muns. 5904.

(2) R.B.T. vol.i, p. 13.

manufacturing region of potential importance excluded from its interests was the north-east. Even so a wool-sorter was appointed in Aberdeen in 1734. In any case the royal patent setting up the Trustees in 1727 made possible a flexible approach to the industry. The Preamble stated that any plan for distributing money "shall continue and endure... till the same shall be altered or varied in the manner therein after expressed.." Then the patent laid down that plans could be altered on proposals being laid before the king by the Trustees.⁽¹⁾ Thus Patrick Lindsey's criticism in 1733 bemoaning the fact that the wool fund was limited to "those counties where the wool is produced" was largely irrelevant. In any case those counties included such centres of manufacture as Musselburgh, Haddington, Edinburgh, Stirling and Kilmarnock. The factor which really affected the Board's policy of encouragement was the influence over the fund of the woolmasters who had been responsible for its procurement. Insofar as the growers demanded aid for their own localities to aid their own efforts at manufacturing the Board was precluded from granting sums to established clothiers and from making capital grants to would-be manufacturers in existing centres for the purchase of looms and other equipment. On the other hand the woolmasters do not seem to have set up their own manufactories according to the terms upon which the annuity was granted. Concentration upon proper sorting and scouring did not lead to an increase in local manufacturing. This, as we shall see was mainly because a profitable wool and yarn trade grew up with England, even in the rough wools.⁽²⁾ Thus, in a measure, the

(1) R.B.T. vol.i, pp. 3-4. The distribution of the wool money had to be made "as may most conduce to the general good of the United Kingdom... which plan and method of Distribution shall continue and endure... till the same shall be altered or varied in the manner therein after expressed".

(2) See below pp. 56ff.

frustration of the Board's purposes was a result of a clash of interest with the southern woolmasters.

It is doubtful, however, if a thriving manufacturing sector could have been established in the coarse-wool producing counties at this time even given harmonious relations and identical interests between the Trustees and the woolmasters, or even if more capital had been made available. Necessary economic factors were lacking which could never be artificially created by outside assistance no matter how sincerely offered. In the first place there was a shortage of labour, and especially of the skilled variety necessary for the growth of manufacturing. "In the Wooll-countries there are not many hands for manufacture", wrote Patrick Lindsey, "A farmer or store-master... who pay 200L a Year of Rent has no more people in his family, besides himself, Wife and Children than three or four Herds... All that can be proposed there is to clean and wash their wool, and to send it to the market sorted..."⁽¹⁾ The closure of the wool-station at Sanquhar was occasioned by the sorter's inability to acquire labour in the district.⁽²⁾ For the same reason Cockburn of Ormiston urged the Board to divert their aid from such areas to more populous centres like Musselburgh and Haddington where experienced clothiers and workmen already existed, that they might be able to increase their stock and extend their production.⁽³⁾ Even in these towns, however, skilled labour was at a premium. "When any of our principal workmen die or fall in discord with their Masters the Manufactories they are concerned in come

(1) P. Lindsey, op. cit., p. 107.

(2) M.B.T. vol iii, p. 115.

(3) S.R.O. Clerk of Penicuik Muns. 5901, 5904.

as effectually to stop as a clock or a watch does upon the breaking of a wheel..." wrote Sir John Clerk.⁽¹⁾ In the 1770s James Anderson still urged the time-worn solution on his readers of importing skilled labour from England for the troubles of the woollen industry.⁽²⁾ Though most women could spin the production of a good yarn depended upon proper sorting and a reasonable standard of raw wool, both of which were lacking for much of the century. Moreover a good deal of the wool grown in the southern counties was more suitable for worsteds than for woollens. The Hawick spinning school taught the art of combing, a wool-comber being stationed in the town for many years.⁽³⁾ Here again the question of the scarcity of skilled labour arose for the combing was more skilled than hand-carding and required muscular strength, necessitating, often, the use of men, instead of women or children. The lack of such skills deterred the manufacture of this wool into cloth. The need to import English combs and a trained instructor into Stirlingshire in the 1730s has already been noted.

Though skilled labour was scarce, what did exist appears to have been effectively organised which probably militated against the free expansion of the industry. Weavers' corporations were widespread in Scotland and date from the seventeenth century in the Borders.⁽⁴⁾ These bodies were mainly designed to regulate entry into the craft, and also provided a pool of equipment such as dye vats and reeds for the weavers' common use.⁽⁵⁾ In 1705 the Hawick weavers

(1) S.R.O. Clerk of Penicuik Muns, 5897.

(2) Op. cit., vol. i, p. 323.

(3) M.B.T. vol. iii, p. 181.

(4) Selkirk 1608; Hawick c 1640; Galashiels 1666; Melrose 1668. cf. T. Craig-Brown, History of Selkirkshire; R. Hall, History of Galashiels.

(5) cf. R. Hall, op. cit., pp. 281-5.

prohibited the taking of more than one apprentice annually and he had to be trained for four or five years.⁽¹⁾ The scant evidence extant also suggests that the corporation exercised some control over prices for its members' services.⁽²⁾ At the end of the century the Galashiels weavers' corporation was still a strong body able to regulate entry to the craft.⁽³⁾ The practices of these bodies may well have restricted the Trustees' efforts. On one occasion a Leith weaver, Alexander Kidd, requested the Board to defend him in a lawsuit raised against him by the Canongate Incorporation of Weavers, for weaving cloth when not a member of that body. The Board were advised to take no action for although the linen manufacture was a free craft the existing legislation made no reference to woollen cloth.⁽⁴⁾

Factors of political expediency cannot be overlooked in any discussion of the woollen industry in Scotland in the 18th century. Again it must be borne in mind that the original proposals for Union on the English side made no reference to compensation to the Scottish wool growers.⁽⁵⁾ The insertion of a clause concerning the wool equivalent was purely a Scottish move, tolerated by the English only in order to smooth the path of Union and because the clause dealt only with the manufacture of coarse, tarred wool in the southern counties - a commodity so inferior as to constitute no serious threat to English manufacturers. Nonetheless there was a feeling in Scotland that any vigorous encouragement of the woollen industry at

(1) T.H.A.S. 1869, p. 31.

(2) Ibid, 1868, p. 226.

(3) R. Hall, op. cit., pp. 281-5.

(4) Ibid, pp. 291-2.

(5) D. Defoe, op. cit., pp. 201-203.

large would incur English displeasure and it was noted that the government was in a position to bring pressure to bear on a public body like the Board of Trustees. The existence of such fears is suggested in contemporary writing. In 1733 Lindsey opined that the English were "too wise to encourage any manufacture that might interfere with their great staple". Anderson endeavoured to discount the objection that England would oppose a rival Scottish cloth industry in the 1770s drawing attention to the indivisibility of the two economies. At the same time an aristocrat pamphleteer asked if it was really true that English ministers would "rise in fury" if Scotland tried to emulate the woollens of their country. Loch also believed that Gentlemen did not encourage the woollen industry for fear of the English and in case bounties and premiums were withdrawn.⁽¹⁾

It is hard to avoid the conclusion, therefore, that the Board of Trustees was not seriously concerned with the fortunes of the woollen industry, marshalling most of their efforts to the undergirding of the manufacture of linens. For much of the 18th century the Board allowed itself to be the mechanism by which the southern wool-masters extracted the few crumbs of compensation at their command from the Union settlement, which itself ceased to be so onerous as the English wool-trade grew up. Nowhere is the lassitude of the Board concerning woollen manufacture so evident as its palpable failure to regulate the industry efficiently - a task that the linen industry proves was well within its capabilities.⁽²⁾ Although the

(1) P. Lindsey, *op. cit.*, p. 110; Anderson, *op. cit.*, vol. ii, p. 229; Eight Sets of Queries etc... By a Peer of the Realm, (1775), p. 8.

(2) For an extract from the laws governing the manufacture of woollen cloth in Scotland at this time see Appendix iii at the end of the chapter.



Trustees appointed their sorters as stampmasters in the Royal Burghs and in some rural areas, as well as subjecting them to regular inspection by the Riding Officer, little overall control of woollen cloth was achieved. It is true that some attempt was made to bring the manufacture of serges into line with the demands of Dutch purchasers, by extending the statutory length. Also illegally made goods were seized on occasion, but little overall regulation was achieved.⁽¹⁾ In its own reports the Board acknowledged that progress in the industry was retarded by "numberless Faults and Frauds" and in 1761 undertook to appoint fresh stamp-masters in the wool-counties "to ascertain by stamps the marketable Woollen Cloth and to prosecute Frauds".⁽²⁾ But the Board's attempts to increase the regulation of woollens in the 1760s was more out of consideration of the linen trade than that of woollens for the Board noted in 1763 that defective wool-cloth regulation "has... an unlucky influence upon the linen manufacture, which is everyday deserted by some of its operators in order to deal in the Woollen or Cotton Branches, where by the want of Regulations they have a greater opportunity to employ their ingenuity in fraudulent practices".⁽³⁾ Efforts at better regulation of woollen cloth were short-lived, however, and in the 1770s David Loch found very inferior goods being offered for sale and considered that even where stamp-masters did exist, at least in the Borders, they were ineffectual as well as unpopular.⁽⁴⁾

(1) M.B.T. vol.ii, pp. 176, 185, 196. cf. Letters of the Board of Trustees, vol.i, pp. 140-1.

(2) R.B.T. vol.v, p. 141.

(3) Ibid, vol.vi, pp. 3-4.

(4) D. Loch, op. cit., p. 9.

5. The Survival of Woollen Manufacture

Despite the prognostications of the woolmasters in 1707 and the subsequent ineptitude of the Board of Trustees, it would be wrong to conclude that the Union witnessed the demise of the coarse cloth industry in Scotland as well as the fine cloth branch. Though Scotland pursued an economic policy in the post-union period which aimed at complementary rather than competitive development with England the manufacture of coarse woollen products was not antipathetic to it. English imported cloths were mainly of the finer qualities and purchased by the more wealthy classes. Such goods the Scottish manufacturers had attempted to manufacture before the union without much success. But the bulk of the Scottish population had always worn cloth of native manufacture and there was no reason why this should not continue after 1707. Geographical remoteness and inadequate communications plus the lower living standards north of the border of the working population provided an effective price barrier against low-priced cloths from England for much of the 18th century, though some Yorkshire and Westmorland cloth penetrated into the southernmost counties, though in what quantities it is impossible to determine.

Thus the old established coarse wool manufacture survived the union. Not only did most Scots meet most of their own clothing needs, but a surplus continued to be supplied on the open market. Thus a Swedish traveller in Scotland in 1720 noted that locally-manufactured woollen goods were a prominent feature of regular markets held at Dumfermline, Inverkeithing, Dunblane, Lanark, Maybole, Dumfries and Thornhill, as well as at Kilmarnock and

and Stirling.⁽¹⁾ Indeed the most important manufacturing areas were those which had been noted for woollens prior to 1707, such as Kilmarnock, Stirling, Edinburgh, Musselburgh, Haddington and the north-east, especially Aberdeenshire. Kilmarnock continued to trade in cheap serges after the union many of which were exported to Holland and later to Germany where the cloth was widely used for soldiers' uniforms. Imitation Kendal 'greens' flannels, bonnets and, of growing importance, carpet making comprised the other products of the area. Cheap serges also were made in large quantities at Stirling and by 1766 "many hundreds of looms" were said to be employed in the district weaving serges, shalloons, plaiding and tartans, with export markets in Holland, West Indies, America and even in England. At nearby Alloa considerable quantities of camblets were made, some being sent to London and Quebec. Edinburgh was noted in 1733 for its low-priced shalloons and by the 1760s was noted for plaids and tartans in addition, while in the next decade carpets, duffles and coatings gained ground there. To the east large consignments of Musselburgh stuffs were sold in the colonies in the 1730s, and despite their low return such goods were still prominent in 1766, being deemed the cheapest in Europe at 2½d. per yard. Many were exported to Holland. The town seems to have quickly made use of the increased quality of local wool for a variety of cloths, ranging from 2/6 to 15/6 per yard, was being made from Border county wool in the 1770s. Similarly the manufacture and finishing of cloth continued in Haddington after the union. By 1766 there existed in the burgh an "opulent company" making "all sorts of superfine and coarse broad and narrow cloths as well as bays, shalloons... carpets and worsted plushes". Raw webs

(1) H. Kalmeter, Journal of Travels in Scotland, 1719-20.

from the country people were purchased at the weekly market by the skilled finishers in the town who milled, dyed, and pressed them before sale. In the 1770s David Loch expressed his admiration of the skill of the burgh's operatives.⁽¹⁾ (It is possible that they were the descendants of English workmen imported for the needs of the New Mills company before the Union.)

Aberdeen, too, despite its growing association with hand-knitted hose continued to manufacture woollen cloth during the century though probably to a lesser extent than formerly. In 1733 large quantities of fingrams were said to be exported yearly to Holland and by 1766 these goods were still manufactured "to a great amount", despite many country people having turned from woollens to linen manufacture.⁽²⁾

Woollen manufacture was widespread in Scotland, then, in the 18th century. Output was probably not high, but some goods found their way overseas as in the previous century. The Borders, however, as we have seen were not noted at this stage for manufacturing piece goods despite the fact that the Board of Trustees' efforts were concentrated on this region. The reasons for this have already been offered. Labour was short; markets were distant, wool-masters and farmers apathetic. That the latter could afford to be, however, was due to the fact that the Borders during the 18th century became increasingly integrated not with the rest of the Scottish economy (though some Scottish woollen towns used Border wool) but with the

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- (1) Lindsey, op. cit., p. 105; Postlethwaite, op. cit.. Loch noted that Stirling manufacturers purchased wool from England for quality cloth. op. cit., p. 16.
- (2) R. Lindsey, op. cit., pp. 105-6; Postlethwaite, op. cit., Section on Scotland.

north of England economy. This was especially true in the second half of the century - for two reasons. Firstly, English manufacturers were interested in the improved wool of the Scottish Borders consequent on agricultural changes; secondly, due to pressure on labour supply when demand was expanding, English clothiers or entrepreneurs made use of Border women as outworkers to spin for them. Thus Loch found families at Peebles, Lauder and Kelso spinning flax for a Darlington firm; at Selkirk considerable quantities of combed wool arrived daily by waggon from Darlington, Manchester, Halifax and Durham to be spun into yarn and returned. Some English clothiers had actually moved into the district to make use of local labour, while some Border weavers worked on commission for north of England manufacturers. English wool dealers were busy in the area too. About £30,000 of wool was being purchased annually in the Langholm area alone in the 1770s for the English manufacturers.⁽¹⁾ The strain on the domestic system at this time is well illustrated by the fact that most of this wool, after being combed in England came back to the Borders to be spun, sent back south to be woven and finished before some of it returned north again to be sold. The lack of success in stimulating woollen manufacture in the Borders, therefore, with the possible exception of Hawick, and to a lesser extent Galashiels, was much due to the fact that wool-masters found a satisfactory outlet for their products, probably even before much improvement had taken place in their wool.⁽²⁾ Even the coarser wools were manufactured to a great extent south of the Border. As early as 1738 it was stated that "great quantities of our worst

(1) D. Loch, *op. cit.*, pp. 44-52.

(2) A spinning school, specifically for 'the English trade' was sanctioned by the Board of Trustees in the 1730s. cf. *M.B.T.* vol. iii, p. 181.

tarred wool is used at Leeds" and in 1759 it was noted that the bulk of Roxburgh wool could not be manufactured locally "but must be carried to the English or north country markets".⁽¹⁾ Similarly Adam Smith wrote that "a great part of the wool of the southern counties of Scotland... after a long land passage (was) manufactured in Yorkshire".⁽²⁾ Naismith believed that the poorest of Scots wool was successfully manufactured at Kendal.⁽³⁾ Thus they continued the policy of exporting the raw product pursued so successfully in the 17th century, and were able to reap a reasonable return without having to encourage wholesale industrialisation. If Loch can be relied on it seems that the Scottish woollen towns relied a good deal on wool imported from England and Spain rather than Border tarred wool, except for the cheapest of woollens and for carpets. The Border proprietors were only able to sell to the English due to the superior skills of their workers who could fashion a decent web from poor wool and, latterly, because much of the wool suited the growing worsted trade.⁽⁴⁾

6. Textiles in Debate

Despite, or perhaps because of, the emphasis placed upon linen textiles in the 18th century there developed over the period a growing realisation that the stagnation of woollen manufacturing represented a wasting national asset, which if properly encouraged could be translated into a significant growth area. Opinion concerning the lines of economic development in Scotland after the

(1) S.R.O. Clerk of Penicuik Muns. 5901, 5926.

(2) Wealth of Nations (1913 ed.) vol.ii, pp. 281-2.

(3) J. Naismith, op. cit., p. 468.

(4) For the rise of the English worsted industry at this time see E. M. Sigsworth, Black Dyke Mills, chap. 1.

Union was largely coloured by the abortive nature of the attempts to found a viable fine-cloth sector in the late 17th century in spite of comprehensive state inducements, together with the concurrent decline in the coarse woollen trade overseas. This failure had been the result of a lack of skilled techniques, of capital, and strong English competition, aided by weak customs administration. In post-union Scotland there did not exist even a thin hedge of protection against English fine products, so that any attempt at competition was to court economic suicide. Thus a field of operations within the textile branch had to be found which was not subject to these pressures and in which Scotland had a comparative advantage over England. Already, even before 1707, linen manufacture had shown signs of growth and it was natural that this industry should replace woollens as an object of public encouragement in the post-union economy. The position was aptly summarised by Patrick Lindsey:

"The English have long been masters of the woollen trade. Their clothiers and piece-buyers are owners of stocks able to carry it on to keep their goods on hand until a market offers, to sell them at reasonable rates and upon a long time. England is sufficiently stocked, nay one may say over-stocked with the best of workmen in every branch of the woollen trade; and no country can succeed so as to be the great gainers by any manufacture until it is stocked with good manufacturers, that their wages may be brought low enough to enable them to undersell their neighbours in that commodity at a foreign market. Whereas we have no stocks equal to so great an undertaking, we must also be at the expense to bring from England workmen for several branches and to pay them higher wages than they get at home; and we cannot expect to get their best workmen. These and many other difficulties... render it absolutely impossible to succeed in the woollen trade - at least in broadcloth, druggets, fine kerseys, and the woollen goods of Norwich".(1)

Concluding that Scotland, therefore, could never become the seat of

(1) P. Lindsey, op. cit., p. 111.

the woollen trade Lindsey stressed the need for the establishment of a Scottish staple industry as the English had done.

"We have a staple manufacture of our own, at least we have the linen, in which the English deal not... and we should learn to discourage every trade that may interfere with or hinder the progress of our only staple".

Lindsey computed that English goods sold at 10% to 15% cheaper than Scottish but that Scots linen could be sold in London at a profit of 5% to 10%.⁽¹⁾

By inference Lindsey did not discount the possibility of progress in the coarse woollen sector where the strength of English competition was not so apparent. A little later Cockburn of Ormiston expressed his view that here much improvement could, and should, be made.

"If this large and extensive manufacture were cherished and encouraged, our inhabitants whose living and labour are cheaper than in England, might be trained to be as expert and perfect in it, and to sell as cheap if not cheaper than the English, to such a degree as it might be the source of the greatest riches in Scotland".

His practical proposals for stimulating the industry included the maintenance of proper regulation, selling for cash rather than credit in order to eke out the amount of available capital, and the conclusion of a reciprocal trading treaty with Spain and Portugal.⁽²⁾

The notable improvements in agriculture, which characterised the second half of the 18th century, particularly regarding sheep and wool production, coupled with the failure to establish a linen industry based on home supplies of flax, triggered off considerable discussion concerning the relative merits of linen and woollen

(1) P. Lindsey, op. cit., p. 111.

(2) Letter of Cockburn, quoted in Ms. 'Galashiels Weavers' Corporation, Presentation of Relics 1908'.

textiles in the Scottish economy. Amongst the literature on the subject the works of Sir James Anderson, David Loch and John Naismith rank as the most important. One of the earliest critiques of current economic policy, however, came from the ranks of the aristocracy in an anonymous pamphlet published in 1775.⁽¹⁾ The Peer argued that woollens not linens should be the object of public help because their manufacture accorded better with the resources of the country. In the first place the raw material was readily available whereas three-quarters of the flax necessary to prosecute the linen industry had of necessity to be imported. Even so, where wool was needed from overseas, Scotland was well enough endowed with water communications to avoid long land haulage, a fact that was denied to the English and which should operate as a cost advantage to Scotland. In the same way water power was more abundant in Scotland than south of the border. Proof that England need not inevitably overshadow her northern neighbour in cloth production consisted in the fact that much Scottish wool was manufactured in England and subsequently sold again in Scotland. "In order to gain a penny from the English the Scots lose sixpence". If manufacture was encouraged more energetically at home the nation as a whole would be enriched. To this end the upper-classes should give a lead, which previously had been lacking. Apart from being "generally dull, muddled with drink, and indolent" the Scottish country gentleman was careless regarding dress and fashion. "The men who dress the finest in London do dress the plainest in Edinburgh, as imagining themselves always in the country when they are not in the metropolis..." He did not mind what was offered to him by tradesmen and shopkeepers who

(1) "Eight Sets of Queries, etc..."

charged what they liked for foreign goods and assured the customer that Scottish products were "good for nothing". If concentration on the linen industry ceased and the woollen industry aided in its place, results would soon show that it could walk "without crutches". More attention should be paid to the proper rearing of sheep by the majority of farmers, following on the progress made by the Duke of Buccleuch, Lord Hopeton, Sir John Dalrymple, Lord Adam Gordon and others; funds should be made available for craftsmen to improve their techniques in England, and for the encouragement of sorters, washers, spinners and dyers, weavers and innovators. "Complete systems" of workmen should be imported from England. These desiderata would only come about as a result of a complete change of policy on the part of the Board of Trustees. They should give up the cossetting of the linen manufacture, based as it was on political considerations rather than economic sense; the Trustees were to be criticised for exposing English goods for sale in their cloth hall and for charging higher fees for the lodgement of cloth there than in the similar establishments in England. Alternatively, if the Board continued to "bestow all its favours upon the linen manufacture, merely because their predecessors did it, they will... resemble the very sheep which they neglect and which follow the bell-wedder without knowing why or where..."

It is almost axiomatic that pamphleteers state their case in somewhat subjective and hysterical terms, but although subsequent writings on the matter took on a more scientific appraisal of the situation in the textile field stressing its link with changing conditions in agriculture, many of the criticisms and recommendations made by the Peer were endorsed. To a greater or lesser extent Anderson, Loch, and Naismith concurred in the view that the woollen

industry had been neglected, was still neglected, and ought to be encouraged. In his "Observations on National Industry"⁽¹⁾ Anderson stressed the many problems confronting the establishment of a new industry in an under-developed country, especially in remote regions like the Highlands, where supervision of production was made difficult. When there was a dependence upon expensive imported raw materials this problem was thrown up in greater relief "for no manufacturer would willingly entrust (such) with inexperienced operators at a great distance from himself; and he cannot here, as in a more populous district, give only a little at a time, so as to be no great loser if it should not be altogether well done". This fact must always have acted as a "powerful bar" to the successful establishment of the linen manufacture in the north of Scotland. Anderson, too, underlined the failure to grow good flax in Scotland, thus subjecting the manufacturers to the mercy of the exporters who not only charged high prices but retained the better qualities for their own use and thereby ensured that only poor quality products could become the staple linens of Scotland. The soil of Scotland, on the other hand was too infertile for the successful cultivation of the crop, and thus to attempt it was to do a disservice to the general health of agriculture by taking out of cultivation land that could profitably be exploited for corn growing. Rather, Scotland lent herself to the prosecution of the woollen industry. In the Highlands rearers of sheep would be given added security, for, being able to sell both the carcass and the wool they would have "at least two chances to escape a bad market for one they have at present". In water-power Anderson believed Scotland to be better endowed than

(1) For what follows see vol.i, pp. 32-34, 60-71, 271, 322-3; vol.ii, pp. 288-90.

England. "I leave any one who has seen the limpid rapid rivulets of Scotland to compare them with the dead muddy waters of England, and tell which side the balance falls".

Unlike the pamphleteer of 1775 Anderson did not advocate a stimulation in the demand for superior cloths as a method of reviving and expanding the industry. His suggestions ran along well-worn paths. Coarse cloths should be made on a wider scale, for besides the fact that deficiencies in their manufacture could more easily be concealed, there existed a greater demand for "serviceable cloths" sold at reasonable prices. Skilled workmen should be imported into Scotland "by watching opportunities when any accidental stagnation of trade throws these out of employment..." Scots should train in England also. Experienced wool-sorters were required "without which no woollen manufacture could be properly established" and though the art was practised from the Solway to John O' Groats women should be taught to spin "with neatness and accuracy". The landowners had a part to play not by engaging directly in manufacturing themselves but "through the medium of others", while they provided the necessary economic framework in improving road, aiding the settlement of labour, regulating prices and holding markets.

The most forthright critic of the linen manufacture at this time was the merchant David Loch⁽¹⁾ whose hostility to it was only matched by his ardent advocacy of wool manufacturing. He differed from his contemporaries in that in addition to highlighting the prevailing weaknesses of the linen industry he showed, as a result of

(1) D. Loch, Essays on Trade passim for what follows.

his country-wide travels, that woollen cloth manufacture was practised over a large area of Scotland and already showed signs of emerging from its long period of stagnation. A policy of support for it would help it to blossom out. Loch was firmly convinced that his fellows had "all along been pursuing a phantom in the linen manufacture" while they had "totally disregarded or very much overlooked that real and substantial source of trade... the woollen". The chronic necessity to import flax proved the commercial impracticability of the trade to Loch, who possessed little regard for the quality of the domestic crop.⁽¹⁾ Consequently if Scotland was to continue to make linens she must forget all plans to sell quality goods, but concentrate on the inferior qualities. On the other hand, Loch perceived that the dawn in the woollen branch was not far away for whereas fine linens were permanently at a disadvantage due to the reliance upon, and the cost of, imported flax, it would gradually become possible to rival the English woollen industry due to the steady improvement in the quality of wool. On his circuit he had noticed broadcloths being made at several places, and had also witnessed a new outlet for Scottish wool manufacture in the growing scale of carpet manufacture. It would appear that Loch's tours and his subsequent informed writing may have had an effect on the policy of the Board of Trustees who sponsored him for the woollen industry began from that time to be the recipient of a greater degree of aid and interest.⁺

Apart from illustrating the search for a policy on textile development in Scotland, which had been a favourite topic of debate

(1) D. Loch, Essays on Trade, vol.ii, pp. 95-6.

⁺ This will be demonstrated in chapter 3.

since the early 17th century, the ideas of the contemporary writers expose two matters of significance. In the first place the suggestions made for the revivification of the woollen industry differed very little from the policy actually pursued by the Trustees, the accent being placed on coarse products and on the better preparation of the wool, along with efforts for improvements in finishing the woollen cloth. Secondly the comments of the writers underline the fact that very little progress had been made since the union both as regards the scale and the quality of output. The same things needed to be done as were required in the early decades of the century. Even Loch, though he took a more optimistic view of the state of the industry than his contemporaries, acknowledged that Scotland should not attempt to rival the English in the manufacture of superfines but should make the coarser cloths for home and general overseas demand. Even in the 1770s Loch realised that the Scottish woollen industry still had not properly learned to walk, leave alone run.

7. Wool Growing in the Eighteenth Century

Official returns regarding sheep density and wool production in Scotland at the beginning of the 18th century are not available, although a census of wool production, at least in the southernmost counties was taken in 1708.⁽¹⁾ Only the returns for Berwickshire are available.⁽²⁾ For the end of the century there are the estimates of the various contributors to the Statistical Account, tabulated

(1) S.R.O. Clerk of Penicuik Muns., 5897.

(2) S.R.O. Uncatalogued manuscripts.

conveniently by Sir John Sinclair.⁽¹⁾ At that time (1800) sheep in Scotland numbered about 2.9 million, and wool output was computed at 10.3 million lbs. (2)

There are in existence, however, a few unofficial figures relating to wool and sheep at the time of the Union among the papers of Douglas of Cavers.⁽³⁾ The contents of these documents are set out, with comparative figures for 1800 in table I.

Table I Estimated Number of Sheep, and Amount of Wool Produced in the Southern Wool Counties and in Scotland in c 1707 and c 1800

<u>County</u>	<u>Wool Production</u> <u>c 1707(000 stones*)</u>	<u>Wool Production</u> <u>c 1800(000 stones)</u>	<u>Sheep</u> <u>Pop'tion</u> <u>c 1707(000s)</u>	<u>Sheep</u> <u>Pop'tion</u> <u>c 1800(000s)</u>
Roxburgh	23	33	248	266
Selkirk	14	15	156	118
Peebles	13	14	139	112
Berwick	8	14	86	134
Scotland	110	439	1,210	2,900

Sources: Douglas of Cavers Papers in T.H.A.S. 1880; 'Tarred Wool Census of Scotland' (Berwickshire), 1708, S.R.O. unclassified documents. P. Deane and W. Cole, British Economic Growth 1688-1959, p. 194.

Note The sheep population figures for 1707 are based on an average fleece of about 2 lbs weight. cf. App. 1.

* i.e. stones of 24 lbs.

A further document drawn up by Douglas of Cavers and other Roxburgh proprietors gives figures for wool production in several of the southern counties in 1727. These are used in comparison with the other Scottish counties in 1800 in table I.

(1) Sir J. Sinclair, Appendix to the General Report of Scotland, (Edin. 1814), vol. ii, pp. 185-6.

(2) cf. P. Deane and W. Cole, British Economic Growth 1688-1959, p. 195.

(3) T.H.A.S. 1880.

Table II

Estimated Sheep Population of
Scottish Counties, 1727 and c 1800

<u>County</u>	<u>Estimated Sheep Pop'tion 1727(000s)</u>	<u>Estimated Sheep Pop'tion 1800(000s)</u>
Aberdeen	-	100
Argyle	-	278
Ayr	22	313
Banff	-	58
Berwick	86	134
Caithness	-	13
Clackmannan	-	8
Crossarty	-	6
Dumfries	71	200
Dunbarton	-	28
East Lothian (Had'ton)	-	41
Elgin (Moray)	-	37
Fife	-	25
Forfar (Angus)	-	60
Galloway (Wigton & Kirk)	155	204
Hebrides	-	104
Inverness	-	50
Kincardine	-	25
Kinross	-	6
Lanark	88	122
Midlothian (Edin.)	22	72
Nairn	-	12
Orkney & Shetland	-	108
Peebles	88	113
Perth	-	222
Renfrew	-	10
Ross-shire	-	45
Roxburgh	242	266
Selkirk	66	112
Stirling	11	38
Sutherland	-	37
West Lothian (Lin'gow)	-	4
/Stewartry of Annandale/	94	-

Sources: 1727 Douglas of Cavers Papers, T.H.A.S. 1880.
c 1800 Sir John Sinclair, General Report of Scotland,
chap. XIV app. 4, vol.ii, 1814, pp. 185-6.

There are several things indicated by the data. In the first place it appears that the number of sheep in Scotland increased by about 150% over the century while wool production increased by something in

the region of 400%, and indication of the degree of improvement achieved in sheep husbandry in the 18th century. The average weight of fleece over the same period increased from about 11 fleeces to the stone in 1707 to 7-8 to the stone by 1800.⁽¹⁾ Secondly, the traditional wool-producing counties of Roxburgh, Peebles and Selkirk, though they remained important, lost their dominant position in the country with the extension of sheep farming to other areas, notably the Highland. The number of sheep and the weight of wool in Peebles and Selkirk in 1800 was not appreciably different to that of 1707, though the condition of the sheep and the value of the wool were, of course, much superior. Thirdly, it would be wrong to assume a linear increase in sheep density and wool output over the century. The figures for Selkirk, Peebles and Berwick in 1727 are considerably less than those for 1707 indicating a steep decline in wool production after the union, which probably continued for most of the half-century thereafter. Literary sources suggest that this was indeed so, at least in those counties producing the poorer wool, which was less likely to find a large outlet in England. Clerk of Penicuik stated in 1730 that "since the union some of the gentlemen who live in these (southern) shires which produce wool have lost half of their estates and... are in a manner forfeited".⁽²⁾ He added in 1733 that "the coarse (wool) remained for the most part a burden on the proprietors".⁽³⁾ Loch claimed that in 1727 the price of Border wool had declined by

(1) See appendix 1b.

(2) T. C. Smout (ed.) op. cit., p. 205.

(3) S.R.O. Clerk of Penicuik Muns., 5897.

50% since the union. (1)

The computation of an adequate price series for 18th century wool in Scotland is complicated by two factors, - the lack of available data and secondly by the nature of wool itself. Wool is not a homogeneous commodity, varying not only from breed to breed, but from sheep to sheep and within the individual fleece itself. In addition, some wool was tarred, much was sold in a dirty condition. Some fleeces were sorted but in 18th century Scotland most domestically manufactured wool was sold unsorted. In these different states the price of wool varied. Thus the computation of an average price for wool even with the same breed is practically impossible. The scattered references to prices of different kinds and states of wool are nonetheless drawn together in table III, overleaf.

(1) T.H.A.S. 1880.

Table III Price of Various Types of Scottish Wool
c 1700-1778. (Current Prices)

<u>Year</u>	<u>Wool Type</u>	<u>Av.Price</u> <u>(per st.</u> <u>24 lbs)</u>	<u>Wool Type</u>	<u>Av.Price</u> <u>(per st.</u> <u>24 lbs)</u>	<u>Wool Type</u>	<u>Av.Price</u> <u>(per st.</u> <u>24 lbs)</u>
c 1700			Blackface	5s.	Best White	10s.-11s.
1720			"	4s.	" "	11s. 8d.
1743			"	3s. 4d.		
1750	Cheviot Laid ⁺	6s. 2d.				
1751	" "	7s. 0d.				
1752	" "	6s. 0d.				
1753	" "	5s. 6d.				
1754	" "	6s. 0d.				
1755	" "	6s. 0d.				
1756	" "	6s. 0d.				
1757	" "	6s. 0d.				
1758	" "	6s. 8d.				
1759	" "	8s. 4d.	Blackface	6s.-8s.	Best White	12s.-14s.
1760	" "	8s. 4d.				
1762	" "	5s. 3d.				
1764	" "	6s. 6d.				
1766	" "	7s. 0d.				
1768	" "	6s. 8d.				
1770	" "	6s. 8d.				
1772	" "	8s. 2d.				
1774	" "	7s. 9d.				
1776	" "	8s. 9d.				
1778	" "	6s.10d.	Blackface	8s.-9s.	Best White	15s.-21s.

⁺ i.e. tarred.

Sources: c 1700 S.P.P. XVII, (94).
 1720 Kalmeter, Journal of Travels in Scotland, 1720.
 1743 R.B.T., 1743.
 1759 (except Cheviot) Clerk of Penicuik Muns., 5926, S.R.O.
 1778 (except Cheviot) D. Loch, "Tour through etc.."
 1750-1778 (Cheviot Laid) Notebook of H. Brown,
Galashiels, 1828-29.

The paucity of the evidence and the impossibility of checking these sources with any other contemporary evidence makes possible only tentative conclusions. The data suggest that the price of coarse tarred wool did decline after the union and remained low probably till the 1750s. By the 1770s it had recovered to something like twice its value at the union (assuming constant prices) which was possibly a

reflection of the demand for coarse wool provided by the growing carpet industry. The series for cheviot laid wool shows prices in the 1750s at much the same level as coarse wool had been at the union but in the 1760s prices maintained a steady upward trend. As one might expect the finer wools do not appear from the data to have suffered any major price deterioration after 1707 although any significant increases seem to have been absent until the second half of the century. The price of this type of wool was already dropping on the international market before the union and the treaty may not have brought any new obstacles due to its ready sale to English manufacturers.

On the whole the steady increase in wool prices after the 1760s was more a response to the expanding English industry than to that of Scotland itself. The large increases in the price of finer wools at this time could hardly have been due to pressure by Scottish manufacturers for very few fine cloths were manufactured by them.

The difficulties noted in conjunction with the correct measurement of sheep density and the growth of wool production and prices repeat themselves when a quantitative assessment of cloth production is attempted. Unlike the linen industry no record was kept of the amount of stamped cloth sold. The only relevant statistics discovered thus far are the details of the amount of drawback on soap used by woollen manufacturers.⁽¹⁾ The use of this series is fraught with so many difficulties that it is impossible to draw any sensible deductions from them. (see app. II). But factors already

(1) S.R.O. Gross and Nett Produce of Excise for Scotland, vol. i, 1707-1807.

discussed in this chapter make it extremely unlikely that any measurable growth occurred in the cloth manufacturing sector of the Scottish economy for three generations after the union. Rather the evidence points to a recession, or, at best, stagnation in the industry for much of the period. Though most Scots may have continued to be dressed in the products of their own manufacture, it is doubtful whether many other people were (or desired to be). But the factor which made coarse cloth manufacture a buoyant element in the Scottish economy in the 17th century was not home demand but the export trade. This began to decline well before the union and all the evidence of the 18th century points to its non-recovery. Exports of woollen goods from Scottish ports in 1765 totalled £21,700 at official prices, £23,000 in 1774, and £22,900 in 1785.⁽¹⁾ Even if one assumes that all these goods were of Scottish origin, (which is most unlikely) the total is unimpressive. Taking the highest of these three sums, £23,000 and according a value of 4/- per ell of cloth (a figure well below the "slump" figures of the 1690s,⁽²⁾ and ignoring price changes) the export total represents only about 115,000 ells, - an amount considerably less than the annual exports of Aberdeen alone in the previous century.

(1) P.R.O. Customs 14.

(2) cf. T. C. Smout, Scottish Trade on the Eve of Union, pp. 235-7.

8. Conclusion

The Scottish woollen industry for much of the 18th century, therefore, remained in a backward and undeveloped condition. There was no planned attempt to begin again the manufacture of fine cloth. This branch had proved abortive even before 1707, and could not have survived the unabated winds of English competition after the Union. The overseas trade in coarse cloth, also in decline before 1707, never regained its previous size. Though most woollen exports went to the American colonies, this market failed to adequately replace the much diminished continental trade.⁽¹⁾ At home, wool-cloth manufacture continued to be a part-time occupation for the most part, of country people making for their own needs primarily but selling a little surplus in the local markets to travelling dealers. The Union did not lead to the death of this type of manufacture. But as long as woollen manufacture remained an adjunct of agriculture the acquisition of new skills or even the improvement of the old was unlikely. In its turn, until agriculture itself began to develop, creating rising incomes and a more buoyant home market, the economic development of the woollen industry was frustrated. As it was, most of the official encouragement available to industry in Scotland after the Union was channelled into the linen industry which promised better than woollens. Even pressure from within, evidenced in the 15th Article of the Treaty of Union in the petitions of the wool-masters, was not sustained. Gradually a wool-trade with England

(1) P.R.O. Customs 14. Exports of 'woollendries' from Scottish ports to North America totalled £17,464 in 1765, £19,925 in 1774, £18,130 in 1785 (official prices). Exports of 'woollendries' to Europe totalled £2,316 in 1765, £2,755 in 1774, £3,145 in 1785 (official prices). Both these sets of figures exclude carpets and hosiery.

replaced the old foreign trade although on a more limited scale at first. The demands of the southern wool-growers for help to grade their wool locally did not lead to growth in cloth manufacture. Rather the sorters and staplers, where they survived, were employed in preparing the wool more for the English woollen centres than those in Scotland. Indeed the insistence of the southern proprietors on the stationing of sorters in their own localities and not in the established cloth-making towns was in all probability prompted by the desire to adjust their raw material to the needs of the English market, which was more circumspect than those of the north sea countries had been. Thus even the inferior wools found a better outlet to the south than in Scotland itself. As late as the 1770s, therefore, there was little sign of the revival that was soon to take place in the manufacture of Scottish woollen cloth.

STATISTICS OF SHEEP DENSITYa. Reliability

I feel it is possible to place a good deal of reliance on the figures given by Douglas. It can be objected that they are of an unofficial nature and may be heavily biased in their owner's favour. Although it is possible that the figures were based on the returns for the wool census of 1708 which are now largely lost (the official returns for Berwickshire do not jar the imagination when viewed alongside the mss. ones), nonetheless the origin and method of composition of the data remain unknown. Also the figures for 1727 which formed the basis of a petition to the Board of Trustees differ from those of 1707 in some respects and were almost certainly derived from private sources for an official wool census was not taken at that time. However even if one puts the worst possible construction on them, and admits that Douglas was anxious to give a high total of wool output to Roxburgh and to understate that of the adjacent county in order to obtain a high proportion of the wool equivalent, the figures still bear examination.

- a) If the above were true the figure of 110,000 stones for Scottish wool production in c 1707 would be a conservative rather than an inflated figure. Douglas would have endeavoured to make the Roxburgh figure as high a proportion of total output as possible.
- b) This would make the growth in wool production over the century less than has been suggested but a four-fold increase in a century when fundamental changes in sheep husbandry and fleece weights are admitted does not seem abnormally high.

c) Though Douglas may have given loaded figures to the three counties to favour his own lands the trend indicated by the 1800 figures, arrived at, one supposes independently from any of these figures, is remarkably the same for Roxburgh, Selkirk and Peebles. In any case that Roxburgh was a dominant wool producing shire was not in dispute. It was stated in 1759 that the shire "grows the greatest quantity of wool of any county in Scotland... (and) produces one fifth part of the whole of the kingdom..."

If the c 1707 figures had been grossly distorted it would have tended to show up in the 1800 estimates by Roxburgh showing entirely different patterns from surrounding areas.

d) It is true that a considerable disparity is shown between some of the production figures for 1707 and those for 1727. But that a drop in production is likely to have occurred at the union has been shown in the text. Roxburgh does not appear to have declined a great deal, it is admitted, but firstly there was little arable land in much of the shire so a diversification of farming was difficult, and secondly at least in the dale-land areas the wool was of reasonable quality, and could be sold in England.

b. Method of Computation of Sheep Population, 1707 and 1727

The figures for the sheep population of the various shires at the above dates were achieved by multiplying the number of stones of wool produced by 11. This number was arrived at after studying the official returns for Berwickshire of the wool census of 1708. (S.R.O. misc. mss.) and represents the average weight of fleece for the

county at that time. Fleece weights varied from 10 to 16 to the stone of 24 lbs. but most were found to be between 10 and 12 fleeces to the stone. Since most of the wool of the southern shires at that time was of a similar inferior nature it is not unreasonable to regard the Berwickshire case as near typical. It is probable that average fleece weights in some south western areas were a little heavier, but this error is nullified by the known fact that many fleeces at least in Berwickshire were lighter by a good deal. Thus the estimate is conservative rather than exaggerated.

Appendix II A NOTE CONCERNING THE SOAP DRAWBACK
TO SCOTTISH WOOLLEN MANUFACTURERS
IN THE 18TH CENTURY

A prima facie examination of these returns contained in the excise account for Scotland suggests that they represent an important means of measuring growth in the industry. A closer study of the actual debenture certificates however reveals the existence of so many variables of an indeterminate nature that the source cannot be interpreted with any degree of precision. In the first place the rate of specific duty changed on several occasions, - initially a duty of 2d. per lb. (avoirdupois) was charged to importers of foreign soap and makers of British soap. (10 Anne, Cap 19, Par. 1.) Under section 25, para. 29, a drawback equivalent to one third of the duty paid was recoverable by manufacturers and finishers who made woollen goods.

In 1714 (12 Anne 2, 9, par. 1) the duty upon imported soap was increased by 1d. per lb. and that on British soap by $\frac{1}{2}$ d. per lb. The extra duty was repayable to manufacturers in toto, but not the original, which remained at one third. In 1774 following complaints that British soap had been sold to manufacturers as foreign soap "and such manufacturers having employed the soap so purchased in the manufacture of wool and linen have applied... for the allowance by the 10 and 12 Anne, and have claimed payment of the duties as for soap imported, whereby the revenue has been greatly lessened... it is enacted that there shall be paid to every such manufacturer... for all soap employed by him... whether such soap be imported into, or made in this kingdom, only, so much of the said duties as are now paid for soap made in the kingdom". Later, in 1782 (22 Geo. III,

Cap 68, par. 13) further additional duties were placed on British soap and a distinction was made between soft and hard varieties which carried a different rate of duty.

Thus increases in the amount of drawback between 1714 and 1774 could include an extension of dishonest practices as well as growth in the amount of soap employed. After 1782 allowance must needs be made for change in the rate of duty and the way it was imposed.

A second and equally real difficulty is the fact that an increase in the amount of soap used does not necessarily mean a similar increase in the amount of cloth made. It may only indicate a greater use of soap in the preparation of wool for manufacture (e.g. scouring dirty wool) or in the milling of it. Also, after 1782 a change in the type of soap used would tend to under or overstate the change in production due to the lower rate of duty payable on soft soap after that date.

Even more significant, it is impossible to differentiate in the debenture certificates between cloth manufacturers and hosiery firms, and where the two were carried on in one establishment it is not possible from the debentures to separate the two. Thus the expansion of hose manufacture would increase the amount of soap subject to drawback, but this may well have occurred at the expense of cloth making which in the same period may have experienced an absolute as well as relative decline.

Further problems of usage are the incomplete nature of the records - Aberdeen certificates make up the entire body of debentures for some years. Moreover the payment of drawback was irregular and did not correspond to any fixed period of time. Thus it is

impossible to correlate the individual rebates with the annual totals in the excise returns.

For these reasons the figures available have not been employed. The impression gained from an investigation of the debenture certificates is that the amount of drawback did increase steadily after the 1760s but insofar as this is a reflection of increased use by woollen manufacturers it is more applicable to the expansion of the Aberdeen stocking industry than to any growth in cloth-making.

Source of the legislative details:

John Swinton, "An Abridgement of the Public Statutes in Force and Use Relative to Scotland" vol.II, Edin. 1788, section on soap.

Appendix III

EXTRACTS FROM LAWS GOVERNING
THE MANUFACTURE OF WOOLLEN CLOTH
IN SCOTLAND IN THE 18TH CENTURY

Stat. 6 Geo. I. Cap 13. Par. 1

"Every piece of plading, and narrow and broad fingrums made in Scotland, shall be of the dimensions following, viz. Every piece of plading and narrow fingrums shall be made of the same sort of wool and yarn, and of equal work and fineness from one end to the other, and at least 28 inches in breadth; and every piece of broad fingrum shall be wrought of one entire sort of wool and yarn, and at least 38 inches in breadth".

Par. 3

The magistrates of the chief royal burghs were to appoint stamp-masters and make stamps for serges, plaidings, fingrums, and stockings. "... no stamp-master shall trade in such serges, etc., or stamp any such serges... which are not made of well-sorted yarn, equally wrought..." A fine of 20/- was imposed for non-observance of the above. In the burghs the Deans of Guild had sole authority in judging cases, and in the shires they plus the local heretors or proprietors of public fairs or markets had joint authority.

Par. 7

"The owners (of cloth) shall pay to the stamp-master, before the goods are marked, for every piece of serge, etc., ld..."

Stat. 10 Geo. I. Cap 18. Par. 1

"Every piece of rock serge made in Scotland, and white out of the loom, shall be 36 inches in breadth at least within the lift and 63 yards in length; and every half piece shall be proportional; and all such pieces and half-pieces shall be taken up in folds, or a soft roll, and shall not be stretched by hard rolling; and no white broomed or tarred wool shall be wrought or mixed together; but each piece shall be wrought up of the same sort without mixture; and shall be equally worked, and of the same fineness from one end to the other.." (Here follows similar instructions for other types of serge. All serges had to be made from scoured yarn. The same laws of stamping applied as above).

Source:

John Swinton, "An Abridgement of the Public Statutes in Force and Use Relative to Scotland" vol.II, Edin. 1788, section on "wool". S.R.O.

1. Introduction

In the previous two chapters it has been shown that while attempts were made over extensive periods of time to encourage the growth of woollen manufacturing in Scotland, shortage of capital, a dearth of skill, the poor quality of the raw materials and an unsuitable political and commercial framework prevented any real progress in the industry. By the third quarter of the 18th century woollen manufacturing in Scotland was in much the same state as had prevailed at the time of Union, and was probably smaller in real terms than it had been in the middle of the 17th century.

In the last quarter of the 18th century, however, there appeared unmistakable signs of growth in the industry. By 1830 the volume of goods manufactured had grown considerably, quality had also improved markedly, while the organisation of manufacturing had undergone radical alteration. Furthermore, by that date, the importance of the Border region of Scotland as the chief centre of cloth-making was firmly established. Important technical progress had also been made and the market had widened calling forth new forms of commercial organisation. In sum, by 1830 the Scottish woollen industry had at last become firmly established as a part of the industrial sector of the Scottish economy and was equipped to take full advantage of a favourable economic climate which was to bring fame and fortune to the manufacturers in the Victorian era.

This chapter is an attempt to trace these developments and to analyse the economic and social forces that were shaping them.

2. Growing Demand for Woollens

It is clear that towards the end of the 18th century the Board of Trustees for Manufactures in Scotland began to pay more attention to the state and needs of the woollen industry. The occasion of this change of emphasis, though not the whole cause, was the publication of David Loch's "Essays on Trade" in 1778. Loch revealed an industry that was far from dead but which was languishing from want of public attention. He showed that this sector of the economy was one where economic growth was both feasible and desirable. Perhaps happily for the woollen branch the especial favour which the Board of Trustees had shown for linen textiles was at this juncture on the wain. By 1780 it was clear to observers that the ambitious attempts to found a Scottish staple industry on fine linen manufacture had not succeeded. The chronic inability to grow fine flax and the consequent need to import large amounts of dressed flax and yarn, often at inflated prices, hampered the development of the industry. It was this fact which occasioned much of the contemporary criticism of the Board's policy in neglecting the woollen industry which suffered at that time no such drawback. On the other hand the manufacture of coarse linen goods was by now well-established in Scotland. Production expanded in a remarkable way. The output of coarse linens nearly doubled between 1775 and 1796, and by 1822 production stood at almost three times the 1775 level.⁽¹⁾ Thus the Board had now less need to aid the linen industry and was in a better position to allocate its meagre resources in a different direction. The cotton industry was a potential subject for the Board's attention but

(1) H. Hamilton, An Economic History of Scotland in the Eighteenth Century, p. 154.

the rapid advances made by it convinced the Trustees that the industry was not in need of financial encouragement. As early as 1788 the Board passed a regulation that no aid was to be given to the cotton industry because of its evident prosperity.⁽¹⁾ The way was clear, then, for the Trustees to adopt a more liberal policy towards the woollen industry, although it must be emphasised that signs of enterprise and growth were already in evidence. To this extent the increased subsidies to woollen manufacturers shown in Table i, below, were the response to growth rather than the cause of it. Though the amounts remained small, (on the whole about half the annual amounts received by wool farmers), they were larger than in earlier decades and rose steeply in the 1790s and during the early decades of the 19th century. This rise can partly be explained by wartime inflation but it also reflects the need for capital by entrepreneurs of humble origin wishing to expand their businesses or to enter the woollen trade in response to growing demand for woollen products.

The annual reports of the Board illustrate the Trustees' growing confidence in the industry at this time. The customary pessimism of earlier years began to give way to a cautious optimism. In 1784 the Board noted that the "methods of manufacturing the coarse wool have received considerable improvement" though progress was admitted to be slow.⁽²⁾ By 1791 there was every reason to hope that the manufacture of such wool would soon be an object of no small importance.⁽³⁾ The Trustees in 1814 reported with obvious satisfaction the manufacture of

(1) Minutes of the Board of Trustees, 1788, vol. 26, p. 270.

(2) Reports of the Board of Trustees, 1784, p. 9.

(3) Ibid., 1791, p. 185.

Table i AID GIVEN BY THE BOARD OF TRUSTEES IN
THE FORM OF GRANTS TO WOOLLEN
MANUFACTURERS 1775-1825

<u>Year</u>	<u>Amount</u> <u>(in'est £)</u>	<u>Index (1775=100)</u>
1775	257	100
1780	239	93
1785	263	102
1790	150	58
1795	209	81
1800	240	93
1805	500	195
1810	507	197
1815	615	239
1820	486	189
1825	466	181

Source: Annual Reports of the Board of Trustees for the
Encouragement of Manufactures. S.R.O.

'superfine' cloth in Aberdeenshire "equal in quality to any of the kind manufactured in Britain".⁽¹⁾ It was therefore in a context of expansion that the Board transferred more of its resources to the woollen industry. Rather than giving bounties on amounts of cloth produced, as in the middle decades of the 18th century, the Board reverted to something like its original policy of making grants towards the purchase of capital equipment. A large proportion of the aid went towards mechanising the carding and spinning processes. In addition entrepreneurs were given financial encouragement to travel to the English manufacturing districts, notably to the West Riding to learn more about their craft, especially the dyeing and finishing processes. Payments were also made for improvements in machine design and to encourage mobility among skilled workers. Furthermore prizes were offered for cloths displayed before the Board in Edinburgh.⁽²⁾

(1) Reports of the Board of Trustees, 1814, p. 291.

(2) Ibid., passim after 1780.

In addition to the records of the Board of Trustees the customs accounts relating to Scotland also indicate a steady rise in the demand for Scottish woollens towards the end of the 18th century. The use of these data, it must be admitted, bristles with difficulties.

They quite probably include goods of English origin that were exported through Scottish ports. Moreover customs accounts give no indication of the size of any increase in production because they take no account of increased home demand or of exports to England, though the latter was unlikely to be very significant.⁺ Nonetheless an increase in woollen exports from Scotland's ports is unlikely to be accounted for entirely by more English made goods using these channels. In particular, goods destined for continental Europe were least likely to be of English origin, ports in the south and east being more suitable for English manufacturers. Table ii below reveals a steady increase in all European woollen exports in the latter part of the 18th century and a quicker increase in the early years of the 19th, (due mainly to increased Irish trade). Total exports also grew strongly after 1800 almost fourfold between 1805 and 1815, reaching £77,000 in that year (at official prices). Though this figure was not maintained the general post-war level of woollen exports was about double that prevailing in pre-war years at around £50,000 annually, except in the boom year of 1825 when the total reached nearer £60,000.

⁺ There is no indication of woollen cloth, as opposed to yarn, being sold in England at this time in extant business records. It is possible that a little may have been sold in the northern counties of England.

Table ii

EXPORTS OF WOVEN WOOLLEN GOODS FROM SCOTTISH PORTS
TO (a) ALL MARKETS, AND (b) EUROPEAN MARKETS
INCLUDING IRELAND, 1765 TO 1815

<u>Year</u>	<u>Exports to all markets</u> <u>(£000s) official prices</u>	<u>Exports to European markets</u> <u>(£000s) official prices</u>
1765	21.7	2.3
1775	23.2	2.8
1785	22.9	3.1
1795	20.7	4.3
1805	20.2	4.4
1815	77.6	10.5

Source: P.R.O. Customs 14.

Note. The table includes carpets but excludes non-woven woollen products such as hosiery.

It is true that some of the increase in woollen exports in this period was due to the expansion of the carpet industry with which we are not concerned but a good deal of the increase was also the result of growing exports of cloths and 'woollendries' in general, especially kerseys and druggets.

A third potential indication of changes in the level of demand for woollens in this period is the price of raw wool. For much of the period, as for earlier years only fragmentary data are to be found concerning the market price of wool sold in Scotland. Table iii, however, is based on the price of cheviot, tarred wool paid by a Border woollen manufacturer between 1775 and 1796. Table iv shows changes in the price of cheviot wool as a whole between 1797 and 1827. Together, therefore, they afford an indication of the movement of wool prices over the period under discussion. The price of a stone of Border wool rose steadily after 1779 and more steeply in

Table iii

AVERAGE PRICE PER STONE, (24 lbs.) OF
CHEVIOT LAID WOOL 1775-96 (CURRENT PRICES)

<u>Year</u>	<u>Price per stone</u>	<u>Index 1775=100</u>	<u>Year</u>	<u>Price per stone</u>	<u>Index 1775=100</u>
1775	8s. 0d.	100	1786	9s. 9d.	122
1776	8s. 9d.	109	1787	11s. 8d.	146
1777	8s. 8d.	108	1788	12s. 0d.	150
1778	6s. 10d.	85	1789	12s. 6d.	156
1779	5s. 0d.	62	1790	13s. 6d.	168
1780	5s. 9d.	72	1791	14s. 6d.	181
1781	6s. 0d.	75	1792	17s. 0d.	225
1782	7s. 4d.	92	1793	14s. 6d.	181
1783	8s. 4d.	104	1794	14s. 0d.	175
1784	8s. 5d.	105	1795	18s. 2d.	227
1785	9s. 9d.	122	1796	23s. 4d.	291

Source: Account book of H. Brown, woollen manufacturer, Galashiels, 1828.

Table iv

AVERAGE PRICE PER STONE, (24 lbs.) OF
CHEVIOT WOOL, 1797-1827 (CURRENT PRICES)

<u>Year</u>	<u>Price per stone</u>	<u>Index 1797=100</u>	<u>Year</u>	<u>Price per stone</u>	<u>Index 1797=100</u>
1797	13s. 6d.	100	1813	25s. 0d.	185
1798	15s. 6d.	122	1814	32s. 0d.	237
1799	22s. 6d.	167	1815	36s. 0d.	267
1800	24s. 6d.	181	1816	19s. 0d.	141
1801	26s. 6d.	196	1817	21s. 0d.	155
1802	25s. 6d.	189	1818	35s. 0d.	259
1803	23s. 6d.	174	1819	23s. 0d.	170
1804	25s. 0d.	185	1820	20s. 0d.	148
1805	31s. 0d.	230	1821	17s. 0d.	126
1806	35s. 0d.	259	1822	14s. 0d.	104
1807	31s. 6d.	233	1823	12s. 0d.	89
1808	29s. 0d.	215	1824	12s. 6d.	93
1809	35s. 0d.	259	1825	19s. 6d.	132
1810	42s. 0d.	311	1826	11s. 9d.	87
1811	24s. 0d.	178	1827	12s. 0d.	89
1812	26s. 0d.	193			

Source: Report of the Committee on the British Wool Trade, B.P.P., 1828, viii, 515.

the second half of the 1790s reaching a temporary maximum in 1801. Thereafter prices fell till 1803 but moved sharply upward again to reach 42s. per stone in 1810, about three times the level of 1790. Until the boom of 1814-15 pulled them upward briefly wool prices fell again and the trend remained downward in the 1820s.

It is, of course, true that the exigencies of a major European war are reflected in these price movements. When war was undertaken in the 1790s the price of wool moved sharply upwards as imported varieties proved more difficult to obtain. Prices ceased to rise at the Peace of Amiens but reached record proportions during the Napoleonic blockade. On the resumption of peace the prices fell away, and continued to fall notwithstanding the undoubted increase in production in the 1820s, due to heavier imports. The price of wool in this period, therefore, is a function of changing supply conditions due to the interruption of trade with Germany and Iberia in particular, as well as of changing conditions of demand. It is our concern to establish the latter. It seems permissible in the circumstances to postulate that wool prices were being pushed upwards by an increased demand for woollen products. War not only interfered with wool imports; it also created a great demand for wool-clothing for the armed forces of a quality that would require the coarser varieties of wool. Also the home population was growing rapidly in the late 18th and early 19th centuries. Moreover the reversal of the upward trend in wool prices towards the end of the French wars was due to improvements in supply rather than any sustained loss of demand. The amount of foreign wool imported began to rise significantly reaching over 7m. lbs. by 1816.⁽¹⁾

(1) B. R. Mitchell & P. Deane, Abstract of British Historical Statistics, p. 192.

There is no need to doubt, therefore, that growing demand for woollens was influencing wool prices as well as changes on the supply side. What is still in doubt, however, is the extent to which the Scottish woollen manufacturers participated in this expansion. It seems reasonable to suppose that Border manufacturers were participating in this when the Board of Trustees were granting more financial aid and when woollen exports were rising. Conditions conducive to a general expansion of consumer demand do seem to have been present in Scotland at this time. Population rose from 1.2 millions in 1765 to 1.6 millions by 1801, and thence more quickly to reach 2.1 millions by 1821.(1) Moreover, it has been argued that national income was rising more quickly than population growth allowing greater income per head, though dearer food no doubt channelled some of this increase away from textiles. In general new opportunities in industry and commerce were presenting themselves, as was a desire to improve old methods of production and attitudes.(2) Significantly there does not appear to have been any lessening in the average Scotsman's propensity to consume the products of his own, rather than the English, woollen industry. Concerning the last decade of the 18th century Sir John Sinclair wrote later that very little 'foreign' cloth was worn. "The men were decently dressed for labour, or for appearing at Kirk or market, with well-dressed Scots cloth, commonly brown, grey or blue which they thought warmer and more comfortable than the best English superfine..."(3)

(1) J. Kidd (ed.), Scottish Population Statistics, S.H.S. 3rd Ser.44.

(2) H. Hamilton, 'Economic Growth in Scotland, 1720-1770', S.J.P.E. 1959, p. 87.

(3) Sir John Sinclair, Analysis of the Statistical Account of Scotland, 1831, App. 1, p. 18.

Nonetheless though wool price data is suggestive of growth in the Scottish branch of the industry it is not conclusive for much Border cheviot wool was consumed in the manufacturing districts of the West Riding. For further illumination of the state of Scottish manufacturing, therefore, a consideration of local developments from other sources is also necessary.

3. Investment and Expansion in the Borders, 1780-1825

The financial encouragement offered by the Board of Trustees to manufacturers of woollen goods renders the former's records an invaluable source for the chronology and character of investment during the formative period of the industry. Initially the increased demand for Scottish woollen products was met by an expansion of productive capacity within the confines of the existing technology, by adding further productive units such as single-thread spinning wheels and hand-loom.⁽¹⁾ Minor technological changes were not long delayed, however, in response to the demand for a wider range of products than formerly on the open market. Thus broad-loom were acquired for blanket manufacture and steel reeds introduced more capable of withstanding the punishment of the fly-shuttle than the traditional cane reed.⁽²⁾ The fly-shuttle itself was introduced to Galashiels in 1789.⁽³⁾ In addition greater attention was paid to the correct dyeing and finishing of cloth and apparatus for the use of dusters figured largely in the grants of the Trustees in the 1770s and 1780s. A common Woad vat was obtained by the people of

(1) cf. R.B.T. 1776, pp. 85-7; 1777, pp. 109-11; 1780, pp. 177-79, *inter alia*.

(2) Ibid., 1787, pp. 96-8.

(3) R. Hall, History of Galashiels, p. 286.

Galashiels in 1775 probably marking the beginnings of the "blue" cloth which became associated with the district in the ensuing years and which eventually superceded the old undyed "greys". John Thompson of Melrose, the Thomlin brothers of Hawick, James Sanderson of West Gordon, Robert Boyd of Stow and one Alexander Hopkirk, were other Border clothiers who purchased similar equipment about this time. In the 1790s finishing equipment figured prominently in the investments of Border and other manufacturers; raising machines, drying stoves and improved presses were installed and also some worsted-glossing machinery. Later, mechanical cropping shears were adopted.⁽¹⁾

The manufacturers were equally concerned, however, with the production of more cloth as well as with improved quality. Thus attention was focused upon the main hand-producing processes which controlled the level of yarn production. As the output of several wheels was required to keep a single loom in operation a bottleneck was soon created as demand increased. In turn the output of yarn was dependent on the level of cardings produced by hand-operated cards. It must be remembered that woollen manufacture was not yet a completely separate occupation from agriculture. Often hands capable of spinning were engaged in such work. Ure stated in 1794 that little wool or linen yarn-spinning was carried out in Roxburghshire because men and women and children were "under the present system of husbandry needed in the field from the beginning of spring until the harvest is over".⁽²⁾ Serious obstacles to increased production were overcome, therefore, by the mechanisation of the carding and spinning of wool. Manufacturers

(1) R.B.T. passim, after 1775.

(2) D. Ure, General View of the Agriculture of Roxburghshire, (1794) p. 70.

all over Scotland invested in scribbling, carding and spinning machinery. Baird introduced two carding engines to Aberdeen from Rochdale in 1789. By 1800 the number had grown to eighteen. By 1814 Haddon & Co.'s mill in that city was equipped with twenty steam-powered carding sets.⁽¹⁾ Spinning 'jennies' figure in the inventory of another Aberdeenshire firm, the Kilgours of Nethermundy, in 1788.⁽²⁾ But most progress took place in the Borders. 'Scribblers' (probably hand-operated) were obtained by four Galashiels clothiers in 1785 and the first water-driven carding machinery in the region was installed in Galashiels in 1791.⁽³⁾ 'Jennies' appeared in Galashiels and Jedburgh in 1790 and in Peebles the following year.⁽⁴⁾ The number of 'jennies' in Galashiels rose from two to eighteen between 1790 and 1797 and also increased in unit capacity.⁽⁵⁾ Considerable investment took place in buildings too, in Galashiels, six mills being founded between 1780 and 1805.⁽⁶⁾

The emphasis on the mechanisation of the basic productive processes led to the desired increase in productivity. In 1798 Dr. Douglas of Galashiels stated that the inhabitants were "enabled to make a much greater quantity of cloth on a shorter notice" than formerly while quality had been enhanced. Costs were also reduced; wool spun on the 'jenny' was reckoned at 4½d. per slip in 1798 as

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- (1) Sir John Sinclair, General View of Agriculture in Scotland, (1814) vol. iii, p. 294.
 (2) J. R. Allan (ed.), Crombies of Grandholm and Cothal 1805-1960, p.19.
 (3) R.B.T. 1785, 1791.
 (4) Ibid., 1790, 1791.
 (5) R. Douglas, Agricultural Report of Selkirk, (1798) pp. 329-31.
 (6) T. Craig-Brown, History of Selkirkshire, vol. i, pp. 575-6.

opposed to 6d. per slip on the hand wheel.⁽¹⁾ The trade of the town grew rapidly in response to the widening of the market. No longer were only local needs being met. By the early 19th century, though local customer-weaving remained important, goods were regularly sold in considerable quantities on the open market in Midlothian, Forfar, Fife, Kincardine, Aberdeen, Banff, Elgin, Perth and Stirling as well as in Edinburgh and Glasgow.⁽²⁾

The greater activity in the Border was noted by visitors to the area. The poet Wordsworth, passing through Galashiels in 1803 noted (without sympathy) the "townish bustle" and the "ugly stone houses" which were taking the place of the brown-roofed thatched cottages.⁽³⁾ In 1814 another observer found Galashiels "in a state of great animation, the woollen manufacturer being uncommonly busy" and noted the "rapid advancement" that had lately been achieved.⁽⁴⁾ The demand for weavers caused some to move from the Hawick neighbourhood into the area of Galashiels and it was considered in Melrose in the late 1790s that the current investments in the Galashiels woollen industry had been a major factor in the decline of the local linen industry as the woollen manufacturers were enabled to pay high wages to spinners - a luxury that the linen yarn trade could not bear.⁽⁵⁾ That production and productive capacity was expanded in Galashiels at the end of the 18th and early 19th centuries is not in doubt. The town was energetic and highly successful in competing

(1) R. Douglas, op. cit., pp. 329-31.

(2) R. Hall, op. cit., p. 311.

(3) D. Wordsworth, Recollections of a Tour Made in Scotland, A.D. 1803.

(4) R. Hall, op. cit., p. 90.

(5) R. Douglas, Agricultural Report of Roxburghshire, (1798) p. 212; Statistical Account of Scotland, vol. ix, p. 81n.

Table v

DISTRIBUTION OF PREMIUMS OF THE BOARD OF TRUSTEES FOR
WOOLLEN GOODS 1791-1829 SHOWING DOMINANCE OF GALASHIELS
CLOTHIERS IN PARTICULAR, AND THE BORDER AREA IN GENERAL

<u>Year</u>	<u>Total woollen premium</u> £	<u>Amount rec. by Galashiels</u> £	<u>Amount to Jedburgh</u> £	<u>Amount to Kelso</u> £	<u>Amount to other areas</u> £
1791	82	66	4	-	12
1792	59	59	-	-	-
1793	94	66	10	8	10
1794	107	89	10	8	-
1795	125	103	12	10	-
1796	100	79	-	10	11
1797	114	84	-	8	22
1798	109	83	-	14	12
1799	88	80	-	-	8
1800	112	104	-	-	8
1801	144	116	-	12	16
1802	95	76	-	-	19
1803	109	89	16	-	4
1804	96	88	8	-	-
1805	120	120	-	-	-
1806	106	106	-	-	-
1807	107	91	16	-	-
1808	146	130	16	-	-
1809	120	120	-	-	-
1810	162	112	-	-	45
1811	185	142	8	5	30
1812	112	104	-	-	8
1813	135	99	4	-	32
1814	112	25	8	5	74
1815	130	46	-	-	84
1816	125	85	-	-	40
1817	91	67	-	9	15
1818	70	18	-	12	40
1819	172	127	-	5	40
1820	99	99	-	-	-
1821	78	78	-	-	-
1822	105	105	-	-	-
1823	128	114	-	-	14
1824	125	108	-	-	7
1825	87	82	-	-	5
1826	98	70	-	-	28
1827	196	155	-	-	41
1828	249	233	-	-	16
1829	<u>252</u>	<u>185</u>	<u>-</u>	<u>-</u>	<u>67</u>
	4744	3803	112	106	708

Source: Reports of the Board of Trustees. S.R.O.

for the premiums offered by the Board of Trustees (Table v). Due, however, to a lack of official statistical information the extent of the growth of the woollen industry is difficult to gauge, but an attempt has been made in Table vi to draw together fragmentary estimates of the growth of capacity and trade in the town.

Table vi

GROWTH OF PRODUCTIVE CAPACITY
AND TRADE IN GALASHIELS, 1774-1825

<u>Year</u>	<u>No. of manufs</u>	<u>Home wool consumption (stones 24 lbs.)</u>	<u>No. of H/Looms</u>	<u>No. of 'Jennies'</u>	<u>No. of carding sets</u>	<u>Annual output (money value)</u>
1774	?	722	?	?	?	?
1778	10	2,200	30	?	?	?
1790	?	2,916	43	2	1	£5,450
1797	17	4,944	54	18	4	£9,870
1805	?	?	?	?	7	?
1818	?	?	?	?	12	?
1825	c35	22,000	175(1828)	?	?	£57,720

Sources: D. Loch, Tour Through the Manufacturing Districts etc..
Dr. Douglas, Agricultural Survey of Roxburghshire.
Statistical Account of Scotland, vol. ii, Galashiels.
J. H. Dawson, Abridged Statistical History of Scotland (1853).
Minutes of the Board of Trustees, vol. 35, p. 84.

It is impossible to verify the figures given in Table vi above but the increase in wool consumption by roughly 70% and in the value of output by about 80% between 1790 and 1797 is not out of line with other statements by Douglas or with the considerable investment in machinery and other plant that was taking place. Moreover, as the level of output was not large, increases of this nature were quite possible in an expanding market. The less than proportionate increase in the number of looms may be accounted for by the increased use made of existing looms, and by the manufacture of hosiery yarn in

the town both for sale, and on commission for Hawick merchants and manufacturers.⁽¹⁾ The origin of Dawson's figures for 1805 and 1818 is obscure but they are not out of line with current investment and the trend in wool prices at the time. It is likely that the number of carders given for 1818 was achieved well before that date. With further investment in the post-war years especially in mule-spinning machinery the trade of the town increased further and the output figure of £58,000 in 1825 was computed by an official of the Board of Trustees.⁺ There is no doubt therefore that a remarkable degree of expansion took place in Galashiels during this period.

Industrial expansion was also marked at this time in the burgh of Hawick, a considerably larger town than Galashiels and with an older commercial tradition. Set among wool-raising country that was not too remote from trunk communications to the south the burgh had increasingly traded in wool and other goods since the union. The pattern of development in Hawick was not exactly similar to Galashiels therefore. Though some woollen cloth was produced there after 1787 the trade of the town was concerned more with carpet and hose manufacture and increasingly with the woollen yarn trade.⁽²⁾ The making of woollen cloth only became a significant factor in the local economy after the French wars and more particularly in the 1830s.⁽³⁾ In the 1750s, at a time when little cloth was made for the open market in the Borders some local gentlemen in collaboration with a

(1) Statistical Account of Scotland, vol. ii, p. 309; Soap Drawback Certificates (uncatalogued) S.R.O.

⁺ 1825, it must be remembered, was a boom year, and this figure was not maintained.

(2) Stat. Acc. of Scotland, vol. viii, p. 529.

(3) W. Wilson, "Rise and Progress of Manufactures at Hawick", Trans. of the Nat. Assoc. for the Promotion of Social Science, 1863, p. 873.

Dunfermline weaver introduced to the burgh the manufacture of coarse carpets using, most probably, local Blackface wool.⁽¹⁾ Spinning was organised on a "putting out" basis, the women "receiving from the storehouse one stone at a time".⁽²⁾ The venture succeeded and expansion followed for it was estimated in 1798 that the Hawick carpet industry consumed over half of the total wool manufactured in the county.⁽³⁾ Though persisting at least into the 1820s the carpet industry declined in importance in the local economy as the hosiery trade expanded.⁽⁴⁾

The introduction of Frame-knitted hose to the town by Baillie Hardie in 1771 proved to be of fundamental importance for the commercial future of the burgh.⁽⁵⁾ The circumstances surrounding the growth of this branch of the woollen industry are obscure; Hardie may have been influenced by the success of the hosiery industry of Aberdeen and dreamed of ousting that city from its dominant position in hosiery in Scotland by adopting mechanical, rather than hand, knitting, thereby creating a large home market among the ordinary population by cheapening the means of production. There were still no frames in Aberdeen in 1794.⁽⁶⁾ Whatever his intentions Hardie did little but customer work and eventually relinquished the trade for family reasons about 1780 into the hands of John Nixon, who by 1793 was making quantities of lamb's wool, worsted, and cotton hose for the open market. In the last quarter of the 18th century the popularity of lamb's wool hose rather than linen or worsted hose placed Hawick in an increasingly favourable position with around 8,000 sheep bearing

(1) R. Wilson, History of Hawick, (1825) p. 252.

(2) Stat. Acc. of Scotland, vol. viii, p. 528.

(3) R. Douglas, Agric. Survey of Roxburgh and Selkirk, (1798), p. 213.

(4) R. Wilson, op. cit., p. 252.

(5) Stat. Acc. of Scotland, vol. viii, p. 529n.

(6) Scroll Minutes of the Board of Trustees, Feb. 12th, 1794.

short clothing wool in the immediate vicinity.⁽¹⁾ By 1825 such hose was one of the chief products of the town, every local business being regarded as subordinate to it.⁽²⁾

A second strand of the Hawick economy, and before 1830 an increasingly important one, was the manufacture of yarn for sale across the English border. The Hawick spinning school, established in the 1730s, was from its inception orientated to the needs of the English rather than local manufacturers. By the end of the century a sizeable trade seems to have existed organised by local merchants who put out wool among the women folk of the district for spinning and then despatched the yarn to Kendal, Boroughbridge and elsewhere in England. A proportion was also sent to Stirling for shalloon making.⁽³⁾

Yarn production for English hosiery and worsted manufacturers grew rapidly therefore from the latter part of the 18th century. By 1816 yarn production was in the order of 250,000 lbs. annually a figure which grew to about 1,000,000 lbs. by 1825.⁽⁴⁾ By the close of the French wars several large firms had emerged in the burgh. William Wilson for example made 50,000 pairs of worsted hose in 1813 and 47,000 lbs. of yarn.⁽⁵⁾

By contrast the manufacture of woollen cloth in Hawick during the period from 1780 to 1830 did not reach significant proportions. The number of looms in the burgh in 1828,-55, was little more than

(1) R. Wilson, op. cit., p. 255; Stat. Acc. of Scotland, vol. viii, p. 523.

(2) R. Wilson, op. cit., p. 255.

(3) Ibid.

(4) Pigot's New Commercial Dictionary of Scotland, p. 645.

(5) Soap Drawback Certificates (uncatalogued) S.R.O. Other manufacturers of some size were John Pringle, David Laing and William Nixon.

that noted by David Loch in the 1770s, though some former carpet looms may have been replaced by looms manufacturing woollen cloth.⁽¹⁾ The beginning of a regular trade in the latter, apart from the traditional customer-weaving, dates from the late 1780s when narrow cloth, dyed blue and no doubt similar to that made in Galashiels, was introduced and sold in the fishing districts of the north of Scotland.⁽²⁾ Originally about 120 stones was consumed (1787); this increased to nearly 500 stones in 1793 and about 1,300 stones at the turn of the century.⁽³⁾ It was only after the end of the French wars that Hawick manufacturers became seriously occupied with the woollen manufacturing branch consequent upon difficulties in the hosiery sector. In particular the manufacture of blankets "rapidly increased" and by 1825 engaged the attentions of several companies.⁽⁴⁾ Lighter goods in the form of flannels and narrow coarse plaiding were introduced and in the late 1820s further investment in carding and spinning machinery was capped by the introduction in 1829 of the first power-loom in Scotland by Messrs. Dickson and Laing.⁽⁵⁾ Nonetheless no premiums were obtained by Hawick manufacturers in the Board of Trustees' competitions; indeed they may not have competed, and cloth manufacture remained subordinate to the hose and yarn trade leaving Galashiels as the unrivalled producer of woollen piece-goods in the Borders, and possibly in Scotland, at that date.

Compared with the case of Galashiels it is difficult to obtain a coherent picture of the chronology of investment in wool manufacturing

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- (1) Report of the Assistant Hand-Loom Weavers Commissioners, B.P.P. 1839, XLII, 159.
 (2) Stat. Acc. of Scotland, vol. viii, p. 529.
 (3) Ibid.; R. Douglas, op. cit., p. 213.
 (4) R. Wilson, op. cit., p. 253.
 (5) W. Wilson, op. cit., p. 873; R.B.T. passim in 1820s; Border Magazine, vol. ii, no. 16, 1897, p. 1.

in Hawick. The records of the Board of Trustees are silent until 1816 when Waldie Pringle, Wilson and Co. received £150 towards the cost of carding machinery.⁽¹⁾ Thereafter follows another period of silence until 1826 when further aid was forthcoming.⁽²⁾ Some Hawick yarn may have been carded and spun on the machinery at Galashiels but it is not to be doubted that considerable investment in such machinery was made in Hawick from the 1790s onwards. A mill for making woollen carpet yarn was opened in the 1790s; Lynwood mills were founded in 1804 and those at Wilton in 1811 the owners of which previously had spun yarn on jennies (presumably driven by hand).⁽³⁾ According to Dawson there were 7 carding mills, 44 scribbling machines and 100 hand jennies in Hawick in 1816.⁽⁴⁾ Though it is possible that there was no water-powered machinery at this date it is unlikely in view of developments elsewhere in the neighbourhood. By 1825 8 carding mills were in existence and 20 full sets of carding machinery.⁽⁵⁾ When Dickson and Laing received aid from the Board of Trustees in 1828 their mills were described as already being "very extensive".⁽⁶⁾ At that date the annual value of trade in the burgh was computed at almost £88,000.⁽⁷⁾ Thus that most of the investment took place without the encouragement of the Board of Trustees seems certain; what is less certain are the reasons for the Hawick manufacturers' practice of not requesting the financial assistance of

(1) R.B.T. 1816, pp. 355-6.

(2) Ibid., 1826, pp. 223-4.

(3) R. Wilson, op. cit., p. 255; Border Magazine, vol.ii, no. 16, 1897, p. 1.

(4) J. H. Dawson, Abridged Statistical History of Scotland (1853), p.923.

(5) R. Wilson, op. cit., p. 267.

(6) Scroll Minutes of the Board of Trustees, June 17th, 1828.

(7) M.B.T. vol. 35, p. 84.

the Board when grants were being paid to other Border centres fairly liberally. It is possible that in view of the organised putting-out system in the district capital was not scarce. On the other hand it is more than possible that investment was sometimes frustrated by the obscurantist approach to industrialisation on the part of local landlords, anxious to safeguard their policies from spoliation and refusing to grant the necessary feus. In the 1820s for example the local historian, a burgh official, drew attention to the opportunity for mills in and around the town, and added

"for a few years some of these falls of water were not comeatable owing to a whim of the late Duke of Buccleuch. His Grace seemed to have forgotten that the manufacturers and their workers were the principal consumers of the produce of his land. Should the present Duke.... be disposed to grant feus of the water falls on his property in the vicinity of this town he might make it a principal seat of the woollen manufacture in Scotland.... The other principal proprietor of water-falls in this neighbourhood is Mr. Douglas of Cavers, whose property... is well adapted for the erection of mills of powerful magnitude. Were this gentleman to learn how essentially it might contribute to the manufacturing enterprise, and general prosperity of the district, by selling or feuing some corners of his estate his known generosity and public spirit are guarantees that these water-falls would not long be withheld, and that the price required would not be exorbitant..."

While Wilson had to prod the local Roxburghshire aristocracy as forcibly as etiquette permitted the gentry of Selkirkshire were setting a good example. "Mr. Scott of Gala and his father, whose views seem to have been equally sound and liberal, have raised a town (Galashiels) which is likely... to become the Leeds of Scotland..."(1)

Compared with the significant expansion of the manufacturing industry at Galashiels and Hawick at this time developments else-

(1) R. Wilson, op. cit., pp. 287-8.

where in the Borders were less noticeable. At Jedburgh the manufacture of woollen goods was not sufficiently important to warrant a mention in the Statistical Account of the burgh; local commerce was deemed to have declined as a result of the termination of the clandestine wool trade with England previously perpetrated there; thereafter the wranglings of local politics consumed most of the local energy.⁽¹⁾ Woollen manufacturing machinery however was introduced to the town about 1790 and thereafter premiums were gained from the Board of Trustees for certain types of woollen goods, (notably imitation welsh flannel), on numerous occasions.⁽²⁾ With Kelso, Jedburgh was recognised at the end of the 18th century as one of the principal centres for flannel and blanket manufacture in Scotland.⁽³⁾ The scale of manufacture, however, remained small compared with Galashiels there being listed only two cloth-makers in the burgh in 1825/6, and only twenty looms in 1828.⁽⁴⁾ Hosiery and woollen yarn spinning also spread to Jedburgh from Hawick and the output of some manufacturers was not inconsiderable. George Farquhar made over 25,000 pairs of stockings in 1814 and William Lockie nearly 17,000 pairs.⁽⁵⁾ Nonetheless, Jedburgh basically failed to become an industrial centre during this period. Fewer looms existed in the town in 1828 than had been present in the 1770s, despite advances in carding and spinning techniques. In the absence of any data on this point it may be surmised that, as with Selkirk, traditional burgh restrictions and a lack of feus may have hampered development.

(1) D. Loch, Tour Through etc., p. 47.

(2) See Table v above.

(3) R. Douglas, op. cit., pp. 212-3.

(4) Pigot's New Commercial Dictionary of Scotland, p. 649; B.P.P. 1839, XLII, 159.

(5) Stat. Acc. of Scotland, vol. viii, p. 529n; Soap Drawback Certificates, (uncatalogued) S.R.O.

Further east Kelso was the scene of some activity during this period manufacturing goods of linen and cotton as well as of wool and possessed 70 looms in 1828. Though a little machinery was installed the fertility of the local farmland channelled much capital into agriculture rather than into manufacturing industry. Little development occurred too in Selkirk burgh; severe burgh restrictions remained in force which hampered industrial development until the later 1830s. (1) A contemporary opined that the burgh had "never possessed any manufactory worth mentioning save the highly estimated one of manufacturing the fourth part of a member of Parliament". (2) Only one woollen manufacturer was listed in the town in 1825/6 who himself was a Galashiels clothier and employed only a handful of people, mainly in hosiery. (3) Melrose, formerly an important centre of linen-making ceased to be a manufacturing centre as mills were erected on Gala water and labour was attracted to the woollen branch by higher wages; also, the banks of the Tweed at Melrose were liable to flooding thus rendering them unsuitable for factory building. (4) Development remained light further up the Tweed valley. The large mill erected as a magnanimous gesture by Alexander Brodie at Innerleithen was not a commercial success though the woollen machinery was employed for a time by the local population and clothiers. (5)

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- (1) B.P.P. 1839, XLII, 159; Stat. Acc. of Scotland, vol. x, pp.586-7, 597; New Stat. Acc. of Scotland, vol. iii, p. 7.
- (2) James Hogg, 'Statistics of Selkirkshire', Trans. of the Highland and Agricultural Society of Scotland, 1832, vol. ix, p. 299.
- (3) Pigot's New Commercial Dictionary, p. 659.
- (4) Stat. Acc. of Scotland, vol. ix, p. 81n; A.B.M. Hague, Some Geographical Aspects of the Evolution of the Textile Industries of Scotland, Edin. Univ.(unpub.) M.Sc. thesis, 1965, p. 121.
- (5) Rev. C. Findlater, Agric. Survey of Peeblesshire, 1802, pp. 27, 218.

Already the dominance of the region by the Ballantyne family was foreshadowed in the firm of Ballantyne and Dobson operating in the village.⁽¹⁾ However by 1828 there were only 10 looms in use regularly in Innerleithen and some of these were employed on cottons.⁽²⁾ A similar situation prevailed in Peebles, though James Dickson made some woollen goods for the open market, and about 1829 began to manufacture tweeds.⁽³⁾ This area was remote, and well away from the main routes through the Borders to Edinburgh and the Forth and south into England, factors which played some part in the development of Galashiels and Hawick respectively. Langholm, on the other hand, seemed to be well-placed for the development of industry at this time. Here however, the cotton and thread industries maintained an outpost. The manufacture of woollen goods occupied only a minor position in local industry, which remained on a very small scale. In 1794 the local minister could complain that "considering all the advantages which Langholm enjoys, it is a matter of surprise, that a woollen manufacture, upon an extensive scale, has not long ago been established". Feuing may have been one hindrance; with the establishment of a little candlewick and check manufacture in the late 1790s the local patron was then described as "the liberal patron of industry". Woollens did not develop much beyond the "country-work" stage however, and by 1825/6 the main firms in the town were engaged in worsteds, stockings and thread-making.⁽⁴⁾

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- (1) Account book of David Ballantyne, Ballantyne Archives, Edin. Univ. Lib.
- (2) B.P.P. 1839, XLII, 159.
- (3) Border Advertiser, Dec. 9th, 1874.
- (4) Stat. Acc. of Scotland, vol. 13, pp. 587ff., vol. 21, pp. 245-6. Pigot's New Commercial Dictionary, p. 326.

4. The Economic Problems of the late 1820s

That this period from 1780 to about 1825 can be termed one when the foundations of the Scottish woollen industry were laid down is primarily due to the enterprise and energy portrayed by the two towns of Hawick and Galashiels in the Borders, and also to expansion in Aberdeenshire. After 1815, however, and particularly in the late 1820s factors were present which threatened to undermine the progress already made and which, in some cases, ended the activities of a number of woollen firms. The first of these factors was the progressive deterioration of cheviot wool as a result of continued attention given to producing superior mutton stock. Broadly such farming produced two results, an increase in the length of wool fibre causing the wool to become more suited to combing rather than to the carding process, and secondly the gradual deterioration in the overall quality of the wool. Neither of these developments was in the interest of the Scottish woollen manufacturer who made but a few worsted pieces. Yet at this date the technical deficiencies of manufacturing machinery were such that the type of wool found locally determined the nature of the productive process. The continued cross-breeding of different sheep gradually blurred the distinction between 'long-sheep' and 'short sheep' i.e. those bearing combing and those that produced clothing wool. This was not always in the best interest of the manufacturer who preferred on the whole to maintain a distinctiveness between manufacturing wools to facilitate sorting and blending.⁽¹⁾ In 1798 Dr. Douglas, minister of Galashiels and himself financially interested in the local woollen industry,

(1) E. S. Harrison (ed.), Scottish Woollens, p. 63.

commented that "the existence of... a breed not original and distinct, but an evident mixture of short and long-woolled sheep may give birth to many speculations concerning the advantages which may be obtained by crossing the Dishley and the Cheviot sheep... Increase of the fore-quarter, enlargement of the carcass and greater weight of wool are to be laid in balance with the deterioration of the wool not in quality but in usefulness, and consequently in value".⁽¹⁾ Of equal significance however, was the gradual reduction in the quality of cheviot wool as a whole. As early as the 1770s Anderson warned that "the views of Bakewell... were very different from those that ought to actuate the improvers in Scotland... the principal view... ought to be to obtain abundance of fine wool..."⁽²⁾ In 1830 however an Edinburgh merchant complained that the introduction of so many breeds of sheep into Scotland "although it may have increased the carcas has so much deteriorated the quality of the wool... that we now require to import the wool of other places, in order by mixing with our own, to make our Scotch wool fit for the manufacture of cloth... [Scotch wool] is deteriorated and will not now make cloth worth more than three shillings per yard..."⁽³⁾ English staplers by the late 1820s had ceased to purchase cheviot wools. By 1828 Spanish low qualities and Van Dieman's land wool already competed hotly with it. It was stated by an English stapler that "the fashion of the day [was once] for cheviot wool to wear as cloth... it is not the fashion now. It is not fit to make fine cloths".⁽⁴⁾

(1) R. Douglas, op. cit., p. 215.

(2) J. Anderson, Observations on Industry, (1777), vol. i, pp. 218-9.

(3) Alexander Craig to the Board of Trustees, Report of the Special Committee on Premiums for Woollen Cloth, 1830, p. 28.

(4) Report of the Committee on the British Wool Trade, B.P.P. 1828, VIII, 515.

If the Scottish woollen manufacturer had been able and willing to meet this challenge by adapting his production to goods made from imported finer wools from the continent the decline in popularity for cheviot-made products would have caused him no particular hardship. There were potent difficulties in the way of change, however, which effectively prevented for a period of some years any radical re-shaping of the industry. In the first place the industry was still in its infancy; only in recent years had Border clothiers begun to manufacture much for the open market; the level of technical skill had still been low when machinery had been introduced. The traditional products of the Borders had been coarse in quality and thus carding machinery suitably clothed for preparing coarse rather than fine wools had been installed. A change over on any scale to the finer foreign wools would have entailed adaptations to existing and fully operable plant which for the most part was beyond the resources of the owners.⁽¹⁾ Secondly many of the clothiers and operatives were not sufficiently skilled to produce fine goods capable of withstanding the competition of similar Yorkshire-made products. Furthermore the prejudice of the merchants through whom most of the goods were sold by the 1820s was, according to one manufacturer, sufficient to deter the industry from breaking too strongly with tradition. Organisational difficulties were present also; insomuch as many premises and machinery were jointly owned and communal purchasing was practised production changes would have had to be agreed to by several parties rather than by an individual or a pair of partners.⁽²⁾ For these

(1) cf. Memo Book of H. Brown, woollen manufacturer. Entries for April 11th, 1828; Feb. 14th, 1829.

(2) Ibid., e.g. April 11th, 1828.

reasons it was considered in Galashiels in 1828 that the manufacturers could not "adopt the making of fine cloth ... for a good number of years... fine cloth has been and may still be made to a small extent but it will be but small for a long time to come yet".⁽¹⁾ Some of the larger and more progressive firms did take steps to adapt their production to the changing conditions. As early as 1815 W. & D. Thompson of Galashiels installed wool cards finer than those currently in use in the town. Similar machinery was installed there by George Paterson and Jas Sime in 1823.⁽²⁾ Foreign wool was introduced in flannel manufacture in Hawick in 1826.⁽³⁾ J. & H. Brown of Galashiels experimented with imported wool including mohair in 1828 and obtained estimates for finer-toothed card clothing in 1829.⁽⁴⁾ In 1828 the clothiers of Galashiels and neighbourhood petitioned the House of Lords not to sanction an additional tax on imported wools, "a measure which must prove so hurtful to the general Interests and Prosperity of all classes of the Community".⁽⁵⁾ Imports of German wool through Scottish ports increased from £5,000 in 1815 to £11,000 in 1825 and total imports of wool from abroad from £17,200 to £23,000.⁽⁶⁾ Despite this trend towards the employment of finer foreign wool its use at this stage represented only a fraction of total wool consumption in the Scottish industry. Before 1825 stated a contemporary writer "it was a rare occurrence for the manufacturers of Galashiels, Hawick, Stirling and Clackmannonshire to use a single

(1) Memo Book of H. Brown, April 11th, 1828.

(2) 'Aid Given to Manufacturers', Board of Trustees Records, p. 22.

(3) D. Bremner, The Industries of Scotland, p. 196.

(4) Memo Book of H. Brown, May 6th, 1828; July 14th, Aug. 7th, 1829.

(5) Journals of the House of Lords, 9. Geo. IV, 60, p. 487.

(6) Customs 14/27, 37. P.R.O.

fleece of foreign wool..." But thereafter "the consumpt of foreign wool... rapidly increased to the diminution of the Scotch..."(1) Even so a contemporary manufacturer in Galashiels reckoned that only about 20,000 lbs. of such wool was used there in 1828/29, and although this was the largest quantity hitherto employed it represented only about 5% of the town's total wool consumption.(2) It must be concluded, therefore, that large-scale employment of foreign wool was not a feature of the Scottish woollen industry at this stage.

Yorkshire woollen manufacturers, on the other hand, resumed their pre-war policy of making extensive use of imported wool from the continent, due to the insufficiency of the home clip.(3) After 1815 imports of foreign wool were resumed in increasing quantities and reached about 30 million pounds (weight) by 1830. Scottish manufacturers soon began to feel severe competition on their own selling grounds from wool-dyed blues of the finer varieties. One remarked in 1828 that his English rivals were able to "send down cloths to Scotland... which entirely cut up the finer cloth made from cheviot wool".(4) As a result the demand for the traditional Galashiels blues fell off and prices slumped from 6s. 6d. per yard in 1818 to 4s. per yard in 1827. After a period of steady expansion on the basis of coarse blue and grey cloths, therefore, Scottish clothiers now found the bottom dropping out of their market, due to the price competitiveness and technical superiority of West Riding products. In view of the serious difficulties in the way of the Scottish manufacturer

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- (1) R. Boyd, "On the Woollen Manufactures obtained from the Wool of our Mountain Sheep". T.H.Ag.Soc., 1843-45, p. 135.
- (2) Memo Book of H. Brown, May 25th, 1829.
- (3) cf. H. Heaton, The Yorkshire Woollen and Worsted Industries (1965 ed.), pp. 325, 329; R. M. Hartwell, The Yorkshire Woollen and Worsted Industry 1800-1860, Oxford D.Phil. (unpub.) thesis, 1955, p. 24.
- (4) Memo Book of H. Brown, July 24th, 1828.

making changes in the nature of production, described above, he had little option but to concentrate on the lower qualities and hope that transport costs would protect this end of the market from competition from the south. It is something of a paradox that on the eve of becoming known to the world as a centre for the manufacture of the finest qualities of woollen cloth, the Border manufacturers took a step in the other direction. At a special meeting of the Galashiels Manufacturers' Association in 1829 the local clothiers (who still marketed their goods largely on a communal basis) "unanimously agreed that the articles made from cheviot wool viz stocking yarn, Plaidings, Bazes, Cloths, Flannels," should be made because "cheviot wool being of a coarse quality and little other kinds having ever been made, the machinery in the town is adapted for coarse wool only and... we cannot work fine to advantage..."⁽¹⁾ There was no intention to bring about a direct confrontation with Yorkshire-made goods, therefore. Rather the superior varieties were cut back. Out of a total stock of 152 pieces at the end of 1828 the Galashiels firm of J. & H. Brown had only 30 priced above 3s. per yard. The following February only 17 out of 218 were so priced.⁽²⁾ Even so in April that year one of the partners of this firm was forced to conclude that "low as the raw material is there is evidently a smaller profit upon our cloth than at any former period which cause may be traced to the low-priced English blues that comes into competition with ours..."⁽³⁾ Competition on price and quality was not the only factor affecting the level of prosperity in the industry in Scotland at this time, however. Fashion plays a large part in

(1) Memo Book of H. Brown, Feb. 14th, 1829.

(2) Ibid., Dec. 3rd, 1828; Feb. 19th, 1829.

(3) Ibid., April 8th, 1829.

the fortunes of textile firms. Those that survive are those which have a flexible production policy. It has been shown above that Scottish manufacturers at this stage were not able to bend their production to new conditions as readily as their Yorkshire rivals with their superior skills. The future growth market lay with finer lighter made products which favoured the worsted better than the woollen manufacturer. The dense, unimaginative, coarse piece-dyed cloths of the Scottish Borders were progressively no match for the more fashionable Yorkshire wool-dyed cloths made from foreign wools.

The difficulties experienced by the Border manufacturers at the end of the 1820s were also caused in part by the general economic depression that struck the economy at that time, as a result of poor harvests and a low level of investment following the collapse of the Argentinian boom in 1825.⁽¹⁾ Some manufacturers had bought in large stocks of wool at inflated prices in the conditions of expanding trade in that year. When the boom burst much remained on hand which had to be sold off in the form of cloth at very low prices.⁽²⁾ The unprofitable nature of trade in 1826-28 left the woollen clothiers in a weak position in the blight of 1829. In short the economic conditions affecting the Scottish woollen industry in the later 1820s demanded of the entrepreneurs a degree of commercial insight and financial stability which many of them lacked. Even J. H. Brown, a firm which successfully weathered the storm to found new mills in Selkirk in the mid-thirties admitted to having expanded output more "than we could reasonably expect to have sold to our ordinary

(1) S. G. Checkland, The Rise of Industrial Society in England, 1815-1885, p. 14.

(2) Memo Book of H. Brown, July 24th, 1828.

customers, for we never thought of seeking new ones..."⁽¹⁾ Many of the clothiers failed therefore in the crisis of 1829. "This town is in a most disastrous state" wrote Henry Brown, "at present no less a number than twenty individuals have failed in business since this time twelvemonth whose engagements will reach near £30,000!" He opined that "want of management" was largely to blame. The banks had encouraged unsound trading by adopting too liberal a credit policy with the local manufacturers many of whom had very small businesses. Some individuals had their name on up to 70 bills.⁽²⁾ Firms with larger reserves of liquid assets on the whole appear to have survived the crisis in Galashiels in 1829 and became the nucleus of the 'tweed' industry which emerged in the next decade.

The situation in Hawick in the 1820s is largely obscured through lack of evidence. Because cloth-making was not such a central part of the local economy as in Galashiels Hawick may well have suffered less. Hosiery, however, suffered declining fortunes in the post-war period, and a decisive turn towards cloth manufacture appears to have been made in 1817. The problems of the hosiers were attributed mainly to the obscurantism of the local stocking-makers, who not only demanded high wages but refused to adopt new methods of production, thus permitting the English to undersell them. Some blame was also placed on the Speenhamland system which was felt to amount in practice to a subsidy for the Derby and Leicester manufacturers.⁽³⁾

(1) Memo Book of H. Brown, Aug. 8th, 1829.

(2) Ibid., Dec. 25th, 1829.

(3) R. Wilson, op. cit., pp. 263-4; W. Wilson, op. cit., p. 873.

The crisis conditions of the late 1820s did not leave the north of Scotland unscathed. Due largely to the gloomy outlook the hitherto successful partnership of Crombie, Knowles & Co., of Cothal mills Aberdeenshire broke up; at the same time the Kilgours of Peterhead went bankrupt with liabilities of £30,000 on which only 2s. 10d. in the £ was paid causing waves of distress in the area due to many lowly people having invested their meagre savings in the firm, seemingly trusting it more than the banks. (1)

5. The Location of the Woollen Industry

The foregoing detailed discussion of local development reveals that the Scottish Border counties, particularly Roxburghshire and Selkirkshire, were the greatest areas of expansion of the woollen industry in this period. Progress in the manufacture of woollen goods was being made throughout most of the Scottish mainland but nowhere was the expansion as noticeable as in the southern counties. This is not to say that other districts were not important; significant advances were being made in the Hillfoots and in the city and neighbourhood of Aberdeen, areas which continue to be important. But the establishment of the Borders as the dominant location of the Scottish woollen industry had its origins in the period under discussion.

In the previous chapter it has been shown that the main manufacturing districts of Scotland for most of the 18th century were those where the production of woollen cloth for sale had been

(1) J. R. Allan, (ed.), Crombies of Grandholm, pp. 34-5.

long established. Stirling, Kilmarnock, Musselburgh and Haddington had been important centres in the 17th century, and their leadership continued until the latter years of the 18th century.* The factors operating in favour of these towns becoming centres of woollen manufacturing were largely geographical. They were marginally situated in relation to other forms of economic activity, such as coastal commerce, fishing, or to the linen trade so strongly based in the central belt. The woollen towns were also situated at the margin of the wool-producing districts in the upland zones affording easy access to raw material but at the same time not distant from the distributing and consuming centres of the Forth and Clyde valleys. Thus Haddington and Musselburgh for example were able to draw easily upon the wool-raising districts of Berwickshire and Roxburghshire and yet bordered the sea and stood hardby the large urban centre of Edinburgh. In the same way Kilmarnock drew on Ayrshire and Galloway wools and exported goods relatively easily from western ports or supplied the growing city of Glasgow with woollen products. The Hillfoots were similarly placed in relation to local wools and the markets of the Forth valley, Glasgow and Edinburgh. Moreover in these lowland districts, marginal to upland zones, the necessary labour force existed to meet the restricted needs of the 18th century Scottish domestic market. Agriculture or fishing provided the main occupations of the areas but the somewhat seasonal nature of these enabled earnings to be augmented by the subsidiary manufacture of cheap woollen articles for sale in the local markets as well as for personal use.

* Aberdeen, the chief town engaging in the woollen trade in the 17th century consequent to the loss of the profitable overseas trade in plaidings and fingsrams concentrated with success for much of the 18th century on hand manufactured high class hosiery and linen yarn and only revived the woollen cloth branch towards the end of the century.

The Border district did not to any significant extent share in this pattern in the first three quarters of the 18th century. Production in this remote region, far from labour supplies and the markets associated with the more urbanised central belt, was confined to local needs, that is, production for the families themselves, for private customers, and a little surplus for sale in the local market. The latter, by virtue of the sparse population of the whole region, was never significant. It has already been shown that this was a major factor in the failure to establish woollen manufacturing on a commercial scale in the region after 1707.

At the end of the 18th century this ancient location pattern in the woollen industry was undergoing change. In general the more traditional centres were declining, as centres of wool cloth production. Thus it was stated of Haddington in 1793 that "the number of weavers employed in [coarse wool manufacture] is greatly diminished of late". No woollen company any longer remained in the burgh.⁽¹⁾ By 1845 there was said to be "no manufactures in the town" though it remained an important wool market.⁽²⁾ By the 1790s the manufacture of stuffs at Musselburgh had long been superceded by cheap cotton articles. These in turn had succumbed to those manufactured in the western districts which were cheaper. Though one sizeable woollen mill survived in the town in the 1790s it was reported that "none very considerable" manufactures had been established "owing to their having been at all times carriers and furnishers of various kinds of provisions for the capital, which employed them in a manner more agreeable to them than the sedentary lives of manufacturers could have been". The weaving

(1) Stat. Acc. of Scotland, vol. vi, pp. 538-9.

(2) New Stat. Acc. of Scotland, vol.ii, pt. ii, p. 13.

of woollens, it seems, had always been supplemented by other kinds of employment in this, one of the main woollen towns for much of the 18th century. (1)

At Aberdeen plaidings and fingrams which formerly had composed the staple woollen articles of the city were considered to be "quite out" by the end of the century no more being exported than was sufficient for under-wrappers to the bales of stockings. (2) Similarly the nature of Kilmarnock's economy was changing; by 1792 carpets were increasing in importance made from local Ayrshire wool. Footwear manufacture was next in importance and the cotton industry was growing. Various types of woollen cloth, however, accounted for little more than 5% of the value of the burgh's trade. (3) Woollen cloth production also ceased to be significant in Edinburgh. In 1845 none was mentioned in connection with the city. Instead local producers concentrated on the fashionable trade that arose for decorated shawls and fancy linens. (4) At Stirling, though the manufacture of shalloons in 1793 was said to be "considerably revived" carpet making was growing, several companies having been started for that purpose. But increasing numbers of people were now being employed as out-workers for the Glasgow cotton manufacturers about 260 looms in the area being engaged on muslins. The lack of a good fall on the river Forth was stated to be the reason why mills had not been constructed for woollen manufacture in the town. (5)

(1) Stat. Acc. of Scotland, vol. xvi, pp. 13-14.

(2) Ibid., vol. xix, pp. 204, 208.

(3) Ibid., vol. ii, pp. 87-8.

(4) New Stat. Acc. of Scotland, vol. i, p. 54.

(5) Stat. Acc. of Scotland, vol. viii, pp. 283-4.

Thus the nature of the economies of those towns which previously had maintained a link, albeit often a feeble one, with woollen cloth production for much of the 18th century, was undergoing change and adjustment by the 1790s. Some towns switched from cloth to carpets; others adopted the opportunities offered by the cotton manufacturers. Elsewhere the former woollen workers became more engaged in supporting the needs of rapidly growing urban areas.

In contrast to developments in the central areas of Scotland the woollen industry in the Borders took firm root in the last quarter of the 18th century, and before long had established itself as the dominant region in Scotland for woollen cloth production.

The reasons for this are not immediately apparent. For example at the end of the 18th century the area was still very sparsely settled. Indeed the county populations of Roxburgh and Peebles actually declined between 1755 and 1801 (see table vii below). The increase in Selkirkshire was only modest. It would appear that agricultural reorganisation in these counties may have led to a migration of some potential industrial labour away from the area altogether. It is true that after the turn of the century the population of the Borders began to grow more rapidly, much of which was associated with the towns of the district. Galashiels grew from 1,018 persons in 1801 to 1,534 in 1831, and Hawick from 2,798 to 4,970 over the same period. All the same these increases are not dramatic and in the early 1830s there were only 150 weavers considered to be at work in the Galashiels district. (1)

(1) Census Returns, Scotland.

Table vii

POPULATION OF THE COUNTIES OF ROXBURGH,
SELKIRK AND PEEBLES 1755 TO 1831 (000s)

<u>County</u>	<u>1755</u>	<u>1801</u>	<u>1811</u>	<u>1821</u>	<u>1831</u>
Roxburgh	34.7	33.7	37.2	40.9	43.6
Selkirk	4.0	5.3	5.8	6.6	6.8
Peebles	8.9	8.7	9.9	10.0	10.6

Source: J. Kydd (ed.) Scottish Population Statistics.
S.H.S. 3rd Ser., 44.

Secondly the Borders were not favourably placed in relation to fuel supplies. Even before the coming of steam power the manufacturers required considerable quantities of coal. Large amounts of hot water were needed in the dyeing of the cloth; coal fired stoves were used to dry it. The small partnership of J. & H. Brown of Galashiels, with an annual turnover of only about £1,300 in 1828 consumed almost a ton of coal per week. (1) The coal consumption at Hawick in the 1820s was considered to be "almost incredible for a place so limited in size". Coal supplies had to be transported by road to Galashiels from Middleton, a distance in excess of twenty miles. Jedburgh, obtaining coal from the Lothians was considered to be at a considerable disadvantage because of this from a manufacturing point of view. The nearest coal supplies to Hawick were thirty miles distant. Border woollen clothiers were therefore under a considerable cost disadvantage. Prices were often higher than those ruling in the Lothians. In the 1820s Hawick coal prices were at times double those ruling nearer to the pits. Coal prices in Jedburgh were kept down somewhat by the carriers obtaining a return load of grain to Dalkeith. Moreover supplies were irregular, due partly to the bad state of the roads in

(1) Memo Book of H. Brown.

winter and also to the seasonal nature of the carrying trade the carters spending some of the year tending their land, and driving limes for the farmers.⁽¹⁾

The distance of the Border manufacturing districts from coal supplies was, indeed, accentuated by the poor state of communications. Galashiels was not on the main route to Edinburgh which was constructed in the mid-18th century via Selkirk, Clovenfords, and Stow. No road connection with Selkirk existed till 1833. The Hawick-Selkirk road, the main north to south route through the Borders was described as "execrable" in 1826; to another contemporary the line of it appeared "palpably objectionable" and that its designers had "intended to punish the horse species for some original transgression". The bad state of communications in this area had enabled Hawick traders to appeal successfully against trade tax. These local conditions no doubt inspired Sir Walter Scott to support a proposal to construct a tram road between Dalkeith and St. Boswells in 1821, with a depot at Galashiels, for the carriage of coal and limes. The Edinburgh road from that place was so inferior that it necessitated the carriers on occasion to walk their ponies up the bed of the Gala Water instead.⁽²⁾ It is true that many road improvements were accomplished in the Borders in the 18th century especially in Roxburghshire, but they had little influence on the main manufacturing districts, and therefore

(1) R. Wilson, op. cit., p. 150; Stat. Acc. of Scotland, vol. i, p. 16, vol. ii, pp. 315-6; Memo Book of H. Brown, passim for coal prices.

(2) R. Hall, op. cit., pp. 61 and 100; New Stat. Acc. of Scotland, vol. iii, p. 10; Anon, Border Tour, (Edin.) 1826, p. 146; R. Wilson, op. cit., p. 11; T.H.A.S., 1960, p. 25.

served little to make the region an attractive one due to the high carriage costs and the inaccessibility of the market. (1)

Not only was the Border region isolated geographically, it was also remote psychologically. There existed in the immediate vicinity of the manufacturing towns, no other pace-setting industries which could act as a spur to change and investment, as, for example, existed among the West Riding manufacturers. (2) In some places, it is true, there was a degree of over-lapping between woollens and linen and cottons. But where this did occur - at Langholm, Peebles, and Melrose, these alternative industries were either themselves in decline, or were not large enough to exert much influence on woollens. In fact, the Borders developed as a "single industry" area, and little attempt was made to found other spheres of employment to encourage an influx of labour from elsewhere.

Nonetheless, despite these apparent disadvantages the Border counties did possess many of the supply factors conducive to the emergence of the region as a significant woollen manufacturing area. The district possessed an abundance of suitable water for power and for the scouring, milling and dyeing processes. Adequate falls of water could be found on most of the rivers to encourage the erection of water-driven scribbling and spinning mills. Moreover the settlement pattern of the region had already responded to the presence of water. The fulling mills had been located of course on the rivers and villages had tended to grow up around them. Galashiels, for example, had been a fulling centre since the middle ages and had three

(1) R. Douglas, Agricultural Survey of Roxburgh and Selkirk, p. 200.

(2) cf. E. M. Sigsworth, Black Dyke Mills, p. 16.

waulkmills by the end of the 18th century. The limited amount of labour that the Borders did possess, therefore, tended to be localised in those parts well suited for the growth of factory industry.

Agricultural advances in Scotland in the 18th century, especially in the southern counties, by making available to manufacturers large quantities of improved wool, helped to overcome one of the oldest drawbacks to the successful establishment of a woollen industry in the area. An ignorance of, or unwillingness to promote sound breeding, lack of good pasture land, deficiencies of fodder for winter feeding and harmful traditions such as daubing sheep with tar, had ensured that wool appeared on the market in a coarse and dirty condition that made it unfit for any but the most inferior products. Also the loose, informal organisation of the industry, with the family unit predominant, precluded any change to better, imported varieties, though this did occur to some extent in larger towns. The relationship between the growth of the Scottish Border woollen industry and contemporary changes in agriculture cannot be too firmly stressed.

Border farmers and land owners figured prominently in encouraging improved methods of sheep husbandry and the introduction of better breeds. No development could have been more propitious for the nascent local industry than the introduction over a wide area of the cheviot sheep. The cheviot in time dislodged the traditional Blackface from the Border uplands, except in the highest districts, and eventually penetrated the highlands.⁽¹⁾ The Blackface breed possessed a fleece of very coarse and open fibres, long in the staple and containing a large proportion of 'dead' hairs and kemp

(1) cf. J. E. Handley, The Agricultural Revolution in Scotland.

which militated against its successful manufacture. Thus only the coarsest of homespuns, rough carpets, and worsted hose from the longer fibres were manufactured from it, whilst much was sold to English clothiers either in the raw or as yarn. The wool of the Blackface proved capable of little improvement, but eventually the crossing of the Blackface ewe with the Border Leicester, did lead to an ideal type of wool for "tweed" cloths later in the 19th century from which the famous crossbred qualities arose. (1)

It was the cheviot sheep, however, which was to have a marked effect upon the Scottish and English woollen industries. Its hardiness was conducive to its thriving on the lower grounds of the Southern Uplands while it carried a heavy fleece releasing large quantities of wool for manufacturing purposes. Moreover, the fibres were short and even and of a finer texture than the Blackface, while the fleece was bright and lustrous and possessed good felting properties suitable for the currently fashionable dense, heavy, cloths. The shortness of the fibres made the wool suitable for carding, and thus for the woollen more than the worsted process of manufacture, making it relevant to the manufacturing skills of large numbers of the population in England and Scotland.

The excellence of the breed and its large economic potential soon led to its ousting the Blackface from the Border pasture lands. In 1791 it was reported that "so much convinced are the farmers of Ettrick Forest, of Tweeddale and Liddesdale of their superior excellence that they are now converting their flocks as quickly as

(1) T. D. Franklin, History of Scottish Farming, p. 142; Scotch Tweed, vol. i, p. 17.

possible into the Cheviot breed".⁽¹⁾ By 1828 Lord Napier of Ettrick stated that the Blackface sheep had been driven from the Southern Uplands, and Southey could remark in 1851 that "the change most remarkable in Scotland is the decrease of the Blackfaced sheep accompanied by the substitution of the cheviot".⁽²⁾ Moreover experiments were made to improve the cheviot itself notably by crossing the ewe with the Leicester ram, the result being the Border Leicester possessing a sound fleece, finer and shorter in the staple than the midland ram though lacking some of the lustre of the cheviot itself. Also the New Leicester or Dishley breed found some acceptance on the lower grounds, particularly in Berwickshire, where its soft heavy fleece supplied wool for the hosiery industry.⁽³⁾

Scottish woollen manufacturers and hosiers benefited greatly from these developments, obtaining their supplies almost exclusively from local sources, little foreign wool being used by them before 1830. Surviving business records of this period illustrate the wool purchasing habits of the local manufacturers. David Ballantyne of Innerleithen purchased most of his wool from nearby farms in the late 1820s;⁽⁴⁾ J. & H. Brown of Galashiels obtained their wool in the same way buying often from the same farmers a year's supply at "wool time".⁽⁵⁾ Ure stated in 1794 that the local woollen manufacturers consumed "a great quantity of wool, chiefly the

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- (1) Sir John Sinclair, Plan for Improvement of British Wool, (1791), p. 4.
 (2) Report of the Committee of the British Wool Trade, B.P.P. 1828, VIII, 515. R. M. Hartwell, op. cit., p. 164.
 (3) J. E. Handley, op. cit., pp. 143-4; 241-2.
 (4) Account Book, in Ballantyne Archives, Edin. Univ. Lib.
 (5) Memo Book of H. Brown.

product of the store-farms in the neighbourhood".⁽¹⁾ This constituted no departure from custom but by the last quarter of the 18th century the wool offered for sale in this way was of a higher quality and marketed in a superior condition than formerly. As a consequence the standard of woollen goods improved and product differentiation increased. Thus the founding of the modern Scottish woollen industry is inextricably, though not exclusively, associated with the contemporary changes in agriculture; the availability of improved wool encouraged investment in woollen manufacture and helped the industry to achieve an initial quality "breakthrough" which in the shorter term enabled part of the growing demand for woollen clothing to be met by home (i.e. Scottish) producers, and which in the longer term may be viewed as the harbinger of the second quality "breakthrough" associated with the foundation of the "Tweed" industry in the 1830s.

While it is true, however, that the raising in the Borders of large quantities of good clothing wools was conducive to the expansion of local woollen manufacture, it would be erroneous to conclude that the main impetus to wool-growing in Scotland at this time emanated from that quarter. Rather, the real spur came from other sources; the growing demand for mutton (in relation to which wool was merely a prolific and profitable by-product) and secondly, from the demands of the much larger Yorkshire woollen industry. It has already been noted that subsequent to the Union a regular trade in wool grew up between England and Scotland which grew in proportion as the century proceeded. Yorkshire dominance continued into the 1820s. Her staplers were the main purchasers and price leaders at the great

(1) D. Ure, General View of the Agriculture of Roxburghshire, (1794) p. 70.

Border wool sales despite the growth of local woollen manufacturing. "At Melrose fair yesterday" wrote a Galashiels manufacturer in 1828, "there was almost no wool sold... it is somewhat remarkable that we have not heard of any Englishman that have bought a single parcel yet, who but never opened the market till this year".⁽¹⁾ The same year Lord Napier of Ettrick emphasised the dependence of the Scottish grower on the English manufacturer when he claimed that in the post-war years "when the Yorkshire wool-staplers came in one would give an offer which was not accepted; next came another who underbid him; and next came another who underbid him and therefore we were generally very glad to get what the first man bid..."⁽²⁾ Nonetheless, despite the fact that the supply of wool in the Borders was largely orientated towards, and dominated by English needs⁺ which were by no means always in the interest of the Scottish manufacturer, the provision of better quality clothing wools in increasing quantities at this time redounded to the overall benefit of the local woollen industry. The presence of local wool supplies is not a sufficient reason in itself to explain the success of woollen manufacture in the area, however, despite its obvious importance. The weaving of woollen cloth has traditionally been a ubiquitous practice both in Scotland and England, and the lack of local wool supplies has not always precluded its successful manufacture. The sizeable trade in woollen

(1) Memo Book of H. Brown, Aug. 13th, 1828.

(2) Report of the Committee on the British Wool Trade, B.P.P. 1828, VIII, 515.

⁺ So acceptable was cheviot wool in England that it was sometimes used to settle debts. "Having no money in this country to remit you for the cards, we have shipped you... Three sheets of Cheviot wool... which we hope you will soon get converted in cash..."

Alex. Johnston to W. Smith, Ossett, 1813.
Newmill, Elgin, Letter Bk. 1. p. 59.

cloth associated with Aberdeen in the 17th century was mainly founded on wool brought from the south of Scotland, or even England. English manufacturers bought wool from the extremities of both kingdoms, not confining themselves to the finer and thus more valuable varieties. Wool being valuable in relation to weight and bulk is able to bear considerable freight costs making the industry "foot-loose" in character.⁽¹⁾ Later in the 19th century when the Borders imported the vast majority of the wool consumed the established location pattern was in no way affected. "Being near the raw material is of very little consequence..." wrote a northern manufacturer at that time.⁽²⁾ Notwithstanding, the use of local Scotch wool was of fundamental importance to the Scottish industry and in the 1830s it was the specific characteristics of cheviot wool that gave to the industry its distinctive 'tweed' products.

A further essential factor for the successful establishment of woollen manufacture in the Borders was the provision of an adequate supply of skilled labour in the area. It has been observed that a deficiency of this factor was another of the prime reasons for the backwardness of the area in the previous decades of the 18th century. However by the last quarter of the century certain changes were occurring in the conditions of supply of labour which benefited the woollen industry. The concurrent re-organisation of agriculture was tending to undermine the ancient dualism of the rural economy. In the sheep-rearing districts in particular there was a tendency for small tenants to be displaced by enclosures despite the resettlement

(1) cf. F. J. Glover, "The Rise of the Heavy Woollen Trade in the West Riding of Yorkshire in the 19th C.", Business History, vol. iv, no. 1, p. 2.

(2) James Johnston to George Gunn, Feb. 10th, 1849. Letter Books, Newmill, Elgin.

of some in the extended cultivated area.⁽¹⁾ In the upland grazing areas such as Selkirkshire and parts of Roxburgh the nature of the terrain did not permit of much re-allotment. Some tenants, therefore, moved to villages where advantage could be taken of their alternative skills of spinning and weaving.⁽²⁾ Thus agricultural labour and woollen manufacture, albeit slowly, "became more distinct and a complete separation [eventually] took place between them".⁽³⁾ The gradual evolution of a permanent work-force in the woollen industry was a fundamental pre-requisite for expansion of production and a higher standard of product. The increase in the number of workers should not be overstressed, however. The county population totals and those of the towns and villages do not indicate any marked increase in the labour supply.⁽⁴⁾ Rather, better use was made of the existing labour force. Existing capacity was more fully used made increasingly possible by the agricultural changes discussed above. The decline of the linen industry in the area in favour of woollens released workers, particularly in the neighbourhood of Melrose for wool-cloth manufacture. Perhaps more important, investment in power-driven teasing, carding and spinning machinery allowed considerable increases in production without a proportionate expansion in the labour supply.⁽⁵⁾ Even so labour supply was at times a problem; present day difficulties in this regard are not new.⁽⁶⁾ Weaving remained a seasonal trade when production was very largely geared to

(1) H. Hamilton, An Economic History of Scotland in the 18th C., p.93.

(2) Ibid.

(3) Sir John Sinclair, Analysis of the Stat. Acc. of Scotland (1831), Appendix 1, p. 19.

(4) See table vii above.

(5) R. Douglas, op. cit., pp. 329-31.

(6) Memo Book of H. Brown, Sept. 29th, 1828.

heavy cloths for men's wear. Workers would initially be reluctant to commit themselves wholly to the industry when opportunity for agricultural work still existed. At harvest time the chance of supplementary earnings would not often go begging. The shortage of wool workers for these reasons in Roxburghshire in the 1790s has been noted above.⁽¹⁾ As output grew, however, and production became more centralised full-time employment could often be given at good wages as manufacturers stocked up with goods well ahead of their selling time.

The emergence of the Border counties as the foremost woollen manufacturing area in Scotland presupposes an adequate supply of men with entrepreneurial talent, who were willing to apply it in the direction of woollen manufacturing. Here the nature of the terrain was not without importance. The large physiographic unit termed the Tweed basin is surrounded on all sides by upland areas often in excess of 1,000 ft. This land is characterised by low soil fertility and high rainfall; little agricultural enhancement was possible in contrast to lower parts of the valley. The same was true of upper Teviotdale where Hawick is situated. Sheep farming continued to be the full expression of the potential of agriculture in these higher regions. In short, therefore, the inhabitants of the villages naturally turned to woollen manufacture in the absence of any viable alternative. Contrariwise, Kelso, which had been associated with woollen cloth making in the 18th century did not expand this aspect of its economy to the same degree as other Border places, despite the presence of wool nearby, as a more attractive investment for local capital presented itself in the fertile agricultural land surrounding.

(1) See page 93.

Woollen manufacturing was at first a marginal occupation practised in areas where little other economic activity was possible.⁽¹⁾ It is in this context that the region's supply of entrepreneurs must be viewed. That they proved to be successful ones, however cannot be explained simply in terms of the economic and geographical stimuli by which they were surrounded. Non-economic factors played an important role. There is evidence, for example, that qualities of energy and bold enterprise were to be found among the Border population long accustomed to living at the margin of subsistence. David Loch found the inhabitants of Hawick in the 1770s very industrious and deserving of public notice. The people of Kelso were similarly viewed. The villagers of Galashiels were also commended for their industry by Loch whom he found to be more prosperous than previously on that account. This was not true in all the Border towns. Jedburgh was upbraided by the same writer for indulging in petty political squabbles which sapped the industrial vigour of the inhabitants. Selkirk was similarly afflicted.⁽²⁾ But in the important cloth and hosiery towns leaders of industry were prominent. The pioneering spirit of the Galashiels clothiers is seen in the dominance by the town of the competitions held by the Trustees in Edinburgh from 1780 onwards, and by requests to the Board for aid to study manufacturing techniques in England.⁽³⁾ Their single-mindedness was noticed by the agent of Scott of Gala, the local landowner. "The parks and fields proposed to be let to the inhabitants", he noted in 1797, "seem to be sufficient... as most of them are (to their credit) so intent on their own business

(1) cf. W. H. K. Turner, "Wool Textile Manufacture in Scotland", Scottish Geographical Magazine, Sept. 1964, pp. 582-3.

(2) D. Loch, Tour Through etc., pp. 44-52.

(3) Reports of the Board of Trustees, passim.

that they have not great desire to be farmers..."⁽¹⁾ In their enterprise the leaders of Border industry appear to have had the backing of the church which may have played a part in the conditioning of the local population to the disciplines conducive to industrial expansion. The minister of Galashiels, Dr. Douglas, encouraged the local inhabitants in their endeavours to the extent of lending the clothiers on a long term basis £1,000 for a cloth hall.⁽²⁾ Encouragement was also obtained from local landlords like Scott of Gala and Sir Walter himself.⁽³⁾ In sum, Clapham's ascription to the Yorkshire woollen industry is equally applicable to the Borders. "It is the ordinary case of a pushing, hard-working locality with certain slight advantages attacking the lower grades of an expanding industry".⁽⁴⁾

5. The Significance of the Period

This chapter has sought to show the growth of the Scottish Border woollen industry in response to changing conditions of supply and demand towards the end of the 18th century. Yet it was not the growth of the industry in physical terms which constitutes the true significance of this period. It is not possible to gauge the volume of total output of the industry in 1830. But it was doubtless only small both in terms of the production of the woollen industry in

(1) Alexander Low, 'Report on the Estate of Gala', quoted in T. Craig-Brown, History of Selkirkshire, vol. ii, Appendix vii, p. 393.

(2) R. Hall, op. cit., p. 310.

(3) The laird of Gala appears to have granted 99 year tacks before feus became general. Sir Walter Scott encouraged the local clothiers by supporting their petitions on occasions to the Board of Trustees. cf. R. Hall, op. cit., p. 282. T. Craig-Brown, op. cit., vol. i, pp. 570-1.

(4) J. H. Clapham, "The Transference of the Worsted Industry from E. Anglia to the West Riding", Economic Journal, vol. xx, 1910, p. 201.

Britain as a whole, and of the national income of Scotland. Rather technical advance and quality improvement were the factors of long-term importance in the light of the industry's subsequent nature.

The records of the Board of Trustees at this time afford valuable evidence of the growth of quality of woollen goods of Scottish origin. The undoubted improvements which occurred, however must be seen in their context to be correctly adjudged. There is little doubt that prior to the 1770s and even much later in some areas the standard of Scottish goods was extremely low. Later improvements were relative to this and therefore should not be overestimated. For example the superfine trade was never large, and seems to have been confined largely to a small part of the country; In 1828 the Board had perforce to remark that "very little has been done in the manufacture of superfine cloths which may still be considered as in its infancy in Scotland".⁽¹⁾ At the end of the period despite the advances made the Trustees reported that the industry was still "confined chiefly to low-priced fabrics and to carpets, and the spinning of yarn for hosiers".⁽²⁾ Indeed when manufacturers invested they bought machinery specifically designed for the manufacture of coarse products, having had little experience of the finer wools. However, coarse-made goods should not be equated with ill-made goods; early tweeds were manufactured from coarse cheviot wool and yet were sold mainly to the aristocracy. Thus progress was made in the better carding and teasing of wool, in more uniform yarn spinning, in improved dyeing and finishing of the cloth.⁽³⁾ If this was not so the subsequent

(1) R.B.T. 1828, p. 291.

(2) Ibid., 1830, p. 7.

(3) Records of the Board of Trustees, passim.

history of the industry is hard to understand catering as it did for the whims and fancies of a very discriminating clientele.

Gradually the products of the industry, in line with current trends in fashion over the period moved slowly towards a concentration upon fancier cloths which still characterises the industry today. The Galashiels grey cloth, undyed and often poorly finished (though purchased by all classes of the community) gave way to the "Blues" which were introduced in the 1770s.⁽¹⁾ These were dyed at first with woad and later with indigo. These goods persisted to the end of the period⁺ and became the standard type of cloth of Galashiels and elsewhere. In addition, however, advances were made in the south of Scotland in dyeing other colours. In this respect the highlands of Scotland had always been ahead of other areas, possibly due to the abundance of coloured flora in the highland region. Highland women employed various durable colours when making their traditional tartans for hose and trousers ("cados"), striped stuffs, checked blankets and coarse and fine tartan plaids.⁽²⁾ Surviving records, however, reveal that a varied assortment of dyestuffs were being used by local and small manufacturers in the Borders at the beginning of the 19th century. James Dickson of Peebles, for example, as well as dyeing blues with indigo dyed yellow, red, "clarret", green, olive, black, and brown.⁽³⁾ At "Brodie's" mill at Innerleithen in the 1790s cloths "of all colours" were manufactured.⁽⁴⁾ Shepherd and clan

(1) e.g. "One of your weavers is fabricating a gown: for me and I am very impatient for my Galashiels Grey. I have no doubt of making the weaver's fortune for everybody follows my lead.." Mrs. A. Rutherford (Cockburn) to Dr. Douglas, Oct.3rd, 1790, in Letters & Memoirs of Mrs. A. Rutherford, pp. 219-20.
Memo Book of H. Brown, July 29th, 1828.

⁺ Galashiels grey (undyed) cloth was still sold by D. Ballantyne at Innerleithen in the 1830s. cf. his Account Book, Ballantyne Archives, Edin. Univ. Lib.

(2) A. McDonald, "On Manufactures", T.H.Ag.Soc. vol.ii, 1803, p. 243.

(3) Ledger, in possession of Arthur Dickson & Co., Galashiels.

(4) Rev. C. Findlater, Agriculture Reports: Peeblesshire, 1802, p. 218.

tartans formed some of the products of James Hilsons of Jedburgh about 1814 while the trend towards the fancy trade in Galashiels is evident in the weaving of "mixed" shawls (cotton warp and woollen weft) at Wilderhaugh mill prior to 1819 and fancy wool and silk vestings at Huddersfield mill in the 1820s.⁽¹⁾ J. & H. Brown were experimenting with mohair products dyed in several colours in the later 1820s. Dyestuffs figuring amongst their stocks at that time included copperas, madder, yellow-wood, logwood, Shumac, and Cudbear as well as indigo.⁽²⁾ In 1825 a local writer noted that "the blunked blues or hoddin gray which the outer garments of our forefathers displayed would not be so suitable an accompaniment to the mechanical waists, flowing surtouts and divers inexpressibles in which our modern dandies strut with such perpendicularity and show", an indication that the traditional goods were changing.⁽³⁾

Attention was also paid to improving the finish of the cloth. Purchases of new finishing apparatus such as presses, croppers and raising machines were common. Manufacturers took pains to learn better the art of finishing. Grants were awarded to some manufacturers to travel to Yorkshire to assimilate the finishing procedures there.⁽⁴⁾ Having been to London in 1828 Henry Brown of Galashiels especially stayed in Leeds for a time to study their methods of finishing and dyeing. The notebook which he left records many instances of experiments with presses and dyeing techniques revealing the attention which the presentability of the product was given.

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- (1) 'Aid Given to Manufacturers..' Board of Trustees Records, p. 25; A. Cochrane, 'The Scotch Tweed Trade' in Trans. of the Nat. Assoc. for the Promotion of Soc. Sci. 1863, p. 793; Border Advertiser, Oct. 30th, 1863.
 (2) Memo Book of H. Brown, passim.
 (3) R. Wilson, op. cit., p. 268.
 (4) R.B.T. passim.

Goods typical of this period were "made-in-the-finishing" rather than "made-in-the-loom" as were the later tweeds. They were heavily milled and dressed-faced being given a lustre by raising, cropping and hot-pressing.⁽¹⁾ Thus it was imperative to pay attention to the finish which at this juncture was possibly more important than spinning a uniform yarn.

Perhaps the greatest contribution made by the Board of Trustees to the Scottish woollen industry was the general encouragement given to manufacturers to improve, and to extend the range of their products. In doing so they managed to foster and exploit the competitive instinct that was undoubtedly present among the clothiers. The very fact that they could now be certain of the interest of this public body was an important psychological stimulus. In 1830 when the Board began to question the necessity of granting premiums due to the growth of the industry an Edinburgh woollen merchant thought them still useful especially in the current depressed state of trade which might "produce a fatal damp on the spirits of the manufacturer, and make him hastily renounce what may... be revived".⁽²⁾ Richard Lees, one of the most successful of the Border entrepreneurs stated that it was quite obvious when a premium was given by the Board "the stimulus to exertion was increased" and when an article of superior quality or design was produced by any individual it created a "powerful emulation" amongst the rest to equal or excell the performance.⁽³⁾

(1) A. Cochrane, op. cit., pp. 792-3.

(2) Alex. Craig to the Board, Report of the Special Committee on Premiums, 1830, p. 28.

(3) Ibid., p. 34.

Thus though Scottish woollen articles could probably not compare with the English goods in the upper quality ranges investment in machinery and the attention paid to dyeing and finishing laid the foundation of the novelty, high-class trade that characterised the industry after 1830. It was this attention to quality improvement and the experimentation encouraged by the Board's premiums that enabled the Border manufacturers in this period to build a bridge between the ill-made goods of the earlier decades and the "poems in tweeds" which were soon to send London's West End into a commercial flurry.

Chapter 4:- THE PRODUCTS OF THE INDUSTRY 1830-1914

1. The Advent of Fancy Cloths

It is tempting to see the year 1829 as a rigid dividing line or watershed in the history of the Scottish woollen industry. The economic dislocation accorded to the cloth districts in that year and the dating of the traditional products of the Borders have been noted above; 1829 also witnessed the first introduction to the London market of the products to be known later as tweeds and which were to provide the Scottish woollen industry with its distinctiveness. In a real sense 1829 did mark the end of an era for the trade. Old goods were progressively discarded, new markets were opened. Horizons widened. Yet different though the new products were from the older cloths they nonetheless constituted an evolution rather than a revolution in cloth design. The fancy trade upon which the name of the industry was built during the 19th century was rooted in the products of the pre-tweed era, and in one product in particular - the black and white checked plaid used by Border shepherds.

The Border plaid had long been manufactured in the district. It was made of local wool and was often undyed, the black and white effect being obtained by the natural colouring of the wool used. The white was improved sometimes by the use of sulphur though the plaids were more usually "peat-reeked" to achieve the same end.⁽¹⁾ The garment possessed therefore, usually a dirty and smokey hue. The plaid's length was customarily about 4 yards and its width "six quarters" or about $1\frac{1}{2}$ yards. By the 1820s, and concurrent with the

(1) "Reminiscences of the Tweed Trade, 1829-1836", Border Advertiser, Dec. 9th, 1874.

vogue of travel and tourism these plaids were increasingly being used for travelling wraps.⁽¹⁾ Their ability to withstand the rigours of journeying "outside" on the stage-coach did not escape the attention of passengers who "found that to roam through different and changeable climates at such great speed they needed something warmer than 'a light heart and a thin pair of breeches'".⁽²⁾ The plaid, therefore, traditionally associated with humbler folk became an adornment of the travelling aristocracy at the very outset of the tweed trade, a fact that was to give the industry its particular genre.

Simultaneously there grew up a taste for tartan cloths similar to the traditional garb of the Highlands which had been proscribed after 1745 for many years. At first these were made in the web for cloaks and also as scarves and plaids with borders and fringes measuring $\frac{3}{4}$ to a yard in width and subsequently widened to $1\frac{1}{2}$ or 2 yards, being principally for ladies' wear. By the middle 1820s the more restrained designs were being adopted as men's wear also.⁽³⁾ Historically, however, the Borders did not possess a tartan and thus the omission was filled by the shepherd-check pattern instead. It was, indeed, adopted by Sir Walter Scott (a friend of shepherds) as the "tartan" of the clan Scott.⁽⁴⁾ This fusion of the shepherd check with the growing popularity of tartans in general was the kernel from which the Scottish woollen trade in fancies grew.

These developments did not in themselves constitute a revolution in the Scottish woollen industry however. As indicated in chapter

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- (1) "Reminiscences of the Tweed Trade, 1829-1836", Border Advertiser, Dec. 9th, 1874.
 (2) Border Advertiser, Sept. 18th, 1863.
 (3) A. Cochrane, "The Scotch Tweed Trade", Trans. of Nat. Assoc. for the Prom. of Soc. Sci. 1863, p. 793.
 (4) Ibid.

three these years witnessed severe difficulties in the industry. Fancy goods occupied but a minor part of the manufacturers' output. The blues, drabs and greys still predominated in 1830. The fashionable had not yet displaced the customary, and the 'fashion' conscious gentry of the era had not yet become the typical customers. The impetus which changed the pace and direction of the industry came when the shepherd-check design was adopted as a trouser cloth. Probably about 1826 Sir Walter Scott had himself made a pair of trousers from such material and was followed by other gentlemen, notably Lord Brougham.⁽¹⁾ This bold innovation began to spread among the Scottish gentry. Its harnessing for commercial exploitation was largely due to the insight of Scottish merchants rather than to the manufacturers themselves. One such merchant, Alexander Craig of Edinburgh who had London connections first noticed the design being worn as a trouser cloth in Glasgow in 1829, the bold, light, check design standing out conspicuously among the blues and drabs. There being no pieces of such material made Craig deduced that the original fabric was a 'peat-reeked' shawl or plaid. Soon afterwards similar garb was to be seen on occasion in Edinburgh. The style must also have penetrated to the metropolis for about the same time a Scottish tailor with a business in Covent Garden, James Locke, inquired of Craig for patterns of "a coarse woollen cloth, black and white checked stuff, made in Scotland, and expected to be wanted for trousers". Patterns of the material being unknown Craig snipped a corner from a checked cloak and forwarded it to Locke who immediately ordered six pieces. These were woven in Peebles and were the first "tweeds" made.

(1) "The Early Stage of the Tweed Trade", Border Advertiser, Oct.20th, 1875.

Further orders followed being supplied by clothiers in Peebles and Bannockburn. By late 1830 Galashiels manufacturers too were engaging in the trade but having to be persuaded that the material was not wanted for plaids with borders and fringes but for trouserings. Thus Scottish-made shepherd-checks vigorously promoted in London by James Locke, (who with consummate vision had moved from Covent Garden to Regent Street) and by Craig and others in Scotland, rapidly took hold among the more 'avant-garde' of the upper classes. (1)

Not without some sagacity Scottish manufacturers had not in general warmed to the trade, a fact indicated by the first orders being placed in minor centres of cloth production. The demand for such cloths was considered to be ephemeral, a fleeting whim of the aristocracy. This was equally clearly perceived by the trade's merchant promoters who soon realised that variations upon the theme quickly needed composition if the 'music' was to continue. The arrangement of the shepherd-check pattern in different sets and colours which gave further scope for a variety of styles quickly supplied this need. The black and white check was dipped (perhaps accidentally) in brown dye producing a black and brown check which proved equally popular. There followed blue and black, green and black and broken and larger checks in all the former colourings. These in turn were supplemented by tweeled cloths (in contrast to plain-woven goods) the novelty effect being produced by the different weave. (2) This sequence in early 'tweed' production is illustrated in contemporary business records. Henry Ballantyne, then of Galashiels, appears to have first manufactured shepherd-check trouser

(1) "Reminiscences of the Tweed Trade", loc. cit.

(2) Ibid.

cloths in 1831. Brown and black checks and blue and blacks followed in 1832 and black tweels in 1833.⁽¹⁾ Colour variations were supplemented by alterations to the check itself. In 1836 James Locke initiated the large check, 8" x 7", which "opened the eyes of many to new fancies".⁽²⁾ These new checks were given topical names such as 'railway' and 'Victoria'.⁽³⁾ About the middle 1830s, however a happy accident led to the coining of an exceedingly appropriate collective name for the Scottish woollen products. Locke on receipt of some twilled goods from William Watson of Hawick gave the invoicing to a clerk who is said to have misread the word 'tweel' for 'tweed' he knowing that the products emanated from that quarter. The commercial advantage of such a trade name was quickly realised and the word was generally adopted by the trade.⁽⁴⁾

Alongside the growing demand for checks, tartans and highly coloured shawls were proving equally popular. The demand for the former goods was reinforced by the Queen and Consort's early visits to Scotland and their obvious relish for the country embodied later in the purchase of Balmoral. The Queen herself bought Royal Stewart tartans in large quantities and Albert ordered tweeds for suits.⁽⁵⁾ To stimulate the trade even further London merchants, particularly Locke, devised new tartans. On the occasion of the Queen's first visit to Scotland Locke took the large 'Murray' tartan and incorporated it with the 'Victoria'. From this came nearly all the 'Dress Clan'

(1) H. Ballantyne, Account Book, 1829-38, Ballantyne Archives, Edin. Univ. Lib.

(2) Border Advertiser, Sept. 18th, 1863.

(3) H. Ballantyne, Account Books, Ballantyne Archives.

(4) This is one of the early examples of a trade name. The origin of the term is not capable of documentary proof, but the substance of the story seems well accredited. cf. B. Wilson, "The Industrial Development of Hawick", T.H.A.S. 1953.

(5) "The Early Stages of the Tweed Trade", loc. cit.

patterns in shawls. (1) All kinds of vagaries were produced in tartans which bore little or no correspondence to true clan designs. Popular demand was not discriminating to this extent. "If a young gentleman can show his smart plaided stockings or cap, or if a young gentleman of larger growth can procure a plaid waist-coat or trowsers, he forthwith dubs himself a highlander, and thinks of Roderick Dhu or Rob Roy, without stopping to enquire whether it be or not a recognised tartan". (2) Thus designers showing great freedom and boldness in experiment produced a large variety of 'unauthentic' tartans for cloths and shawls. (3) The vogue for fancy shawls lasted until the late 1840s when demand for at least the Scottish-made products began to show signs of waning. For most of this period they were made 6/4 and 8/4 wide but larger type 'blanket' shawls were also produced 14/4 and even 16/4 wide. Until about 1850 the trade in these goods in some markets far outstripped the demand for other types of cloths. In that year, for example, Henry Ballantyne sold £7,250 of goods to London buyers of which £5,300 was in plaids and shawls. (4) By 1852, however, an Innerleithen manufacturer could write that "few or no orders for wool shawls" were given and most factories hitherto mainly employed upon them were changing to tweed production. "The wool shawl trade in the meantime seems to be done - year after year only bringing disappointment and great loss of money to those who have clung to it". (5) Though shawls continued to be made until the 1870s

(1) Border Advertiser, Sept. 18th, 1863.

(2) G. Dodd, The Textile Manufactures of Great Britain, p. 44.

(3) For a good technical sketch of the products of one Galashiels firm between 1850 and 1900 see W. N. Johnston, A Study of the Galashiels Fancy Woollen Trade, in South of Scotland Woollen Technical College Library, Galashiels.

(4) H. Ballantyne, Day Books, Ballantyne Archives.

(5) Robert Gill to James Johnston, Jan. 17th, 1852. Newmill, (Elgin) 'In-Letters' 1852-4.

at least, in fine and heavy grists, their significance was lost in the 1850s when cheaper Yorkshire-made mixed yarn goods began to compete successfully with them in the highly volatile ladies trade. By 1852 many of the "best-to-do manufacturers" in the Hillfoots specialising in the Glasgow fancy trade, and particularly in shawls, were turning to tweeds.⁽¹⁾ After the signing of the Cobden treaty with France in 1860 the increased import of French merino dress fabrics completed the demise of the shawl, its manufacture giving way to the making of travelling rugs and other accessories.⁽²⁾

The early pre-occupation with tartans noted above was also modified to add a further dimension to the increasingly wide range of fancy products manufactured. Many estates in the Highlands were bought up by lowland or English gentlemen mainly for the purpose of pursuing their interest in shooting and fishing. Sheep and shepherds were often displaced by the formation of deer forest and grouse moors. It was not unnatural for the new owners to regard themselves in some way as the new highland chiefs and to wish to clothe their 'retainers' in a form of tartan uniform. These 'retainers' however, had non-military functions but comprised, in the main, ghillies, keepers and foresters. Thus their uniforms required to be distinctive in design but capable also of merging with the scenery in order to camouflage the wearer when out hunting or shooting. Again, however, it was the Border shepherd-check that provided the foundation of these "District Checks" as they became known, for the Border plaid was worn by shepherds from that area who drifted northwards towards the end of the 18th and the beginning of the 19th centuries with the extension

(1) Robert Gill to James Johnston, March 23rd, 1852. Newmill, (Elgin) 'In-letters' 1852-4.

(2) See W. N. Johnston, op. cit.

of sheep farming in the highlands. The districk checks, therefore, arose from a social and economic revolution and thus they were not directly related to the type of heraldry represented by the traditional highland clan tartans. The 'Glenurquart' check, which still provides the basis for many fancy cloth designs, was adopted by the Countess of Seafield as a definite device on her Glen Urquart estates and was worn by all her tenants, factors, gamekeepers and the like, from the 1840s onwards. The influence of the Border plaid is also clearly visible in the 'Glenfeshie' which by the addition of a red overcheck became an almost invisible clothing when used in its proper environment, merging with the red and grey granites of the glen. Other checks introduced which also reflect the influence of the shepherd check were the 'Ing', the 'Ballindalloch' of Strathspey, the 'Ardtornish' of the west coast, the 'Glenquioch' of the north-west, and the 'Ciogach' in black and brown check, (later to be adopted in America by shooting clubs and renamed the 'Gun Club'). At a later date new ground in the evolution of protective colourings was broken by the intricately-woven 'Balmoral' attributed to the Prince Consort for use on the estate of Balmoral. Similar distinctive designs were developed by Lord Lovat who by experimenting with primroses and bluebells produced the 'Lovat mixture', while the Chisholms conceived the unique 'Erchless'. Not unnaturally the protective principle became applied to the uniforms of Scottish military regiments; for example the 'Elcho mixture' became associated with the London Scottish Rifle Corps.⁽¹⁾ It was but a short step to the wearing of Khaki cloths or field greys instead of the highly coloured uniforms formerly used.

(1) "The Early Stages of the Tweed Trade", loc. cit.

The detailed origins of some of these designs is unknown; it is probable that some like the 'Glenurquart' or the 'Mar' which is a derivative of it, were woven almost by accident by mixing up the colours of the shepherd check; others seem to have been deliberately conceived for estate uniform and camouflage purposes. Certainly the manufacture of such cloths was an important element in the trade of certain highland merchants and manufacturers, particularly McDougall of Inverness and James Johnston of Elgin, who were well situated geographically to meet the need. (1)

Taken in this parochial sense the conception of the 'District Checks' was not an important development in the Scottish woollen industry as a whole; the market was not large and one or two small firms could deal adequately with the demand. The significance of the checks lies in the fact that they became 'popularised' forming the basis of designs for informal men's wear in general. The three types of check design, for example, the 'Shepherd', the 'Glenurquart' and the 'Coigach', "dominated the designing of the vast bulk of ordinary checked woollen cloths". (2) The 'Glenurquart' was of particular importance because it was capable of an infinite range of variations, and the whole industry used these designs by the 1860s and 1870s, their importance being particularly appreciated when the

(1) For an authoritative discussion of the origin and design of district checks see E. S. Harrison (ed.) Scottish Woollens, chapters 6 and 7. That the landowner rather than woollen manufacturers were responsible for these designs is suggested in the following:- "You say that you must give over making the Lovats as they do not pay you. Lord Lovat and his family have been the means of putting many a good £20 note of profit in your pocket and in mine, he it is who introduced a taste for shooting tweed made in the North..." D. McDougall to J. Johnston, Newmill 'In-letters', 1854-56, Sept. 1855.

(2) E. S. Harrison, op. cit., p. 29.

taste for more traditional type tartan cloths began to wane. (1)

Thus the 'Districts' gave a new dimension to the fancy woollen trade in Scotland and formed the bulk of the designs which were exported to America. In particular the Lovat mixture by employing carefully selected shades of bright colours artfully blended together opened to the designer a whole range of new territory.

2. The Importance of Designing

The association of Scottish woollen products with bold fashion innovations in the second quarter of the 19th century, engendered by the upper-classes, gave to Scottish woollen cloths new characteristics which became the hallmarks of the Scotch tweed trade. The latter began with novelty; its novelties found a ready outlet in the vagaries of a privileged clientele. Thus from its inception the ability of the Scottish tweed industry to produce new designs was of paramount importance. At first, however, the art of designing was relatively unknown among the woollen manufacturers. Former goods were dyed in lone colours which were restricted in scope. Weave patterns were simple; often the yarn was so imperfectly spun that the cloths had perforce to be heavily milled to conceal the imperfection. (2) The same blues and greys and drabs were produced with the minimum of variation from year to year. Because of this lack of diversification the weaving of 'trial' patterns of 'ranges' was unknown, pieces being woven from the beginning in lengths of 30 or 40 and often 50 yards. (3) The only 'patterns' used were short lengths of different coloured yarns wound on sticks which were shown

(1) District check patterns figure much in patterns supplied by Border manufacturers at this time. cf. W. N. Johnston, op.cit.

(2) A. Cochrane, "The Scotch Tweed Trade", loc. cit., pp. 792-3.

(3) "Reminiscences of the Tweed Trade", loc. cit.

to customers by the manufacturers on their 'journeys'. With the production of a wide range of novelties after 1830 however such informal methods of designing became outmoded. Because of their closer relationship with the customer it was the tailor and the merchant who first perceived the importance of producing the correct type of design rather than relying on well-established cloths which were about to be dismissed by a more fashion conscious clientele. Furthermore, they quickly realised the need to produce not only fresh designs but designs which reflected the life and land of Scotland. Thus merchants like Archibald Craig and J. & A. Ogilvie, of Edinburgh together with James Locke and A. Binnie, Scots residing in London, were the industry's first true designers. Locke and Craig, apart from obtaining ideas from ladies' dress patterns and ribbons, used withered leaves, flowers and heather, and even waterworn stones from the northern glens, granites, porphyries and jaspers in particular.⁽¹⁾ In the 1830s James Crombie who manufactured at Cothal mills in Aberdeenshire invited Locke to Donside where the autumn tints of the woodland so took his eye that he suggested that they should be imitated in solids and mixtures.⁽²⁾ Craig even made use of different pieces of coloured paper to show to merchants in London.⁽³⁾ Other ideas came from the customers themselves; their importance in the evolution of the 'district checks' has already been noted. The 'heather mixture' conceived in this way and vigorously made practical by Locke and subsequently blended with other colours "featured in almost every new pattern introduced".⁽⁴⁾ It would appear that the

(1) "Reminiscences of the Tweed Trade", loc. cit., and Border Advertiser, Sept. 18th, 1863.

(2) J. R. Allan (ed.), Crombies of Grandholm, p. 53.

(3) "Reminiscences of the Tweed Trade", loc. cit.

(4) "The Early Stages of the Tweed Trade", loc. cit.; Border Advertiser, Sept. 18th, 1863.

manufacturers were slower to see the need for design but it became increasingly uneconomic to manufacture pieces of fancy cloth as ordered by the merchants in lengths of up to 50 yards as they often proved unsaleable. (1) Locke's endeavours to obtain 'trials' and 'ranges' was received with little initial enthusiasm but by the early 1830s they became an established feature of the trade. The first such was probably that produced by James Dickson of Stow Mill about 1834 being several yards long and embracing dozens of different patterns and colourings and yet woven in the loom. Both the technical efficiency and the designs of the range impressed the merchants in London and large orders followed. (2) Thereafter the designing of tweed and fancy cloths remained an informal partnership between the manufacturer and his designer on the one hand and the merchant and tailor on the other. The latter half was probably the more active, however, manufacturers often being accused of lassitude, particularly in the balmy days of the 1860s. In 1863 Locke considered them to be "much behind in their ideas" and required to shake off their attitude of insularity. (3) The merchant was able to gauge public taste more accurately and was frequently consulted before even trials were ventured. Henry Ballantyne wrote to one house

"as the time is now drawing near we require to be thinking on Spring styles, may I take the liberty of requesting a favour of you as you have many opportunities of seeing and hearing what is likely to go in tweeds you should very much oblige me by collecting a few small patterns of as many nice things of the present summer as you can... we don't want to copy them only to give us an idea of the direction to follow in colouring etc...." (4)

Merchants and the manufacturers sometimes collaborated to promote a particular colour for the season; more often the designer and the

(1) "Reminiscences of the Tweed Trade", loc. cit.

(2) Ibid.

(3) Border Advertiser, Sept. 18th, 1863.

(4) H. Ballantyne to Mr. Young, May 1854. Letter Book, Ballantyne Archives.

entrepreneur together concocted designs for the coming season. When trial patterns were decided ranges were made, several similar designs being tried on one range and frequently woven in monochrome, that is, showing one colour of ground. These ranges were then shown freely to the merchant who either made suggestions for alternate patterns or selected from the range styles and colours to his taste. Of these, small selling samples were then manufactured and only when these were delivered and found satisfactory were piece orders actually placed with the manufacturer. (1) The making of a large number of these expensive ranges was necessitated by the frequent practice of a house being given exclusive designs. The sole right of distribution of a successful design could be a very profitable arrangement for merchant and manufacturer alike, and was jealously guarded. "Mr. Llewellyn was here last week" wrote a Galashiels manufacturer in 1852, "and he fixed on one of the ranges. He gave an order for some pieces.. to begin with but upon condition that none else were to see the patterns. And to make sure work of it he got the range along with him..." (2) In 1856 Henry Ballantyne of Walkerburn having received a complaint from a merchant assured him that the pattern had been "strictly confined" to him and added "we gave you all the patterns that we had of it and have not made a single piece of it to any other house but your own". (3)

Whether due to innate national talent, to constant practice, or to the inspiration of the surrounding scenery Scottish designs soon became the envy of English, and later, foreign manufacturers. Many

(1) Textile Recorder, Dec. 12th, 1912, p. 248.

(2) Adam Dunbar to J. Johnston, March 8th, 1852. Newmill 'In-letters' 1852-4.

(3) H. Ballantyne to Messrs. Laing and Irvine, Hawick, Jan. 14th, 1856, Letter Book, Ballantyne Archives.

designers were attracted to Yorkshire by higher rewards.⁽¹⁾ A cheaper method of obtaining good patterns, however, was to poach them. Surviving letter books of tweed firms reveal this as a constant source of irritation to the manufacturers. In 1849 Messrs. Dickson & Laing of Hawick won an action against a Leeds firm for poaching shawl patterns from their registered list.⁽²⁾ Henry Ballantyne complained in 1856 of "the difficulty [of getting] anything without falling upon the Yorkshire principle of cheating..."⁽³⁾ The same firm was forced to acknowledge later in the century that some merchants handling Scottish ranges sent them to manufacturers in Yorkshire to be copied. The merchants afterwards returned them to the Scottish manufacturer with regrets that they could not see their way to order from them having meanwhile ordered the same style in a cheaper cloth.⁽⁴⁾ Due allowance must be made for exaggeration on the part of the Scots who themselves may not have remained unsullied in the matter, but there is no doubt that poaching existed. Moreover the practice was bound to harm the Scottish manufacturer whose competitiveness was not in price but in priority of design. The issue became the concern of the textile press in the 1890s. "Not a few of the large [Scottish] firms", noted the 'Textile Mercury' "spend thousands yearly in getting up designs and patterns...No sooner... do they get out a new design that takes the eye of a London buyer, than, in some cases, he orders only a few pieces... as a sop... and simply sends down the pattern to Bradford to be copied... they are produced at much less cost and

(1) 'Times' Financial and Commercial Supplement, May 21st, 1906.

(2) Border Advertiser, Jan. 12th, 1849.

(3) Nov. 29th, 1856, Letter Book, Ballantyne Archives.

(4) N. Ballantyne to Mr. Thackery, Leeds, June 11th, 1894. Letter Book, Ballantyne Archives.

soon adorn the Regent Street shops as real 'heather mixture'".⁽¹⁾
 In 1910 a private conference was held at Galashiels between English and Scottish wool textile manufacturers to consider what steps should be taken to secure improvements in connection with patterns, which led to the appointment of an investigating committee. Whether any permanent agreement was reached is not known but the formation the same year of the "Scottish Woollen Manufacturers' Association" to prohibit pattern collectors from obtaining new seasons' patterns suggests that the conference was abortive though action may have been taken in relation to foreign 'poachers'.⁽²⁾

The production of a constant stream of new designs and effects, therefore, was one of the marked characteristics of the Scotch tweed trade and the root of its success. "It is only by catering for an immense variety of tastes and making goods suitable for many different markets that we can hope to find sufficient orders", commented a Hawick mill-owner.⁽³⁾ "Designing", wrote Archibald Craig, in 1874, "has proved to be the very salvation and back-bone of the tweed trade.. the veriest tyro in the trade knows that without a constant succession of new patterns, the business would even now go down in a few years... every change of pattern was a fresh impetus to the trade".⁽⁴⁾ As a consequence manufacturers vied with their competitors to produce a new saleable design and to show it early, the latter, as competition from England and overseas increased, becoming increasingly important over the century. As early as 1852 Robert Gill of Innerleithen was showing winter patterns in February and urged a

(1) Textile Mercury, July, 1893, p. 39.

(2) Ibid., Oct. 1910, p. 210; cf. Oct. 5th, 1910, Private Letter Book, Ballantyne Archives.

(3) Quoted Hawick Advertiser, Jan. 3rd, 1896.

(4) "Reminiscences of the Tweed Trade", loc. cit.

colleague to be "at it... night and day to get patterns ready" the trade then not allowing the manufacturer to take it "so easily as formerly when one journey in the twelvemonth was sufficient to keep our people employed".⁽¹⁾ As the extract suggests designing imposed not a little strain on the ingenuity and intellect of the tweedmakers. John Crombie of Grandholm stated in 1854 "we have been busy preparing first ranges of spring goods and I can't say I see anything amongst them very much to be fancied, however, we must make another attack on our cockney friends and tell them how new they are..." The same manufacturer viewed the arrival of the harness loom with alarm capable as it was of producing designs far more elaborate than anything possible on the hand-loom. "I fear they make almost an overturn in the trade as far as designing goes", he wrote, "the scope is unlimited... I wish them all at the -----".⁽²⁾

Important as fresh designs twice yearly were however, many successful patterns enjoyed a lengthy existence allowing manufacturers to make long runs of cloth. Materials designed for formal occasions and for business wear were not subject to the volatility which characterised the market for leisure goods. Also most tweeds were manufactured for mens', rather than for ladies' wear, whose fashion changes were not usually very radical. Thus designers endeavoured to use known favourites without losing the advantages of freshness

(1) Robert Gill to Jas. Johnston, Jan. 17th, 1852, Newmill 'In-letters' 1852-4.

(2) John Crombie to Jas. Johnston, July 3rd, 1852; Sept. 29th, 1854, Ibid. The actual weaving of them caused further difficulties, apart from the cost. "We are busy with your half yards and it is a terrible business to make so many being all different colouring they take so long time up in putting into the loom that it exhausts the writer's patience..." H. Ballantyne to anon. 1855. Letter Book, Ballantyne Archives.

and novelty by making minor adaptations and variations. The ability to ring changes upon the old themes was perhaps the special forte of the Scottish designers. They were considered to be masters of a "host of cunning little artifices by which the common is lifted out of the commonplace and the old is made to renew its youth". Most of the tweed trade in fact was, in the opinion of this observer composed of "common designs uncommonly well done".⁽¹⁾ In this respect the use of fancy weaves was important to obtain the novelty effect. A touch of distinction was thus given to cloth with little to distinguish it from a large class of plainly woven fabrics except the ingenuity shown in the distribution of the threads and colours in the loom. In years of buoyant trade therefore the medium quality side of the industry at least had a taste of making considerable numbers of pieces per pattern as was commonplace in Yorkshire. "We used often to have work" said C. J. Wilson of Hawick in 1896, "that would keep us going for six months. After the seasons orders were taken we could then sit down and summarise in a short time the precise quantity of each colour and yarn that we were likely to require during the ensuing half-year. We could start a given number of looms upon a particular kind of work and keep these looms going on at the same style and cloth for months on end..."⁽²⁾ Writing to Archibald Craig in 1872 James Johnston of Elgin stated "I send you patterns of our present Spring stock among which you will recognise many old stagers..."⁽³⁾ Three or four designs would keep a mill going nearly a whole season, the buyer "hardly knowing whether the tweeds grew or were made".⁽⁴⁾ Nonetheless, there was a strong economic

(1) Textile Recorder, Feb. 1913, p. 314.

(2) Hawick Advertiser, Jan. 3rd, 1896.

(3) Jan. 25th, 1872, Newmill Letter Books (4).

(4) Hawick News, Jan. 21st, 1898.

motive for producing new designs, for it was easier to get a good price for a new cloth, than to raise the price of an old one when the cost of wool rose.⁽¹⁾

3. Characteristics of Tweed Cloth

The products of Scottish woollen looms after 1830 became firmly identified with three design characteristics, - the skilful use of colour, the employment of pure, virgin wools, and uniqueness of texture. These factors combined in a cloth made up the distinctiveness of a "tweed".

It was the colour effect of the early tweeds rather than their textural quality which provided their appeal. Thereafter the skilful blending of colour to produce natural ground effects and bold patterns was perhaps the chief aim of the designer. Colour was considered to be "the most important point in Scotch tweed". Nothing that was not effectively and artfully coloured would sell irrespective of pattern or price.⁽²⁾ For some time tweed patterns used large areas of broad colour giving a bright, solid effect. In the second half of the 19th century a transition began towards softer patterns and more mellow colour effects in contrast to the bold, strong stylings of earlier years. Colour novelty was increasingly obtained by fancy weave patterns which made good use of fancy twist yarns which facilitated the distribution of the colours in the material. But for the use of such yarns (made up by twisting different coloured threads together) it would have been impossible to mix bright and strongly contrasted

(1) Textile Recorder, Dec. 12th, 1912.

(2) Ibid., Feb. 1912, p. 312.

colours and at the same time avoid a harsh broad effect that was not always in public taste. Increasingly soft broken effects were in fashion which the various 'mixture' designs were well suited to satisfy. In the 1890s the trend to softer colouring gave way to a distinct lessening of colour altogether; district checks resumed popularity and coloured weave effects almost disappeared, the predominant colours now being greys and slates. As the death of Queen Victoria drew near the tweeds which she had helped to establish thus grew increasingly more sombre, losing their characteristic freshness.⁽¹⁾ But colour quality and purity remained important nonetheless.

The second major design characteristic of tweeds stemmed from the importance of good colouring. Only by using pure wools could the best colour effects be obtained. It was the paying of strict attention to the quality of the raw material that distinguished Scottish tweeds from those of other areas; they were in particularly marked contrast to the Yorkshire 'tweeds' which made much use of shoddy and mungo. In order to show off good colours to the best advantage a wool was required whose fibres could be spun fine enough to manufacture a cloth of the desired weight or thickness but not so fine that the eye could not discern the individual fibres which carried the colouring. Furthermore, wool of a good natural colour displayed the dyes more pleasingly than a 'dull' wool. Wool possessing a natural lustre reflected the light more satisfactorily. All these desirable characteristics could be found only in the fine Cheviot and cross-bred wools and the success of the trade in tweeds

(1) W. N. Johnston, op. cit.; A. Cochrane, op. cit., pp. 795-6.

was largely dependent on the choice of such material.⁽¹⁾ By making use, therefore, of broader-fibred wools such as cheviot the old tradition of manufacturing a coarse woollen cloth was maintained in Scotland. The advent of tweed cloths was at first more a new departure in pattern and colour design than in the textural composition of the cloth. Despite this, reference to contemporary pattern books makes it clear that the early tweed designers also made use of the finer wools; the increasing use of these in the 1820s has already been noted above.⁽²⁾ Most of such wool was imported from Saxony, but increasingly Australian merino wools made their appearance.⁽³⁾ Cloth made of such material was finer and softer in texture but because of its narrower fibres and due to its sensitivity to the milling process it could not match the brilliant colouring of the cheviot. During the 19th century the trend of fashion was towards lighter and less highly coloured products and thus 'Saxony' cloths became increasingly popular while the coarser cheviot was blended more and more with colonial cross-bred wools. When worsted qualities were in demand the Scottish tweeds made much use of 'Saxony' qualities because the finest grades closely resembled worsteds in finish and handling.⁽⁴⁾ The diminished need for strong colours, however, did

(1) E. S. Harrison (ed.), op. cit., pp. 95-6.

(2) See above p. 110. E. S. Harrison (ed.), op. cit., pp. 148-9.

(3) cf. B.P.P. 1833 VI, 690 for advantages of Australian wools.

(4) For convenience sake the terms 'cheviot' and 'Saxony' ceased to be applied solely to cloths made from the wool of those names, but became general terms denoting quality. Broadly all Scottish woollen goods can be divided into these two types. 'Cheviot' came to cover all cross-bred products and 'Saxony' yarns and cloths are all those made from merino wools, the latter having originally been obtained in the kingdom of Saxony. The dividing line between 'Saxony' and 'cheviot' qualities is 60s quality. In Galashiels measurement (the Gala 'cut'), one pound of such wool can be spun into 60 x 560 yards - about 19 miles.

not make the use of pure wool any less necessary. The latter was a pre-requisite of good colouring whether strong or subdued. The introduction of impure wools was resisted by the trade with resolution. In 1851 Galashiels manufacturers agreed not to sell waste in the town but to employ a "reputable agent" in Huddersfield.⁽¹⁾ That some manufacturers used a little, however, may be implied in the resolution of the same body in 1860 that "waste of every description will only be sold to such parties as will at once send it to Yorkshire". The mill workers appear to have understood what was clearly in their best economic interest for they then formed a committee to prevent local dealing in waste.⁽²⁾ These interests were neatly summarised by a Hawick manufacturer in 1855. "Spare no expense... on your wools... your dyestuffs... aim at excellency of fabrics... and beauty of design; repel every attempt to compromise".⁽³⁾ Pure wool and pure designing were thus interdependent; further, the wool required skilful blending to obtain a distinguished product, for the designer was forced by fashion trends to select small designs in quiet colours which was greatly more difficult than making large designs in high colours. To get these new effects different qualities of wool were combined together in one cloth. Whatever description or combination of wool was used, however, it was virgin material and unsullied with cotton or linen threads.

Finally tweed cloths possessed a distinctive texture which again was at least partly due to the need for good colouring, but which per se differentiated tweeds from other forms of cloth. It

(1) Minute Book of Galashiels Manufacturers' Corporation, p. 68.

(2) Ibid., (page unnumbered).

(3) Hawick Advertiser, Oct. 27th, 1855.

was of basic importance to make a cloth which was weather-resisting but which at the same time had style and colour. Thus it required to be dense enough to keep out cold but the individual nature of the fibres had to be preserved in order to obtain good colour effects. Thus tweeds were twilled in the weave, as their name implies, for in crossing threads two under two and simultaneously moving forward to the right or the left a denser weave was obtained than the simple one under one or plain weave without losing the individuality of the fibre. (Such a weave pattern was so common in Scotland that 'tweel' had become a synonym for yarn).⁽¹⁾ Thus tweeds required less milling to obtain a satisfactory degree of density when the thicker-fibred wools were employed. Tweeds therefore derived their specific textural character from being "made-in-the-loom" rather than "in-the-finishing". Milling was kept to the minimum though more was usually associated with saxony qualities as finer wool tends to felt more easily. This lack of heavy milling helped to preserve the full bloom of the colours, even in winter weights, and from the textural viewpoint gave them elasticity and comfort without detriment to durability.⁽²⁾ It was this which made the Scottish tweed product so suited to leisurely pursuits. In the 1830s and 1840s the tweed was contrasted to the English tightly-woven heavily-milled cassimere which possessed no such elasticity. The use of twisted yarn as well as improving colouring also helped to achieve this distinctive texture. The warp and the weft threads of the tweed were spun equally firmly but inflexibility which might be expected to have resulted was avoided by the use of twist yarns which added strength

(1) E. S. Harrison (ed.), op. cit., p. 3.

(2) Scotch Tweed, vol. vi, p. 126.

but equalised the goods both lengthwise and crosswise. In this way firmness and closeness were combined with flexibility and elasticity.⁽¹⁾

4. The Nature of the Tweed Trade

Stemming from the nature of the first impulses given to it in the 1820s by experimentors in fashion for men's wear, the Scotch tweed trade itself acquired certain characteristics.

In the first place the purchasers of the early fancy 'tweed' cloths were members of the educated classes following in the wake of men like Scot and Brougham. Thus the trade catered from its inception for the more well-to-do who, because clothing was more a luxury to be indulged in rather than a necessity, could afford to experiment in their dress and add to or change their wardrobe more frequently. Hence the importance of design and novelty. There is much evidence to support the view that tweeds took hold among the upper classes rather than further down the social scale. After the pioneering of Scot and other gentlemen in Scotland Scottish woollen products were in great demand by the London nobility. Royalty soon became associated with the goods. Sir Robert Peel was soon to be seen relaxing in black tweeds at evening functions; mauds from Scotland even invaded the Vatican. Undergraduates at Oxford and Cambridge bought tweeds in large quantities. The 'District Checks' evolved at the behest of Highland land-owners. In the upper ranks of the army fine-milled 'saxony' trousers were worn extensively

(1) A. Cochrane, op. cit., pp. 794-5.

from an early date.⁽¹⁾ It is true that at a later date tweeds began to be worn by a wider section of the public; the cheviot qualities in particular had characteristics that commended them to the less well-to-do and could be sold at reasonable prices when excessive styling had not to be paid for.⁽²⁾ Nonetheless it was the nature of the early clientele that set the tone of the industry. It was the West Riding that supplied the mass-market for woollen products.

Secondly, due to the upper-class nature of its original clientele the Scottish woollen industry in the 19th century became a synonym for quality which was expressed in the meticulous care taken by the designers and manufacturers in the production and presentation of their goods. "Quality is our only fort" stated Henry Ballantyne of Walkerburn,⁽³⁾ who with most other manufacturers vigorously eschewed temptations to reduce it in dull times. For their part the merchants were constantly corresponding with the manufacturers about faults in the goods received and not infrequently returned goods on the slightest pretext which, when made for the particular use, and at the desired price of the merchant, could result in serious loss to the manufacturer. Surviving letter books are pre-occupied with complaints

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- (1) "Reminiscences of the Tweed Trade", loc. cit.; Border Advertiser, Sept. 18th, 1863; E. S. Harrison (ed.), op. cit., chaps. 6 and 7; "The Early Stages of the Tweed Trade", loc. cit.
- (2) In 1863 Jas. Locke stated that tweed trousers of Scottish make were being worn by almost everybody - Border Advertiser, Sept. 18th, 1863; most of the American trade was aimed at the moderately paid and lower paid customer and little trade was done with the really rich - Glasgow Herald, Aug. 24th, 1909. The upper working class market was large during the third quarter of the 19th century - Glasgow Herald, June 13th, 1908.
- (3) H. Ballantyne to Messrs. Wilson & Armstrong, July 17th, 1856, Letter Book, Ballantyne Archives.

and queries by merchants who were dissatisfied with the yarn or the colour, or the design not quite matching the pattern ordered, or even the smell of the goods. These were always checked before leaving the premises but in winter especially the use of gas-light could lead to minute pattern or colour variations being overlooked. In a quality industry, therefore, catering for the tastes of very discriminating customers the manufacturer stood to lose much if his goods failed to measure up to the very demanding standards, while the merchant could always use this as a lever to exact better terms from the makers.⁺⁽¹⁾

The Scottish tweed industry was also characterised by its close association with the trend of fashion. It was indeed sired by fashion and like most creatures was capable of being smothered by its creator. The history of the Scottish woollen industry in the 19th century is a constant struggle to be in the vanguard of fashion changes, to make Scotch tweed the "favourite fabric of fickle fashion", and to find the correct solution when it was not.

Fashion change has to do with the intangible and it is difficult to accurately assess the influence which it brought to bear upon the industry. For example a whole social revolution may have been embodied in the taste for tweeds which grew up among the elite in the 1830s and beyond. Certainly fashion at the beginning of the 19th century was losing its formality and with the French revolution leading to the overthrow of the monarchy and to lengthy wars it became disorientated from the European, and especially the French, courts. Throughout Europe and North America after 1815 the idea of less

⁺ On one occasion Henry Ballantyne threatened to cease trading with his most important London house if its petty complaints continued.

(1) cf. Newmill Letter Books, passim; Letter Books, Ballantyne Archives.

ostentatious elegance was gaining preference, a movement which was particularly associated with the English, who had emerged victorious and without peer from the French wars. By about 1825 after about half a century of drift towards a peculiarly English style of dress there developed a liking for brighter colours and simple pattern effects which was perhaps an expression of the weakening of the power of the court under the regency with its associations of general levity and even scandal, together with relief at the termination of the seemingly endless struggle with France. The shepherd-check in black and white and simply woven provided an admirable initial departure from the plain colours of before and as shown proved a flexible enough basis for the development of further colour and general design changes thereafter.

On the other hand the presence of a desire for more colour and less formal elegance does not explain the fact that fashion movement was in a decidedly Scottish direction. It was this which was of particular significance to the Scottish woollen industry. By the early 19th century Scotland was ceasing to be a synonym for barbarity and intellectual and economic stagnation. Edinburgh's New Town, the comment of the Edinburgh Review and the Waverley novels were potent expressions of the social, intellectual and literary ferment of the country at that time. The contribution of Sir Walter Scott to the woollen industry was considerable. He created with his novels a love for all things Scottish and the context of romanticism within which Scottish tartans and cloths were first sold, apart from initiating the fashion in trouser cloths which was the foundation of the tweed industry thereafter. A government inspector in 1839 stated that he was assured by a woollen manufacturer that "the Waverley

novels, by rendering tartans popular in the temperate climates of Europe had conferred a very material benefit on the woollen trade of Scotland".⁽¹⁾ It was due to Scot's associations with the district that the invention of the trade name "tweed" was such a happy accident.

The reinstatement of the monarchy after 1837 to a position of respect in the country coupled with the Royal family's relish for Scotland signified by the purchase of Balmoral confirmed the taste for Scottish-made products. The Queen and Consort bought Scottish-made cloths in England and wore tartans and tweeds when visiting Scotland, thereby stimulating general demand. The shepherd's plaid and similar cloths were in general vogue in England after Victoria's visit to Scotland in 1848, and the consequent influx of tourists.⁽²⁾

Even when tweeds won an individual reputation independent of their Scottish associations the doings of royalty could still influence the demand for them. The Consort's adoption of the 'Balmoral' tartan stimulated its popular demand as well as encouraging the vogue for Scottish landowners and their tenants and employees to adopt distinctive estate clothing; it was the appearance of the Prince of Wales in 1867 wearing a complete suit of tweed with cape to match that confirmed the tendency towards suitings made of one colour and design of material which had been growing slowly from the 1850s. Death in the Royal family, on the other hand had the reverse effect. It was reported in 1896 that "a smart demand has taken place for blacks and greys owing to the death of Prince Henry of Battenburg..." while with the death of the Queen in 1901 a local commentator saw the fancy

(1) B.P.P. 1839, XLII, 159, Report of Dr. Harding.

(2) "Reminiscences of the Tweed Trade", loc. cit.

woollen industry in a state of general collapse for the moment.⁽¹⁾

In general anything which promoted leisure tended to the good of the tweed industry. The invoices of some of the pioneer merchants indicate that they were primarily concerned with the exploitation of the leisure habits of the English gentleman.⁽²⁾ Golf, hunting, shooting and fishing were pastimes which demanded clothing of the tweed nature. Later in the 1880s the extension of a greater degree of leisure to others encouraged the trade. For example the cycle boom of that period gave an impetus to the trade with its ramifications of bright colours and flexible texture.⁽³⁾

The long-run trend of fashion in wool-made goods over the 19th century however, was in general against the interests of the Scottish manufacturers. By the last quarter lighter, smoother and cheaper products became more in demand which were more relevant to the worsted trade than to the woollen. Scottish manufacturers responded to this trend by either lowering the quality of their products or by introducing their own high-class worsted products. This was particularly so in the 1890s during a long and unprecedented recession in the tweed trade. These products were not merely slavish copies of Yorkshire cloths but were intended to be distinctive in the same way as the woollen tweeds were. Though the yarns were bought in Yorkshire the resultant fabric was quite different. The "Scotch Worsted" was given an absolutely natural finish and its high design standards combining elasticity, softness and lightness rendered it particularly

(1) Hawick Advertiser, Feb. 14th, 1896; Hawick News, Feb. 8th, 1901.

(2) For example the invoices of Jas. Locke proclaimed, "Tweeds in heather and granite colours for shooting and deer stalking". Newmill 'In-letters'.

(3) Hawick News Supplement, Feb. 12th, 1897.

adaptable to the American market. Being more "dressy" in appearance than the traditional Scotch tweed it was more suitable for town wear. Structurally only the best and finest Botany and merino wools were employed with the result that the cloth was heavily "shotted" with weft, thus helping to give durability with lightness.⁽¹⁾ By 1898 these fabrics which combined all that was best in a tweed fabric and yet suited current fashion demands had already won a reputation in the London and Scottish wholesale centres.⁽²⁾ Experiments in cross-bred and cheviot worsteds employing the ill-fated 'ondee' weave form were not so successful, however, and contributed in fact to the depression in the Borders at the end of the 19th century.⁽³⁾

Despite its somewhat arbitrary characteristics fashion was to some extent influenced by economic factors, in particular variations in the price of wool. The manufacture of heavy tweeds was as much dictated by this factor as the demands of fashion itself. People became used to dressing at a price and would not pay increased charges when the price of wool was high. When worsted wools were high, however, this had the effect of stimulating the demand for woollen goods which was beneficial to the tweed industry in particular.⁽⁴⁾

The priority of design and novelty from its inception also led to a spirit of intense individualism within the trade, which became an established characteristic during the 19th century. Not only did the Scottish woollen industry as a whole seek distinctiveness in its products but also individual concerns sought to specialise within the general framework of quality and novelty in order to corner a particular

(1) Private Correspondence Book, 1910, Ballantyne Archives.

(2) Hawick News, Aug. 19th, 1898.

(3) Scotch Tweed, vol. vii, p. 121.

(4) J. H. Clapham, Woollen & Worsted Industries, p. 182.

area of the market, and to make competition more imperfect. For example, Ballantyne of Walkerburn became renowned for quality flannel cloths, Roberts of Selkirk for particularly high-grade suitings, Reid & Taylor of Langholm for durable hard cloths, J. & J. Crombie of Aberdeen for coatings of exceptional quality, Wilson of Bannockburn for military tartan cloths, and Johnston of Elgin for the use of rarer wools such as vicuna and alpaca, as well as district checks. Though these products were not manufactured on the whole to the exclusion of other types their makers became so associated with these specialities that a trained eye could discern with ease who were the various makers of cloths on show in the warehouse or tailor's shop.⁽¹⁾ To an extent also a degree of regional specialisation developed; the Hillfoots until the 1850s were predominantly concerned with the manufacture of tartans and shawls for the Glasgow market and were only marginally associated with tweeds which were mainly the prerogative of the Borders, though shawls were an important constituent of the trade there too for many years. Regional differences tended to be obscured as the century continued and particularly on the decline of the shawl trade in the 1850s when many Hillfoot manufacturers went over to tweed manufacture.

The nature of the products of the industry therefore meant that the trade seldom acted as a body. Each individual manufacturer tended to act alone endeavouring to outwit his rival though in skilled designing rather than in price, for most firms saw the necessity to keep up the overall quality of the industry's goods. Thus an 'umbrella' body like the Galashiels Manufacturers' Corporation had few

(1) Based on author's conversation with Mr. Alfred Harrison, a veteran Edinburgh woollen merchant.

regulatory functions and contented itself mainly with parochial matters like water supply and river pollution and an annual orgy of toast-drinking and sentimental reminiscing.⁽¹⁾ After 1860 the South of Scotland Chamber of Commerce showed a little more overall responsibility especially towards the end of the century, but at its inception the rivalry, bordering on suspicion, within the trade found expression in the desire to have two separate chambers, one for Hawick, and one for Galashiels.⁽²⁾ Thus the spirit of self-expression and emulation which was fostered after 1780 by the premiums of the Board of Trustees was carried over into the tweed industry after 1830. The tweed manufacturer's temperament was characterised by guarded affability. "They are rather a close set, most of my neighbours", wrote an Innerleithen employer, "they say nothing till their being very busy and then they brag like the mischief".⁽³⁾ Even less information concerning the progress of trade was afforded to the outsider.⁽⁴⁾ While the market was rising and demand firm the prosecution of trade on a supremely individual level sufficed, and possibly stimulated the manufacture of superior cloths calling for a high degree of skill and ingenuity. By the latter years of the century, however, the chronic inability of the manufacturers to present a common front in the face of serious trading difficulties proved to be of great detriment to the industry as a whole.⁽⁵⁾

(1) Local Border Press, passim; Gala. Manufs. Minute Book.

(2) R. E. Scott, A Century of Commercial History and Progress 1860-1960, p. 5.

(3) Robert Gill to Jas. Johnston, Apr. 3rd, 1855, Newmill 'In-letters', 1854-6.

(4) cf. F. H. Groome, (ed.), Ordnance Gazetteer of Scotland, (1888) vol. iii, p. 68, "The manufacturers are exceedingly averse to affording information concerning the extent of their operations".

(5) See p. 250 below.

After 1830 the manufacturers and merchants of Scottish-made woollen cloths succeeded in taking the lead in fashion and developed distinctive products renowned for quality of design and raw material. As personages of high social standing developed a taste for these products so the market widened to include many in the lower strata of society. Scottish manufacturers found themselves in the van of public taste. Recognising this Yorkshire and continental producers sought to emulate Scottish designs or to poach them. Scottish designers were in great demand due to their flair for producing colourful, tasteful patterns. At a time when travel and tourism was becoming increasingly popular among the leisured classes and when Scotland was commending herself to the public through her literary, political and scientific energy cloths from north of the border were greatly desired, bearing the distinctive stamp of the country in their design and admirably suited to meet the needs of the sportsman and traveller, or the more formal requirements of the businessman or churchgoer. In his taste for Scotch tweeds, durable, sound, "an honest stuff, honestly made",⁽¹⁾ the Victorian male expressed his views about life as surely as he did in his literature and architecture.

(1) D. Bremner, Industries of Scotland, p. 157.

1. Introduction

If the period 1780-1830 witnessed the laying of the foundations of the Scottish woollen industry the following half-century saw its consolidation and expansion. Considerable investment in new buildings and machinery occurred, the labour force was greatly increased eventually eclipsing that in other branches of the textile industry in Scotland, while the market for the various products of the industry widened from its predominantly local base in 1830 to cover most of the countries of the world by 1880.

It is the purpose of this chapter to trace the course of growth over the period and to isolate, where possible, the economic conditions which influenced levels of activity and investment. Due to the presence of regional and even local specialisms in the industry the broad national picture has been supplemented by a close examination of developments in the Borders, the Hillfoots, and in the north of Scotland. In the latter part of the chapter an attempt is made to measure changes in the output of the industry both in aggregate terms and in some of the more important districts and towns. A brief discussion of the relative importance of the Scottish and Yorkshire woollen industries during this time concludes the chapter.

2. General Expansion in Scotland after 1830

Table I CHANGES IN THE PRODUCTIVE CAPACITY
OF THE SCOTTISH WOOLLEN INDUSTRY, 1835-1878

<u>Year</u>	<u>No. of mills</u>	<u>No. of spin'g spindles</u>	<u>No. of pwr. looms</u>	<u>Amount of mov'g pwr.</u>	<u>Total no. of workers</u>
1835	90	?	?	?	3,505
1838	112	?	?	1,822	5,076
1847	?	?	?	?	9,637
1850	182	224,129	247	2,533	9,464
1856	196	272,225	665	2,943	9,280
1861	184	317,185	1,303	3,906	9,812
1867	193	343,068	3,418	5,942	14,760
1871	218	421,489	10,543	9,305	23,000
1874	257	529,011	11,758	?	27,728
1878	246	559,031	6,284	?	22,667

Source: Factory returns. (See also the appendix to this chapter)

The above returns give some indication of the chronology of growth in the industry during the period under review. Between 1835 and 1874 the number of woollen mills nearly trebled. Erection of new buildings was largely concentrated in two periods, one dating from the 1830s to the late 1840s and the other from the mid-1860s to about 1875. Building was particularly heavy in the early 1870s. Figures for spindles and looms do not exist prior to 1850. After that date the number of spinning spindles, (as opposed to doubling or twisting spindles) increased steadily down to 1867. In the 1850s spinning capacity expanded by about 40%; between 1861 and the later years of this decade the rate of expansion slowed to about half this figure, partly because of the heavy investment in the preceding years and partly because of technical changes at this time involving the gradual replacement of the hand-mules for the higher capacity "self-actors". Thus the returns tend to understate the actual increase in spinning potential in the 1860s. Rapid expansion was resumed in the later

years of the decade, however; between 1867 and 1874 the number of spinning spindles increased by about 63%, and continued to grow, though at a reduced rate, throughout the 1870s.

The period after 1850 also witnessed the wide application of powered weaving to the industry. In that year there were fewer than 250 power looms in the whole country. By 1857 this number had increased to 665, had doubled again by the early 1860s, and trebled between 1861 and 1867. By 1878 there were nearly ten times as many power-looms in the industry as there had been twenty years earlier.

Care must be taken in the interpretation of the factory inspectors' returns for employment. The earlier figures at least down to the early 1860s exclude the majority of weavers owing to that craft being still a manual one till the coming of the power-loom. The size of the industry's labour force was therefore larger in those years than the figures would suggest. With the increase in the number of spindles and power-looms between 1850 and 1861, however, one would have expected a considerable expansion of the factory labour force. The returns of the factory inspectors do not indicate that this was so. Between 1847 and 1861 there was a net increase of fewer than 200 workers. Indeed the total number employed was actually falling from the late 1840s to the mid-1850s. The behaviour of the employment figures is to be largely explained by the fact that the returns show machinery installed but not necessarily in use whereas labour when not in use is not usually there to be counted. Other evidence makes it plain that the years dating from the late 1840s to about 1853 were relatively depressed, though more so in some districts than in others.⁽¹⁾ When

(1) See p.193 below.

prosperity returned to the industry a large increase in the labour force was registered but only a modest expansion of spinning capacity occurred as hitherto idle plant was brought into use. Between 1861 and 1867 the number of workers grew by about 50% and then almost doubled by 1874. Thereafter the number declined but remained about 50% greater than in the late 1860s.

3. Expansion in the Borders

A large proportion of new investment in the Scottish woollen industry took place in the counties of Roxburgh, Selkirk and Peebles, as table 2 indicates. Indeed one of the most salient features of the first half of the century was the consolidation of this area as the premier cloth-producing district of Scotland.

Table 2

CHANGES IN PRODUCTIVE CAPACITY OF THE
COUNTIES OF ROXBURGH, SELKIRK AND PEEBLES, 1835-1871

<u>Year</u>	<u>No. of mills</u>	<u>% of total</u>	<u>No. of spin'g spindles</u>	<u>% of total</u>	<u>No. of power looms</u>	<u>% of total</u>	<u>No. of workers</u>	<u>% of total</u>
1835	24	27	?	?	22	100	789	23
1838	32	30	?	?	?	?	1,046	20
1847	?	?	?	?	?	?	2,264	23
1850	40	22	77,000	34	109	44	2,573	27
1856	48	25	113,888	42	328	50	3,309	36
1861	44	24	160,257	51	559	43	4,042	41
1867	47	24	139,030	40	1,110	10 ⁺	5,180	35
1871	47	22	155,230	37	1,336	11 ⁺	6,707	29

Source: Factory returns. County statistics ceased in 1871 giving way to regional computation.

+ This sharp drop was brought about by the rapid growth of power-loom capacity in the west of Scotland carpet industry.

By 1856 the above-mentioned counties possessed about 36% of the workforce, 42% of the industry's spinning capacity and nearly half of its power-looms. The relative importance of the region had not much

altered by 1867. The chronology of development did not exactly correspond to the national picture, however. Whereas the number of spindles in the whole industry continued to expand throughout the period the Borders experienced a fall in the 1860s so that the number installed there in 1871 was slightly smaller than a decade earlier. Returns for looms and employment do not suggest any recession occurring at this time. Indeed the number of workers continued to grow throughout the period in contrast to the stagnant national figures in the 1850s. One must deduce, therefore, that the fall in the number of spindles in the 1860s was attributable to a rapid rate of modernisation and to the large-scale purchase of yarn elsewhere.⁽¹⁾ The impression obtained from the factory returns in general is of steady growth over the whole of this period. We must now see whether this impression is corroborated by other evidence.

Investment in woollen manufacturing in the region was largely confined to the towns of Hawick and Galashiels. The latter town became the hub of the whole tweed industry. Table 3 though compiled from fragmentary data gives an indication of the growth of Galashiels' trade in woollens over the period under review. Following the severe depression in the town in 1828-9⁽²⁾ steady expansion of capacity took place and great advances in the value of its trade. As noted in the factory returns considerable expansion occurred from the later 1830s. The number of carding sets, for example, increased by more than 80% between 1838 and 1853. It doubled again by 1869.

(1) cf. D. Bremner, "Self-acting mules are now coming into general use in... the Scotch woollen mills..." Industries of Scotland, p. 165, and see p. 188 below.

(2) See chap. 3, p. 114.

Table 3

GROWTH OF PRODUCTIVE CAPACITY
AND TRADE IN GALASHIELS, 1825-86

<u>Year</u>	<u>No. of hand looms</u>	<u>No. of power looms</u>	<u>No. of carding sets</u>	<u>No. of spin'g spindles</u>	<u>Value of the woollen trade (current prices)</u>
1825	?	?	?	?	£58,000
1829	?	?	?	?	£26,000
1832	175	?	?	?	£30,000
1838	265	?	22	?	?
1840	?	?	25	?	?
1843	?	?	28	?	?
1845/6	563	?	36	5,336	£200,000
1853	?	?	39	?	£250,000
1863	600	295	60	?	£490,000
1865	?	?	65	?	?
1869	?	?	76	66,826	£570,000
1886	402	1,085	114	94,562	?

Sources: D. Bremner, The Industries of Scotland.
H. Brown, Memo Book, 1828-9.
T. Craig-Brown, History of Selkirkshire, vol.i, p.575.
R. & W. Chambers, Gazetteer of Scotland, 1832,
Galashiels.
J. H. Dawson, A Statistical History of Scotland, 1853,
pp. 988-90.
The New Statistical Account of Scotland, vol.iii,
Selkirk, pp. 11f.
B.P.P. 1839, XLII, 159.

Expansion began as a response to the greatly increased demand for the fancy tweels and shawls stimulated initially by the popularity in London and other centres of the Border plaid. In 1833 a provincial newspaper noted that the demand for cloths and shawls made in the town was beginning to outstrip supply, these products having been brought to "great perfection!"⁽¹⁾ A few years later Galashiels was considered to be "the most thriving of all the woollen districts", its trade being "rapidly on the increase", giving occupation to about twenty-five manufacturers of tweeds, tartans, and shawls, and eight specialist yarn-spinners.⁽²⁾ Demand at this time perhaps centred more on the fancy shawl

(1) Quoted in R. Hall, History of Galashiels, p. 317.

(2) B.P.P. 1839, XLII, 159; Pigot's National Commercial Dictionary, 1837, pp. 762-3.

and tartan trade than on tweeds themselves. In 1842 the tartan trade kept the mills active for 15 hours per day;⁽¹⁾ a few years later one inspired observer remarked that the locally-made highly coloured 'blanket' shawls were "in great demand... the gleam of fashion, like the May sun [having given] a new stir to the working bees of the town!"⁽²⁾ By the early 1850s so many mills had been erected and extensions made that the water power of the town was entirely exhausted and manufacturers were forced to seek fresh locations in the Tweed Valley and on the Ettrick at Selkirk.

The introduction of power-loom weaving to the industry led to impressive extensions to the productive potential of Galashiels. By 1863 nearly 300 such looms were at work in the town, almost half the number in the whole of the Borders. As a consequence spinning capacity also increased. According to Bremner nearly 67,000 spindles were located in Galashiels in 1869 nearly 50% of the whole spinning power of the region and almost one-fifth of that of the whole industry.⁽³⁾ Larger structures grew up to house the new machinery. As a result of this wave of investment the value of the town's woollen trade more than doubled between 1853 and 1869 to reach about £570,000 per annum. Much of this expansion of trade followed the success of Scottish woollen goods at the Great Exhibition of 1851, for it introduced them to a much wider market. At times demand was so great that customers could not wait till weavers had completed their warps, lengths having to be cut from the looms and hurried through the finishing processes to meet the orders.⁽⁴⁾ In the mid-1860s trade was so buoyant that

(1) B.P.P. 1843, XXVII, Reports of the Factory Inspectors. (Report of Jas. Stuart), p. 44.

(2) New Stat. Acc. of Scotland, vol. iii, Selkirk, p. 21.

(3) D. Bremner, op. cit., pp. 157-8.

(4) Souvenir of Hawick Textile Congress, 1912, p. 8.

some manufacturers felt it worth while to discard fairly new machinery that had worked for only a few years in order to install plant of greater capacity and speed. Despite additions to spinning plant large quantities of yarn had to be purchased from English manufacturers.⁽¹⁾ Unfortunately no statistical material of any value is available concerning the growth of Galashiels in the 1870s. By the mid-1880s however the number of spindles had increased to about 95,000, power-looms had more than trebled since 1863 and the number of sets had grown by 50%. Over 400 hand looms were still in operation in the town.⁽²⁾ It is clear that Galashiels played a full part in the great advances in trade in the 1870s and these figures may not reflect the productive potential of the town at its peak. If the value of the town's woollen trade went in rough proportion with increases in productive capacity it must have totalled something over £1,300,000 per annum by 1880.

The only other Border town where industrial development approached anything like the scale of that of Galashiels was Hawick. Interpretation of what little quantitative sources exist for the burgh is complicated by the dual nature of the town's economy, many manufacturers combining knitting and weaving on their premises. In 1837 all those classified as woollen manufacturers in the town also made hosiery goods.⁽³⁾ Over time, however, mills began to specialise in one branch or the other, many preferring to concentrate on tweed production. By 1882 only two of the ten tweed-makers had anything to do with hosiery.⁽⁴⁾ Bremner, in his study in the late 1860s appears to have

(1) Trade Circular, April 1864, distributed by Geo. Harrison, woollen merchant, Edinburgh.

(2) See table 3 above.

(3) Pigot, op. cit., p. 749.

(4) F. H. Groome (ed.), Ordnance Gazetteer of Scotland, 1883, vol. iv, p. 251.

made an attempt to separate the two trades for statistical purposes. The burgh's hosiery trade he estimated to be worth about £130,000 per annum but gave no estimate for weaving. An estimate based on productive capacity in the cloth section of the local economy would suggest that the value of the woollen trade in Hawick was between £400,000 and £500,000 per annum in the late 1860s, a little less than in Galashiels.⁽¹⁾ There were slightly fewer power-looms in Hawick than in Galashiels in the mid-1860s, and 68 carding sets in 1869 as opposed to 76 in Galashiels. On the spinning side the latter possessed about 12,000 more spindles at this date than Hawick.⁽²⁾ Thus an annual turnover of something approaching half-a-million pounds in Hawick would seem quite feasible.

As in Galashiels considerable additions to productive capacity took place in Hawick in the 1870s. The 270 power-looms there in 1869 expanded to 560 by 1875 and to 776 in 1879. Carding capacity increased from 68 sets in 1869 to 89 in 1875.⁽³⁾ Again, if output bore a rough relationship to investment in these years the value of the woollen cloth industry of Hawick at the end of this period must have been in the region of £1 million per annum.

Compared with developments at Galashiels and in Hawick industrial expansion in other Border towns was less marked, though by no means unimportant. As already indicated the growth of the industry generally in the region revealed the limitations of some of the early sites of woollen manufacturing and forced employers to locate their new plants in other districts. Thus the development of these alternative sites

(1) D. Bremner, *op. cit.*, pp. 180-1, 197.

(2) *Ibid.*, pp. 157-8, 197.

(3) *Hawick Advertiser*, Aug. 23rd, 1879; *Textile Manufacturer*, 1877 quoted in *Scotch Tweed*, vol. 10, p. 54.

was often the result of Galashiels or Hawick manufacturers looking for more 'lebensraum'. This was especially the case in Selkirk and in the valley of the Tweed. The river Ettrick at Selkirk offered a good supply of water with an ample 'fall' to permit bunched development and which, unlike Gala Water was not so subject to variations due to drought. Furthermore there was a good deal of suitable building land on the haugh beside the river. The burgh, therefore began to be 'colonised' by Galashiels manufacturers in the 1830s when pressure was beginning to be felt in Galashiels. The demand for industrial sites in the burgh is evidenced by the sale for £210 of a corporation-owned water-fall in 1838 with an upset price of only £40.⁽¹⁾ Local restrictions however, continued, as formerly, to slow down the industrial development of the burgh. Even in the mid-1840s these were considered to be a real obstacle to growth.⁽²⁾ By the early 1850s, however, Dawson, on noting the large new mills in the burgh commented that "the old decaying burgh seems to have revived its youth... new buildings are seen rising in and around a town which was long thought to have been in a hopeless state of decay". By 1853 the capital invested in woollen manufacturing in the burgh was estimated at about £50,000. Growth continued in subsequent decades. Wool consumption which ran at about 21,000 stones per annum in the early 1850s was reckoned at more than 31,000 stones in the late 1860s. Over the same period power-looms were introduced the number rising from 50 in 1853 to 180 in 1869.⁽³⁾ In the 1870s, as in Galashiels and Hawick, expansion at Selkirk was more rapid. The number of spindles almost doubled

(1) B.P.P. 1839, XLII, 159, p. 42.

(2) New Stat. Acc. of Scotland, vol. iii, Selkirk, p. 7 - "[there is] little encouragement given to trade or enterprise from the severe burgh restrictions in force..."

(3) J. H. Dawson, An Abridged Statistical History of Scotland, (1853) p. 994; D. Bremner, op. cit., p. 198.

between 1869 and 1886, power-loom increased at an even faster rate. Bremner estimated the output of the burgh at over £220,000 per annum in 1869; this figure probably rose to around £400,000 by 1880.⁽¹⁾

The years after 1840 also saw the development of woollen manufacturing in the Tweed valley, at Innerleithen, Walkerburn, and Peebles. Again the stimulus usually came from manufacturers elsewhere requiring room for expansion. St. Ronan's mill at Innerleithen, for example, was erected for yarn spinning purposes by George Roberts of Selkirk in 1847; the following year an Earlston firm built another mill in the town. Meanwhile Brodie's old mill was taken over by Robert Gill of Galashiels. In the mid-1850s Henry Ballantyne, also of Galashiels, founded the community at Walkerburn in order, initially to spin yarn for his weaving plant at Galashiels. At Peebles, further up the Tweed the Hawick firm of Laing & Irvine erected Tweedside Mills in 1859.⁽²⁾ This hitherto neglected area from the industrial point of view increased its economic potential when other more suitable areas became exhausted of power, and, also, with the opening of the Edinburgh-Peebles railway line in 1855. Due to a low rate of fall on the river, however, factory development remained scattered and therefore on a much smaller scale than occurred in Hawick and Galashiels. Even so Bremner estimated the annual turnover of Innerleithen and Walkerburn in excess of £200,000 in 1869.⁽³⁾ Expansion thereafter, was not as rapid as elsewhere. The 27,000 spindles installed in Innerleithen and Walkerburn by the late 1860s had only reached 35,000 in the mid-eighties including those at Peebles.⁽⁴⁾ No firm reason for this slower

(1) T. Craig-Brown, History of Selkirkshire, vol. i, p. 575.

(2) cf. J. W. Buchan (ed.), History of Peeblesshire, vol. i, p. 217 ff.

(3) D. Bremner, op. cit., pp. 198-9.

(4) T. Craig-Brown, op. cit., vol. i, p. 575.

rate of growth can be given, but it is possible that when steam came into general use more central sites were preferred; labour, too, may have been difficult to recruit.

Further west some development took place in the towns of Langholm and Dumfries. Like Peebles and Innerleithen, Langholm had formerly been an outpost of the west of Scotland cotton industry. The latter was in a rapid state of decline by the 1840s; in Langholm the number of cotton looms decreased from 250 in 1838 to only 62 in 1849.⁽¹⁾ Fortunately for the local economy, the town was situated near enough to the woollen districts to participate in the growing prosperity of that branch of the textile industry, though there appears not to have been an injection of Galashiels or Hawick capital there. The weaving of woollens took a sharp upturn in Langholm after the visit of the Queen to Scotland in 1848.⁽²⁾ Situated near the English border and on one of the main thoroughfares into Scotland Langholm was well positioned to exploit the large tourist trade that followed in her wake. At that time about 100 hand looms were engaged in woollen weaving; by the late 1860s about £130,000 of capital was invested in the industry in the town, the annual average overturn being estimated at about £200,000.⁽³⁾ As in the Tweed valley further development was slow compared to elsewhere in the Borders; again only tentative reasons can be offered on present evidence. Feuing policy may have been constricting; it certainly was on the Duke of Buccleuch's other lands around Hawick.⁽⁴⁾ The failure to build the railway through the town

(1) B.P.P. 1839, XLII, 159; Border Advertiser, June 8th, 1849.

(2) This visit popularised the Estate plaid made at Langholm cf. Border Advertiser, May 18th, 1849.

(3) D. Bremner, op. cit., p. 202.

(4) Hawick Advertiser, June 3rd, 1857.

may also have contributed to the absence of much further development in the burgh.

Dumfries burgh also benefited from the demand for Scottish woollens. There the tweed trade began about 1846 gradually removing hosiery from its dominant position in the local economy. By the late 1860s about one quarter of a million pounds worth of capital had been sunk in the woollen industry there giving an annual average overturn of a similar amount.⁽¹⁾

In the eastern Borders industrial development was not impressive. At Kelso woollen manufacturing virtually died out though it had for long been associated with weaving. Here the absence of good falls of water and the relative attractiveness of agriculture spelt the end of wool-working though production of raw wool in the vicinity continued.⁽²⁾ Investment in woollens at neighbouring Jedburgh took place only on a small scale despite the burgh's long association with the industry. By 1869 the annual value of its woollen trade was only around £66,000.⁽³⁾ Solid reasons are again difficult to offer. Certainly the burgh was a long way from a railway line and remote by road from the Glasgow and Edinburgh markets. Thus the site was not seriously considered by expanding Galashiels and Hawick manufacturers who contributed so much to the development of other places.

The above survey clearly reveals the dominant position of the two towns of Galashiels and Hawick in the Border woollen trade. Growth occurred mainly at the places which had early been associated with the manufacture of woollen cloth and for much the same reasons. In time

(1) D. Bremner, *op. cit.*, pp. 201-2.

(2) *New Stat. Acc. of Scotland*, vol. iii, Roxburgh, p. 330.

(3) D. Bremner, *op. cit.*, p. 200.

other ancillary businesses and services became lodged in these burghs further strengthening their position in the industry. In 1844, for example, the wool-broking and fell-mongering firm of Sanderson & Murray, later to become one of the largest firms of its kind in the world established itself at Galashiels, an important development when one remembers the growing reliance of local manufacturers on imported wool.⁽¹⁾ The firms of Aimers in Galashiels and Melrose in Hawick provided engineering facilities supplying drivegear and some textile machinery to the industry; in 1849 Galashiels was connected to Edinburgh by rail, as was Hawick. Branch banks were established in these burghs; and later specialised finishing and dyeing firms and tweed merchants. Hawick in particular was important as a merchanting centre in the latter part of the 19th century.⁽²⁾ The provision of such services stimulated the erection of small industrial complexes in these two towns and their immediate environs thus enabling manufacturers to reap external economies for their businesses.

4. The Hillfoots, - Stirlingshire and Clackmannonshire

Although the years after 1830 confirmed the position of the Borders as the leading woollen manufacturing district in Scotland other areas also witnessed considerable investment in this field. In particular woollen manufacturing reasserted itself north of the Forth especially around Stirling and in the foothills of the Ochils. This region was probably better placed than some of the Border counties in respect of markets and raw materials; certainly communications with Glasgow and Edinburgh were easier. But although the manufacture

(1) cf. M. McLaren, Sanderson & Murray, 1844-1954. See chap. 9 below.

(2) R. Hall, op. cit., pp. 411 ff, 481 ff; Souvenir of Hawick Textile Congress, 1912, p. 8.

of woollen cloth became one of the staple pursuits of the area in the 19th century it never reached the proportions of the Border industry. This was partly because of alternative and often better paid work being available in coal mining, and the proximity of the major urban centres of Glasgow and Edinburgh meant that labour was quite easily drawn into these cities to find better opportunities there. Nonetheless the Hillfoots comprised the second most important woollen centre in Scotland becoming famous for products related to the ladies trade in particular and for woollen and worsted yarn production.

Just as the tweed industry of the Borders grew up when the traditional products of the area began to lose their market so the shawl trade, which was the main interest of the Hillfoots in the 19th century, replaced the old trade in 'Tillicoultry serges' which had developed in the 18th century. The shawl trade owed something to the popularity of the highly-successful Paisley shawls which had swept into fashion around the beginning of the century. As the taste for shawl-wearing spread, a general demand for tartans was also asserting itself. Glasgow merchants saw the need to combine these two developments and the Hillfoot shawl trade came into being. Thus the woollen tartan shawl was to the Hillfoots what the shepherd-check plaid-cloth was to the Borders. At first, and probably well into the 1840s the shawl trade operated as a putting-out trade organised and financed by Glasgow merchants.⁽¹⁾ With the advent of machinery, however, the factory system gradually emerged, though hand-weaving in the cottages of the workers continued into the second half of the century.⁽²⁾ By

(1) cf. B.P.P. 1839, XLII, 159, pp. 185 ff.

(2) D. R. Christie, "Scottish Tweeds: Four Hundred Years in Fashion", Wool Education Society Pamphlet, Oct., 1958; R. Gibson, Reminiscences of Dollar & District, Gibson was a local woollen manufacturer in the middle of the last century.

the middle of the 19th century there were dozens of small firms in the shawl trade under the Ochils; in Alva alone there were between 40 and 50 small businesses engaged in the trade in the 1840s. Later tweed manufacture was introduced together with high-grade tweed, hosiery and "wheeling"⁺ yarn-spinning. The chronology and size of investment in the area in the half century after 1830 is set out in table 4.

Table 4 CHANGES IN THE PRODUCTIVE CAPACITY
OF THE HILLFOOTS, 1835-71

<u>Year</u>	<u>No. of mills</u>	<u>% of total</u>	<u>No. of spin'g spindles</u>	<u>% of total</u>	<u>No. of power looms</u>	<u>% of total</u>	<u>No. of workers</u>	<u>% of total</u>
1835	?	?	?	?	?	?	865	25
1838	?	?	?	?	?	?	1,410	28
1847	?	?	?	?	?	?	3,295	34
1850	45	25	72,095	32	38	16	3,669	38
1856	43	22	73,445	27	141	21	2,644	28
1861	38	21	71,261	22	278	21	2,297	23
1867	30	15	111,370	32	728	21	3,734	27
1871	33	15	143,516	34	715	7 ⁺	4,123	18 ⁺

Source: Factory Returns. County returns ceased in 1871; thereafter it is not possible to isolate the Hillfoot district from the regional figures.

* The large percentage fall in this year was the result of rapid expansion in the west of Scotland carpet industry.

It is immediately apparent when comparison is made between tables 2 and 4 that the timing of net capital investment in the Borders and in the Hillfoots was different. After an initial period of rapid expansion in the years between 1835 and 1847 extension of spinning capacity ceased in the Hillfoots in the eighteen-fifties. The actual number of spindles suffered a slight fall from 72,095 to 71,261 and the number of mills was reduced from 45 in 1850 to 38 in 1861. In

⁺ i.e. hand-knitting yarn.

the sixties, however investment was resumed and expansion was rapid. Spinning capacity doubled as did (almost) the workforce. Powered weaving plant almost trebled. The number of mills continued to fall as spinning capacity became more concentrated. In the Borders during this period the workforce and weaving capacity expanded rapidly but there was some net loss of spinning plant. (See table 2).

The reasons for the disparity in the investment behaviour of these two regions have to do with a basic shift in the structure of the Hillfoot trade after 1850 which affected the self-sufficiency of the Border manufacturers. Table 4 suggests that initially woollen manufacturing grew up even more rapidly in the Hillfoots than in the Borders if measured by the amount of factory labour. In 1850 38% of the total workforce of the industry was in the Hillfoot district as opposed to only 27% in the Borders. The reasons for this are obscure; both districts had much the same spinning capacity in 1850 while the southern-most region had many more power-looms. It seems unlikely that the number of spindles in the Hillfoots was larger in the years before 1850 (when the first returns for such were collected), for the amount of moving power there was only 400 h.p. in 1838 as against 675 h.p. in 1850.⁽¹⁾ One can merely postulate in the absence of any precise documentation for this period that either the large number of workers per spindle in the Hillfoots was due to obsolete plant or that many hand weavers were brought into factory premises for closer supervision and thus figure in the returns of the factory inspectors.

(1) Reports of the Factory Inspectors in B.P.P. 1839, XLII, p.310 ff, B.P.P. 1850, XLII, 745.

In the eighteen-fifties the trade of the area underwent a marked change. As noted above the staple trade of the woollen manufacturers was in tartan shawls, essentially a ladies trade and consequently vulnerable to sudden changes in fashion. Around the middle of the 19th century such a change did in fact occur, the severity of which is indicated by the stagnation of spinning investment for the remainder of the decade. It was observed in 1851 that, though trade continued briskly in the Borders, at Tillicoultry, Alva and elsewhere where shawl-making was the principal manufacture nearly all the factories were on short time some running only two days per week.⁽¹⁾ Though a part of the slackness could be put down to seasonal fluctuation there was no doubt in the minds of contemporaries that a more permanent change was taking place. In particular the current vogue for 'polkas' was militating increasingly against the shawl trade.⁽²⁾ By the mid-1850s the taste for wearing jackets and cloaks was confirmed and, in the Borders the waning in popularity of tartan products was also noted. Short-time working continued in the Hillfoots while the cheaper end of the shawl market fell into the hands of Bradford worsted manufacturers.⁽³⁾

The great expansion of capacity in the area in the 1860s, partly at the expense of the Borders on the spinning side, was a product of the diversification of woollen manufacturing in the Hillfoots. Reliance on the ladies' fashion trade was greatly reduced by some manufacturers entering the booming tweed industry which, being

(1) B.P.P. 1851, XXIII, Report of the Insp. of Facs., April 30th, 1851, pp. 34-5.

(2) Ibid.

(3) cf. Dr. Oliver, 'The Story of the Scotch Tweed Industry', Scottish Country Life, Jan. 1931; E. S. Harrison (ed.), Scottish Woollens, pp. 58, 168.

predominantly a men's trade was less subject to extreme fashion movements. For example Wilson's of Bannockburn developed the famous 'Bannockburn' tweed noted for their extreme durability and special yarn mixture. Archibald's of Alva were another firm who almost entirely quit shawl production for the tweed business. The other arm of diversification in the Hillfoots was the development of specialised yarn-spinning especially at Alloa and Kinross. John Paton, Son & Co., became renowned for their high quality yarns named after the former town.⁽¹⁾ Of great importance was the growing habit of Border and some English manufacturers of buying much of their woollen yarn from the Hillfoots rather than manufacturing all of it themselves. This development explains the lack of any extra spindles in the Borders in the 1860s (although more modern plant was installed) and is explained partly by the increasing complexity of yarns and the importance of designing in general, and also by the size of overall demand for woollen goods in the prosperous climate of the sixties. Thus after 1860 the economy of the Borders and that of the Hillfoots became more interdependent. Whereas formerly the bulk of the Hillfoot manufacturers had depended on ladies fashion favour for their prosperity now they became more reliant on the success of the tweed trade - a factor which brought salvation in mid-century but which was to cause some embarrassment in the 1890s. Meanwhile the old shawl trade did not die out entirely. Power-looms helped to cheapen them and their style was to some extent altered. In the late 1860s Bremner noted that Tillicoultry tartans still remained important and at Alva the weaving of shawls handkerchiefs and plaids was still described as the staple trade of the town, though subject to severe fluctuations. As a result of these

(1) R. Gibson, op. cit., pp. 202 ff.

changes the Hillfoots remained an important woollen producing region in Scotland, possessing 34% of total spinning capacity in 1871 and with a total output of around £800,000 per annum in 1869, equivalent to about 40% of that of the Borders. (1)

5. The North

Woollen manufacturing extended into the highlands of Scotland but nowhere did an industrial complex emerge as occurred in the Hillfoots and the Borders. Development was scattered; each town of moderate size possessed its local woollen mill. They were to be found for example at Inverness, Huntly, Keith, Elgin and Forres and also in one or two other places. Aberdeen, however, was the most important northern town dealing in textiles. Here the woollen trade was combined for a time with interests in linen and cotton. Only in the second half of the century did woollens become the chief branch of textile manufacture in the Aberdeen area, several of the firms dealing in other fibres succumbing in the depression of 1847-8. The woollen industry in Aberdeen was, thereafter, represented by two sizeable firms, Alexander Haddon & Co., and J. & J. Crombie of Cothal, and later of Grandholm mills.

Manufacturers in the highland area were of course less favourably placed than those further south in terms of materials, labour and markets. These difficulties were mainly overcome by intense product specialisation which allowed northern mills to develop a monopoly of much of the northern quality trade and to participate in the London market also. Crombies of Aberdeen on the other hand became a firm of

(1) D. Bremner, op. cit., pp. 210-11.

some size and gained a world wide trade in overcoatings. This firm accounted for the major proportion of output in the north which at the end of the 1860s was valued at about £200,000 per annum.⁽¹⁾

In the outer islands especially in Lewis and Harris a trade in distinctive tweeds was also growing up after 1840. Until that date most cloth fabricated in this area was for local consumption but thereafter the islands began to cater for the needs of the Scottish gentry who, as in other branches of the industry, helped to lay the foundation of the later popularity of Harris tweed.⁽²⁾

6. Business Data and Short-Term Fluctuations

The foregoing discussion of national and regional growth has largely been based on the returns of the factory inspectorate supplemented by qualitative material gleaned from literary sources. A more precise picture both of the chronology of changes in investment and production and the growth pattern of individual enterprises in different locations can be derived to some extent, from business archives. It is to be regretted that only a small sample of business records has so far come to light. These include, however, those of two of the leading firms in the industry in the 19th century - Henry Ballantyne & Son of Walkerburn, and J. & J. Crombie of Aberdeen. In addition many of the records of Jas. Johnston of Elgin have survived and a few from the firm of William Watson of Hawick. Thus the sample also has the merit of covering a wide geographical area. The author feels that small as the sample is the picture afforded by it is representative of the

(1) D. Bremner, op. cit., pp. 210-11.

(2) Anne Ottey, 'World Popularity of Harris Tweed', Wool Record - Scottish Survey, Nov. 26th, 1966, p. 58.

experience of most other firms in the industry operating under factory conditions.

The testimony of surviving business archives is particularly useful in tracing developments in the industry prior to 1850 when the first machinery statistics were collected by the factory inspectors. Clearly the industry experienced a rapid period of growth from the second half of the thirties to the mid-forties. Johnston of Elgin, for example increased turnover from £4,700 in 1839 to £7,200 in 1845.⁽¹⁾ The value of Ballantyne's trade increased from £6,100 in 1838 to £16,500 in 1846,⁽²⁾ The stock of Crombie, Knowles & Co., in Aberdeenshire rose from £856 in 1830 to £5,000 in 1846, most of the increase coming after 1835.⁽³⁾ This fairly rapid increase in trade required investment in mechanical means of production especially carding and spinning machinery, and to a lesser extent weaving plant. Crombies purchased carding sets in 1837, 1842 and 1844-5. Mule-jennies were added to the plant in 1836, 1837, 1843-4. Gas lighting was installed, suggestive of the need to work longer hours and new drive gear also. New buildings were constructed to house the additional machinery. Altogether the "Machinery & Houses" account of this firm which stood at £128 in 1835 totalled £3,428 in 1846.⁽⁴⁾ At Elgin the Johnston business remained small but the written down value of machinery rose from £900 in 1835 to £1,300 by the later 1840s. New equipment, including power-looms was installed in each year between 1836 to 1841 and in 1846.⁽⁵⁾ Similar developments took place at Henry Ballantyne's

(1) 'Journals', Newmill Records.

(2) Day Book, Ballantyne Archives.

(3) J. R. Allan (ed.), Crombies of Grandholm, p. 44.

(4) Ibid., pp. 52-59.

(5) Inventory Books, Newmill Records.

mill in Galashiels.⁽¹⁾ Despite these additions to productive capacity there is evidence that the demand for tweeds in this period was out-running the means of supply. Henry Ballantyne put out some of his work not only to hand-loom weavers in Paisley and Alva but also tweeds were manufactured for him by the Holmfirth (Yorks) firm of T. & D. Wood in considerable quantities. Ballantyne also purchased extra yarn in the Leeds district amounting to £6,000 worth between May 1845 and Dec. 1846. A sample of the desired type was spun in Galashiels and then sent to be copied in Yorkshire.⁽²⁾

The growth of the Scottish woollen industry was in line with wool-textile developments in the West Riding. Scottish growth was stimulated on the demand side by increased local needs but more especially by fashion demand emanating from the upper classes. On the supply side better wools from Europe were at first important, producing the famous 'saxonies' but in the 1840s advantage was taken of the growing supplies from Australia and Van Dieman's Land. The chronology of new investment suggests that the industry suffered to a limited extent in the slump of 1838-42, but the nature of the clientele of the growing trade in fashionable tweeds kept the level of demand in these years fairly buoyant. Trade was more seriously affected in the depression after 1847. The price of Australian merino wool fell from 18d. per lb. in 1846 to 13d. per lb. in 1848 with no real recovery occurring until 1852.⁽³⁾ Sales appear to have dropped sharply; those of Johnston of Elgin from £7,000 in 1845 to £5,000 in 1851,⁽⁴⁾

(1) Invoice Ledgers, Ballantyne Archives.

(2) Ibid.

(3) B. R. Mitchell & P. Deane, British Historical Statistics, p. 496.

(4) 'Journal', Newmill Records.

Ballantyne's from £16,500 in 1846 to less than half that amount in 1848. His average sales for the years 1844-46 were not again equalled for a decade.⁽¹⁾ Little new investment occurred in 1847-8 at Crombies, temporarily halting the upward trend observable since the early 1830s but the partners' stock continued to increase the net assets of the firm rising from £10,000 in 1846 to £15,000 in 1849. Debts outstanding rose sharply in that year, however suggesting that not all were so little affected by the depression as the Aberdeen firm.⁽²⁾ The Borders probably suffered more than some regions. In 1847 the "Kelso Mail" could remember no similar depression in the woollen districts for "a long series of years", (probably since 1829).⁽³⁾ Emigration from the area rose sharply - from 2 in 1846 to 21 in 1848 and 57 in 1849, the number dropping to 3 in 1850.⁽⁴⁾ Some tradesmen in Galashiels and Hawick found temporary work on local railway construction which by continuing at this time helped to stabilise to some extent the local economy.⁽⁵⁾

Wool prices began to rise significantly again in 1850. The index of imported wool prices, (1867/77 = 100), climbed from 56 in 1850 to 81 in 1853. Supplies from Australia kept up until about 1857 despite the gold discoveries but continental supplies were not so elastic, shortages from this quarter contributing to the steep rise in 1853. The Crimean war caused a downturn in the upward trend of wool prices but in the boom of 1857 the price index rose to 104 when prices reached a point 100% higher than in 1850. Again the growing continental

(1) Day Books, Ballantyne Archives.

(2) J. R. Allan (ed.), op. cit., pp. 44 and 73.

(3) Kelso Mail, June 14th, 1847.

(4) B.P.P. 1851, XL, 680.

(5) Border Advertiser, June 9th, 1848.

industry which made strides during the Crimean war and which began to import some British wool largely accounts for high prices in 1857, and again in 1860 after the financial disturbances of 1857 and their aftermath.⁽¹⁾ On the whole business data accords with the growth pattern suggested by the price data. Johnston's turnover figures show an increase from £6,200 in 1848 to £7,000 in 1854, - slightly lower than that of a decade earlier. Some hesitation in growth marked the middle years of the decade and the difficulties of 1857 show themselves in the fact that sales in that year were only slightly higher than in 1854. By 1860 however strong recovery was underway, turnover at £10,500 exceeding anything previously. The lull in the purchase of new major plant since 1846 was broken in 1850 with more spinning mules. Again a break occurred until power-loom were installed in 1856 and 1857 and new carding machines.⁽²⁾ A similar pattern is afforded by Ballantyne. The crisis of the later 1840s delayed his decision to construct a new mill in Tweeddale the land for which he had purchased about 1845. He eventually opened a new spinning mill on the site in 1855. Sales show a marked recovery in 1850 reaching a level about 40% above that of 1849. The early 1850s however were a plateau period for sales strong growth being delayed until 1856. This behaviour was not quite typical however as the firm could not expand capacity until the new mill at Walkerburn was completed. The firm's letter books are replete with communications to the suppliers of the machinery upbraiding them for delays when customers' orders are being neglected. The trade was there in the early fifties therefore, but Ballantyne could not enjoy it to the full until he had expanded his plant. After

(1) J. R. T. Hughes, Fluctuations in Industry, Trade & Finance 1850-60, pp. 110-113.

(2) Journals, & Day Purchase Ledgers, Newmill Records.

this came into operation in 1855 sales shot ahead by almost 100% between 1855-6 and had doubled again by 1860. Sales were low in 1857-8. Despite rising wool prices which accounted for around 60% of production costs the net output of this firm rose from about £5,500 in 1855 to around £22,000 by 1860. (1)

Steady expansion in the fifties was the keynote at Crombies of Aberdeen. Net assets doubled over the decade. New premises were acquired in 1851 probably for the wincey trade and many power-loom installed. The impact of the 1857-8 crisis seems to have been slight. (2) This was not so in the Borders. Here the number of hand-loom weavers out of work caused comment. (3) New power machinery was for the first time in the Scottish woollen trade subjecting this class of worker to the stresses associated with a declining craft. He was the first to be laid off (apart from pattern weavers) in times of difficulty. William Sanderson, of the Galashiels wool-stapling firm of Sanderson and Murray wrote to his son in Australia in 1857 warning him to suspend all buying operations until further notice. The following year he again commented on the uncertainty and unprofitability of business in the Borders. (4)

On the whole the 1850s were years of steady expansion in the Scottish woollen industry punctuated by years of uncertainty and stagnation. The trade was affected by the political troubles on the continent in the late 1840s and which continued in France well into the next decade. French fashion consciousness had undoubtedly aided the expansion of the industry in the 1840s. At the same time the

(1) Letter Book, Day Books, Invoice Ledgers, 1850-60, Ballantyne Archives.

(2) J. K. Allan (ed.), op. cit., pp. 60-73.

(3) Hawick Advertiser, Feb. 6th, 1858.

(4) M. McLaren, op. cit., p. 45.

American trade grew, especially in the earlier years of the decade but the uncertainties of supply and demand generated by the Crimean war appear to have shortened the manufacturers' horizons. "We are more likely to keep up each others pluck in these dismal times," wrote a Border manufacturer to a colleague in the north, "if the French would look sharp and take Sebastopol - I say the French for by all accounts the remnant of our own... army is too insignificant to give much help in the business... Oh what cruelty ... in our governing class..."⁽¹⁾ The year 1856 was a good one for most firms judging from sales data but the upturn was dampened if not reversed by the crisis of 1857.⁽²⁾

This pattern of short-term fluctuations superimposed on a mildly rising trend of trade that characterised the fifties was repeated on the whole in the sixties with the difference that the upward trend was more pronounced. In 1861 and 1862 the effects of the opening of the American civil war can be clearly seen in the experience of the firms whose records survive. Ballantyne's turnover which had recovered strongly after the crisis of 1857-8 fell steeply again in the early sixties and production fell from 108,000 ells in 1860 to only 72,000 in the following year. In 1862 output climbed only to 88,000 ells. The same tendency is suggested by the sales behaviour of Johnston's of Elgin where only a nominal increase was registered between 1860 and 1863. William Watson in Hawick experienced a drop in sales in these years. (£26,000 to £19,000) after a mild recovery from the crisis of the late fifties. All these firms grew strongly as far as

(1) Robert Gill to Jas. Johnston, Feb. 22nd, 1855. "In-letters" 1854-6, Newmill Records.

(2) Day Book 1857, Ballantyne Archives; Journals, Newmill Records; Sales Ledger, Watson Records.

turnover is concerned between 1863 till 1866 when it is clear that the Overend Gurney failure obviously brought renewed dislocation. But the trough of 1867 was still higher in all cases than the peak of 1860. By the late sixties the strong upward trend was continued and then powerfully reinforced by the great boom in European trade in the early 1870s. There seems no doubt that the Scottish woollen industry participated strongly in this bonanza. Johnston of Elgin's sales doubled between 1869 and 1872 reaching a peak three times greater in money terms than in 1860. Ballantyne's output which had not grown between 1868 and 1871 increased suddenly by 40,000 ells in 1872. But it was William Watson of Hawick who, of our sample, benefited most from the boom. His turnover jumped from only £36,000 in 1870 to £81,000 in 1872, £126,000 in 1873 - a year when most of his competitors were experiencing declining sales.⁽¹⁾ Watson's returns for 1873 were never repeated until at least after 1902 when the records cease. Similarly a dramatic growth occurred in production at the Aberdeen firm of J. & J. Crombie, - from 75,000 yards in 1865 to 363,000 yards in 1872. Not unnaturally these production and sales levels could not be fully maintained. The peak of the boom was soon reached and 1873 was for most a bad year for trade. But the remainder of the seventies saw the continuence of the upward trend of sales and output which had characterised the middle decades of the century. The level of production of Ballantyne's in the trough of 1879, for instance was still a third greater than in the trough of 1873. Again, while production never reached 200,000 ells per annum in the boom of the early seventies it exceeded 300,000 ells in 1880. Johnston's of Elgin also continued to experience growth for the rest of the seventies

(1) Day & Wages Book, Ballantyne Archives; Journals, Newmill Records; Sales Ledger, Watson Records.

though slower than previously. Watson of Hawick's annual sales in the later seventies continued to be about 100% higher on average than in the previous decade.⁽¹⁾

Trade expansion in the years after 1860 was only made possible by heavy investment in new buildings and modern machinery. Ballantynes installed power-looms in their new Walkerburn mill in every year from 1858 to 1872 except 1869. The old 'mule-jennies' were replaced by fully automatic self-actors. Spindle capacity grew from 1,840 in 1855 to 8,000 in the mid-seventies.⁽²⁾ The depreciated value of machinery at Watson's factory in Hawick which stood at £3,000 in 1861 rose to £5,500 in 1864, to £10,000 by 1870, and £16,000 in 1873.⁽³⁾ At Elgin James Johnston purchased either power-looms spindles or carders in every year between 1861 and 1876 except 1866. The value of machinery at Elgin allowing for depreciation rose from £680 in 1857 (probably a much undervalued figure) to £4,425 in 1871.⁽⁴⁾ Similar expansion occurred among Hillfoot firms. At Alloa John Paton employed 450 workers and 30 carding sets in 1872 compared with 150 and 9 respectively in 1861. In 1873 the firm bought up its rival, the Keilarsbrae Spinning Co. at Sauchie and extended the works. Two years later a new plant was constructed at Clackmannon containing £33,000 of yarn-spinning machinery.⁽⁵⁾ New factories were also erected at intervals in Alva, Tillicoultry, Dollar, Menstrie and Kinross.⁽⁶⁾

(1) Ibid; J. R. Allan (ed.), op. cit., pp. 79-80.

(2) Invoice Ledger & Valuation Books, Ballantyne Archives.

(3) General Ledger, 1849-80, Watson Records.

(4) Day Purchase Ledgers, Newmill Records.

(5) Privately printed manuscript.

(6) R. Gibson, op. cit., p. 202 ff.

It is clear from this detailed consideration of business data that the cyclical behaviour of the Scottish woollen industry in the 19th century largely coincided with that affecting the economy as a whole. Short term cyclical movements might be summarised as follows:-
 upturns from 1835 to 1846, 1849-53, 1855-65 (with the American war imposing a check in 1861-2), 1869-72, 1874-78; downturns in 1847-48, 1854, 1857-8, 1866-8, 1873 and 1879. The industry does not appear to have suffered much in the period from 1838-42 though this may be proved otherwise if more evidence comes to light.

7. Changes in the Value of Total Output

The researcher seeking a quantitative assessment of changes in the value of Scottish woollen production in the 19th century is seriously handicapped by lack of data. No official returns of the level of production were taken, or of its value. One must rely entirely, therefore, on a few estimates that were given from time to time in the period by observers and endeavour to apply some sort of check on their veracity.

The only commentator on the woollen industry who endeavoured to give some indication of changes in the value of production over time was Bremner.⁽¹⁾ He based his calculations upon an estimate given by Adam Cochrane, a Galashiels manufacturer when addressing the Social Science Congress in Edinburgh in 1863. Cochrane's figures were based on the productive capacity of the carding engines at work at that date in the factories. According to him each of the larger-type sets represented an annual overturn of about £6,000. On this basis he

(1) D. Bremner, op. cit., pp. 157-8.

offered a figure of a little below £2m. for the value of the tweed trade in 1863. Using a similar basis for calculation Bremner gave a figure of just over £2m. for 1869. His output figures for individual centres of the trade appear to have been arrived at in a similar way.

Any attempt to interpret and to build upon these estimates immediately poses problems. In the first place it is not quite clear what Cochrane and Bremner understood by the "Tweed" trade. By the 1860s this term was being used very freely and could be used to describe many types of woollen products made both in Scotland and England. Was the shawl and accessory trade included for example, to say nothing of shirtings and vestings? Secondly were the figures offered meant to relate only to the "tweed district", which meant in fact, the Borders? It is possible to clarify at least Bremner's figures on this point. If one totals the value of trade in woollen cloth given for several of the chief Border towns the result approximates to the aggregate figure offered for the "tweed trade" of just over £2m. (See table 5).

Table 5 VALUE OF OUTPUT OF WOOLLEN GOODS OF
THE CHIEF BORDER MANUFACTURING CENTRES IN 1869

<u>Place</u>	<u>Estimated overturn</u> (£000s)	
Galashiels	570	
Hawick	450	(based on Bremner's carding set return)
Dumfries	260	
Selkirk	220	
Innerleithen & Walkerburn	211	
Langholm	200	
Jedburgh	66	
	<u> </u>	
Total	1,977	

Source: D. Bremner, Industries of Scotland.

1871 to 'carding machines'. In neither case does the figure bear much relation to the sets quoted by Bremner. In 1867 only 191 'condensers' are listed for the whole of Scotland whereas Bremner gives 340 sets for the Borders alone. In the 1871 returns only 281 'carding machines' are listed under the Border counties. These can hardly be equated with Bremner's sets considering the rapid expansion that occurred at this time in productive capacity. Moreover any rough correlation between increases in machinery and the value of output is difficult to justify. Increases in spinning spindles do not take account of yarn being bought in from England; in the same way to relate growth of output directly with expansion of powered weaving capacity does not take account of hand-loom weaving which it was replacing. In any case the power-loom returns seem to have been unduly influenced by events in the western counties in these years, presumably in the carpet industry. Similarly the assumption of a close relationship between output and changes in the labour force also assumes that productivity remained unchanged. One is left with no alternative but to guess therefore. When all the evidence is studied and adequate notice taken of the great increases in production that some firms experienced in the early 1870s it is not unlikely that the level of output of the late 1860s was increased by 75% by the mid-1870s. By 1875 the annual gross value of output of all woollen goods (except hosiery and carpets) manufactured in Scotland was probably about £5m. This figure was almost certainly not maintained for long but it seems reasonable to suggest that the value exceeded £4m. per annum in 1880. Firmer evidence concerning the value of production at a later date encourages belief in these figures. In 1907 the Census of Production taken after a long period of decline in the demand for tweed during which some contraction of the industry took

place put the gross value of the industry's output at something over £3m. (including blankets and shawls). If the figure of £5m. in 1875 is accepted we may say that woollen production in Scotland represented something like 10% of total British production (including carpets) and perhaps nearer 15% if carpet production is excluded from the national figures. Because of the high export propensity of Scottish manufacturers the Scottish proportion of goods sent abroad was probably nearer 15% than 10%. It must be emphasised that the data here is very limited and until firmer evidence comes forth it will remain hard to isolate fiction from fact.

9. The Scale of Growth

Though the Scottish woollen industry never achieved a position of prime significance in the 19th century being overshadowed by developments in other fields its record of growth was remarkable enough. The manufacture of woollen goods replaced linens and cottons as the chief form of textile production in the country. As the number of people employed in the latter branches fell employment in woollen manufacture increased rapidly especially in the years after 1860. Moreover the industry became of great regional importance; most of the inhabitants of the Border counties were dependent upon it in one way or another; woollen manufacture provided almost the only form of industrial employment in many other places too. Even more important, an industry which had even in 1830 been of insignificant size and mostly unheeded outside the confines of its limited market had, by the end of our period, achieved international recognition for the quality and variety of its products. Yet, when this has been said, the fact remains that the Scottish woollen industry was always

insignificant, as far as size is concerned, when compared with that of Yorkshire. It is reasonable to ask why woollen manufacturing in Scotland did not expand on a larger scale. There were people who spoke in the early years of the 19th century of places like Galashiels and Hawick becoming the "Leeds" of Scotland.⁽¹⁾ They did not; these towns never began to approach the Yorkshire woollen centres in the scale of their industrial pursuits.

On the surface this problem is readily accounted for. The Yorkshire manufacturers specialised in the growth area of the industry catering for the demands of the mass-market by producing cheap woollens. Scotland did just the reverse, for, while in its prime the tweed trade supplied customers of all walks of life, the industry was always geared to the tastes of the quality market. By definition, therefore, because fewer people could afford Scottish woollen goods the industry was smaller than that of Yorkshire. However, one must needs enquire as to why Scottish manufacturers chose this path rather than serving the needs of the mass-market where growth potential was higher.

In the first place it must be remembered that the traditional products of the Borders had always found some outlet among people of some standing; Galashiels grey was in a sense a 'classless' cloth.⁽²⁾ In addition great attention was paid, under the auspices of the Board of Trustees to quality improvement after 1780. Even so the quality of Scottish woollens in 1830 was still probably inferior to that of similarly-priced goods made in England, so that attention to this aspect of manufacture does not satisfactorily explain the growth of the novelty trade in subsequent years. Another factor of more

(1) T. Craig-Brown, *op. cit.*, vol. 1, pp. 507-8.

(2) Letters and Memoirs of Mrs. A. Rutherford, pp. 219-20.

relevance was the absence in the woollen districts of Scotland of a large proletarian population engaged in other industries and who provided a ready market for low-priced, cheap-quality fabrics. In Yorkshire the neighbouring coal and iron industries acted as a kind of catalyst to growth, - growth in a particular direction. Moreover these industries were consumptive of male labour which encouraged immigration to these districts thus providing sufficient female labour to enable the woollen industry to grow enough to meet mass demand. This was not the case in any of the woollen districts of Scotland. It is true that mass demand existed in Glasgow and to a lesser extent in Edinburgh; but the absence of a diversified economy in the woollen areas detracted from their ability to serve this kind of market.

When these economic arguments have been considered, however, (and they are not without substance) it must be said that woollen manufacturers hardly exercised a choice as to what direction their industry would follow. If one had informed a Galashiels clothier in the late 1820s that within a decade his goods would be the rage of London's West End he would no doubt have remained incredulous. In other words tidy economic arguments must take second place to the power of fashion and fortuitous circumstances. The most important facts relating to the direction which came to be followed by the Scottish woollen industry were, firstly, that the Border plaid cloth became fashionable among the increasing number of travellers to keep out the weather; secondly Sir Walter Scott, a well-known author happened to live near Galashiels and also happened to travel a good deal to the metropolis on account of his literary fame and his public office;⁽¹⁾ thirdly, Scotland was being 'discovered' as a happy

(1) cf. B.P.P. 1839, XLII, 159, p. 186 n.

hunting ground by the aristocracy. As a result Scottish-made cloth became increasingly found in the capital and before long the enterprise of its merchants laid the foundations of future developments in the trade. Scottish manufacturers were, willy-nilly, borne along by social pressures emanating from the upper classes in the same way that Yorkshire manufacturers were influenced by the changing social and economic situation in that area. In this way the Scottish woollen industry became identified with low-intensity production and high prices and Yorkshire with high-intensity production at low prices. That identification having been made there was comparatively little room for flexibility on the Scottish side. If the tweed-makers had allowed their products to be cheapened then their trade would have been lost altogether. Yorkshire manufacturers, however, could always aim at product improvement while keeping their prices stable thus expanding their share of the market. When they did succeed in doing this to some extent, the Scottish makers were forced to create further differentiation in the products of the two regions thus buttressing their association with the limited high-class trade. Yorkshire competition forced the Scottish industry always towards those areas of the market where growth potential was smaller. Demand for Scottish goods was, therefore, relatively inelastic while the opposite was true of the Yorkshire trade, at least for much of the century. The size differential of these two branches of the wool-textile industry was thus an expression of the markets towards which they were orientated; in turn their orientation was the result of social, economic, and, at least in the case of Scotland, fortuitous circumstances.

The basis of the expansion of Scotland's woollen industry in the decades after 1830 was its success in capturing the upper end of the market for woollen cloth, mainly, but not exclusively, for men's wear. The industry's success in this quarter was very largely a function of fashion movements. It is true that Scottish woollen workers - notably designers - possessed skills which aided the fortunes of the trade. But the fact that fashion smiled upon the products of the Scottish border at a crucial moment in their history is a fact of immense importance. The coming into favour of Scotland generally with the upper classes redounded to the benefit of the local woollen industry. The growing taste for travel and the restoration to public confidence of a monarchy which had a taste for things Scottish ensured that the market widened sufficiently to create the necessity of changing production and organisational methods. Fashion movements are partly spontaneous of course and the expansion of the 1830s was largely a response to spontaneous demand emanating from the more avant-garde of the upper classes. But that Scottish woollens received a permanent rather than a temporary stimulus was due to the careful nurturing of fashion trends by Scottish brains, - often exiled ones in the best Scottish tradition.⁽¹⁾ Scots with a highly-developed commercial flair did much to keep fashion favourable once it had moved in their direction. This was not always possible, as with the Hill-foot shawl trade, but the Scots preserved their near-monopoly in quality tweed production throughout this period. Would-be competitors looked to Scotland for their inspiration. Behind the baldness of the statistics of growth, therefore, lies a rich amalgam of fortuitous circumstance and genuine human endeavour. The coining of the word

(1) See chapter 4 above, p. 142.

'tweed' was an accident; that people bought them all over the world was not. Fashion may have beamed quite unexpectedly but that it lasted for half a century was not only due to the texture of Victorian society in general but to the entrepreneur who energetically designed his cloths and showed them in London, who innovated not only by adopting inventions and improvements pioneered elsewhere but constantly 'tinkered' to improve the performance of his plant.⁽¹⁾

Towards the end of this expansive phase, however, the factors which had provided the basis of growth were less evident. Economic and social conditions were changing. The virtues embodied in Scottish fine cloths were being challenged by other factors less conducive to the industry's prosperity. The response which the industry made to these will be dealt with in the following chapter.

(1) E.g. Henry Brown of Selkirk invented the 'Scotch feed' carding machine widely adopted in the West Riding. H. Ballantyne & Son, possess patents of the last century for carding improvements. See also the many references to machinery improvements in the Minute Books of the Board of Trustees, S.R.O.

Appendix 1A NOTE ON THE INTERPRETATION
OF THE FACTORY RETURNS

The returns taken at intervals during the 19th century by the factory inspectorate have been employed in this chapter to give statistical data concerning changes in the productive capacity of the woollen industry in terms of labour, spindles, and power-loom. Certain factors must be borne in mind, however, when conclusions are drawn from these figures. Firstly they only relate to premises under the jurisdiction of current factory legislation. Until the 1860s, for example, there were many weavers employed in loom-shops which were outwith the control of the factory inspectors. There were, in addition, a few domestically based firms producing for the market, though their contribution may not be considered as important. Secondly mere aggregation of this statistical material takes no account of increases in capacity due to technical advances producing more output per unit of plant. This is particularly relevant to information regarding spinning capacity. Hand-operated mule-jennies gave way to the self-actor in a wide section of the industry during the period under review greatly increasing output per spindle. In the same way carding sets increased their performance by becoming larger, wider and faster. Thus the number of these machines or spindles within the industry understates the actual productive potential.

On the other hand the factory returns do not differentiate between factories making woollen cloth and those engaged in woollen carpet manufacture. Where the Borders or other woollen-manufacturing districts are discussed separately this factor is not of importance. Carpet-making was almost entirely centred in the west of Scotland, though a few firms so engaged in the Edinburgh area figure in the

returns of the southern region after 1871. The national statistics, however, do include the whole of the Scottish carpet industry which adulterates the figures for 1871 and 1874 somewhat for the purposes of this study. Worsted and hosiery mills do not figure officially in the returns for woollen mills but it may be presumed that where mills undertook the manufacture of knitted goods and yarn as well as cloth, there was a degree of overlapping. Lastly the factory returns indicate, apart from one exception in 1871, only the amount of machinery installed, not that actually in use. Thus the total capacity of the industry is not a sufficient indication of activity within it at any given time.

Appendix 2PRODUCTION INDEX OFH. BALLANTYNE & SON, WALKERBURN, 1859-80

(1860 = 100)

<u>Year</u>	<u>Index</u>	<u>Year</u>	<u>Index</u>
1859 ...	86	1870 ...	141
1860 ...	100	1871 ...	161
1861 ...	78	1872 ...	203
1862 ...	95	1873 ...	116
1863 ...	146	1874 ...	212
1864 ...	169	1875 ...	251
1865 ...	150	1876 ...	268
1866 ...	183	1877 ...	288
1867 ...	167	1878 ...	319
1868 ...	159	1879 ...	227
1869 ...	160	1880 ...	338

Source: Wages Ledgers, Ballantyne Archives.Note

The above table is based on the output (ells) produced by both hand-loom and power-loom weavers. Hand-loom weaving for the market (as opposed to pattern weaving) ceased in this firm in 1869. The width of cloth was much the same throughout the period. The early power-looms wove a cloth similar in width to that woven on the hand-looms and the faster, wider power-looms were not generally installed in the industry until later in the eighties. The fact that the wages paid to the weaving foreman over the whole of this period stayed at five-eighths pence per ell also suggests that the width of the cloth was constant.

1. Introduction

In common with other sectors of the British economy the Scottish woollen industry began to show signs of deceleration, and at times, even absolute decline, in the thirty years or so before 1914. All available data suggest that producers lost in this period much of the confidence and enthusiasm that had characterised the central decades of the 19th century. By contrast the 1880s and more especially the 1890s were years of growing complaint and even dismay on the part of employers and workers alike. Scottish-made woollen products which had seemed to many to be invincible showed themselves as vulnerable as those of other industries.

The period between the collapse of the great foreign trade boom in 1873 and the middle of the 1890s has long borne the title of the 'Great Depression'. It is the purpose of this chapter to inquire whether such a description is merited by the condition of the Scottish woollen industry at this time. More specifically an attempt has been made to identify the factors which combined to create the undoubtedly changed economic climate within which the manufacturers operated before 1914 and to discuss the impact which these forces exerted upon the industry.

2. Trends in Output, Prices and Profits

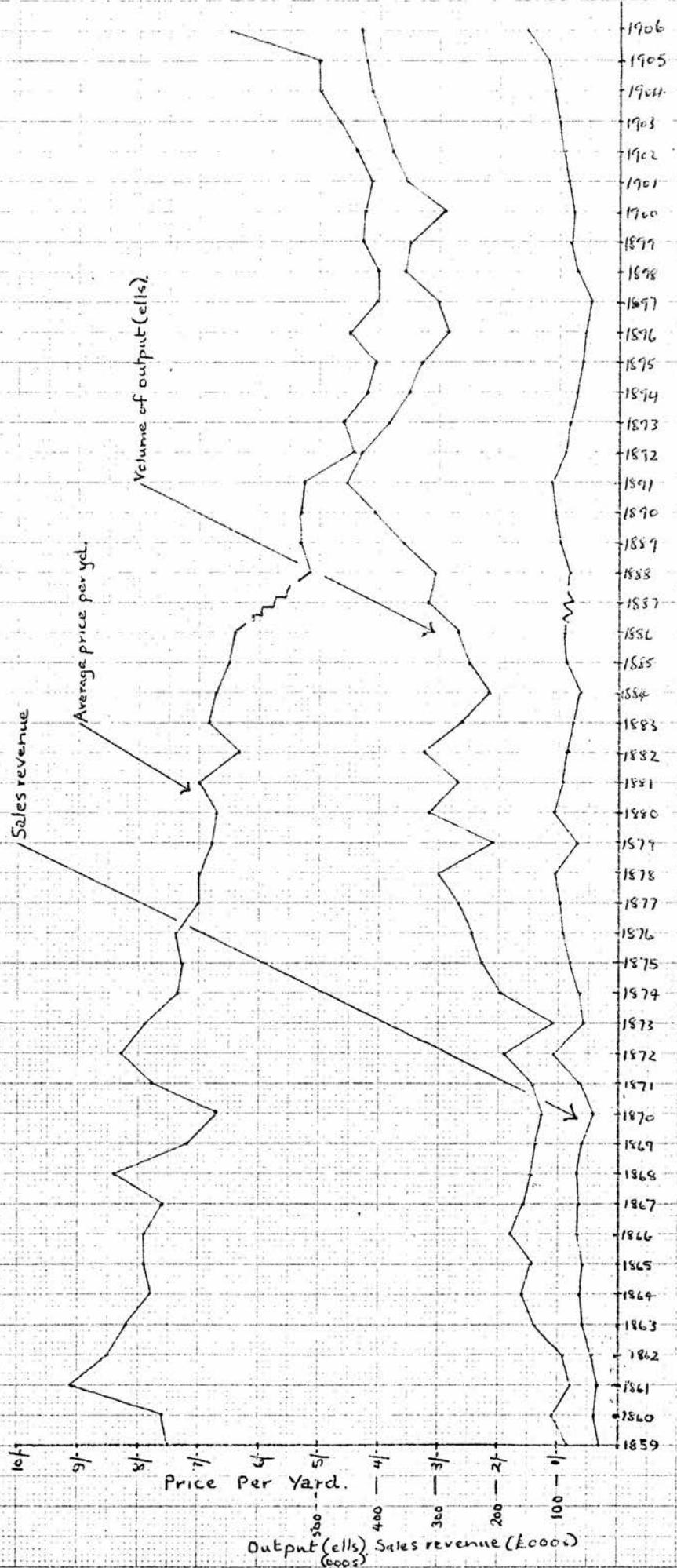
Just when the industry as a whole became aware of increasing long-term problems in trading is difficult to chronicle exactly. Opinion varied among the manufacturers themselves. It was felt by some that

trade had never revived after the topping-off of the boom in the early seventies following the Franco-Prussian war.⁽¹⁾ Others spoke of a rare spell of prosperity in the 1880s. More traced the downturn in their fortunes specifically to the tariff in America in 1890.⁽²⁾ Fortunately one is able to get behind these broad statements somewhat by studying in detail the sample of business records that has survived from this period which sheds some light on the movements of prices, output and employment in the industry.

Figure i shows changes in prices obtained per yard of cloth by Henry Ballantyne & Son of Walkerburn between 1859 and 1906. It is clear that after a steep rise in the early part of the decade prices began to fall down to 1867 and again after 1868. The export boom of the early seventies raised them again but a further fall occurred after 1872. Short-term fluctuations continued under the influence of the trade cycle, peaks occurring in 1876, 1881, 1883, 1889, 1893, 1896, and 1899. But taking the long view it is quite clear that from the early sixties to the end of the century the long-run trend of Ballantyne's prices was downward. There is nothing extraordinary about the years 1873-96; prices were falling before and continued to fall until 1898 at least. The signs are that after that date the trend is reversed though the recovery is stronger after 1901. Unfortunately the data stop in 1906 but other evidence suggests that short-term fluctuations in subsequent years before 1914 were superimposed on an upward trend of prices.

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- (1) C. Wilson, Address to the Border Counties Commercial Travellers' Assoc., Galashiels, 1903.
- (2) Dr. T. Oliver, "Some Lines of Development", Glasgow Herald, Dec. 30th, 1914; Report of the Tariff Commission, 1905, vol.ii, pt. ii, para. 1314 et alia.

Fig.1 Output, Sales revenue and average unit prices, Henry Ballintyne & Sons, Walkitburn, 1859-1906.

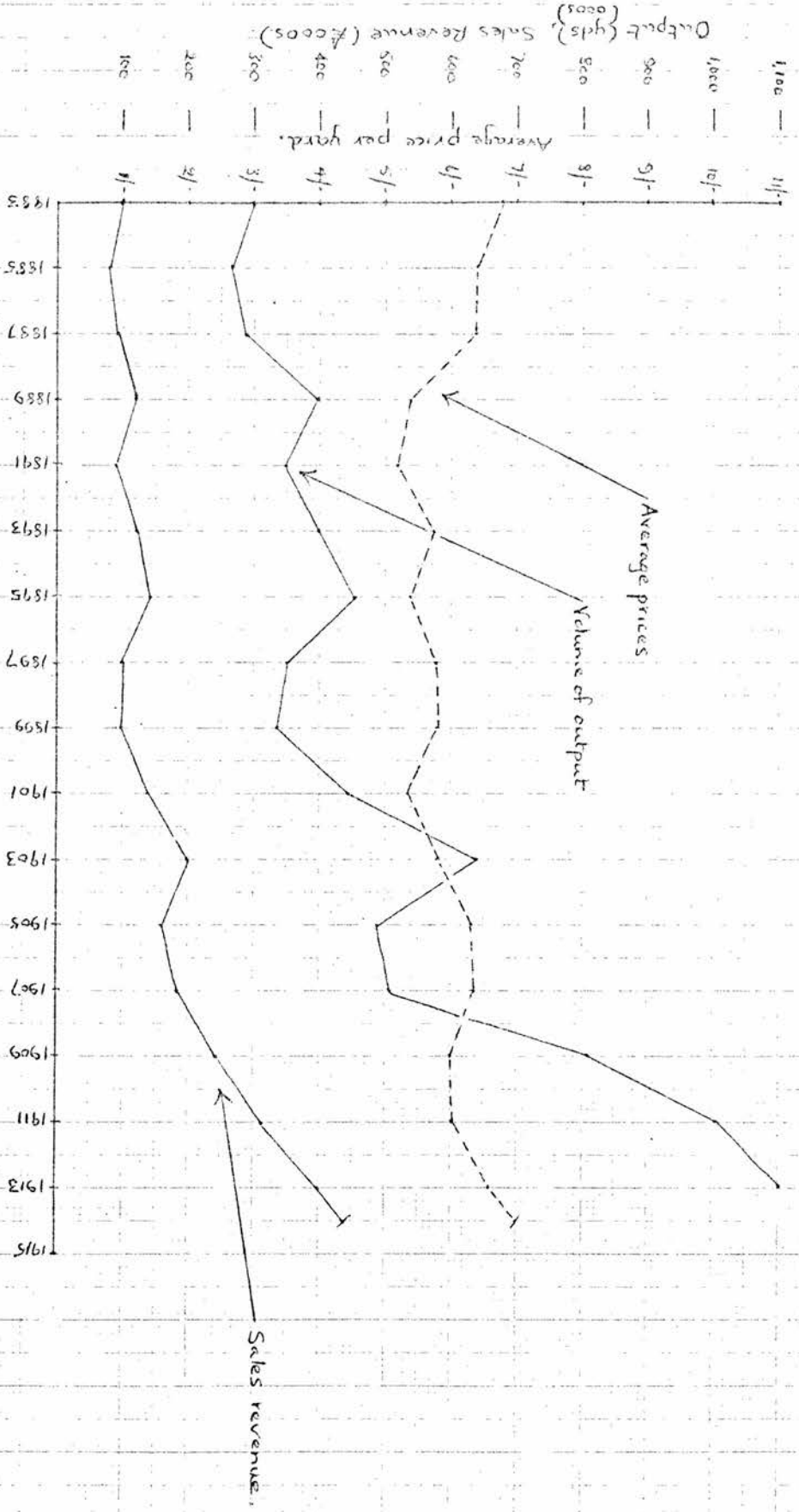


It is also clear from figure i that the demand for Ballantyne's products remained firm until the early 1890s. Despite falling prices output continued to rise for much of the period termed the "Great Depression". The break in trend noticeable in 1891 continued till the turn of the century when a strong upward movement set in which it seems lasted down to the war. It has not proved possible to obtain figures for the net output of this firm but it seems clear from sales revenue figures that expanding production in the sixties and seventies was more than enough to offset falling prices. In the eighties, however, revenue ceased to grow despite rising production. The downward trend of revenue continued until the later nineties, when, along with prices and production this trend was reversed. It seems legitimate to conclude from this examination that profits were depressed for this firm from the 1880s to near the end of the century and that full depression, in the sense of production cutbacks characterised the 1890s. Employment and wage data belonging to this firm confirm this view. The average number of workers employed by Ballantyne rose from 270 in 1873 to 440 in 1891. Then a steep fall occurred to 1897 when the number was stabilised at about 360 till 1900. Then the workforce rose to new peaks. Total wage data not unnaturally shows a similar long-term pattern.⁽¹⁾

The picture afforded by the records of J. & J. Crombie of Aberdeen is not dissimilar from that of Ballantyne. (See figure ii). Prices per unit were already falling in the early 1880s when the data begin, a trend which continued till 1891. Thereafter for the rest of the 1890s no particular trend is observable, prices remaining

(1) Wage Books, Ballantyne Archives.

Fig. II. Output, Sales revenue and Average unit prices, J & J Crebble, Aberdeen, 1883-1914.

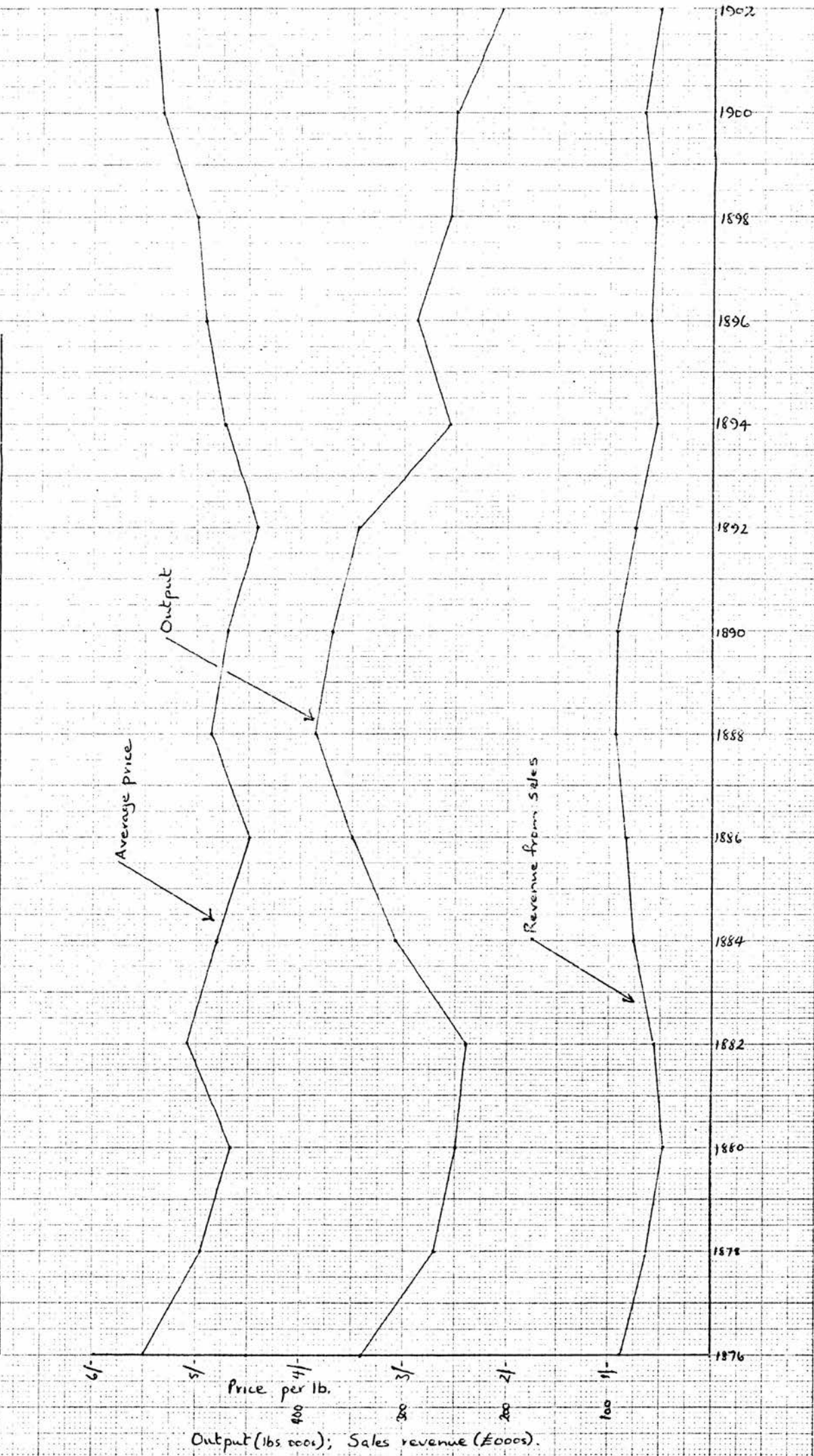


remarkably stable to about 1902 when a strong upward trend set in which continued to 1914. Output moved upward throughout the eighties but a downward trend is discernable in the nineties which was strongly reversed after 1899, and, like prices, continued to the outbreak of the war. Revenue from trade, however, stagnated from the early eighties until 1901. As production fell in the nineties prices were held. Crombies appear to have adopted a policy of either restriction of output or quality improvement, (or both) to maximise earnings from trade in this difficult decade. Here again the impression gained is of a profits depression in the 1880s combined with depression of production in the following decade, and a recovery in both from the early 1900s onwards.

Figure iii is based on data belonging to the firm of William Watson & Son of Hawick. Here, too, prices moved downward from at least the mid-1870s to 1892. Then in a similar way to Crombie, Watson appears to have been able to stabilise and then to actually increase unit prices in the 1890s by qualitative changes in production. Revenue decreased in this decade but it is possible that by his policy of raising quality Watson managed to slow down the rate of fall in revenue. Net output, (the difference here between the value of inputs and gross revenue), rose steadily in the eighties but fell away in the 1890s almost to the 1880 level by 1902.

The general impression gained from a study of the behaviour of these businesses is that production continued to grow during the 1870s and 1880s with cyclical troughs occurring in 1873, 1879, and again in the middle eighties. In the nineties output was quite severely reduced causing unemployment in the industry. Troughs occurred between 1891 and 1894, and again between 1897 and 1900. Prices and probably

Fig iii Output, sales revenue and average unit prices, Wm. Watson & Son, Hzwick, 1876-1902.



Scotland Chamber of Commerce gives it some significance. In accordance with the usual practice of the woollen manufacturers no statistical evidence on prices and profits was submitted. The S.S.C.C. merely stated that the volume of trade since the early 1870s had increased, but its gross value had declined. On the other hand capital investment was higher so that gross return on investment was a good deal reduced. In the yarn-spinning section of the industry profits in the mid-eighties were declared to be "very much less" than in the early seventies - a fact which is not surprising as the latter years were boom years while a slump hit the mid-eighties. Nonetheless the yarn-spinners had conducted little further investment after 1875 and in 1885 less capital and labour were being employed than in 1875-80. The volume of trade had already diminished. Prices and profits were falling. (1)

The cutback in production in the early and late nineties which was noticed in the business data is also well documented in other sources. Between 1891 and 1901 the population of Hawick fell from 19,204 to 17,303. That of Galashiels fell by about one quarter. (2) An observer wrote in 1899 that the Scotch tweed trade was "withering and decaying and casting a blight over a once bright and busy part of the country". He spoke of rows of empty houses, a dwindling population and a steady flow of emigrants to Canada and the U.S.A. and the streets filled by "loungers", in truth men idle due to idle plant. (3) In 1897 a mill standing at a written down value of £18,000 was unable to find a purchaser at £5,000. A year or two earlier an

(1) R.C. on the Depression of Trade and Industry, 1886 1st Report, B.P.P. 1886, XXI, p. 110.

(2) Census Returns (Scotland) 1911, vol. i, pt. ii, para. 2059.

(3) W. C. McBain, The Liberty Review, April 15th, 1899; Glasgow Herald, Sept. 14th, 1897.

almost new mill valued at £12,000 was sold by a bond-holding bank for less than £6,000 payable in easy instalments at $2\frac{1}{2}\%$ interest.⁽¹⁾ In 1898 many Hillfoot manufacturers succeeded in obtaining reductions in their assessments due to the state of the yarn and shawl trades.⁽²⁾ Prices continued to slump. Goods were sold below cost on occasion to keep mills working. The head of a Leeds clothing firm stated in 1898 in relation to a consignment of Scotch Tweed "I bought that lot at 2/- a yard... not long since I paid 3/6 a yard for similar goods and I believe they could not be produced for much less than 2/6."⁽³⁾

Having traced the pattern of movement of the main economic indicators in this period it is necessary to investigate the causes. The falling prices shown in Ballantyne's business in the sixties were almost certainly due to technological change. It was in this decade that self-acting spinning mules were installed generally in the industry as a result of previous investment in powered-weaving machinery. The continuence of falling prices in the 1870s and eighties however, are not to be explained fully in this way. The great export boom of the early 1870s called much new capacity into the industry. With the collapse of the boom in 1873 therefore the industry was burdened with a good deal of excess capacity both in terms of machinery and labour. Demand still ran fairly strong, however, above the level of the 1860s so that production was not reduced further after 1873 but, on the contrary continued to expand. Prices did not recover, however, due to increased competition in the industry. Manufacturers had real incentive therefore to cut their costs. Possibilities for this presented themselves not only in falling wool prices but also in

(1) Ibid.

(2) Letter Book 2, p. 273, Ballantyne Archives.

(3) Hawick News, March 11th, 1898.

further capital investment in plant giving greater output per head. This took the form of widespread investment in the "fast" power-looms which, by operating at a speed twice that of the older "slow" looms gave considerable increases in productivity. This new investment characterised the 1880s. Again new capacity was absorbed in the conditions of strong demand in the later part of that decade but a sudden collapse of demand after 1890 left the industry highly over-capitalised. Thus real recession resulted giving rise to considerable unemployment and the closure of several mills.

We have succeeded in explaining to some extent the falling trend of prices and profits in the years after 1873. But the real question is why was not demand strong enough to maintain profitability in these years and so weak after 1890 that severe cutbacks on production occurred for most of a decade. It is to this question that we now turn.

3. The Impact of Foreign Tariffs

Scottish manufacturers had good reason to make adverse tariffs their major scapegoat. A high proportion of the output of the industry found its way abroad - to the very countries from where most interference was stemming. In 1886 it was estimated that about 40% of piece goods production was exported, mainly to Europe and North America.⁽¹⁾ Some individual firms and even entire communities were even more heavily committed to exports. Galashiels for example was almost totally concerned with the North American market.⁽²⁾ Thus the erection of tariff barriers were a severe threat to the industry. Any interference

(1) R.C. on Depression etc., loc. cit., evidence of S.S.C.C.

(2) Glasgow Herald, Oct. 6th, 1913, p. 11a.

with the free conduct if international trade had always provoked reaction in the Borders. Free trade principles were deeply held (Cobden was given the freedom of the burgh of Hawick in 1844). The S.S.C.C. was formed in 1860 as a result of the maintenance of a tariff on woollen goods by the French.⁽¹⁾

The return to protective commercial policies in Europe began in the seventies did not initially seriously embarrass the industry. In fact woollen industries abroad needed immediate protection from cheap imports, not quality goods. Nevertheless, over time the Scottish manufacturers, especially those most concerned with medium and plain goods felt the effects of protective duties upon their businesses.

The real blow to the industry, however was afforded by the erection of a stiff American tariff against woollen goods in 1890, as the incidence of both specific and ad valorem charges fell more heavily upon better quality goods. The McKinley tariff of 1890 imposed on woollen cloth valued at more than 40c per lb. a specific duty of 44c per lb. plus 50% ad valorem. Conditions were relaxed under the short-lived Wilson revision in the mid-1890s (which caused a temporary upturn in the fortunes of several Scottish firms) but under the Dingley tariff of 1897 a new category was included which brought the ad valorem duty on cloth (and dress goods) valued at 70c per lb. or more, up to 55%.⁽²⁾ In round terms, the duties imposed on most woollen goods under the 1890 tariff structure was equal to more than 100% of their foreign value, while the severe Dingley legislation was specifically designed

(1) R. Scott, One Hundred Years of Commercial Progress, p. 1.

(2) For full details of the American Tariff structure see F. W. Taussig, Tariff History of the United States (1931), especially pp. 260, 263 and 333-4.

to "preserve the home market as far as possible to our own producers".⁽¹⁾ Though a further revision of the tariff was embodied in the Payne-Aldrich act of 1909 woollen duties remained virtually unchanged down to 1914 apart from a slight reduction on yarn and dress goods in the cheaper ranges.⁽²⁾ The imposition of continental tariff protection was undoubtedly prejudicial to the trade of the Scottish woollen manufacturers and spinners, being sufficient to turn some of the staunchest free traders into retaliationists, and a few to downright protectionists.⁽³⁾ Especially severely affected were yarn spinners. A Selkirk spinner testified before the Tariff Commissioners in 1905 that an increase in the price of yarn of ld. per lb. caused by import duties was "more than enough to decide an order in a trade where quotations are made by the farthing".⁽⁴⁾ As early as 1886 there was talk of retaliation to stem the "inch by inch decay" of the yarn trade caused by continental tariffs.⁽⁵⁾ By 1901 European yarn orders were reported to be two-thirds less on average than in the 1870s and 1880s,⁽⁶⁾ and what was required was much more intricately fabricated and designed. A Selkirk yarn spinner stated that it was "impossible to send plain carded yarns to the continent".⁽⁷⁾ The tweed manufacturers were also adversely affected, progressively so as tariff adjustments were made. In 1903 a circular was distributed by the

(1) P. Ashley, Modern Tariff History, pp. 219-220.

(2) F. W. Taussig, op. cit., p. 393 and note; Glasgow Herald, Aug. 24th, 1909, p. 6.

(3) The best source for opinion on these matters is Scottish Woollen Trade and Foreign Tariffs, published by the S.S.C.C. in 1903. For the opinion of one influential yarn spinner see Tariff Reform - a paper read before the Hawick Constitutional Club by T. Craig-Brown, Oct. 16th, 1903.

(4) Para. 1968.

(5) T. Craig-Brown, Foreign Tariffs, p. 14. cf. R.C. on Depression etc. evidence of W. Schulze paras. 5369, 5383, and 5481.

(6) Southern Reporter, June 16th, 1901. This reduction was blamed on, but may not have been wholly caused by tariffs.

(7) Scottish Woollen Trade and Foreign Tariffs, p. 6.

S.S.C.C. to all its members engaged in woollen manufacture regarding the effect of continental tariffs upon the level of business. The replies obtained were unanimous in their opinion that continental trade was indeed hampered by protective barriers. A Galashiels manufacturing firm put the general opinion of Border businessmen succinctly: "France, dwindling down; Germany ditto; Russia, after a last struggle now dead; Austria, very difficult and risky; Italy, sometimes a bit of business in a novelty if we give them it for nothing".⁽¹⁾ W. B. Sime of Hawick advised that the last increase in the French tariff had so seriously diminished his business that he had been compelled to dismiss his French agent because the amount of trade he could do would no longer pay the cost of his patterns.⁽²⁾ By 1906 'The Times' reported that Scottish dealings with France had "degenerated into a petty trade in short lengths..."⁽³⁾ Not unnaturally the effect of protective commercial policies was most fully felt in the cheaper ranges. "When it comes to plain goods in the medium and cheaper qualities" wrote a leading tweed merchant, "the Tariffs kill business.. trade is practically limited to the extent in which we are successful in producing novelties. The constant cry is for 'novelty' and catering for that alone enables us to sell at a profit".⁽⁴⁾

Not all the continental tariffs however, were equal in their effect on the Scottish tweed and yarn makers. On the whole it was felt that the French tariff was more of an impediment than the German, though the latter was felt to be prohibitive by some.⁽⁵⁾ But many

(1) Scottish Woollen Trade and Foreign Tariffs, p. 7.

(2) Ibid., p. 8.

(3) Times Financial & Commercial Supplement, May 21st, 1906

(4) Scottish Woollen Trade & Foreign Tariffs, p. 8.

(5) Ibid., passim; C. Wilson, Address to Border Counties Commercial Travellers' Association, Galashiels, 1903.

manufacturers turned their attention to the German market more fully after the McKinley tariff of 1890, for it was also the base for trade in Eastern Europe and with Russia. A. J. Sanderson of Galashiels stated in 1903 that though his French trade had been gradually diminishing for the past two decades, that with Germany had been growing considerably.⁽¹⁾ The overall effect of tariffs depended directly upon the nature of the goods produced by the exporting firm. Those who specialised in high-grade fabrics with the accent on design were more successful at penetration than manufacturers of plain goods in the medium qualities because of the sophisticated skills embodied in the product and the comparative irrelevance of the price factor. There were still many German merchants in this period, for instance, who dealt exclusively in British goods because they thereby obtained superior clothes and patterns.⁽²⁾

If, however, continental commercial policies after 1880 were adverse to the Scottish woollen producer, that of the U.S.A. in the 1890s was little short of disastrous. The North American market with its large number of British emigrants, especially Scots, with similar consumption patterns to their native country, was, prior to the erection of the McKinley tariff, the best overseas outlet for Scottish woollen products.⁽³⁾ The McKinley tariff of 1890, however, effectively placed a 90% duty on woollens sent from Scotland. Woollen yarn which sold in Selkirk at 1/3d. to 1/8d. per lb. was, on entering the U.S.A. subject to a duty of 1/4½d. per lb. besides 35% of its value. In the case of yarn invoiced at 1/3d. per lb. this represented a total duty

(1) Scottish Woollen Trade & Foreign Tariffs, p. 8; Glasgow Herald, Sept. 16th, 1914.

(2) Report of Tariff Commission, loc. cit., evidence of P. & R. Sanderson, para. 1824.

(3) Glasgow Herald, Sept. 14th, 1897.

of $1/9\frac{1}{2}$ d. or 143%. Taking 4/- per lb. as the average value of cloth made in the Border suitable for the American trade, this was liable to a total duty of about 3/10d. per lb. (1) After the Dingley legislation of 1897 the average duty on such cloths rose to over 100%. (2) Under the Payne-Aldrich schedules the tariff on Scottish products still ranged from 95%-145%. (3) Not surprisingly American tariff policy was regarded as "unquestionably the worst slap in the face the tweed industry ever got" which "practically severed the commercial intercourse between the Scottish Border towns and the United States". (4) Prior to 1890 the trade of Border manufacturers with the U.S.A. was in excess of £500,000 annually. By 1905 this had dropped to about £50,000. Galashiels was particularly adversely affected. Prior to McKinley about 75% of the town's trade was directed to the American market. By the early 1900s this had slumped to only 5%. (5) The following table shows the experience of three Border firms engaged in the American trade.

	<u>ANNUAL AVERAGE SALES TO U.S.A.</u>		
	FIRM		
	a	b	c
Before McKinley	£25,000	£10,000	£30,000
After McKinley	£12,000	?	?
After Dingley	£ 2,000	£500	£3-4,000

Source: Glasgow Herald, Oct. 4th, 1913.

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- (1) Textile Mercury, July 1891, p. 62.
 - (2) T. Craig-Brown, Tariff Reform.
 - (3) Glasgow Herald, May 10th, 1909, p. 8.
 - (4) Ibid., June 13th, 1908. 'Problems & Practices of the Scottish Tweed Trade'; and Aug. 24th, 1909.
 - (5) Report of Tariff Comm., loc. cit., para. 1314; Glasgow Herald, Oct. 6th, 1913.

Another firm reported trade as having been "cut to pieces, and in many cases rendered worthless to any manufacturer who has to look to these markets to do more than help pay his working expenses".⁽¹⁾ Members of the S.S.C.C. in 1903 were unanimous in their condemnation of the American tariff, employing freely phrases like "practically ceased", "almost stopped", "market practically closed" and "ruinous conditions".⁽²⁾ Where merchants had been used to order 1,000 yards to a colouring, they were now content with 50 yards or less.⁽³⁾ The Hillfoot manufacturers suffered no less than those in the Borders. By 1905 the Hillfoot trade in ladies' dress goods was in general 50% down on former years, the American trade having been "killed by the McKinley tariff". One firm whose average annual turnover with the U.S.A. prior to 1890 was around £20,000 sold only £2,000 in 1891 and nothing at all by 1894.⁽⁴⁾ As in Europe it was the less than top quality manufacturers and spinners who suffered most. Only the purest aristocrats of the trade were little worried. Most firms combined work of various levels of quality, but the market was not large enough for all to participate fully in the highest class trade. Nevertheless high-class American tailors were always anxious to get the best and most novel goods, and were willing to pay any price for a fetching novelty. The well-to-do American thought it "the right thing" to wear the latest novelties in imported goods. He thus demonstrated his financial standing. The volume of such trade was small however, amounting to only about 5%-10% of total trade prior to 1890, the loss of which would not have been materially felt by the industry.

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- (1) Report of the Tariff Comm., loc. cit., para. 2016, evidence of Walter Scott & Sons, Dumfries.
- (2) Scottish Woollen Trade & Foreign Tariffs, passim.
- (3) Ibid., p. 4.
- (4) Report of the Tariff Comm., loc. cit., paras 1348, 1349.

Such cloths had prestige value and acted as 'kite flyers' for more modest products which made up the bulk of the trade.⁽¹⁾

There can be no doubt on the evidence that the protectionist policies of foreign governments, especially after 1890, had an extremely depressing effect on the Scottish tweed and yarn industry. There is a close correlation between the erection of tariffs and the prosperity of the industry. The imposition of moderate tariffs on the continent in the 1880s coincided with the first falterings in trade. Severe depression in the 1890s, relieved a little in the middle of the decade and more severe again at its close, corresponds closely to the McKinley, Wilson and Dingley tariffs in America. On the other hand tariffs cannot be held wholly responsible for the misfortunes of the industry. They were still in effective operation when the great revival of trade took place in the early 20th century, though admittedly the centre of gravity of the export trade had shifted from America to Europe, where the tariff was less severe. However, continental tariffs too had been the subject of much bitter criticism by manufacturers in the questionnaire returns of 1903. While allowing the importance of the tariff issue, for a total explanation of the problems of Scottish woollen manufacturers, we must look to other companion factors.

4. The Impact of Competition

Contemporary opinion saw in the increase in competition, both from foreign and English manufacturing, another major threat to the Scotch tweed trade. To some extent intensified competition in third

(1) Scottish Woollen Trade & Foreign Tariffs, p. 4; T. Craig-Brown, Tariff Reform, p. 6; Glasgow Herald, Aug. 24th, 1909.

markets or at home, was a function of protective policies. One of the principal objects of erecting tariff barriers was to protect the home market and thus subsidise exports by obtaining good returns on home sales. Over time, also, the skills and capital equipment of foreign manufacturers improved greatly, thus adding to the range of goods in which they could successfully compete. There were many in the Scottish woollen industry who felt in the 1880s and even after 1890 that because their goods were so distinctive in quality, colouring and design that they had no need to fear tariffs and foreign competition.⁽¹⁾ Such complacency was hardly justified as we have seen. By the early 20th century Scottish manufacturers were beginning to feel the cold draught of competition in overseas markets. By 1905 Scotch flannel suitings, for example, were being successfully matched by Dutch manufacturers on the German market. The decline in the vesting trade between Galashiels and Italy was thought to be due more to Italian progress than to the tariff.⁽²⁾ More alarming was the fact that French and German competition was being increasingly felt on the domestic market, especially in ladies' costume cloths. Robert Noble & Co. of Hawick complained in 1905 that they were "practically cut out" of their own home trade due to cheap German and French piece-dyed products. Similar competition was felt from low-priced imported shawls from Germany. John Henderson & Sons of Alva spoke alarmingly of a "systemised German invasion" of such fabrics.⁽³⁾ On the whole however, tweed manufacturers were not seriously affected by imported woollens. The experience of the cheap dress goods branch was the exception, not the rule. At home competition stemmed mainly from Yorkshire.⁽⁴⁾

(1) See for example the naive statement of the Galashiels Textile Workers' Union made to the Tariff Commissioners in 1905.

(2) Report of Tariff Comm., *loc. cit.*, para. 1343, 1346.

(3) *Ibid.*, paras. 1939, 1953.

(4) *Ibid.*, para. 1356 and see below pp.

In common with many other British manufacturers Scottish employers reacted somewhat irrationally against foreign manufacturers accusing them of all manner of underhand tricks.⁽¹⁾ A Dumfries firm, for example, was in no doubt that competition on the home front was the result of "spurious imitations" as well as all the other "vile practices which the foreigner introduces into every trade he touches"⁽²⁾ Others claimed that the still existing U.S. trade in high-grade goods was only tolerated by that country so that the American merchants could buy them in small quantities to educate themselves to 'coach' their own manufacturers. "Buyers look at our styles" grumbled Keddie, Gordon & Co. of Galashiels, "buy a few bits to save their shame, and then make up their bulk in cheaper goods on this side, or know better what to buy on the other. We lose patience when speaking of this country (U.S.A.) which takes 95% of a start... and then struts about as Lords of creation".⁽³⁾ Fume as they might however, the fact remained that by a combination of skill and knavish behaviour Scottish manufacturers were being successfully imitated by foreign manufacturers. Even the Clan tartan trade was being successfully invaded in low qualities and "bastard substitutes".⁽⁴⁾

The main burst of foreign competition in the woollen trade was felt by the yarn spinners, however, who were faced with ever increasing consumption of cheap Belgian yarn by home and overseas manufacturers. Belgium, herself largely excluded from the American market by the tariffs of 1890 and 1897, turned increasingly to Britain as a trading

(1) cf. D. H. Aldcroft (ed.), The Development of British Industry and Foreign Competition, 1875-1914, p. 16.

(2) Report of the Tariff Comm., loc. cit., para. 2016.

(3) Scottish Woollen Trade & Foreign Tariffs, pp. 3 and 4.

(4) Report of the Tariff Comm., loc. cit., para. 1348.

outlet. Yorkshire makers, too, who hitherto had obtained a good deal of their carded yarn from Scotland, turned more and more to inferior imported varieties.⁽¹⁾ Even Scottish manufacturers, seeking refuge in cutting costs, increasingly turned to Belgian yarn (which contained about 10% cotton). In 1905 a Hillfoot manufacturer estimated that three quarters of the yarns used there were of continental origin, while the remaining 25% were only home produced due to their being sold at cost price, or less.⁽²⁾ In that year a Galashiels firm reckoned that Belgian yarn had a cost advantage over locally made yarn of 3d. to 4d. per lb.⁽³⁾

It was an added burden to the Scottish woollen industry that increasing competition from overseas manufacturers and the loss of foreign markets should also be the occasion of intensified competition from England. West Riding manufacturers, also faced with the disruption of their trade in cheap goods by hostile tariffs, particularly in America, turned their attention to a vigorous exploitation of the home market in fancy goods. At first Yorkshire attempts at emulating Scottish cloths in inferior qualities were viewed with some contempt, but the Colne Valley manufacturers showed great skill and enterprise in making from a combination of low-grade wool, torn-up stockings, pulled waste and cotton, good imitations of even the most characteristic Scotch tweed patterns. As a result Yorkshire 'tweeds' began to make great inroads on the sale of the genuine article.⁽⁴⁾ A Leeds businessman claimed in 1898 that Yorkshire was making "as good cloths as the regular Scotch makers, at less price, and in as good

(1) Textile Mercury, Jan. 1891, p. 2.

(2) Report of the Tariff Comm., loc. cit., para. 1893.

(3) Ibid., para. 1351.

(4) T. Craig-Brown, 'Problems & Practices of the Scotch Tweed Trade'; Glasgow Herald, June 13th, 1908.

designs and colours".⁽¹⁾ The Yorkshiremen were helped in their efforts partly by the time-worn custom of copying Scotch patterns, partly by the migration of Scottish designers to Yorkshire in search of more scope and better wages, and also by many Scottish firms seeking salvation from the crisis by leaving the pinnacle of impeccable standards and carrying on battle on Yorkshire's terms.⁽²⁾ This resulted in even Scottish warehousemen increasingly turning to cheaper Huddersfield tweeds. By 1906 it was estimated that about three quarters of "Scotch Tweeds" produced in Britain were made in England, a fact that is suggested by the increasing concern of some Scots to obtain an adequate trade mark.⁽³⁾

The striking success with which Yorkshire manufacturers reacted to dwindling overseas trade by exploiting the home market was also aided by the current movements in fashion. In the first place woollen cloths were giving way to worsteds at this time as public taste preferred lighter and less formal garments. At the same time the demand for durable quality cloths began to wain as public taste moved towards cheaper more expendable garments. Fine men's broadcloths went down before fine worsteds, while 'rough' textured types of woollens gave way to some extent to worsted serges. The growing ladies' trade aided the movement towards lighter more fancy fabrics, as did the requirements of what remained of the American market.⁽⁴⁾ Thus Scottish

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- (1) Hawick News, Feb. 25th, 1898. Letter from 'A Leeds Gentleman'.
 (2) Times Financial & Commercial Review, May 21st, 1906;
Hawick News, April 21st, 1899.
 (3) Dr. T. Oliver, 'Some Lines of Development', Glasgow Herald, Dec. 30th, 1914; Report of American Consulate in Edinburgh, in Textile Recorder, Dec. 1906, p. 226. For discussions on Trade Marks see, inter alia, Border Telegraph, April 7th, 1908, July 21st, 1908; Glasgow Herald, April 22nd, 1909, Nov. 29th, 1910.
 (4) E. S. Harrison (ed.), Scottish Woollens, p. 154. The switch to worsteds was also connected with the growth of cycling. People evidently preferred shiny pants to baggy knees.

manufacturers already besieged by tariff barriers in their important export sector, and by increasing foreign competition at home and overseas, were further embarrassed by arbitrary fashion changes. Thus in 1898 an observer could write that "a few years ago Scotch tweeds were all the rage, while at the present time no man with any pretensions to being considered well-dressed is to be seen arrayed in the productions of the looms of Caledonia".⁽¹⁾ The changes in demand were particularly harmful to the sale of average tweeds. "People do not now go in for the clothing which may descend from grandfather to grandson, nor do they pay the old-fashioned prices for them... the present generation preferring repeated changes to the plain goods which suited our forefathers... taste, comfort and variety, not to mention prices, being the chief considerations".⁽²⁾ The social composition of demand for Scottish woollens had become fairly wide during the middle years of the 19th century. Though careful to maintain the purity of raw wool content, manufacturers produced a wide variety of qualities. One way of keeping costs down to the more humble purchaser, whose tweed suit in any case was usually reserved for Sundays and other formal occasions, was to restrict the amount of designing that went into their production. Consequently these cloths were fairly plain and patterns were repeated year after year. By the last quarter of the 19th century it was this part of the trade, which had never been as 'novelty' conscious as the aristocratic branch, which was under heavy fire from Yorkshire fancy woollen and worsted producers.

A further function of this important change in fashion, and the battle for the home market, was the gradual evolution of the multiple clothier, and the ready-made trade. From its origins in the mid-

(1) Letter to Hawick News, March 11th, 1898.

(2) Ibid., Jan. 21st, 1898.

1850s in London, Norwich and Glasgow the ready-made clothing industry was mainly concerned with cloths of inferior quality. In the 1890s however, buying "off the peg" was beginning to affect the purchasers of medium qualities also, and the Scottish tweed manufacturers were no longer exempt from its economic implications. Moreover, this movement in tailoring was even more seriously affecting overseas markets, especially the U.S.A. A 'ready-made' suit there carried none of the social stigma that clustered around the concept in Britain. By 1914 it was reported that the bulk of American business and professional classes bought ready-made clothes.⁽¹⁾ By the late 1880s in Britain, however, large wholesale tailoring houses were distributing broadcast to drapers throughout the country bunches of cloth patterns representing stock at headquarters. Would-be purchasers chose the pattern, were measured by the local agent, and the manufacturing tailor made the garment on a mass-production basis, but nonetheless combining attractiveness of style with cheapness of cost. This type of tailoring, therefore, required large quantities of standardised cloth identical in weight and pattern. The satisfaction of this type of demand was more easily achieved by the Yorkshire woollen factories employing considerable quantities of 'recovered' wool and other fibres than by the Scottish manufacturers for whom quality rather than cheapness had always been the governing factor. The ability of these Yorkshire manufacturers to imitate accurately the distinctive designs of the genuine Scottish article made it certain that they captured the market for medium qualities on the home front.

(1) For a general discussion of the growth of the multiple clothier see J. Thomas, "A History of the Leeds Clothing Industry", Yorkshire Bulletin Occasional Papers, No. 1, Jan., 1955.

This quiet revolution in distributing woollen articles to the consumer, heralding the decline of the bespoke tailor, the principal outlet of the merchant dealing in Scotch goods, was not lost on the Scottish manufacturers. Those dealing principally in top-quality products were again not alarmed; others questioned whether the ready-made principle would ever extend to the purchasing of the genuine Scotch tweed. Many, however, were more realistic. As one remarked, the top quality trade was "only a small outlet, no trade centre can exist on the plums without getting a share of the good solid bread".

As the stigma attached to mass-produced clothing began to ease manufacturing tailors began to employ medium and even high-class cloths for ready-made clothing, thus bringing quality cloths to the consumer at considerably reduced prices.⁽¹⁾ As a result of these developments, and in the general context of discussions concerning the diversification of industry in the Borders, calls were made upon local manufacturers to employ surplus capital in establishing clothing factories to make up the local cloth. A number of the commercial interests in the area strove to get Glasgow firms to open up in the Borders, pointing out that being set among the mills they would be able to command a better range of goods and get their ideas more fully worked out than they could do by merely seeing pattern ranges. It was generally realised, however, by the proponents of these ventures that a wider range of qualities than those made in the Borders would have to be stocked because of the type of market, and competition from the West Riding. Though one factory was eventually opened at Galashiels (which still operates) the idea did not in general appeal to local capitalists. They feared the introduction

(1) See Hawick News, March 25th, 1898.

of low-class labour (as did existing workers - owing to the threat of a lower wage level); they were sceptical of the size of demand for high-class ready-mades, and, more important, feared, not without some cause, that they would lose a good deal of their merchant trade. They thus preferred to leave well alone, and trust to orders for multiple tailors being placed through the merchant as were those of the bespoke tailor. Thus the making up trade continued to be conducted elsewhere. (1)

There is no doubt then, that the Scottish woollen industry was assailed by formidable problems towards the close of the 19th century which posed a severe threat to its structure, organisation and tradition. Foreign tariffs, especially the American, played havoc with an export trade amounting to about half the total output. Foreign competition was increasingly felt in overseas markets in plain goods and at home in yarn and ladies' cloths. Fashion, at the same time, moved sharply away from Scottish products at home in two ways; a switch from woollens to worsteds, and a growing taste for cheap, mass-produced fancy articles lacking the lasting characteristics of real tweeds. An expression of this change in social attitudes was the growth of the ready-made trade in the large centres of population. Multiple tailors began to move into higher qualities and Yorkshire enterprise in imitating Scotch goods in cheap worsteds made sure that English rather than Scottish mills supplied this growing demand. In sum, therefore, the Scots, unlike their Yorkshire counterparts, failed to exploit the home market, which, on account of the current interference with foreign trade, was of greatly increasing importance.

(1) See the local press, passim in 1898 and 1899, especially Hawick News, Jan. 7th and Jan. 14th, 1898.

This in turn reflected on their export trade because the Germans and French took their lead in fashion from London.⁽¹⁾

5. Entrepreneurship, and Internal Organisation of the Tweed Industry

Important as these external influences were, however, it would be erroneous to conclude that the Scottish woollen trade was the innocent victim of inevitability. Ineffective adjustment to market conditions in this period was to some extent a result of internal weaknesses. Prior to the 1880s little competition had been felt from other branches of the woollen industry in Britain. Scottish manufacturers had successfully captured the quality market and had no trouble in selling their output. For the most part capacity was fully occupied. Because of this the existence of a seller's market for so long bred a degree of inertia and complacency in the industry. Little attention was given to sounding out new markets and manufacturers came to rely increasingly in the medium qualities on repeat orders for well-tried patterns. Profits were good, as the increasing number of fine mansions dotted around the manufacturing centres bore witness. Management became less involved in the activities of the mill floor and gradually owners delegated more control to subordinates, though not eschewing their predilection for small family businesses. In common with other industries the local businessman bore much of the criticism for the palpable weakness of the tweed trade at this time. "We cannot compete if we content ourselves with wringing our hands and speaking of the prosperity of the Borders as having passed away", complained the local press.⁽²⁾ The indomitable energy and

(1) Glasgow Herald, Feb. 15th, 1912.

(2) Hawick News, Jan. 28th, 1898.

perspicacity of the founders of the industry was felt to be lacking, and that too much unproductive capital was lying in the owners' hands.⁽¹⁾ Manufacturers were accused of over-strong partialities for the smoking concert, the billiard table and the Riviera. "I'm afraid we have both got the gadabout fever and won't be satisfied unless we see a new country every year" wrote one in 1892.⁽²⁾ Some were guilty of over-conspicuous consumption. J. T. Laing for example, examined for bankruptcy in 1909, admitted to keeping four servants and a coachman and drawing a high income from the business for personal expenditure.⁽³⁾ "We have/had many men" observed a Hawick minister in public, "chiefly in the founders of our businesses - men not afraid of very hard work, keeping pleasure in its place, sticking fast to their posts. In the second generation, however, we have often seen a different spirit; sometimes contempt for trades, an aping of the fine gentleman, an aspiring to be what they were not... love of ease, self-indulgence and lack of grit and back-bone. They must work in the spirit of their fathers... study the technique of their business, bend their energies and talents in one direction..."⁽⁴⁾ A Hawick burgh councillor considered the local manufacturers in general to be an "effete body" who ought to retire and give place to men with more energy and less money.⁽⁵⁾ They were likened to Mr. Micawber; rather than face up to the crisis in the industry they merely waited for something to turn up.⁽⁶⁾ More than ever before dynamic leadership was required, and on the evidence it seems justifiable to charge many tweed-makers with

(1) Hawick News, Jan. 7th, 1898.

(2) T. Craig-Brown to George Hyman, Aug. 12th, 1892. Private Letter Book. cf. Border Advertiser, Nov. 15th, 1898.

(3) Hawick Advertiser, Feb. 19th, 1909.

(4) Hawick Advertiser, Jan. 8th, 1909.

(5) Hawick News, Dec. 31st, 1897.

(6) Ibid., Oct. 7th, 1898.

insufficient of it. In the past they had been able to apply the dictum "Let those who will sell their goods by the pound, we sell our brains" with some justification. But largely unnoticed the industry had been outpaced in the good years leaving out-dated and expensive production methods in the lean. The 'Hawick Advertiser' sounded the Clarion call: "Technical education, application, energy and thrift must be the war cry, combined with capital... whether in worsted, high-class tweeds or low goods to suit the million, there should be no reason why Border goods should be second to any in price, quality or general excellence".⁽¹⁾ But traditional attitudes were firmly ingrained. Even on the enactment of the harsh McKinley tariff, many tweed-makers were unmoved. They 'shrugged their shoulders' [and said] "America must have our goods and if she chooses to pay double price for them that is her lookout".⁽²⁾ For all the criticism levelled at them at public gatherings, from the pulpit and the press, manufacturers largely refrained from comment. Their contributions to local newspapers mainly confined themselves to fond remembrances of yesteryear or harangues against the foreigner with his guileful ways and low labour costs. What energy they did display was often channelled into local politics. It is perhaps not insignificant that the head of one of the most successful Hawick tweed firms until his ill-health, Mr. Blenkhorn, was a Yorkshireman who was stated to be "not prominently identified with the public life of the town".⁽³⁾ The canker of traditionalism and self-adulation was equally prevalent in Galashiels at annual mill 'soirees', in the welter of verbiage spilled at annual

(1) March 24th, 1899.

(2) T. Craig-Brown, 'Problems & Practices of the Scotch Tweed Trade', Glasgow Herald, June 13th, 1908.

(3) Hawick Advertiser, May 14th, 1909.

dinners of the Manufacturers' Corporation, an event which eventually prompted a Selkirk yarn spinner to remark "the time is past for comforting ourselves at corporation banquets with the assurance that 'the enterprise which distinguished us in the past will etc.... and for all such flattering platitudes".

It would be easy to conclude from the amount of criticism levelled at the leaders of local industry in the Borders that they were indeed completely devoid of energy and enterprise. Equally to do so would be unjust and inaccurate. Such accusations were easy to throw, but it was not always possible to attach them to the target. A more objective investigation of the response made by the industry to changing market conditions is necessary before a disinterested evaluation of managerial efficiency can be made.

Scottish woollen manufacturers possessed three possible lines of action, short of doing nothing, in order to meet the problems discussed above. In the first place new markets could be sought out where tariff restriction or competition was not so great. Secondly they could endeavour to latch on to prevailing trends and try to cater for the mass market in cheap products where growth potential evidently lay. Thirdly the industry could raise the quality of its products to even higher levels and concentrate more exclusively on catering for the discriminating purchaser to whom price was of only secondary importance. This might require the evolving of entirely new products while retaining quality and distinctiveness. All these policies might involve re-equipping of mills with the latest machinery.

A fair test of entrepreneurial response to the challenge of competition is the degree to which they embraced the possibilities of

technical progress.⁽¹⁾ Though textile technology, especially in woollens, advanced only slowly in the 19th century, important technological changes were being made at this time in the major processes of spinning and weaving. On the spinning side the chief invention was the ring-spinning frame, which operated on a different principle to the established mule, occupied less space and produced yarn more quickly. Several of these machines do appear to have been installed in Galashiels from the mid-1870s. On the whole however they seem not to have been regarded highly, probably for mainly technical reasons. They were not alone in their conclusions. Charles Vickerman in his book "Woollen Spinning" (1894) scoffed at the idea of employing the continuous spinning frame for woollen yarns, saying that the inventor had done nothing more noteworthy than the perpetration of a piece of mechanical mischief. It is true that the self-acting mule was more versatile than the frame in its ability to spin a wide variety of yarns, especially the finer counts. The early ring frames were quite capable of spinning the heavier or thicker yarns but not the finer counts. The woollen manufacturer relied heavily upon his ability to vary the structure of his yarn and to this extent the frame was less relevant than the older mule. Secondly, though continuous in operation, the early ring frames had to be stopped preparatory to making a "piecing" if a slubbing broke at the condenser bobbin. The early frame did not offer therefore any appreciable productivity advantage over the new 'self-acting' mules. Both machines operated around 2,000 R.P.M. The self-acting condensers themselves were recent and displaced the piecing-machines and gradually the slubbing

(1) For much of what follows I am indebted to Mr. J. A. B. Mitchell, lately of the Scottish Woollen Technical College, Galashiels.

'billy' too. Combined with larger carding machinery the self-actor itself had greatly accelerated the process of yarn-making without loss of quality. There were good technical reasons, therefore, why the ring spinning frame should be so little employed in the Borders. Lack of innovation here should not blind us to the investment in self-actors which had proceeded apace in the sixties and seventies. More scope for investment offered itself on the weaving side. Weaving machinery wore out more quickly than the leisurely 'mules' and thus replacement demand occurred earlier. The new 'fast' loom operated at an average of about 100 'picks' per minute - about twice the speed of the older looms. They were also wider in the reed. 'Fast' looms, therefore, offered scope for considerable advances in productivity, and there were no serious technical drawbacks to their introduction. It seems clear that most manufacturers took advantage of the new looms. Certainly the larger firms did so. 'Fast' looms were rapidly replacing the 240 odd 'slow' looms on J. & J. Crombie's books in the early 1880s. The last had gone by 1895.⁽¹⁾ In Hawick 549 out of 582 power-looms in 1904 were of the modern type. In Galashiels 'fast' looms accounted for 754 out of 789 and in Selkirk 381 out of 389. Indeed, to obtain trade it became increasingly necessary to introduce fast, high-capacity weaving and spinning machinery due to the growing merchant practice to refrain from placing orders till the last moment and then requiring delivery almost immediately.⁽²⁾ Nevertheless progress in the other towns and the rural areas was much slower. In 1904 less than half of the looms in the south east region of Scotland were of the faster and wider type, and the claim of the 'Textile

(1) J. R. Allan (ed.), *op. cit.*, p. 108.

(2) *Returns of Woollen Factories, 1896*, LXXXVII 293; *Hawick Mercury*, Jan. 3rd, 1896, *Textile Mercury*, Jan. 1902, p. 15.

Mercury' that slow looms were "a thing of the past" was hardly justified when applied to the industry as a whole. Dr. Oliver, Principal of the Galashiels Woollen Technical College, was of the opinion that many manufacturers were slow to replace obsolete plant before 1914. The charge of too much out-dated machinery was perhaps more applicable to finishing plant. Though specialist dyers and finishers did appear in the Borders in this period, most firms retained control of these processes themselves. Scotch tweeds had never been particularly renowned for their finish; rather they were known for design and durability. The Scots, therefore, had never had the need to develop the finer arts of this part of the manufacturing process.⁽¹⁾ Now, however, the vigorous competition in design and finish shown by Yorkshire manufacturers increased the significance of this stage.

We may conclude, therefore, that most of the leading Scottish woollen manufacturers at least displayed enough awareness of current needs to take advantage of improved weaving plant, though they shunned the spinning frame for avowedly technical reasons. Increases in productivity by weavers therefore were obtained, but due to the general slackness of demand we may explain part of the unemployment problem in the 1890s, more particularly that of women, by investment in this better plant. Where four hundred hands had been required to produce a given output, now only about three hundred were required.⁽²⁾

(1) cf. Glasgow Herald, Dec. 30th, 1914, p. 40. One wonders whether the distinctive 'hairy' nature of a Scotch tweed is not a testimony to the lack of finishing ability shown by the early manufacturers before their products caught on in the 1830s. Certainly they had shown little ability in this direction in the 17th or 18th centuries. cf. chapters 1 & 2.

(2) Hawick News, Dec. 27th, 1901.

Thus part of the problem of the industry at this period resulted from over capacity, caused by modernisation, at a time of reduced or stationary demand. The manufacturers' detractors could not have it both ways. Retention of old plant or investment in new was likely to produce a measure of unemployment.

Secondly, how far did manufacturers seek out new markets? The organisation of the trade was such that a good deal of the initiative here lay with the merchant, not the manufacturer. It had been the merchants who had given rise to the tweed trade in the first place.⁽¹⁾ Also tweeds by the very nature were more fitted for sale in temperate climates. There is some evidence that the tweed trade did seek out fresh outlets for its products or exploited older ones more vigorously. The German market was given more attention after the McKinley tariff in 1890; a big boost was given to manufacturers by increased dealings with Canada. The Canadian tariff was felt to be worth about 3/4d. in the £ compared with Germany and it was estimated that trade to Canada quadrupled between 1896 and 1908.⁽²⁾ In addition Australia and New Zealand were rising in importance, as was South Africa. Some manufacturers even persevered in catering for the Indian and Chinese markets.⁽³⁾ Unfortunately no quantitative assessment of the pioneering of new markets is possible, but there is no case for concluding that merchants and makers showed no adaptation to market conditions.

Faced with the seeming eclipse of their products it was natural that some manufacturers should have forsaken their former high standards of materials and adulterated their products by the use of

(1) See chapter 4, pp. 140ff.

(2) Glasgow Herald, Nov. 12th, 1908; Scottish Woollen Trade & Foreign Tariffs, pp. 10-12.

(3) Ibid., pp. 10-12; Hawick Express, Dec. 27th, 1912.

poor and mixed yarns. In this they sought to extend their range downwards to cater for the growing mass market in inferior qualities. The spurs which prompted some manufacturers to adopt this policy were the trends of fashion, Yorkshire competition in cheap and medium qualities, and the difficulties in getting a rise in the price of cloth corresponding to any rise which took place in the price of wool. This was particularly important after 1900.

Such a policy of apostasy entailed meeting the West Riding on its own ground. Yorkshire woollen manufacturers were renowned for their ability to spin anything 'with two ends'. In the lower end of the trade special skills were required in manipulating the raw material in the same way that the Scots had been adept at producing pure yarns and pieces.

These ventures, by compromising the reputation of Scotch tweed, brought little success, and embarrassment to all. A well-disposed Yorkshireman declared in 1898 that "some Scotch makers have ruined their trade and name by making low-cloths and the word Scotch is getting of less value as a character every season".⁽¹⁾ "In the old days", echoed the 'Yorkshire Post', "Scotch tweed, the genuine article, like Scotch whisky, enjoyed as much immunity as Caesar's wife. Now Scotchmen cheapen their goods in imitation of the Yorkshiremen. The old Scotch trade has been dished by... not sticking to the pure old Scottish tweed that made them their fame and money". Yarn spinners, too, were involved in this regressive policy, in order to compete with each other and with Belgian yarn in a shrinking market for carded yarns.

(1) Hawick News, April 21st, 1899.

Thus "putting on the gloves with Dewsbury" usually brought failure to those concerned. As one retired yarn spinner more poetically observed "those who bowed the knee to Baal had grievous reason to regret their apostacy". Their own individual reputation as producers of genuine tweeds suffered. The market preferred Yorkshire cloth which, though lacking the superior reputation of Scotch tweed, at least was all it claimed to be. (1)

It seems clear that most of the more important firms in the industry, those who were the largest employers of labour and capital responded differently to the situation. They modernised their plant, but they refused to lower the standards which had given their products a superlative reputation. Instead they devised new products which took advantage of the general movement in fashion but retained good materials and designing. In practice this meant a shift towards worsteds production rather than woollen tweeds in men's goods. The 'Scotch Worsteds' which became so popular in these and subsequent years was really born of the problems of the late 19th century. By 1897 it was estimated that there were many large Scottish firms whose output ranged from 20% to over 90% worsted cloth and ten years later the same writer concluded that nothing had been so remarkable in the history of the trade than the "extraordinary increase in worsted fabrics". (2)

Other firms turned to take advantage of the growing "athletic" trade by the manufacture of flannel suiting which required only loosely made light yarns and no milling, coping or tentering. Others began to exploit the growing taste for light tweeds for ladies' wear. (3)

(1) Glasgow Herald, June 13th, 1908.

(2) Glasgow Herald, June 13th, 1908.

(3) Report of American Consul in Edinburgh in Textile Recorder, Dec., 1906, p. 226.

In the Hillfoots the most novel development came in infant shawl production - a logical extension of the staple trade of the district. This change was made possible by the introduction of Raschel warp-knitting machines, imported from Germany, which produced fabric made from warp only without the insertion of any weft.⁽¹⁾

Such diversification kept the principal Scottish woollen firms afloat in a difficult era. By producing genuine products, some businesses maintained a good enough record in this period. Blenkhorn, Richardson of Hawick in the latter years of the century were an example of how energy and enterprise could yield dividends. With mills closing their doors around them the firm made consistently good profits in the 1890s and when it became a limited liability company in 1898 the available shares were subscribed many times over.⁽²⁾ Crombie's of Aberdeen also responded vigorously to depressed conditions. After the McKinley tariff they switched their endeavour to the continental trade, especially to Germany. Though profitability was lower than formerly, Crombie's felt less of the blight that was attacking the Borders. This may have been partly due to their pre-occupation with over-coatings which suffered less than suiting from the worsted invasion, but in part too to bold management.⁽³⁾

There were few crumbs of comfort, however, for the yarn spinners. They were only geared for the manufacture of carded yarns and their mills were fairly replete with recently acquired capital stock. Their prosperity largely depended on manufacturing demand, but, as shown above, the latter were increasingly buying in worsted yarn for their

(1) D. R. Christie, "Four Hundred Years of Scotch Tweed", Wool Education Society Pamphlet, 1954.

(2) Hawick News, Oct. 12th, 1898; Letter Book of the firm.

(3) J. R. Allan (ed.), op. cit., p. 107.

mills. On the carded side Belgian and inferior grades were making a profound impact on the Glasgow light woollen and wincey market. Perhaps many spinners were too conservative in outlook. No attempt was made to introduce worsted spinning into Scotland on any scale. One firm which did install combing plant, however, Patons of Alloa, achieved a real measure of expansion during this period both in manufacturing and knitting yarns.⁽¹⁾

One cannot generalise, therefore, about the level of entrepreneurial ability in the Scottish woollen industry. Manufacturers reacted in different ways with varying degrees of success or failure. Like most other sectors of the economy the Scottish woollen industry had its fair share of talent and inadequacy. There did exist, however, areas of general weakness in the industry which militated against successful adaptation to new conditions. First the industry was burdened by heavy production costs. Its pre-occupation with quality ensured that prices were thought of as being added to cost, rather than costs being assessed in relation to a final price. On the whole Scottish firms had acted as price leaders to the whole British industry and usually obtained their figure when trade was buoyant. The nature of production ensured that costs were high. Normally only virgin wool was employed, not waste or mungo, and individual tastes were catered for. The Scotch tweed trade was largely a 'short-run' trade with few lengthy runs. The shorter the warp the greater the cost per unit of production. Such a trade put a premium on designers. The latter were often paid good salaries and a number of pattern weavers had to be maintained. Large numbers of trial patterns had to be produced from which merchants could choose. A firm with an annual turnover

(1) Privately printed history of the firm.

of about 12,000 pieces made in a year about 1,500 ranges of eighty to one hundred patterns each, or 150,000 different patterns. For every pattern chosen, manufacturers had to make large patterns varying from $\frac{1}{4}$ yard to $2\frac{1}{4}$ yards each. These cost about double price but were charged the same price as the goods. Commonly buyers only ordered piece-lengths from about half of the large patterns supplied. About fifty per cent of those orders would be for two pieces per pattern (manufacturers endeavoured to make this a minimum) and the lengths for the rest would vary from three to thirty pieces per pattern, though runs as high as the latter were not common in novelty lines.⁽¹⁾

Thus warping was a constant and expensive task as the procedure was complicated and led to an excessive amount of machine down-time. In addition the amount of warp yarn wasted was the same for patterns as for any cloth length - about one yard. Hence in pattern weaving about 50% of the warp was lost.⁽²⁾ Thus designing was an exceptionally costly part of the productive process as most of it fell on the manufacturer himself. A Hawick firm reckoned in 1905 that pattern weaving alone added 4d. per yard to the cost of piece lengths.⁽³⁾

The hostility, therefore, expressed by manufacturers towards merchants and others who poached their designs (of which there were too many to register them all) was motivated by economic as well as ethical considerations. In the highly competitive conditions of the late 19th century the procedure by which a Scottish cloth got into the customer's hands was too protracted and costly to enable manufacturers to compete on price with other areas even if poorer quality raw materials were used. Secondly the industry as a whole showed signs

(1) T. C. Brown, The French Tariff on Woollen Goods, Open letter to President of S.S.C.C. 1881.

(2) E. S. Harrison (ed.), Scottish Woollens, p. 44.

(3) Report of the Tariff Comm., loc. cit., para. 1351.

of using labour wastefully. Naturally in an industry which was at most a partially mechanised craft the labour factor was significant. This was especially true of the tweed trade with its relatively large numbers of 'non-productive' workers. Manufacturers had given little heed to productivity considerations in the expansive decades in the middle of the century. In addition a good deal of extra labour had been taken as in the boom years between 1871 and 1875. Its marginal productivity was low and it became a liability as trade fell off. Some of it was shed causing hardship but much was retained so that workers were often underemployed, leading to low productivity.⁽¹⁾ Management was unwilling to readily part with their labour. Little alternative work was available and labour was not easily come by when it was required. Tweeds were thought (perhaps wrongly) to depend for their distinction upon the innate skills of Border people. On the workers' side, though little formal unionism existed, resistance to a more economic use of labour was strong.⁽²⁾ The result was though many woollen workers were unemployed or left the district the tweed industry was burdened with a labour force out of proportion with the demand for woollen products. Labour costs, therefore, which averaged about 16% of total production costs, were not materially reduced. Thirdly the industry paid less attention than it should have done to technical education. Here it was little different from the rest of British industry, but it was perhaps more important to the tweed trade than to some other branches of the economy. The sale of Scottish woollens depended very largely on artistry and superlative skills in the blending of wools and the dyeing of wool yarn and piece lengths. The need to face up to powerful competition on these issues was clearly

(1) See chapter 10 below.

(2) See chapter 10 below.

portrayed in the Paris International Exhibition of 1867, and resulted in the S.S.C.C. sending a manufacturer to the continent to investigate the state of technical education there.⁽¹⁾ The following year, subsequent to a visit from the Organising Inspector of the Science and Art department, a committee of manufacturers and interested parties was formed with a view to starting classes in Galashiels. Little was achieved however, and when the Inspector returned in 1871 he was impelled to "preach a scathing sermon" on the lack of Scottish enterprise, adding that as many examination papers were sent to one small town in Ireland as were sent to the whole of Scotland.⁽²⁾ As a result a designers' association was formed in Galashiels but soon faded away, though private classes in weaving and designing continued for a few years under the direction of the association's secretary. Buoyant trade for much of the 1870s pushed the need for such training into the background but interest revived a little as trade faltered in the 1880s. Again classes operated perfunctorily in Galashiels under the auspices of the Mechanics Institute paid for by a manufacturer's levy. Though the Galashiels local school board adopted the Technical Schools Act of 1887 little was done, and it was not until 1901 that a movement was set in motion to establish a Technical College geared to the woollen industry, a venture that achieved final success only in 1909.⁽³⁾

Though certain manufacturers displayed some interest in technical education for their workpeople the importance of the issue failed to grasp them as a body. Most looked askance at formal education and preferred men firmly rooted in traditional mill practices. "As everyone who works in a factory knows", stated the local press, "... a good

(1) Textile Recorder, Sept., 1910, pp. 162-3.

(2) T. Oliver, The Rise of Scotch Tweed Technique, p. 3.

(3) Ibid., pp. 4-13.

church membership, with a capacity for whistling the proper tune into the ear of the proper person is far more likely to advance your interests than all the technical education that could ever be imparted".⁽¹⁾ As far as technical training was afforded any cognizance, it was regarded more as a convenient way of extending mill education rather than of primary importance for its own sake. Hence a good flow of fresh ideas was prevented from permeating into the mills so that when the resources of the industry were stretched much was found wanting. The Yorkshire manufacturers and continental spinners appeared to some at least to manipulate the various grades of wool to better advantage. Most manufacturers appeared to take too near a view of their businesses. In general technical training was regarded either as unnecessary or irrelevant. C. J. Wilson of Hawick in 1905 thought it "a good thing" but no good for breaking down tariff barriers.⁽²⁾ A Galashiels colleague spoke similarly. "I have not much belief in a two or three year's course at a technical centre turning out the best workmen. Practical training is required adapted to the stage the workman is at..."⁽³⁾ Perhaps it was significant that when Crombie's of Aberdeen wanted to train their manager in designing they sent him to Germany.⁽⁴⁾

A fourth characteristic of the Scottish woollen industry which made it difficult to meet the challenge of the late 19th century was its highly competitive and fragmented structure. (It is true that this characteristic was equally applicable to the English branch of the trade, but the way out for the manufacturer there was comparatively

(1) Hawick News, Oct. 4th, 1901.

(2) Report of the Tariff Comm., loc. cit., para. 1837.

(3) Ibid., para. 1822, evidence of P. & R. Sanderson, Galashiels.

(4) J. R. Allan (ed.), op. cit., p. 116.

simple - a reduction of prices by the increased use of recovered wool).⁽¹⁾ Scottish manufacturers and workpeople alike showed an excessive degree of independence. "They seldom agree about anything" was the verdict of a prominent Borderer.⁽²⁾ Independence and individuality had contributed to the virility displayed by the industry in its formative years but what had hitherto been on balance an asset was now in the changed circumstances of the late 19th century a distinct liability. The most important manifestation of this spirit was the lack of a common policy on the terms on which the woollen trade was conducted. Consequently the industry played straight into the hands of the merchant who could in bad times impose more or less whatever terms he cared to choose. He could always find someone to accept a lower price than his neighbour, and this further encouraged cloth adulteration and a general lowering of standards. What had been an industry of price makers, became one of price takers. The result was suspicion and disagreement at a time when a common front was most desirable. "The manufacturers have themselves to thank in no small measure for the present unsatisfactory condition of the industry", reproved 'The Times', "internecine competition is very keen and combination seems impossible... the idea of any 'gentleman's agreement' is scouted as not worthy of consideration".⁽³⁾ The same theme was echoed by the 'Glasgow Herald' which warned that some regulation of pattern lengths, terms and even prices would have to be considered.⁽⁴⁾ No co-operation was achieved, or indeed sought, on these matters

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- (1) E. M. Sigsworth & J. M. Blackman, 'The Woollen & Worsted Industries' in D. H. Aldcroft (ed.), The Development of British Industry & Foreign Competition 1875-1914, p. 155.
 (2) Glasgow Herald, Dec. 30th, 1914, p. 40.
 (3) Times Financial & Commercial Supplement, May 21st, 1906.
 (4) Jan. 18th, 1908.

however. The industry continued to be notorious for the length of its credit terms, its liberal policy on patterns, and made little headway before 1913 in obtaining a trade mark for its products owing to difficulties in arriving at a satisfactory definition of "scotch tweed".⁽¹⁾

6. Recovery Before 1914

In the first section of this chapter it was noted that the business records that have survived suggest that a long term improvement in prices, profits and output in the industry took place from the early years of the present century down to the first world war. There seems no doubt that this was the experience of a number of firms. Those that had been strong enough to survive the nineties took full advantage of the reduced overall capacity of the industry during these years. Ballantyne for example increased production from 300,000 ells in 1900 to 433,000 ells in 1907. Sales turnover rose 50% between 1903 and 1911 and prices moved upwards too. Crombie, likewise expanded output greatly, from fewer than 9,000 pieces in 1901 to 22,000 pieces in 1910. Revenue more than trebled over this period.⁽²⁾ The cause of this recovery was largely the great rise in Australian wool prices which tended to switch demand from Botany worsteds back to the Scotch woollen tweeds made from cheviot or similar wool. The latter rose in price also but not so steeply as imported long wools. Cheviot white wool whose price had fallen from 30/- per stone (24 lbs.) in 1880 to only 13/- in 1902 rose to 27/- in 1906. Though suffering in the ensuing depression temporarily the

(1) cf. R. E. Scott, A Century of Commercial History and Progress, pp. 14-15.

(2) Wages Books, Ballantyne Archives; Abstract of Production of J. & J. Crombie.

price of cheviot remained inflated down to the war. Australian wools were even dearer however, advancing from 6d. to 10d. per lb. between 1901 and 1906 due to stock depletion from severe drought and to the great demand stemming from America and other countries.⁽¹⁾ Manufacturers though busier than previously were not able at first to improve their profitability.⁽²⁾ Demand recovered only slowly in the early years of the century and there were setbacks in 1904-5 and again in 1907. Thus cloth prices though rising did not keep pace with wool prices. When the latter fell in 1907-8 merchants immediately wanted a reduction in cloth prices though some manufacturers had not yet paid for their wool stocks. Profitability was improved when better supply co-incided with good demand after 1909. Wool prices then fell as supply more than met demand.⁽³⁾ By 1911, for example, the Hawick firm of Blenkhorn Richardson which had received many complaints from shareholders in the years previous because no dividend had been paid, was earning "surplus profits" (50% of which were paid as a salary bonus to the directors until further complaints were received).⁽⁴⁾ Even so many firms still found it hard to obtain trade and fell back on government orders or commission work for the more virile firms. The revival in trade that undoubtedly occurred therefore should not deceive us into thinking that the troubles that beset the industry in previous decades were now gone for good. Though some firms had grown there were now fewer of them and prices though improved were still below those of the 1860s. The total output of the industry in 1913

(1) Glasgow Herald, Dec. 27th, 1906, Dec. 22nd, 1908.

(2) Ibid., Dec. 30th, 1914; Minute Book, Galashiels Manufacturers' Corporation.

(3) Minute Book, Galashiels Manufacturers' Corporation.

(4) Letter Book, Blenkhorn, Richardson & Co.

was put at about £3m. (1) which was a good deal less in real terms than in the later 1860s and probably little more than half the value of real output that had been achieved by 1873.

7. Summary and Conclusion

The decades prior to 1914 were an unprecedented test for the Scottish woollen industry as they were for the economy in general. Throughout the 19th century the Scots had taken full advantage of a product of distinctiveness and craftsmanship which led the way in men's, and sometimes ladies', fashion. A large, perhaps over-large, export trade had been built up with primary producers and young industrialising nations in the temperate zone. Many of these were peopled either by British expatriates or other Europeans with similar consumption patterns to those in the United Kingdom. By the 1880s however, the industry's honeymoon period was ending. Other countries were experiencing their own industrial revolutions, and, as Britain had done, made use of a widely diffused indigenous craft to foster their textile industries.⁺ Immigration policy and borrowed technology ensured that knowledge was quickly built up. The tariffs which were erected, therefore, affected a wider range than the cheapest products. This was particularly true of the United States, with the result that the Scottish-American trade was all but wrecked. Partial compensation was obtained by exploiting continental and colonial markets, and that of Canada especially, but here, too, tariffs made progress difficult. The logical step was to turn to the home market. Here, again however, the industry suffered frustration as fashion moved sharply against

(1) Glasgow Herald, Dec. 30th, 1914, p. 40.

⁺ - Though textiles did not play such a leading role as in the British case.

the tweed-makers and favoured the manufacturers of light, smooth-faced, cheaper fabrics. Simultaneously progress in ready-made clothes was causing a radical change in distribution methods which again, by favouring long runs of standard type cloths in the medium qualities, worked against the Scottish woollen trade. Severe competition was felt from Yorkshire - from the Colne Valley mills in cheap woollens and from Huddersfield fancy worsted makers in the novelty trade. Whereas the Yorkshire woollen trade overcame international restrictions by reducing cost this course was fraught with dangers in an industry with a reputation for quality. Scottish firms which sought the same solution as the West Riding generally brought calamity to themselves and suspicion to all. Mill closures, idle plant and unemployment resulted. On the whole the successful mills were those who invested in new plant and, more important, in new products.

The long-term prospect for the industry was not bright however. The size of the market for individual and durable fancy clothing was no longer sufficient to maintain all firms in full employment for long periods. The drift towards more standardised, more expendable clothing was permanent. Meanwhile, however, the inevitable reckoning with these problems was delayed. The clouds were thickening on the political horizon of Europe, and the tweedmakers had fortunes to make in war.

Chapter 7:- THE DEVELOPMENT AND STRUCTURE OF THE
FACTORY SYSTEM IN THE SCOTTISH WOOLLEN INDUSTRY

1. The Pattern of Evolution, c. 1780-1865

The growth of the woollen industry in Scotland in the 19th century was made possible by important changes in its structure and organisation. Prior to the last quarter of the 18th century woollen goods were produced by much the same methods and organisation as had prevailed for several centuries. Thereafter gradual but fundamental changes occurred which transformed the manufacture of woollen goods from a domestic to a factory-based operation. It is the purpose of this chapter to trace this process and to isolate its main contributory factors, and then to examine the nature of the woollen factory in Scotland in the second half of the 19th century.

The term "factory", however, is ambiguous unless clearly defined. In what follows the word is understood to mean a building or group of related buildings, other than dwelling houses, containing power-driven machinery relevant to all the major stages of production, owned or leased by an entrepreneur or body of such, employing labour on a wage basis. Though such a definition may not satisfy all the attributes of factory production it does embrace the main characteristics of the typical production unit that emerged in the industry in Scotland.

Until late in the 18th century the organisation of woollen manufacturing in Scotland clearly reflected the limited extent of the market. Apart from a few places favourably situated in terms of labour and trading, as well as raw materials, (an all-too-rare conjunction at that time in Scotland), woollens were made either for purely domestic purposes or for the satisfaction of individual orders

placed with "customer weavers" by persons residing in the immediate locality. In the Borders, which is our special concern, few of the economic desiderata for open market trading existed but a few goods were manufactured for exposure at local fairs and markets or sold to travelling merchants or to the middle-classes residing in the burghs. In this way Galashiels 'greys' became well-known in many parts of Scotland and possibly in northern England. Also, considerable numbers of the women in the area were employed as yarn-spinners for manufacturers in the north of England. Occasionally piece goods were woven on this basis. But it is quite clear from the evidence that there existed no organised "putting-out" system for finished goods in the Borders until the latter decades of the 18th century, though such an organisation in spinning was widespread in the area for much of the century.⁽¹⁾

As the bulk of woollens produced were for domestic or local consumption the production unit was necessarily simple. No expensive capital equipment could be carried nor a fully dependent labour force employed. Woollen manufacture was an intermittently performed craft, an adjunct of agricultural employment convenient for the supplementation of the inhabitants' meagre earnings. The home, therefore, was the natural basis of organisation; the family provided the labour as and when required. Often it worked up the wool from its own sheep. Manufacturing equipment was simple and easily lodged in the home, where its use was largely dependent upon the level of agricultural activity in the neighbourhood.

Such an organisational pattern was only relevant to conditions of low output and technological stability. The widening of demand

(1) See chapter 3 above, p. 99.

in the late 18th century made the manufacture of woollen goods by a small body of independent weavers increasingly anachronistic as they were unable to realise the full market potential. The traditional pattern of organisation therefore, began to change under the impetus of two influences, - the growth of demand and the advent of new textile machinery. A state of disequilibrium arose in the industry as hand methods of carding and spinning and informal methods of organisation produced bottlenecks in the production of woollen yarn. On the weaving side production of blankets was slowed by the weavers' inability to bear the cost of fly shuttles and steel reeds.⁽¹⁾ Thus conditions in the industry were ripe for a new type of organisation to emerge.

Evidence concerning the chronology of structural change in woollen manufacturing at this stage is distinctly lacking and that which does exist is obscure in the extreme. However the formation of two new bodies of woollen workers in the Borders at this time does suggest that the organisation of manufacture did, in fact, respond to changed market conditions. Both of these new organisations were associated with Galashiels the chief weaving centre in the Borders. In 1777 a body known as the Galashiels Manufacturers' Corporation was formed followed a year later by a Dyers' Corporation.⁽²⁾ Little is known about the latter body but the Manufacturers' Corporation, (sometimes referred to as the Incorporation of Clothiers), included members from Melrose, Earlston, Stow, Lauder, Dryburgh and Gordon, as well as Galashiels itself. It is not possible to formulate the precise reasons for the establishment of these two bodies at this juncture in addition to the general considerations outlined above. It is possible, however, that

(1) R. Hall, History of Galashiels, pp. 287-8.

(2) Ibid., p. 281 ff.

the Manufacturers' Corporation, at least, was an off-shoot, - a discontented one, - of the old Weavers' Corporation which had existed since 1666.⁽¹⁾ A perusal of the rules of these two bodies suggests a possible reason for the cleavage. The Weavers' Corporation in addition to providing a common stock of apparatus for the practice of its craft exerted very rigid control over entry to it, adopting the doctrine of primogeniture. As late as 1835 the ailing corporation confirmed that the privilege of entry was "intended solely and exclusively for eldest sons".⁽²⁾ The rules of the Manufacturers' Corporation, on the other hand, state only that a small fee had to be paid for each apprentice except in the case of members' eldest sons who were admitted free.⁽³⁾ We may surmise, therefore, that the Manufacturers' Corporation had a more flexible attitude to the weaving craft than adherents of the older weavers' body. The former represented a group (ten at first) of weavers who appreciated the need to expand the supply of skilled labour if full advantage was to be taken of the market. Moreover they combined to purchase new and better manufacturing equipment such as a grinding stone for their shears and a teasing willy for opening the wool of members, and, for a fee, that belonging to outsiders.⁽⁴⁾ In this body, therefore, can be seen emerging a new type of woollen manufacturer.

The origins of the Dyers' Corporation in 1778 are even more obscure than those of the manufacturers as only the list of their Deacons (i.e. Presidents) has survived.⁽⁵⁾ It is reasonable to assume, however, that the formation of this body was associated with the growing practice of using blue dyes in the area. Again, the original

(1) R. Hall, History of Galashiels, p. 281 ff.

(2) T. Craig-Brown, History of Selkirkshire, vol. i, p. 522.

(3) Ibid., p. 525.

(4) Ibid.

(5) R. Hall, op. cit., p. 291.

members of this body probably stemmed from the old Weavers' Corporation. One must examine both the Dyers' and the Manufacturers' Corporations, therefore, if a picture of organisational change at this crucial period is to be obtained.

Comparisons of the manufacturers' membership and Deacons lists, and the Deacon roll of the Dyers reveals a considerable degree of reciprocation between their two bodies. It was possible, it appears, to have been a member of both bodies. Richard Lees, for example, later a prominent manufacturer, is listed as a member of the Manufacturers in 1790 and was the Dyers' deacon in 1783. The Dyers' deacons of 1779 and 1780 also figure among the Manufacturers a decade later. These examples suggest a progression from the Dyers to the Manufacturers, but other instances show that the relationship was by no means so tidy. Apart from the fact that the Manufacturers' Corporation was established first, John Roberts is listed among the Manufacturers in 1804 and appears as Dyers' deacon three years later. Though the exact relationship between these two societies is elusive they obviously co-operated very closely and were in part composed of the same people. Until 1825 both bodies celebrated the michaelmas festival under the same roof. In time the Manufacturers actually adopted the Dyers' motto ("we dye to live and live to die..!!), and were termed the "auld dyers".⁽¹⁾ It seems clear, then, that the first master manufacturers in the Border woollen trade stemmed from the ranks not only of the weavers but from skilled dyers. The old weavers' body was superceded and left to represent journeymen and apprentices. Only a single list of members of the Weavers' Corporation is extant, that for 1789. No member at that date can be found

(1) R. Hall, op. cit., p. 316.

among the ranks of the other local bodies, either before or afterwards. (1)

On this admittedly fragmentary evidence one may make a reconstruction of the probable course of organisational change at this time. We may notice first that the arts of weaving and dyeing had long been linked. In 1715, for example, one of the Weavers' Corporation regulations stated that weavers "that has three stones of wool must dye it in the leads, and lesser quantities in the kettles..."(2) As the use of vegetable dyes was a skilled pursuit we may presume that though all dyers could probably weave all weavers were not necessarily dyers. There was, therefore, a permanent imbalance between these two crafts. As dyeing changed and increased in importance towards the end of the 18th century as the market widened, those skilled in the art of dyeing came together to promote their craft by purchasing vats and dyestuffs and to control the entry of apprentices, in the same way as some of the more enlightened weavers. It is, moreover, not unreasonable to assume that those dyers with vision included some of these enterprising weavers which explains the high correlation of membership of the Dyers' and Manufacturers' Corporations. A class of weaver-dyers thus emerged from the main body of woollen workers due to their superiority in technical skill and commercial ambition.

The presence of master-dyers among the pioneers of the Border woollen industry needs to be explored a little further, however, for the very nature of his craft and its relative position in the various processes of production afforded him a greater measure of commercial

(1) R. Hall, op. cit.,

(2) T. Craig-Brown, op. cit., p. 523.

opportunity than that of his fellows. His skilled services could not now be by-passed, as had formerly been common, in the increasingly discriminating market for woollen goods. Furthermore, these services tended to come in the last stages of manufacture as most woven goods were dyed in the piece rather than in the wool or as yarn. Broadly the dyer's services were required immediately prior to fulling or milling. Apart from their juxta-position in the process of manufacture the dyer and the fuller had several things in common. Both required covered premises other than a dwelling house, though only of a rudimentary kind. More important both crafts necessitated the presence of large quantities of running water, - the dyer for boiling in the vats and for washing webs from the loom, the fuller to operate his mechanical stocks. It is not surprising therefore that a close link can be distinguished in the Borders not only between weavers and dyers but also between dyers and fullers. They operated from the same premises and probably on occasion combined the two pursuits. An examination of the Manufacturers' Corporation membership role in conjunction with a contemporary rent role confirms this contention. In 1784 one Andrew Henderson was deacon of the Dyers' Corporation in Galashiels. In 1796 he figures as a tenant of the Nether Waulkmill there. His co-tenants at that date, Messrs. Young and Thompson also appear as Deacons of the Dyers about that time. The Upper Waulkmill in Galashiels in 1796 was leased to Messrs. Roberts and Sanderson. Roberts was Dyers' deacon in 1795 and Sanderson a year later. At the same date the Mid-Waulkmill in the town was leased to Messrs. Grieve, Cochrane, Lees and Gill. Grieve and Cochrane are listed among the Dyers' deacons about this time and all describe themselves as dyers when petitioning aid from the Board of Trustees.⁽¹⁾

(1) Scroll Minutes of the Board of Trustees, Jan. 15th, 1794.

The dyer/fuller was, therefore, in a convenient position to become an organiser of production as well as a performer of specialised services for others. He handled, for the most part, finished webs; he owned or leased premises in the main centres of population, and thus was well suited to conducting trade with local merchants. It was but a short step from receiving webs to dye and mill, and taking in wool or yarn to scour, to giving out wool to card, spin, and weave, before dyeing and finishing it himself at the waulkmill. The dyer was thus the pivot of the new form of organisation. Gradually the local weavers operated less on an independent customer basis and took more orders from the masters. As early as 1797 weavers in Galashiels were said to have few webs in their looms that did not belong to the "clothiers"; local woollen workers became increasingly dependent upon them for their livelihood. (1)

The technical innovations that were taking place in the textile industry in this period worked to the further advantage of the dyers-cum-fullers in the Borders. The records of the Board of Trustees show that machinery for the preparation of wool, dyeing equipment, and spinning machinery was being installed on a considerable scale towards the end of the 18th century. A master manufacturer therefore required to extend his range of capital equipment. Men who performed services for the whole of the Border woollen manufacture were more likely to possess the capital to install new plant than those who were only intermittantly engaged in the industry. More important the dyer/fuller possessed more suitable premises for textile machinery. It is true that the introduction of machinery did not at first mean that further centralisation was inevitable. Much of the machinery

(1) R. Douglas, Agricultural Report: Selkirkshire, (1798), pp. 329-331.

at this stage was hand-operated and represented an aid to domestic manufacture. Warp yarns continued to be spun on the traditional wheel and weaving remained untouched by the new technology. Even so the occupants of the waulkmill were more favourably placed in relation to the adoption of the new plant than were domestic workers. In the first place expansion of output was taking place in the context of improving quality of manufacture. Thus the real commercial advantage lay with the person who could adopt a complete set of teasing, scribbling and carding machinery rather than one of these items. Quality in the piece depended very largely on adequate preparation.⁺ Thus even the new hand-operated equipment was probably beyond the reach of most domestic workers. Secondly innovation in the Borders was taking place at a time when water powered plant was already available, and though some hand-driven machinery may well have been installed the number of requests for aid received by the Board of Trustees from the occupants of waulkmills is sufficient indication that water powered machines were much more prominent forms of investment. Capital was becoming a more important factor and the dyer/fuller who had by his craft increased his stock, and recently had organised a putting out system on a hand production basis, was much more likely to possess it than anyone else engaged in wool production. The pioneer entrepreneurs in the Border Woollen industry arose, then, from amongst the weavers of the district. Unlike the case of Yorkshire merchant capital was not invested in the industry apart from a few scattered examples in the neighbourhood of Aberdeen.⁽¹⁾ The early masters therefore had little to invest than their ordinary savings which could

⁺ cf. the old Border song "Tarry woo' is ill to spin, card it weel ere ye begin".

(1) H. Heaton, The Yorkshire Woollen and Worsted Industries, (1965 edit.) p. 389; J.R. Allan (ed.), Crombies of Grandholm, pp. 15, 22-23.

not have amounted to very much. The shape of business organisation was determined by this fact for a long period. Only slowly did the mills come to be controlled by one owner or co-partnership. The early "machinery mills" were jointly owned, several clothiers pooling their resources.⁽¹⁾ But the businesses did not, in many cases become straightforward partnerships. Each shareholder, while sharing the use of the buildings and machinery with others operated his business personally, having his own workers and his own customers. Sometimes a "share" was purchased by two or three men operating as a partnership. A good example is that of Nether mill in Galashiels. This was founded in 1805 by four clothiers two of whom were William Brown and James Bathgate. By 1828 the others had surrendered their shares so that these two men owned half of the premises and machinery each. William had two sons who joined him in the business, James and Henry. They rented from their father use of the machine house, some garden and a line of tenters. Though their father owned the machines and a weaving shop together with some other apparatus his sons owned the dyehouse. It is possible that James and Henry Brown were in the process of taking over their father's part of the business at this date but Jas. Bathgate who owned half the mill and machinery operated entirely separately. In a list of local manufacturers Bathgate appears separately from J. & H. Brown with an estimate of the annual turnover of each. Occasional references like "our turn with the stove" confirm that while the apparatus and premises were shared the businesses of the 'shareholders' functioned separately.⁽²⁾ With the growth of trade and wealth this strange form of organisation

(1) Fire Book, 1805, Caledonian Insurance Company, Edinburgh, policies 254-6.

(2) Memo Book of H. Brown, Nov. 13th, 1828, May 25th, 1829.

ceased, though joint-ownership of mill premises continued for many years.⁽¹⁾

By the last years of the 18th century it is possible to identify two concrete changes in the organisation of the Border woollen industry. First, a clear rift had taken place in the social structure, producing well-defined employing and wage-earning groups. Though "customer work" and manufacture for domestic needs had not ceased these traditional activities became secondary to manufacturing for the market through the organising work of the dyers at the waulkmills. Secondly the woollen "factory" already existed in a fairly advanced form. Machinery for preparing and spinning wool together with equipment for raising, shearing, dyeing, milling, and pressing was all to be found there. Indeed centralisation of production proceeded at a rapid pace. The "putting out" system had but a brief life-span owing to its late development in a region organised for long on a guild-like basis. Probably by the end of the first decade of the 19th century the only major manufacturing process that had not been affected by change was weaving, though even here it is possible that more domestic looms were becoming owned by the masters. But weaving was still a non-centralised occupation, due to slow technical change in this sphere. Despite this weaving gradually became more centralised in the first quarter of the 19th century. J. & H. Brown of Galashiels, for instance, possessed their own "Weaving shop" in 1828.⁽²⁾ In the late 1830s a government inspector stated that in the Border woollen districts all weaving with trivial exceptions was performed in "factories", that is in loom-shops owned by, and under

(1) H. Ballantyne, for example, rented part of Ladhope Mill, Galashiels, till 1859. Letter Book, Ballantyne Archives.

(2) Memo Book of H. Brown, Copy of Insurance Policy, Nov. 1828.

the supervision of, employers. (1)

The rapid centralisation of the Border woollen industry during this period was the result of several related factors. As already stated the final quality of the product depended greatly on the correct preparation of the raw wool. Otherwise the uniformity of the yarn suffered. Technical innovations designed to overcome production bottlenecks promoted the break-up of domestic spinning. The growth of centralised weaving was determined partly by the greater use of wide blanket looms, too large and too expensive for domestic use, but mainly by the nature of the goods produced. By the 1830s tweels were finding an extensive market among well-to-do buyers so that quality control in the various stages of production was vital. Weavers could be more easily supervised when working in one location; embezzlement of expensive raw materials was made more difficult, and, insofar as centralisation increased worker discipline, tighter delivery schedules could be adhered to.

Though industrial organisation in the woollen areas may be said to have moved rapidly towards the factory system in the half-century after 1780 domestic manufacturing lingered on. Ironically it was the new scribbling and spinning mills which helped it to do so. The consolidation of production in the hands of the mill proprietors was only gradually achieved, though in Galashiels it appears to have occurred more rapidly. For many years the "machinery mills" acted in a dual capacity. Their proprietors made goods themselves for the open market, but they also continued to perform services of carding and spinning for the local people. Though it is safe to conclude that

(1) B.P.P. 1839, XLII, 159, pp. 39-41.

the "service" side of these businesses gradually waned it is impossible to say precisely when the manufacturing aspect became predominant. The period of transition is likely to have varied with different concerns or in different areas and to have been helped or hindered by the state of trade generally. A study of contemporary business records helps to shed a little light on this problem as well as affording evidence to substantiate the pattern of evolution outlined above.

An account book of James Dickson, a Peebles clothier, relating to the years 1805-1824⁽¹⁾ indicates that a substantial part of his work consisted of performing services for country people. He scoured their wool and yarn, dyed their webs and milled their blankets. On his own account he manufactured a considerable range of piece goods, including broad and narrow flannels, duffles and worsted stuffs, as well as the traditional 'blues'. These he sold to local individuals (a vestige of his former customer-weaving days perhaps) but more often to travelling merchants operating in the surrounding counties or from Glasgow and Edinburgh. As some of their orders totalled £20 or £30 it is reasonable to assume that he employed domestic weavers in the locality.

Another account book dating from 1827 shows the workings of a similar business at Innerleithen, belonging to David Ballantyne.⁽²⁾ Entries were placed under two headings:- "Country work from the looms to finish", and "Finished cloth and wool manufactured". In the former section appear entries recording the receipt of webs and wool deposited by local people to be dyed or scoured or sometimes raised.

(1) Ledger, in the care of Arthur Dickson & Co., Galashiels.

(2) Account Book of D. Ballantyne, Ballantyne Archives.

The owner's instructions were clearly recorded, including such homely injunctions as "wanted as soon as possible" or even "immediately". Ballantyne was clearly operating at this date partly as a service mill for people making their own cloth. It is possible that these weavers were being organised by another entrepreneur who had no finishing or dyeing equipment of his own, or who operated from a distance. There is no means of verifying this, but true or false Ballantyne continued to act as a service mill for out-workers into the 1830s. In addition, however, he manufactured goods on his own account in a similar way to Dickson further up the Tweed, and distributed them to merchants in Peebles, Carnwath, Biggar and other local centres, and in Glasgow and Edinburgh.

The survival of services for country people depended largely on the remoteness of an area in relation to the main markets for piece goods. The Tweed valley where Dickson and Ballantyne were operating was such a district. So was the north of Scotland. Alexander Johnston could write of his woollen business in Elgin in 1835, "I card a good deal of wool for the country people who take it away in rows and spin it at their own houses".⁽¹⁾ As late as 1864 his son James, in advising a colleague concerning the feasibility of establishing a woollen mill at Kingussie, suggested merely a small carding and spinning plant "to work up some of the wool for the natives".⁽²⁾ In contrast the needs of individual woollen workers seem to have quickly died away in Galashiels with its easier access to the market. A manufacturers' account book for 1828/29 gives no hint that services were still performed at that date all endeavour being geared to the

(1) Alex. Johnston to Sir John Byerly, Letter Book II, Nov. 7th, 1835. Newmill Records.

(2) Jas. Johnston to Alex. Cameron, Letter Book IV, April 29th, 1864. Newmill Records.

satisfaction of a demand for the town's cloth stemming from all over Scotland. (1)

The establishment of a true factory type of organisation in the Scottish woollen industry had to await the mechanisation of the weaving process. Until this occurred in the late 1850s and 1860s the manufacture of woollen goods retained a semi-domestic flavour. Weaving shops proliferated giving a measure of prosperity to the hand-loom weaver that was in complete contrast to his fortunes in the cotton textile industry in Britain at this time. A single weaving shop in Galashiels in 1850 occupied six floors and contained upwards of seventy looms. Bridge street in the same town was described as "full of hand-loom" in 1853. (2) "In busy times", wrote Bremner in the late 1860s, "the 'rickle-tick' of the looms may be heard issuing from every door and window..." (3) Hand weaving lasted well into the 1860s in Hawick. Many tweeds made by Dickson & Laing there in 1864 were hand-woven. A colleague considered that in that year there was in Hawick "much the same amount of hand-loom weaving as formerly notwithstanding the increase in power factories!" (4) A year later there were nearly as many hand-weavers working in Galashiels as in "the palmiest days" of the craft. (5) At Henry Ballantyne's mills at Walkerburn hand-weaving continued to be responsible for a significant proportion of total output until 1866, eight years after power-loom had first been introduced there, and in fact lasted commercially until 1870. (6) According

(1) Memo Book of H. Brown, passim. But in Hawick a 'public' mill was opened by Robert Clapperton as late as 1842. His charges for carding and spinning 'country wool' were advertised as lower than usual in the neighbourhood. Hawick Observer, July 30th, 1842.

(2) Scotch Tweed, vol. x, p. 38.

(3) D. Bremner, Industries of Scotland, p. 167.

(4) Second Report of the Children's Employment Commission, B.P.P. 1864, XXIX, pp. 225-6.

(5) Border Advertiser, June 9th, 1865.

(6) Wages Books, Ballantyne Archives.

to one local historian (who was connected with the industry) hand-
looms still accounted for about 25% of the total number of looms in
the main Border manufacturing centres in the mid-1880s.⁽¹⁾ Outwork for
hand-loom weavers continued in busy spells down to the outbreak of the
Great War.⁽²⁾

The returns of the factory inspectors make it quite clear that
the mechanisation of the weaving process in the Scottish woollen
industry belongs to the 1860s. It was in that decade that the woollen
factory in the strict sense became typical in the main manufacturing
centres, though, as already shown hand-weaving was not displaced
entirely for several decades thereafter. The long period that elapsed
between the mechanisation of the other major productive processes and
that of weaving requires some explanation. It was only in the 1850s
that the rising box principle, by which more than a single shuttle
could be used, changing the weft every few picks, was perfected by the
firm of Hattersley the Yorkshire machine-makers.⁽³⁾ As the Scottish
industry was predominantly concerned with the manufacture of fancy
cloths hand-loom with rising boxes were more relevant to production
requirements than simpler forms of the power-loom, though examples of
such were installed as early as the 1830s in some places. The slow
decline of hand-weaving was also a consequence of the inability of
newly-installed plant to keep pace with the rapid increases in demand
at this time. Power-loom tended to be introduced on a piecemeal
basis so that their effect on the displacement of the hand-worker was
often minimal. Lack of capital in some cases, native caution, and

(1) T. Craig-Brown, op. cit., vol. i, p. 575.

(2) cf. Hand-loom Book, Ballantyne Archives; R. Hall, op. cit.,
p. 411; In Aberdeen J. & J. Crombie gave out work to be woven
by hand in each year from 1908 to 1914. (Firm's manuscript).

(3) E. Sigsworth, Black Dyke Mills, p. 37.

the wide variety of goods manufactured prevented the occurrence of an "avalanche" of new machinery which would have swept away the old more rapidly. Moreover the profitability of a machine was directly related to the length of the warp. Many orders for very short lengths were more economically made on hand, rather than on power, machines which could be used for longer runs. For this reason many firms retained small hand-weaving departments long after the power-loom had been introduced for the production of special orders and patterns. (1)

To summarise, the evolution of the factory system in Scotland's woollen industry took place in two fairly distinct phases. Between the 1780s and the 1820s scribbling and spinning mills came into existence in response to greater demand for yarn as the market for cloth expanded. Though these mills at first performed services for country work they soon became the manufacturing centres of the trade. Weaving was done mainly for the proprietors of these mills from about the end of the century in the Galashiels area. Hand-weaving was not mechanised until the 1850s and 'sixties as technical problems were overcome and as the supply of hand weavers ceased to be sufficient for the growing industry. This constituted the second phase of the evolution of the factory. Nonetheless the weaving process was brought under central control in the Borders from a comparatively early date - certainly by 1830. Weaving or loom shops replaced the actual home of the worker as the seat of his operations. This centralisation of all the productive processes may well have proceeded more rapidly in the Borders than in the West Riding. The absence of a central hall for disposal of cloth meant that the individual weaver soon became

(1) Wages Books, Ballantyne Archives; Apprentice Book, Watson Records.

dependent on the entrepreneur for orders for webs and had to work on his terms or die a lingering death as a customer weaver. Those terms usually meant that weaving must be carried out in loom shops for managerial reasons.

2. The Organisational Structure of the Woollen Factory

Table I clearly indicates that the typical production unit in the woollen industry was integrated vertically. The figures for the period 1850-1867 show that when power-looms came to be adopted they were installed in existing mills⁺ rather than located in specialist weaving firms. Thus the number of factories officially described as spinning mills was reduced by about two-thirds within that period, while integrated mills possessed 64% of the spinning capacity and 73% of the weaving capacity in the industry, and employed about three-quarters of the work-force, in 1867. In the Border counties of Roxburgh, Peebles and Selkirk (table II) the vertically-integrated establishment was even more pronounced possessing in that year 81% of those counties' spinning capacity, 93% of their powered weaving capacity and employing over 90% of the labour.

In the latter third of the 19th century, however, the specialist type of mill grew in importance, though never becoming dominant. The number of yarn mills in Scotland doubled between 1867 and 1874. Although the upward trend was reversed, the proportion of total

⁺ These mills were officially designated "spinning only" mills, but there is, of course, a difference between this unit and the specialised yarn-spinning establishments of the later 19th century. The former were only so-called because weaving was still performed by hand in loom-shops, which at that time did not come under the jurisdiction of factory legislation.

Table I SPINNING, POWERED WEAVING CAPACITY &
LABOUR FORCE IN DIFFERENT TYPES OF
WOOLLEN MILL IN SCOTLAND, 1850 - 1904

<u>Year</u>	<u>No. of mills</u>	<u>Mill type</u>	<u>Spinning spindles</u>	<u>% of whole</u>	<u>Power looms</u>	<u>% of whole</u>	<u>Total workers</u>	<u>% of whole</u>
1850	165	Spin	176,112	78.7	-	-	6,954	72.4
	16	S & W	48,017	21.3	235	95.2	2,384	25.2
	1	Weave	-	-	12	4.8	126	2.4
1856	157	Spin	159,963	58.8	-	-	4,828	53.9
	35	S & W	112,262	41.2	631	94.7	4,097	45.6
	1	Weave	-	-	34	5.3	37	0.5
1861	124	Spin	131,102	41.4	-	-	2,979	30.3
	54	S & W	186,083	58.6	1,166	89.5	6,263	63.8
	6	Weave	-	-	137	10.5	570	5.9
1867	52	Spin	124,380	36.3	-	-	1,733	12.1
	115	S & W	218,688	63.7	2,477	72.6	11,225	78.4
	17	Weave	-	-	941	27.4	1,345	9.5
1874	102	Spin	206,313	40.0	-	-	3,640	13.2
	105	S & W	322,698	60.0	4,432	37.6	17,518	63.6
	40	Weave	-	-	7,326	62.4	6,376	23.2
1878	85	Spin	238,460	41.0	-	-	3,035	13.7
	116	S & W	320,541	59.0	4,186	66.6	15,796	71.3
	31	Weave	-	-	2,098	33.4	3,335	15.0
1884	92	Spin	230,338	41.8	-	-	3,396	12.9
	117	S & W	321,347	58.2	5,406	67.9	18,247	69.4
	31	Weave	-	-	2,552	32.1	4,639	17.9
1890	85	Spin	254,503	45.0	-	-	4,107	13.6
	118	S & W	310,643	55.0	5,146	52.4	19,291	63.7
	48	Weave	-	-	4,690	47.6	6,884	22.7
1904	66	Spin	216,044	43.8	-	-	-	-
	127	S & W	277,712	56.2	4,356	59.7	-	-
	46	Weave	-	-	2,944	41.3	-	-

Source: Factory Returns.

Note: Unenumerated mills in the factory returns are not included here.

No employment returns are available for 1904.

Table II SPINNING, POWERED WEAVING CAPACITY & LABOUR
FORCE IN DIFFERENT TYPES OF WOOLLEN MILL
IN ROXBURGH, SELKIRK, AND PEEBLES, 1850-1904

<u>Year</u>	<u>No. of mills</u>	<u>Mill type</u>	<u>Spinning spindles</u>	<u>% of⁺ whole</u>	<u>Power looms</u>	<u>% of⁺ whole</u>	<u>Total workers</u>	<u>% of⁺ whole</u>
1850	35	Spin	59,622	77.4	-	-	1,818	70.5
	5	S & W	17,378	22.6	109	100	755	29.5
	-	Weave	-	-	-	-	-	-
1856	28	Spin	50,066	44.0	-	-	1,175	35.5
	19	S & W	63,822	56.0	328	100	2,134	64.5
	-	Weave	-	-	-	-	-	-
1861	18	Spin	39,804	25.2	-	-	867	21.2
	25	S & W	118,453	74.8	535	95.5	3,115	77.3
	1	Weave	-	-	24	4.5	60	1.5
1867	9	Spin	26,288	18.8	-	-	247	4.8
	33	S & W	112,742	81.2	1,034	93.2	4,696	90.6
	5	Weave	-	-	76	6.8	237	4.6
1904	20	Spin	101,658	42.5	-	-	-	-
	37	S & W	136,976	57.5	2,104	88.8	-	-
	8	Weave	-	-	276	11.2	-	-

Source: Factory Returns.

Notes: No separate returns for these counties were taken between 1871 and 1904. No detailed employment statistics are obtainable from the 1904 returns. Doubling or twisting spindles are NOT included.

+ i.e. % of the total for these counties only.

spindles found in yarn mills increased from 36% in 1867 to 45% by 1890. Specialist weaving mills also grew in relative importance this time expanding their share of loom capacity from 27% in 1867 to 47% by 1890 while their share of the workforce more than doubled. In the Borders the same tendency can be noted (table II). Yarn mills increased their percentage of total spinning capacity between 1867 and 1904 from 18.8 to 42.5.

The dominance of the vertical mill in the industry together with its declining importance towards the end of the century may be explained by technical and commercial factors. History also played its part for the woollen factory as we have seen usually evolved through a 'service' stage when domestic workers used it for scribbling and spinning. But it must be noted that the structure of a woollen yarn can be greatly varied due to the different types and lengths of fibres employed. The woollen manufacturer took infinite pains over the composition of his yarn particularly when various grades of wool were blended. On this depended the uniformity and distinctiveness of his products. Spinning one's own yarn also facilitated experimentation which was the very life-blood of the tweed trade. Tweeds too were characterised by special dyeing and milling techniques. Thus the average Scottish factory integrated backwards into spinning and forwards into finishing.

The growing importance of the specialist mill was largely due to the increasing significance of good designing in the industry towards the end of the century brought about by growing competition from Yorkshire fancy worsteds whose enterprising manufacturers had successfully imitated tweed designs and styles in combed wools.⁽¹⁾ If a manufacturer wished to remain competitive in the fashion trade he had to be in a position to constantly offer a wide variety of designs and colours which entailed carrying heavy stocks of yarn. In 1905 a Hawick mill-owner claimed that a tweed-maker in "a large way of business" had always to hold between £20,000 and £30,000 of yarn stock.⁽²⁾ Thus large sums of capital were often locked up for long

(1) See chapter 6 above, p. 228.

(2) Report of the Tariff Commission 1905, vol. ii, pt. ii, The Woollen Industry, para. 1838.

periods with no guarantee of ultimate sale. Moreover the novelty effect in tweeds was increasingly obtained by the use of skilfully constructed yarns so that its manufacture came more and more under the control of the specialist. In a real sense the yarn-spinner had become the chief designer of the trade. So the specialist mill grew in importance. Whereas in 1874 the average spinning and weaving factory possessed about one third more spindles than the yarn mill by 1904 the position had been reversed (see table III).

Table III SPINNING CAPACITY OF WOOLLEN MILLS IN
SCOTLAND, SOUTH & S. EAST REGIONS,
ROXBURGH, SELKIRK AND PEEBLES, 1867-1904

<u>Year</u>	<u>Average number of spinning spindles, spin'g only mills</u>			<u>Average number of spinning spindles, sp. & weav. mills</u>		
	Scot.	S. & S.E.	R.S.P.	Scot.	S. & S.E.	R.S.P.
1867	2,392	2,583	2,808	1,901	2,751	3,555
1874	2,023	2,536	nr	3,073	3,941	nr
1878	2,805	2,738	nr	2,763	3,546	nr
1884	2,503	2,911	nr	2,746	3,462	nr
1890	3,000	-	5,083	2,189	-	3,702

Source: Factory Returns

Note nr = no returns; in order to obtain data for the main manufacturing counties in the Borders figures for the South & S. East regions have been given owing to the cessation in the early 'seventies of data on a county basis until 1904. The Southern region comprised in the factory returns the counties of Dumfries, Kirkcubright, Roxburgh and Wigton. The S. East region comprised Berwick, Edinburgh, Haddington, Lin-Lithgow, Peebles and Selkirk. The totals for these two regions taken together reflect the fact that Roxburgh, Selkirk and Peebles account for the vast proportion of manufacturing capacity in them.

It is not possible to give a figure for the S. & S.E. regions in 1904 owing to the incompleteness of the returns at that date regarding the number of factories in the area.

New entrants to the industry tended to specialise in either weaving or spinning.⁽¹⁾ Nonetheless the integrated mills still possessed over 56% of the industry's spinning capacity and almost 60% of the power-loom looms in 1904. In the Borders these proportions were even higher at 57% and 89% respectively (see table II).

3. The Size of the Firm

Tables III, IV and V make it clear that the average woollen mill in the 19th century was a small concern, both in terms of capital and labour. Table III above as we have noticed reveals that the average yarn mill did grow in the second half of the century, but only slowly. Those in the Borders in 1904, averaging just over 5,000 spindles were by far the largest in the industry. As the specialist mills grew the integrated ones decreased in size as far as their spinning capacity was concerned falling from a peak of about 3,000 in 1874 to only a little more than 2,000 in 1904, in the industry as a whole. Border mills were about 60% larger than the Scottish average but still smaller than yarn mills in the area. It must be remembered of course that there is not an exact correlation between the decline in spindles and declining capacity due to improvements in spinning machinery. The same is true of weaving capacity where improved looms were fast-loom looms replaced the slow looms in the 'eighties. Here again the figures reveal a very low level of capitalisation (table IV). The average number of power-loom looms in the industry's weaving factories moved up from 55 in 1867 when most of the hand-loom looms had been superseded for commercial work, to 98 in 1890 falling to only 67 in 1904. In the integrated plants the number was much lower, reaching a maximum of 46 in the mid-eighties

(1) cf. the list of mill erections in Selkirk in T. Craig-Brown, op. cit., vol. ii, pp. 180-2.

and dropping to only 37 in 1904. Capacity in Border specialist weaving mills was below the average, few mills of this type being found in the region. Border weaving capacity in the integrated mill was somewhat higher than the average in the industry.

Table IV AVERAGE NUMBER OF POWER-LOOMS IN WEAVING ONLY, AND INTEGRATED MILLS IN SCOTLAND, S. & S. E. REGIONS, ROX., SELK., AND PEEBLES 1867-1904

<u>Year</u>	<u>Weaving only mills</u>			<u>Spinning & Weaving mills</u>		
	Scot.	S. & S.E.	R.S.P.	Scot.	S. & S.E.	R.S.P.
1867	55	10	15	22	27	30
1878	68	49	nr	36	54	nr
1884	82	52	nr	46	59	nr
1890	98	54	nr	44	58	nr
1904	67	-	34	37	-	57

Source: Factory Returns. (see notes to table III)

The small scale nature of woollen operations is also reflected in the size of the average labour force per unit of production in the industry. Each mill employed only 76 workers on average in 1867 and after growing to 108 in 1874 no further growth took place before at least the end of the century for the 'nineties were depressed. Again the Border mills were bigger than the average (see table V).

Table V AVERAGE NUMBER OF WORKERS IN WOOLLEN MILLS IN SCOTLAND AND THE S. & S.E. REGIONS, 1867-1890

<u>Year</u>	<u>Scotland</u>	<u>S. & S. E.</u>
1867	76	99
1874	108	147
1878	92	141
1884	100	147
1890	110	165

Source: Factory Returns. (No details of employment were taken in 1904).

Apart from the smallness of the unit of production in the industry the significant fact derived from these figures is that a woollen mill soon reached its maximum size after becoming a factory in the true sense, that is a place where all the main processes took place under power. In other words expansion took place not by increasing the size of existing mills so much as erecting new ones. Some of these were, of course, built by existing companies in new locations but this characteristic smallness is much more a reflection of the ease of access into the industry due to the relatively small amounts of capital required and because of the highly variagated nature of production. It is possible that shortage of or unwillingness to borrow capital may have hindered expansion in individual cases. Spinning and weaving plant did become increasingly complex and expensive as time passed. There exists some evidence of an inability to buy buildings and land and equipment due to the tightness of the money market. In general, however, it is not likely that shortage of capital prevented the expansion of a firm really bent on such a course. It was characteristic of the woollen industry that the supply of entrepreneurs was elastic especially in the early part of the century due to the ready availability of credit and the low capital costs prevailing in the industry. Though capital increased in importance technology developed at a leisurely pace so that grouping of individual units was not encouraged, (as is now occurring) by the cost of re-equipping the mills. Moreover prices remained strong to the mid-seventies so that the spurs to rationalisation entailed in low prices and fierce competition were also absent. Profitability remained good; the battery of fine manufacturers' mansions still adorning the Galashiels-Selkirk road is sufficient testimony to the fact that capital resources were not a significant barrier to growth. Instead investment was

made in other fields.⁽¹⁾

Problems of labour supply may also have contributed to the small size of the average unit. The Borders is not well populated today and was never thickly peopled in the 19th century. Moreover the population was not characterised by its mobility. Often, at least in the more remote areas it was impossible to bring a large body of workers together to operate a large unit. When Henry Ballantyne, for example built his mill on the Tweed at Walkerburn he had to employ workers from Galashiels who either walked every day or "camped" in the mill (for a consideration) until houses had been constructed for them nearby. Even so the weaving department remained at Galashiels for a few years longer, supplemented in its output by help from weavers at Alva and Paisley.⁽²⁾ By contrast it is noticeable that Aberdeen, a large reservoir of labour, possessed woollen mills of unusual size.⁽³⁾ Again, however, it is hard to see the labour factor being the major determinant of the size of the individual firm. In Hawick and Galashiels at least the aggregate number of workers was great enough to have supplied the needs of several large units instead of a multitude of small ones.

It is possible that another influence upon the size of the firm was geography. Early mills had been built as high up the valleys as possible to obtain the necessary water-power. Thus room for expansion was often difficult to find. Moreover these mills were built at a considerable distance from coal supplies. Water-power continued to

(1) See chapter 11 below.

(2) Wage Books, Ballantyne Archives.

(3) e.g. Alex. Haddon's mill employed over 1,200 hands in the 1850s, 3rd Stat. Acc. of Scotland, Aberdeen, p. 48.

be a major determinant of location well into the second half of the 19th century .⁺ The size of the individual unit, therefore, could have been limited by lack of room for expansion and the amount of power available at the wheel. There is some evidence that these did constitute some sort of hindrance to growth. Henry Ballantyne had to go to Walkerburn in the 1850s because water power had been practically exhausted at Galashiels . After 1847 Geo. Roberts of Selkirk produced some of his yarn at Innerleithen at a subsidiary mill, due to pressure on space and power.(1) But it is difficult to ascribe a prime role to geographical influences in the determination of unit size. Coal was rendered accessible at reasonable prices by the opening of the Edinburgh to Galashiels rail link in 1849 which was soon extended to Hawick. Yet local manufacturers did not opt to install steam engines as their major form of power until the late 1850s and 'sixties, in most cases. Change was produced by the advent of the power-loom for which more power than was usually available at the wheel was required. We cannot look to shortage of fuel as the cause of small-scale operations in the industry therefore. The continued importance of water-power was an effect not a cause of smallness.

Rather we must turn to technical and related commercial factors for the prime cause of low unit size in the woollen industry. Much depended on the nature of wool itself, and particularly the woollen process of manufacture. In the carding process there is no need to remove fibres of different length or diameter so that all the wool is employed and many differing types of wool can be used, often blended with one another. For this reason woollen yarn is capable of infinite

⁺ See pp. 283ff..

(1) J. W. Buchan (ed.), History of Peeblesshire, vol. i, p. 219, 222.

variety whether made from high quality wools as used in the Scottish industry or low wools characteristic of the Yorkshire branch of the industry. Indeed Yorkshire factories were no bigger than Scottish mills despite catering for the mass market. Thus it is not so much that the Scottish woollen factory catered for the quality market, but because it was a woollen mill per se that gave the industry its small unit structure. By producing slightly varying yarns and piece-goods firms carved out a monopoly for themselves by exploiting marginal differences between their own goods and those of their neighbours. Such specialisation then reinforced the tendency to smallness. Rugged independence was a well-known Border characteristic before the advent of its woollen industry but the attribute was nowhere better expressed than in the managers of the mills. Specialisation in the way described bred it. Employers were unwilling to lose any authority or responsibility. Sons entered their fathers' businesses cementing close family ties.⁽¹⁾ Outlook remained narrow and little thought was given by most to extending the market or to changes in the basic products. Thus the industry hardened into its mould as particular labour skills were developed, and close mercantile relationships were forged. Often a firm manufactured almost exclusively for the tastes of one merchant house causing growth to be limited by the merchant's own selling opportunities. Thus the Scottish woollen manufacturer had no desire to be big. As long as the business paid him a return he was satisfied with the status quo. He had even less desire to merge with a competitor to form a larger laterally organised unit. In any case the market would not at that time have stood too large a unit. The Scottish industry was early wedded to fancies and where

(1) cf. J. R. Allan (ed.), Crombies of Grandholm, p. 102; Company History of H. Ballantyne & Son, (1929).

mass-production came in novelty would have for the most part disappeared. It is true that many firms did make longer runs of medium quality goods of traditional design as a part of their defence against the whims of the market, but such products never became typical of the trade. Thus the tweed trade did not lend itself readily to the economies of large-scale production, and it has been truly stated of the industry that "the minimum size at which the firm could avail itself of the available economies was not large".⁽¹⁾

4. The Supply of Factory Power

A discussion of the factory system in the Scottish woollen industry would not be complete without drawing further attention to the heavy dependence of the average woollen mill on water for power. Table VI below reveals that water retained a dominant position in the industry until well into the 1860s. As late as 1861 about 60% of total horse power was provided by water and 68% of the power used by spinning-only mills. By 1867, however, steam power had so asserted itself that the relative position was roughly the reverse of that in 1861. Even so water h.p. was still increasing absolutely in 1871. The advent of steampower was clearly associated with the introduction of the powerloom which necessitated not only more, but regular, power. Water continued to be used where possible, however, until the present century, mainly by yarn-spinning establishments, despite the availability of coal supplies. For a long time steam engines were regarded as only a useful supplement to water power, or as a standby in time of emergency. When Stow mill near Galashiels was offered for lease in 1860 it was stated that the mill was water-driven but a steam engine on the premises could be had "if required".⁽²⁾ In 1886 Dunsdale mill

(1) G. F. Rainnie (ed.), The Woollen & Worsted Industry, p. 57.

(2) Hawick Advertiser, March 3rd, 1860.

at Selkirk was driven by steam and water, while Ettrick Mills there were powered by "three magnificent water wheels... supplemented by a... steam engine".⁽¹⁾ As late as 1910 a mill in Galashiels was said to suffer from "the defect of having no water-power" and had thus "remained closed for a longer period than it otherwise would", while another mill in the town was said to have the "great advantage" of an abundant water supply.⁽²⁾

Though water was for so long the chief source of power for the woollen industry manufacturers who depended on it were often inconvenienced by its irregularity. "The vexatious drying up of our rivers", wrote Robert Gill of Innerleithen, in June 1854, "has driven me to the thought of an engine... this has been a very dry season, and we have been greatly kept back with our work - I see it will not do to go on under such uncertainty - till yesterday... we have not had half work since February".⁽³⁾ During a drought in 1848 a Hawick spinner sought special permission to introduce a system of relay-working which was against the spirit if not the letter of the recent legislation on the subject. "As the water is now becoming smaller", he wrote, "and likely in a few days to be quite insufficient to drive all the mill I shall be under the necessity of parting with one half of all my hands, or working the whole on alternate days unless I obtain leave from the Inspector to work by relays".⁽⁴⁾ So much did the industry depend on water for power purposes that the area inspector wrote that the Borders had "strong claims to separate consideration

(1) T. Craig-Brown, op. cit., vol. i, pp. 180-1.

(2) Textile Mercury, Oct., 1910, p. 351, Nov. 1910, p. 391.

(3) Robert Gill to Jas. Johnston, June 18th, 1854, "In-letters" 1852-4, Newmill Records.

(4) B.P.P. 1847-8, XXVI, Rept. of the Insp. of Facs. Rept. of Jas. Stuart, May 30th, 1848, pp. 43-4.

Table VI AMOUNT OF MOVING POWER USED IN
SCOTTISH AND BORDER WOOLLEN MILLS 1850-1871

<u>Year</u>	<u>Scotland</u>		<u>Type of Mill</u>	<u>Roxburgh, Selkirk, Peebles</u>	
	<u>Steam</u>	<u>Water</u>		<u>Steam</u>	<u>Water</u>
1850	729	1,303	Spinning	77	500
	145	350	Spin/Weave	80	130
	6	nil	Weaving	nil	nil
<u>Total</u>	880	1,653		157	630
1856	708	1,193	Spinning	88	327
	453	550	Spin/Weave	232	407
	20	nil	Weaving	nil	nil
<u>Total</u>	1,181	1,743		320	734
1861	544	1,154	Spinning	119	325
	942	1,104	Spin/Weave	384	529
	92	70	Weaving	nil	70
<u>Total</u>	1,578	2,328		503	924
1867	983	596	Spinning	117	253
	2,546	1,648	Spin/Weave	1,045	635
	299	49	Weaving	56	40
<u>Total</u>	3,828	2,293		1,218	928
1871	1,194	669	Spinning	207	238
	4,258	1,634	Spin/Weave	1,819	851
	1,262	129	Weaving	28	90
<u>Total</u>	6,714	2,432		2,054	1,179

Source: Factory Returns.

were the difficulties of legislating for single districts less impracticable..."⁽¹⁾ It was not only water shortage that caused trouble for the manufacturers, however. Sometimes there was too much, causing "back-flooding" which slowed or stopped the wheel.⁽²⁾ Moreover if a wooden wheel stopped for a long time with one part of it standing in water it became saturated resulting in uneven operation

(1) B.P.P. 1851, XXIII, Rept. of the Insp. of Facs. Oct. 31st, 1850, pp. 39-40.

(2) R. Hall, op. cit., pp. 113-4.

and bad yarn until the remainder of the wheel was equally wet. (1)

If water-power was so irregular it is surprising that it was so tardily discarded. It is true that the Borders were far from coal deposits which, at least before the coming of the railway about mid-century, was expensive to transport. Even so quite sizeable quantities were bought by some manufacturers in the early part of the century for dyeing and other purposes. In 1832 a large coal depot was established at Galashiels and the following year a gas company was formed requiring large and regular supplies. (2) Manufacturers had access to coal for power, therefore, long before the railway arrived, but made little use of it until some years after this event. As already stated the availability of coal appears not to have been the decisive factor in the retention of water power. Relative cost was no doubt important in the mind of the manufacturer, for water flowed near at hand and apart from the maintenance of the cauld it cost nothing to obtain. Cheapness was an advantage which overshadowed the capricious nature of the supply. But water suited the character of the trade also. Spinning machinery turned at a leisurely pace so that there was no premium on hasty revolutions of the wheel or on the speed of production generally. Quality was what counted not speed of output. Thus though steam power was known in the industry as early as the 1790s in Aberdeen and the 1830s in the Borders (3) it possessed no real advantage to the average tweed manufacturer until mechanical weaving drove him to it.

(1) Based on personal memo. from water-mill owner.

(2) R. Hall, op. cit., pp. 113-4.

(3) Ibid., p. 354; Sir J. Sinclair, General Rept. of Agric. in Scotland, vol. iii, p. 294.

The pattern of growth of the factory system in the Scottish woollen industry described in this chapter serves to challenge our all-too-easy assumptions about the nature of the industrial revolution in Britain. For in this part of the textile industry at least there was no massive substitution of labour for capital. There occurred no rapid encroachment on ancient skills such as hand-loom weaving. Rather the coming of industry strengthened them until well into the second half of the 19th century. Furthermore a measure of industrialisation took place without much urbanisation in the broad sense of the term. Men were not herded into large factories in great numbers; the towns more resembled overgrown villages. The gaps between the home and the loom-shop and the loom-shop and the mill were narrow and bridged without undue difficulty. The industrial revolution in the Borders paid scant attention to the steam engine until the 1860s. The same streams which had provided the power for the fulling-stocks and water for scouring and dyeing in past centuries supplied the needs of the factories too for much of the 19th century. In sum, industrialisation and changed organisation in this part of Britain was a gradual enough affair with little of the hectic strain that no doubt accompanied it in other areas and other industries. Perhaps in the Borders the term 'evolution' does mean more than 'revolution'.

Chapter 8:- DISTRIBUTION: THE ORGANISATION OF
HOME & OVERSEAS TRADE

Because he produced cloth rather than clothing the Scottish woollen manufacturer had little to do with the wearers of his products. It is true that in the early years of the industry before anything other than a local market existed for their cloths some clothiers did sell goods to individuals who themselves organised their manufacture into a garment by a local tailor. On the whole, however, the producer disposed of his goods to middlemen making up a distributive network linking the producer with the final purchaser. Ultimately the demand for the manufacturer's cloth not only depended on his own skills in manufacture and finishing but on his correct gauging of fashion trends and on the cut, shape, and fit of the final garment. The last function was almost invariably performed by the bespoke tailor. That the cloth itself was of the 'right' colouring and design was due to a close association between the manufacturer and the woollen merchant. This last person in time became the lynch-pin of the Scottish woollen trade by virtue of the essential functions which he performed in an industry largely devoted to high-class fancy-cloths and accessories.

The services of the woollen merchant, however, were not in great demand in the days of the industry's infancy in the latter decades of the 18th century. The principle method of cloth distribution at that time was for the manufacturers to do it themselves. At this stage goods were not always made to order as was the case later; rather, production was speculative, goods being made for stock until at various seasons of the year the manufacturer took his wares, or

samples thereof, on his 'journeys' to all parts of Scotland, to England and to Ireland. (1) John Crombie, founder of the famous Aberdeen woollen firm travelled to London carrying samples of his cloth for his customers' inspection. (2) The Manufacturers' Corporation of Galashiels sponsored a kind of corporate system of distribution: two of their number acted as travellers for the Corporation merchanting its wares over a wide area and particularly in the sea-board towns of eastern Scotland. Local fairs, too, continued to be well patronised by woollen clothiers. Many carried their pieces to them on carts from which they measured out lengths for local individuals or for travelling merchants. (3) From Hawick, William Laidlaw, originally a hosier, later a tweed-maker regularly tramped over the moors to Newcastle to sell his goods, smuggling a little whisky en route to help cover expenses. (4) In 1829 a Galashiels manufacturer, faced with high stocks of blues ferried his goods to Kirkwall and Lerwick by fishing boat living off oatmeal, sillocks and treacle on the way and eventually sold the whole of his load at twice the price it was fetching in the south. (5) It was by peddling their wares in this way in the true tradition of the 'Scotch merchant' that Border manufacturers built up a reputation for their cloths.

It is not possible to state just when this type of distribution began to be replaced by selling cloth on a made to order basis through merchanting houses. Business records of the early 19th

(1) Memo Book of H. Brown, passim. cf. Letter Books, Newmill Records.

(2) J. R. Allan (ed.), Crombies of Grandholm, p. 31.

(3) T. Craig-Brown, History of Selkirkshire, vol. i, p. 513.

(4) Border Treasury, vol. 14, p. 5.

(5) R. Hall, History of Galashiels, pp. 339-40.

century show that while the periodical journeys retained their importance at least down to 1830 formal dealings with merchants were already frequent. James Dickson of Peebles received substantial orders from 'merchants' based in places such as Peebles, Biggar, Carluke, and Carstairs.⁽¹⁾ It is doubtful whether these men were much more than storemen or shopkeepers engaged in both retailing and wholesaling over a limited area. Even the occasional order from merchants in Glasgow and Edinburgh were most likely from houses dealing in a variety of goods, thus differing from the exclusive woollen specialist houses of a later period. Galashiels manufacturers seem to have had regular merchant connections in the early years of the 19th century. By the 1820s a good deal of the trade of J. & H. Brown of Galashiels was channelled through middlemen in Edinburgh and Glasgow.⁽²⁾ An indication that Border cloth was already attracting the attention of factoring houses in the 1780s and 1790s is indicated by the attempts made at that time to establish Galashiels as a marketing centre. A Cloth Hall was erected there in 1791 for the exposure and sale of goods, manufacturers renting shelves at 40/- per annum. Though at the Hall's inauguration in 1792 150 pieces were disposed of in a few minutes this method of marketing does not appear to have been a success. In 1798 one of its chief sponsors wrote that he hoped the Hall would "meet the encouragement it deserves" but the venture was finally terminated in 1811. The precise reasons for the failure of Cloth Hall distribution are not known but it may be surmised that the remoteness of the Borders discouraged merchants from visiting the centre; it became easier for them to make special orders with individual firms while the manufacturer himself appreciated at least

(1) Account Book, in care of Arthur Dickson & Co., Galashiels.

(2) Memo Book of H. Brown, passim.

part of his production being removed from its speculative basis and therefore had less need to make use of his shelves in the Hall.⁽¹⁾

The future lay therefore in the made-to-order trade conducted by the merchant houses operating from the larger commercial centres. Direct contact between the manufacturer and the bespoke tailor gradually diminished and the 'journeys' were transformed from peddling expeditions into regular visits to factoring houses to show patterns. The changing emphasis on merchanting through a middleman which was the main marketing feature of the years down to 1830 was of great significance to the Scottish woollen trade. For at some point, possibly through a Glasgow or Edinburgh house's London connection, one of the products of Borders clothiers came to the notice of merchants in the metropolis dealing solely in high-class woollen fabrics.⁽²⁾ Thereafter the London factoring houses provided the main outlet for tweeds and, more important, much of the enterprise and ingenuity of the trade. It was the merchant rather than the manufacturer who chose the path along which the industry was to move. City and West-End factors placed the original orders for fancy tweels while Border manufacturers had their eyes still fixed on their local outlets for blues, greys, and drabs. In a true sense the Scotch tweed trade was sired not so much by the producers as the merchants. It was they who realised the potential of Scottish cloths in the upper-class market in the Capital; they took the initiative in stimulating new colours and designs which gave the goods a true Scottish flavour which made them a distinctive product; they cajolled the manufacturers into improving their commercial chances by manufacturing

(1) R. Hall, *op. cit.*, pp. 303-5, 312-15, R. Douglas, *Agric. Report: Selkirkshire*, 1798, p. 330. One of the reasons for the failure of the hall may have been financial. See chap. 11, p. 380.

(2) See chap. 4, p. 140.

trials and ranges prior to making cloth in the piece.⁽¹⁾ Visits by merchants to the manufacturing regions were frequent, many of them being Scots, and thus over a period of time a close relationship grew up between the producers and the middlemen in the trade. The tweed trade, and its prosecution became a joint venture, a partnership where each was the life-blood of the other. The output of the manufacturer was 'tailored' to meet the precise requirements of the merchant who jealously guarded his claim to the exclusive use of patterns made to his specification. Not surprisingly in an industry of small production units it was often the case that a large proportion of the output of a mill was channelled through a single merchant company. In 1862, for example, Henry Ballantyne of Walkerburn sold goods to the value of about £38,000 of which £35,000 worth was purchased by the single London house of Wilson & Armstrong.⁽²⁾ Placing many of his eggs in one basket was a price which a manufacturer in a high-class fancy trade had to pay. Exclusiveness was as much in the interest of the producer as the wholesaler. "We are regularly in the habit of making Ranges and strictly conforming them in style to some of our wholesale customers" declared Ballantyne "the interests of the merchant and manufacturer are one and cannot be separated... without injury to both. Therefore mutual confidence becomes necessary to success".⁽³⁾ Occasionally though that confidence was lost. Manufacturers, rightly in a lot of cases, suspected merchants of getting their expensive patterns copied by cheaper manufacturers elsewhere; merchants accused the makers of selling their own exclusive designs to other houses. But at least

(1) See chap. 4. p. 140ff.

(2) Day Book 1861-63, Ballantyne Archives.

(3) H. Ballantyne to Craigs Bros., Edinburgh, June 16th, 1858. Letter Book, Ballantyne Archives.

while a seller's market existed which was the case for much of the 19th century, both parties realised the value of close partnership in bringing success. The services of the woollen merchant were indispensable in a novelty trade such as the tweed industry. Bespoke tailors and makers-up had no wish to purchase cloth by the piece (i.e. about 50 yds.) They preferred to purchase suit lengths of 3 yds. to $3\frac{1}{2}$ yds. from the merchants' bunches. The merchants, however almost always ordered piece-lengths sometimes many pieces per pattern but more often one or two. Thus the merchant enabled even the specialist woollen manufacturer to operate on a reasonable scale by breaking down his output to meet the fragmented demand of the tailors. The merchant rather than the manufacturer was the stockholder bearing a considerable proportion of the risks of production which were high in a fancy trade, and releasing the manufacturer's capital to finance further manufacture (though this benefit was partially offset in the tweed trade by the habit of granting long credit to the merchant).⁺ Furthermore by placing orders at the beginning of the two manufacturing "seasons" (i.e. for winter and summer goods) the merchant helped to ensure steady and continuous employment in the mills when trade at the distributive end may have been virtually at a stand-still. He also encouraged foreign trade by the credit facilities he offered. Often the merchant accepted local currency from a tailoring house which, due to the complexities of international payments, would not otherwise have been interested in imported cloths. Above all, the merchant's virtue lay in his ability to keep his fingers on the pulse of the market thus keeping the manufacturer abreast of current trends, both at home and abroad.

⁺ See chap. 11 below, p. 381.

Failure to do this would have soon meant the eclipse of the trade.⁽¹⁾

It follows from the above that the woollen manufacturer was, perhaps more than in other trades very dependent for his livelihood on the enterprise and integrity of the middleman. The name of the manufacturer never even appeared on the cloth handled by the merchant so that the tweed firms could not build up a market for their cloth independent of him. This was not felt to be onerous in a seller's market and when there existed a large demand for a diversity of products which the specialist tweed-makers were able to exploit. In the changed conditions that characterised the latter years of the 19th century, however, overt friction between merchant and manufacturer became more common. Wilson & Glenlyon of Hawick began to stamp a brand name on to the listing of their cloth, a move which was resisted by the merchants and was eventually discontinued.⁽²⁾ The chief cause of complaint was, however, the ability of the merchant to dictate, to a large extent, terms and prices. Pricing in the tweed trade had always been a haphazard affair. Manufacturers in their reliance on the merchant had never insisted on retaining firm control over the price for their cloth. This may have stemmed partly from the early decades of the century when the middleman acted more as a commission agent than a woollen merchant proper, taking the manufacturers' goods, which were still in the process of establishing themselves in terms of design and quality, and selling what he could for the best price available. The manufacturer had no option but to allow the merchant a considerable degree of latitude, especially in times of weak demand. Surviving letter books are liberally endowed with

(1) The Woollen Merchant; conversation with Alfred Harrison, retired woollen merchant, Edinburgh.

(2) Ibid.

letters between merchant and manufacturer discussing prices. After much disagreement about the colouring and quality of his cloth with a London house in 1857 Henry Ballantyne was provoked to write, "I hope I am right that you will make as little deductions as you can on any of the goods... for it is very disheartening to a manufacturer to have the small profit all swept away after so much hard work in getting them made".⁽¹⁾ Similarly James Johnston of Elgin on many occasions had to request a Glasgow house to use its own discretion in altering prices of his cloths in order to get them off hand. Sometimes his instructions amounted to complete surrender. "You will do the best you can for our interest and use your own discretion as regards reducing prices where you see cause..." he wrote in 1839.⁽²⁾ In negotiating a military uniform contract in 1840 he stated "as to the price of the cloth we are quite at your mercy, and if you think 5/6d. sufficient we... must submit to it..."⁽³⁾ Over the years therefore, the industry came to be one of "price-taking" rather than "price-making". In favourable trading conditions manufacturers got a good return as merchants were not too averse to accepting a plea for higher prices if they thought the market could stand it. Towards the end of the century such conditions again did not apply. Then a buyers' market operated and the tweed-makers were hard put to it to keep their mills in operation in the face of fashion change and competition at home and abroad. Wool prices were notoriously volatile so that if a manufacturer accepted orders from the middleman at a price and then suffered an increased bill for wool (which

(1) H. Ballantyne to William Armstrong, Oct. 24th, 1857. Letter Book, Ballantyne Archives.

(2) Alex. Johnston to Urquhart, Blackwood & Co., May 9th, 1839. Letter Book ii, Newmill Records.

(3) Alex. Johnston to Col. Brown, June 10th, 1840. Letter Book ii, Newmill Records.

normally represented about 50% of the costs of production) he naturally lost a good deal of his profit if some of the burden could not be passed on to the merchant, and through him to the consumer. Merchants were most reluctant to grant such increases and manufacturers could not enforce their demands due to their lack of common action. For the same reason the merchants were often in a position to elicit reductions in prices if the cost of wool fell between the granting of an order and its completion. In 1908 a Selkirk mill-owner complained that merchants had practically "'ear-marked' every manufacturer who had the temerity... to ask [for a price increase] and threatened to close accounts right and left... merchants will not take a rise in price and the manufacturers are too weak to insist upon it..."⁽¹⁾ It is true that a few of the leading tweed-makers possessed a much greater degree of independence. Robert's of Selkirk for instance were in a position to choose to whom they sold goods.⁽²⁾ But most firms were forced to take the merchant's terms which led many to adulterate their cloth in an attempt to increase their margins.⁽³⁾ The specialist woollen merchant was not always the only intermediary between the manufacturer and the tailor. Many producers, often situated in remote areas and fully involved in the day to day running of their businesses employed an agent, usually based in a large urban centre who sold goods on commission to the merchant, and, at least in some cases, to the retailers themselves. When demand for Scottish cloths was unprecedentedly great after the Great Exhibition in 1851 many factories made arrangements for having agents, with an office, permanently resident in London, where patterns could always be

(1) Glasgow Herald, June 13th, 1908; cf. Hawick Express, Dec. 26th, 1913.

(2) As stated by Alfred Harrison.

(3) See chap. 6, p. 242.

consulted and orders taken. This became a general rule. Agents, too, were allowed some latitude in pricing.

"I understand" wrote James Johnston to a candidate in the 1850s, "that you are willing to canvass for orders for my goods on your usual beat and afterwards settle up the accounts for a commission of 5% on the nett amount received from Retail dealers, and 2½ from wholesale purchasers... forfeiting commission on any bad debts... I shall keep you supplied with patterns of goods, making or on hand, charged as low as possible... my rate is low... but to good parties to induce an order you may always have a little latitude, say to the extent of 1d. or 2d. /i.e. per yd./ in the case of Retailers and 3d. to 4d. for wholesale customers..."⁽¹⁾

Obviously the success of marketing in this way depended much on the calibre of the agent. Johnston was unsuccessful with his; one ran up too many bad debts, the other invested the money he did collect, immediately went bankrupt, and paid 6/- in the £.⁽²⁾

Even where agents were employed in the provinces or in London most of the manufacturers treated personally with their most important customers, some of whom refused to see an agent.⁽³⁾ Every year, often twice or thrice, manufacturers travelled to London to show their patterns, discuss prospects for the next season, obtain orders and sometimes settle debts before returning northwards to supervise design and manufacture.⁽⁴⁾

Though the home trade has always been the back-bone of the industry the Scottish tweed districts have from the early 19th century exported a considerable proportion of their total output. Owing to the usual lack of firm statistical data, and to the fact that many goods found their way abroad through the home-based merchant houses

(1) Jas. Johnston to Alex. Johnston, Nov. 24th & 29th, 1855. Letter Book iii, Newmill Records.

(2) Ibid., passim in 1850.

(3) Jas. Johnston to his agent, March 12th, 1868, Letter Book iv, Newmill Records.

(4) cf. Letter Book, Ballantyne Archives passim, and Letter Book i-iv, Newmill Records passim.

it is not possible to give a wholly accurate figure for the average amount exported. In the 1880s, however it was reckoned that 50% of total production was sold abroad. (1) A similar proportion was given to the Tariff Commission in 1905. (2) The export trade could, however be even more important than these figures suggest to individual firms or localities. Businesses specialising in particularly high grade cloths could expect to sell most of their output overseas; it was stated of Galashiels that 75% of the town's trade was conducted with the U.S.A. alone prior to 1890. (3) Predictably Scotch tweeds found a ready sale in all countries where there existed a temperate climate and a sizeable upper-class market. In concrete terms this meant that for most of the 19th century goods were mainly sent to France, Germany and Austria, and the the United States. After the erection of the American tariff system in the 1890s tweed producers concentrated increasingly on their European trade which in some areas at least was growing quickly before 1914 despite growing commercial restrictions. J. & J. Crombie, for instance having opened a New York office in the early 1880s closed it in 1890 and by concentrating on Europe soon were selling goods in France, Scandinavia, Holland, Belgium, Germany, Austria, Hungary, Italy, Yugoslavia and Bohemia. Even Russia, despite the charges faced by the commercial traveller wishing to trade there came within the company's trading pattern. (4) Again the woollen merchant in England occupied a central position in the conduct of such trade. But increasingly in the second half of the 19th century direct relations were established between the Scottish manufacturers and the foreign import houses on the continent,

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- (1) Royal Commission on the Depression of Trade & Industry, 2nd Rept. evidence of the S.S.C.C. B.P.P. 1892, XXXV, Cd. 6708.
 (2) Report of the Tariff Commission, 1905, vol. ii, pt. ii, The Woollen Industry, paras. 1305-6.
 (3) Glasgow Herald, Oct. 6th, 1913.
 (4) J. R. Allan (ed.), op. cit., p. 105.

especially in Germany. These houses regularly sent their buyers to the tweed mills in order to select patterns to make up their bunches.⁽¹⁾ The German houses that were interested in tweeds were of particular value to the industry. German merchants possessed unrivalled commercial know-how and were usually fluent linguists. For these reasons they controlled much of the Eastern European and Scandinavian trade, employing armies of travellers to ferret out orders.⁽²⁾ Many opened branches in London and several German houses settled in the Borders themselves notably Schulze & Co. in Galashiels and Fuhrmann & Kramer in Hawick.

Like their English counterparts the foreign-based merchant obtained exclusive patterns from the manufacturers. Alexander & Bernhard of Berlin for example, while not insisting that Crombies channelled all their goods through them claimed control over the number of other German houses dealt with and had first sight of the Company's ranges, first refusal of all its novelties, and cloths at 6d. per yard cheaper than any of their rivals. In return the Berlin firm vigorously promoted Crombie's specialities and advised them closely on the state of the market in various parts of the continent.⁽³⁾ Adolph Bernhard was for Crombie's European trade what James Locke of Regent Street had been in earlier days to the firm's home trade.

The American trade was organised in a similar way though many firms opened agencies in New York and elsewhere as demand for tweeds grew. By the latter decades of the century imports of woollens were

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- (1) Report of Tariff Commission, vol. ii, pt. ii, evidence of P. & R. Sanderson; Board of Trade Working Party Report: Wool, 1947, p. 138; Minute Book, Galashiels Manufacturers' Corporation.
 (2) Glasgow Herald, Sept. 16th, 1914; J. R. Allen (ed.), op. cit., p. 105.
 (3) Ibid.

largely under the control of the Syndicate Trading Company, a combination of some of the most successful merchants in the States. Perhaps fortunately for the tweed trade this group comprised among its members a high proportion of Scots, it sometimes being referred to as the "Scotch Syndicate".⁽¹⁾ Though no proof can be offered it is hard not to believe that at least a proportion of the trade between the tweed districts and North America was of a loosely "sentimental" nature owing something, at least, to the goodwill of the merchants of the syndicate and the presence of a large number of Scottish emigrants in the country. When the commercial 'chips' were down, however, sentiment played little part and the Scottish industry suffered greatly from the tariff system imposed at the end of the century.

Compared to the European and American trade dealings with other countries including colonial and dominion territories were not large. The reason for this was partly climatical, for hotter countries preferred to use the lighter worsteds than solid tweeds. More important, perhaps, was the different atmosphere which prevailed in newly colonised territories as regards the style of dress. James Johnston of Elgin, for example, having "no doubt there are many Scotchmen... who will be glad of a plaid on their way to the diggings" attempted in the mid-1850s to sell a consignment in Australia on a speculative basis through an informal agent known to him. Johnston was soon informed, however, that not only had his goods arrived "at least three months too late for the season" (because he had failed to remember that the seasons there were opposite to those at home) but that his cloths were quite unsuited to the market. "I contrasted your goods with Silver's",⁺ wrote the agent, "... in yours

(1) Textile Mercury, April 1891, p. 325.

⁺ Silver was an agent for a Yorkshire firm.

coats, vests and trousers are respectively invoiced at 30/-, 10/- and 16/-; in Silver's 12/6, 4/6, and 7/6. I have no manner of doubt that yours are the superior article, but unfortunately in this country quality and workmanship are not sufficiently appreciated..." Subsequently Johnston not surprisingly described his attempted Australian trade as "an unfortunate speculation" his goods having to be disposed of at great loss. It seems that no attempt was made to capture the market by making products to suit. To do so may have prejudiced his good connections at home. (1)

The practice of sending speculative consignments to a colonial territory in the hope of tempting Scottish emigrants with goods from "the auld countrie" sometimes worked well enough. Ballantyne of Walkerburn sent parcels of tweeds to the Cape and elsewhere on several occasions in the 1850s, complete with the local paper, all to be distributed by an emigrant friend on the spot. (2) Even Johnston, despite his failure in Australia, regularly sent consignments of cloth to Ceylon and Jamaica for sale through an emigrant friend who was setting himself up in business. (3)

Such examples again indicate the necessity of working through an enterprising middleman capable of correctly judging the state of demand. The South African situation was a further example. In this territory, as in Australia the vast proportion of clothing was of the cheaper 'ready-made' type, estimated at about 80% around 1900. Even so, about 12% of suits worn in the colony were made to measure. Scottish tweeds figured hardly at all among these, according to a

(1) Jas. Johnston to A. B. Spark, March 11th, 1853 and subsequent correspondence, Letter Book iii, Newmill Records.

(2) Letter Book, Aug. 9th, 1856, Ballantyne Archives.

(3) Letter Book i, July 18th, 1831, Newmill Records.

Scot resident in the colony, only because they were incorrectly presented due to the absence of direct selling agencies in the country. Instead they arrived through ordinary channels "mixed up with tweeds charged with cotton and shoddy" so that the purchaser was not at liberty to discriminate between what was quality and what was not. Consequently most of the trade went to the cheaper producers of Yorkshire. (1) It is hard to escape the conclusion that in some cases manufacturers showed little interest in exploiting the market properly, though a few began to develop their trading connections in the warmer climates prior to 1914 when traditional markets showed clear signs of weakening. (2) Of more general interest was the rising amount of trade performed in Canada. In a questionnaire answered by the firms belonging to the South of Scotland Chamber of Commerce in 1903 all the replies indicated that the Canadian market was showing great promise due to the preferential tariff and because of similar consumption patterns to the United Kingdom. The Border merchanting firm of Lowe, Donald, of Peebles, previously much concerned in the North American trade thought Canada likely to become one of its best markets at this date. (3)

It was perhaps a sign of the weakness of the tweed trade in these years that so often the loss of traditional outlets for tweed cloths was followed by a new-found concern to obtain Government contract work. In one way, of course this was not surprising: there were wars and rumours of wars and Britain began to re-arm with seriousness. But as far as can be ascertained the Scottish woollen industry for most of the 19th century did not compete with Yorkshire

(1) Hawick News, April 8th, 1898.

(2) Hawick Express, Dec. 27th, 1912.

(3) Scottish Woollen Trade and Foreign Tariffs, pp. 10-12.

manufacturers to secure large clothing contracts with the army or navy. It is known that occasionally regiments were supplied with high-grade uniform cloth for officers' wear; some Scottish regiments depended on home manufacturers for tartans; local corps were clothed usually by the local woollen producer, (who equally usually held rank within).⁽¹⁾ But this sort of trade was small and cannot be compared with the large-scale Government work carried out by English woollen manufacturers. At the end of the 19th century, however, a considerable amount of such work was being undertaken by Scottish mills. It was generally allowed in 1901 that "had it not been for government contracts the Border industries would have been very depressed... especially in the cloth department".⁽²⁾ There was no difficulty for well-known firms in getting on to the Government list, but the work was not profitable and thus was looked for only in the absence of other business in order to cover overheads and to occupy, (and thus preserve), the labour force.

In this sort of trade the normal channels of distribution were usually replaced by direct dealings with government departments. The specialised services of the woollen merchant were not required in a trade which was activated by tenders containing detailed specifications of the quality and price of the cloth being circulated to the interested mills whose only requirement was to return them duly completed to an official at the ordnance department.⁽³⁾ It would be wrong to

(1) "The Early Stages of the Tweed Trade", Border Advertiser, Oct. 20th, 1875; Letters of Wilsons of Bannockburn; Letter Books in Ballantyne Archives & Newmill Records, *passim*.

(2) Hawick News, June 14th, 1901; Glasgow Herald, Dec. 30th, 1914.

(3) Contract Book, W. Brown & Sons, Galashiels.

conclude, however, that even in the years before the first world war increased work for the government was performed on a scale which seriously disturbed the existing distributive network in the woollen trade. Many firms regarded such work as undignified as well as unprofitable. Even those who indulged in it were not dependent on it but carried on a large 'normal' trade through the merchants. Furthermore the changed nature of distribution which was beginning to be felt as a result of the growth of the ready-made trade was hardly felt north of the border. Clapham, writing in 1907 felt that the old type of specialised woollen merchant was already faced with extinction due to the loss of their connection to the large wholesale clothing establishments.⁽¹⁾ This may well have been true in Yorkshire, but it could hardly be said yet of the tweed trade. It is true that a few Scottish manufacturers had, with a degree of success by-passed the merchant to deal directly with these firms.⁽²⁾ But at this stage the ready-made trade did not employ on any scale the higher qualities of cloth which were the staple lines of the tweed manufacture. Even when such fabrics were required the clothing manufacturer still preferred to deal with the merchant rather than the producer when selecting pieces; the merchant offered a greater collection than any one manufacturer and the wholesale clothier only wished to invest in stocks of cloth that were in general demand. As long as the principle outlet of the Scottish woollen industry was the bespoke tailor the services of the woollen merchant remained indispensable. In the same way so long as the tweed trade was identified with high-class novelty fabrics the wholesale clothier had no real interest in

(1) J. H. Clapham, The Woollen and Worsted Industries, p. 165.

(2) Glasgow Herald, June 13th, 1908.

purchasing from mills rather than the merchants. In 1914, therefore, the ties between the merchant and the woollen manufacturer in Scotland were as strong and as necessary as ever.

1. Wool and the Woollen Manufacturer

It is perhaps a truism to state that the greatest pre-occupation of the Scottish woollen manufacturer is with his basic raw material. But it is characteristic of the whole of the wool-textile industry that the cost and nature of the raw material assumes a greater proportional significance in production than in most other industries. In the woollen industry, particularly that of Scotland the raw wool is not obscured in the process of production.⁺ The quality of the wool, therefore, is of great importance. In addition the cost of the raw wool constitutes a large proportion of the manufacturer's gross product. This was so from the early days of the industry. Calculations made by a Galashiels manufacturer in the late 1820s, when wool was cheap for example showed that raw wool constituted between 35% and 39% of his prime costs, depending on the quality of wool employed.⁽¹⁾ As finer, more expensive wools came to be used, and as other costs were reduced by technical innovation the proportionate cost of wool rose higher. In 1865 wool used by William Watson of Hawick represented more than 60% of his direct costs, the precise amount varying with the weight of cloth produced. Between 1865 and 1870 the amount of wool consumed by this firm totalled almost 50% of the value of the firm's turnover in the same period. In each of these years Watson's expenditure on wool and yarn greatly exceeded the total of his other direct production costs.⁽²⁾ Similarly the value of

⁺ This is particularly true of the Scottish industry due to the small amount of milling normally applied to tweed cloths, thus leaving the weave and the uniformity of the yarn open to view.

(1) Memo Book of H. Brown; cf. Fig. v below.

(2) Memo Book, Watson Records.

wool and yarn bought by the Galashiels firm of Ballantyne and Tait in the early 1840s amounted on average to more than 50% of total annual expenditure on production. (1)

Wool, then, was an important cost item to the producer of woollens. But an additional burden which he had to face in both the short and long term was the volatility of wool prices. Normally the acceptance of orders for cloth preceded the sale of the final product by about one year. If the price of wool changed in the interval, therefore, as it frequently did, the margin of profit was in danger of erosion. Fluctuations in the price of raw wool are largely determined by the long 'gestation' period before a decision to grow more wool makes its impact on the market. Wool supply does not speedily respond to changes in the condition of demand. When supply does ultimately respond demand conditions have often altered again leading to more price instability. Furthermore, the condition which mainly affects the demand for the woollen manufacturer's output is the demand for wool clothing. The price of the final garment is usually considerably in advance of the price of the cloth, especially tweed cloths of high quality. The cut and styling of the garment is at least of equal importance to the purchaser as the quality of the cloth itself. Thus changes in the cost of wool do not have any considerable effect on demand for clothing. In any case the demand for wool clothing is relatively inelastic, probably lying in the range 0.50-0.64. In all, therefore, 'normal' changes in wool price have only a small effect on demand. (2) A manufacturer who purchased wool when its price was high,

(1) Annual balances, 1841-44, Ballantyne Archives.

(2) cf. B. P. Philpot, Wool Prices, 1870-1950, Ph.D. thesis, (unpub.) Leeds, 1955; G. F. Rainnie (ed.), The Woollen and Worsted Industry, An Economic Analysis, pp. 1-15.

therefore, could not readily obtain an increase in the price of his finished cloth. For this reason the price of wool at any time could affect the type of production carried on in the mill. At a time of high prices the woollen manufacturer found it hard to make winter qualities, (using more shots per inch) pay; he was thus tempted to make lighter weights or to adulterate his goods by employing inferior yarns or even shoddy or cotton. "Wools are selling in London fearfully high..." complained Henry Ballantyne in 1856, "it will add 8d. to 1/- yd. on the cost of heavy autumn goods, which we can never ask, so that we are to have a bad and profitless trade for some time..." Ultimately he managed to gain increases of 3d. - 4d. yd. for his cloths.⁽¹⁾ Similarly Alexander Johnston of Elgin wrote to a colleague in 1833, "my stock of wool is getting low and unless a great rise takes place on heavy goods or a great fall in the price of course (sic) wools our trade must prove a ruinous one".⁽²⁾

For the Scottish tweed manufacturers to have combated high wool prices by adulterating their goods would, if done for any length of time or on a large scale, have ruined the industry. Tweed was synonymous with quality. To have come down from this pedestal would have only tipped the Scottish manufacturer into the arms of his Yorkshire rivals. Nonetheless adulteration did occur. In the mid-1850s for example when wool prices were unprecedentedly high some Galashiels makers introduced cotton into thin trouserings and cheap shawls, the goods being designated "mixed". "This step has been resorted to" declared the local press, "solely from the enormous price of wool"

(1) Letter Book, May 19th, 1856, Ballantyne Archives.

(2) Alexander Johnston to John Crombie, April 9th, 1833. Letter Book ii, Newmill Records.

and the dangers of the practice were roundly pointed out.⁽¹⁾ On the whole, therefore, though Yorkshire manufacturers could afford to juggle with the content of their cloths if wool prices or other economic phenomena made it desirable,⁽²⁾ the Scottish manufacturer was a prisoner of the type of trade he conducted. Henry Ballantyne spoke more truly than he knew when he said "quality is our only fort".⁽³⁾

Not only was the cost of his raw wool of great significance to the manufacturer; the grade and cleanliness of it was of equal importance. Wool was and is not a homogeneous product. The success of the woollen manufacturer largely turned on his ability to exploit what were often marginal variations in fibre dimension, or quality, often by blending them successfully together. It was often this skill that made him a specialist and as such enabled him to obtain a share of the market for novelty production. It was largely this factor which in time made the woollen manufacturer look further afield for his raw wools leading to the dominance of the wool market by colonial and other overseas growers in the second half of the 19th century.

2. The Changing Pattern of Wool Supply

It was stressed in Chapter 3 that much of the rise of the Scottish woollen industry in the late 18th century and early 19th century was due to contemporary changes in Scottish agriculture, in particular, the improvement in sheep husbandry. The 'drabs', 'greys'

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- (1) Hawick Advertiser, June 7th, 1856; Border Advertiser, March 23rd, 1881; Minute Book, Galashiels Manufacturers' Corporation.
- (2) cf. K. V. Pankhurst, "Investment in the West-Riding Wool-Textile Industry in the Nineteenth Century", Yorkshire Bulletins of Econ. & Soc. Research, vol. 7, no. 2 Sept. 1955, p. 111; E. M. Sigsworth & J. Blackman, "The Woollen and Worsted Industries", in D. H. Aldcroft (ed.), The Development of British Industry & Foreign Competition 1875-1914, p. 153.
- (3) Henry Ballantyne to Messrs. Wilson & Armstrong, July 17th, 1856, Letter Book, Ballantyne Archives.

and 'blues' of the Borders were mainly fabricated from cheviot wool grown locally, being supplemented in small quantities by Highland or foreign varieties. The advent of the "tweed" industry in the 1830s did not at first threaten the use of cheviot wool. Indeed for a while it was intensified. Cheviot wool possessed basic characteristics which were very conducive to current tastes in fashion. It therefore continued to be employed though it lost its relative importance to imported varieties as the century progressed. James Hogg, himself a local shepherd, could boast in 1832, that the manufacturers of Galashiels

"consume the greater part of the wool in the country around, together with great portions of the best wool of the Borders.. of late years, indeed, when the wool became such a drug in the market, had it not been for the spirit of the Galashiels manufacturers, the farmers of Ettrick Forest might have set their potatoes with their tarry wool, for no other person would give money for it...."(1)

In their continued consumption of locally grown wool the woollen manufacturers represented an important factor in the economy of the Borders at a time when the large Yorkshire wool trade had diminished.⁽²⁾ There existed active forces in the first third of the 19th century, however, which, over time, led to a shift in the relative importance of the home and overseas grower. Firstly, cheviot wool was becoming increasingly unsuitable for quality cloth manufacture due to farmers concentrating on rearing for mutton rather than for wool. The wool as a result grew coarser and longer in the fibre making it more suitable for worsted rather than for woollen manufacture. Secondly fashion in its long term trends was against the continued use of cheviot in some branches of the tweed trade. As the century

(1) Jas. Hogg, "Statistics of Selkirkshire", Trans. of the H. & Ag. Soc., 1832, p. 300.

(2) See above chap. 3, p. 108.

progressed public taste moved increasingly in favour of lighter cloths and quieter patterns. Cheviot could not be classed as a really fine wool and one of its great characteristics was its ability to show off colouring to its best advantage. Thus as the tweed makers increasingly catered for the tastes of those who set the trend of fashion at that time, the aristocracy, cheviot wool became less relevant to their needs. Scottish wools generally did not possess "the properties required for producing the goods now generally required, a large proportion of which are of the finest description, and as the largest profits are derived from [these] we need not wonder that capital should... naturally seek profitable investment..."(1)

Though factors outwith the control of domestic wool producers were affecting the purchase of their clip, the Scottish farmer was his own worst enemy in not marketing his product in the most adventurous way. Sheep continued to be smeared with tar and butter, though enlightened critics had been denouncing the practice for decades. Consequently the wool suffered greatly in quality fetching on the market only a fraction of the price of "white" (i.e. unsmeared) varieties. In addition, it was often marketed in an unwashed state. The criticisms of Robert Boyd in the 1840s are curiously similar to those of David Loch made in the 1770s.

"Sheep washing is more imperfectly performed than any other department of sheep husbandry. In consequence of this negligence, it is well-known to manufacturers that Scotch high-land wool suffers a reduction in scouring of one-half, and, when it is smeared with tar and butter... $\frac{5}{8}$ ths. English wool-staplers are the purchasers of Scotch wool, and, so long as it will continue to be so imperfectly managed, the amount annually paid for its transport to England will constitute a considerable proportion of its intrinsic value, independent of

(1) Robert Boyd, "On the Woollen Manufactures Obtained from the Wool of our Mountain Sheep", Trans. of the H. & Ag. Soc., 1843-45, pp. 134-5.

the expense attending the waste which wool of such description incurs in scouring, drying etc... we need not wonder at having the English wool-stapler talk disparagingly of Scotch wool. Farmers complain that the small prices obtained... holds out no inducement to handle the fleeces better, but... when we view the... foreign wool and... the perfect condition in which it is sent to market... Scotch wool stands a higher price to the manufacturers than the foreign..."(1)

In his last sentence Boyd hit upon the prime cause of the woollen manufacturers' growing demand for colonial wools in the 1840s. From this time up to the 1870s wool prices were steadily rising more especially to 1863. This rise was associated with the general expansion of the British woollen and worsted industry and the great increase in demand for imported wools due to the insufficiency, and unsuitability in many cases, of the domestic clip. The supply of imported wool increased more rapidly than the supply of domestic wool, so that though prices of all wool rose, English wool rose more steeply than imported varieties. (See Fig. iv). (2)

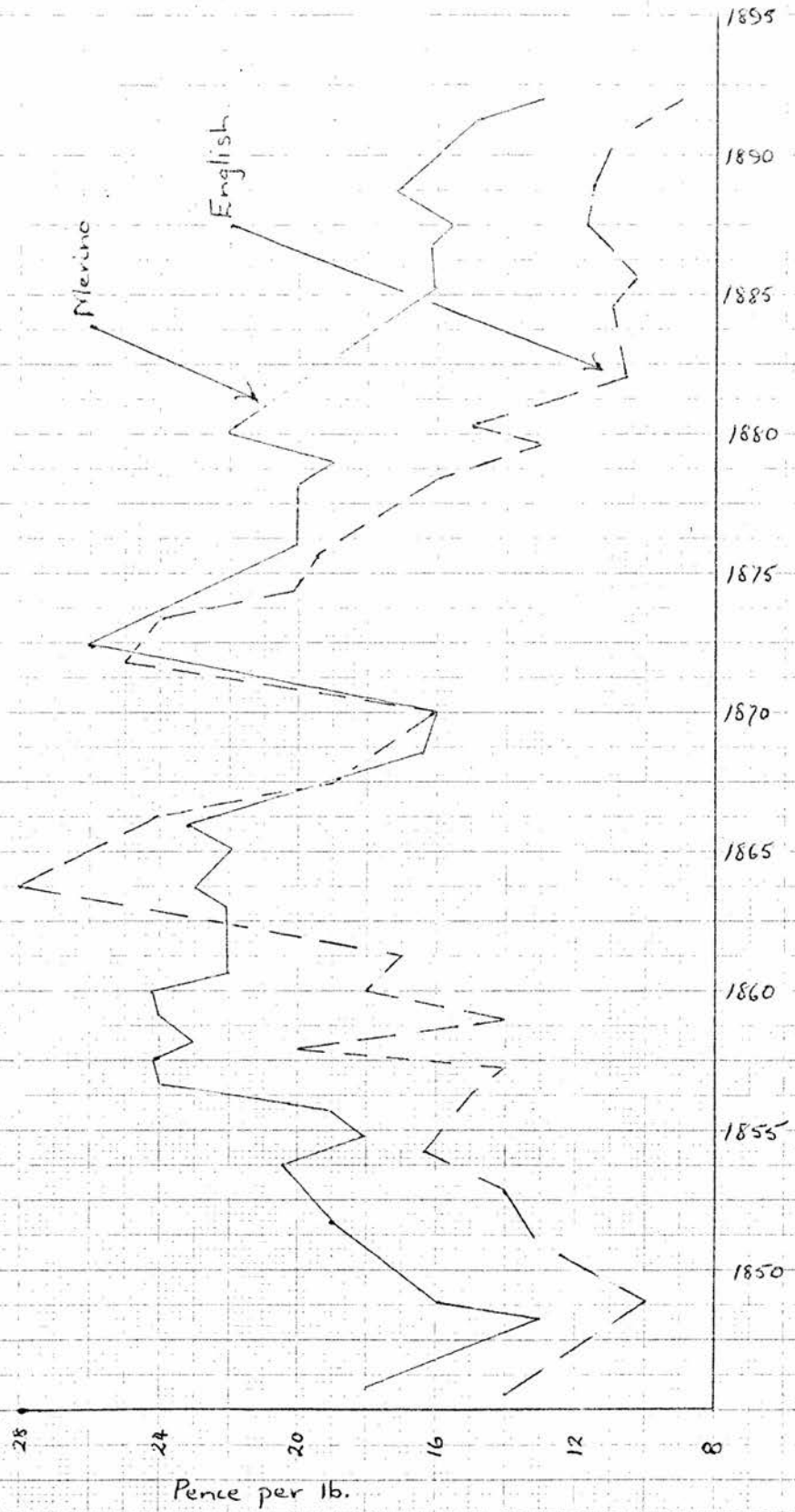
When compared with native wool therefore, colonial and foreign varieties possessed distinct advantages which became increasingly important over time. The most favoured wool in Scotland was the fine 'Botany' qualities emanating from Australia, and colonial cross-bred from New Zealand. Australian wool was found to be not only satisfactory in staple and quality but also soft to handle. This made it good to spin and needful of less milling than other types. "There is no wool known to spin so well as the Australian wool from its length of staple and peculiar softness" stated a user in 1833. (3) James Johnston of Elgin wrote concerning it "I much prefer the Australian to the Cape wools, the latter being much harder and more difficult to

(1) Ibid.

(2) K. V. Pankhurst, op. cit., pp. 107, 110.

(3) B.P.P. 1833. VI, 690, pp. 77-8.

Fig iv. English and Merino wool prices, 1846-1902. (after Sauerbeck.)



mill". (1) Moreover Australian 'Botany' wool grew whiter than Saxony Spanish or Cheviot (even in an unsmeared condition). It was not subject to brown and yellow tinges which afflicted the other varieties. Rather it grew equal in texture and in colour throughout with no dark strands to mar its appearance thus making it eminently suitable to the tweed trade where perfect colouring was required. Most of the wool used in the industry in the 19th century ultimately came from Australasia though Cape and South American wool was used to some extent and German lamb's wool continued to be used for the very finest qualities. (2) The proportion of home clip to total wool consumption declined rapidly between the later 1830s and 1850s. By the middle of the century the vast bulk of wool used in the industry originated overseas. The precise chronology of this change is difficult to formulate. According to the writer of the N.S.A. for Galashiels about 95% of the wool consumed in the town in the mid-1840s was of native origin. (3) By the early 1850s, however, Dawson reckoned that 95% of the wool consumed there was imported. (4) There seems no doubt that use of the domestic clip was waning rapidly in relative terms in the 1840s though perhaps not quite as dramatically as the figures for Galashiels suggest. In 1848 a local newspaper reported that "Saturday last was the anniversary - for it can scarcely be called anything else - of the Galashiels Wool Fair which at one time was pretty large, but has now almost dwindled down to nothing, since foreign wool has so greatly superceded the home-grown in our manufactures. The market was chiefly occupied with ginger-bread

(1) Jas. Johnston to E. G. Goodhart, Nov. 22nd, 1847. Letter Book ii, Newmill Records.

(2) Adam Cochrane, "The Scotch Tweed Trade", Trans. of the Nat. Assoc. for the Prom. of Soc. Sci., 1863, p. 795; B.P.P. 1841, VII, 400, evidence of Mr. Tennant.

(3) New Stat. Acc. of Scotland, vol.iii, Selkirk, p. 21.

(4) J. H. Dawson, Abridged Statistical Survey of Scotland, (1853)p.988.

sellers..."(1) Extant business records also reflect the greater use of imported varieties at this time. Henry Ballantyne of Walkerburn purchased the bulk of his wool locally till the late 1830s. By 1837 he was purchasing more imported wool than home clip. Gradually Australian varieties began to take precedence over other imported wools. Of the wool purchased by him in 1845/46 where the place of origin is specified £2,179 came from Australia, £464 from Germany, £237 from the Cape and £220 from Odessa.(2) The same trend towards imported and particularly Australian wools at this time is indicated in the purchase ledgers of Johnston of Elgin.

Though the tweed industry came to depend very heavily on imported wools in the period after 1840 it must not be forgotten that Cheviot wool was still purchased in considerable quantities due to the overall expansion of the industry. Such wool remained unmatched for the coarser grades of fabric until colonial cross-bred varieties challenged it. Moreover when prices of imported wools rose markedly manufacturers turned to the lower qualities thus forcing up its price. Cheviot wool prices fell steadily in the 1840s from a peak in the mid-1830s but recovered somewhat in the 1850s and '60s when imported wools were dearer.* In the boom conditions of the early 1870s Henry Ballantyne even returned again to the practice of buying from local farmers for the first time for about 30 years.(3) The whiter growth of the colonial cross-bred wool gave it a comparative advantage over true Cheviot however, whose other characteristics it also matched. This, coupled with the growing importance of worsted production in

(1) Border Advertiser, July 14th, 1848.

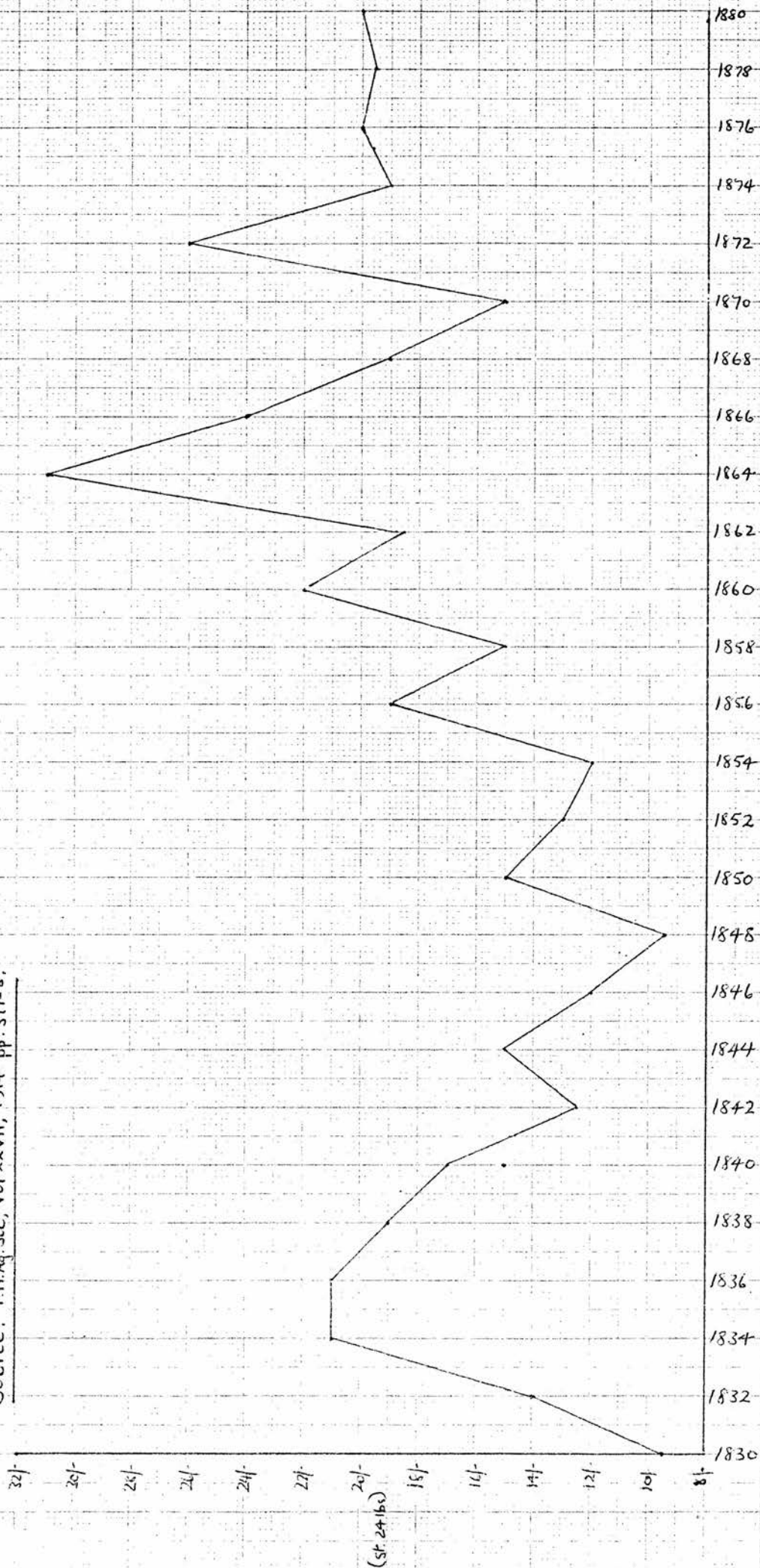
(2) Invoice Ledgers, Ballantyne Archives.

* See Fig. v.

(3) Invoice Ledger 1871, Ballantyne Archives.

Fig. V Average price of Cheviot (laid) wool, 1830-1880.

Source: T.H. Ag. Sec., vol xxvii, 1914 pp. 377-8.



the medium qualities towards the end of the century meant that Cheviot wool had permanently lost its dominant place even in the coarser varieties before 1914, though the finer counts in the 56's range continued to be widely used.(1)

3. The Changing Methods of Wool Purchasing

The twin facts that wool is a "qualitatively variable" commodity which for the most part was imported from distant countries led to the growth of a complex marketing system in the course of the 19th century. Broadly, however, wool found its way to the manufacturer in two main ways: by direct buying from local growers, or through the services of the wool stapler who may have been situated in the manufacturing locality or at a distance from it. These methods were often supplemented by the wool agent who sold the commodity on commission either for growers or staplers.

Until the 1830s most woollen manufacturers dealt directly with local farmers when purchasing their wool because as yet little foreign wool was employed. Wool was thus bought in sizeable lots at "wool time", the manufacturer either purchasing it on inspection at the farm or buying it 'blind' with some financial safeguard if it was not up to standard.(2) This method of buying may best be described as an informal ritual an occasion where both parties had ample scope to use their in-built shrewdness and obstinacy.

"The farmer certainly knew the purpose of our call, but the subject was not broached with any indecent haste... the approach would as a rule be casual. By a time-honoured custom the purchaser of the clip in the previous year had

(1) E. S. Harrison (ed.), Scottish Woollens, p. 153.

(2) Memo Book of H. Brown, cf. Letter Books i-iv, Newmill Records, Letter Book, Ballantyne Archives.

the first refusal. If you happened to be in that position there was really nothing to do but settle the price; but both parties knew full well that the price would not be settled that day... The conversation would drift on about the state of trade, the merits or demerits of the particular clip or the price of colonial wool; the bull points would be stressed by the vendor while the would-be purchaser an unqualifiedly pessimistic outlook. The final words were almost always "well, we'll be seeing you at Hawick", perhaps coupled with instructions to send over your sheets. This meant that the bargain was practically concluded and the price would amicably adjusted at Hawick fair a few weeks hence".⁽¹⁾

The fairs were, of course, a method of selling in their own right if prior agreements had not been made. It was the fair which set the price of wool not only on the day but for some months afterwards. The Borders was the scene of important wool fairs - at St. Boswells, Hawick and Kelso among others. To them came most of the Border sheep farmers, the wool-brokers, dealers and other purchasers. Together they engaged in arguments that were apt to be "long and tautological, lasting often into the late afternoon, till some hardy spirit would break the ice, a bargain would be struck, the news passed round in a flash, and then there was a scramble to sell or to secure the wool".⁽²⁾ In the north much of the wool of the flocks of Sutherland and Caithness, Ross and Inverness found its outlet at the great Inverness Fair established in 1818. Northern manufacturers were sometimes engaged by their Border colleagues to purchase Highland wool for them at this Fair in the early part of the century, Border manufacturers sometimes reciprocating at the Border Fairs.⁽³⁾ In this personal method of wool-buying, whether or not at the Fairs themselves, sale was by private bargain not by auction as was the case with foreign wools. The farmer in trying to strike his bargain usually tried to sell at the same price as his neighbour

(1) E. S. Harrison (ed.), op. cit., pp. 97-8.

(2) Ibid., p. 98.

(3) Letter Book i, Newmill Records, passim; Memo Book of H. Brown, passim.

regardless of quality, threatening to hold it over or despatch it to England if his wishes were not met. This practice meant that there was a tendency for inferior clips to claim too high a price and superior qualities too low as the stapler or manufacturer tried to depreciate the superior in order to gain the poorer clips for what they were really worth.⁽¹⁾ Selling in this way gave no incentive to the farmer to improve his wool as did the auction system. This may, at least partly, explain why smearing died such a slow death in the industry.

Purchasing wool by this method of private treaty with the grower at one time in the year had another major drawback for the manufacturer. Wool had to be purchased for a long period ahead thus tying up much of his working capital. J. & H. Brown of Galashiels, for example bought over £900 of wool in 1829 when their average annual turnover was in the region of only £1,300.⁽²⁾ Between 1830 and 1865 the stock of wool in the annual inventory of J. Johnston of Elgin averaged over 15% of his total assets and in individual years reached well over 20%. Wool in stock at William Watson's mill at Hawick in 1849 represented over 12% of his total assets.⁽³⁾ The advent of foreign and colonial wools in large quantities in the tweed industry helped to reduce the need to carry large stocks owing to the simultaneous development of stapling facilities near or in the manufacturing districts. In 1844, for example, the firm of Sanderson & Murray was started in Galashiels.⁽⁴⁾ If the Galashiels and Walkerburn firm of Henry Ballantyne & Sons was typical the purchase of wool direct from local farmers ceased to be quantitatively important in the 1840s,

(1) Kelso Mail, June 3rd, 1847.

(2) Memo Book of H. Brown, Aug. 1829.

(3) Memo Book, Watson Records.

(4) M. McLaren, Sanderson & Murray 1844-1954.

most supplies now coming through local brokering and stapling facilities.⁽¹⁾ Table 1 shows that the number of wool brokers and dealers in the Edinburgh area increased markedly in the late 1840s strongly suggesting a swing to imported wool, and thus to stapling services, by manufacturers at this time. The latter could now purchase his raw wools at any time of the year rather than only at the clipping season; supplies were usually ample and relatively stable. Manufacturers purchased from the stapler in the form of extended contracts to be taken up as desired. Johnston's of Elgin for example placed orders for 30,000 lbs. with the brokering firm of McCaig in Galashiels to cover a period of six months, wool being paid for only after delivery.⁽²⁾ The local stapler also often acted for individual manufacturers at the London wool sales having been furnished with specific instructions or having come to know their particular requirements.⁽³⁾

Table 1

NUMBER OF WOOL-DEALERS AND BROKERS
IN EDINBURGH & LEITH, 1836-1860

<u>Year</u>	<u>No.</u>
1836 ...	7
1840 ...	7
1845 ...	9
1850 ...	15
1855 ...	14
1860 ...	16

Source: Edinburgh & Leith Post-Office
directories.

The most eloquent testimony to the importance of local stapling facilities in the manufacturing area and to the importance of imported wools to the Scottish woollen industry from the middle of the 19th century is the rapid expansion of the firm of Sanderson & Murray,

(1) Invoice Ledgers, Ballantyne Archives.

(2) Manuscript from E. S. Harrison, Elgin.

(3) Ibid.

fell-mongers and wool-merchants of Galashiels specialising in Australian skin wools. In the 1830s John Murray of Jedburgh worked as a carrier operating between Leith and the Border towns. In 1839 he became the Galashiels agent for the carrying firm of Machell & Co., who worked between Edinburgh, Manchester and Liverpool. Murray set himself up to deal in waste wool buying it up from local manufacturers and selling it to Yorkshire. Noting the increasing amounts of imported wool coming to the Borders from the Forth, Murray decided in 1844 to form a wool-merchanting business with his brother-in Law William Sanderson, a partner in a Galashiels building firm. They started to deal in local and Australian wools, the latter soon becoming the dominant part of their trade. In 1856 the firm began to purchase on the London market and at the great Hamburg wool sale where wool from Hungary, Poland and Bohemia as well as Germany was purchased to be sold to Border manufacturers. A little later William's son John Sanderson went out to Australia and New Zealand in order to buy wool directly. In this way the Firm of Sandersons of Melbourne was established. About the same time a Prussian wool merchant was appointed by the parent firm in Galashiels as its European buying agent. Less than twenty years after the foundation of the business extensive premises for pulling Australian, Tasmanian, Cape and Buenos Aires sheep skins had been erected in Galashiels, tanning premises had been rented in Alloa, John Sanderson had been settled in Australia and was being allowed a proportion of the considerable profits of the home firm to build up his business not only as a wool buyer but as an actual wool-grower, and Murray had made enough money to erect his great mansion of Glenmayne at a cost of £20,000. By the mid-1860s the firm of Sanderson & Murray was one of the largest firms

of its kind in the world. (1)

Such was the importance of wool to the Scottish woollen manufacturer that occasionally he endeavoured to buy wool by by-passing existing purchasing institutions and obtaining supplies from their source especially when it was felt that only the poorer grades were being sent. To this end the Hawick & London firm of Wilson & Armstrong joined with Sanderson & Murray in purchasing a wool farm in New Zealand in 1862 to be administered from Melbourne. (2) The invoice ledgers of Henry Ballantyne show considerable purchases of wool from that city in the 1860s and '70s. The same firm even went to the extent of sending George Ballantyne to New Zealand to enter the wool-buying business to supply personally the requirements of his firm, the latter giving him detailed purchasing instructions. (3) Such practices were probably not common however, and the staplers continued to provide the main means of wool supply throughout the second half of the 19th century. The London wool auctions emerged as the foremost market in the world most imported wool being channelled through it until the growth of the great Australian wool auctions in the later years of the 19th century began to rob it of some of its importance.

(1) M. McLaren, op. cit., p. 70.

(2) Ibid., p. 62.

(3) Letter Book, p. 47. Ballantyne Archives.

1. Introduction

The British industrial revolution cannot be seen simply in terms of the substitution of capital for labour. Despite technological advance important industries remained labour intensive. Coal was one, the woollen industry was another. Though labour costs here were not a high proportion of direct production costs - about 15% on average in the Scottish firms investigated - labour nonetheless remained a strategic factor in the production process despite periodic advances in textile technology in the 19th century.

Many of the multifarious hand processes traditionally associated with cloth manufacture were not eroded by the introduction of machinery. Some crafts, like sorting for example, remained virtually untouched. Even where machines did replace old skills the craft element was never completely removed. In any case mechanisation in the woollen sector came later than in textiles as a whole mainly due to technical problems. The woollen industry, therefore, remained labour rather than capital intensive. The progress of a firm depended heavily upon the quantity and the quality of its manpower. The specialised nature of the production unit was mainly achieved by the ability of a few key work-people at various stages of production to manipulate machinery or raw materials in a distinctive way. Both manufacturers and customers came to believe, perhaps in an exaggerated way, that Scotch tweeds could be made by no-one else than the Border people and those of a few other places. The distinctive character of the cloth depended as much on labour as anything else. It was largely for this reason

that the traditional location pattern of the industry remained virtually unaltered despite increasing economic disadvantages, such was the trust in, and dependence upon, the inherent skills of its workpeople.

2. Demand for and Supply of Labour

The majority of the Border population in the 19th century depended, as now, almost entirely on the local textile industry for its livelihood. Outside of agriculture no other major source of employment existed. This was only a little less true of the other Scottish woollen districts. To obtain alternative work to that provided by the woollen industry often meant complete removal from the area. Thus at first glance it would appear that the position of labour in the industry, in terms of bargaining power, was weak. There were, however, important balancing factors. On the demand side conditions in the industry in the 19th century as a whole were favourable to the labour factor. As already stated while technical change did occur and fundamental re-deployment of labour in the industry took place the craft element in the production process was never eliminated, and in some types of operation never even disturbed. Thus many of the native skills of the local people which had been built up over many generations were not made redundant when factory-based methods of production made their appearance. Furthermore though sharp recessions did occur at intervals in the 19th century the demand for the woollen products of the Borders remained firm for most of the period. The set-backs of the late 1840s in 1858, 1873 and 1879 are best regarded as minor variants on a long upward trend of trade lasting from the 1830s to the mid-1880s. It was in this period that the tweed trade was founded and became a basic part of the Scottish economy and

dominant in the Border economy. Thus labour continued on the whole to be in great demand during this period; little unemployment occurred to sully industrial relations or put downward pressure on wage rates. Only after 1890 did anything approaching a glut of labour appear in the region, and this situation did not persist for many years, being remedied by emigration and the revival of trade in the years before 1914.

Perhaps more important in terms of the workers' bargaining position was the relative inability of supply to expand to satisfy fully this demand for labour. Several reasons contributed to this. In the first place despite the provision of railway links between the Borders and Edinburgh in the middle of the century the region remained what it always had been, a remote area. "The whole Border manufacturing district", observed an enquirer in 1854, "appears to be isolated from the other manufacturing communities".⁽¹⁾ This had two effects. It made unlikely the immigration of workers from other sources in any significant number despite the prosperity of the industry; it also produced feelings of exclusiveness and insularity among the native population which was not always conducive to the acceptance of strangers. Nor was the Border district attractive to potential emigrants in other parts except for its natural beauty. Border towns were no better than the large industrial cities of the central belt. Hawick possessed no proper drainage system till well into the second half of the 19th century. At Galashiels water was obtained from public and private wells, many of them soiled and irregular, till 1879.⁽²⁾ Neither was the death-rate in the area below that of the

(1) Report on Arrestment of Wages, B.P.P. 1854, LXIX, 205, p. 24.

(2) R. Hall, History of Galashiels, p. 145.

country at large. It stood at 27.6 in the parish of Hawick and Wilton, for example, in 1861 compared with a Scottish average at that date of only 21.3 and a Roxburgh figure of only 19.9. (1) Several severe outbreaks of epidemic including cholera were experienced in the region. It is not meant to show by these figures that the Border towns were necessarily worse than other manufacturing districts, but merely to avoid the impression that because of their beautiful surroundings and small size they possessed any particular drawing power for immigrant labour. As any influx was likely to come from rural or semi-rural areas due to the nature of the skills required in the industry it must be recognised that the prospect of moving to a Border town was not necessarily viewed as a pleasant one. Housing was cramped and often of poor quality. Of 100 houses investigated in Hawick in the early 1860s 42 contained only one room and on average each room of the sample contained 8 persons. They possessed no sanitation or water supply. (2) "Our population" complained a local manufacturer in 1857, "is crammed into a miserable small space; and scarcely a town in the Empire has worse sanitary arrangements". He laid the blame squarely on the Duke of Buccleuch for granting insufficient feus. "There ought to be no variance between Hawick and Buccleuch, it is hard to have a whole community screwed together like ours simply because some member of the Buccleuch family was pelted with stones by some of the rabble... more than twenty years ago". (3) Housing was inadequate in Galashiels too. The inability to obtain sufficient labour in the boom conditions of the mid-60s was attributed to this factor. Married families did not come and single persons

(1) R. M. McGregor, "Some Aspects of the Medical History of Hawick", T.H.A.S. 1957, p. 43f.

(2) Ibid., p. 45.

(3) Hawick Advertiser, Jan. 7th, 1857.

had to make do with poor lodgings. Many workmen who did enter the area built their own dwellings. (1) As late as 1910 mills in Selkirk were said not to be able to take full advantage of improved trade because of a "house famine". One local yarn-spinning firm bought some old mills in the burgh and converted them into workers' houses in an attempt to get more labour. (2) Labour was unlikely to be attracted into the Borders, therefore, by good social amenities. On economic grounds however, the woollen districts held out prospects of regular employment and adequate earnings. Nonetheless there is little evidence of much labour being attracted into the region on these grounds. Of course work could only be obtained if one possessed relevant skills. But even where such skill did exist there was little occupational mobility involving immigration into the area. For example despite the plight of the Scottish cotton weavers in the very period when their colleagues in the woollen sector were twice as well paid few of them transferred into woollens. This was partly due to an innate indisposition to change both their habitat and the fabric upon which they worked. Many felt insufficient for the slightly different skills which were required for the heavier and more intricate work of the woollen sector. But in many cases it was not so much the existence of a skill gap that hindered such workers as the cost of bridging it. An official enquirer into the condition of hand-loom weavers in the late 1830s concluded that the poverty of linen and cotton weavers precluded them from carrying out alterations to their looms which would have cost about 20 shillings. They were unable to afford even a few days off work to be instructed in the skills of weaving woollens. (3)

(1) Minute Book, Galashiels Manufacturers' Corporation.

(2) Textile Mercury, Nov. and Dec. 1910, p. 466.

(3) Report of Assistant Hand-loom Weavers' Commissioners, B.P.P. 1839, XLII, 159, pp. 194-5, 212.

Thus a situation was aroused where cotton and woollen weavers living in adjacent houses could have 100% difference in their earnings. A few did enter the woollen sector, particularly where cottons bordered on woollen producing districts as in the upper Tweed valley and at Langholm. But on the whole cotton workers did not transfer into woollens and the industry was not subjected to the tide of cheap Irish labour which did so much harm to the position of cotton operatives.⁽¹⁾ A further factor which limited the supply of skilled labour in the woollen industry, especially in the second half of the 19th century was the absence of any balancing employment in the area, in contrast to the situation in Yorkshire. Increasingly, especially after the adoption of the automatic spinning mule and the power-loom in the 1860s women predominated in the industry's workforce.⁽²⁾ Moreover a high proportion of the better paid jobs were performed by women especially in weaving where, after the introduction of the power-loom few men were employed. C. J. Wilson, a Hawick employer stated before the Labour Commission in 1891 that women often earned more than men; a few of the latter even found it best to stay at home and allow their wives to earn their bread.⁽³⁾ Complaints that women got all the best jobs in the Borders were not infrequent.⁽⁴⁾ There was little incentive, therefore, for families to enter the area for while a wife would be readily given work it was often far more difficult for men to find it.

Not the least important factor determining the supply of labour in the district was the ability of workers, especially weavers, to

(1) Ibid., pp. 6 & 10.

(2) Factory Inspector's Returns.

(3) Royal Commission on Labour, B.P.P. 1892, XXXV, C. 6708-vi, paras. 7497-7501, 7515.

(4) Textile Mercury, Dec. 1910, p. 466.

protect the rate of entry to their craft. One should not be deceived into thinking that the palpable weakness of trade unionism in the woollen industry was symptomatic of labour's lack of bargaining power. Collective action was taken with regard to weaving prices and the employment of incoming weavers from other districts. When a government official enquired if ex-cotton weavers had been engaged by Galashiels clothiers in the late 1830s he was told that the woollen weavers there would not permit it. He remarked later than one of the reasons why Irish labour did not permeate the woollen sector very much was because "the weavers possess, and equitably exercise the power of preserving a just remuneration for their labour; there is no excess of hands".⁽¹⁾ In the 1840s the Weavers' (or Reed) Corporation was still able to insist that a stranger weaver coming into the town obtained its approval and paid a sum of money before he could set to work. This had to be complied with for it was impossible for the working man to keep up for himself a set of reeds suitable for the different qualities of webs from time to time supplied to him.⁽²⁾ Naturally as hand-weaving gave way to mechanisation the power of the Corporation died but some workers found other methods of exploiting their scarcity value.

"I am sorry to see you are in a little trouble with your carding manager" wrote Robert Gill, an Innerleithen manufacturer, to a colleague in the '50s, "that is a class of workman very scarce here, there is no getting the manager to learn new hands, they rather try to keep them back and the result is both scarcity and bad tradesmen - the good ones even are careless to do work well, they know they cannot easily be replaced - I would prefer a Yorkshireman... I am not satisfied with the work, his price is high for indifferent work".⁽³⁾

Later P. & R. Sanderson, a Galashiels firm experienced their workers' power to protect their position and traditions against incomers.

(1) B.P.P. 1839, XLII, 159, p. 56.

(2) Border Advertiser, Nov. 26th, 1873.

(3) Robt. Gill to Jas. Johnston, Jan. 30th, 1855, "In-letters" 1854-6, Newmill Records.

About 1900 in an effort to improve productivity the firm endeavoured to break the long tradition of allowing a weaver to operate only one loom by putting two looms under the control of a single weaver when working plain goods. They had to engage labour from Bradford to operate the system. Such was the hostility of the employees to the changes that the Yorkshiremen were "influenced to go back" and the experiment came to a premature end.⁽¹⁾ Of course some workers from other towns did come to the Borders and elsewhere to work in the woollen mills. Walter Laing a Hawick mill-owner was impressed with the number of "strangers imported" to the burgh in the mid-1860s.⁽²⁾ Bremner noted that it was a regular custom for Hillfoot shawl weavers to find work in the Galashiels tweed mills in their close season.⁽³⁾ A number of key workers were recruited in Yorkshire though this was made difficult by the higher wages paid to many key workers in that county than in Scotland. Johnston of Elgin repeatedly made enquiries for departmental foremen in the Yorkshire districts but without much success. In 1812 Alexander Johnston wrote that he was afraid to obtain labour in Yorkshire because the rates he would have to pay would set a precedent for local employees. In the 1850s the firm was told that wages offered in Elgin were an obstacle to obtaining English labour so that other inducements had to be offered such as low-rent or free housing and gardens.⁽⁴⁾ Immigrant manpower, however, was never a large proportion of the total labour force in any woollen-manufacturing area.

The expansion of the labour force in the woollen districts was mostly achieved by natural increase in the local population. In 1881

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- (1) Report of the Tariff Commission, 1905, vol. ii, pt. ii, The Woollen Industry, para. 1825.
 (2) Children's Employment Commission, 2nd Report, B.P.P. 1864, XXIX, p. 226.
 (3) D. Bremner, Industries of Scotland, p. 211.
 (4) Alex. Johnston to a Leeds firm, Letter Book i, p. 11; Adam Dunbar to Jas. Johnston April 9th, 1854, "In-letters" 1854-56, Newmill Records.

76.5% of the population of the parliamentary burgh of Hawick was born in the county and 91.8% were born in Scotland; 5.7% came from England and only 2.2% from Ireland. In Galashiels 48.7% were born in the county of Selkirk, 93.7% originated in Scotland, 3.0% came from England and 2.7% from Scotland. Most of those born outwith the county came from adjacent counties and the rest from other woollen centres in Scotland. (1)

The above survey of the forces determining the level of supply of labour in the industry leads one to conclude that the supply of labour was inelastic and for the most part was not equal to the demands of the industry in the 19th century. Expansion in the middle years of the century may well have been slowed by an inadequate supply of workers. Extant business records certainly suggest that labour supply was a constant problem to employers. In the 1850s the Border manufacturers operated a gentlemen's agreement concerning recruitment policy. Adam Dunbar, a Galashiels businessman wrote in the 1850s "The manufacturers consider themselves used very unfriendly when any of them engages their neighbour's hands without consulting them. In the case of hand-loom weavers this is not heeded, but with regard to the departments they have an understanding or union among themselves which is very generally adhered to". (2) In the 1860s when trade was expanding rapidly it was reported of Tweedside mill in Peebles that it was unable to run at full capacity for want of labour most workers coming from a distance. (3) Galashiels experienced similar difficulties.

"Factory hands are always scarce", said Bremner, "except in periods

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- (1) Census of Scotland, 1881, vol. ii, pp. Lv-Lvi; cf. Board of trade working party report: Wool, 1947, p. 132 - "to a considerable extent recruitment.. has been a matter of family tradition".
- (2) Adam Dunbar to Jas. Johnston, May 8th, 1852. "In-letters" 1852-4, Newmill Records.
- (3) Hawick Advertiser, July 14th, 1860.

of temporary depression".⁽¹⁾ In the expansive years prior to 1914 a dearth of good darners and finishers hindered the trade, as well as inadequate housing.⁽²⁾ In northern manufacturing areas the situation was worse. James Johnston of Elgin appears from his firm's letter books to have been constantly on the watch for new workers in the south of Scotland or in England. He advertised for weavers in the window of a Galashiels bookshop but with only moderate success, the candidates being interviewed for him by the proprietor. Quite often men who wandered to the Borders from the Hillfoots moved on to Elgin or Aberdeen. Johnston found most difficulty in obtaining power-loom weavers. If some were found they were not easily retained. "The two new weavers are leaving" he wrote in 1855, "which is very unhandsome—they have no complaint, but they imagine they can make better wages in the south". In another letter he stated that his power-looms were actually out of use for lack of operators. Aberdeen was probably better off but even here mills were never over-stocked with workers.⁽³⁾

We may conclude with some conviction therefore, that the dependence of the population of the Borders and some of the other woollen districts on a single means of livelihood did not materially weaken the position of most of the operatives vis à vis their employers. The rising market for the products of the industry for most of the 19th century kept up demand for workers. Due to geographical remoteness, restrictive practices, the lack of balancing industry and various social considerations labour supply never outstripped demand, and, in times of rapidly expanding trade, lagged behind it. Although statistical verification of the point is not possible it seems

(1) D. Bremner, op. cit., p. 192.

(2) Textile Mercury, Aug. 1910, p. 142.

(3) "In-letters", 1852-54, Newmill Records; cf. "Official letters", Newmill Records.

probable that the expansion of the industry in the 19th century was not only limited by the type of market for which it mainly catered but by the inability to recruit or retain an adequate labour force. It now remains to be seen whether the reward of labour in the industry was an accurate reflection of its scarcity value.

2. Earnings

Any attempt to measure accurately the return of labour in the woollen industry is immediately confronted with special complicating factors. Firstly for most of the 19th century there was no standard pricing system for labour in the industry. Each mill paid its own rates. It is probable, however, that the market for labour within the Border towns themselves was reasonably perfect. Wage rates between various mills in Hawick or Galashiels probably did not vary too much in the context of a general labour shortage. Wages would be pushed up to a more or less common level in order to prevent poaching. When asked by the Royal Commission on Labour in 1891 whether wage rates differed much between mills C. J. Wilson of Hawick replied "I should say not very much".⁽¹⁾ Differences that did occur were due to differences in the kind or quality of work performed in the mills. This highlights a further general problem in ascertaining wage levels in the industry. The fact that a class of worker had a common designation does not necessarily signify that it was engaged upon identical work and received comparable rates of pay. For example a weaver of plain goods was paid differently to one weaving fancies. The latter may have possessed more skill and would have the quality of the work done taken into consideration; such work may have

(1) B.P.P. 1892, XXXV, C. 6708-vi, para. 7526.

involved slower performance to avoid breakages or more intricate darning when faults did occur. Again towards the end of the century the rates of remuneration for weavers depended on whether they were engaged on "fast" or "slow" looms. Furthermore some workers were employed on a piece-work basis, others were paid by the hour, or, less often, on an annual basis. Thirdly actual net earnings varied much according to local conditions. Before 1849, for example, the weavers of Galashiels had to pay their own light and weft winding. This burden was assumed by the employers thereafter. (1) Spinners' seemingly high earnings were considerably reduced in net terms by their having to pay a substantial part of the wages of the piecers. (2) Carpet weavers' gross earnings in the Hillfoots in the late 1830s were reduced by payments to draw-boys, sometimes amounting to 2/6 weekly, and for light. Tartan weavers there had to pay for their own weft winding. Cottage weavers in the Hillfoots were subject to incidental costs amounting to about 1/8 weekly at this time made up of 1/- for winding, 4d. loom stance or rent, 2d. for lighting, and 2d. for wear and tear of looms, mounting, etc. (3) Thus it is difficult to compile earnings figures which are comparable over time or between different districts. Further, earnings in money terms were sometimes supplemented by real benefits such as cheap accommodation or gardens. Finally there is the general problem of inadequate data, especially in the early years of the century. For other decades extant business records are useful but by no means numerous enough to obtain a sample sufficient to afford firm generalisations concerning the level of earnings in the industry as a whole.

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- (1) Table of Prices, 1849, Galashiels Manufacturers' Corporation; Kelso Mail, May 7th & 14th, 1849.
- (2) Private Letter Book, c. 1910, Ballantyne Archives; T. Craig-Brown to Douglas Scott, Feb. 3rd, 1912, Family Letter Book.
- (3) B.P.P. 1839, XLII, 159, pp. 185ff.

In the absence of perfect tools, however, the enquirer must perforce use imperfect ones. The data discussed below is largely based on official estimates given by the Hand-Loom Commissioners in 1838, on estimates given by various other commentators, and on the small sample of business archives. They are probably sufficient to give a view of the likely trend of earnings in the 19th century even if the actual level of earnings is debatable in some cases. Much of this evidence relates to hand-loom weavers. These were important workers in the industry till the mid-'sixties. Other workers' incomes, except departmental foremen and perhaps some male spinners were lower. Because the weaving process is one of those basic to the industry it is likely that fluctuations in weavers' earnings were accompanied by variations in those of other workers. We may say, therefore, that the use of weavers' income data for the most part, does enable generalisations to be made concerning the overall trend of earnings in the woollen industry.

Table i below gives details of the average weekly earnings in gross terms, except where stated, of male hand-loom weavers in different parts of Scotland from the end of the 18th century to the middle of the 19th. In the 1790s it appears that a Border narrow-cloth weaver could expect to earn in the region of 9/- weekly while a broad-cloth weaver in the Hillfoots obtained a shilling or two more. At this date woollen workers were not always permanently engaged in the industry still retaining a connection with agriculture though in the Galashiels area at least this was declining. It is thus difficult to establish accurately what would be an average weekly income for a whole year but it is unlikely that earnings in agriculture would average more per week than could be obtained in woollen manufacturing.

Table i

AVERAGE WEEKLY GROSS EARNINGS OF
HAND-LOOM WEAVERS IN SEVERAL WOOL-WORKING
DISTRICTS OF SCOTLAND FROM THE 1790s TO 1850

Ref. no.	Date	Place	Amount per week				
			s.	d.	s.	d.	
1	1793	Galashiels	8.	0.	-	9.	6.
2	1794	Selkirkshire	7.	6.	-	10.	0.
3	1798	Alloa	10.	0.	-	12.	0.
4	1829	Galashiels	c.	12.	0.		
5	1830	Borders	15.	0.	-	18.	0.
6	1831	"	15.	0.	-	18.	0.
7	1832	"	15.	0.	-	18.	0.
8	1833	"	14.	0.	-	17.	0.
9	1834	"	13.	0.	-	15.	0.
10	1835	"	12.	0.	-	14.	0.
11	1836	"	12.	0.	-	16.	9.
12	1837	"	12.	0.	-	16.	9.
13	1838	"	11.	0.	-	16.	9.
14	1837/8	Galashiels	13.	0.			
15	1838	"	12.	0.	-	16.	6.
16	1838	"	14.	0.	-	20.	0.
17	1838	Hawick	15.	1.			
18	1838	"	10.	0.	-	15.	0.
19	1838	Jedburgh	12.	8.			
20	1838	Langholm	9.	6.			
21	1838	Innerleithen	11.	6.			(if hired annually)
22	1838	"	12.	0.	-	17.	0.
23	1838	East Scotland	12.	0.	-	15.	0.
24	1838	"	7.	0.	-	9.	0.
25	1838	Auchtermuchty	c.	14.	0.		
26	1846	Galashiels	18.	9.			(Ballantyne)
27	1847	"	13.	7.			(")
28	1848	"	11.	5.			(")
29	1849	"	10.	4.			(")
30	1850	"	13.	8.			(")

Sources:

1. R. Hall, History of Galashiels, p. 306;
2. D. Ure, General View of the Agriculture of Selkirk 1794, p. 35;
3. Stat. Acc. of Scotland, vol. viii, p. 622;
4. Notebook of Henry Brown;
- 5-13. B.P.P. 1839 XLII, 159, p. 15, these are net earnings "compiled from various manufacturers' books";
14. Ibid., p. 13; details supplied by Messrs. J. & W. Cochrane, Galashiels;
15. Ibid., p. 41;
16. Ibid.;
17. Ibid., p. 13; details supplied by Messrs. Dickson & Laing, Hawick;
18. Ibid., pp. 39-40;
19. Ibid., p. 40;
20. Ibid., p. 13;
- 21-22. Ibid., p. 42;
- 23-25. Ibid., pp. 185ff;
- 26-30. Wages books of Henry Ballantyne & Son, Walkerburn - (at this time this firm's weaving was done at Galashiels).

Unfortunately no data has come to light concerning earnings in the first quarter of the 19th century. A manufacturer in Galashiels appears to have paid rates for weaving which would have amounted to about 12/- weekly in 1829.⁽¹⁾ As that year was one of acute depression in the area the estimate of 15/- to 18/- per week for 1830 given by the Hand-Loom Weaving Commissioners is probably nearer to normal rates in the 1820s.⁽²⁾ If this was so it seems clear that woollen workers made considerable money gains in the first quarter of the 19th century though short-term movements are hard to define. It is probable that earnings corresponded to some extent with fluctuations in the price of wool in this period. If this was so earnings probably rose till about 1812-13 and fell after the end of the Napoleonic wars to recover once more in the mid-1820s when activity in the industry was high.

Spinners' earnings in this period were probably about the same as weavers' if jennies were in use, less if hand-spinning was continued. In the 1790s a male jenny-spinner could earn about 9/- per week in the Hillfoots.⁽³⁾ In 1829 Henry Ballantyne paid a spinner at Galashiels about 13/- per week inclusive of overtime. In the mid-1830s spinners in the town were said to earn about 17/- per week but from this piecers' earnings of about 3/- would have been deducted.⁽⁴⁾ Wage levels in operation in the industry in the 1830s are better documented. Close investigations carried out into the conditions of hand-loom weavers threw a considerable amount of light on to the matter. It seems that the woollen weaver earned around 12/- to 15/- per week on average depending on the type of product being made.

(1) Memo Book of H. Brown, ref. to Robt. Gill.

(2) See Table i.

(3) Stat. Acc. of Scotland, vol. viii, p. 622n.

(4) Account Book 1830-39, Ballantyne Archives, New Stat. Acc. of Scotland, vol. iii, Selkirkshire, p. 22ff.

Much the same rates appear to have been paid to Hillfoot carpet weavers. Tartan weaving in that district, mainly performed by female labour, was worse paid at around 9/- weekly.⁽¹⁾ Individual earnings, however, were often markedly different from the mean. Robert Brydon of Hawick, for example, earned an average of £1. 3s. 5d. for the six weeks from 1st April 1838. A colleague only averaged 10/8½d. per week over the same period. Earnings depended not only on the regularity of the work obtained but on the energy and skill of the individual and on the type of web in the loom. The statistics of earnings in the Borders in the 1830s contained in table i show that 2nd class weavers earned 2/- to 3/- per week less than those engaged on superior products.⁽²⁾

Table i also suggests that the trend of all classes of weavers' earnings in the Borders in the 1830s was downward. Earnings of weavers engaged upon inferior qualities fell by about 25% between 1832 and 1838 while those of 1st class weavers declined by about 12% over the same period. Most of this decline took place in the earlier part of the decade and after 1835 the downward trend was arrested in the high-class weaving branch though the earnings of inferior weavers fell again in 1838. The reasons for this trend are not documented but it may be surmised that it in part reflected the rise of higher grade cloths at the expense of the older coarse cloths made in the district. By the mid-1830s the tweed trade began to get under way and the decline in weavers' earnings was arrested, particularly those engaged in that branch of the industry. In addition the whole economy was disturbed in these years and the Borders did not escape.

(1) See table i.

(2) B.P.P. 1839, XLII, 159, p. 15; cf. table v below.

"The whole of our most valuable peasantry and operative manufacturers are leaving us" complained James Hogg in 1833 and charity balls were held in Galashiels to relieve distress. (1)

In the late 1830s earnings began to rise again, a trend which lasted for nearly a decade. In 1846 average weekly earnings of hand-loom weavers in full work at Henry Ballantyne's loom shops in Galashiels were 18/9d. In 1847 a sharp recession occurred, however, and earnings slumped badly, while the number of regular weavers without employment rose markedly. Weavers' earnings under Henry Ballantyne slumped to only 10/4d. in 1849, though the year witnessed a three week strike. In 1850 earnings began to recover again and although they slumped in 1852 and 1858 the trend was firmly upward until the mid-1860s. Hand-loom weavers were in the van of this upward movement in money wages. In 1856 Ballantyne's weavers earned an average of 23/4d. per week, more than three times the low level of 1849 and about 80% higher than the average for the entire workforce of the firm. This level was not fully maintained, though it was exceeded in 1864 and equalled in 1866. (2) Gradually the average wage of the firm's total workforce approached the level of weavers' earnings. Power-looms were introduced in 1858, a decision influenced no doubt by the rapid upward rate of hand-loom weavers' earnings; the power-looms were immediately wholly operated by female labour paid at about half the rate for hand-weaving. (3) In the early 1860s however, the rapidly expanding trade of the Borders gave Ballantyne's hand-weavers a new lease of life and their earnings cannot be said to have declined drastically as happened in the cotton industry earlier. (In 1869 hand-weavers

(1) Quoted in R. Hall, op. cit., p. 116.

(2) See tables i and ii.

(3) Wage Books, Ballantyne Archives.

in Galashiels were still paid at the same rate as had prevailed before the introduction of the power-loom).⁽¹⁾ But work was less regular and by the late 1860s there were sufficient power-looms in the firm to do away with commercial hand-weaving in the mill although some outwork continued till the end of the century.⁽²⁾

The records of Henry Ballantyne & Son indicate that all the firm's workers made substantial money gains in the middle decades of the 19th century (see tables ii and ix). Taking 1850 as 100 the firm's wage index had risen to 179 by 1864. The upward trend was reversed for a few years though this may have been more apparent than real owing to the declining number of hand-weavers whose high earnings had previously greatly influenced total average earnings. In the first half of the 1870s the trend was clearly upward once more, the index reaching 197 in 1876 (1850 = 100).⁽³⁾

With the defeat of France in 1870 competition from that quarter ceased temporarily and a tremendous boom in European trade occurred. All the available earnings data show rapid growth in the Scottish industry at this time. The average weekly earnings of fully employed power-loom weavers at Walkerburn rose from 13/6d. in 1868 to 15/1d. in 1876. Average earnings of all workers in the firm rose from 13/2d. in 1870 to 19/3d. in 1874.⁽⁴⁾ Pattern-weavers in Hawick at this time, paid hourly, received about 25/- per week.⁽⁵⁾ The gains made in these hectic years were not fully maintained as manufacturers realised that they had over-stretched themselves but despite this

(1) D. Bremner, op. cit., p. 167.

(2) Hand-loom Weaving Book, Ballantyne Archives.

(3) See table ii.

(4) Wage Books, Ballantyne Archives.

(5) Hawick Advertiser, Oct. 2nd, 1875.

Table ii AVERAGE WEEKLY NET EARNINGS OF WOOLLEN
WORKERS AT HENRY BALLANTYNE & SONS, WALKERBURN, 1850-1879

<u>Date</u>	<u>Hand-loom</u>		<u>Power-loom</u>		<u>All workers</u>	
	<u>weavers (m)</u>		<u>weavers (f)</u>			
	s.	d.	s.	d.	s.	d.
1850	13.	8.	-		9.	5.
1851	14.	1.	-		-	
1852	13.	0.	-		9.	1.
1853	16.	4.	-		-	
1854	17.	8.	-		10.	10.
1855	19.	10.	-		-	
1856	23.	4.	-		13.	10.
1857	20.	7.	-		-	
1858	15.	8.	-		11.	10.
1859	20.	4.	10.	2.	14.	3.
1860	22.	9.	13.	2.	16.	0.
1861	18.	0.	9.	4.	-	
1862	18.	9.	10.	7.	13.	7.
1863	21.	6.	-		-	
1864	24.	9.	14.	11.	17.	0.
1865	19.	8.	-		14.	7.
1866	23.	4.	-		15.	7.
1868	18.	4.	13.	6.	14.	5.
1870	-		-		13.	2.
1873	-		10.	8.	15.	0.
1874	-		-		19.	3.
1876	-		15.	1.	18.	8.
1879	-		12.	9.	16.	4.

Source: Wage books of the firm.

the earnings of labour at Ballantyne's in 1879, a bad year for trade, were well above the average level of the previous decade.⁽¹⁾

In the 1880s the industry entered upon a long period of difficulty progress being increasingly punctuated with periods of dull trade and sagging margins. Mills closed, a good deal of machinery was scrapped and many workers left the industry altogether.⁽²⁾ It is not surprising that wage evidence shows that the upward trend in earnings which had characterised the prosperous middle decades of the century was halted for a generation, and in many cases even reversed. In

(1) See table ii.

(2) See chapter 6.

1905 it was stated that labour prices at a mill in Innerleithen had remained unchanged for twenty years.⁽¹⁾ In the same year it was opined that the general level of weavers' earnings in Hawick at that time was a good deal lower than "formerly", a clear allusion, in the context, to the period before the steep rise in the American tariff in 1890. Table iii reflects this general situation.

Table iii AVERAGE WEEKLY EARNINGS OF ALL WOOLLEN
WORKERS AT BALLANTYNE OF WALKERBURN, 1882-1906; (NET PAY)

<u>Year</u>	<u>Average earnings</u>	
	<u>per week</u>	
	<u>s.</u>	<u>d.</u>
1882	18.	0.
1885	17.	6.
1888	18.	3.
1891	19.	7.
1894	17.	4.
1897	17.	10.
1900	15.	7.
1903	21.	5.
1906	22.	7.

Source: Wage books of the firm.

Table iv AVERAGE WEEKLY NET EARNINGS OF ALL EMPLOYEES
AT JAMES JOHNSTON & CO. NEWMILL, ELGIN, 1879-1911

<u>Year</u>	<u>Average earnings</u>	
	<u>per week</u>	
	<u>s.</u>	<u>d.</u>
1879	9.	3.
1884	11.	4.
1889	11.	2.
1893	11.	7.
1899	13.	5.
1905	15.	10.
1911	18.	11.

Source: Pay books of the firm.

It suggests that earnings in the Ballantyne business remained virtually static in the 1880s and after a brief rise in the early 'nineties declined down to 1900. A broadly similar picture is given in table iv of earnings in a highland firm at this time. Other evidence suggests

(1) Report of the Tariff Commission, loc. cit., paras. 2134, 1834.

that the earnings of female power-loom weavers also changed very little in the last quarter of the century. Those in Hawick earned about 18/- weekly in 1886, about the same in 1891, and a maximum of 24/- in 1901, the average still being around 18/-. In 1905 power weavers in Selkirk could expect no more than 16/- to 20/- weekly. Galashiels wages were about the same. (1)

Trade revived markedly, however, in the years down to 1914, except between 1907 and 1909. Average earnings of Galashiels power weavers began to rise slightly in 1905 to about 20/- for all classes compared with about 18/- formerly. (2) At Ballantyne's mills average earnings of the whole labour force rose sharply from 15/7d. in 1900 to 22/7d. by 1906. At Johnston's mill in Elgin average earnings reacted similarly rising from 13/5d. in 1899 to 18/11d. by 1911. (3) On the eve of the world war earnings in the industry were probably 50% higher than in the 'eighties and 'nineties in many firms but no higher than had been achieved by some workers in the 1860s.

Money wage movements therefore fall into three distinct periods in the 19th century. From the 1830s to the mid-eighties the trend was upward, mildly at first but more strongly in the years after 1850. Then earnings showed a horizontal trend for much of the period between the mid-'eighties and about 1900-05. Thereafter a steep increase occurred down to 1912-14, (real wage movements are discussed below). Despite the existence of these fairly sharply defined trend periods earnings fluctuated considerably in the short period. Table v shows

(1) Hawick Express, May 18th, 1887, Hawick News, June 28th, 1901, R.C. on Labour, loc. cit., paras. 7497, 7511.

(2) Report of the Tariff Commission, loc. cit., para. 1825.

(3) See tables iii and iv.

earnings of a group of hand-loom weavers employed full-time⁺ by H. Ballantyne between 1846 and 1856.

Table v ANNUAL NET EARNINGS OF FOUR HAND-LOOM
WEAVERS, BALLANTYNE OF GALASHIELS AND WALKERBURN, 1846-56

<u>Year</u>	<u>D. Tait</u>			<u>Will. Rankin</u>			<u>Will. Cockburn</u>			<u>Rob. Turner</u>		
	<u>£.</u>	<u>s.</u>	<u>d.</u>	<u>£.</u>	<u>s.</u>	<u>d.</u>	<u>£.</u>	<u>s.</u>	<u>d.</u>	<u>£.</u>	<u>s.</u>	<u>d.</u>
1846	38.	11.	0.	43.	1.	6.	42.	0.	0.	not empl'd		
1847	28.	14.	8.	39.	4.	4.	34.	14.	0.	" "		
1848	25.	11.	4.	30.	11.	7.	not empl'd			" "		
1849	28.	6.	10.	33.	6.	0.	" "			" "		
1850	39.	0.	6.	not empl'd			34.	0.	0.	37. 16. 3.		
1851	36.	8.	10.	43.	10.	4.	38.	18.	0.	38. 7. 4.		
1852	30.	9.	8.	37.	2.	4.	30.	11.	0.	not empl'd		
1853	40.	3.	0.	42.	1.	6.	not empl'd			44. 2. 0.		
1854	44.	3.	3.	37.	10.	9.	" "			50. 0. 3.		
1855	not empl'd			36.	12.	7.	" "			55. 17. 6.		
1856	48.	3.	2.	not empl'd			" "			69. 6. 6.		

Source: Wages books, Ballantyne Archives.

As most of the work done in the industry was done to order any oscillation in the state of trade made itself immediately felt in employment and activity. Little if any was manufacturer for stock in times of slackness so that earnings provide a good barometer of the state of trade in general. They possessed much the same amplitude as the up-swings and the downswings of the cycle, at least in the expansionary years of the mid-19th century. After about 1880 expanding trade did not immediately show itself in earnings; rather casual or semi-casual labour (usually women) seem to have been taken on so that total wage bills rose but average earnings stayed much the same or moved upward only slightly.

One of the things which impressed the Hand-loom Commissioners in the late 1830s was the dramatic difference between the state of the cotton and woollen weavers in Scotland. The low degree of occupational

⁺ i.e. they received work in each month of the year in which they were employed. They were paid each month.

mobility between these two classes of worker has been noted above.

But the fact of it led to large differentials between earnings levels in the two industries. Woollen workers were considered at that time to be about 100% better off in real terms than their counterparts in cotton. This was true even where the two activities were juxtaposed. At Kinross, for example, there were about 400 looms in 1838 of which about 50 were engaged upon woollens. The earnings of cotton weavers there averaged only about 3/- to 4/6d. weekly whereas those of the woollen weavers were as high as 14/3d. A similar situation existed in Auchtermuchty. (1) In the Borders cambric weavers at Peebles could only muster about 6/- a week. The few that had transferred to woollen weaving at nearby Innerleithen earned twice as much and yet still were worse paid than such workers in general in the region. (2)

It has already been pointed out that any attempt to compare earnings in various areas associated with the manufacture of woollen cloth is fraught with many difficulties. One of the chief difficulties is the selection of another area of the woollen trade with which to compare the tweed industry so that earnings in the two regions reflect similar work and conditions. The nearest approach to the situation of the workers in the Scotch tweed trade was the Huddersfield fancy worsted industry. Goods of superior quality were made there; the industry, like that in the Borders contained a high percentage of female labour, especially weavers in the second half of the century. Furthermore a weaver usually operated no more than a single loom in both districts. (3)

(1) B.P.P. 1839, XLII, 159, p. 212.

(2) Ibid., pp. 55-6.

(3) cf. A. L. Bowley, "Wages in the West Riding of Yorkshire", J.R.S.S. vol. 65, 1902, pp. 102-26.

Earnings of hand-loom weavers in the Huddersfield district in the 1830s appear to have been comparable to those in the Borders, averaging between 12/- to 14/- weekly. For the 1840s the evidence is somewhat limited but probably little change took place in the relative levels of the two areas. Huddersfield hand-weavers earned about 14/- per week in 1843 and, in the depressed years at the end of the decade about 10/- to 12/-. These may be compared with earnings of Ballantyne's weavers in Galashiels in 1847-49 of 11/9d. The progress of hand-loom weavers in the Borders in the 1850s may have been more rapid than in Huddersfield. Between 1859 and 1861 earnings of these workers in the latter district averaged about 16/- weekly compared to those employed by Ballantyne of over 20/-. If due allowance is made for under-employment, however, the difference between the two areas was probably not as great. The position of female power-loom weavers at this time appears to have been roughly similar, earnings being in the region of 12/- to 15/- weekly, though evidence in the 1860s is very slim. In the early 'seventies the average earnings of these workers was still the same; the level in Huddersfield in 1871 of 11/- to 16/- compares with an average figure for all weavers at W. Watson's Hawick mills of 12/6d. in 1872 and about the same figure at Ballantyne's at Walkerburn.⁽¹⁾ A more detailed comparison of the various rates paid in the industries of both regions is afforded by the Returns of Wages in 1877 (see table vi). According to these, men's wages in many occupations in the tweed industry were consistently lower than their counterparts in Yorkshire, especially departmental heads. A scribbling foreman in the Galashiels district, for example, could expect to earn about 25/- to 50/- per week compared with 50/- to 60/- in

(1) Ibid.; tables i and ii.

Huddersfield. However, certain categories of design and finishing work were better paid in the Borders. This is more clearly apparent on the women's side. Skilled knotters, menders, and burlers, for example, earned between 15/- and 20/- weekly in the Galashiels area as opposed to 9/- to 12/- in Huddersfield.

Wage returns for various districts of the United Kingdom also were taken in 1885 and are reproduced in tables vii and viii below. The usefulness of this evidence is marred somewhat by virtue of 1885 being a depressed year. In terms of the actual level of earnings the returns may not be typical but it may be supposed that the relative earnings levels of the various districts were not affected by a recession which was general rather than local in its incidence. Table vii shows that the Scotch tweed industry in 1885, at £35 per head per annum, was well below several Yorkshire districts in the average rate of earnings per head, including Huddersfield. But the Border workers were paid about the average rate for the industry as a whole. Other branches of the Scottish woollen industry, including the Hill-foot shawl trade with a high percentage of male workers received lower than average earnings. The yarn trade with average income per head at only £26 per annum was the worst paid section of the whole industry outside of Ireland. These low averages for branches other than the tweed trade in Scotland brought the Scottish annual average income per head down to £31 compared with £35 in England. As in England earnings in Scotland tended to be higher in the metropolitan districts of the industry. Considerable discrepancies occurred between earnings in the Borders and elsewhere where the market for labour was less perfect, and where a lower level of skill was often required. In the yarn trade the absence of any weaving brought down the average rate of earnings considerably.

Table vi **COMPARISON OF EARNINGS IN GALASHIELS
& DISTRICT, & HUDDERSFIELD 1877**

<u>Description of occupation</u>	<u>Average Rates of Wages or Earnings during 1877</u>			
	<u>MEN</u>		<u>WOMEN</u>	
	<u>Gala. &c.</u>	<u>Hudds.</u>	<u>Gala. &c.</u>	<u>Hudds.</u>
Woolsorters	+27s.	27s.	-	-
Foremen sorters	30s.	-	-	-
Scourers & Driers	20s.-24s.	21s.-23s.	-	-
Dyers	18s.-20s.	22s.-24s.	-	-
Dyers Foremen	30s.-44s.	50s.-60s.	-	-
Teazers & Willyers	18s.-21s.	-	-	-
Scribblers	17s.-18s.	-	-	-
do. Foremen	25s.-50s.	50s.-60s.	-	-
do. Feeders	17s.	-	11s.	11s. (1880)
Condenser mindrs	17s.-18s.	-	-	10s.-12s.
Spinners & Twist	+25s.-32/6	30s.-40s.	-	-
do. Foremen	28s.	35s.-45s.	-	-
Warpers/Beamers	25s.-28s.	25s.-28s.	-	-
Healders	+25s.	-	+15s.	-
do. Foremen	25s.	-	-	-
Winders	-	-	+12s.-14s.	9s.-12s.
Fettlers	19s.	20s.-22s.	-	-
Pattern designer	32s.-70s.	50s.-60s.	-	-
do. weaver	*25s.-30s.	25s.-30s.	-	-
Weavers	+22s.	20s.-35s.	+15s.	-
do. Foremen	28s.-30s.	-	-	-
Burlers	+15s.	-	+15s.-16s.	9s.-12s.
Knotters/menders	-	-	+15s.-19/9	10s.-12s.
Fullers	18s.-19/6	22s.-25s.	-	-
do. Foremen	23s.-34s.	40s.-50s.	-	-
in Yarn store	20s.-24s.	-	-	-
do. Foremen	30s.	-	-	-
Dressers/Giggers	26s.	24s.-25s.	-	-
Tenterers	18/6-20s.	24s.-25s.	-	-
Cutters or Cropps	20s.-28s.	24s.-26s.	-	-
Press setters	18s.-22s.	26s.-28s.	-	-
Steamers	16s.-19/6	24s.-26s.	-	-
Finish/Foremen	26s.	-	-	-
Drawers	24s.	-	+12s.	-
Engine Tenters	24s.-28s.	25s.-30s.	-	-
Stokers	23s.-25s.	24s.-28s.	-	-
Mechanics	26s.-31s.	30s.-40s.	-	-
Warehousemen	31/6-50s.	20s.-25s.	-	-
Labourers	18s.-19s.	20s.-22s.	-	-
Floor Brushers	-	-	11s.	-

Sources:

Galashiels: Returns of Wages 1887, C-5172.

Huddersfield: Ibid. in A. L. Bowley, "Wages in the Worsted & Woollen Manufactures", Journal of the Royal Statistical Soc. vol. 65, 1902, pp. 118-119.

+ = piece work.

Table vii COMPARISON OF AVERAGE ANNUAL RATES
PER HEAD IN DIFFERENT BRANCHES OF THE
WOOLLEN INDUSTRY OF GREAT BRITAIN IN 1885

<u>Name of District</u>	<u>Average rate per head (£)</u>
Dewsbury (coatings)	39
Huddersfield	39
Halifax	38
Dewsbury (blankets)	36
Scotland (tweeds)	35
Leeds and district	35
Scotland (shawls)	34
West of England	31
Scotland (shirtings and blankets)	31
Wales	30
Scotland (yarn)	26
Ireland	21

Source: Returns of Wages in the Textile Industries, B.P.P. 1889,
LXX, 843, C-5807, p. xiv.

Table viii AV. WEEKLY EARNINGS IN SEVERAL WOOLLEN
MANUFACTURING DISTRICTS IN THE FOLLOWING EMPLOYMENTS 1885

<u>District</u>	<u>MEN</u>				<u>WOMEN</u>							
	<u>Scrib- blers</u>		<u>Spin- ners</u>		<u>Hand- loom weavers</u>		<u>Power- loom weavers</u>		<u>Scribblers Feeders & Condenser minders</u>		<u>Power- loom weavers</u>	
	<u>Time</u>		<u>Piece</u>		<u>Piece</u>		<u>Piece</u>		<u>Time</u>		<u>Piece</u>	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
[#] Dewsbury	22.	1.	31.	1.	24.	8.	15.	10.	12.	3.	14.	4.
Hudders' d	20.	10.	28.	5.	21.	2.	22.	10.	12.	2.	15.	6.
Scotland												
(tweed)	18.	5.	28.	3.	22.	7.	-	-	8.	6.	15.	11.
(shawls)	-	-	-	-	19.	7.	-	-	-	-	13.	5.
(shirts, blankets)	16.	5.	23.	2.	15.	0.	-	-	-	-	11.	6.
(yarn)	17.	8.	24.	3.	-	-	-	-	7.	8.	-	-
Leeds & District	22.	0.	33.	10.	18.	9.	15.	9.	10.	8.	13.	7.
West of England	16.	11.	21.	10.	19.	8.	22.	3.	7.	9.	13.	9.

Source: as for table vii above p. xv.

Note + = Time and piece
/ = Time rates
= Coating trade

Table viii shows individual rates of earnings for several of the main occupations within the industry in the mid-1880s. Clearly men's earnings in branches other than the tweed trade were well below those in some Yorkshire districts. In the tweed trade average weekly income for male workers in certain more skilled trades was about equal to that operating in Huddersfield but markedly less than that in Leeds. On the women's side the high earning capacity of female power-loom weavers in the fancy tweed trade is reflected in their average weekly income of 16/-, the highest in Britain.⁽¹⁾

Detailed comparisons of earnings in the whole industry were also taken in one pay week only in 1906. These are set out in Table ix. Here the high earning power of female weavers is still marked and the number of these workers in the main Border counties helped to give all women workers there higher average earnings than in any other district in the industry in Britain. Men too appeared to have improved their position since the 1880s, albeit only marginally, probably as a result of considerable emigration from the Borders in the 1890s.⁽²⁾ Their average weekly earnings per head were slightly above those in Huddersfield but still well below rates in Leeds. The average weekly income of all workers in the main Border manufacturing counties in 1906 was about the same as in the Huddersfield district but appreciably more, even when the shortcomings of the evidence are allowed for, than other districts in the industry.

As in 1885 other parts of Scotland compared less favourably with English districts in 1906. According to table ix men's earnings were

(1) C. J. Wilson, a Hawick employer stated before the Labour Commission in 1891 that he did not like to keep women weavers who could not make for themselves at least 20/- weekly, on a fast loom. "We think they are not skilful enough unless they can do that..." loc. cit., paras. 7502-3.

(2) See chap. 6.

Table IX

EARNINGS IN THE WOOLLEN INDUSTRY 1906 (WEEKLY, FULL-TIME)

(B.P.P. 1909, LXXX, p. xli)

DISTRICT	MEN	Lads & Boys		WOMEN	Girls	ALL WORKPEOPLE	
		Full Timers	Half Timers				
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	
Huddersfield	27. 4.	11. 2.	3. 2.	17. 1.	9. 8.	3. 3.	20. 1.
Leeds	29. 2.	10. 5.	3. 7.	13. 9.	9. 10.	3. 8.	15. 11.
Dewsbury & Batley	27. 2.	11. 1.	3. 4.	15. 0.	9. 11.	3. 0.	17. 11.
Halifax	26. 0.	9. 7.	3. 2.	12. 4.	9. 0.	3. 3.	13. 0.
Bradford	27. 2.	9. 9.	3. 9.	12. 7.	9. 5.	3. 8.	13. 11.
Keighley	26. 2.	10. 3.	3. 10.	13. 6.	10. 2.	4. 1.	14. 0.
Rest of W.R.	27. 0.	9. 8.	3. 5.	12. 11.	7. 9.	3. 6.	15. 9.
All Yorkshire	27. 3.	10. 3.	3. 8.	13. 10.	9. 6.	3. 8.	15. 9.
West of England	21. 9.	9. 4.	3. 6.	11. 3.	8. 6.	-	13. 11.
Rox. Selk. Peebles	27. 7.	10. 6.	-	18. 6.	8. 6.	-	19. 8.
Rest of Scotland	23. 11.	8. 11.	3. 0.	11. 8.	7. 4.	3. 2.	14. 0.
Rest of U.K.	24. 10.	9. 8.	3. 2.	12. 11.	7. 9.	3. 2.	14. 11.
All U.K.	26. 10.	10. 2.	-	13. 10.	9. 3.	3. 8.	15. 9.

Average Earnings of Operatives working Full Time in the last pay-week at Sept. 1906

well below the U.K. average though a little higher than in the West of England trade. Women, too, earned less in these areas; they averaged only 11/8d. compared with 18/6d. in the Borders. That a large discrepancy existed between the Borders and other Scottish districts is again borne out by other evidence. Female power weavers at Aberdeen's Grandholm Mills in 1891 averaged only 13/9d. per week compared with between 16/- and 20/- in the Borders.⁽¹⁾ Similarly at Newmill, Elgin, workers' earnings in 1905 were more than 25% lower than those at Ballantyne's of Walkerburn in 1906.⁽²⁾

It may be concluded that the tweed district of the woollen industry in Scotland was paid at roughly the rate prevailing in the main manufacturing centres in England while some categories of worker, especially women weavers earned rates which were second to none, to some extent justifying some manufacturers' claims that workers there were the highest paid in the country. Other districts however were some of the worst paid woollen areas in the industry due largely to the limited opportunities in rural areas for alternative employment. There is some suggestion in the evidence that male earnings in the Borders suffered slightly due to the lack of balancing industry in the area but this does not seem to have been a factor after the turn of the century when many families had left the district. But the main conclusion to be drawn from this discussion is that the charge sometimes put forward that the industry grew up on high profits and low wages requires modification in the light of the evidence. By the standards operating in the whole of the woollen industry at the time most Border woollen workers were reasonably well paid though unskilled workers must perhaps be excluded from such a generalisation.

(1) J. R. Allan (ed.), Crombies of Grandholm, p. 94.

(2) See above tables iii and iv.

There did after all exist a strong disposition among manufacturers to keep up wages in order to preserve good standards of workmanship and prevent migration to other industrial areas. It was the custom of some manufacturers north of the Forth to actually enter into agreements to keep up wages of woollen weavers to maintain the quality of the fabric.⁽¹⁾ Employers sometimes appear to have been motivated by other than purely economic reasons in this respect. Border workers became identified with intelligence and responsibility in their conduct as citizens and employees. There was no desire to see the workforce diluted by other lower elements. If wages remained satisfactory workers would not leave and create a vacuum to be filled by a different calibre of workman. Any would-be incomers could be well-chosen if a high-wage policy was operated. This attitude, which can be better understood when it is realised that many of the manufacturers were leaders of local society some becoming magistrates and provosts, is well illustrated by their reponse to the call to diversify the local economy in the 1890s. Employers refused to use surplus capital and suggestions for the erection of "ready-made" clothing factories foundered mainly on the grounds that they would encourage the import of cheap labour into the area with all the social strain that they might involve.⁽²⁾

Finally in this section changes in the real income and living standards of the labour force in the industry must be considered. Observers who commented on the Borders in the 19th century were unanimous in describing the condition of the working classes as good, and notably better than many workers elsewhere. In the late 1830s the Assistant Hand-loom Commissioners felt that woollen weavers were "wholly removed from distress" and were in marked contrast to weavers

(1) B.P.P. 1839, XLII, 159, pp. 56, 212.

(2) Hawick News, Jan. 14th, 1898.

in the cotton industry. The weavers' homes exhibited "every symptom of comfort"; the class was removed from "the demoralizing influences and the physical disadvantages of large towns". They united the "cleanliness and salubrity of the country with the comfort of easy circumstances". They were also "more moral" and generally educated their children. (1) Weavers were the aristocrats of labour in the woollen industry and we must not suppose that all workers shared their standard; the towns, too, became more unhealthy as they grew, but there was no doubt in the Commissioners' minds that woollen workers had a materially better standard of life than the western weavers had. In the Report on Arrestment of Wages presented in 1854 very few cases of small debt were said to occur in the district, and when they did the culprit was often an incomer. The Report was careful to point out the thriftiness of the local population and pointed to the prosperity of the co-operative stores by way of example (as did C. J. Wilson to the Royal Commission on Labour in 1891). The report concluded that "in the Border manufacturing districts... the habits of the people are conspicuous for a self adjusted regularity..." (2) Bremner added in the late 1860s that squalid poverty was unknown in Galashiels, the workers being able to afford high rents. Building societies, banks and Benefit institutions all thrived in the district. (3) This picture of general prosperity among the working classes did not change in the difficult years towards the end of the century. In the 1890s the manufacturers, at any rate considered that workers had never been so well off despite increasing irregularity of work, while Hawick in 1912 was described as one of the best paid industrial towns in the country,

(1) B.P.P. 1839, XLII, 159, p. 20.

(2) Report on Arrestment of Wages, B.P.P. 1854, LXIX, 205, pp. 24, 50.

(3) D. Bremner, op. cit., p. 193.

the population being well-housed and well-dressed and "able to maintain themselves in comfort".⁽¹⁾

Table x comprises an attempt to place some sort of statistical check on this evidence, none of which was given by work-men themselves. The index of real income for hand-loom weavers at Ballantyne's in the 1850s shows that solid gains were made in the period. Real income in the period 1856-60 averaged about 30% more than at the beginning of the decade, admittedly a time when the industry was emerging from depression. In the following decade this level was maintained until about the mid-'sixties when real income fell though not to the level of the early 'fifties. All workers shared in this overall rise in the standard of living. After an initial fall in real earnings at the opening of the decade rapid increases followed down to the mid-'sixties. Thereafter the index shows a fall in real income per head from 169 in 1864 to only 123 in 1870 (1850=100). In the so-called "Great Depression" years however rapid gains were resumed which continued unchecked (except for 1879) into the early 1890s in this firm at least. Thereafter a further loss in real income was sustained in this depressed decade but as a high level of activity was resumed after the turn of the century real earnings also moved upward and stood in 1906, when the data cease about 150% above the level of 1850. As far as the workers in this firm are concerned, therefore there was no cessation of real gain in the mid-'nineties. This may have been partly due to the fact that many workers had left the district in the previous decade creating a severe labour shortage in the area. The trend of real earnings after 1906 is hard to determine due to lack of data. There is some evidence,

(1) Minute Book, Galashiels Manufacturers' Corporation; R.C. on Labour, loc. cit., para. 7614; Hawick Textile Congress Souvenir, 1912.

Table x WAGE INDEX OF HAND WEAVERS (FULL TIME)
AND ALL WORKERS AT HENRY BALLANTYNE & SON, WALKERBURN,
1850-1906. (1850=100)

<u>Year</u>	<u>Hand Loom Weavers</u> (Piece work)		<u>Total Workers</u> (Time and Piece)	
	Average money earnings	Real Income	Average money earnings	Real Income
1850	100	100	100	100
1851	103	106	-	-
1852	95	98	96	99
1853	120	113	-	-
1854	129	106	114	93
1855	145	115	-	-
1856	171	136	146	116
1857	151	127	-	-
1858	115	105	125	115
1859	149	139	-	-
1860	166	150	169	152
1861	132	116	-	-
1862	137	123	143	129
1863	157	147	-	-
1864	181	171	179	169
1865	144	135	-	-
1866	171	150	164	144
1868	134	118	152	134
1870	-	-	139	123
1873	-	-	158	130
1876	-	-	197	179
1879	-	-	172	167
1882	-	-	190	179
1885	-	-	185	193
1888	-	-	193	217
1891	-	-	207	225
1894	-	-	183	210
1897	-	-	188	219
1900	-	-	164	184
1903	-	-	226	246
1906	-	-	238	259

Based on Bowley's price index as in W. T. Layton, An Introduction to the Study of Prices, 1912, p. 150.

however that prices rose more rapidly than wages. The wages paid at Galashiels between 1905 and 1912 were said to have remained unchanged.⁽¹⁾ This district was, however, one of the dearest as far as provision and

(1) Glasgow Herald, Aug. 28th, 1913.

fuel prices were concerned. The Report on the Cost of Living of the Working Classes in 1908 showed that Galashiels prices were the highest in Scotland. A similar survey taken in 1912 revealed that food and coal prices were higher in only one other town of 88 investigated in Britain. Between 1905 and 1912 rents in Galashiels rose by 7% the highest increase among 10 Scottish towns surveyed except one.⁽¹⁾ Thus it would appear that the steady increases in real income over the second half of the 19th century were halted and even reversed in the decade before 1914. Nonetheless the development of the factory system of woollen manufacture in the Borders in the 19th century not only brought rich rewards to its promoters but a real measure of improvement in the lives of its labour force. In the 1870s and 1880s much of the main Border towns was rebuilt; factories on the whole were clean well-lit and airy. In the early 1890s many woollen workers were purchasing their own houses through local building societies and the cultivation of allotments was their main leisure pursuit.⁽²⁾ The coming of industrialisation in the Borders was, broadly, a gradual enough phenomenon to avoid some of the more violent social stresses associated with the factory system in other areas. The craft element in the industry was never eliminated by mechanisation; skilled intelligent workmen predominated. Labour, if not over plentiful in quantity, was good in quality leading to a type of operative who, with his main interests being in politics thrift and religion was perhaps best described by an employer as "very steady".⁽³⁾

(1) Glasgow Herald, Aug. 28th, 1913.

(2) R. C. on Labour, loc. cit., paras. 7567-7585, 7677-8, 7686.

(3) Ibid., para. 7596.

Trade Unionism & Industrial Relations

An outstanding feature of the woollen industry in Scotland, is the almost total lack of formal union organisation among its workforce. Bremner noted this in the late 1860s; C. J. Wilson in his evidence before the Royal Commission on Labour in 1891 said he had no dealings with union officials largely because unions hardly existed.⁽¹⁾ Later, in 1905 the same employer noted with pride that the industry paid the highest wages in the country "in the absence of Unions".⁽²⁾ In 1907 Clapham observed only one union in the Borders among woollen workers with only 40 male and 74 female members.⁽³⁾

The large proportion of female labour, about 60% in the Borders, would appear to be one of the main reasons why unionism was weak. Though most of these workers were unmarried⁽⁴⁾ many were earning as members of working families where the weekly income would comprise the earnings of several people. Secondly the labour force in woollen mills was not homogeneous. Workers possessed different skills from one another and their respective interests were not always identical. When combination did occur it tended to be along local craft lines rather than as a composite working body. Thirdly, and perhaps most important the units of production were small; men and management were not far removed and, in the formative period of the industry, possessed common roots. Industrial relations, therefore, in the first generation of ownership at least, were intimate and informal. Decisions were often

(1) R. C. on Labour, loc. cit., paras. 7647-9.

(2) Report of the Tariff Commission, loc. cit., para. 1834.

(3) J. H. Clapham, Woollen & Worsted Industries, p. 204.

(4) R. C. on Labour, loc. cit., paras. 7512-14. In 1907 it was reported that of 4,400 women over the age of 18 at work in textile factories in the Edinburgh district (which mainly comprised the Borders), 3,885 were single, 150 were widows and only 358 were married. Most textile workers in this district (11,464 out of 14,461) were in woollens. B.P.P. 1909, LXXIX, 851.

taken on a joint basis; employers took their place on the mill floor to further along production in one department or another.⁽¹⁾ Some mills did not even possess a proper office, ledgers being piled on a window-sill or similar place.⁽²⁾ Management and men recognised no social barrier; the mills and the mill towns were closely-knit places where no serious fissures of class could readily evolve.

Under conditions pertaining in the second half of the 19th century such relationships were forced to undergo change. As business expanded the mill proprietor was forced to spend more time off the floor and to delegate responsibility. With the greater use of expensive plant informal working attitudes could no longer be accepted and fines for lateness and poor performance were widely introduced.⁽³⁾ Inevitably a wider gulf began to emerge between workers and management. This change was to some extent accompanied by increased tension between the two. Towards the end of the century a combination of unstable trading conditions and technical change led to sporadic outbursts of union activity, whereas in normal times the main objects of trade unionism, security of employment, adequate pay and conditions, could be attained without recourse to formal organisation. Though the unions which did emerge towards the end of the century were usually ephemeral in nature they often lasted long enough to secure their immediate objectives. Dyers, for example, who formed a union in Hawick in 1889 secured a pay increase and then dissolved themselves. In 1887 "fast" loom weavers in Hawick organised themselves and prevented the discontinuance of the pay differential between themselves and the "slow" loom weavers before the union disbanded. Due to dull trade and the threat

(1) R. Hall, *op. cit.*, p. 145.

(2) *B.P.P. 1841*, X, 294, p. 29.

(3) C. Gulvin, "Wages and Conditions in the Border Woollen Industry about 1890", *T.H.A.S.* 1967, pp. 45-6.

of statement reductions Galashiels power-loom weavers formed a branch of the Amalgamated Weavers Association in the town in 1895.⁽¹⁾

This kind of organisation was the exception rather than the rule however, and was unknown in this form in the early part of the century. Until the 1840s the Weavers' Corporation continued its guild-like regulations which afforded some protection to labour of this kind. It was still powerful enough to bring about a protracted strike in 1849 against threatened reduction in weavers' statements. But the decline of this and other bodies in the middle years of the century was not followed by other types of general organisation, relations between men and employers, if silence be used as a criterion, were on the whole good. Stoppages were a rarity in the industry, though disagreements were not, due mainly to the complicated rate structure. "The question of pay was a constant source of wrangling and annoyance" wrote one elderly worker concerning the 1840s, "... few weeks wages were paid without some degree of feeling being shown..."⁽²⁾ The basic attitude of employers may be viewed as one of discreet paternalism. Problems were expected to be settled by private interview with the owners not by official union delegations. Workers were encouraged to save by mills savings schemes, interest being granted by the employer on money lodged with the firm.⁽³⁾ A few operated profit-sharing schemes in which workers and staff participated. The management of J. & J. Crombie of Aberdeen even granted a pay increase on condition that it was "invested in Societies, Insurance or endowments so as to provide for

(1) B.P.P. 1890, LXVIII, 176, p. 73; R.C. on Labour, loc.cit., para. 7675; Hawick Express, Apr. 16th, 1887; W. H. Marwick, A Short History of Labour in Scotland, p. 54.

(2) Border Advertiser, May 20th, 1874.

(3) R.C. on Labour, loc. cit., paras. 7528-7533, 7663-5, 7661-2; Textile Mercury, Dec. 1891, p. 390.

old-age, ill health, or absence from business..." Pensions were sometimes granted to faithful servants of the firm or lump sums in lieu.⁽¹⁾ Hand-outs sometimes of some substance were made to celebrate anniversaries or on the occasion of retirement of partners from a firm.⁽²⁾

In this atmosphere of "family type" relationships it is little wonder that unionism failed to germinate. It was viewed as unnecessary by the large majority of workers and support was always weak even when serious attempts were made to found unions in the depressed years towards the end of the century. Though the intimacy of contact which characterised the industry in its formative years was to some extent lost relations were never too distant and on the whole affable. This at least was the opinion expressed before the Labour Commission in 1891 and, on the evidence, there is no reason to quarrel with such a view.

This chapter began by pointing out that on the surface it would seem that labour in the woollen industry in the Borders was not in a strong bargaining position. The remainder of this discussion has sought to show that social, geographical and economic factors all combined to assist the power of labour in the industry. Immigration into the area was small; trading conditions, and thus demand for labour throughout the major part of the 19th century, were good. Wages were no worse, and in some crafts higher than in the better paid districts of the industry in England. Real income per head rose considerably as the industry expanded. The working classes in the Borders showed their contentment by resorting to little formal organisation. So did employers. It is perhaps this last fact which is important to our understanding of basic worker attitudes in the

(1) J. R. Allan (ed.), op.cit., pp. 105-7, 88, 90, 95, 97, inter alia; Textile Mercury, Nov. 1910, p. 447.

(2) For example one employer invested a large sum of money in securities calculated to yield between £120-£140 annually to be spent on workers' outings and socials. Textile Mercury, Sept. 1910, p. 226.

woollen industry. It was not a simple 'we' and 'they' situation, although this element is a little more apparent in the 1890s. Each mill was a unit on its own making its own products in its own avowedly inimitable way. Employees did not sense any major difference of interest between themselves and their particular employer. They acted more as a team with the proprietor of a factory often playing his part as a craftsman on the factory floor, or in the design department. Contact with workers was never lost for expansion in the industry did not produce large units of production. If one may speak of a 'we' and 'they' attitude it must be in the context of different mills or manufacturing districts not as an expression of class consciousness.⁽¹⁾ It is this close identification of the worker with his firm or his type of product rather than his class or status consciousness that is important in explaining the relative lack of concerted action in the industry. For the same basic reason employers did not band together either. Even when all the dyers' labourers struck in Hawick in 1889 the employers settled the matter at their own mills without referring to one another.⁽²⁾ Thus workers were not encouraged to combine or agitate on a broad front for they saw no combination among the potential opposition. One must add this strong psychological factor to the other important economic considerations to explain the relatively uneventful and thus presumably satisfactory history of labour in the woollen industry in the 19th century.

(1) This is seen to some extent in the local press when mills squabbled over venues for annual outings. It would seem that mills would try to avoid going where others had chosen and wouldn't travel on the same train .

(2) R. C. on Labour, loc. cit., paras. 7544-8.

1. The Supply of Capital

The ability of men to make economic progress depends to some extent on their access to capital. It also depends on their ability to make additions to capital over time, the process usually known as real investment or capital accumulation. The success of the early entrepreneurs in the Scottish woollen industry was largely a result of the fact that they obtained sufficient capital to finance trade and organise others to work for them and to extend their operations as time went by. In this chapter the origins of capital in the industry are investigated and the use made of it, and the methods by which capital accumulation took place.

We may divide the capital requirements of the woollen manufacturer into two types, first capital to finance the provision of fixed assets such as buildings, machinery and general manufacturing utensils; secondly resources to finance the purchase of wool, dyestuffs etc., to pay wages, and to cover the granting of credit⁺ to customers, - in short working or circulating capital. The latter was by far the most important item in the formative years of the industry and remained so for many firms into the second half of the 19th century. Table i shows the proportion of circulating capital to total assets of two woollen firms in the north of Scotland. Working capital accounted for over 90% of Crombie's total capital in the early 1830s. His machinery was simple and small in amount while he rented his mill from a local laird. The percentage dropped away to around 66% in the mid-'fifties, though bad trading years like those of 1857-8 by causing the build-up of stocks of yarn, wool and finished goods could shoot the proportion to over 80% again. It was not until the firm moved into spacious mill

⁺ This is dealt with in detail below, pp. 380ff.

buildings in Aberdeen in the early 1860s that the proportion fell again though the absence of data after this time makes it impossible to say whether this was a trend which continued. The likelihood is that it did, however; a broadly similar picture is given for Johnston of Elgin, with a very high proportion of working capital showing itself in the later 'fifties. The construction of a fully equipped mill in 1864-5, however, greatly raised the proportion of fixed assets to total capital.

Table i PERCENTAGE OF CIRCULATING, TO TOTAL
CAPITAL IN THE FIRMS OF JAS. CROMBIE AND
JAS. JOHNSTON, WOOLLEN MANUFACTURERS, 1830-65

<u>Year</u>	<u>Crombie</u>	<u>Johnston</u>
	<u>%</u>	<u>%</u>
1830	91	-
1832	92	-
1834	88	-
1836	88	-
1838	84	-
1840	87	81
1842	?	74
1844	77	75
1846	66	75
1848	67	79
1850	66	82
1852	67	84
1854	72	84
1856	78	81
1858	80	86
1860	-	81
1862	-	77
1863	-	77
1865	-	39

Source: Balance sheets, quoted in J. R. Allan (ed.), Crombies of Grandholm, pp. 44 & 73; 'Journals', Newmill Records.

The amount of capital required for fixed assets, therefore, should not be over-emphasised. Early textile machinery was, on the whole, simple and cheap. It could often be made locally and repairs were normally carried out by the mills themselves. The break-through in textile technology in the second half of the 18th century was made possible by

marginal improvements on old methods of production. The new machinery was meant to relieve a bottleneck in domestic yarn production not to bring about an industrial revolution. That it helped to do so was largely fortuitous in that the potential of a marginal improvement in spinning machinery proved to be unlimited. One would expect, therefore, that early machinery would bear some resemblance to existing equipment both in design and cost. This does seem to have been the case. We are not concerned with design but it appears that the cost of making and mounting a broad-loom in the Borders in 1795 was only about £12. It could be made fully operational for less than £20.⁽¹⁾ Such a loom was probably one of the most elaborate pieces of equipment that would be required at this stage. On the spinning side many of the 'jennies' were still hand operated and did not become fully automatic until the 1860s. Though no actual purchase prices of 'jennies' have been found they seem to have been relatively inexpensive. For example six of them plus a warping 'mill' were insured in 1805 for only £45 by a larger than average clothier.⁽²⁾ Nor did the provision of manufacturing premises necessarily call for large inputs of capital. Many workers used their own homes, of course, under the domestic system. But when the home no longer sufficed it was rare for a would-be manufacturer to actually construct a mill. If he did it was often of a most rudimentary nature with a thatched roof and sometimes even without proper walls.⁽³⁾ More often room and power was rented as was usual among the early woollen manufacturers in Yorkshire.⁽⁴⁾ Existing

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- (1) Scroll Minutes of the Board of Trustees, Jan. 21st, 1795. S.R.O.
 (2) Fire Book, Policy No. 364, Caledonian Ins. Co. Edinburgh.
 (3) Aid Book, Records of Board of Trustees, S.R.O. p.2. The Board's representative noted in this instance, "I could not help telling Mr. Wight that had I seen his premises before the grant was made or paid, it would have been far less".
 (4) cf. K. V. Pankhurst, "Investment in the West Riding Wool-textile Industry in the 19th century", Y.B. vol. 7. no. 2. Sept. 1955, p.95.

waulk-mills (i.e. fulling-mills) often became the nucleus of the woollen factory, or empty corn-mills. All three waulk-mills in Galashiels eventually became factories and another there was originally used for grinding corn.⁽¹⁾ Alexander Johnston of Elgin also rented a corn-mill. Insofar as some manufacturers entered the industry from farming these buildings were brought into use for spinning, weaving and dyeing purposes. This was not the normal practice in the Borders but it occurred in Aberdeenshire and Moray. The accounts of the Kilgours of Kinmundy in the 1780s contain references to 'Farming stock' including ten horses.⁽²⁾ Similarly the balance sheets of J. Crombie & Co. in the 1830s refer to 'crops', their mill also being an ex-meal-milling building.⁽³⁾ The more usual practice in the Borders was for entrepreneurs to combine together to rent mills and purchase equipment, sharing the use of it while at the same time running their own businesses. For example in 1794 Robert Gill, David Grieve, Adam Cochrane and Richard Lees, clothiers in Galashiels wrote jointly to the Board of Trustees in Edinburgh stating that "not being able individually to erect machinery to go by water..." they had joined together.⁽⁴⁾ Alternatively sons wishing to enter the woollen business rented room and water power from their fathers. This was the case of J. & H. Brown in Galashiels in the 1820s. H. Ballantyne rented premises in this town until 1857 when at last he was able to build a substantial mill with one other partner.⁽⁵⁾ Until power was applied to the weaving process most manufacturers made do with the smallest premises possible for their factory-based operations and rented rooms

(1) R. Hall, History of Galashiels, p. 282.

(2) J. R. Allan (ed.), Crombies of Grandholm, p. 16.

(3) Ibid., pp. 44 and 29.

(4) Scroll Minutes of the Board of Trustees, Jan. 15th, 1794.

(5) Letter Book, Ballantyne Archives.

or mill-flats elsewhere for weavers. In 1847, for example, William Brown in Galashiels had the second flat of Deanbank mill for hand-loom weaving. The two upper flats were rented by another manufacturer and the ground floor was a wool store for another. Others seem to have had no mill-base at all. John Clapperton was described as a hand-loom manufacturer in 1847, the 'largest' in Galashiels with three weaving shops. Watson of the same burgh possessed a weaving shop and bought all his yarn at Buckholm mill. The latter was the first large mill in the town but the purchase of it "exhausted the resources" of the proprietor, Sanderson. (1)

It was possible, then, to enter the woollen industry with only a little capital. Often equipment was shared and premises as well to help cover rents. Contemporary evidence supports the view that woollen businesses could be established with little in the form of fixed assets. In 1795 Sir John Sinclair reckoned the cost of equipping a small woollen mill in the north of Scotland at about £200. (2) In 1805 William Brown and Co.'s "machinery house" consisting of two storeys "stone and slated" together with the machinery it housed was only valued for insurance purposes at £400. Similar premises in Galashiels and Earlston were insured for the same figure suggesting that properties were not being under-insured. The same year Robert Walker of Galashiels was in business with property and machinery valued at only £220. Crombie, Knowles & Co. started business in the north with between £300 and £400. In 1811 Ladhope mill, built only in 1793 was sold with all its contents for £650. (3) A few 'factories'

(1) Scotch Tweed, vol. 10, p. 38.

(2) Agric. of the Northern Counties of Scotland (1795), App. p. 44.

(3) Fire Book 1805, Policy Nos. 255-6, 516, 858, Caledonian Ins. Co. J. R. Allan (ed.), op. cit., p. 25; Scotch Tweed, vol. 5, p. 19.

were larger but they were the exception rather than the rule. James Hilson's "mill house" at Jedburgh was valued at £200 in 1805 and machinery at a further £550. His "sulphur" house and spinning shop with hand jennies elsewhere in the burgh totalled about £100 more.⁽¹⁾ It is doubtful whether more than about £500 was required, however, to found a medium-sized 'factory'. Even in 1828 one of the largest firms in Galashiels according to turnover valued its property, including stocks of raw materials etc., at only a little over £1,000.

The actual amount of capital involved, however, is a large or small amount depending on one's access to it. The organisation of the Scottish woollen industry with its emphasis on the sharing of equipment bears testimony to the fact that many of the original manufacturers in the industry possessed very little in the way of capital either to buy equipment or to finance trade and manufacture. Other sources point in the same direction. Despite their almost insignificant cost, for example, the Weavers' Corporation in Galashiels requested their local minister Dr. Douglas to petition the Board of Trustees for help to purchase broad-loom as many of them were "indebted to the tradesman for the expense owing to our want of stock".⁽²⁾ In the 1790s the same gentleman stated that for want of sufficient capital the local clothiers "were obliged to purchase on credit and at a high rate every necessary article of manufacture and to sell the produce instantly at whatever ready money it will fetch..."⁽³⁾ Shortage of capital to meet current needs forced Alexander Johnston of Elgin to sell his few banking and insurance shares in 1812. Often he was involved when firms failed owing him money. Invariably he settled for what he could

(1) Fire Book 1805, Policy No. 364, Caledonian Ins. Co.

(2) R. Hall, op. cit., p. 286.

(3) Stat. Acc. of Scotland, vol. ii, p. 315.

obtain quickly. In 1835 he confessed to having his "back to the wall for want of cash". At other times he requested bills to be met early to help his liquid position especially when wool purchases had to be made. (1)

The provision of even small sums of capital then caused no little difficulty in the woollen manufacturing districts of Scotland. Where, then did the capital come from? The Board of Trustees in Edinburgh has long been regarded as one of the principal sources of capital for the early entrepreneurs by providing grants for machinery. A close study of these grants and of the policy underlying them suggests, however, that the contribution of the Board was only marginal and thus had little effect on the growth of the industry in a strictly financial sense. In the first place it must be remembered that the Board had very little money to spend and not all of it by any means was devoted to the fostering of the woollen industry. It is true that sums given by the Board to the industry began to increase at the end of the 18th century but total aid for all purposes only averaged about £800 per annum for the whole of Scotland between 1775 and 1825 or enough to found about two smallish concerns each year. However not all this sum was employed as aid to manufacturers. Much was spent on encouraging the growth of good wool which only indirectly benefited the manufacturer. Grants to the latter in the period 1775-1825 averaged only about £400 annually for the whole country. Only a proportion of this money found its way to the Borders. Between 1775 and 1833 approximately £5,000 was given to this area for purposes of aid to the manufacturers, or about £85 per annum. If the aid to the principal seats of manufacture in the region is isolated, that is aid

(1) Letter Books i & ii, passim, Newmill Records.

received in Hawick and Galashiels, the sums become negligible. Over the same period Hawick received an average of £23 annually and Galashiels about £25. Moreover most of the Board's aid came in the 1820s when industry in these two towns was already well established. Half of the aid to Galashiels was paid between 1823 and 1833 and more than half of the money given for development in Hawick came between 1828 and 1833.⁽¹⁾ It is also worthy of note that the sums given by the Board represented only a proportion, (often quite a small one), of the total cost incurred by the recipients. The Board gave £70 to George Mercer in Galashiels in 1791 towards machinery costing £200. In 1811 it cost Richard Lees £140 to install a new cropping machine on which he was allowed £45 by the Trustees. Two Galashiels firms received £100 each for investment amounting to £650 each. The first recorded grant to a Hawick firm was £150 towards an outlay of £1,600. Examples could be multiplied. In addition the Board did give grants in the form of premiums for prize-winning cloth shown in Edinburgh. In this connection Hawick did not figure at all, presumably never entering the competitions organised by the Board or else doing so without success. Galashiels did benefit to the extent of about £3,800 in this way between 1791 and 1829. The early date, however, when this town began to dominate these competitions suggests that the woollen industry there was already in a healthy condition before the Board's premiums began. Furthermore the premiums were not large, the average value being about £10, barely enough to cover the cost of the cloth itself, though it could be sold afterwards. But it is not likely that much business capital was provided from this source. It was true of all the Trustees' awards that business decisions could not be based upon the chance of receiving aid. Capital provided from public funds,

(1) Reports and Minutes of the Board of Trustees, passim.

therefore, was a useful supplement to, but not a determinant of, investment.⁽¹⁾ Indeed the precise nature of the Board's attitude to investment in the industry is not always clear from the records. Financial assistance was often granted or refused in what appears to have been a somewhat arbitrary manner. Thus the Trustees turned down a request on more than one occasion because the petitioners had not done anything novel or that the Board had already given aid for erection of similar machinery in the place concerned. Also the Board was not prone to helping firms who had already established themselves on a moderate scale. Rather it was more likely to help undertakings that would be open to the public, that is to card and spin for the local people, or if apprentices were to be engaged. Sometimes these conditions were actually stipulated before aid was forthcoming. The Trustees in the early 19th century were still largely motivated by the desire to give some employment to the poor, which was so central in woollen manufacturing establishments in the 17th century. They showed no great enthusiasm for investment which was not likely to do this directly.⁽²⁾

We must conclude, therefore, that the payments made by the Board of Trustees in Edinburgh to the woollen manufacturers played only a marginal part in the provision of capital in the early period of the industry's growth. Indeed very little external capital seems to have been injected. Only rarely can it be shown that merchants interested themselves financially in woollen businesses. Such a case was the firm of Crombie, Knowles & Co. of Aberdeedshire. James Knowles was an Aberdeen merchant and took a lease of Cothal mills in 1798. He came of a merchanting family engaged in wool-selling and trading in corn, meal

(1) Reports and Minutes of the Board of Trustees, passim; Rept. of the Committee on Premiums, 1830, p. 34, Letter of R. Lees.

(2) See Scroll Minutes of the Board of Trustees, Jan. 15th, 1794, June 11th, 1794, March 2nd, 1796, inter alia.

and locally-knitted hosiery, and which invested heavily in land at a most propitious time. James Knowles was based at Rotterdam for a while and probably took a lease on Cothal mills with the idea of making superior cloth to sell through his Dutch connections. Thus he formed a partnership with a local weaver, John Crombie. Their capital to begin with was small, about £400, but other partners including one other merchant were taken on later. The new merchant partner, Alexander Rhind was a man of some substance with interests in land and real estate, and in shipping. He was also well connected through marriage being uncle to Simpson of Collyhill who had made a fortune in the West Indies and left a large endowment to Robert Gordon's hospital. The actual capital applied to the business remained fairly small but the standing of the partners helped them to get established and may have enabled them to take risky decisions which would have been precluded to men who had nothing to fall back on.⁽¹⁾ Further north, at Elgin, the firm of James Johnston & Co. was also started out of general merchanting activities although no outside capital seems to have been courted. Alexander Johnston, the founder of the firm, appears to have had a hand in nearly all the business opportunities that presented themselves in this part of Scotland towards the end of the 18th century. He dealt in oatmeal and pease meal, fish, whisky, snuff, tobacco, beer and English cloths. He sold flannels on commission for a Rochdale firm, hats for a Manchester company and cloth for one at Leeds. Even crockery passed through his hands. He also acted for a time as an insurance agent. As well as these ventures Johnston continued to deal in wool and manufacture on his own account not deigning to send his own patterns and cloths down to Yorkshire for sale. He also had interests with the

(1) J. R. Allan (ed.), op. cit., pp. 22-5.

local saw mill in chartering ships to sail regularly to south and north America to buy wood and some of the rarer wools whose manufacture became a speciality of the firm.⁽¹⁾

This association of merchant capital and woollen manufacture seen in the north of Scotland does not figure in the Border firms at all, though further evidence may alter this view. Here capital was pooled by several clothiers and increased by savings. Of the outside agencies the banks played no role at all in the provision of long-term finance. This mostly came from relatives and friends. Even James Crombie did not keep his merchant partners for long. Both had pulled out by the late 1820s. When the firm moved to Grandholm mills in 1858 the necessary capital was mainly found within the family. Only about one-sixth of the firm's total assets at that date was provided outside the family.⁽²⁾ The Hawick firm of William Watson was also very much a family affair, the subscribers in 1849 all bearing that name. This was still the case in 1864.⁽³⁾ The same is true of Henry Ballantyne and Sons. Early balance sheets have not survived but in 1883 when John Ballantyne took over the business his capital stood at £68,000. In 1896 he assumed his two sons as partners. His own capital then stood at £91,000. His sons each put about £8,000 into the firm. Between them the three partners had contributed £107,636 towards the total capital of £109,323.⁽⁴⁾

Woollen firms in Scotland like so much of 19th century British business were, thus largely self-financing. Firms were built up mainly by savings on the part of the entrepreneurs themselves. The

(1) Letter Book i, *passim*, Newmill Records.

(2) J. R. Allan (ed.), Crombies of Grandholm, pp. 73-4.

(3) General Ledger, 1864, Watson Records.

(4) Profit & Loss Acc. No. 2, Ballantyne Archives.

founders of the industry were independent clothiers owning their wool and at least part of the utensils which they used. Thus they turned over their own capital and had opportunity to accumulate more, though this was at first a prolonged process. It has already been shown that it was sometimes many decades before savings were sufficient to finance the erection of a proper mill. Nonetheless the beneficent minister of Galashiels declared that the local people invested over £3,000 in machinery and buildings between 1790 and 1797 describing them as "poor people who began business without any capital" raising themselves by their "own energy and enterprise".⁽¹⁾ When some return began to be seen manufacturers ploughed back heavily into their businesses with all that that policy implied for their own living standards. Loch noted in the 1770s that the proprietors of the Hawick carpet factory drew no dividend from it for many years after its foundation, ploughing back the whole of the profits. Henry Brown and his partner James of Galashiels appear to have allowed themselves about 15/- weekly in the 1820s. James Johnston of Elgin paid himself a salary of £40 per annum in 1836.⁽²⁾ Self-discipline was the foundation of the highly successful yarn-spinning firm of John Paton & Son of Alloa, now part of Paton & Baldwins. The firm was founded by John Paton a dyer and spinner in 1813. He trained his youngest son for the business which he inherited in 1848. On his death in 1860 his two partners inherited the business and formed a co-partnery for 14 years. The capital of £10,000 was to be subscribed equally by them. Profits were to be equally shared but could not be withdrawn. A modest salary was taken instead. Later they were joined by their sons with another relative as an accountant.

(1) R. Douglas, Agricultural Survey, Selkirk, pp. 329-30.

(2) D. Loch, Tour Through etc., pp. 46-7; Memo Book of H. Brown, passim; 'Journal' 1829-38, p. 425, Newmill Records.

In 1873 a new agreement was drawn up whereby they all became partners for 6 years with a capital of £64,000. Only the two senior partners could withdraw profits and this only because they were to provide further capital at a low rate of interest. In 1883 when capital worth £162,000 had been accumulated it was decided that no capital could be withdrawn but interest and profits could be up to £2,000 per annum. By 1918 the firm was worth nearly one million pounds.⁽¹⁾ Henry Ballantyne, founder of the Walkerburn firm of that name also seems to have lived frugally, and succeeded in inoculating his sons with the same virtue. Table ii is taken from the firm's accounts between 1849 and 1855. It reveals that the percentage of profits which were ploughed back into the firm in these years averaged 50. In 1849 55.4% of net profits were retained and 60% in 1855. The senior partner, Henry, paid himself 5% on his capital (a rate that seems to have been common in the industry and constant despite the changing level of market rates), sometimes he took a small wage of £8 per month - at other times he took £50 a year for "board". His son David took £4 monthly as his wage in 1849 until 1852 when his withdrawals increased slightly as a proportion of his profits but no wage was deducted. Other withdrawals against his capital account were negligible. Table iii shows that the firm of J. & J. Crombie was built up rapidly largely by retention of profits between 1830 and 1858. It is not known how much the partners of this firm were drawing from the firm but the rapid build up of capital suggests that a good proportion of profits was being ploughed in to the business over these years. Nor did it stop in 1858. By 1860 the firm had borrowed a little more in order to move into Grandholm mills and ploughed in all the profit for the year ending in October 1861.⁽²⁾

(1) Private history of the firm.

(2) J. R. Allan (ed.), *op. cit.*, pp. 75-6.

Table iiCAPITAL ACCOUNTS OF HENRY & DAVID BALLANTYNE

1849 - 1855

	1849		1850		1851		1852		1853/54		1854/55	
	Henry	David	Henry	David	Henry	David	Henry	David	Henry	David	Henry	David
Balances brought forward	£ 716	£ 125	£1,021	£ 192	£1,342	£ 256	£1,512	£ 327	£1,847	£ 293	£2,033	£ 340
Add: Sundry	99	5	73	63	61	-	63	-	33	-	77	-
Wages	72	48	8	52	-	52	-	48	-	-	-	-
Interest	30	6	51	9	67	13	75	16	92	15	102	17
Share of Profit	<u>342</u>	<u>69</u>	<u>399</u>	<u>80</u>	<u>264</u>	<u>53</u>	<u>417</u>	<u>83</u>	<u>350</u>	<u>70</u>	<u>170</u>	<u>34</u>
	£1,259	£ 253	£1,552	£ 396	£1,734	£ 374	£2,067	£ 474	£2,322	£ 378	£2,382	£ 391
Deduct: Drawings	<u>238</u>	<u>61</u>	<u>210</u>	<u>140</u>	<u>222</u>	<u>47</u>	<u>220</u>	<u>181</u>	<u>289</u>	<u>38</u>	<u>216</u>	<u>44</u>
Balance carried forward	<u>£1,021</u>	<u>£ 192</u>	<u>£1,342</u>	<u>£ 256</u>	<u>£1,512</u>	<u>£ 327</u>	<u>£1,847</u>	<u>£ 293</u>	<u>£2,033</u>	<u>£ 340</u>	<u>£2,166</u>	<u>£ 347</u>
	<u>£1,213</u>		<u>£1,598</u>		<u>£1,839</u>		<u>£2,140</u>		<u>£2,373</u>		<u>£2,513</u>	

Source: Ballantyne Archives

Table iii

GROWTH OF NET ASSETS OF CROMBIE
OF ABERDEEN, 1830-58

<u>Year</u>	<u>Net Assets</u> £	<u>Jas. Crombie</u> £	<u>John Crombie</u> £
1830	2,499	-	-
1831	2,973	-	-
1832	2,874	-	-
1833	3,302	-	-
1834	2,856	-	-
1835	3,115	-	-
1836	3,476	-	-
1838	3,612	-	-
1839	4,504	-	-
1840	4,905	-	-
1844	7,531	-	-
1845	8,657	-	-
1846	10,203	1,785	3,418
1847	12,083	1,505	3,078
1848	13,613	2,044	4,069
1849	15,140	2,624	5,016
1850	16,176	3,106	5,570
1852	21,763	5,829	8,434
1853	24,982	6,905	10,577
1854	26,328	7,489	11,339
1855	27,533	7,949	12,084
1856	30,585	9,051	14,034
1857	32,934	9,862	15,572
1858	35,196	10,509	17,187

Source: Balance Sheets of James Crombie & Co. in J. R. Allan (ed.), Crombies of Grandholm and Cothal.

Note. No figures are available for 1837, 1841-43, 1851. The difference between the first column and the sum of the other two is made up by "Partners' Stocks". This stood at £5,000 in 1846 and was increased to £7,500 the next year and remained at that figure.

The ability of woollen manufacturers to plough back capital into their businesses in this way presupposes that the woollen trade itself must have been reasonably profitable. Unfortunately there have survived very little data on this subject. Manufacturers were not prone to airing the subject. It has been possible to work out some figures for net returns on capital invested for two important firms, however.

Table iv gives percentage returns on the capital of Crombies of Aberdeen in the early 19th century and for the period 1831-58. These figures are net of any drawings from the firm by the partners and therefore are minimum returns to investment.

Table iv MINIMUM RETURN ON CAPITAL INVESTED
IN J. CROMBIE & CO., ABERDEEN, 1812-19, 1831-58

<u>Year</u>	<u>% return</u>	<u>Year</u>	<u>% return</u>
1812	10	1840	9
1813	18	1841-4	No data
1814	19	1845	15
1815	12½	1846	18
1816	12	1847	18
1817	12	1848	12½
1818	16	1849	11
1819	13	1850	7
		1851	Change in financial year
1831	19	1852	8
1832	Negative	1853	15
1833	15	1854	6
1834	Negative	1855	4½
1835	9	1856	11
1836	11	1857	8
1837	No data	1858	7
1839	22		

Source: Balance sheets quoted in J. R. Allan (ed.),
Crombies of Grandholm.

Certainly there was money to be made in the Scotch woollen trade, and plenty of opportunity to build up a business by ploughing back profits. Crombies did well even in the difficult years after 1815. In the early 1830s the firm experienced patchy returns, but it was trying to find its feet after failure in 1828. The later 'thirties and mid-1840s were years when profitability was especially good and when the opportunity was taken to rapidly build up the firm. Evidence of the state of profitability for later in the century is only fragmentary, but it appears to have remained good. Only a little outside capital was put into the firm in these years yet in 1883 it was worth £135,000 as

against £35,000 in 1858. Even in the depression year of 1885 Crombies made a net gain of around 9%. Expansion was still possible in the difficult 1890s. Net profits in 1893 were more than £20,000 and by 1902 had reached £42,000. In the year before war they were as high as £73,000. Though the capital value of the firm at these dates is not known these figures indicate great expansion. The firm had been changed from a co-partnership into a limited liability company in 1883, but a private one. Most of the shareholders were Crombies. While we cannot discount additional capital being invested in the business by outsiders it seems more probable that the firm continued to grow on the basis of retaining a high proportion of profits. (1)

A small amount of data on the profitability of woollen manufacture has been obtained from the Ballantyne archives. The absence of a strategic ledger has precluded the writer from gaining data for a longer time span. Table v gives details of net returns to capital gross of withdrawals, etc. from 1851-55.

Table v PERCENTAGE NET PROFITS OF
HENRY BALLANTYNE AND SONS, 1851-55

<u>Year</u>	<u>Net Profit %</u>	<u>Year</u>	<u>Net Profit %</u>
1851	21	1853/4	20
1852	25	1854/5	14

Source: Annual balances, Ballantyne Archives.

These figures like those for Crombie show how possible it was to expand business on internal finance. The 1850s, it must be remembered were not the easiest for trade. Returns to investment in the following decade were probably much higher. It must also be remembered, however,

(1) J. R. Allan (ed.), op. cit., pp. 102, 107, 117.

that at this stage the absolute amount of net gain was small in this firm, and without doubt in most of the Border businesses, because the amount of capital invested was yet only modest. Net profits at Ballantyne's for example in the years 1851-5 were only £510, £702, £560, and £400 respectively. Thus even with a high rate of ploughing back it was some time before this firm was able to build a substantial mill of its own.

A second way of retaining resources within a firm to assist expansion was of course by the ordinary process of depreciation. Profit was reduced by the amount of depreciation that was charged. "While the cost of an asset is being depreciated its productive capacity is maintained by repairs so that a firm accumulates savings by depreciation as well as holding the asset and these savings are only off-set when the asset is scrapped".⁽¹⁾ Border manufacturers seem to have been only too anxious to depreciate heavily, mainly for tax purposes. Ballantynes sought to write down assets at the rate of 6% per annum but this was rejected by the tax authorities who would only permit 5%. Ballantynes took their engineers advice and wrote a letter on the subject to Platts of Oldham. Eventually the firm's property was divided into Heritable and Moveable, the former being written down 5% and the latter 7½% per annum.⁽²⁾ One Selkirk firm even went to the trouble of holding annual official valuations of plant and property in a bid to lessen the impact of taxation.⁽³⁾

Scottish woollen firms expanded, then, almost exclusively on internal finance made possible by a combination of good profitability over the long-term, careful living and accounting, and heavy 'ploughing

(1) K. V. Pankhurst, op. cit., p. 103.

(2) Letter Book 2, pp. 4-7, 20-1, 24, Ballantyne Archives.

(3) Private Letter Book of T. Craig-Brown.

back'. It would appear that many of the early manufacturers probably lived at a level not very dissimilar from their better-off work people. There was not a great deal of difference between the salary of David Ballantyne, junior partner in Henry Ballantyne & Sons in the early 1850s and the earnings of a few of their hand-loom weavers. His younger brother certainly obtained, at £4 per month, a good deal less than many of the workers.⁽¹⁾ The same frugality was true of Alexander and James Johnston in the north of Scotland. From the 1860s, however, the need to invest heavily the good profits of those years was not so pressing. There is evidence that the manufacturers and their sons were willing to spend more on luxury. John Murray, the Galashiels carpenter who founded the wool-stapling firm of Sanderson & Murray in 1844, built himself a £30,000 mansion in the 'sixties. In 1861 a Hawick manufacturer boasted that his palatial mansion erected by him at a cost of £30,000 had been built from only one year's profits.⁽²⁾ A whole batch of manufacturers' mansions were erected in the neighbourhood of Galashiels and Hawick at this time. In 1829 Henry Ballantyne had built himself a house at Galashiels when he moved in from Innerleithen. It cost him £70. His sons John and David soon after their father died each had houses worth £3,000, stables, and a lodge, plus furniture and paintings totalling in all £6,500, a modest domain by some standards but comfortable nonetheless. By this time also woollen manufacturers were steadily spreading their commercial investments over other fields of activity. James Johnston of Elgin bought shares in the Moray Firth Mining Company in 1880 and dabbled in Highland railways earlier. Ballantynes bought shares in mining ventures in Australia and elsewhere.⁽³⁾ The increasing

(1) Ledger B, Wage Books, Ballantyne Archives.

(2) M. McLaren, Sanderson & Murray 1844-1954, p. 70. Scotch Tweed, vol. 12, p. 99.

(3) 'Letters 1880s', Newmill Records; Investment Ledger, Ballantyne Archives.

unprofitableness of trade in the last quarter of the century made expansion less desirable. Better returns could be made elsewhere. As a result few new mills were constructed after the early 1880s and existing businesses ceased to grow or did so much more slowly than formerly. Crombies seem to have been very much the exception.

2. The Financing of Trade

As noted already it was working capital which the entrepreneur required most and which appears to have caused him most difficulty. This was the case not only in the early days of the industry but for much of the 19th century as well. Many expedients were devised to overcome the difficulty. For example in Galashiels the local minister, Dr. Robert Douglas loaned £1,000 of his own capital to help finance the building and operation of a Cloth Hall in the town in 1791. Clothiers who had subscribed to its erection (usually a guinea) were enabled to draw two-thirds of the value of their goods which they deposited in the Hall whether sold or not. The remaining third was collected when the cloth was finally disposed of. It is perhaps not surprising that this expedient for obtaining working capital did not last very long. (1) At other times use was made of the local Friendly Society which had been formed in 1802 to afford relief to clothiers in times of difficulty. Bills were granted at 5% which often ran for five or six years. At times the borrower was notified that the reverse side was so covered with signatures that it was necessary to renew the paper while threats of legal action to obtain repayment were evidently common. (2) Another method of obtaining capital for short-term coverage was for manufacturers to borrow among themselves. This spirit of brotherhood was formed in

(1) R. Hall, op. cit., p. 303.

(2) Border Telegraph, Feb. 18th, 1908 - based on the Friendly Society records.

the craft associations earlier when equipment was held in common. It was but a short step from sharing apparatus to sharing money. This practice is well documented in a manufacturer's note-cum-account book of the late 1820s. The clothier concerned, Henry Brown lent about £540 to various local colleagues between March 1828 to December 1829 ranging in amount from a few shillings to about £40. These transactions took place on 70 different occasions and involved about 20 different individuals. Over the same period Henry Brown himself borrowed about £340 from his fellows. All debts were paid promptly in a week or two or even a few days later. No interest was charged. (1)

The main way of financing the processes of production in the woollen industry was the use of credit. The nature of the trade meant that at any one time much capital was tied up in raw materials or stocks of cloths and yarn, or in dyestuffs. Thus there developed early on in the industry's history the "elaborate and delicately balanced system of credits" which was common in much of British industry for much of the period of the industrial revolution. (2) By the use of credit firms with very slender resources could set up in business and acquire working capital by borrowing more on credit than they allowed. The banks here played an important role; by injecting credit into the system by their bill-discounting facilities they allowed the credit apparatus to grow and to be elaborated. Nowhere was the use of the credit system more exploited than in the Scotch tweed trade for it remained one of the most notorious features of the trade down to the first world war, when for the first time under the impact of working for the government the manufacturers saw the benefit of prompt payments.

(1) Memo Book of H. Brown, passim.

(2) S. Pollard, "Fixed Capital in the Ind. Rev. in Britain", J. of Ec.H., vol. xxxiv, 1964, p. 309.

Border manufacturers made good use of the banks discounting facilities at an early date. By the 1820s Galashiels possessed branches of the Leith and the National banks. Hawick had a branch of the Linen bank in 1797 and the Commercial bank in 1820. The liberality of the Galashiels banks in the late 1820s in granting discounting facilities to manufacturers of low standing was considered by one of them to have contributed to the many failures in the town in 1829, though the banks themselves survived.⁽¹⁾ In addition, however, many manufacturers took advantage of overdraft facilities at their local bank. Sometimes these ran for years at a time tending to make the distinction between short and long term lending somewhat academic. Henry Ballantyne had a permanent overdraft in the late 1820s and 'thirties; Jas. Johnston of Elgin had an overdraft from 1852 to at least 1855 with the North of Scotland Banking Co. amounting to not less than £500. In 1852 it stood at £1,019. He ran another one at the same time with the Bank of Scotland. William Watson & Son of Hawick owed the Linen bank there £1,300 in 1849. In 1879-80 this firm was paying interest at the rate of £1,500 annually on "bank credit". In Aberdeen James Crombie ran an overdraft from at least 1830-36 amounting to several hundreds of pounds, his second most important item on the debit side.⁽²⁾

That they were able to obtain bank credit was important to the woollen manufacturers for it is clear that they had had to give credit themselves from the early days of the industry when little use was being made of banks. Most collected outstanding debts, or tried to, on their periodic "journeys" throughout the country, when they also sold goods or took further orders. Payment was always hard to obtain,

(1) Memo Book of H. Brown, Dec. 25th, 1829.

(2) Bank Deposit books, Ballantyne Archives; Letter Book i, Newmill Records; Abstract of Accounts, Watson Records; J. R. Allan (ed.), op. cit., p. 44.

however, and this fact did not change much in succeeding years. The letters of Alexander and James Johnston of Elgin show clearly how "tight" money was in the north of Scotland in the first half of the 19th century. In 1812 the shop-keepers in the area were said to be noted for being "long-winded". The same year Alexander Johnston told a Fraserburgh customer that his account was "shamefully overdue... some part of it two years..." He advised another firm trading in the north to add something to the price of a customer's goods as "we question much if he will pay regularly at 6 mos." On the other hand credit had to be given if trading was to go on. Johnston advised an English firm selling cloths in the district to allow four Caithness customers "another year's credit..." As late as 1848 James Johnston wrote to a customer in Buckie requesting settlement of his account observing that "the last goods you had from me was in the autumn of 1843 so you cannot complain of the credit allowed you". The same month an Evanton client was reminded of his account that was two-and-a-half years overdue.⁽¹⁾ Normally Johnston gave six months credit or 5% cash in a month. Another northern firm gave 12 months credit or 5% at six months.⁽²⁾

Abstracts from the early balance sheets of James Crombie and Co. of Aberdeen reveal the degree to which credit was given in the woollen trade. Table vi shows that the percentage of net worth tied up in debts outstanding was often over 50% and occasionally when trading conditions were especially adverse in excess of 60%. The data suggest that there was no marked diminution in credit given as the industry matured though this particular firm took less as time went on.

(1) Letter Book i, pp. 7,15,20,73, Newmill Records.

(2) Ibid., pp. 6 and 73.

Table vi

DEBTS OUTSTANDING AS PERCENTAGE OF
NET WORTH, J. CROMBIE & CO., 1830-58

<u>Year</u>	<u>Debts due to the firm</u> £	<u>% of net assets</u>	<u>Year</u>	<u>Debts due to the firm</u> £	<u>% of net assets</u>
1830	1,403	56	1846	4,721	46
1832	1,448	50	1848	5,452	40
1834	1,498	52	1850	6,187	38
1836	1,094	33	1852	13,152	60
1838	1,748	48	1854	16,550	63
1840	2,158	44	1856	19,563	64
1844	2,724	36	1858	18,696	53

Source: J. R. Allan (ed.), Crombies of Grandholm, pp. 44, 73.

Note. No data for 1842.

The giving of long credit was a characteristic of the Border manufacturer also. The day books of the firm of Henry Ballantyne are prefaced by detailed instructions to the clerks concerning the terms upon which trade is conducted with various houses. The firm's letter books reveal how rarely even the generous terms offered were actually adhered to. Writing to one of his main merchant houses in 1855 Ballantyne advised "we find it will be out of our power to carry on delivery of so many goods from this date - Oct. 6th/up to April without getting supplies of cash to go on with ... we do not consider ourselves justified... (1) in not having one season's goods paid for before going on with another.."

Though many of the manufacturers had used the credit system to raise themselves in the past by the middle of the century they began to find that they were the prisoners of the system.

"Another evil", declared one of them, "is the undue length of credit now exacted... I have no liking to risk two season's goods and mean, if I cannot limit it to one, to sheer out of that connexion a good deal - it is folly to permit such

(1) H. Ballantyne to Messrs. Wilson & Armstrong, Letter Book, Ballantyne Archives. cf. John Paton to Jas. Lord, London, "from a large number of our customers we do not get a single penny between Jan. and August". Letter Book, Paton & Baldwins, Alloa.

extended credits as we have to accede to - and as far as my experience goes I can hardly get a pleasant settlement now, so difficult has that evil made it... most of these tweed people seem to think they can treat us as they please".(1)

The local press echoed his views which were especially pertinent in times of high discount rates. The manufacturers were declared to have too much of their capital sunk in the process of manufacture and the advantage of introducing a prompt system of cash payments was pointed out.(2) The members of the woollen trade took no notice, however. They were too independent to get together to agree terms. Thus the system was no better in the less favourable economic conditions at the end of the century. Even longer credit was often demanded by merchants and the orders went to those manufacturers who would comply with them.(3) In 1906 the Times declared that the tweed trade was still labouring under the long credits that were given. Then the almost universal custom in the industry was to give six month's credit at the expiry of which a four month's bill was accepted and $2\frac{1}{2}\%$ discount allowed on payment. In practice this meant a year's credit with a cash discount on top.(4) It need hardly be said that such a system represented a most uneconomic use of capital. An authority on the industry in 1914 stated that if merchants had paid cash in a month about £1,500,000 less capital would be required, or about 50% of the total capital applied.(5) Not only was capital wasted but the ability to obtain such favourable terms meant that entry into the industry on the merchanting side was all too easy leading to many failures in difficult years. Letter books contain many references to failures and bad debts were quite common. Merchants sometimes vanished overnight without

(1) Robt. Gill to Jas. Johnston, 'In-letters' 1854-6, Newmill Records.

(2) Hawick Monthly Advertiser, July 1st, 1854.

(3) Textile Mercury, Feb. 1899.

(4) Times Financial & Commercial Supplement, May 21st, 1906.

(5) T. Oliver, "Some Lines of Development", Glasgow Herald, Dec. 30th, 1914, p. 40.

trace. The most celebrated of these was Alexander Collie who amassed liabilities of over £3½m. in a few years in the early 1870s. Many Scottish houses were bound up with him several of them being brought down. Other London merchants fell with him including one whose assets totalled only £400 but who had accepted bills for Collie amounting to £56,000, his commission for this service being his chief income.⁽¹⁾

Thus it would appear that the establishment of a credit system in the woollen trade was a function of the lack of capital of the early entrepreneurs and of the lack of liquidity among the purchasers of woollen goods. Its persistence for so long however was rather a result of the type of clientele for whom the woollen manufacturers mainly catered. Credit was given by the tailor to the final customer because the latter was of a type whose credit-worthiness would not normally be in question. Thus the merchant would have to give credit to the tailor and it would reverberate back along the line to the manufacturer. Ultimately, of course someone had to pay. This was usually the role of the wool stapler because no credit was allowed at the wool sales.⁽²⁾ In the case of the Border manufacturers the financial role of the local wool-stapling firm of Sanderson and Murray from whom many of the manufacturers got most of their wool, was crucial. When a manufacturer purchased wool from Sanderson and Murray the normal credit given was for three months. But this was often extended even up to a year. This enabled the manufacturers to tide themselves over difficult periods and sell their goods at an acceptable price. Sometimes the firm would grant bills to manufacturers who had run short of ready cash. Often credit given ran into many thousands of pounds and naturally this firm took an active interest in the Border woollen

(1) cf. R. Scott, "Hawick and the Collie Disaster", T.H.A.S. 1962, pp. 31ff; Hawick Advertiser, July 3rd, 1875.

(2) J. H. Clapham, The Woollen & Worsted Industries, p. 114.

businesses in debt to them. Occasionally partners were found who were willing to apply their capital in the trade. (1) The advantages of such a well-established firm, of world renown by the 1860s, was of inestimable value to the Border woollen industry. One wonders, however, whether Sandersons would have done even better if they had tightened their credit more as the liquid position of the manufacturers improved. This might have forced them to insist on better terms from the merchants. As it was this did not happen; the giving of long credits acted as an outlet for surplus capital, gave an advantage to the larger firm in difficult times, and, insofar as firms could be propped up almost indefinitely by obtaining credit, helped to lower the general efficiency of the industry. It made more vulnerable the inefficient and efficient alike for the waywardness of one or two badly managed firms could bring down others whose only sin was to trust them with a measure of credit. Thus when Alex. Collie failed in 1875 a number of firms collapsed with him in the Borders and elsewhere. One so affected was the merchant house of Wilson and Armstrong of London, which failed for over £500,000. (2) This company had been Henry Ballantyne's chief customer only a few years before; over 90% of his London trade was with it. (3) Had that still been the case in 1875 Ballantyne may well have succumbed even though he had no link with Collie and was an old established business. Obviously in a trade where a high proportion of trade was done with perhaps a single merchant house the risk of involvement if long credits were given was very great.

The reasons for the slipshod terms upon which the tweed trade was conducted were partly historical, partly psychological, and partly

(1) M. McLaren, op. cit., pp. 70-1.

(2) R. Scott, op. cit.

(3) Day Books, Ballantyne Archives.

commercial. The granting of liberal credit had been necessary in the early days of the industry in order for the manufacturers who were mostly of humble origins to get established. Many of them depended on the services of town merchants who took their cloth to sell to other houses taking a commission for their trouble. Obviously the manufacturer had to wait until his goods were finally disposed of. Credit was also the result of an innate disaffection for payment displayed by some, at least, of Scots folk. Again the time between the clothier's purchase of the farmer's wool and the final sale of woollen cloth was often several months during which time the manufacturer had to finance his operations. He of necessity had to get credit from the farmer, and later from the stapler, and therefore gave it more readily too. As the industry grew and the nature of the goods changed other factors became operable. The cultivation of the quality trade meant that tailors were willing to grant credit to their customers. It also served to intensify competition among the manufacturers thereby precluding them from coming together to agree common terms when the industry ran into troubled waters towards the end of the 19th century. Merchants then had the whip-hand and were in a position to exploit many firms in the industry and even to drive them out of business if they chose. As Dr. Oliver, Principal of the Galashiels Woollen Technical College said in 1914, the coming of the war gave the industry the chance at last to put its own house in order.⁽¹⁾

(1) Glasgow Herald, Dec. 30th, 1914.

EPILOGUE

Throughout this study attention has been drawn to the debilitating effects of the paucity of statistical information relating to the woollen industry itself and to the Scottish economy in general. Any estimates that have been ventured concerning the scale of output have been at the most of a tentative nature. Nowhere is this lack of statistical evidence more felt than when endeavouring to assess the position of the woollen industry at the end of the period of this study both in regard to its former history and in relation to the Scottish economy as a whole. Unfortunately national income figures for Scotland are still awaited and in their absence it is not possible to gauge the significance of the woollen manufacturing sector with any precision. However, the data yielded by the Census of Production taken in 1907 does enable some sort of measurement to be made which affords some indications of the industry's importance at that date. In the first place it is possible to put the Scottish industry in the context of the wool-textile industry of the United Kingdom; secondly its importance vis a vis the other major industries of Scotland can be roughly measured. The necessary data for these comparisons are set out in tables 1 and 2 below.

An examination of table 1 reveals that in 1907 the Scottish woollen industry was responsible for a little over 7% of the total value of the entire British industry, that is including worsted manufactures. If worsted goods are excluded Scotland accounted for about $11\frac{1}{2}\%$ of the yardage of woollen goods produced and about 17% of their value. Moreover she produced about 16% of the volume and nearly one third of the value of carded yarns manufactured in Britain. Thus although the position of the West Riding in the woollen industry was

clearly unassailable the Scottish industry was not insignificant. If one could isolate quality products from the rest of production the share going to the Scottish manufacturers would be considerably higher.

Table 1 THE OUTPUT OF THE SCOTTISH AND BRITISH WOOLLEN INDUSTRIES, 1907

<u>Type of goods produced</u>	<u>Quantity produced (Scotland)</u>	<u>Quantity produced (U.K.)</u>	<u>Value of production (Scotland)</u> £	<u>Value of production (U.K.)</u> £
Woollen yarns	10.2m. lbs.	62.2m. lbs.	779,000	2,414,000
Woollen tissues (broad & narrow)	21.2m. yds.	183.6m. yds.	2.8m.	16.5m.
Total value of all products ⁺	-	-	5.1m.	66.9m.

⁺ excluding carpets.

Source: Returns of the Census of Production, 1907, B.P.P. 1909, c.4896.CII 655.(3).

Table 2 OUTPUT OF SOME OF THE PRINCIPAL INDUSTRIES OF SCOTLAND, 1907

<u>Industry</u>	<u>Value of output (£000s)</u>
Mines	21.2
Iron & Steel	19.6
Jute, Linen	16.2
Engineering	16.0
Shipbuilding & Marine Engineering	15.2
Building	10.7
Bread & Biscuits	8.5
Woollen & Worsted	5.1 (excluding carpets)
Total (all main industries)	<u>145.8</u>

Source: E. Crammond, "The Economic Position of Scotland etc." J.R.S.S. vol. 75, 1911-12, p. 161.

The relative importance of the main Scottish industries in 1907 is set out in table 2. In terms of value of output the woollen industry was clearly very inferior to the heavy industries of the Clyde Valley, and only about half the importance of building and contracting. In sum we find that the woollen sector accounted for only about $3\frac{1}{2}\%$ of the value of production of the country's major industries. The industry thus did not occupy a central position in the Scottish economy in the period before 1914.

But if regional considerations are substituted for national ones then clearly the woollen industry in Scotland was of much greater significance. Its existence was crucial to the local economy of several areas of Scotland, especially the Borders. In Selkirkshire, for example, 33.4% of the total male population of the county was directly concerned in wool manufacture in 1911 and 57.4% of the female population. (1) The Border towns of Hawick, Langholm, Galashiels, Innerleithen, Walkerburn and Selkirk owed their growth and, in the case of Walkerburn its very existence, to the woollen industry. They were still almost totally committed to it in 1914, and, indeed, still are today. The same was only a little less true of Peebles and Jedburgh. Clearly a very large proportion of the entire population of the Border region was either directly or indirectly connected with the manufacture of wool. The woollen factories controlled the income-earning abilities of most of the trades in the area. This lack of balance was not serious all the while the woollen industry was sound but today it lies at the route of the economic difficulties of the area.

When everything is considered, however, it may be that the measure of the Scottish woollen industry's impact on the nation cannot, after

(1) Census of Scotland, 1911, vol. i, pt. ii, pp. 2060-1.

all, be represented by bald statistics however honestly offered. At root the influence of anything is determined by its response to factors which are themselves influencing; and the most powerful formulating influence bearing upon the textile industries at any time is fashion. The survival of the cloth manufacturer in particular depended heavily on fashion movements and his response to them. In more specific terms the Scottish woollen industry was a creature of a favourable trend of fashion, which reflected the tastes of the young aristocracy, itself being moulded by the altering social scene after Waterloo. The taste for Scotch goods among the rich filtered down through the social hierarchy to the middle and upper-working classes as humbler men aped their monarchs and princes in what was still largely a deferential age. But for a favourable twist of fashion the woollen industry in Scotland in the early 19th century might have been as still-born as it was in the late 17th century. It is significant that until the pull of fashion was exerted on the industry in the late 1830s factory inspectors and commentators on the industrial scene in Scotland never included the Borders in their enquiries, - not until 1842 in fact, though, as has been shown above, much energy was being put into the industry in the area long before that. As it was, Scotland was the only other area outside of Yorkshire where a woollen industry actually took root and grew during the industrial revolution, - this mainly due to the creative energies of fashion.

But fashion is an elusive bird which is better led than chased. To this end Scottish manufacturers devoted much of their wit and ingenuity during the last century and in doing so set new standards of craftsmanship and design in the industry, symbolised in the word "Tweed" which became an international term for the qualities of durability, comfort and value for money. One may suggest, therefore,

with good reason that the greatest contribution made by the Scottish woollen industry in the 19th century was the assistance it gave to the building of an association between the Scottish economy and the manufacture of superior-grade products. By exporting a large proportion of an output based on the careful selection of raw materials and expert designing the Scottish woollen manufacturers helped to mould this image, which was none the less real for its intangibility. "Hawick-Made" and "Made in Galashiels" came to be but junior partners of the term "Clyde-Built".

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