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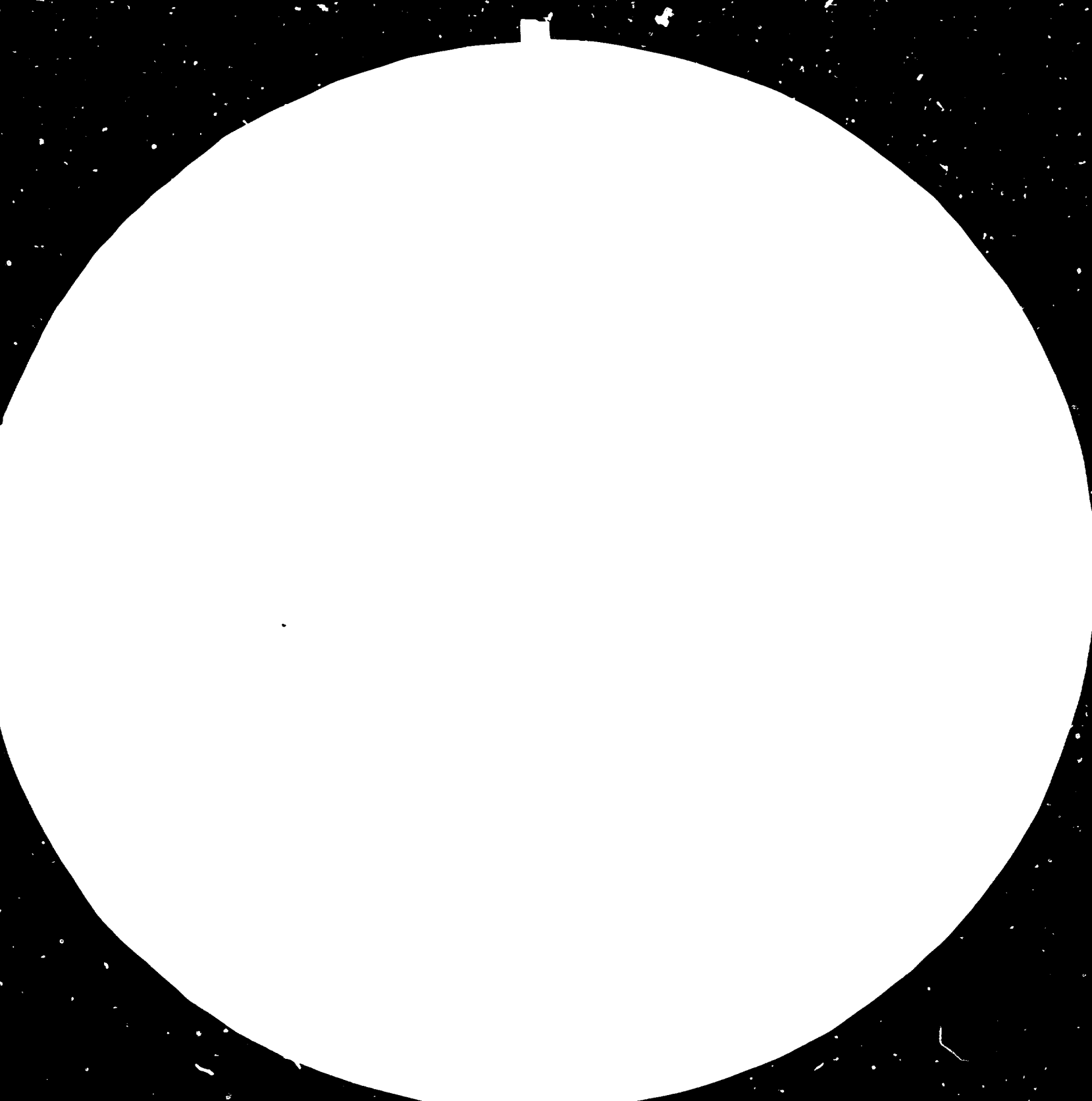

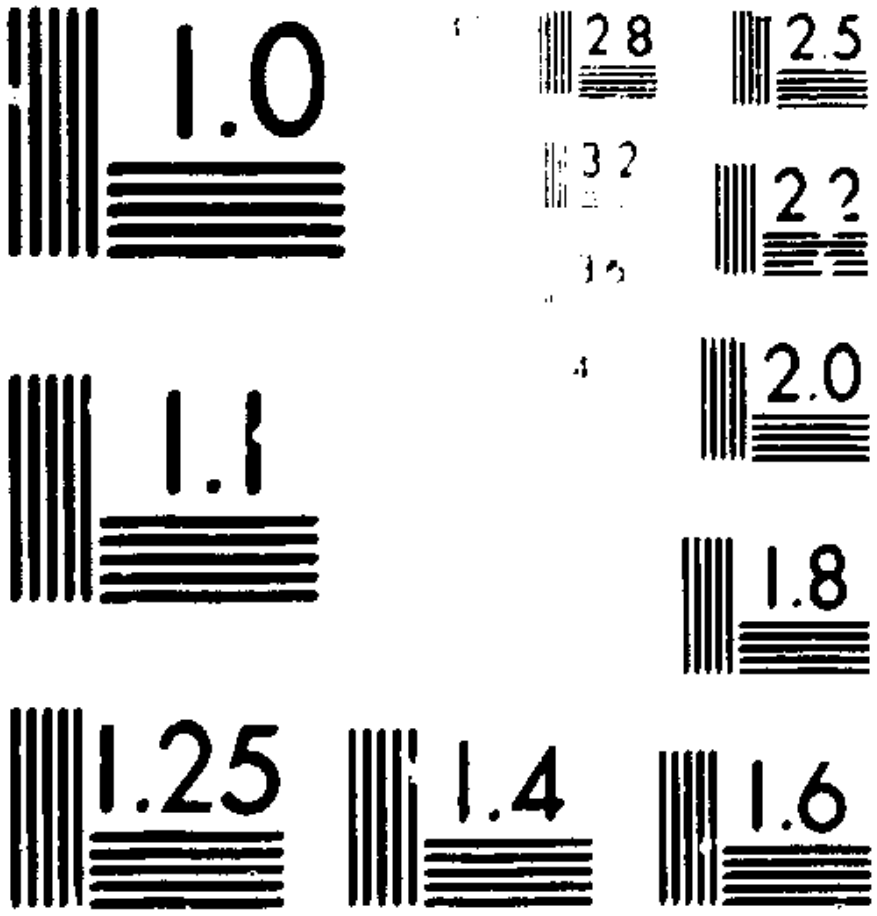

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STRUCTURAL CHANGE IN BRITISH INDUSTRY:

THE CASE OF THE KNITTING INDUSTRY*

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Prepared by the

Global and Conceptual Studies Branch
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UNIDO Working Paper on Structural Change

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FOREWORD

This study is one of a series of country studies in the research programme under the aegis of UNIDO covering, inter alia, studies on redeployment potentials and obstacles, and prospective analyses of structural changes in developed and developing countries. The aim of this research programme is to analyse the ongoing restructuring process and to identify the major determinants at international, regional and national levels. By identifying the factors that determine structural changes and by indicating the likely direction and possible implications of the restructuring process, befogged state of affairs in the restructuring process might be reduced to the advantage of forward-looking adjustment policy. In so doing, it would seem essential that the issue also be brought down to different branches of the industrial sector in developed and developing countries.

The British experience in structural change is of particular interest. The relative decline of the British economy has proceeded to a point where its future pattern of international specialization can no longer be expected to be a stereotype. This paper attempts to present a bird's eye view of structural changes in British industry in general and a worm's eye view of the knitting industry in particular. The purpose is to give explicit expression to adjustment problems of one branch of British industry to structural transformation in response to competition from developing countries. The reasons for choosing the knitting industry are: (a) the knitting industry is a labour intensive industry subject to particular pressures from adjustment in developing countries; and (b) the set of interrelationships between different factors affecting the knitting industry has remained generally unexplored in the empirical literature on British industry.

The statistical data for the project were sourced from published UK data. The authors and UNIDO Secretariat are beholden to businessmen in the knitwear industry, Knitting Industries Federation and to the trade unions for their assistance in facilitating this study.

The Appendix to the study provides a comprehensive statistical picture of the UK knitting industry, which illustrates the extent to which structural change has occurred.

This study was prepared by the UNIDO Secretariat with the assistance of Dr. V. Cable and Mr. P. Tasker of Overseas Development Institute.

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EXPLANATORY NOTES

The following abbreviations are used in this paper:

EFTA	European Free Trade Association
ES	Export Performance in Relation to Productivity
GMWU	General and Municipal Workers' Union
IP	Import Penetration
MFA	Multi-Fibre Arrangement
MLH	Minimum List Headings
MMF	Man-made Fibres
NEDO	National Economic Development Office
NICs	Newly Industrializing Countries
NUHKW	National Union of Hosiery and Knitwear Workers
RCA	Revealed Comparative Advantage
SITC	Standard International Trade Classification

I. STRUCTURAL CHANGE IN BRITISH INDUSTRY

1. Introduction

The British experience of structural change in industry and the relationship between this change and that taking place in the international economy is of particular interest for several reasons. First, the close links between the UK and the developing Commonwealth ensured that Britain experienced, before almost any other industrial country, the impact of competition in the form of manufactured imports from developing countries. In the early 1960s, over 10 percent of British imports of finished manufactures were from 'Newly Industrializing Countries' (NICs): mainly Commonwealth Asia. As a consequence, the UK now has substantial experience of both adjustment and resistance to adjustment. The UK cotton industry reorganization programme, for example, dates from 1959, import quotas on cottons date from the early 1960s, and quotas on jute have applied since the Second World War. There is now sufficient experience of sectoral intervention, brought about by developing country competition and other reasons, to formulate some general conclusions as to its effects.

Second, the British economy has experienced substantially slower growth than have most other OECD countries during the post-war period. Industrial adjustment has, therefore, to be undertaken under conditions which have not been entirely favourable to the rapid absorption of displaced resources, and of increasing uncertainty and pessimism about achieving a satisfactory international division of labour. This experience is of interest, not only to the UK, but to other industrial countries which may well be entering a period of lower growth.

Finally, the relative decline of the British economy has proceeded to a point where its future pattern of international specialization can no longer be expected to be a stereotype of an advanced industrial country: a simple model for predicting comparative advantage based on a relative abundance of human capital is unlikely to be wholly satisfactory in the case of the UK, whatever wider relevance it might have.

The approach adopted here towards the study of structural change is to try to understand the mechanism of adjustment through a particular industrial case study. Taking the worm's eye rather than the bird's eye view has the advantage of analysing the magnitude of problems, but the disadvantage of constricting vision. It is not valid to generalize from one case: each industry has had its own unique experience.

Structural change implicitly involves the transfer of resources from one industry or branch to another. The case study approach does, however, have the advantage of permitting a detailed look at the mechanism of technical change, and of the effects of industry-specific government policies. The case study, therefore, confines itself to one industrial area that meets these requirements.

2. Government Policy and Industrial Performance

The central objective of recent UK industry policy, under Governments of both parties, has been to remedy the poor performance of British industry relative to that of its competitors. Although there has been a relative industrial decline, with interruptions, throughout most of this century, the pace has appeared to quicken in recent years. Evidence of declining British competitiveness in manufactures (which is a substantial part, though not the whole source of overall British growth performance) has been particularly striking. 1/ Amongst the many indicators which could be used to illustrate this process is the ratio of finished manufactured exports to manufactured imports (SITC Section 7 + 8) where the ratio has declined from 3:1 in the early 1960s to approximately 1:1 today (see Table 1). The UK's share in dollar terms, of world trade in manufactures (SITC 5-8), has declined from 17 percent in 1970 to 9.7 percent in 1979 although the market share has marginally

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1/ Statistical evidence summarized in C.J.F. Brown and T.D. Sheriff, Deindustrialization in the UK: Background Statistics, NIESR Discussion Papers No. 23; and analysed in D.K. Stout, 'Deindustrialization and Industrial Policy' in F. Blackaby (Ed.) Deindustrialization, Heinemann, 1979.

improved since 1973. This is, however, a symptom rather than a cause of decline. It is more likely that the relatively slow growth of manufacturing productivity is at the heart of the problem.

Explanations for this poor performance are many. A good many pivot around various interpretations of the medium and long term statistical relationship between output growth and productivity ('Verdoorn's Law'), which appears to apply to both intercountry and interindustry comparisons.[2/] As far as intercountry comparisons are concerned, the link between slow output and productivity growth can be taken as evidence that poor productivity growth performance originates in the relatively low priority given to expansionary macroeconomic policies in the fields of demand management and exchange rates. As a consequence, there has been a dearth of investment, a failure to reap economies of scale, and a loss of stimulus to technical innovation. Causality could, of course, flow in the opposite direction - from the 'supply side'. Such evidence as exists points to the existence of both sets of influence [3/] - in effect, to a vicious or virtuous circle of stagnation or growth. The controversy continues and overlaps substantially with current arguments about the current economic strategy for UK industry. As far as current government policy is concerned, however (and to the extent that this is concerned with growth rather than anti-inflation objectives), the emphasis is strongly on a supply side rather than a demand-induced approach.

2/ General discussion in T.E. Cripps and R.J. Tarling, Growth in Advanced Capitalist Economies 1950-1970; N. Kaldor, Causes of the Slow Rate of the United Kingdom, CUP, 1966 and controversy in the Economic Journal, 1975 (Rowthorn and Kaldor).

3/ For example, see R. Wragg and J. Robertson, 'Postwar Trends in Employment', Department of Employment Research Paper No. 3, 1978.

Table 1. RATIO OF VALUE OF FINISHED MANUFACTURED EXPORTS TO IMPORTS (SITC 7 + 8), 1963-1970

1963	3.28	1971	1.88
1964	2.62	1972	1.56
1965	2.72	1973	1.27
1966	2.65	1974	1.35
1967	2.08	1975	1.48
1968	1.93	1976	1.38
1969	2.01	1977	1.34
1970	1.90	1978	1.19
		1979	1.06

Source: Department of Trade, Monthly Review of External Trade Statistics, various issues

One explanation for the poor productivity performance of British industry which is, of course, not independent of the above, is a relative deficiency of investment. Recent evidence has suggested that, albeit relevant, this factor may have been exaggerated:

> "the United Kingdom's performance cannot simply be ascribed to a shortage of investment. It is clear that, at least a part of the U.K. problem lies in the amount of output which is obtained from investment. Put another way, it is not the size of the capital or other resources, available to industry which presents a constraint on growth, but the efficiency with which these resources are used." 4/

Some indirect support for this view was offered by a comparative study of the age of the capital stock in the UK and USA:

> "the analysis suggests that more modern and technically superior plant may go less far to explain the higher level of U.S. productivity than is often supposed." 5/

4/ Anne Mueller, 'Industrial Efficiency and UK Government Policy' in C. Bowe, Industrial Efficiency and the Role of Government, Department of Industry, 1977.

5/ R. W. Bacon and W. A. Eltis, The Age of US and UK Machinery, NEDO Monograph 3.

There is another explanation of poor productivity performance, somewhat closer to the central interest of the UNIDO project, that there is something 'wrong' with Britain's industrial structure - there is an 'adjustment problem'. This would arise because scarce skills and capital are 'locked-in' to low growth and productivity sectors, while these and other barriers are preventing high growth and productivity in emerging sectors. Implicit theorising along these lines was at least partly responsible for the enthusiasm in the sixties, which has not entirely died, for active government intervention policies designed to 'pick winners' by promoting 'growth industries' (then identified as computers and aircraft especially): to promote 'economies of scale' in industries (by deliberate amalgamation of enterprises and by adopting a somewhat uncritical approach to merger activity in general); and to penalise low productivity sectors (seen in the sixties as non-traded services, now as the public sector in general).

The UK had no coherent blueprint for structural change designed to promote some industrial activities and inhibit others. Empirical testing of theories about the appropriateness or otherwise of a given industrial structure runs up against serious problems of definition; 'an industry' is a largely meaningless concept except for defining a particular level of statistical aggregation. Studies of broad industrial branches have tended to weaken the argument about any British industrial structure deficiency; e.g. a comparison of UK and Federal Republic of Germany from 1954 to 1972 (at the level of 14 broad industry groups) showed that "in every branch of manufacturing industry, West German performance was superior to that of the UK, demonstrating that at this level of aggregation the relative failure of the UK industry was one of performance and efficiency rather than of defective industrial structure". 6/ Table 2 shows that Britain has run down, in manpower terms, its low productivity, declining industries more rapidly than almost any other industrial country and that labour absorption in expanding industries has taken place at a much slower rate. As Table 3 shows, British trade

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6/ M. Panic (Ed.), The UK and West German Manufacturing Industry 1954-72, NEDO, 1976.

Table 2: CONTRIBUTION OF "LABOUR-ABSORBING" AND "LABOUR-SHEDDING" INDUSTRIES TO MANUFACTURING EMPLOYMENT, 1963 TO 1977

(WEIGHTED ANNUAL AVERAGE GROWTH RATES OF EMPLOYMENT[a])

	Labour-absorbing industries			Labour-shedding industries		
	1963-1970	1970-1973	1973-1977	1963-1970	1970-1973	1973-1977
Austria	2.9	1.2	0.0	-0.2	-3.2	-2.9
Belgium	0.9	0.9	0.0	-0.5	-1.3	-3.4
Canada	2.3	1.9	0.3[c]	0.0	0.0	-0.9[c]
Denmark	1.3	0.9	0.0[c]	-0.3	-0.4	-4.0[c]
Finland	2.7	3.2	0.4	0.0	0.0	-0.9
France	1.5	1.8	0.1[c]	-0.4	-0.1	-0.9[c]
Germany FR[b]	1.2	0.4	0.1	-0.5	-1.0	-2.1
Italy	1.3	1.3	1.0	-0.1	-0.4	-0.2
Japan	3.1	0.6	0.2	0.0	-0.7	-3.3
Norway	1.7	2.0	2.5	-0.4	-2.9	-0.9
UK	0.0	0.0	0.0	-1.0	-2.1	-1.6
USA	1.9	1.3	0.1	0.0	-0.1	-0.7

Source: The Impact of the Newly Industrialising Countries on Production and Trade in Manufactures., OECD, 1979. Table 17, p. 42.

a The growth rate of employment in both sectors is weighted by each sector's share in total manufacturing employment in the years 1970, 1973, and 1976.

b Germany F.R. figures for 1963-1970 and 1970-1973 are not comparable with figures for 1973-1976 due to changes in classification.

c Data refer to the period 1973 - 1976 only.

Table 3: IMPORT PENETRATION AND EXPORT SALES RATIOS BY INDUSTRY, 1968 TO 1978

	Import Penetration						Export Sales Ratio					
	1968	1970	1972	1974	1976	1978	1968	1970	1972	1974	1976	1978
Food and drink	21	19	19	21	18	17	4	4	4	6	6	7
Coal & petroleum products	22	17	14	16	na	15	13	13	12	14	na	14
Chemicals	18	18	19	27	26	29	24	25	27	34	34	38
Metal manufactures	18	19	18	24	na	22	15	16	16	17	na	19
Mechanical engineering	20	20	23	29	30	31	32	34	38	40	46	44
Instrument engineering	30	32	39	50	54	56	33	39	43	52	56	56
Electrical machinery	14	17	21	29	32	36	20	21	23	29	37	39
Shipbuilding	na	43	57	56	na	44	na	31	33	23	na	37
Vehicles	14	12	19	31	39	34	34	33	34	41	44	45
Metal goods	5	6	7	10	12	13	12	12	11	14	17	17
Textiles	16	15	19	25	28	31	18	20	21	26	27	29
Leather and leather goods	21	19	22	25	29	33	25	25	24	24	25	26
Clothing and footwear	12	13	16	21	25	27	9	10	9	11	15	18
Bricks pottery etc.	5	6	5	9	8	9	9	10	10	13	14	15
Timber & furniture	27	26	24	32	28	27	2	3	3	5	6	8
Paper	17	18	17	22	22	20	7	7	7	8	10	11
Other manufactures	10	10	12	16	17	18	15	17	16	19	22	20
TOTAL MANUFACTURES	17	17	19	23	23	25	17	18	19	22	23	25

na - not available

a Import penetration is the value of imports divided by apparent home demand (import plus sales of domestic producers less exports).

b The export sales ratio is the value of exports divided by manufacturers sales.

Source: Economic Trends, August 1977 (1968-1976); Business Monitor, 14 March 1980 (1978).

performance, in terms of export sales ratios and import penetration, has deteriorated in the vehicles and electrical machinery industries, with the growth of exports relative to sales falling behind import penetration: but these are not self-evidently 'declining industries' for other than fortuitous reasons.

There is some evidence to suggest that there may well be a problem of resource misallocation between industry groups. A recent NEDO paper by Brech, analysing fixed investment trends in the Federal Republic of Germany and the UK, shows that resources have flowed, in the Federal republic of Germany, relatively more into high technology industries than into industries with apparently less potential (e.g. textiles, iron and steel). 7/

Work on the pattern of Britain's 'revealed comparative advantage' has also shown evidence of a technological downward drift in the structure of UK trade. 8/ But these insights have not yet produced any discernible impact on policy which treats resource allocation either in very general terms or as a problem to be resolved within industries. Empirical evidence suggests that there is an exceptionally large dispersion of profitability levels between firms within particular industries. Whatever the economic evidence, it is also politically convenient. As Caroline Miles has observed - commenting on UK and Japanese experience:

> "it is difficult to envisage a senior British civil servant discussing the problems of declining industries.....being prepared to state in public that certain older industries have no place in a highly developed, technologically advanced economy in the second half of the 20th Century." 9/

There is another, analytically quite distinct, interpretation of British industrial inefficiency. The problem is not one of resource misallocation within or between industries, but of the generally

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7/ M. Brech, UK Industrial Structure and the Problems of Adjustment, NEDO, 1979 (mimeo).

8/ G. White, UK International Competitiveness and the Role of R + D, Department of Trade, 1978 (mimeo).

9/ Caroline Miles, 'International Trade and Structural Adaptation' in H.G. Johnson (Ed.), The New Mercantilism, Blackwell, 1974.

low quality of management, industrial skills and technology employed. This idea is indirectly supported by evidence that Britain not only suffers from problems of cost competitiveness, but also from deteriorating non-price competitiveness, caused by relatively poor product quality, marketing and delivery. The unit values of exports within particular product groups show evidence over time of a relative decline, and the decline is particularly serious in large, fast-growing markets.[10/] If this is true, then the new distribution of factor endowments may well suggest an optimal pattern of comparative advantage which reflects this shift towards lower technology activities and brings the UK more directly into competition with newly industrialising countries. This is, however, a pessimistic and deterministic view and there is no evidence that governments wish to plan on that assumption.

Drawing together the various strands of the argument, there are two major ingredients in the analysis of British industrial performance which have contributed to the formation of recent industrial policy. One is the belief that there may be a problem of resource misallocation, but this is not primarily attributable to a lack of structural change in terms of broad industrial categories. The other is the belief that there is a general, across-the-board, problem of deficient management and labour skills. The approach of Conservative and Labour Governments to these problems does, of course, differ. The former have stressed personal incentives and greater competition, both to remove barriers to better resource allocation and to improve the 'quality' of factors of production. The latter have stressed intervention, notably in the form of an 'industrial strategy', thereby seeking - through (industry) working groups of officials, businessmen and unionists, and through financial assistance - to raise the performance of the weakest firms within each industrial grouping. Neither of these sets of policies has been conducive to the formation of an official view of a likely, let alone desirable, industrial or wider economic structure. Labour's 'industrial strategy', by implication, avoided questions of interindustry rather than intra-industry change, while the present Conservative administration has no inclination to engage in any form of advance industrial planning - except

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10/ D. Connell, 'The UK's performance in export markets - some evidence from international trade data', NEDO Discussion Paper No. 6.

for commitments to particular industries such as motor vehicles, and to support for an embryo microprocessors industry.

There will probably be substantial industrial change notwithstanding the lack of any official commitment to its direction. There are two particular sources of change which may become increasingly important. One of these involves microprocessors. One study has estimated that 16 percent of the UK work force could be displaced over a 15-year period (but it is also estimated that all or most would, or could, be absorbed as a result of expenditure from the real income generated by productivity improvements). The implied impact of microprocessors on UK productivity is a 1.2 percent increase per annum.[11/] Another estimate gives a productivity increment of 0.4 percent to 1.2 percent over the same period.

The other source of change concerns the effect of competition from newly industrializing developing countries.[12/] On the basis of a global growth prediction (and a definition of NICs which included most of Southern and Eastern-Europe) the UK Government estimated that 8 percent of the manufacturing labour force, or 3 percent of the total labour force, could be displaced as a result of rising imports from this source over a ten-year period (the net reduction, as a result of increased exports to the NICs, is much lower). No estimate has been made of the national productivity gain from shifting the structure of production to accommodate this competition and from redeploying scarce resources elsewhere. It should be stressed that these estimates should be treated with caution. Not only is the methodological basis of the projections understandably insecure, but it is far from clear whether the projected changes are additional to, or alternatives to, other sources of productivity growth. The extent to which the displacement of labour results in a growth of general unemployment or is part of a rapid relocation to more productive activities, depends on the management of the economy while the adjustment is taking place; and about this it is impossible to make predictions. This study attempts to assess the role of the NICs in structural change in the UK.

11/ The evidence is summarised in "The medium term prospects", National Institute of Economic and Social Research Quarterly Bulletin No. 89, Nov. 1979.

12/ The Newly Industrialising Countries and the Adjustment Problem, Government Economic Service Working Paper No. 18, Jan. 1979.

3. Developing Countries and Britain's Pattern of Specialization

British industrial policies have hitherto not been explicitly designed to accommodate or confront the industrialization of developing countries in any systematic way. This is understandable since its impact has so far been small in aggregate: roughly 10 percent of all UK imports of manufactures come from NICs, broadly defined; and 7 percent if Southern and Eastern Europe are excluded. This represents 3 percent of UK industry's domestic sales. These figures suggest that there is little specific adjustment problem associated with NIC imports, at least in relation to such other influences on industrial structure and employment as those associated with technological changes, changes in patterns of demand, and trade specialization with developed countries. But this may understate the importance of the issue in several respects. First, it ignores the effect on UK exports in third countries. This may be very much more substantial than the effect on import-competing industries, but is very difficult to estimate, let alone do anything about. Second, values will understate volume changes for goods of significantly lower unit cost. Third, the low figures reflect, in part, restraint already being experienced on imports. Finally, the analysis is retrospective. Projections from past growth rates suggest quite substantial displacement of labour in the future (at least in gross terms). It may well be that the net effect of these changes are beneficial to the UK, and that the costs should be easily accommodated, but awareness of the potential magnitude of manufacturing competition is beginning to impinge substantially on trade policy.

The impact of developing country competition has so far been experienced in a few product areas and the most important of these are summarized in Table 4. The share of exports to developing countries as a percentage of the UK manufacturer's market has risen to 24 percent for most penetrated 3-digit industry (shirts and underwear). Larger figures apply at a more disaggregated level of analysis. For example, the cutlery category includes razor blades which disguises the impact of a growth in the Republic of Korea's share of the UK stainless steel market from zero to 28 percent over six years. On the other hand, of 130 industrial categories, only twenty register import-penetration levels of over 5 percent, and of these, eight are textiles and clothing and three are leather goods categories. The most spectacular increases over an eight year period have

been in watches and clocks, leather goods, and rope, twine and net. There is also evidence of a significant growth of import penetration from NICs in engineering goods (particularly electrical). The only decline was in jute, which is protected by quotas. The table also lists the 30 industries with the highest ratios of exports to developing countries to total sales: these are mainly engineering categories. Only five overlap with the import penetration list, suggesting a high degree of inter - rather than intra - industry specialization.

More understanding can be gained by analysing the trends in manufacturing trade specialization, measured in terms of revealed comparative advantage (RCA) [13/] (see Table 5). The basic (1978) equation for UK-World trade RCA produced an R^2 of 0.20, but of 8 variables employed, only the share of manual workers showed up as statistically significant (inversely). The fit for the same equation for UK-developing country trade produced a much better fit ($R^2 = 0.48$) as one would expect from a pattern of trade relying more heavily on clearly defined differences in factor endowments. Britain's comparative disadvantage with developing countries lay, as might be expected, in industries with a high share of women in the labour force and a high share of manual labour (both highly significant statistically). There was also an inverse correlation between RCA and a measure of physical capital intensity. This would appear to bear out a 'Leontief paradox' effect, i.e. the UK has a comparative advantage in trade with developing countries in products incorporating a high human capital but low physical capital content.

In order to achieve a more detailed picture, RCA was split into its two components: import-penetration (IP), and an index of export performance in relation to production (ES). Generally better fits were obtained for the export equations, as one might expect, since import patterns are somewhat distorted by existing import controls. The UK-World trade equations brought out the importance of research and development as a

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13/ See, for example, the forthcoming publication by V. Cable and O. Rebelo, Britain's Pattern of Specialization in Manufactured Goods with Developing Countries, and Trade Protection, World Bank Research Paper (forthcoming).

significant factor in IP and ES, and also in the structure of exports to developing countries. Other factors - the share of women in the labour force, the share of manual workers and (inversely) capital inventiveness - came out strongly as they did in the RCA equations. Another factor of importance in the IP equation is the significance of a regional variable measuring the degree of concentration of employment in regions of above-average unemployment. Less was obtained from the RCA equation for changes over time, either for developing countries or for the world, suggesting that factor endowment characteristics are becoming less important and that import and export structures may be converging (borne out by evidence of a statistically significant correlation between changes in ES and IP). The IP equation for developing countries again confirmed the tendency for imports to be characterized by UK industry employing a relatively large proportion of women, of unskilled workers, and being relatively labour-intensive vis-a-vis capital.

Table 4: UK INDUSTRIES RANKED BY 1978 DEVELOPING COUNTRY IP (>5%) AND ES (>10%) RATIOS, 1970 AND 1978
(per cent)

Import penetration			Export sales		
MLH	1970	1978	MLH	1970	1978
444 Mens shirts, u'wear	12.4	24.0	336 Construction equip.	20.0	42.2
352 Watches, clocks	0.4	23.3	383 Aircraft	9.7	33.0
432 Leather goods	4.4	21.3	353 Textile machinery	8.3	32.3
441 W'proofed o'wear	6.8	17.3	361 Electrical machinery	6.6	28.6
413 Woven cotton fabrics	11.2	16.4	380 Cycles, motor cycles	20.6	22.5
494 Toys, sports goods	10.2	13.6	391 Tools	12.9	22.0
415 Jute goods	26.6	13.4	338 Office machinery	6.8	20.9
449 Dresses	12.0	13.1	334 Industrial engines	23.6	19.8
431 Leather tanning	10.2	12.0	353 Surgical appliances	8.3	18.4
322 Copper, brass manuf.	2.1	11.8	335 Watches, clocks	20.9	18.1
416 Rope, twine & net	0.0	11.2	362 Dires, cables	8.7	18.1
417 Hosiery, knitted goods	3.2	10.7	370 Shipbuilding	9.5	18.0
445 Dresses, infants' clothes	2.9	9.9	333 Pumps, valves	10.7	17.7
450 Footwear	4.2	7.0	367 Electronic capital goods	10.4	17.1
365 Radios, broadcasting equipment	1.0	6.5	341 Industrial	6.7	16.8
418 Lace	1.6	6.4	237 Dyestuffs	na	16.4
338 Office machinery	0.3	6.4	392 Cutlery	12.3	16.4
363 Other base metals	0.0	6.0	339 Other machinery	7.9	15.0
392 Cutlery	4.3	5.2	372 Pharmaceuticals	10.4	14.7
475 Wood containers, baskets	0.7	5.1	367 Mech. handling equip.	10.4	13.8
			332 Machine.tools	6.0	13.8
			354 Scientific instruments	6.2	13.5
			331 Agricultural equip.	11.0	12.9
			312 Steel tubes	6.8	12.1
			369 Other electrical goods	5.3	12.0
			364 Electrical components	4.5	11.5
			381 Motor vehicles	7.7	11.2
			418 Lace	2.9	11.1
			411 Man-made fibres	4.9	11.0

Source: Economic Trends, August 1977; Business Monitor, 14 March 1980; and unpublished Department of Industry data for developing country trade figures.

All of this suggests that if trade with developing countries follows current patterns and trends, there will be a continuing adjustment problem faced by industries that are characterized by a high proportion of unskilled, and female, workers. At the same time, it is wrong to say that Britain's comparative advantage in trade with developing countries lies in capital-intensive, but have a high skill content. The burden of adjustment falls, in practice, on specific industries, of which textiles and clothing are most conspicuously involved.

Table 5: CROSS-SECTION REGRESSION EQUATIONS FOR REVEALED COMPARATIVE ADVANTAGE, UK.

Dependent Variables		Independent variables (n = 87 industrial categories)									
	Const.	AFS2	R+D	K/L	VAPM	OPSH	WHSH	AVWAGE	RBS	R^2	F
RCA^{1978} Developing Countries	53.80	.144	.0002	-2.02	-.244	-65.[illegible]	-.241	.719	-.168	.46	9.61
	(1.92)**	(.721)	(.552)	(-1.53)*	(-1.76)*	(-3.10)***	(-1.64)**	(1.065)	(-1.60)*		
RCA^{1978} World	48.68	.158	-.1118	-2.31	-.150	-103.99	.111	.154	-.167	.20	2.75
	(.822)	(.375)	(-.158)	(-.825)	(-.508)	(-2.35)***	(.359)	(1.076)	(-.752)		
$RCA^{1978-1970}$ Developing Countries	.156	-.007	-.182	.380	-.391	.545	.163	-.208	-.023		
	(.048)	(-.298)	(-.445)	(.249)	(-.024)	(.226)	(.096)	(-.027)	(-1.879)***	.05	0.58
$RCA^{1978-1970}$ World	.271	-.846	-.174	.614	.386	.642	.014	-.579	-.123	.03	.38
	(.031)	(-1.363)*	(-.016)	(1.496)*	(.886)	(.099)	(.316)	(-.276)	(-.377)		
IP^{1978} Developing Countries	-13.19	.252	.953	-.256	.0001	14.360	.130	.381	.088	.50	11.18
	(-1.650)**	(.442)	(.941)	(-.679)	(.228)	(2.401)***	(3.110)***	(.198)	(2.942)***		
ES^{1978} Developing Countries	11.09	.363	.244	-.506	-.0002	-5.479	-.735	.705	.018		
	(1.458)*	(.669)	(2.538)***	(-1.409)*	(.490)	(-.963)	(1.843)**	(.[illegible]8)	(.618)	.24	3.50
IP^{1978} World	20.87	.607	1.510	-1.554	-.00002	-2.981	-.031	.577	.105		1.68
	(.495)	(.202)	(2.827)***	(.780)	(-.011)	(-.094)	(-.140)	(.568)	(.666)	13	
ES^{1978} World	52.95	.115	1.499	-2.143	-.0008	-48.43	-.429	.811	.087		
	(1.428)*	(.431)	(3.193)***	(-1.224)	(-.464)	(-1.746)**	(-.221)	(.908)	(.063)	.27	4.22
$IP^{1978-1970}$ Developing Countries	-3.136	.079	.138	-.905	-.0010	-2.315	.359	.229	.135	.16	2.18
	(-.298)	(1.054)	(1.037)	(-1.819)**	(-1.905)*	(-.940)	(.651)	(.904)	(3.413)**		
$ES^{1978-1970}$ Developing Countries	-.140	.104	.292	-.140	.000	-.218	.121	.278	.144	.11	1.44
	(-.067)	(.688)	(1.092)	(-1.405)*	(-.195)	(-.138)	(1.096)	(.547)	(1.816)**		
$IP^{1978-1970}$ World	-3.338	.008	.013	-.133	.119	2.575	0188	.007	-.009	.21	3.10
	(-2.478)***	(.870)	(.757)	(-.2091)***	(-1.755)*	(2.555)**	(2.662)***	(3.022)***	(-1.906)**		
$ES^{1978-1970}$ World	-.970	-.007	.190	.004	.710	.385	.002	.003	.050	.14	1.36
	(.903)	(-.868)	(1.399)*	(.071)	(1.330)*	(.479)	(1.805)**	(1.363)*	(1.235)		

Note: Variables

AFS2: Average firm size (net output)
R+D: R+D expenditure as a share of industry sales
K/L: Capital stock per employee. In the absence of a disaggregated capital stock measure, a proxy was used of cumulative net capital investment per employee
VAPM: Value added per employee
OPSH: Share of operatives (manual workers) in the labour force
WHSH: Women as a percentage of employees
AVWAGE: Annual average earnings per employee
RBS: Index of concentration of employment in high unemployment regions.

*Statistical significance at 10%, **Statistical significance at 5%
*** Statistical significance at 1%.

4. Textiles and Clothing

Any study of the adjustment mechanism in relation to imports of manufactures from developing countries to the UK is likely to derive much of its historical insight from the experience of the textiles and clothing industries. In 1977, even after several years of import restraint, these products accounted for approximately 50 percent of UK manufactured imports from developing countries in Asia and Latin America, and 40 percent of all manufactured imports from NICs, as against 10 percent of all manufactured imports. Such is the degree of restraint currently effected in imports that, where significant trade liberalization is envisaged, the impact on the textiles and clothing industries would be substantially greater than in any other sector. There are industries, or branches of industries, where levels of import penetration (watches, or leather goods), or growth of import penetration from developing countries has exceeded that in the most penetrated branches of textiles and clothing, but these have not been sufficiently economically or politically important to generate the great pressure for government action that has been seen in the textile and clothing industries. This action has taken two main forms. One is assistance to re-equip branches of the industry and accelerate scrapping of out-dated machinery and equipment; this has happened under schemes for the cotton textiles industry (1959-1964); woollens (1973 until the present); and clothing (1975 until the present). The other is protection against import competition: there have been quotas (initially voluntary export restraints) on cotton textiles since the early 1960s, but these were generalized to all main developing country suppliers and all textiles and clothing items in 1974 (toughened in 1977); in addition, there have been controls on Mediterranean textiles and clothing products, anti-dumping duties on East-European garments, strong resistance to all forms of tariff liberalization, and, latterly, pressure for quotas on US fibres.

The background to this combination of policies is a substantial decline in employment in these industries, a squeeze on profits and a stagnation of output in textiles, and a deteriorating textiles and clothing trade balance. The trend in employment can be seen in Table 6. It can

be seen that major deterioration in employment has taken place in the intermediate product stages of spinning and weaving and fibres production rather than in clothing, knitting and carpets (the final stages of processing).

Table 6: Employment in the Textiles and Clothing Industries, 1970 to 1979

('000)

	Dec 1970	Dec 1971	Dec 1972	Dec 1973	Dec 1974	Dec 1975	Dec 1976	Dec 1977	June 1978	June 1979
Great Britain										
Man-made fibres	41	38	36	36	39	34	34	33	31	31
Cotton spinning, weaving	137	125	112	110	107	96	91	90	84	80
Wollen + worsted fabrics	134	113	107	107	101	88	82	82	79	76
Knitted	129	127	127	127	125	115	114	119	115	113
Carpets	44	42	43	43	42	37	36	35	32	32
Finishing	55	51	51	51	50	45	46	47	46	45
Total Textiles	633	581	558	555	546	494	480	484	464	452
Clothing	337	338	338	332	320	307	291	297	290	293
Northern Ireland										
Textiles	45	41	39	39	39	35	33	na	na	na
Clothing	23	23	22	21	20	18	16	na	na	na

Source: Textiles Statistics Bureau

One cause of this declining employment is productivity growth. Somewhat paradoxically, 'declining' textiles has registered one of the highest levels of productivity growth of any UK manufacturing industry. Generally, it is high growth industries which generate the highest productivity growth. This helps to explain the decline in employment up to 1973, which has an extremely impressive recent record of productivity growth albeit from a level well below the manufacturing average.

Table 7: GROWTH OF OUTPUT (PER EMPLOYEE PER ANNUM), 1960 TO 1978
(per cent)

	1960-1973	1969-1973	1973-1975	1975-1978
Textiles	5.3	6.6	-2.0	1.9
Clothing + footwear	3.0	5.6	3.4	3.3
All manufactures	3.6	4.3	-1.8	2.1

Source: NIESR

The process of growing capital-intensity, which has been characteristic of textiles over the last two decades, has become less obvious since 1973, although this may be a statistical quirk produced by measuring output per employee rather than per man-hour; by measuring output in terms of sales rather than capacity; and by including part-time and government subsidised employment in the total.

The most striking recent feature has been the stagnation and, in some cases, falls in real output. Again, a distinction should be made between clothing and, to a lesser extent, the final stages of processing (knitting and finishing) where output has increased or been broadly maintained, and textiles proper, where output has fallen sharply, resulting in substanital excess capacity for man-made fibres. Stagnation of output has led to falling profitability, which appears to be close to zero when allowance is made for inflation (Table 9).

Table 8: PRODUCTION INDICES OF TEXTILES AND CLOTHING, 1974 TO 1979
(Base year 1975 = 100)

	1974	1975	1976	1977	1978	1979 (Sept. qtr.)
Textiles	106	100	103	101	99	96
of which:						
Manmade fibres	111	100	110	98	103	101
Cotton	107	100	102	99	93	89
Woollen & worsted	113	100	101	105	101	96
Knitting	103	100	105	106	103	98
Carpets	103	100	100	92	93	94
Finishing	97	100	105	104	101	100
Clothing	99	100	97	103	106	109
Consumers expenditure on clothing (constant 1975 prices)	99	100	106	106	112	111

Source: Textile Statistics Bureau

Table 9: PROFITABILITY - UK INDUSTRIES, 1970 TO 1977
(per cent)

	Recorded pre-tax return on assets		Real return[a]	
	Manufacturing	Textiles & Clothing	Manufacturing	Textiles & Clothing
1970	11.6	11.1	6.6	7.2
1971	12.7	12.6	7.0	6.7
1972	15.0	15.7	8.4	5.1
1973	17.8	19.4	6.8	6.5
1974	17.0	16.1	2.7	5.0
1975	15.2	9.9	1.9	0.5
1976	18.9	14.5	4.3	-0.4
1977	17.6	13.3	5.9	2.9

Source: T.V.F. Williams, The Profitability of UK Industrial Sectors

a The 'real' return corrects for the effect of inflation on conventional book value depreciation and stock appreciation.

One explanation of this deterioration in output, employment and profitability, has been a deteriorating external trade balance. This has been given considerable prominence by those demanding protection, especially where 'low cost' developing country imports are concerned. Table 10 shows that there has been a marked overall deterioration throughout the 1970s, while until 1973 the deficit on clothing was more than balanced by the surplus on textiles.

Table 10: TRADE BALANCE, TEXTILES AND CLOTHING, 1970 TO 1979

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979 (3rdq.)
Textiles	+191.2	+ 143.0	+122.8	+149.6	+140.5	+96.2	+135.8	+164.4	-124.6	-210.1
Clothing	-6.3	-48.7	-74.5	-153.9	-172.4	-240.0	-271.7	-168.4	-250.1	-369.0
Balance	+184.9	+ 94.3	+ 48.3	-4.3	-32.0	-143.8	-135.9	-4.0	-375.4	-579.1

Source: UK Official Trade Statistics

Table 11: INFLUENCES ON UK TEXTILE AND CLOTHING EMPLOYMENT, 1970 TO 1975

MLH	industry group	Change in employment	Demand	Productivity	All external trade	imports from dev. countries
Final products						
441	Weatherproof outerwear	-3,500	+4,266	-4,452	-3.294	-1,230
442	Mens & boys outerwear	-12,900	+24,677	-22,862	-14,714	-5,127
443	Womens & girls outerwear	-3,100	+11,983	-10,895	-4,185	-2,719
444	Mens underwear, shirts, etc.	+1,800	+29,282	-12,439	-15,043	-13,475
445	Dresses, lingerie, etc.	+3,900	+47,245	-36,259	-7,086	-5,676
449	Dress industries	-2,700	+6,577	-8,412	-865	+1,348
417	Hosiery & knitted goods	-14,200	-6,472	+2,187	-9,915	-7,442
Mainly intermediate textile products						
411	Man-made fibres	-1,600	+10,445	-9,234	-2,811	+23
412	Cotton & MMF spinning	-26,300	-18,802	-18,802	-322	+3,571
413	Cotton & MMF weaving	-13,800	+15,430	-12,377	-16,853	-4,337
414	Woollen & worsted fabrics	-36,100	-22,846	-5,925	-7,329	-159
415	Jute	-1,600	-2,760	-984	+2,144	+1,983

Source: UK Government Economic Service Paper No. 18, The Newly Industrialising Countries and the Adjustment Problem

NOTE: The methodology is explained in the above-mentioned paper. The underlying assumptions need to be recalled: (i) the growth accounting relationships which give rise to the separate factors are mechanical, not behavioural (thus, any causal interrealtionship between trade, demand structure and productivity factors are ignored); (ii) changes are in value, not volume, terms (therefore, they understate the effects of low unit value imports); and (iii) the calculation is meaningful only for direct, not indirect, effects (thus, imports of clothing may affect employment in intermediate products through the demand factor).

Since then, both textiles and clothing have been in substantial deficit. There are, however, several factors which need some caution in interpretation. Until 1977, the only strong deterioration was in clothing. Much of the change was due to rising imports from developing countries, but clothing itself has not registered serious problems in terms of output or employment; output broadly kept pace with domestic expenditure (Table 8). The textiles balance, on the other hand, deteriorated very sharply in 1978 and 1979 after the imposition of quotas on 'low cost' imports. Much of the problem - for textiles - relates to competition with other developed countries and to declining competitiveness in the face of rising exchange rates.

Evidence from the period before MFA bilaterals (1970-1975) tends to confirm that the direct effect of developing countries' imports on the stricken textiles industry was relatively minor. The major impact of imports was on some clothing branches, notably shirts, but even so, in

the period under consideration, employment decline was insignificant in these areas.

Whatever the balance of the argument about causality, the MFA has proved to be central to the UK Government's policy on textiles and clothing:

(i) While the impact of import competition on employment, output and profits may have been exaggerated by lobbyists, there has been a negative effect on the industry as a whole; by depressing prices, and therefore profits, and therefore investment; and by undermining confidence.

(ii) The 'comparative advantage' argument in favour of specialization with developing countries, especially in the labour-intensive clothing field, is outweighed by the backward linkage relationship between clothing and (relatively capital-intensive) textiles. The fact that (even more capital-intensive) man-made fibre production accounts for over 70 percent of final demand (in terms of fibre use) is a backward linkage of even greater economic and political importance.

(iii) In principle, it should be possible through protection to create conditions, through increased investment, in which competitiveness can ultimately be achieved.

Each of these propositions (and the policy implications) are highly debatable, but it is perhaps most useful to look in detail at how they relate to a particular textiles branch.

5. The Knitting Industry as a Case Study of Adjustment

The reasons for choosing to focus upon the knitting industry are:

(a) It is a recognizable entity within the textiles and clothing group, in government policy, and in statistical source material.

(b) It is little studied in the empirical literature of the British textile industry. By contrast, a good deal of detailed work has been done on other sections of the textiles and clothing group.

(c) It has had substantial experience of import penetration from developing countries.

(d) It captures the essence of the policy problems faced by the textiles group of industries as a whole and that it is closely integrated with man-made fibre production both through its backward industrial linkages and through ownership. (The 'knitting revolution' was based, to a large extent, on man-made fibres.)

(e) It contains a wide technological and product mix, from relatively capital-intensive fabric making to labour-intensive sewing up, and from 'up-market' knitwear to 'mass-market' products. It thus offers a variety of alternative adjustment possibilities for individual firms.

(f) The industry is geographically concentrated, in a way that the clothing industry, per se, is not. Thus it presents particular adjustment problems for labour, albeit in an area of relatively full employment. (Nottingham, Leicester, and the Scottish border area). The industry is also a substantial employer with approximately 100,000 workers.

(g) The power structure of the industry is interesting. The industry is dominated by a few firms, mainly subsidiaries of fibre producers, but it also has a large number of independent companies. Views on the merits of trade protection vary considerably between firms, and in this there is a considerable variety of competing interests.

In short, the knitting industry offers useful insights into the adjustment mechanism in response to competition from developing countries. But, there are difficulties in such an exercise.

It is necessary to isolate the response to developing country imports from responses to other factors such as changes in technology and labour practices, variations in fashion and end-use demand, always remembering the extent to which these may also be in response to competition from overseas. Furthermore, in essence, competition from imports reflects a failure, in market terms, of the UK industry to compete. The reason may simply be a function of lower labour costs, but overseas competitors may possess other advantages. Important in this context is the strong growth in imports from other developed countries. Similarly, the success or otherwise of UK products in the protected markets of Western Europe may perhaps provide further understanding of their general competitiveness.

The study commences with an analysis of the industry in recent years. For this it is necessary to separate current phenomena from long - term trends, although the sensitivity of the industry to the volatility of short-term fluctuations is itself a cause for concern. Trade patterns are examined in some depth, concentrating on those sub-industries that have experienced a large volume of developing country imports. The second stage identifies where and how adjustment has taken place. There are difficulties in distinguishing causation. The third part of the report discusses the effects of existing policies, in particular the Multi-Fibre Arrangement (MFA), and inquires into the possibilities of an acceptable alternative or variation, assuming that some kind of restraint can be justified.

II. THE STRUCTURE OF THE KNITTING INDUSTRY IN THE UK

1. Background

A study of the UK knitting industry illustrates well the complexities of the debate about adjustment to developing countries' imports and the strong linkages between different sectors of the textiles industry. Knitting as a sub-industry grew in the first half of the 1970s, a period of high import penetration, at the expense of other sub-industries and, indeed, has given birth to a whole new sub-industry: warp knitting. This growth was partly a response to, and partly a cause of, the improvement in quality of man-made fibre yarns and developments in high-speed knitting technology. However, competition from imports in the woven sector of the industry combined with increasing cost pressures in domestic production were themselves factors in the impetus behind these developments. Indeed, protection for some woven products in the first MFA seems to have been a cause of the need to include major knitwear products in the second MFA as foreign producers switched into less-utilized quotas.

The knitting industry in the UK (accounting for about 16 percent of the combined textile and clothing industries' labour force), according to the latest statistics, was responsible for about 7 percent of the world's output of knitted products (by volume), disaggregated among selected items as follows:

Table 12: UK SHARE OF WORLD PRODUCTION (volume) - KNITTED PRODUCTS, 1976

Knitted fabrics	5.7
Socks, hose	6.2
Women's stockings	7.8
Knitted undergarments	7.0
Knitted sports shirts	2.1
Knitted sweaters	16.7
Other knitted outergarments	7.8

Source: UN, Yearbook of Industrial Statistics

In 1976, the UK exported 4.3 per cent of the world's exports of both underwear and outergarments, and 6.0 per cent of fabrics. At the same time it imported about 6 per cent of the garments in each category, and 3 per cent of the fabrics.[14/] Since 1976 the UK's share of world trade in knitted products has increased for both imports and exports: the export's share is below the production share because of a large element of domestic consumption.

These percentages make the UK one of the major knitting nations, but substantially less important than in 1970 for fabrics, or in earlier periods for garments. Nonetheless, the UK still ranks among the top six exporting nations. At the same time, it ranks tenth as an importer of fabrics, but fifth and fourth for underwear and outwear respectively.

2. Production, Sales and Consumption

The level of sales by UK manufacturers in the Hosiery and Knitwear industry (Minimum List Headings - MLH 417) has risen over the past twenty years by some 6.9 per cent per annum. Discounted by the average wholesale price increase for the industry of 5.0 per cent per annum, the level of sales rose in real terms by about 1.8 per cent per annum over this period.

Growth in the seventies, however, differed from that of the sixties. Average real growth in the 1960s was over 4 per cent per annum compared with nearly 6 per cent in value, whereas, since 1970, sales have remained at about the same level in real terms, and 11 per cent per annum in value.

Demand (measured by apparent consumption) rose by 12.0 per cent per annum from 1970 to 1978, 11.1 per cent per annum to 1975, and 13.6 per cent per annum from 1975 to 1978. When discounted by output prices for the industry, this implies 2.1 per cent real growth in the earlier period, around 3.1 per cent since 1975, and 2.7 per cent overall. As can be seen, much of this demand growth is accounted for by UK imports, a factor that is increased by the rise in UK exports. Thus, in value terms, 59 per cent of the growth in the market was met by UK suppliers and 41 per cent by importers, despite the restrictions, and in fact the share attributable to UK suppliers fell to

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14/ UN Yearbook of International Trade Statistics

Table 13: MAJOR EXPORTED FABRICS AND CLOTHING, 1970 TO 1977

	Share of world exports							
	1970	1971	1972	1973	1974	1975	1976	1977
Fabrics								
Germany, FR	25.2	24.2	22.5	23.9	21.2	21.7	24.2	24.4
Japan	16.0	21.1	21.5	19.0	19.5	18.4	15.6	14.7
Italy	9.8	8.6	9.2	8.5	10.3	13.0	12.4	13.8
Netherlands	8.6	7.2	6.9	6.9	7.3	7.1	6.8	6.6
UK	12.0	12.3	9.5	7.8	6.8	6.4	5.9	6.4
France	7.1	6.2	6.6	6.4	5.7	5.9	5.4	5.4
Underwear								
Hong Kong	14.4	16.3	16.8	15.8	14.8	17.7	19.5	na
Germany, FR	15.6	14.1	14.3	15.1	14.1	11.8	10.2	na
Italy	14.2	11.3	11.7	8.8	9.2	10.2	7.6	na
France	6.9	8.5	7.6	7.8	8.6	8.5	7.3	na
Republic of Korea	1.7	3.0	7.5	8.2	6.5	6.7	9.7	na
UK	4.7	3.8	3.8	3.5	3.8	3.9	4.3	na
Outerwear								
Italy	33.7	32.0	31.9	27.0	26.8	27.3	25.3	25.7
Hong Kong	14.4	14.8	14.4	14.7	14.1	14.5	15.9	15.5
Republic of Korea	4.8	5.2	6.5	8.4	9.2	9.4	10.7	10.0
France	7.0	7.4	8.0	7.9	7.7	8.1	6.2	5.9
Germany, F R	6.7	7.2	6.5	6.7	6.3	6.8	7.4	8.4
UK	5.3	4.8	4.2	4.3	4.3	3.7	4.3	5.5

Source: UN, Yearbook of International Trade Statistics

57 per cent in the period 1975-1978, when imports rose to 43 per cent.

It is important to understand that the knitted goods market is not homogeneous. The technologies, costs, market conditions, and impact of imports vary considerably from product to product. Basically, there are five or six main groups of commodities (depending on classification): fabrics (weft and warp knitting, but also including some specialist products such as elasticized and netted fabrics); gloves (the knitting industry that first suffered from developing country imports and has never really recovered); hosiery (socks, stockings and the new, but now dominant, tights); undergarments (shirts and other underwear and nightwear); outergarments (ranging from coats, suits, and dresses for women, to all kinds of jumpers, pullovers, jerseys, and the like).

Detailed production statistics are given in Appendix Tables A1-A8. The approximate product share (in value terms) of UK manufacturer's sales and consumption are shown in Table 14.

Table 14: PRODUCT SHARE OF MANUFACTURER'S SALES AND APPARENT CONSUMPTION, 1970 AND 1978 (per cent)

	Sales		Apparent consumption	
	1970	1978	1970	1978
Fabrics - Weft knitted	22.1	17.0	31.4	26.9
- Warp knitted	12.5	13.3		
Gloves	0.1	0.1	0.5	1.2
Hosiery - Socks	6.4	7.9	5.9	6.4
- Stockings	3.0	0.9	3.2	0.8
- Tights	12.8	8.5	13.6	8.7
Undergarments				
- Shirts	2.2	3.0	3.6	3.7
- Other	8.9	10.1	9.6	11.5
Outergarments				
- Jerseys	27.1	37.1	26.3	38.5
- Other	4.9	2.1	5.8	2.3
TOTAL	100.0	100.0	100.0	100.0

Note: Figures may not add to totals because of rounding.

Fabrics are processed into a variety of secondary products, including garments, household furnishings, linings, etc. Most weft knitted fabrics are used in garments, while warp knitted fabrics are used as follows:

Table 15: WARP KNITTED FABRICS[a] - END USES, 1978 (per cent)

	Quantity	Value[b]
Apparel		
Men's, boys' shirts, nightwear	4.2	6.9
Women's, girls' lingerie	35.3	28.3
Dresses, blouses, domestic overalls	12.7	19.5
Suits, skirts, trousers	2.3	4.3
Garment linings	7.9	7.8
Other	2.6	3.0
Total	65.0	69.8
Household furnishings, etc.		
Sheeting	9.8	5.9
Curtaining	10.0	9.8
Other	8.9	10.1
Total	28.7	25.8
Other		
Knitwear linings	4.6	2.6
Other	1.7	1.7
Total	6.3	4.3
TOTAL	100.0	100.0

a Fabrics of synthetic filament yarn

b Output

The statistics of UK knitted goods are divided between those classified to MLH 417 (hosiery and knitwear) and those included with woven fabric garments in the statistics for made-up clothing. The major categories of relevance to the knitted goods industry are MLH 443-5 (Tables A6-A8), but even here the distinction between garments of knitted or woven fabrics is not always clear. Knitted fabric used in these activities may be either produced by UK manufacturers or imported, but the significance of including these sub-categories in this analysis rests with the fact that made-up clothing is the sub-industry suffering most from import penetration. The use of knitted fabrics for apparel is thus an important part of the knitwear market, but is classified statistically to made-up clothing sub-industries rather than hosiery and knitwear. The relationship between MLH 417 (hosiery and knitwear) and the main clothing sub-industries affected (MLH 443, 444, 445) is shown in Table 16.

Table 16: OUTPUT AND SALES - KNITTED GOODS, 1975 (per cent)

	Share of output produced by establishments classified to:				Sales by UK mfrs. (value[a])
	MLH 417 (Tables A1-5)	MLH 443-5 (Knitted fabric) (Tables A6-8)	Other or nes	All MLH (Knitted)	
Fabrics	100.0	-	-	100.0	23.4
Undergarments, hosiery	77.3	5.1	17.6	100.0	26.8
Outergarments, gloves	51.1	43.6	5.3	100.0	49.9
TOTAL	69.6	23.1	7.3	100.0	100.0

a Includes some double counting of fabrics made into garments.

Garment making is an activity that has been more heavily affected by low cost imports than other textiles because of the high labour content. However, knitted garments tend to have a lower labour content, on average, because of the simpler nature of most of the garments.

These knitted garments classified to clothing are, however, also those that have the most immediate competition from other clothes. Shirts for instance, are highly mechanized in the making-up process. The decline in sales from warp-knitted shirts (MLH 444) relates more to a shift in demand away from, for example, drip-dry synthetic to woven cotton-synthetic mixes in the case of more formal shirts, and to knitted sports shirts (both classified to MLH 444 and MLH 417), than to the impact of imports per se despite the cause célèbre of shirt-making in the mid-1970s. (See Appendix Table A9). The growth in imports of knitted shirts (Appendix Table A6) relates to mainly to cotton T-shirts (reclassified in 1978 to other underwear), a market different in kind which has shown a contraction of demand for shirts of warp-knitted fabric. It would, however, be wrong to ascribe this decline in output to a growth in competition from imports.

Similarly, the decline of stretch slacks (Table A7) is offset by the rise in other knitted fabric slacks (a much larger market which has remained strong despite the challenge of denim to casual trousers in general), and the fall in sales of tailored outerwear, suits and coats relates to changes in fashion towards less formal dressing and natural fibres. There has, however, been some growth in skirt and blouse production (MLH445) (Table A8).

It is thus important to understand the underlying changes in fashions to fully appreciate the impact of imports. If imports have grown at the expense of UK sales, the reasons probably include the fact that foreign suppliers have adjusted to these shifts in demand attitudes better than the UK manufacturers.

Similar factors are also involved as far as Hosiery and Knitwear (MLH 417) is concerned. A useful insight into the relative importance of competition from imports as a factor affecting levels of output of the UK industry can be gained from a slightly more detailed analysis of developments in each product category. The volume of UK sales of weft fabrics has risen during the 1970s (Appendix Table A4). Improved staple yarns aided the recovery of weft fabrics from competition from the high-speed warp knitting machines. Warp fabric (Appendix Table A5) sales declined throughout the 1970s: it is now considered a less desirable fabric for clothing (although not for furnishings) as consumers have moved away from cheap functional wear, giving more weight to aesthetic considerations. The development of new mixed yarns, which to some extent reconcile these attributes, has also been important. Warp Knitting grew very rapidly in the 1960s, but is now faced with massive over-capacity. Prices reflect this with warp prices rising four times as fast as weft fabrics prices, from 85 per cent of weft on average, to nearly half as much again. Imports of fabric remained a fairly constant percentage of home demand until the late seventies, when exchange rate changes and differential costings resulting from oil price changes on the one hand, and USA access to domestic feedstocks (both synthetic and natural) on the other, resulted in an increased competitiveness of European and American fabrics. Cost-cutting exercises at home also encouraged the importation of fabrics on the grounds that additional savings could be made from the lower waste levels on foreign fabrics because of greater consistency of quality in both yarn and dyeing.

The UK glove industry is now very small. The volume of production (Appendix Table A3) has risen since the initial collapse in the sixties, but this has nearly all been concentrated on exports. Indeed, the price differential between UK and imported gloves (Appendix Table A49) is very high because of the very different markets being catered for (hence the 100 per cent export of UK products).

The stockings industry began to lose out seriously to tights from 1968. Tights are much cheaper to produce and more capital-intensive than stockings. Foreign producers were gaining an entrance to the stockings and tights market, but mass production and selling cost reduced this to a minimum. The capital involved made developing country competition unlikely, both because of the amount required to achieve sufficient economies of scale, and because cheap labour in this field provides little cost advantage.

Sock output has also expanded strongly in volume terms, aided by the "pop-sox" fashions. Imports have also risen, but have not significantly increased their share of the market (Appendix Table A26). Developing countries (especially the Republic of Korea) are a significant source of sock imports, but so are the European producers. A factor that has aided sock sales, given the relatively poor population growth of the UK, has been a change in consumer attitudes towards disposability, and by preference towards coloured socks. Sales have also been supported by the growing use of staple fibres, especially acrylics with wool-like appearance and feel in preference to nylon-type stretch socks.

Some major developments in shirts demand have already been discussed with respect to the decline in demand for those made of warp knitted fabric. For shirts made in the piece, however, there was a slowness of manufacturers to appreciate the rise in fashion for the sports shirts (i.e., not merely for sports wear). Knitted shirt manufacturers thus lost out both from a switch to woven shirts and from more exciting foreign styles in knitted ones. The hot summer of 1976, however, brought about a dramatic shift from synthetic warp to cotton weft knitted shirts (Appendix Table A8, 6 and 9).

Knitted underwear production (Appendix Table 2) remained fairly steady over the seventies. On the other hand, imports and the level of import-penetration rose rapidly despite import controls. A substantial portion of these imports come from non-MFA producers, mainly European, both within and South of the EEC. Portugal in particular is responsible for supplying a growing proportion of children's underwear (especially as the MFA quota system discourages developing country producers from manufacturing smaller sizes). Within underwear, there has been a major switch out of synthetics (especially warp fabric nylons), into cotton mixes (Appendix Table A9).

It seems likely that UK producers could have been caught in this change as well, since the operations are basically different and require different plant.

Production of jumpers and pullovers (Appendix Table A3) has shown a volume increase, especially in the area of up-market goods for export. Domestic sales in fact are slightly down, with imports rising since 1974. There has been a rise in the quality levels of Far East producers, and indeed, in many respects quality is above that of UK producers. Price and quality considerations are, however, interlinked, since UK manufacturers are faced with the need to lower design standards to produce within the appropriate price bands. But 'low cost' competition is not the only factor. Imports of knitwear from Europe have also risen in response to a more fashion-conscious male consumer demand. Lowering of design standards and a lack of market awareness by management are reasons for falling sales figures. Top quality Scottish and other up-market producers are obvious exceptions: their very existence is a tribute not only to their product, but also to management ability; a factor amply exemplified by the sales of such merchandise to the NIC markets in the Far East.

It should be reiterated that the market is not homogeneous, even for a single garment category, and that major changes in taste of fashion or technology have resulted in switches between products and, in the longer term, between product categories. These changes have had a profound impact on production levels and have generally been of greater significance than the growing competition from imports although, of course, some imports have been restrained by regulation in recent years.

3. Facts about Firms

The Hosiery and knitwear sub-industry (MLH 417, excluding those activities classified to garment manufacture) is composed of a large number of establishments, over 70 per cent of which have less than 100 employees. The average establishment, employment for the whole industry was about 120 in 1975. However, a few large establishments accounted for a very large proportion of sales: the five leading hosiery and knitwear firms accounted for 35 per cent of sales, and the five leading warp knitters 65 per cent of sales. This reflects the influence of the vertically integrated man-made fibre enterprises.

Appendix Tables 10 to 12 compare the situation in 1970 with that in 1975, based on industrial census data. This was a period of relative prosperity in the knitting industry. Unfortunately, the 1975 figures are probably too early to show the full effect of the MFA and fail to take account of the recent large increase in knitting imports. In the early seventies, despite the increase in imports over that period, the number of establishments rose. The major increase was in companies with less than 10 employees (Table A12). This tallies with the reported rise in small companies owned by immigrants and which mostly employ immigrant labour (including unpaid family workers). These small firms mainly undertake sub-contracting or produce relatively low quality knitwear for market stall sales (roughly 10 per cent of the total), especially cater for the growing immigrant population of the East Midlands. The percentage of sales of larger companies also rose. Middle-sized establishments became less important, being squeezed in markets served by both the large and small enterprises.

The distinction between weft and warp for the purpose of studying industrial structure is somewhat misleading, since the major warp knitting establishments and companies tend to be subsidiaries of weft or wider clothing conglomerates.[15/] Although the warp industry tends on average to be composed of larger and more capital-intensive units, it is more generalized. The top five companies in weft knitting had an average employment of 8680 in 1975 compared with 1620 in warp knitting.

The most interesting factor to emerge from the enterprise analysis is the higher profitability (in value added and wages-to-sales terms), capital investment levels, and productivity (in sales operative terms) of the smaller companies[16/]. Since 1975 the larger companies appear to have recovered.

15/ The top five weft companies are Courtaulds, Nottingham Manufacturing Company, (NMC-Mansfield Hosiery Mills), Coats Paton, Carrington Viyella and Corah who together produce 60-65 per cent per volume. Courtaulds and NMC together account for about one-third of employment. The addition of Coats Paton, Corah, and Pretty Polly brings the employment percentage to 45 per cent. Pretty Polly replacing Carrington Viyella represent several enterprises each in the enterprise analysis. Courtaulds owned four of the top six (by sales) companies in 1977-78. Dawson International is the largest Scottish Knitwear Group and is ninth in terms of sales.

16/ This may merely reflect one year's results: 1975 was a low sales year for Corah, NMC and Courtaulds.

The number and apparent commercial success of many small firms is explained by the flexibility of knitting, which adds to the advantage of small runs with a wide range of fashion possibilities. There is little advantage to be gained in terms of scale economies in many product areas so that, where large companies do exist, they are usually the result of external pressures rather than of factors internal to the industry. Analysis of the operations of some fifty companies produced no correlation between size and profitability. At the same time, the system of out-workers and sub-contracting encourages the existence of numerous small operators, a large proportion of whom are immigrants. On the other hand, many small firms are family enterprises, many of which have been established for several generations. Although there are exceptions, these family businesses are instilled with traditions that tend to make management objectives of a conservative character.

Large knitting companies stem from one of four main sources. First, the dominance of Courtaulds results from that company's 1960s policy of expanding vertically into downstream markets essentially to protect its fibre production and especially to enable it to expand into synthetics against the technological superiority of the chemical companies. Similar reasons might be found for the expansion of other major yarn spinners into fabric and garment production (Coats Paton and Carrington Viyella - the latter formerly linked with ICI), but these companies have only shown a peripheral interest in knitwear (as a result of horizontal expansion by woven garment manufacturers with whom they have become involved).

Second, the growth of other knitwear specialist groups has been in response to retailing activities, particularly the activities of Marks and Spencer, who needed large volume to production capacity to accommodate their sales outlets and who to some degree created this capacity in line with their own expansion by developing very close relationships with suppliers.

Third, these relationships in hosiery and warp fabric production technology, have played a significant role in the scale of production: tights, in particular, require very large investment in automated machinery. Warp fabric production also favours very long runs, and this is evident in plant size. Weft fabric, however, although rarely undertaken by very small

companies, can be competitively produced by companies in the medium-size range. Machines come in a variety of size, but the scale economies of weft fabric production relate more to machines than the factory. Thus, small weft knitting companies with even just one machine can achieve profitability levels in garment production equal to those of the larger groups. This has been shown by Italian producers who have overcome the fundamental problem of small size - that of marketing.

Fourth, the need for well organized marketing and for bargaining power in dealing with large retailers, has given some impetus to larger firm (but not plant) size. But this factor does not appear to be crucial; small producers have instead preferred to organize producer associations for marketing and lobbying purposes.

4. Employment

Employment in the hosiery and knitwear industry in 1978 was estimated at 121 000, of which over two-thirds were women and 60 per cent located in the East Midlands. Unlike other clothing and textile sub-industries, Hosiery and knitwear has not shown a long-run decline in employment (Appendix Table A14). Current employment levels, although showing a decline from the early seventies, are on a par with the 1950s and the 1960s (Appendix Table A16). Productivity improvements have broadly offset increased sales in their effect on the demand for labour. Within the labour force the tendency has been for manual workers to have less influence on productivity changes.

Employment activities are divided in the industry into three main categories: knitting, cutting and sewing. Knitting is a capital-intensive activity in which male employees, who are highly skilled with respect to particular machinery dominate. There are training problems in moving from one type of machine to another. There are four basic machines: circular, flat-bed, sock and tights machines. Opportunities to transfer skills outside the industry (even within textiles) are virtually nil. Cutting and sewing are both labour-intensive and predominantly utilize female workers. Those male employees, involved in these activities, are mainly concerned with cutting, especially when it is a machine operation. Skills gained in these activities do have some application to other clothing sub-industries, but within those there is an increased movement towards use of machinery.

The very advantages of knitted fabric in these market-place (its stretch and feel) prevent the automation of this process because of the problems of lining up seams: a relatively simple operation with woven fabric. While most of the labour is concentrated in these latter activities, it is within knitting that the technological advances not only have been, but also are expected to continue. Thus, innovations as envisaged within this industry are unlikely to have a major impact on employment; and the opportunities to counter labour cost disadvantages by reducing labour content are limited.

Contraction of the industry could create a body of unemployed who, although highly skilled within the knitting industry, are tantamount to unskilled in the general labour market outside that industry. Against this the East Midlands is not one of the high unemployment areas (Appendix Table 20) and policies to relocate light engineering operations into the region have met with a success not evident elsewhere in the country. Nonetheless, whether the area can accommodate the number of new unemployed that would result from a complete relaxation of import controls, ceteris paribus, is open to question. The situation is further exacerbated by the fact that the other major industry in the region, footwear, is also suffering from a lack of competitiveness with imports. There is a predominance of female workers in the hosiery and knitwear industry, and although a number of these are young single girls, the main portion of this labour force is made up of married women who are relatively immobile - being tied to their husband's job location. This would not, however, prevent a phased reduction of the female labour force. Already the reluctance of young girls to work in the noisy and often dirty environment of many knitting mills has shown itself in a decline in the number of new employment entrants and the high level of employment turnover, and it is also apparent in the small number of women who are prepared to return to the industry after pregnancy. However, employment alternatives are limited and the result has been a movement of young workers out of the region in search of more exciting and healthier prospects; an opportunity not open to married women to the same extent.

Although there are scattered pockets of employment in the industry in other regions (mainly those bordering the East Midlands), the only other major centre of activity is in Scotland around Hawick. Concentrating on relatively

up-market and specialist Scottish knitwear which has good domestic and export demand, this area has not experienced a decline in employment resulting from pressure of imports. The Scottish industry is almost exclusively male, even in the cutting and sewing operations, but the higher labour costs that this implies can be accommodated within the high prices achieved for the product. Should foreign competition (or indeed, competition from elsewhere in the UK as a result of current attempts to move up-market) begin to affect employment levels in Hawick, the problem - although less in size - could be much more severe for those involved, since the industry represents a major source of livelihood for the inhabitants and employment alternatives within the region are extremely limited.

The composition of the labour force in general has implications also for wage determination. The large female component of the labour force is a major reason for the lack of muscle of the Hosiery Union. The main Union in the East Midlands is the National Union of Hosiery and Knitwear Workers (NUHKW) with a membership of 74 000 - about two-thirds of the regional industrial workforce. In Scotland workers are represented by the General and Municipal Workers Union (GMWU). While women have shown themselves concerned with the problems of the industry, and their own pay and conditions in particular, their lack of continuity of employment represents a serious handicap, particularly to becoming union officials. Combined with the fragmented nature of wage bargaining (although within guidelines laid down at industry level, serious negotiation takes place at the plant level), this has led to little relative improvement in wage levels for the bulk of the industry's employees, whereas the well organized male knitters (especially the politically powerful flatbed knitters) have made substantial gains. The Equal Pay legislation of 1974 had little impact on female pay levels mainly because activities were not mixed between the two sexes. Having said this, it should, in fairness, be pointed out that wage levels within the knitting industry are much closer to national averages than other clothing industries. This is mainly as a consequence of the availability of alternative employment within the region, a situation not experienced in the woollen and cotton centres. Furthermore, the workforce has shown no discontent with the piece-rate system that operates (although, of course, it provides no security in periods of recession), since it enables them to introduce flexible working hours palatable to family commitments, and earnings. The industry

sees "payment by results" as a major cause of the relatively high productivity levels without which labour cost differentials compared with developing countries would be larger.

Workers are paid piece-work rates devised over a long period at plant and industry level. The problem of specifying acceptable output levels for widely differing products and designs using different thicknesses, colour mixes, and kinds of yarn with varying handling properties, on different types and ages of machines, each with varying levels of efficiency, has led to a complex system of broad industry guidelines and detailed plant rates which usually include a "fall-back rate" for temporary no-worker periods during the day. One large company has introduced time rates with guaranteed earnings and a bonus related to quality, but its position is peculiar in the sense that it is tied to supplying a large retailer with very regular work-flows. There does not seem to be a call for a similar move by other companies even though piece rates conflict with the short-runs that are common in export orders.

An additional employment factor is the large number of immigrants in the industry. Immigrant workers in the industry account for about the same percentage as the general labour force in the region: 20 per cent in Leicester, 8 per cent in Nottingham. In many cases, the employees are involved in activities owned by relatives or other immigrants. There are allegations (which are difficult to prove or disprove) that coloured immigrant pay levels are substantially below those of white workers, and that white workers combine with management to coerce immigrants. This is a source of some latent antagonism which echoes the antagonism of the unions towards developing country producers which is based, in part, on the poor levels of social welfare and employment conditions in those countries.

The high level of female employment, of immigrant and family workers, makes it difficult to assess the effect of redundancy in the industry on workers, since many do not register as unemployed. It is also difficult to determine the extent of re-employment, the period out of work, or the kind of employment eventually achieved. The extent of such problems will vary significantly with the availability of alternative employment; a function both of the level and kind of industrial activity in the area and the stage of the economic cycle.

III. COSTS AND PRICES

The competitiveness of imports from developing countries depends substantially on their labour cost advantage. However, labour costs only partly explain price differentials.

1. Labour

The labour content varies with the cutting and sewing components of the product. This is reflected in the system used for calculating piece-rates on different garments. Making-up activity is priced in "standard minutes" which vary from less than one for socks to 50 for a coat. Thus, fabric producers have the lowest ratio of labour costs to sales. Without even cutting costs, some companies producing high quality knitted fabrics on very modern machinery have labour costs as low as 8 per cent of the turnover. More usually, this figure is around 16 per cent, or higher where some garment production is also carried out. The share of wages in turnover is closer to 25 per cent for hosiery and 30 per cent and 35 per cent, respectively for underwear and outergarments, both of which have more complicated sewing requirements, and in the case of outergarments often involve materials which are difficult to manipulate because of their thickness. However, factors such as brand names, the proportional number of female workers, patterning of material, or complexity of design, all affect the level of labour costs of particular firms or sub-industries.

2. Materials

The material component naturally varies inversely with labour costs. Thus, for warp knitted fabric, materials can account for up to 70 per cent of total costs. On the other hand, the waste element in garment manufacture can be considerable, if cut and sewn from fabric add to the cost of material that actually shows itself in the garment

Table 17: MATERIAL COSTS - WASTE (per cent)

		Waste as share of materials cost
Children's wear	- shirts, blouses, skirts	10 - 12
	- dresses, sweaters, etc.	15 - 18
	- trousers, shorts	20 - 25
Ladies outergarments		
	- medium quality, plain fabric	20 - 25
	- high quality, plain fabric	25 - 30
	- medium quality, patterned fabric	25 - 30
	- high quality, patterned fabric	30 - 35

Direct knitting of the garment on the machine (as opposed to cutting from fabric) substantially reduces the wastage and, therefore, can save up to 15 per cent of the output price. Hosiery manufacture is almost totally automated. The wastage is, therefore, kept to a minimum. There is, of course, no waste in fabric production in this operation.

The use of different fibres does have a considerable impact on material cost: yarns and fabrics vary in price depending on location. Relative prices are given in Table 18.

Table 18: FABRIC PRICES , 1977 AND 1978

	1977	1978	Comparative prices (weft knitted fabric 1978 = 100)
	£/Kg	£/Kg	per cent
UK weft knitted fabric	2.7	2.7	100
UK warp knitted fabric	3.8	4.0	148
Imported fabrics			
Synthetic		4.6	170
Wool,hair		7.0	259
Cotton		6.4	237
Regenerated		4.2	156
Exported fabrics			
Synthetic		4.0	148
Wool,hair		5.4	200
Cotton		3.6	133
Regenerated		3.9	144

UK export prices for fabric are considerably below UK imported prices. Although partly explained by different fabric qualities, the implication is that the user costs of materials for making garments of knitted fabric in the UK are (or could be) below those of other major fabric producers, and indeed, the average UK domestic prices for both warp and weft are below the traded prices. Developing countries, which are predominantly importers of fabrics might, therefore, be at a relative disadvantage.

The cost of fabric is a function, in turn, of yarn costs. These yarns are predominantly synthetics; 97 per cent of warp fabrics are made from synthetic filament yarn and 66 per cent of weft fabrics (1978 figures) with another 17 per cent of synthetic staple. Natural fibres play a greater role in knitting straight from the yarn; 16 per cent wool (mainly Scottish knitwear) and 12 per cent cotton. The cost of these yarns, in turn, is a function of the fibre price. But the quality of the yarn is very important in knitting, much more so in fact than with weaving. In woven materials a yarn failure produces a flaw, with knitwear, the product falls apart. Knitters seek uniformity, lubrication, and softness in their yarns. UK spinners have tended to concentrate on producing yarn at less cost: continuous filament. Because of the low level of quality of this yarn, knitters were forced into producing patterned fabrics and garments to cover the flaws. Furthermore, this yarn is very synthetic in appearance. The switch in market demand in the mid-seventies towards plain colours and natural fibres produced a switch in consumption by UK knitters towards superior staple yarns from the Continent. In fact it is cheaper to import these yarns than to buy them in the UK: first, because they are not produced in bulk in Britain and, therefore, do not gain from scale-economies; and second, the quality levels of Continental yarns are so much higher that delays through yarn breakages, etc. are reduced to a minimum.

UK yarn prices have not been published - in fact, since the cartel agreements between man-made fibre producers in Europe ended. By careful marketing yarn merchants give the impression, to UK knitting manufacturers, of special discounts on yarn of between 20 per cent and 30 per cent of the official price. In practice, nearly all producers using Continental yarn benefit from these so-called discounts, although the exact discount level does vary with buyer strength. Similar discounts are given to their own national customers.

Natural fibre prices have risen by between two and three times during the 1970s, especially during the 1973-74 commodity price boom. Synthetic prices have fluctuated. Some fibres are actually lower in price than a few years ago and others have fluctuated plus and minus 10 per cent over some time; yet others have shown a doubling of prices — no doubt influenced by energy prices. Energy has a larger influence in garment making than, say, the difference between a cotton or synthetic shirt, and it is on energy costs rather than yarn costs that the oil price rises have had the most impact. As yet, there is no evidence so far that higher oil and petrochemical prices have significantly changed the relative costs of natural and man-made fibre-based yarns.

3. Overhead

Overheads are estimated at around 30 per cent of total costs (including indirect labour costs) by firms in the industry. This figure varies with the share of administration (excluding salaries) and, to a small extent, with variations in capital intensity (small because most companies seem to write-off their equipment over a fairly long (10 year) period). Many companies include National Insurance contributions and related staff benefits within this figure, rather than in labour costs, and these, of course, vary directly with the size of the company workforce.

An estimated breakdown of overheads is given in Table 19:

Table 19: OVERHEADS AS PERCENTAGE OF SALES - KNITTING INDUSTRY

	Per cent
Depreciation	3 - 5
Spares, Maintenance	6
Power	2
Rent, rates	1
Transport	2
Insurance, Bank charges	2 - 4
General expenses	4
	20 - 24
Non-operatives	4 - 8
National Insurance	2

In addition, there are unquantifiable overhead costs related to labour practices and safety regulations (e.g., space for working, rest rooms, meal breaks, safety equipment), but as a percentage of total sales these are not large. Interest charges are normally deducted "below the line", after profit is drawn, but as a true cost of production they are here included in overheads.

UK overheads have risen dramatically in the last decade as a percentage of production costs as fuel (energy costs have been partially offset by fuel economies), property and other charges have tended to rise faster than the rate of wage inflation and (despite their dramatic increases in 1973-74) raw material costs.

4. Profits

Profit margins vary considerably in the industry, but with a few exceptions (mainly Scottish knitters and some jersey fabric producers) they are not high. They average around 10 per cent of turnover, except for some outergarment producers whose margins are sometimes even targetted as low as 6 per cent. In recent years, profits in many companies have, moreover, been dependent on the temporary employment subsidy. Strangely, there is no correlation between profits and either capital-intensity or labour-productivity. Regression analysis on a sample of nearly 40 companies for the financial year 1978-79 produced correlation coefficients of 0.09 and 0.01, respectively. Analysis of years gave similar results. There was, perhaps, some evidence to suggest that hosiery manufacturers (particularly those that were fairly specialized) had slightly better profit performances as a group than others, but as with those, there was a considerable range.

Profitability levels are normally dependent on the maintenance of a high production level to reduce the incidence of capital depreciation and other overheads. They also, therefore, tend to be very vulnerable to changes in market conditions and are particularly affected by the unforeseen under-utilization of capacity that can result from cancellation of provisional contracts by retailers with whom they have a dependent relationship. The contractual system is also responsible for the significant impact made on profits by interest rates, particularly as at present when they are at such a high level. The system requires high stock levels, held by the manufacturers, and therefore, a high level of working capital is a factor that

becomes proportionately more important as inflation rates rise. Small family businesses without recourse to large reserves and operating on narrow margins are unlikely to be able to accommodate these financial requirements with recourse to borrowing, which, of course, further reduces profits.

5. Total Costs

In consequence of the above factors a breakdown of manufacturing costs in the UK knitting industry is given in Table 20.

Table 20: BREAKDOWN OF COSTS - KNITTING INDUSTRY (per cent)

	Costs as percentage of sales			
	Fabrics	Under-garments	Outer-garments	Hosiery
Labour	10-20	30	30-35	25-30
Materials	50-65	40-50	35-45	40-55
Overheads	20	20	20	20
Profits	10	10-15	5-10	10-15

Product costings obviously vary. A breakdown of costs for cotton briefs is as follows:

	Percentage of output price
	%
Labour direct (and administrative)	17
Materials	40
Transport	1
Overheads	32
Profits	10

Variations in the cotton input, because of different yarns and sizes, produced a 10-15 per cent variation in the garment price, but even so, this does not radically alter factor relationships. For instance, a 25 per cent increase in materials costs results in the following:

	Percentage of output price
	%
Labour direct (and administrative)	15
Materials	45
Transport	1
Overheads	30
Profits	9

Men's and Children's jumpers breakdown is as follows:

	Percentage of output price	
	Men's jumpers	Children's jumpers
	%	%
Labour direct (and administrative)	20	20
Materials	50	40
Overheads, Transport	30	30
Profits	6	10

In each of these cases, overheads included administrative staff costs. It can be seen that although labour cost is an important factor, it is not dominant even in labour-intensive garment making.

6. Price Comparisons

In broad terms, imported knitted goods products have a landed price less than UK ex-factory prices. However, there is a problem of comparability from both the point of view of design and weight of material. The design differential cannot be distinguished from the available statistics: the weight differential, however, can. For example, cotton articles from the USA are nearly, on average, twice the price of those from Hong Kong and higher than prices from Portugal. However, these articles are of very different weight (either through different yarn content or different types of article). When the average weight is taken into account, the relative values can be shown to reverse the pricing order. Similarly, Italian synthetics sweaters are cheaper than those from Hong Kong, but they are also much lighter - the difference in weight is more than compensating. Although there is some doubt whether weight differences of yarn are a significant factor in final pricing (ie., whether the consumer really identifies price with yarn content when comparing, for example, two jumpers or T-shirts that are in most other respects similar). The use of average price per kilo does not seem to overcome some of the problems of comparison between articles that even with the same description are widely dissimilar (see Appendix for price details).

Costs have risen considerably since the mid-seventies.

Hosiery and Knitwear	Index 1978
Earnings per hour (Oct. 1974 = 100)	
- Male employees	144
- Female employees	144
Raw Materials, fuel (1975 = 100)	
- Clothing and footwear industries	144
Yarns (1975 = 100)	
- Wool	154
- Cotton	144
- Man-made fibre	140
(Retail Price Index (June 1975 = 100)	144)

While clothing and footwear retail prices have risen at about the same rate as costs, output prices of UK knitwear manufacturers have risen slightly faster.

	Index (1975 = 100) 1978
Men's socks	158
Tights, panti-hose	141
Shirts	126
Other men's undergarments	150
Other women's undergarments	155
Men's pullovers, etc.	172
Women's pullovers, etc.	154
Weft knitted fabric	114

Price comparisons of UK and foreign products can be made from Table 21 below:

Table 21: COMPARISON OF UK AND FOREIGN PRICES, 1978

	UK (A)	Exports (B)	Imports (C)	$\frac{(A)}{(C)}$	$\frac{(B)}{(C)}$
Knitted fabrics (£/Kg)	3.12	4.0	4.70	0.66	0.85
Knitted gloves (£/doz.pr.)	1.98	6.65	2.63	3.03	2.85
Women's stockings (£/doz.pr.)	2.74	3.04	2.77	0.99	1.10
Women's, Children's tights (£/doz.pr.)	2.58	2.53	2.05	1.26	1.23
Other socks (£/doz.pr.)	0.40	5.28	2.76	0.14	1.91
Knitted shirts (£/doz.pr.)	19.86	25.69	16.67	1.19	1.54
Other knitted undergarments (£/)	7.53	10.57	6.32	1.19	1.67
Jerseys, etc. (£/doz.pr.)	34.86	63.14	23.50	1.48	2.69

The level of import penetration relates almost exactly to patterns in these relative prices. Perhaps of equal importance is the ratio of export to import prices. Although very different products are being considered in some instances, the difference between import and export prices is a pointer to further competition. However, care should be taken with comparisons, since within each category, widely differing products are included. This is especially true of outerwear, which covers both high-class Scottish knitwear and down-market acrylics.

International comparison of knitting industry wage costs reveals that UK wages are generally lower than other EEC countries: at 42 per cent of those in the Netherlands and even below those in Italy.[17/] Table 22 gives some indications of relative labour costs.

Table 22: INTERNATIONAL COMPARISON OF LABOUR COSTS - KNITTING INDUSTRY, 1977

	Hourly labour costs		
	National currency	EUA	Netherlands 1977 = 100
			%
Netherlands	f 15.31	4.88	100
Denmark	DK 29.83		86
Germany	DM 12.67	4.15	85
Belgium	BF176.50	3.87	79
France	F 16.90		65
Italy	Lit24.42		62
UK	£ 1.15		42
Ireland	£Ir 1.08		40

EUA - European Unit of Account

17/ Similar estimates for the knitting industry in Hong Kong had the 1977 wage level at 65 per cent of that in the UK, but the 1979 level has risen to over 80 per cent. Mediterranean developing countries also have wage levels substantially below those in the UK.

Table 23: INTERNATIONAL COMPARISON OF AVERAGE HOURLY EARNINGS - TEXTILES AND CLOTHING INDUSTRIES, 1977 (UK = 100)

	Textiles		Clothing	
	Male	Female	Male	Female
Sweden	261		301	283
Netherlands	225		221	
USA	187		186	
Austria	135		130	
Japan	130		116	
Ireland	130	81	123	83
Italy	117		108	
UK	100		100	
Israel	88		68	
Greece	6		61	
Portugal	54		55	
Malta	50	59	54	
Brazil	31		30	
Republic of Korea	23		19	
India	9		9	
Singapore	24		23	

Average landed prices of both undergarments and outergarments vary considerably with source. Reflecting wage levels S.E. Asian imports are the cheapest, but Hong Kong and Southern Europe are often on a par (See Table A47 and A52).

However, direct labour costs do not wholly explain the whole of the price differential. Labour costs are equivalent to only 30-35 per cent of manufacturing costs in outerwear, the main import-penetration sector. Technology, moreover, differs little between East and West. Indeed, in many respects Hong Kong enterprises, newly equipped with the latest technology, are more capital-intensive than some UK operations. However, productivity levels in these countries are estimated to be somewhat below those of the UK where comparable machinery is involved, possibly because of the worker skill levels, and this counteracts the advantage in these areas of cheap labour (though the UK is also well behind Europe and the US in productivity terms). The following, very rough, estimate of different productivity levels was made on the basis of discussion with UK firms:

USA (= 100)	100
UK	40
Hong Kong	30
Philippines	20

Thus, a country with the same productivity level, but with wages at 50 per cent of the UK, or a country with 50 per cent lower productivity, but with wage levels 25 per cent of the UK would only be able to reduce production costs of knitted outerwear by a total of 15-20 per cent: freight costs, losses in transit, insurance premiums and agency fees would add back another 15 per cent producing a net saving of less than 10 per cent hardly sufficient to counter other barriers to market entry.

The key to lower costs is in overheads. Some manufacturers in developing countries do not have to obey rigid working conditions regulations or pay social security taxes. Employees tend, in such enterprises, not to benefit from holiday and sick benefits, and floor-space productivity is raised by reducing the operating margins. In many instances, office workers are in the family and, therefore, are pobably unpaid except for subsistence. More importantly, overheads under these conditions are reduced by long working hours. The average working week is 55 hours in the Republic of Korea for clothing workers - thus reducing overheads by an estimated 30-40 per cent with a net impact on product cost of 12 per cent.

There may also be savings in terms of material costs: Hong Kong companies, for example, receive supplies of materials from both Japan and Europe at the same heavily discounted rates available in those countries, and, in some cases, marginal cost pricing makes materials available at even cheaper rates. Moreover, the yarn content of garments is often below that of the UK; some Hong Kong companies specialized in products made in the cheaper yarns.

Table 24 shows the possible combined effects of all these factors on garment prices from the Republic of Korea. These show a possible cif price, that is two-thirds of the UK price. The assumptions include no difference in productivity and only 10 per cent loss in transit, whereas in practice, the productivity is likely to be lower, and transit losses higher, both adding to unit output prices. While some indirect labour will be free, others will be salaried, and thus both these factors are probably undervalued Lower yarn content garments cannot necessarily be sold at the same prices, and so the advantages from poorer working conditions in cost terms (especially when related to productivity) are probably overstated at 25 per cent. Longer hours are included in the overtime reduction, but no allowance is given for two-shift days. Thus the costs of all these points appear to have been overstated to arrive at the kind of price levels commonly imputed to developing country garment makers. Moreover, the fact that not all producers are running sweatshops (or are producing on low margins) makes this type of operation likely to be the exception to the rule. The conclusion which must be drawn is that lower wage costs and labour-related overheads do not provide Far Eastern producers with an insuperable cost advantage. The key assumption made is that UK and the Republic of Korea productivity levels are the same. UK levels could and should be higher, but in practice are not.

7. Distribution Costs

Although manufacturing costs are critical to the problem of import penetration, other factors also affect the price to the consumer and the margin to the retailer. Chief among these are distribution costs - which are dependent on the method of retailing. The exfactory price varies from between 20 per cent to 60 per cent of the retail prices. The following are approximations of costs in terms of different distribution outlets:

Table 24: LANDED PRICE RELATIONSHIPS - UK - REPUBLIC OF KOREA

	UK basic costing	Republic of Korea: Labour + freight	No indirect labour + profit (20%)	Add back transit losses (10%)	Less holidays (-12% wages) More over-time (-45% overheads)	Lower yarn content	Poorer working conditions
	%	%	%	%	%	%	%
Direct labour	20	5	5	5.5	5	5	5
Indirect labour	10	10	-	-	-	-	-
Materials	40	40	40	44	44	33	33
Overheads	20	20	20	22	12	12	8
Profit	10	8	16	17.5	15	13	12
Output price	100	83	81	89	76	63	58
Transport (10%)) Insurance (1%)) Agents fees (2%))	-	11	11	12	10	8	8
LANDED PRICE	100	94	92	101	86	71	64

Type of retailer	Exfactory price/retail price
Independent	20%
Chain stores	40%
Department mail order, cash and carry	60%

The high distribution costs associated with the small independent retailers result from the additional expenses relating to the wholesalers. Chain stores are involved in direct buying but still have substantial retailing costs.[18/] Lowering of retailing costs are also achieved by mail order and cash and carry companies.

The implications of high - but very variable - retail margin is that final consumer prices are likely to reflect only a fraction of the cost differential between imported cif and exfactory prices (remembering also that imports of clothes carry a duty of 15 per cent to 20 per cent). This assumes that costs differentials are fully passed on. Thus, the sensitivity of UK to lower import prices is less likely to be reflected directly in consumer behaviour, but more in the reaction of retail chains through their profit margins. The changing structure of retailing is also an important determinant of receptivity to the advantages of low import prices with mail order firms and, to a lesser extent, chain stores anxious to increase their market share while operating on lower margins. The crucial role of the retailers is discussed in more detail in Chapter V.

8. "Unfair Competition"

The complaint is frequently made that British firms would compete a good deal more effectively in trade "fair". The complaint, essentially, is that whereas British firms are required to internalize all costs, this is not true for some competitors, usually developing countries. More important at present (particularly since the establishment of the MFA) is the alleged existence of "unfair competition" from developed countries: USA and Japan - in the form of subsidized material prices and both maintaining higher tariffs than the UK, Southern European countries, about to

18/ Marks and Spencer the major UK Knitwear retail outlet have much cheaper than the average selling costs: low advertising and very high sales per sq. ft. of shop floor space and low stocks.

join the EEC and operating subsidies on exports and controls on imports; Eastern European "dumping"; and even within the EEC, the Italian outworker system which circumvents social security costs; and alleged use by the Federal Republic of Germany of outward-processed goods for export to EEC partner States. Whatever the justification for each of these complaints is, it is extremely doubtful if they explain in any way the problem of lack of competitiveness of the UK knitting industry.

IV. TECHNOLOGY AND INVESTMENT

Technological developments are not only directed at widening or maintaining the "technological gap" with developing countries. They also deeply affect other areas of the textiles and clothing industry. Indeed, advances in knitting technology during the early sixties helped to create some remarkable growth in knitting production at the expense of woven products. Despite problems of over-capacity in warp knitting in the late sixties, further improvements in knitting speeds and better quality yarns continued to have beneficial effects throughout the early seventies, when there were rapidly increasing imports. The differences between knitting and weaving technologies are, in fact, a major factor in the industry's defence against imports because of the lower labour content in knitting (i.e., the input cost aspect) and of the greater flexibility of design changes during production (i.e., the market aspect).

The technological changes that have taken place in the knitting industry are part of a continuing process, which renders any simplistic and static picture of comparative advantage of limited use.[19/] The knitting revolution has itself by pressures on the textiles industry to transform man-made fibres in a more efficient, labour-saving manner than the traditional Lancashire weavers. But, the making-up, or sewing of knitted goods remains, in essence, a highly labour-intensive business in which developed countries are at an inevitable disadvantage. The prospects of eliminating this stage of production seem remote. But there is the possibility of increasing the speed and efficiency of weaving.

The extent to which advances in technical knowledge can be converted into changes in comparative advantage is a function, first, of the speed with which the innovators can incorporate new practices in the capital stock through new investment; and secondly, how quickly the demonstration effect in new technique can be accentuated. The strive after new changes and the endeavour to cope with innovations will be a matter of desire supported by capacity to imitate.

19/ See Appendix B for details pertaining to recent technological developments.

Although the major developments in knitting machine improvement took place in the early seventies, their effects are still being felt. UK manufacturers tend to look to a 10-year pay-back on machinery, and with the poor investment climate in the UK in recent years, they have tended to postpone rather than accelerate the speed of their capital replacement. The impact of rising imports from both low cost and higher technology countries has not been to encourage a more rapid switch in factor proportions to realize areas of UK comparative advantage, but instead has been to increase the feeling of malaise and to renew demands for protection. Recently, there have been some signs of a change of direction, but two more practical problems have arisen.

Inflation in the mid-seventies in the UK dramatically increased working capital requirements. Increased material and labour costs at one end, and depressed real prices (from both low cost competition and a reduction in consumer spending on clothing) at the other, have squeezed what were already poor profit margins. Many smaller companies now find themselves in the position of not being able to raise the finance for new machinery, the costs of which have also been rising. Accounting practices based on historic cost depreciation have also led companies to underestimate the inflation effect on reducing their true profitability, and to make inadequate provision for replacement. Depreciation provisions tend still to be based on the idea of current consumption of a capital item rather than the building-up of a reserve for replacement. As such, they are inadequate at a time of high inflation - an inadequacy exacerbated by the assumed 10-year machine life-time. Thus, inability to reinvest has reinforced unwillingness due to unacceptable risk and return factors.

At the same time, the advantages of reinvestment have also diminished. Countries such as Hong Kong have developed their knitting industries to a great extent during the last fifteen or so years. The industry in most developing countries in fact is of very recent origin. Technology levels, in consequence, are at least equal if not higher than in the UK, as new, fast, advanced knitting technology has been used. It costs only about £0.5 million for a major ultra-modern fully-integrated knitting factory.

The old adage about maintenance problems in developing countries is also no longer valid. Modern machinery needs little maintenance: one person can look after a whole factory, and most machinery manufacturers will oblige with free training as part of the sales deal. Thus, the "technological gap" has disappeared or even been reversed in this industry as UK manufacturers struggle on with more antiquated machinery. Even companies with an active replacement programme are likely to phase it within the lifetime of existing machinery, i.e., over ten years. Thus, from a technological point of view the average level in the UK is probably below that of the Far-East, which provides the latter with a distinct advantage over and above that of low labour costs during making-up. Admittedly, as has already been mentioned, productivity levels are lower in these countries at the machine stage but productivity levels appear to be rising faster in countries which have recently entered the industry. The Italian industry, for example, is very well equipped even in the smallest units: most of the latest machinery is employed in small farm sheds. The low level of UK capital investment has, therefore, nullified any advantage which the industry could have derived from access to new technology.

Competitiveness is not solely a matter of productivity growth in lowering cost per unit, but also of design and product innovation. The close relationship between retailers and manufacturers is believed to dull design capability, because price bands specified by retailers reduce the design options available within given cost structure. Nonetheless, it remains true that the bulk of the market requires a fairly low fashion element. This is true because fashion garments are demanded by a small proportion of consumers and, perhaps more important, because large areas of industry have only a limited scope for fashion garments.

Quality is a measure of performance against price and design specification. Hong Kong producers currently seem to have a high performance level against fairly low specifications. Quality levels are high and, indeed, are sometimes cited as being above those of the UK in some areas: this is even more evident in Italian knitwear.

While technological development here is related to knitwear and is one which eventually will be emulated within competing countries, the capacity to develop such ideas is in itself a resource. And other industries, including those considered more appropriate to be pursued by a developed country, are linked to the future of the knitting industry. Recent examples include the knitting of carbon fibres and the internal strengthening with knitted steels of the nose cone of the aircraft, Concorde. One of the major arguments against concentrating production on a limited number of "up-market" high fashion items, is that it deprives the industry of the base from which new technical innovations can be developed.

VII. THE RETAIL SECTOR

It might seem that the problem of low cost imports is a matter for manufacturing alone. There are, however, three very good reasons for considering the activities of retailers of knitted goods and how they interact with those of the manufacturers.

First, the retailers are responsible for the level of imports. The advantages and disadvantages of buying foreign, as opposed to UK merchandise, which have led to the development of different kinds of relationships with, and attitudes among retailers and manufacturers, provide an important insight into the reasons for the level of import penetration and the problem that has to be overcome by UK manufacturers to regain the support of retailers.

Second, there are several factors relating to the retail structure and its operation that distort the functioning of the manufacturing sector, and to some extent reduce its ability to respond to competition.

Third, because of the interrelationship between the two sectors, any solution to the problems of manufacturers will have a major impact on retailers (and, therefore, also on consumers).

1. Retail Structure

The so-called "retail revolution" of the sixties transformed the structure of UK retailing. The rapid increase in the market place of multiple variety chain stores, with their powerful central buying and distribution organizations, has changed not only the size of the manufacturing orders, but the relative power of buyers and their suppliers. These organizations, more often than not, buy direct from the manufacturer, wherever he may be An important aspect of this development was the diversification of super-market chains into the bulk clothing market. The role of the independent wholesaler and/or importer, who, in many instances, used to have his own brand names has diminished considerably but even those that remain must cater to the requirements both in terms of cost and product of a customer in direct competition with the centralized operators. In a similar way,

the more progressive among the independent retailers have found it necessary to combine their buying activities within a form of buyers' co-operation in order to counter the market power of their larger rivals, and to gain the advantage of direct buying.

The knitwear market is dominated by Marks and Spencer which is estimated to account for 35 per cent of the UK market, but the extent of rationalization of the UK clothing industry is best illustrated by the fact that another 26 retailers account for an additional 55 per cent. This concentration has two main effects on the level of imports. First, it greatly eases the access of foreign manufacturers. Unlike France, for instance, where the retail sector is extremely fragmented, manufacturer's agents have to approach a very small number of buyers to cover a large percentage of the market. Other countries with large central buying retail organizations, e.g., the Netherlands, also suffer from a high level of import penetration. The ultimate example is Sweden where the Swedish Co-op., engaged in importing, was stated as one factor behind the démise of the local clothing industry.

Second, even when large retailers adopt a policy to "Buy British", the method of merchandizing they have chosen to pursue (which is to specify the products they will sell and then contract certain manufacturers to make them), has meant that the bulk of the large-scale capacity has already been allocated to specific manufacturers. This leaves small independent manufacturers a very vulnerable, marginal, role. The manufacturers' association and the Knitting Industries Federation have, in response, become involved in organizing marketing groups of small to medium-sized manufacturers along the lines so successfully pursued in Italy where the average establishment employment level is less than nine, but which is a major competitor for bulk orders throughout Europe, especially in Britain. Despite several instances of UK manufacturers failing to act together in the area of exports (partly through fear of loss of independence), the Federation hopes that such a scheme will counter the reliance of, for instance, British Home Stores and Littlewoods (the next two largest retail groups) on imported goods, especially since it relates well with their style of "price point" merchandizing. This latter point needs to be developed in more detail.

2. Buying Policies

It is important to understand the distinction between the two different approaches to merchandizing. In general, the "price point" retailers follow the markets, whereas those like Marks and Spencer lead and, to some extent, create it. With Marks and Spencer type of contract system, the retailer specifies the products he thinks will fit with the consumer image he wishes to create, contracts manufacturers to produce it, and then prices it as market leader. This system requires close co-ordination of design and quality with producers, which is usually built up by long association over a period of years.

The "price point" systems, in contrast, consists of the retailer identifying the kinds of products that can be sold at certain price levels within the broad market segment represented by the retailer. Based on this assessment of its place in the market, the company instructs its merchandizers to buy to these price points, i.e., working on a certain average margin. The buyers search amongst potential suppliers for merchandise within those specifications (which include a balance of retail price, design and quality). A range of products is built up with a range of price points. Imports are bought in, when they represent an available supply to fit the price points.

The dichotomy is not quite so rigid, though in the sense that "price point" retailers also have long relationships with local manufacturers. The main driving force behind this is security of supply, and for this reason despite manufacturer criticisms, large buyers prefer a balanced UK/foreign supply. The impact of import controls and talk of strengthening them has obliged such retailers even more to turn to local manufacturers. Supermarket chains, currently even more heavily dependent on imported merchandize, are finding it necessary to follow suit.

3. The Dominance of the Retailer

Those UK manufacturers who cannot arrange long-term contracts with retailers, bear all the marginal variations in demand; and in consequence, sometimes suffer large fluctuations in their fortunes- a situation unlikely to favour new investment. Under such conditions they are also unlikely to

favour a more dynamic management approach to exports and design. It also effectively reduces opportunities for manufacturers to develop countervailing power to the strength of the retailers (although the existence of the MFA itself goes a long way to correct this). The weakness of the manufacturers is reflected in the terms of most contracts with retailers.[20/] One response to the difficult contract terms is to over-commit capacity, which then leads to delivery problems and damages reputations, especially in export markets. Another response is to run high inventory levels. The effects of this are measurable in the shift of the burden of stockholding. This has shown itself in the growth of stocks as a percentage of sales over the last twenty years, and which has increased rapidly, particularly in the last few years.

Table 25: STOCKS AS A PERCENTAGE OF SALES, 1958 TO 1977

	1958	1963	1968	1970	1972	1975
Goods on hand for sale	12.7	14.6	15.6	15.9	16.1	17.6
Total stocks	19.5	21.8	22.6	21.5	22.6	24.6

Excess stocking increases cash flow problems, and adds to costs through interest rates (assuming that finance is available). Until recently, manufacturers faced financing problems because of a reluctance of commercial banks to finance against stocks or contracts. NEDO has made moves to help rectify this problem.

The retailer is usually also able to cancel his order at any time, without compensation, and further, is able to reduce his commitments by returning merchandise of "insufficient quality" (an open-ended clause used by even the most reputable retailers when it suits them). Thus, manufacturers are operating in a highly unpredictable and unstable market.

20/ Manufacturers must show their designs to retailers six months before the season. Contracts which are then struck, rarely include any advance payment, and include a schedule of part delivery or "call off". The speed of "call off" can be varied by the retailer after the season has begun, depending on his rate of sales.

Problems also exist under the contract system where there are close long term links between producers and retailers. These are beneficial to the former while the retailer is doing well, but are limiting when diversification is required. Export orders tend to be in batches, whereas contracted production is organized on a flow system for bulk supplies. Independent design capability has been dulled by the dictates of retailers, or by the standard requirements to produce down to a price rather than up to a quality. Order, in the domestic market, on the other hand, may be in competition with the main customer and, therefore, have an adverse effect on the manufacturer/retailer relationship. Furthermore, on the occasion of the main client's fortunes recovering, the manufacturer has little alternative but to drop its smaller-order customers if it has become over-committed in the interim. Thus, while the advantages of a link with a major retailer are several (including help with investment both by financing and offering a relatively secure environment), it is at a certain cost of independence and can involve the manufacturer in sharing the retailer's misfortunes (over which, of course, the manufacturer has no control).

4. Brand Names

A further cause and effect of the growth of the power of retailers, relative to manufacturers, has been the decline in the use of manufacturer's branch names. Large chains, particularly the newer supermarket chains, have developed their own house labels. This has the two-fold advantage (to them) of securing consumer loyalty to their shops rather than to a product which can be bought in a variety of places, and it also raises margins, since the retailer can negotiate lower prices on unbranded merchandise. The manufacturer gains in so far as he wins bulk orders. He loses, on the other hand, both through reduced margins and through the absence of branch loyalty or even consumer awareness of his identity, which would otherwise have prevented his replacement, as a source of supply, by foreign producers.

Even large clothing companies acquiesced in the "demise of manufacturers" brand names in the late sixties and early seventies.[21/]

The problem of "own brands" is the need to hold stocks, since a prerequisite of such a market is availability of supply, and this adds to costs. On the other hand, brand loyalty in recession is a valuable asset, as is the ability to even out outwork-flows. Certainly, the advantages seem to outweigh the disadvantages, and there is a movement among many manufacturers towards the recovery of lost names (especially in hosiery where substantial promotional expenditure is also occurring). Had UK manufacturers retained their brand name popularity, the problems of import-competition may have been less serious. It could have resulted in the control of imports by manufacturers rather than retailers, as in Germany where manufacturers rather than retailers sub-contract orders to developing countries.

5. Long-Term Retailer/Manufacturer Contracts

Imports play an important role in serving the interests of expanding sectors of the retail business (such as the mail order chains, supermarkets and some chain stores). Many UK manufacturers have spasmodic and unsatisfactory relationships with retailers. But, nonetheless, there are important advantages to UK manufacturers and retailers from long term, successful, collaboration.

21/ An exception is Pretty Polly, the hosiery company. This company is owned by a group whose other interests lie outside the clothing industry, Thomas Tilling. Although the management is fairly autonomous, this may well have helped to instill an air of independence and self-assurance and, through the provision of finance, to have enabled it to pursue a course independent of short-term financial problems. Besides maintaining its own prestige brand names, Pretty Polly also produces for chain stores under an amended kind of house label arrangement in which the manufacturer retains control and ownership of the label rather than using the retailer's. This system combines the advantages of loyalty to the house label to the retailer, and to the brand name to the manufacturer. Pretty Polly was able to resist foreign competition in the stockings' market, especially competition from Italy and Austria which threatened to overwhelm the UK industry in the late sixties (in the same way that the glove market was lost to Hong Kong a few years earlier).

The advantages to UK retailers of using British, or at least European, suppliers include:

- delays, inherent in overseas supplies, are reduced to a minimum;
- uncertainties surrounding the date of arrival of the goods are reduced;
- lack of control over product quality is reduced;
- advance payment, adding to working capital requirements, is not required (as it is on the letters of credit);
- the inability of many overseas suppliers to adjust quickly to fashion changes (which after all is one of the advantages of knitting over weaving) is reduced (in some cases, notably in Hong Kong, this adaptability is equal to contracted British suppliers);
- losses in transit, which sometimes reach 25 per cent, are reduced (such losses must be taken into account in coatings and they add to stock control problems); and
- it reduces the need to achieve high profit margins to justify all this loss of control and the additional overhead and other costs created by long distances, different cultures, etc.

These are substantial advantages, but in recent years they have not been adequate to prevent a drift towards imports based partly on cost factors and, in some instances, on quality considerations too.22/

22/ In the event, the best and most successful of the UK knitwear manufacturers are those linked with M+S. High quality from manufacturers and a close relationship with M+S which eases products and delivery difficulties which have been sufficient to overcome other disadvantages. It should be noted, however, that this success rests more with their long established relationship with M+S than with anything intrinsic to their own operations. Furthermore, they tend to include the largest and most capital-intensive operations in the industry, and that similar solutions do not exist for the bulk of establishments facing "low cost" competition. These companies also found themselves struggling in the mid-seventies,when consumer demand cut back M+S sales and inflation considerably increased the cost of working capital. The nature of the relationship can be understood from the fact that M+S determined to eliminate its stocks in order to reduce working capital requirements, and did so by cutting out completely one month's production through delayed call off, a high level of returns on "quality" grounds, and cancellation of orders: all weapons at the disposal of the retailer in a dominant relationship with contractors. The structure of retailing goes a long way to explain the origin of manufacturer's demands for import controls. For many manufacturers there is the attraction not only of protecting the British market from encroachment, but of strengthening their negotiating position with British retailers with whom they have traditionally been at considerable disadvantage. Some manufacturers FOOTNOTE CONTINUED ON NEXT PAGE (bottom).

The nature of these contracts explains, to some extent, the resurgence of manufacturer's demands for protection from imports, one factor being the need for manufacturers to strengthen their negotiating position with retailers.

FOOTNOTE FROM PREVIOUS PAGE CONTINUED

have flourished through branching, quality and cost control and through sensitivity to fashion. Others, even within short-term contracts, have succeeded in conducting profitable businesses, maximizing the opportunities from piece-rate, seasonal work, and sub-contracting. Others again, have had a secure long term relationship with a retailer in which the advantages of control to the retailer have, so far, outweighed the advantages of imports. Inevitably, it is the least inefficient and adaptive firms which have been most strident in their demands but there has been a growing loss of confidence amongst the majority. Another source of pressure for protection, surprisingly, has come from the retail sector itself. Marks and Spencer's "Buy British" policy was increasingly becoming a liability in the face of growing competition from other chains, mail order firms and supermarkets, all of whom make freer use of imports. A significant influence on policy was the threat of M+S to switch to imports if domestic producers were not protected from competition.

VI. TRADE PATTERNS

1. Trade in Knitwear

While the growth in imports of knitwear over the seventies was below that other types of clothing (30 per cent per annum in value terms), it was, nevertheless, high at 25 per cent per annum. In all sub-sectors, import penetration has increased over time, but the rate of deterioration was greater at the beginning than at the end of the decade, and import controls may have played a part in this change (see Tables A35 - A37). As can be seen from Table 26, there is a great deal of variation in the degree of import penetration and trade imbalance between sub-sectors. It is in the field of knitted outerwear, and above all gloves, that import penetration is high. But overall, the sector still has only a small trade deficit in relation to domestic activity.

Table 26: VOLUME OF IMPORT PENETRATION - KNITWEAR AND HOSIERY, 1978 (per cent)

	Imports/UK demand	Imports/UK demand + exports	Trade balance/ UK demand + exports
Knitted fabrics	7.3	6.4	6.1
Gloves	99.0	96.0	-93.0
Full-length stockings	6.2	5.7	1.2
Womens, children's + infants tights	20.9	18.9	-9.1
Other socks + stockings	8.3	7.1	7.7
Knitted shirts	39.1	35.5	-26.2
Other underwear	40.4	35.4	-23.1
Jerseys, pullovers, etc.	36.7	33.3	-24.1
All products by value	30.1	24.0	-(3.6)

2. Pattern of Supply

Hosiery and knitwear product groups have a high level of imports (Appendix A21-A39 illustrate various alternative measures of import penetration) and show that the role of the NICs, especially Hong Kong, is of major importance.

Table 27: IMPORTS FROM NICs, BY PRODUCT GROUP, 1978 (per cent)

	Weight	Hong Kong		Republic of Korea		Taiwan		Total	
		Value	Volume	Value	Volume	Value	Vol.	Value	Volume
Gloves	0.4	76.6	82.8	2.5	1.5	3.0	1.6	82.1	85.1
Stockings	8.2	6.0	5.1	22.7	32.6	10.6	13.2	39.3	50.9
Undergarments	19.8	18.4	19.5	1.1	1.2	1.4	1.7	20.9	22.4
Outergarments	71.6	25.4	25.2	10.1	14.4	6.9	11.1	42.4	50.7
Articles	0.4	20.7	22.6	10.1	14.4	6.9	11.1	(20.7)	(22.6)
TOTAL	100.0	22.7	22.2	9.3	12.8	6.1	8.8	38.1	43.8

Hong Kong, the Republic of Korea and Taiwan account for considerably more imports than the entire EEC. The addition of a few more countries highlights the skewed nature of the distribution of imports, with seven countries accounting for 66.5 per cent by value and 69.2 per cent by volume.

Table 28: IMPORTS BY PRODUCT GROUP AND ORIGIN, 1978 (per cent)

	Republic of Ireland		Italy		Portugal		Austria		Total + NICs		Total + NICs + Other EEC	
	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.	Val.	Vol.
Gloves (wt 0.4)	-	-	-	-	-	-	-	-	82.1	85.9	85.4	87.9
Stockings (wt 8.2)	9.6	8.5	6.5	7.3	5.4	6.2	11.2	6.2	72.0	79.1	79.8	83.3
U'gmts (wt 19.8)	12.3	15.1	4.0	4.9	14.5	15.9	6.1	3.1	57.8	61.4	66.4	66.3
O'gmts (wt 71.6)	5.5	4.2	16.8	14.2	3.2	3.2	0.1	-	68.0	72.3	75.0	76.3
Articles (wt 0.4)	-	-	-	-	-	-	-	-	20.7	22.6	42.6	43.7
TOTAL	7.2	6.7	13.4	11.7	5.6	5.9	2.2	1.1	66.5	69.2	74.7	73.9

As can be seen, a further small number of countries accounted for most of the remaining imports in 1978.

Table 29: IMPORTS OF KNITTED FABRICS, BY COUNTRY OF ORIGIN, 1978
(per cent)

	Value	Volume
Germany, FR	16.6	14.6
Irish Republic	10.6	12.5
Italy	10.4	8.5
France	6.4	3.6
Netherlands	4.6	3.1
USA	11.3	11.1
Spain	9.4	9.7
Switzerland	5.6	5.5
Austria	5.2	3.8
Total	79.9	72.4
+ Other EEC	85.7	78.4

Two factors should be noted. First, in the major clothing categories (excluding gloves and articles), the share of the EEC has grown, and that of Hong Kong, the Republic of Korea and Taiwan has fallen consistently during the 1970s (with the exception of the Republic of Korea for stockings). This is probably due to the trade-diverting effects of the MFA, but may also owe something to the effects of rising costs in these three countries and the spread of their operations into other low cost countries, none of which are as yet significant on their own. As mentioned above, this is not the experience of fabrics.

Second, the inclusion of the Southern European countries (Portugal, Spain and Greece) within the EEC in the 1980s will substantially increase the low cost competition which the UK industry already faces and over which it has no control. Furthermore, not only will this exacerbate the problems of controlling import penetration into the EEC, but additionally will increase the problems related to increasing the share of the UK exports in the total EEC market.

3. UK Exports

Within the European context, the UK represents a low wage producer. Its ability to compete successfully in the European market, therefore, provides a significant clue as to whether the high level of imports in the UK is merely a function of price or of a variety of factors. However, unlike another relatively low-wage cost exporter, Italy, the UK's export performance has been below that which the size of the industry would lead one to expect. The NEDO Sector Working Party strategy for the industry has been to take advantage of low wages and protection of the EEC market to raise the level of UK exports to the EEC. The major problem is that the products manufactured in the UK have proven largely inadequate in design. Changing market conditions in the UK: the influence of low cost imports of basic down-market knitwear; the increasing fashion-consciousness of the population; and the trend towards more casual wear both at home and at work have considerably squeezed the classic market. Nonetheless, the obstacles to exporting, the size of the orders, the level of sophistication required in design and manufacture, plus the limited scope for a mass up-market move by the UK industry must question the policy of the knitting industry seeking salvation in exports.

4. Recent Trade Developments

Despite import controls, import penetration increased dramatically in 1979 for two reasons. The strenghtening of sterling early in the year increased the cost advantages not only of developing countries but of other exporters. Large quantities of fabrics were bought from Germany by clothing manufacturers. Although there were also quality grounds, the change in exchange rates substantially altered the economics of such action. Although the impact is limited to some extent by the import restraints of the MFA, the rise of sterling also showed itself in a drop in most Far-Eastern prices (cif) over both 1978 and 1979, despite rapidly increasing wage and shipping costs. Large quantities of US merchandise also found its way onto the UK markets in the first half of the year.[23/]

23/ Despite the improved exchange rate for the US dollar, the lags in the ordering system are such that this is far more likely to relate to the differential pricing system of US producers which effectively halved the material cost for synthetic clothing in much the same way as access to local cotton makes it difficult to compete with the US in denim.

The upward movement of the pound had two other effects. It reduced the tourist trade to a shadow of its former self, which hit the "up-market" producers at home, and it increased the prices for UK exporters, i.e., those same up-market products abroad. This, combined with the increased cheapness of foreign high-class merchandise, meant that, for the first time, the upper end of the market also felt the impact of foreign competition (but not from developing countries). It might have been expected that "upmarket" production would be price inelastic, but this does not appear to have borne out by sales figures.

Thus, with the current controls under the MFA to a great extent holding the impact of developing countries imports in check, there has been a diversion of trade to other sources, some with relatively low wage costs, e.g., Ireland, Italy, but also to high wage countries which compete with UK products on quality and other non-price factors. Even if production were the answer to the industry's problems, recent evidence suggests that the discriminatory form of protection which operates under the MFA, has changed the nature of the problem but not solved it.

5. Factors Determining UK Competitiveness

The early chapters of this study have attempted to show that cost differences are the result of a more complex interplay of factors than a straight-forward lower level of wages in developing countries. Other costs are also lower, notably overheads and materials, although there are some costs which have no UK equivalent (shipping freight, etc.). Labour costs, although a determinant of the pattern of developing country imports, have become increasingly less important as wage levels in the main developing country exporters rise, and as their technology levels are raised. Developing countries overheads are lower and materials are cheaper because in most fabrics less yarn is used.

Cost differences, however, would be insufficient to offset control advantages of UK production on their own, if it were not for the large differences in factory productivity in labour, machinery and use of premises. These accentuate the overhead discrepancy in the cost calculations. Labour productivity on an hour-for-hour basis is lower in developing countries, where machinery is concerned, but is similar or higher where more manual

sewing is involved. However, output per worker-space in developing countries is substantially increased by long working hours, shift working and fewer time benefits (breaks, holidays, etc.). Investment levels are also very low, so that frequently NIC producers are technologically more advanced. Developing country "floorspace productivity" also tends to be higher because there is less non-productive activity and there are fewer regulations restricting the space requirements of machinery, equipment and workers.

UK design and quality levels are lower than they should be to effectively compete with imports. Quality levels (overseas) are continually and rapidly being raised and are accompanied by the full exploitation of the design flexibility of knitting processes (samples are produced within hours in both Hong Kong and Italy compared with weeks in the UK). The retail structure is partly to blame for the fact that most UK manufacturers show a low sense of design importance, stemming, in part, from the family nature of many of the businesses and the comparative newness of the phenomenon of aggressive foreign competition (including that from Europe).

New foreign competiton is important because it appears that the UK industry (there are exceptions, of course) seems in several respects to have failed to keep pace with product innovation: both those made possible by developments in inputs (particularly yarns); and those resulting from changes in fashion. This is a major reason for the limited success in exporting, a factor that was of little importance when the home market absorbed all their capacity. It also explains in part the failure to compete in domestic markets with developed rather than developing country products. The relationships with low investment levels is important here, since there is a need to keep in the forefront of machine technology to take advantage of new developments in fibres, yarns and fabrics.

To summarize: the apparent decline in the competitiveness of the British knitwear industry, or most of it, is only partially explained by the UK's comparative disadvantage, on a global basis, in labour-intensive production activities. Indeed, a paradoxical situation has arisen in which competitors in newly industrializing/developing countries are displaying competitive advantages relative to the UK in precisely those areas (design, technology and work organization) in which a developing country might be expected to do well.

VII. THE EFFECTS OF IMPORT COMPETITION

One crucial question which emerges from the analysis is the extent to which a relatively open trading system has accelerated or slowed the decline in competitiveness of the industry. In other words, is rising import penetration a cause or effect (or both) of declining competitiveness? This question has important policy implications, since it holds the key to explaining whether protection of the kind now being preferred under the MFA is likely to improve the industry's performance. It is not easy to answer this question, since cause and effect are difficult to dissemble. There are also many factors influencing competitiveness, some of which - like exchange rate movements - have an important effect, but not one of any differential importance for this particular industry.

Moreover, import competition is merely one of several interacting factors stimulating change. The technological developments discussed above, in relation to both knitting machinery and yarns, are a response to a series of complicated interreactions between different textiles and clothing sectors. They are, to a great extent, the results of competition within the knitting machinery, fibre, and yarn sub-industries themselves. Thus, against a background of increasing imports, knitted products succeeded in increasing their share of the clothing and fabric markets by displacing wovens, only to find, at a later stage, the process reversed. Meanwhile, fibre producers attempted to cut out spinners and weavers by developing non-wovens to internalize the value added gained between fibre and garment production.

The influence of imports needs to be seen against a complex pattern of specialization which is far from static. It has often been assumed, for example, that knitwear sub-sectors will simply follow glove manufacturing, one-by-one, to extinction. The glove market was lost almost in its entirety in the 1960s to Hong Kong and the glove industry allowed to disappear on the basis of arguments of comparative advantage and the international division of labour (although there is still a very limited UK production of high quality high priced gloves - almost all for export). It was believed that the women's stockings market would follow, but this did not happen. A major turn-around in techniques was achieved by the manufacturers through changes in technology and marketing techniques that were also important in maintaining

the competitiveness of tights. The idea that a whole sector will be wiped out product-by-product defies the experience of a complex world in which there are successful and unsuccessful companies of every size and in every sub-sector producing garments and fabrics by a range of technologies and at different costs.

The effects of import-competition can broadly be grouped into two classes. First, there are the negative attitudes towards investment and improved practices generated by uncertainty. This uncertainty has physical as well as psychological manifestations. The tendency of retailers to look on UK supply as the marginal source creates a more volatile market in the UK, and by upsetting work flows and production planning, reduces profit levels and hence the levels of new investment, thus directly limiting competitiveness. But once again the difficulties of determining causation are present: macro-economic conditions in general have also contributed to a poor investment climate.

At the same time, with the creation of an atmosphere of uncertainty, however, competition from abroad has also engendered in some businessmen an attitude, not simply of the protectionist kind, but of a more positive nature - stimulating a search for new products, marketing techniques and cost-cutting practices.

In order to assess the relative importance of these two influences one can look at several indicators.

1. Production

Before the 1970s, UK sales expanded on the basis of technological developments in both warp and weft production, which increased the competitiveness of knitted as against woven fabrics. Low cost countries had then developed little in the way of knitwear capacity (a slightly more complicated process than the making-up from woven cloth) and pre-Kennedy Round tariff barriers existed against all developed country competitors, except for a small number of EFTA countries.

During the early 1970s, UK production of most knitted products rose, although not as fast as imports. However, while imports took a larger market share, there was no actual fall in UK manufacturers' sales. After the slump of 1975 the recovery of consumer spending also brought growth in both UK and imported sales, but, no doubt as a result of the MFA, imports grew at a slower pace and import-penetration was slightly reduced. However, the low cost countries were quickly replaced by European and other competitors outside the control of the MFA, and aided by favourable exchange rates, so that levels of import-penetration rose rapidly again in the late 1970s.

Some sub-sectors experienced particularly strong competition from abroad. Gloves manufacturers responded by closing down most establishments in the early 1960s but the companies that remained have developed an exclusive niche in export markets. Stockings and tights manufacturers have used excess capacity to sell at or below cost in mass markets supplemented by higher margins on 'up-market' stockings and are protected by strong identity with manufacturers' brand names. Sock firms developed new yarns and fashions with the protection afforded by the fact that the predominant retailer had developed close relationships with UK producers. Underwear companies had mixed experiences, but generally benefitted from the consumer switch in the host summer of 1976 to cotton and cotton mixes. There was no reduction in the number of firms in underwear production. 'up-market' outergarment producers (e.g., Scottish knitwear) have always been more aggressive in exporting products which, until recently, were largely unique. However, other outergarment manufactures were particularly vulnerable to import competition.

Some product areas show that the existence of foreign supply sources is not of itself the reason for the low shares of UK sales. The speed of adjustment to fashion changes by UK producers in the earlier half of the 1970s was slow (as in the case of sports shirts, for instance). Similarly, the growth in imports of quality fabrics was a response to factors other than price. Moreover, in these areas, exposure to competition from imports could be said to have had a positive impact in that it forced improvements in efficiency of UK producers in respect of not only the adoption of these new developments, but also the speed with which they are accepted and implemented.

2. Industrial Structure

There does seem to be some evidence to support the view that competition has contributed to the development of a kind of 'dual economy' in knitwear, on one hand strengthening the position of the large vertically integrated groups which can draw on the financial resources and bargaining power of their parent enterprise, and on the other, many very small firms (mainly owned by immigrants) have established themselves. The companies least able to defend themselves have been the traditional small to medium-sized enterprises, particularly in outerwear. Their response, particularly in the light of the need to accommodate the lower-powered but still considerable direct buying retail groups, has not been rationalization of the more traditional kind - an anathema to these independent family-run concerns. Instead, there have been moves, some successful, others not, to amalgamate capacity and marketing facilities to meet and win orders in a loose federation approach. This has yet to be proved successful.

3. Employment and Technology

Employment levels have been reduced in the last two years (by 4000 in 1979), but the trend still shows employment levels close to those of the 1960s and 1975. Employment changes are, in any event, a result of interactions between trade changes, greater productivity as more of the newer machines are installed, and demand changes most recently triggered by the recovery of the woven sector. Notwithstanding trade, there is no particular reason to assume that employment in industry will continually grow. In fact, with only productivity growth there would be a decline of jobs of between 2500 and 3500 a year. But, in general, quite apart from the direct effect of imports in displacing employment, the effect of heightened competition is almost certain to keep up the pressure to reduce labour costs either by adopting labour-saving practices or by using females as a cheap labour source of limited union enfranchisement.

Technological developments tend to have revolved around knitting, the capital-intensive rather than the labour-intensive area of production. But where there has been evidence of labour saving innovation, it appears to have been more as a response to factors within the UK rather than directly to developing country imports. There has, for example, been the stimulus of

changing demand requirements in competition with woven and non-woven fabrics, and with 'natural look and feel' fabrics. Although the impact of low labour cost import competition has been limited, it is probably true to say that its presence has made the search for cost cutting more intense.

The dependence of manufacturers on retailers increased with import competition, leading to contractual and work flow problems, loss of branch names, a shifting of stockholding patterns, etc. which have all increased this dependence further and reduced the ability of manufacturers to compete independently.

4. Exports

The level of import penetration has had some impact on the industry's attitude to exporting by forcing UK firms to specialize in production and look for new markets. UK knitwear manufacturers have generally had a very mixed record of exporting, partly because of their substantial home market, and partly because of the low design quality of most UK knitwear products in comparison with European goods. Successful exporting has been mainly confined to up-market producers, including the Scottish knitwear manufacturers.

VIII. ADJUSTMENT STRATEGIES IN RESPONSE TO IMPORT COMPETITION

There are five basic responses which the industry could make to a high level of import competition from developing countries, not all of which are mutually exclusive.

(1) Relocate labour and other resources to other industries. This could be done by means of planning, or alternatively through the market by doing nothing and passively allowing resources to move.

(2) Provide protection: to control the level and quality of imports on a selective or discriminatory basis.

(3) Admit the competitive advantages of foreign sources of supply, but attempt to internalize them within the domestic industry - with the lower costs, by one or other forms of outward processing, or the benefits, by manufacturers adopting an importing role.

(4) Specialize, by consolidating those product areas where the competitive disadvantage is not well developed, and to redirect efforts to new sub-products and new markets. 'Up-market' specialization is one variant of this.

(5) Attempt to make existing production more competitive either by means of new investment, incorporating new technology or improvements in existing production.

Within the UK textiles industry as a whole, all these have been tried in part, but the current emphasis is on protectionism (2), coupled with private and government supported measures to increase competitiveness (5). Each of the options will be briefly reviewed.

1. Industrial relocation (1):

The idea that the knitwear industry could in some sense disappear under a free trade situation is one conjured up through comparative advantage ideas. A policy of planned redeployment also appears to point in that direction. But neither the economics nor politics of the industry are at all conducive to the possibility that the industry will simply be allowed to wither away, at least not where the withering is brought about by changes in trade patterns rather than technological factors. As the study tries to show, it is far from clear that any but a few sub-sectors of the industry have an inherent cost disadvantage in competition with low wage producers. Disadvantage applies only to the sewing-up side of the industry. Knitted fabrics, tights, stockings and socks, and Scottish knitwear, have been able to compete. A more realistic scenario would be one in which much of the made-up mass-produced knitted outerwear and shirts production follows glove production to industrializing countries. It was this trend that the 1977 revision of the MFA was designed to stop. The main sources of resistance to rapid liberalization in this direction are three-fold. The first is the 'adjustment problem' posed for the largely female labour force: there may be some problems with gradual contraction. The second is the interest of the 'powerful' man-made fibre producers in ensuring that their downstream outlets do not disappear. The third is the fear that loss of a substantial share of the home market will also handicap machinery suppliers, and thereby reduce their capacity to innovate.

2. Protection (2):

The MFA has only recently made an impact on the UK knitting industry, but the effects are beginning to show. Levels of import penetration have fallen since its inception (excluding 1979), and although one cannot be certain that this reduction was a direct result of the MFA, it has undoubtedly had some influence on the attitudes of businessmen through its imposition of an apparently more secure environment. However, the overall decline in import penetration has been meagre, which supports the view that the real beneficiaries of the MFA have not been UK producers but those within the EEC, Southern Europe, and America which are beyond its control. Leaving aside the Mediterranean countries, the growth of import penetration from advanced, high cost countries, is a measure of the inability of the UK to

compete, even with MFA support, to provide stability. UK cost levels are considerably below those in the more advanced competitor countries and yet it has failed to improve competitiveness significantly either at home or abroad. Unless "orderly marketing" is extended to cover all imports, the UK will need to improve its competitiveness in the domestic market. The MFA, therefore, must be considered simply as a particularized control agency against a particularly successful group of countries, rather than as providing comprehensive protection for British industry.

The latter point is also important, in that the creation of uncertainty of supply (at least beyond certain limits) has forced retailers to adopt a balanced UK/foreign purchasing behaviour. UK retailers have, however, long known that developing country supplies include elements of uncertainty and disadvantage, and this is why most retailers have for several years balanced domestic and foreign sources.

Another effect of the MFA is to encourage production in categories given extra protection as a result of bureaucratic rather than commercial considerations. For example, children's wear imports from MFA countries have declined because a quota system makes no distinction for sizes, and although margins may be similar, absolute levels of profit are less on children's clothes. One reason why extra protection has been given to "sensitive" product subcategories is the fear that elimination of a garment category precludes its revival. Knitwear again provides a possible example of this phenomenon in the form of gloves. It is certainly true that the UK knitted glove industry has, to all intents and purposes, disappeared. Whether the small remnants would recapture the domestic market in the event of changing cost relationships is uncertain, but there is no reason why, in a flexible market economy, it should not.

One final point about the protectionist solution is that it is sometimes justified in terms of giving a 'breathing space' to the industry in order to permit new investment and industrial reorganization to take place so as to allow the industry to be competitive. But, as explained above, there are no short term prospects of automating the most labour-intensive parts of the industry. Nor is it at all clear how it will be possible to realize the sociological changes which would be necessary in order to emulate Far Eastern work practices. It may be relevant to point out that some manufacturers that were interviewed for this study became somewhat alarmed when it was suggested that protection might only be temporary.

3. Internationalization (3): Involvement by Firms in Developing Countries

The following describes forms of adjustment which may be in the interests of firms (i.e., capital) though not necessarily in the interests of the work force.

a. Outward processing

Outward processing involves the processing of part or all of the production of, in this case, the knitted product (usually garments) in another country, but under the control of the domestic manufacturer. This external plant may be owned directly or through a subsidiary, it may be a joint venture operation, or there may be no ownership link, but merely a licensing or sub-contractual relationship.

Part-processing of knitwear is a less-attractive proposition than for woven garments since the making-up stage is so much simpler and less-important. However, some knitwear manufacturers do own knitting factories abroad, notably in Hong Kong, and among these are some of the largest and most successful.

These operations have an employment effect in the UK, but it may not be entirely detrimental, since outward-processing products are often used to average-out margins with local products, perhaps retaining the competitiveness of domestic production and, therefore, domestic employment. Advantages of foreign plants, besides savings on direct costs, are higher machine hours, lower taxes and other overheads, and an ability to introduce the latest machinery without attendant labour problems.

Unlike the Federal Republic of Germany, which reduces the quota component of an outward-processed product, the UK counts it fully against the quota. Thus, off-shore processors are potentially at a disadvantage. In any event, the involvement of British firms is on a small scale, at least in relation to German, Dutch or US firms. To the extent that the practice is developing, it is based in countries not covered by the MFA (Portugal), or with low existing production capacity (Cyprus), or with close proximity to European markets (Malta, Cyprus and Portugal).

b. The role of manufacturers

In the Federal Republic of Germany, 40 per cent of clothing imports are now undertaken by manufacturers. In Britain, the system is by no means as developed, but some manufacturers have effectively switched to the role of importer (either through outward processing or direct importing), selling these imports under their own labels or unmarked. A major reason for the low level of this kind of activity in the UK, is the fact that the retailers are so large that they do their own buying. Should this kind of importing become more popular with employers, it is difficult to determine whether the knitting union would have the power to oppose it, given the limited unionisation of female and immigrant workers. The short-run consequences of this type of adjustment favour capital rather than labour, but capital grounds could justify it in that higher profitability that could sustain new investment in more efficient activities. The possible means of enlarging this role would be for importing through manufacturers who would control quotas equivalent to say 30 per cent of their production (this is in fact slightly higher than the industry-wide import penetration). This is broadly the mechanism of import control in some EEC countries. The manufacturers would benefit from higher average margins plus security, and be able to undertake new investment either in this or other activities.

4. Specialization: Product Diversification and Exporting

NEDO arrived at a recommendation for combating import penetration through increased exports. Since low labour-cost imports were present in European markets too, this implied a specialization in favour of those products in which imports had not made inroads, and where low labour costs were less of an advantage, is concentration on 'up-market' designs and qualities. Specialization in up-market items is tied to an increase in exports because the UK market for these products is too limited to accommodate such a move by large numbers of producers (although quality demands of consumers are also rising).

Generally speaking, and excluding the main Scottish knitwear firms, experience has shown that much of British design and quality is inadequate, and management is often unaware of the requirements of exporting. Meanwhile, quality levels of hitherto low cost producers are rising, to take over

supply of the more sophisticated products before UK producers have moved into those lines. One of the major problems, as has already been discussed, is the structure of retailing, which makes exporting by UK suppliers difficult because of their obligations to, and dependence on, specific UK customers. The requirements of the two markets are totally different: successful exporters, in fact, tend to separate production for the two markets at different plants.

Apart from the production and management problems inherent in both the move up-market and into exports, the scheme suffers from the further major defect in that the further up-market, the smaller the demand; a truism that holds good overseas too. Consequently, many developed country producers, as well as those in the NICs, are seeking to move into this end of the market. This is not to say that such a move towards improving quality, design and management is without considerable merit. It simply offers limited opportunities for what is currently a substantial industry.[24/]

5. Increased Competitiveness (5)

Another option is not to adjust but to try to become internationally competitive in existing product lines. There are many contingent factors (such as the exchange rate) over which the industry has no control. The main categories of potential improvement are:

24/ This kind of adjustment has been discussed in very abstract terms. A concrete example of what is possible is provided by the Coats Paton subsidiary, Jaeger, an up-market retail and manufacturing group. Jaeger manufactures nearly all its own clothing, including both knitwear and wovenwear. Imports or production by others tends to be limited to new lines of products pending Jaeger's own development of capacity. Thus, menswear was imported from Italy when it was first introduced a few years ago, but is now made entirely within the company.

Jaeger is an up-market company: design and quality consideration are paramount. It is, in consequence, less affected by import competition and indeed actually exports to Hong Kong and the Far East (about 30 per cent sales are exports). Consumers possess a high degree of branch loyalty and the firm capitalizes on the implicit British quality of its name. The diversified parent company is a financial 'safety net' so far unused for that purpose, but extremely useful in the early days of rapid expansion. The parent company is, by a considerable margin, the most profitable in UK textiles, with recent post-tax profits (and rates of return) in excess of those of the much larger Courtaulds group. Its strength lies in specialized high quality products sold in the UK and overseas, and in substantial overseas investments.

a. Capital deepening: Increased capital-intensity is one way in which the advantage of low labour-cost producers can be offset. The process of capital deepening is characteristic of the textiles industry generally. There are ways, which have been described, of raising the capital-intensity of both knitting and making-up operations - indeed, these are already taking place - but in the UK, there are also serious problems of machine productivity, as, one installed, it becomes a function of factory layout and labour practices.

b. Improved technology: This is now less a function of machine speed than of advances in developing new fabrics and yarns. Improved knitting of complete garments is one objective, but not one that is ready for implementation. Moreover, the lead time between innovation in British firms and its emulations overseas, including NICs, is not long, on past experience.

c. Management: It is generally recognized that improved management could raise production efficiency, quality and marketing (especially for export). But this is not a feature peculiar to this industry; nor is it obvious that there are quick remedies.

To the extent that past British governments have had a coherent policy for the textiles and clothing industry, other than to protect them from international competition, it is to stimulate firms into action along the above lines; in other words not to adjust out of apparently uncompetitive lines, but to try to make them competitive. The long history of protection and assistance to re-equip cotton textiles, and (more recently) woolens has been designed to achieve this end. Substantial productivity improvements have been effected, but the textiles industry continues, more than ever, to require protection from 'low cost' competition.


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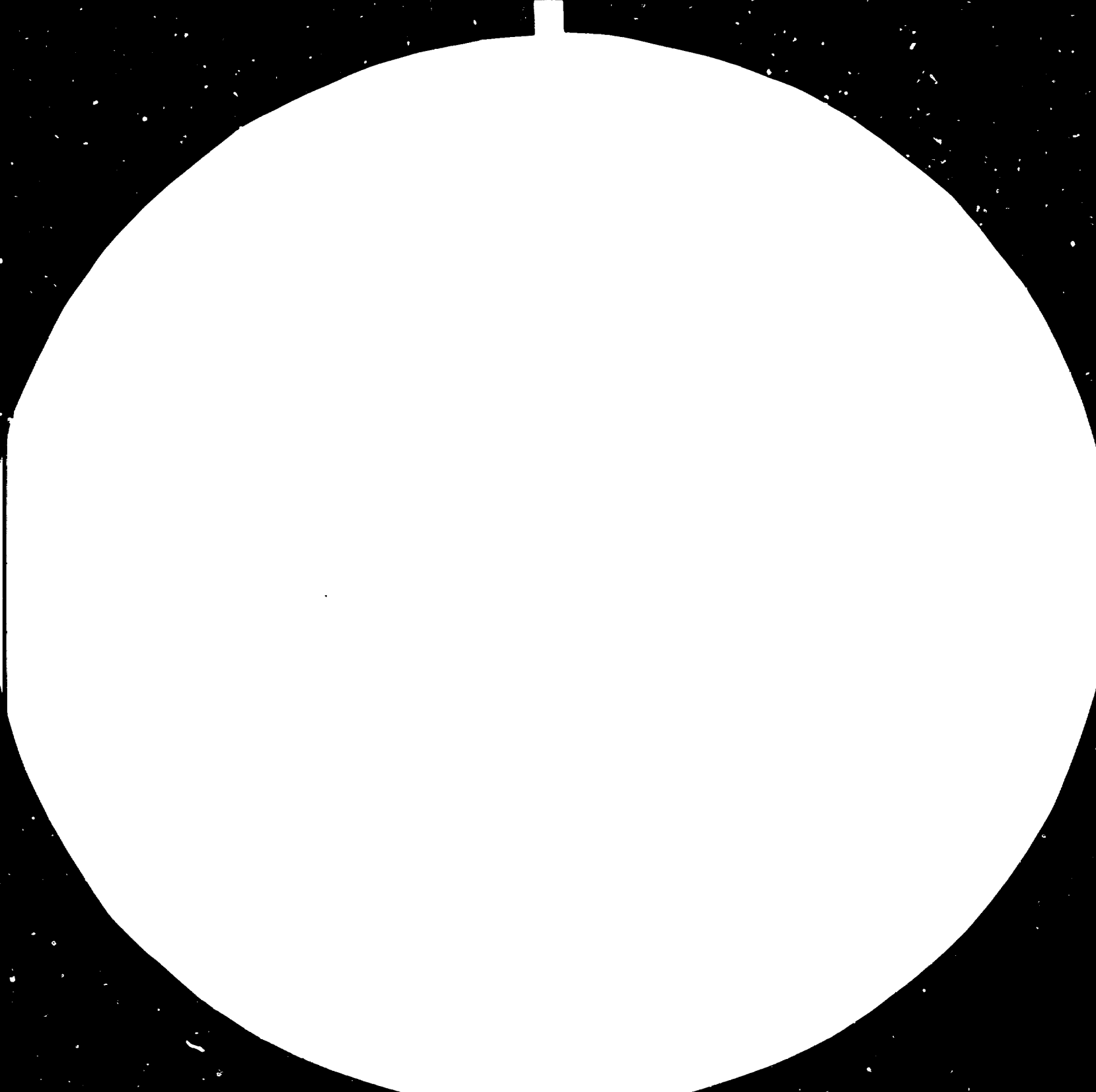

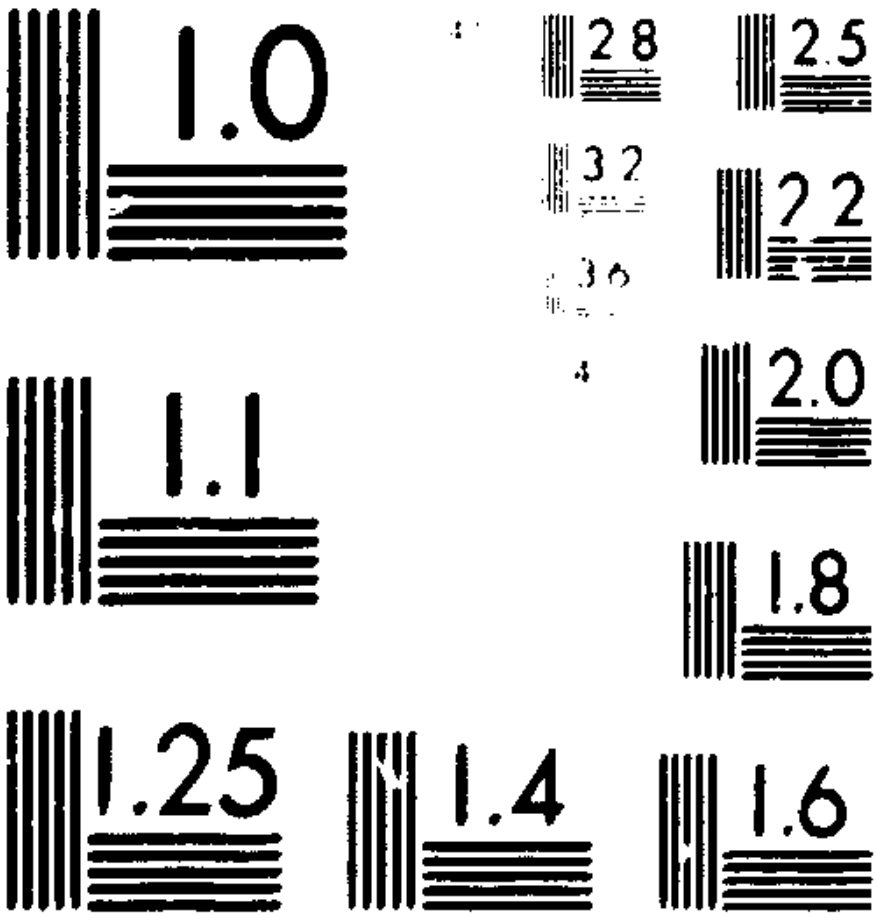

MICROCOPY RESOLUTION TEST CHART

IX. SUMMARY AND CONCLUSIONS

A few key points from the analysis need to be high-lighted:

First, a study of the knitwear sector, itself a sub-division of textiles, has brought out the immense complexity of the process of industrial change, and of the effects of competing imports. Broad-brush economic analyses of factor endowments and comparative advantage tend to obscure this wealth of intra-industry detail. Within the knitwear sector alone, six or seven major sub-sectors have been identified with quite different technologies, and with quite different experience of international competition. One branch (gloves) has been virtually lost to competing developing country imports; several others (shirts and parts of knitted outerwear) appeared to be moving that way, at least for mass-produced rather than high quality, 'up-market' lines. But other groups of producers (of stockings and tights, socks and knitted fabrics) have, by adaptation or because of more capital-intensive methods, established internationally competitive firms. Thus, it is most unlikely that the UK knitting industry will be eliminated by competition from developing countries.

Second, predictions of future trade patterns based on static technology, and current patterns of demand are likely to be seriously misleading. The knitting industry in its present form is itself the product of quite recent technological changes - notably the advance in knitting at the expense of weaving machines - and of the large scale use of man-made fibres in clothing. Developments are currently afoot which could reverse this process: a switch back to natural fibres and to high-speed weaving machines. The major technological weakness of the UK industry - as of garments generally - is the labour-intensive sewing-up operation. There are no immediate prospects of eliminating this, but there may well be long term innovations which could; it would, of course, eliminate much of the rationale for exporting from developing countries.

Third, the pattern of trade specialization with developing countries does not neatly conform to a simple model of high-wage, high technology country trading with low-wage, low-capital and poor competitors. Wage costs alone are inadequate to explain the cost advantage of the main NICs in the

UK market: productivity levels are also high; and machinery productivity is as high or more so. The inability of many UK firms to compete on these grounds, rather than merely in terms of labour costs, helps to explain why selective protection under the MFA has resulted in substantial trade diversion to other (developed country) exporters.

Fourth, an absolutely crucial influence on trade patterns and trade policy has been the role of the retail sector. The strength of retailers relative to manufacturers has not only (until recently) acted as a force for trade liberalization but it has weakened the capacity of UK manufacturers to adjust to competition by depriving firms of brand names and an independent design capacity. As a consequence, manufacturers themselves have become conservative in their approach to exports and imports competition. There are, by contrast, several independent manufacturing firms which have demonstrated the possibilities for adjustment to side-step international competition by concentrating on specialized and high quality items.

Finally, perhaps the most important blockade in the way of substantial trade liberalization to favour developing countries is the interest of the vertically integrated groups,[25/] in preserving 'downstream' knitwear and other clothing outlets for their fibres and yarns. The main attention of international agencies and academics has been focused on the adjustment problem for labour; although there are problems in the knitting industry for married women, it is very doubtful if this is the crucial constraint on liberalization. It is the adjustment problem for capital which is politically more important and which has stiffened the protectionist response. If mechanisms could be devised, through commercial off-shore processing of bilateral inter-government agreements to safeguard the interests of the capital-intensive fibre producers, then rather more progress could probably be made than at present to relocate the genuinely labour-intensive garment assembly processes to developing countries. In the absence of this kind of development, the tendency will be to seek protection and to try to raise efficiency through capital deepening of existing production processes.

25/ Notably Courtaulds, the largest UK textiles company.

Introduction to Appendices

Appendix A consists of 53 statistical tables. The empirical literature, based on a close investigation of official statistics in the UK, provides an apposite overview of developments in the UK knitting industry. The tables highlight additional insight into the development of the knitting industry and the nature of its problems.

Tables A1-A9 concentrate on the output (sales by UK manufacturers) of the industry by various product categories in the 1970s. An element of ambiquity is created on account of exclusion of the activities of making-up garments (from knitted fabrics as opposed to the knitting of garment pieces on a knitting machine for subsequent sewing) from Minimum List Heading 417. These are classified under the clothing industry in various MLH headings according to garment type, whereas MLH 417 is part of the textile industry. Tables A7-A8 attempt to rectify this exclusion, but full coverage is not always possible.

Tables A10-A13 are concerned with the structure of the industry and include details of productivity of both labour and capital in different sizes of firms and establishments. Table A14 covers employment trends in sub-sectors of the UK textile, clothing and footwear industries, while Table 15 depicts unemployment trend and its magnitude. Table 16 peeps into the impacts of technological and marketing developments on the type of employee and at wage costs. Tables A17-A19 review other aspects of employment and wages. Table A20 considers the regional concentration of the industry and compares regional performance.

Tables A21-A30 look at trends in various measures of import penetration. Table A31-A53 cover UK trade - broad sectors, product level, major trading partners and differential pricing in 1978.

Appendix B is destined to recent technological developments in knitting industry. The main technical changes have been described succinctly. Attention of the reader is riveted to the bleak prospects for employment dispelled by the fact that the knitting revolution has itself been stimulated by pressures on the texitle industry towards rationalization in terms of a more efficient and labour saving productive process.

APPENDIX A

STATISTICAL TABLES

TABLE A.1: SALES BY UK MANUFACTURERS - WEFT KNITTED (MLH 417.1)(Pt): Hosiery, tights), 1971 to 1978

	Value								Share		Change on previous year*							
	1971	1972	1973	1974	1975	1976	1977	1978	1971	1978	1972	1973	1974	1975	1976	1977	1978	Average
	£m	£m	£m	£m	£m	£m	£m	£m	%	%	%	%	%	%	%	%	%	%
Men's socks, stockings	16.8	18.0	21.9	26.8	28.4	35.6	43.1	49.3	17.3	26.5	7.1	21.7	22.4	6.0	25.4	21.1	14.4	16.6
Women's:																		
- full length stockings	10.9	8.2	1.6	8.9	7.3	7.8	8.2	9.2	11.2	5.0	-24.8	-7.3	17.1	-18.0	6.8	5.1	12.2	-2.4
- tights, pantihose	58.4	59.0	61.2	71.4	67.1	71.2	75.4	88.0	60.3	47.4	1.0	3.7	16.7	-6.0	6.1	5.9	16.7	6.0
- ankle socks, 3/4 hose	0.9	1.1	1.3	1.3	2.4	3.6	5.8	7.7	0.9	4.1	22.2	18.2	0.0	84.6	50.0	61.1	32.8	35.9
Children's socks, 3/4 hose, stocks.	9.3	8.5	10.6	12.4	18.1	20.3	24.6	30.7	9.6	16.5	-8.6	24.7	17.0	46.0	12.2	21.2	24.8	18.6
Other nes	0.6	1.1	1.0	1.3	0.7	0.9	0.8	0.9	0.6	0.5	83.3	-9.1	30.0	-46.2	28.6	-11.1	12.5	6.0
TOTAL	96.9	95.9	103.6	122.1	124.0	139.4	157.9	185.8	1000	1000	-1.0	8.0	17.9	1.6	12.4	13.3	17.7	9.7
	Volume																	
	m	m	m	m	m	m	m	m										
Men's socks, stockings	8.1	8.6	9.4	9.4	9.2	9.9	9.9	10.1	13.3	16.8	6.2	9.3	0.0	-2.1	1.6	0.0	2.0	3.2
Womens:																		
- full length stockings	8.2	5.8	4.7	5.1	3.6	3.5	3.3	3.4	13.5	5.7	-29.3	-19.0	8.5	-29.4	-2.8	-5.7	3.0	-11.8
- tights, pantihose	36.9	42.8	42.7	43.7	37.8	36.9	34.4	35.0	60.7	58.2	16.0	-0.2	2.3	-13.5	-2.4	-6.8	1.7	-0.8
- ankle socks, 3/4 hose	0.7	0.7	0.9	0.8	1.3	2.2	2.8	3.0	1.2	5.0	0.0	28.6	-11.1	62.5	69.2	27.3	7.1	23.1
Children's socks, 3/4 hose, stocks.	6.9	5.8	7.0	6.9	8.1	8.1	8.2	8.6	11.3	14.3	-15.9	20.7	-1.4	17.4	0.0	1.2	4.9	3.2
Other nes	..	..	..	..	..	..	..	..	n.a.	n.a.	..	..	..	..	..	..	..	..
TOTAL(excl. Other) dozen pairs	60.8	63.7	64.7	65.9	60.0	60.6	58.6	60.1	100.0	1000	4.8	1.6	1.9	-9.0	1.0	-3.3	7.6	-0.2
	Unit price																	
	£	£	£	£	£	£	£	£										
Men's socks, stock.	2.1	2.1	2.3	2.9	3.1	3.6	4.4	4.9	na	na	0.8	11.3	22.4	8.3	16.5	21.1	12.2	13.0
Womens:																		
- full length "	1.3	1.4	1.6	1.7	2.0	2.2	2.5	2.7	na	na	6.4	14.4	7.9	16.1	9.9	11.5	8.9	10.7
- tights, pantihose	1.6	1.4	1.4	1.6	1.8	1.9	2.2	2.5	na	na	-12.9	3.9	14.1	8.7	8.7	13.6	14.7	6.9
- ankle socks, 3/4 h	1.3	1.6	1.4	1.6	1.8	1.6	2.1	2.6	na	na	22.2	-8.1	-11.1	13.5	-11.3	26.6	24.0	10.4
Children's socks, 3/4 hose. stocks,	1.3	1.5	1.5	1.8	2.2	2.5	3.0	3.6	na	na	8.7	3.3	18.7	24.4	12.2	19.8	19.0	14.9
Other nes	..	..	..	..	..	..	..	..	na	na	..	..	..	..	..	..	..	..
TOTAL(excl.Other)	1.6	1.5	1.6	1.8	2.1	2.3	2.7	3.1	na	na	-5.5	6.3	15.7	11.6	11.3	17.2	14.7	9.9
Share of total value MLH 417.1 (%)	21.1	20.5	19.4	20.4	19.5	18.8	17.8	19.6										

na - not applicable
.. - not available

*Tables A1-A8: percentage change p.a. in unit prices based on unrounded figures to avoid distortion due to rounding of unit prices to one place of decimals. This is also the explanation of any apparent discrepancy.

TABLE A2: SALES BY UK MANUFACTURERS-WEFT KNITTED (MLH 417.1(Pt.), Shirts, swimwear, underwear, nightwear 1971-1978

	Value								Share		Change on previous year*							
	1971	1972	1973	1974	1975	1976	1977	1978	1971	1978	1972	1973	1974	1975	1976	1977	1978	78/71
	£m	£m	£m	£m	£m	£m	£m	£m	%	%	%	%	%	%	%	%	%	%
Shirts(all knitted except warp)	11.0	10.9	12.1	12.3	14.7	24.7	33.7	32.7	19.3	23.4	-0.9	11.0	1.7	19.5	68.0	36.4	-3.0	16.8
Swimwear	2.1	1.7	1.7	2.0	1.2	2.0	2.4	2.1	3.7	1.5	-19.0	0.0	17.6	-40.0	66.7	20.0	-12.5	-
Underwear																		
- Men's	16.6	19.0	20.9	27.3	26.5	31.6	40.7	47.7	29.2	34.1	14.5	10.0	30.6	-2.9	19.2	28.8	17.2	16.3
- Women's	15.8	16.2	19.1	23.6	27.7	28.4	36.0	38.2	27.8	27.3	2.5	17.9	23.6	17.4	2.5	26.8	6.1	13.4
- Children's	11.4	12.6	13.5	14.4	13.8	16.3	18.7	19.0	20.0	13.6	10.5	7.1	6.7	-4.2	18.1	14.7	1.6	7.6
Nightwear	..	"	"	"	3.4	2.1	3.7	3.3	- na	na	"	"	"	"	-38.2	76.2	-10.8	na
TOTAL(excl.nightw)	56.9	60.4	67.3	79.6	83.9	103.0	131.5	139.7	100.0	100.0	6.2	11.4	18.3	5.4	22.8	27.7	6.2	13.7
	Volume																	
	m	m	m	m	m	m	m	m										
Shirts(all knitted except warp)	11.9	11.4	11.3	9.3	9.3	15.7	18.2	16.5	39.8	53.6	-4.2	-0.9	-17.7	0.0	68.8	15.9	-9.3	4.8
Swimwear	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.1	1.0	0.3	-33.3	0.0	0.0	-50.0	100.0	0.0	-50.0	14.5
Underwear																		
- Men's	5.9	5.1	5.0	4.6	4.1	4.5	4.5	4.9	19.7	15.9	-13.6	-2.0	-8.0	-10.9	9.8	0.0	8.9	-2.6
- Women's	6.7	6.4	6.8	6.5	6.8	6.2	6.4	6.0	22.4	19.5	-4.5	6.3	-4.4	4.6	-8.8	3.2	-6.3	-1.6
- Children's	5.1	5.0	4.8	4.3	3.7	3.8	3.5	3.3	17.1	10.7	-2.0	-4.0	-10.4	-14.0	2.7	-7.9	-5.7	-6.0
Nightwear	"	"	"	"	0.2	0.1	0.2	0.2	- na	na	"	"	"	"	-50.0	100.0	0.0	na
TOTAL(excl. nightw.) (dozens)	29.9	28.1	28.1	24.9	24.0	30.4	32.8	30.8	100.0	100.0	-6.0	-	-11.4	-3.6	26.7	7.9	-6.1	0.4
	Unit price																	
	£	£	£	£	£	£	£	£										
Shirts (all knitted except warp)	0.9	1.0	1.1	1.3	1.6	1.6	1.9	2.0	na	na	3.4	12.0	23.6	19.5	-0.5	17.7	6.9	11.5
Swimwear	7.0	8.5	8.5	10.0	12.0	10.0	12.0	21.0	na	na	21.4	-	17.6	20.0	-16.7	20.0	75.0	17.0
Underwear																		
- Men's	2.8	3.7	4.2	5.9	6.5	7.0	9.0	9.7	na	na	32.5	12.2	42.0	9.0	8.6	28.8	7.6	19.4
- Women's	2.4	2.5	2.8	3.6	4.1	4.6	5.6	6.4	na	na	7.3	10.9	29.3	12.2	12.4	22.9	13.2	15.2
- Children's	2.2	2.5	2.8	3.3	3.7	4.3	5.3	5.8	na	na	12.8	11.6	19.1	11.4	15.0	24.5	7.7	14.5
Nightwear	..	..	..	..	17.0	21.0	18.5	16.5	na	na	..	..	..	..	23.6	-11.9	-10.8	na
TOTAL(excl.nightw)	1.9	2.1	2.4	3.2	3.5	3.4	4.0	4.5	na	na	13.0	11.4	33.5	9.3	-3.1	18.4	13.1	13.2
Share of total value MLH 417.1 (%)	12.4	12.9	12.6	13.3	13.7	14.1	15.3	15.1										

na - not applicable * see footnote Table A1

TABLE A3: SALES BY UK MANUFACTURERS - WEFT KNITTED (MLH 417.1 (Pt.): Outerwear, gloves, other), 1971 TO 1978

	Value								Share		Change on previous year*							
	1971	1972	1973	1974	1975	1976	1977	1978	1971	1978	1972	1973	1974	1975	1976	1977	1978	78/71
	£m	£m	£m	£m	£m	£m	£m	£m	%	%	%	%	%	%	%	%	%	%
Jumpers,etc-Men's	45.5	49.6	59.5	66.4	74.6	93.8	127.4	147.2	28.0	35.5	9.0	20.0	11.6	12.3	25.7	35.8	15.5	73.3
Women's	14.6	83.3	102.2	118.4	1402	1703	1953	199.5	46.0	48.2	11.7	22.7	15.9	18.4	21.5	14.7	2.2	15.1
Children's	29.4	32.9	34.4	38.3	32.1	35.4	46.6	51.4	18.1	12.4	11.9	4.6	11.3	-16.2	10.3	31.6	10.3	8.3
Other children's infants'	..	..	..	..	3.8	3.0	6.2	5.6	-	1.4	..	..	..	..	-21.1	106.7	-9.7	na
Women's skirts, dresses, suits	12.5	11.0	10.5	9.8	7.3	6.5	8.5	8.8	7.7	2.1	-12.0	-4.5	-6.7	-25.5	-11.0	30.8	3.5	-4.9
Gloves, mittens, mitts	0.3	0.4	0.5	0.7	0.6	1.1	1.1	1.6	0.2	0.4	33.3	25.0	40.0	-14.3	83.3	0.0	45.5	27.0
All other garments	3.7	3.2	3.1	3.1	3.7	4.4	6.8	5.6	na	na	-13.5	-3.1	0.0	19.4	18.9	54.5	-17.6	6.2
TOTAL (excl. all other garments)	162.3	177.2	207.1	233.6	2586	310.1	385.1	414.1	100.0	1000	9.2	16.9	12.8	10.7	19.9	24.2	7.5	14.3
	Volume																	
	m	m	m	m	m	m	m	m										
Jumpers, etc. -Men's	2.3	2.3	2.5	2.3	2.2	2.4	2.5	2.5	19.8	20.8	0.0	8.7	-8.0	-4.3	9.1	4.2	0.0	1.2
-Women's	5.3	5.6	6.4	6.4	6.6	7.0	6.6	6.1	45.7	50.8	5.7	14.3	0.0	3.1	6.1	-5.7	-7.6	2.0
-Children's	3.4	3.6	3.6	3.3	2.3	2.2	2.5	2.8	29.3	23.3	5.9	0.0	-8.3	-30.3	-4.3	13.6	12.0	-2.7
Other children's infants'	..	..	..	..	0.2	0.2	0.3	0.3	-	2.5	..	..	..	..	0.0	50.0	0.0	na
Women's skirts, dresses, suits	0.5	0.3	0.3	0.7	0.7	0.1	0.1	0.1	4.3	0.8	-40.0	0.0	-33.3	0.0	-50.0	0.0	0.0	-20.5
Gloves, mittens, mitts	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.9	1.7	0.0	0.0	0.0	0.0	100.0	-50.0	100.0	10.4
All other garments	..	..	..	..	..	..	..	..	na	na	..	..	..	..	..	..	..	..
TOTAL(excl. all other garments) (dozens)	11.6	11.9	12.9	12.3	11.6	12.1	12.1	12.0	100.0	100.0	2.6	8.4	-4.7	-5.7	4.3	0.0	-0.8	0.5
	Unit price																	
	£	£	£	£	£	£	£	£										
Jumpers, etc.-Men's	19.8	21.6	23.8	28.9	33.9	39.1	51.0	58.9	na	na	9.0	10.4	21.3	17.3	15.2	30.3	15.5	16.9
-Women's	14.1	14.9	16.0	18.5	21.2	24.3	29.6	32.7	na	na	5.7	7.3	15.9	14.8	14.5	21.6	10.6	12.8
-Children's	8.6	9.2	9.6	11.6	14.0	16.1	18.6	18.4	na	na	5.7	4.6	21.5	20.3	15.3	15.3	-1.5	11.3
Other children's, infants	..	..	..	..	19.4	16.5	23.6	18.2	na	na	..	..	..	..	-21.1	37.8	-9.7	na
Women's skirts, dresses, suits	25.0	36.7	35.0	49.0	36.5	65.0	85.0	88.0	na	na	46.7	-4.5	40.0	-25.5	78.1	30.8	3.5	19.6
Gloves, mittens, mitts	3.0	4.0	5.0	7.0	6.0	5.5	11.0	8.0	na	na	33.3	25.0	40.0	-14.3	-8.3	100.0	-27.3	15.0
All other garments	..	..	..	..	..	..	..	..	na	na	..	..	..	..	..	..	..	..
TOTAL(excl all other garments)	14.0	14.9	16.1	19.0	22.3	25.6	31.8	34.5	na	na	6.4	7.8	18.4	17.4	15.0	24.2	8.4	13.7
Share of total value MLH 417.1 (%)	36.1	38.6	39.4	39.5	41.1	42.3	44.3	44.4										

na - not applicable *see footnote Table A1

TABLE A4: SALES BY UK MANUFACTURERS - WEFT KNITTED FABRICS (MLH 417.1(Pt.)), 1971 TO 1978

	Value								Share		Change on previous year *							
	1971	1972	1973	1974	1975	1976	1977	1978	1971	1978	1972	1973	1974	1975	1976	1977	1978	78/71
	£m	£m	£m	£m	£m	£m	£m	£m	%	%	%	%	%	%	%	%	%	%
Weft knitted fabrics																		
-wool,animal hair	10.5	8.8	7.7	3 9	3.3	2.6	2.0	2.3	8.0	1.3	-16.2	-12.5	-49.4	-15.4	-21.2	-23.2	15.0	-19.5
-cotton	5.9	7.2	8.5	11.1	12.2	16.6	21.6	22.9	4.5	12.6	22.0	18.1	30.6	9.9	36.1	30.1	6.0	21.4
-synthetic-cont. filament	69.7	67.2	72.2	80.6	86.4	89.5	90.3	95.1	53.4	52.3	-3.6	7.4	11.6	7.2	3.6	0.9	5.3	4.5
-synthetic-spun	30.5	28.2	29.7	28.6	27.9	36.6	36.3	29.4	23.4	16.2	-7.5	5.3	-3.7	-2.4	31.2	-0.8	-19.0	-0.5
-regenerated,other	3.2	2.0	1.4	1.0	0.9	1.8	3.0	3.3	2.5	1.8	-37.5	-30.0	-28.6	-100	100.0	66.7	10.0	0.4
Other weft knitted	7.3	9.7	11.2	13.3	15.2	18.7	27.3	28.8	5.6	15.8	32.9	15.5	18.8	14.3	23.0	46.0	5.5	21.7
Bonded fabrics	2.2	1.5	1.0	1.5	1.0	0.7	0.2	-	1.7	..	-31.8	-33.3	50.0	-33.3	-30.0	-71.4	na	..
TOTAL (including others not separately distinguished)	130.6	127.4	137.4	145.9	146.8	166.6	180.7	181.9	100.0	100.0	-2.5	7.8	6.2	0.6	13.5	8.5	0.7	4.8
	Volume																	
	m	m	m	m	m	m	m	m										
Weft knitted fabrics (kg)																		
-wool,animal hair	3.8	3.1	2.3	0.9	0.8	0.6	0.4	0.5	6.5	0.7	-18.4	-25.8	-60.9	-11.1	-25.0	-33.3	25.0	-25.2
-cotton	5.9	6.6	7.4	6.5	7.4	7.8	7.8	8.2	10.1	12.0	11.9	12.1	-12.2	13.8	5.4	0.0	5.1	4.8
-synthetic-cont. filament	27.1	25.9	33.5	35.4	36.1	36.4	34.9	37.7	46.6	55.2	-4.4	29.3	5.7	2.0	0.8	-3.3	8.0	4.8
-synthetic-spun	15.4	14.3	14.1	12.9	11.4	14.9	12.7	10.0	26.5	14.6	-7.1	-1.4	-8.5	-11.6	30.7	-14.8	-21.3	-6.0
-regenerated,other	1.4	0.8	0.7	0.5	0.3	0.4	0.8	0.8	2.4	1.2	-42.9	-12.5	-28.6	-40.0	33.3	100.0	0.0	-7.7
Other weft knitted (kg)	3.3	5.1	4.8	5.2	6.3	7.4	11.3	11.2	5.7	16.4	54.5	-5.9	8.3	21.2	17.5	52.7	-0.9	19.1
Bonded fabrics (m^2)	3.6	2.7	1.8	2.2	1.5	1.2	0.3	-	na	na	-25.0	-33.3	22.2	-31.8	-20.0	-75.0	na	..
TOTAL(excl.bonded)	58.2	58.1	66.7	64.2	62.2	67.5	67.9	68.3	100.0	100.0	-0.2	14.8	-3.7	-3.1	8.5	0.6	0.6	2.3
	Unit Price																	
	£	£	£	£	£	£	£	£										
Weft knitted fabrics																		
-wool,animal hair	2.8	2.8	3.3	4.3	4.1	4.3	5.0	4.6	na	na	2.7	17.9	29.4	-4.8	5.1	15.1	-8.0	7.6
-cotton	1.0	1.1	1.1	1.7	1.6	2.1	2.8	2.8	na	na	9.0	5.4	48.7	-3.4	29.1	30.1	0.9	15.8
-synthetic-cont. filament	2.6	2.6	2.2	2.3	2.4	2.5	2.6	2.5	na	na	0.8	-16.9	5.6	5.1	2.8	4.3	-2.5	-0.3
-synthetic spun	2.0	2.0	2.1	2.2	2.4	2.5	2.9	2.9	na	na	-0.4	6.8	5.2	10.4	0.4	16.4	2.9	5.9
-regenerated	2.3	2.5	2.0	2.0	3.0	4.5	3.8	4.1	na	na	9.5	-20.0	-	50.0	50.0	-16.7	10.0	8.8
Other weft knitted	2.2	1.9	2.3	2.6	2.4	2.5	2.4	2.6	na	na	-14.0	22.7	9.7	-5.7	4.7	-4.4	6.5	2.2
Bonded fabrics	0.6	0.6	0.6	0.7	0.7	0.6	0.7	-	na	na	-9.1	-	22.7	-2.2	-12.5	14.4	na	..
TOTAL(excl.bonded)	2.2	2.2	2.1	2.3	2.4	2.5	2.7	2.7	na	na	-2.3	-6.1	10.3	3.8	4.6	7.9	0.1	2.4
Share of total value MLH 417.1 (%)	28.4	27.2	25.7	24.3	23.0	22.4	20.4	19.2										

* See footnote Table A1

TABLE A5: SALES BY UK MANUFACTURERS - WARP KNITTED PRODUCTS (MLH 417.2), 1971 TO 1978

	Value								Share		Annual change*							
	1971	1972	1973	1974	1975	1976	1977	1978	1971	1972	72/71	73/72	74/73	75/74	76/75	77/76	78/77	Av.
	£m	£m	£m	£m	£m	£m	£m	£m	%	%	%	%	%	%	%	%	%	%
Knitted fabrics in the piece -nes(non-raschel mach)	65.7	62.4	73.2	75.8	75.6	85.8	91.6	98.3	73.1	59.7	-5.0	17.3	3.6	-0.3	13.5	6.8	7.3	5.5
-raschel mach.-net/ window f.	8.2	9.0	10.1	11.7	15.1	20.5	22.3	23.6	8.9	14.3	9.7	12.2	15.8	29.0	35.8	8.9	5.8	16.3
- elastic	9.5	8.9	10.5	11.3	11.4	14.6	15.1	16.1	10.3	9.8	-6.3	18.0	7.6	0.9	28.1	3.4	6.6	7.8
Making-up garments	2.8	3.5	3.4	4.3	3.7	4.7	5.2	4.3	3.0	2.6	25.0	-2.9	26.4	-14.0	27.0	10.6	-17.3	6.3
Other	2.1	2.4	3.1	3.7	5.1	7.9	6.9	7.6	2.3	4.6	14.3	29.2	19.4	37.8	54.9	-12.7	10.1	20.2
Bonded fabrics (mainly warp knitted)	2.2	2.5	3.6	4.2	5.0	6.8	12.4	14.7	2.4	8.9	13.6	44.0	16.7	19.0	36.0	82.4	18.5	31.2
TOTAL	92.3	88.7	103.9	111.0	115.9	140.3	153.5	164.6	100.0	100.0	-3.9	17.1	6.9	4.4	21.1	9.4	7.2	8.6
	Volume																	
	m	m	m	m	m	m	m	m										
Knitted fabrics in the piece -nes(non-raschel)(M^2)	420.9	407.7	460.5	389.5	363.8	363.5	342.7	291.0			-3.1	13.0	-15.4	-6.6	-0.1	-5.7	-15.1	-5.1
-raschel mach-net./ wf (kg)	2.5	2.9	3.0	3.9	4.2	5.3	5.5	6.0			16.0	3.4	30.0	7.7	26.2	3.8	9.1	13.3
elastic (kg)	2.6	2.9	3.7	3.7	3.4	3.4	2.5	2.5			11.5	27.6	0.0	-8.1	0.0	-26.5	0.0	-0.6
Making-up garments	..	..	..	..	..	..	..	..			..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..			..	..	..	..	..	..	..	..
Bonded fabrics(mainly warp knitted) (M^2)	4.3	4.2	5.5	5.3	5.9	7.6	11.0	12.5			-2.3	31.0	-3.6	11.3	28.8	44.7	13.6	16.5
TOTAL	..	..	..	..	..	..	..	..			..	..	..	..	..	..	..	..
	Unit price																	
	£	£	£	£	£	£	£	£										
Knitted fabrics in the piece -ues(non-raschel mach)	0.16	0.15	0.16	0.20	0.21	0.24	0.27	0.34	na	na	1.9	3.8	22.5	6.7	13.6	13.3	26.4	11.2
-raschel mach.-net/ window f.	3.28	3.10	3.37	3.00	3.60	3.87	4.05	3.93	na	na	-5.4	8.5	-10.9	19.8	7.6	4.9	-3.0	2.6
elastic	3.65	3.07	2.84	3.05	3.35	4.29	6.04	6.44	na	na	-16.0	-7.5	7.6	9.8	28.1	40.7	6.6	8.5
Making-up garments	"	"	"	"	"	"	"	"	na	na	"	"	"	"	"	"	"	"
Other	"	"	"	"	"	"	"	"	na	na	"	"	"	"	"	"	"	"
Bonded fabrics(mainly warp knitted)	0.51	0.60	0.55	0.79	0.85	0.89	1.13	1.18	na	na	16.3	9.9	21.1	6.9	5.6	26.1	4.3	12.6
TOTAL	"	"	"	"	"	"	"	"	na	na	"	"	"	"	"	"	"	"
Principle products (41702) (£m)	92.8	89.4	105.3	112.8	117.3	141.8	156.1	165.6	na	na								
TOTAL-Survey estabs	84.3	81.4	96.4	106.7	113.5	137.1	154.3	165.0	na	na								
- grossed up	"	"	"	110.3	118.5	143.2	162.0	173.7	na	na								

* See footnote Table A1

TABLE A6: SALES BY UK MANUFACTURERS - MADE-UP CLOTHING (MLH444: Overalls, men's shirts, etc), 1971-1978

	Value								Share		Annual change*							
	1971	1972	1973	1974	1975	1976	1977	1978	1971	1978	72/71	73/72	74/73	75/74	76/75	77/76	78/77	78/71
	£m	£m	£m	£m	£m	£m	£m	£m	%	%	%	%	%	%	%	%	%	%
Shirts of warp kn. fab	16.5	16.2	15.4	13.9	9.2	3.8	3.0	1.6	85.5	10.4	-1.8	-4.9	-9.7	-33.8	-58.7	-21.1	-46.7	-28.3
Shirts other kn. fab	2.8	2.3	2.0	2.4	3.0	5.2	6.8	8.9	14.5	57.8	-17.9	-13.0	20.0	25.0	73.3	30.8	30.9	18.0
Total shirts(incl.woven)	33.5	41.0	49.4	58.3	85.4	91.1	107.8	124.1	na	na	22.4	20.5	18.0	46.5	6.7	18.3	15.1	20.6
Knitted shirts as share of all shirts (%)	57.6	45.1	35.2	28.0	14.3	9.9	9.1	8.5										
Pajamas, nightwear of knitted fabric	"	"	"	"	1.8	3.0	4.9	4.9	"	31.8	"	"	"	"	16.7	63.3	0.0	
TOTAL KNITTED	19.3	18.5	17.4	16.3	14.0	12.0	14.7	15.4	100.0	100.0	-4.1	-5.9	-6.3	-14.1	-14.3	22.5	4.8	-3.2
	Volume																	
	m	m	m	m	m	m	m	m										
Shirts of warp knitted fabric	16.7	14.0	11.2	7.9	4.9	1.9	1.3	0.6	87.0	9.4	-16.2	-20.0	-29.5	-38.0	-61.2	-31.6	-53.8	-37.8
Shirts of oth. kn.fab	2.5	2.3	2.2	2.3	2.5	3.7	4.3	4.3	13.0	67.2	-8.0	-4.3	4.5	8.7	48.0	16.2	0.0	8.1
Total shirts(incl.wovn)	22.1	24.1	27.0	26.0	37.7	35.0	35.9	32.2	na	na	9.0	12.0	-3.7	45.0	-7.2	2.6	-10.3	-5.5
Knitted shirts as share of all shirts (%)	86.9	67.6	49.6	39.2	19.6	16.0	15.6	15.2										
Pajamas, nightwear of knitted fabric	"	"	"	"	0.9	1.1	1.5	1.5	"	23.4	"	"	"	"	22.2	36.4	0.0	"
TOTAL KNITTED	19.2	16.3	13.4	10.2	8.3	6.7	7.1	6.4	100.0	100.0	-15.1	-17.8	-23.9	-18.6	-19.3	6.0	-9.9	-14.5
	Unit price																	
	£	£	£	£	£	£	£	£										
Shirts of warp knitted fabric	1.0	1.2	1.4	1.8	1.9	2.0	2.3	2.7	na	na	17.2	18.9	28.1	6.8	6.4	15.4	15.4	15.3
Shirts of other knitted fabric	1.1	1.0	0.9	1.0	1.2	1.4	1.6	2.1	na	na	-10.8	-9.1	14.8	15.0	16.9	12.6	30.9	9.2
Pajamas, nightwear of knitted fabric	"	"	"	"	2.0	2.7	3.3	3.3	na	na	"	"	"	"	36.4	19.7	0.0	"
TOTAL KNITTED	1.0	1.1	1.3	1.6	1.7	1.8	2.1	2.4	na	na	13.0	14.5	23.1	5.5	6.2	15.6	16.3	13.2
Share of Total MLH 444 Value (%)	16.5	14.1	11.1	8.9	7.1	4.9	4.6	4.1										

* See footnote Table A1

TABLE A7: SALES BY UK MANUFACTURES - MADE-UP CLOTHING (MLH 443: Womens' + girls' tailored outer garments), 1971 TO 1978

	Value								Share		Annual change*							
	1971	1972	1973	1974	1975	1976	1977	1978	1971	1978	72/71	73/72	74/73	75/74	76/75	77/76	78/77	78/71
	£m	£m	£m	£m	£m	£m	£m	£m	%	%	%	%	%	%	%	%	%	%
Womens', girls tailored garments																		
-tailored suits/kn.fab	9.5	4.3	5.9	6.6	5.7	4.4	4.3	3.5	20.6	7.1	-4.4	37.2	11.9	-13.6	-22.8	-2.3	-18.6	-3.5
-non-proofed jackets, blazers	"	"	"	"	1.1	1.5	1.5	2.4	"	4.9	"	"	"	"	36.4	0.0	60.0	"
-skirts of kn. fabric	2.7	3.1	4.3	7.4	7.9	9.1	9.1	9.3	12.4	19.0	14.8	38.7	72.1	6.8	15.2	0.0	2.2	19.3
-slacks of stretched elastic yarn	3.1	3.2	3.1	3.9	4.3	2.1	2.2	2.6	14.2	5.3	3.2	-3.1	25.8	10.3	-51.2	4.8	18.2	-2.5
-slacks of oth.kn.fab	7.0	8.6	11.4	18.2	22.5	25.8	25.9	23.9	32.1	48.8	22.9	32.6	59.8	23.6	14.7	0.4	-7.7	19.2
-non-proofed overcoats, cloaks	4.5	6.4	9.8	10.3	10.5	7.5	7.5	7.3	20.6	14.9	42.2	53.1	5.1	1.9	-28.6	0.0	-2.7	7.2
TOTAL	21.8	25.6	34.5	46.4	52.0	50.4	50.5	49.0	100.0	100.0	17.4	34.8	34.5	12.1	-3.1	0.2	-3.0	12.3
	Volume																	
Womens', girls tailored garments	m	m	m	m	m	m	m	m										
-tailored suits kn.fab	1.1	0.7	0.7	0.7	0.5	0.4	0.4	0.3	10.7	2.1	-36.4	0.0	0.0	-28.6	-20.0	0.0	25.0	-16.9
-non-proofed jackets, blazers	"	"	"	"	0.2	0.2	0.2	0.3	"	2.1	"	"	"	"	0.0	0.0	50.0	"
-skirts of kn. fab.	1.9	2.3	2.9	3.5	3.6	3.5	3.5	2.9	18.4	20.0	21.1	26.1	20.7	2.9	-2.8	0.0	-17.1	6.2
-slacks of stretched elastic yarn	2.0	2.3	2.1	1.6	1.7	0.8	0.8	0.9	19.4	6.2	15.0	-8.7	23.8	6.3	-52.9	0.0	12.5	-10.8
-slacks of oth.kn.fab.	4.7	5.3	6.5	9.0	10.5	11.1	11.1	9.7	45.6	66.9	12.6	22.6	38.5	16.7	5.7	0.0	-12.6	10.9
-non-proofed overcoats, cloaks	0.6	0.7	0.9	0.8	0.7	0.5	0.5	0.4	5.8	2.8	16.7	28.6	-11.1	-12.5	-28.6	0.0	-20.0	-5.6
TOTAL	10.3	11.3	13.1	15.6	17.2	16.5	16.5	14.5	100.0	100.0	9.7	15.9	19.1	10.3	-4.1	0.0	-12.1	5.0
	Unit price																	
	£	£	£	£	£	£	£	£										
Womens', girls tailored garments																		
-tailored suits of knitted fabric	4.1	6.1	8.4	9.4	11.4	11.0	10.8	11.7	na	na	50.3	37.2	11.9	21.0	-3.5	-2.3	8.5	16.1
-non-proofed jackets, blazers	"	"	"	"	5.5	7.5	7.5	8.0	na	na	"	"	"	"	36.4	0.0	6.7	"
-skirts of kn. fabs.	1.4	1.3	1.5	2.1	2.2	2.6	2.6	3.2	na	na	-9.2	10.0	42.6	3.8	18.5	0.0	23.3	12.3
-slacks of stretched elastic yarn	1.6	1.4	1.5	2.4	2.5	2.6	2.8	2.9	na	na	-10.3	6.1	1.6	3.8	3.6	4.8	5.1	9.3
-slacks of oth.kn.fab.	1.5	1.6	1.8	2.0	2.1	2.3	2.3	2.5	na	na	9.1	8.2	15.4	5.9	8.5	0.4	5.6	7.5
-non-proofed o'coats,c	17.5	9.1	10.9	12.9	15.0	15.0	15.0	18.3	na	na	21.9	19.1	18.2	16.5	0.0	0.0	21.6	13.6
TOTAL	2.1	2.3	2.6	3.0	3.0	3.1	3.1	3.4	na	na	7.0	16.3	12.9	1.6	1.0	0.2	10.4	7.4
Share of total MLH 443 value (%)	17.3	18.8	21.1	24.2	22.5	21.5	21.3	18.0										

na - not applicable * see footnote Table A1

TABLE A8: SALES BY UK MANUFACTURERS - MADE-UP CLOTHING (MLH 445: Womens' + girls' light outer garments, infants' garments), 1971-1978

	Value								Share		Annual change*							
	1971	1972	1973	1974	1975	1976	1977	1978	1971	1978	72/71	73/72	74/73	75/74	76/75	77/76	78/77	78/71
Womens' + girls outergarments of kn. fab.																		
-dresses	58.0	64.0	69.0	73.3	79.8	96.2	111.1	116.5	64.2	43.3	10.3	7.8	6.2	8.9	20.6	15.5	4.9	10.5
-costumes	21.0	16.3	14.9	16.4	17.4	19.5	23.6	21.5	23.2	8.0	-22.4	-8.6	10.1	6.1	12.1	21.0	-8.9	0.3
-skirts	2.9	3.7	5.1	8.2	10.9	13.0	17.1	17.1	3.2	6.4	27.6	37.8	60.8	32.9	19.3	31.5	0.0	28.9
-blouses	8.5	9.0	13.6	16.5	14.5	21.9	27.1	32.4	9.4	12.0	5.9	51.1	23.3	-12.1	51.0	23.7	19.6	21.1
Jackets	"	"	"	"	2.2	2.0	3.1	2.3	"	0.9	..	..	..	..	-9.1	55.0	-25.8	"
Nightwear	"	"	"	"	22.2	28.9	37.3	41.4	"	15.4	..	..	..	..	30.2	29.1	11.0	"
Underwear	"	"	"	"	15.6	17.7	19.3	23.3	"	8.7	..	..	..	..	13.5	9.0	20.7	"
Infants outergarments, dresses	"	"	"	"	10.2	11.8	12.9	14.7	"	5.5	..	..	..	..	15.7	9.3	14.0	"
TOTAL	90.4	93.0	102.6	114.4	172.8	211.0	251.5	269.2	100.0	100.0	2.9	10.3	11.5	na	22.1	19.2	7.2	na
	Volume																	
Womens' + girls outergarments of knitted fabric																		
-dresses	22.0	23.2	24.0	20.4	19.9	22.3	23.7	22.3	61.6	25.1	5.5	3.4	-15.0	-2.5	12.1	6.3	-5.9	0.2
-costumes	4.3	3.6	2.8	2.9	2.5	2.6	3.1	2.5	12.0	2.8	-16.3	-22.2	3.6	-13.8	4.0	19.2	-19.4	-7.5
-skirts	2.3	2.6	3.6	4.3	5.2	5.3	5.6	4.9	6.4	5.5	13.0	38.5	19.4	20.9	1.9	5.7	-12.5	11.4
-blouses	7.1	6.9	10.5	10.2	7.3	10.1	11.5	14.2	19.9	16.0	-2.8	52.2	-2.9	-28.4	38.4	13.9	23.5	10.4
Jackets	..	..	..	..	0.5	0.4	0.7	0.4	"	0.5	..	..	..	..	-20.0	75.0	-42.9	"
Nightwear	..	..	..	..	13.8	15.8	17.6	17.8	"	20.1	..	..	..	..	14.5	11.4	1.1	"
Underwear	..	..	..	..	17.3	18.6	16.9	18.8	"	21.2	..	..	..	..	7.5	-9.1	11.2	"
Infants outergarments, dresses					7.2	7.3	7.0	7.8		8.8					1.4	-4.1	11.4	"
TOTAL	35.7	36.3	40.9	37.8	73.7	82.4	86.1	88.7	100.0	100.0	1.7	12.7	-7.6	na	11.8	4.5	3.0	na
	Unit price																	
	£	£	£	£	£	£	£	£										
Womens' + girls outergarments of knitted fabric																		
-dresses	2.6	2.8	2.9	3.6	4.0	4.3	4.7	5.2	na	na	4.5	4.3	24.9	11.7	7.6	8.7	11.5	10.3
-costumes	4.9	4.5	5.3	5.7	7.0	7.5	7.6	8.6	na	na	7.3	17.5	6.3	23.1	7.8	1.5	13.0	8.4
-skirts	1.3	1.4	1.4	1.9	2.1	2.5	3.1	3.5	na	na	12.9	-0.5	34.7	9.9	17.1	24.4	14.3	15.7
-blouses	1.2	1.3	1.3	1.6	2.0	2.2	2.4	2.3	na	na	9.0	-0.7	24.9	22.8	9.1	8.6	-3.2	9.7
Jackets	..	..	..	..	4.4	5.0	4.4	5.8	na	na	..	..	..	..	13.6	-11.4	29.9	na
Nightwear	..	..	..	..	1.6	1.8	2.1	2.3	na	na	..	..	..	..	13.7	15.9	9.8	na
Underwear	..	..	..	..	0.9	1.0	1.1	1.2	na	na	..	..	..	..	5.6	19.9	8.5	na
Infants outergarments, dresses			..	..	1.4	1.6	1.8	1.9	na	na	..	..	..	..	14.1	14.0	2.3	na
TOTAL	2.5	2.6	2.5	3.0	2.3	2.6	2.9	3.0	na	na	1.2	-2.1	20.7	na	9.2	14.1	4.1	na
Share of Total MLH 445 value (%)	34.5	32.9	31.8	29.9	41.4	42.9	42.6	40.2										

* See footnote Table A1

TABLE A9:

SALES BY UK MANUFACTURERS → WEFT KNITTED GARMENTS BY FIBRE(MLH 417.1 (Pt.): Shirts, underwear, jumpers), 1971 to 1978

	Skirts		Underwear						Outerwear									
			Men's		Women's		Children's		Men's				Women's				Children's	
									Fully fash'd		Other		Fully fash'd		Other			
	1971	1978	1971	78	1971	78	1971	1978	1971	1978	1971	1978	1971	1978	1971	1978	1971	1978
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Share of total product category-																		
Cashmere	0.8	2.7	-	-	-	-	-	-	4.1	4.3	35.9	19.0	2.4	4.6	4.8	2.9	4.9	4.0
Wool			2.2	2.0	4.2	3.9	3.4	1.8	15.5	49.4			21.8	43.5				
Cotton	45.1	61.6	79.0	72.3	40.9	45.6	44.9	53.2	Included in 'other fibres'.....									
Synthetic fibre	46.7	34.1	18.8	25.7	51.2	45.2	51.8	45.0	15.3	20.4	49.3	66.6	8.4	47.4	86.4	86.4	86.8	88.7
Other fibres	7.4	1.6			3.7	5.3			5.1	26.0	14.8	14.5	27.4	4.5	8.9	10.8	8.4	
Quantity (m. doz)	1.2	1.6	4.7	4.9	6.7	6.0	5.1	3.3	1.3	1.8	1.0	1.2	2.8	1.9	2.5	4.2	3.4	2.8

TABLE A10: ESTABLISHMENT ANALYSIS (Size, by average number employed), 1970 AND 1975

Size group	Establishments				Employment		Sales		Net output		Capital expenditures		Wages as % of sales				Operatives	
	No.		Share of total		Share of total		Share of total		Share of total		Share of total		Operatives		Other		As % of employment	
	1970	1975	1970	1975	1970	1975	1970	1975	1970	1975	1970	1975	1970	1975	1970	1975	1970	1975
	No.	No.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
1-99	698	849	70.2	78.9	15.4	17.1	17.9	19.4	17.6	18.6	17.2	19.0	13.6	17.7	4.5	5.4	82.6	81.8
100-199	132	106	13.3	9.9	13.0	13.0	15.1	13.9	13.7	14.0	16.9	13.2	14.6	20.5	4.4	6.0	82.9	83.7
200-299	63	44	6.3	4.1	11.8	9.0	14.5	10.2	12.8	10.1	14.1	9.5	13.2	19.3	4.4	6.7	83.3	81.7
300-399	26	24	2.6	2.2	6.9	7.2	6.7	6.6	7.0	5.3	6.2	4.3	17.2	22.5	5.1	8.2	84.1	81.4
400-499	29	14	2.9	1.3	10.1	5.5	8.7	4.8	8.7	5.3	6.0	5.1	18.0	22.5	5.2	8.3	82.8	81.5
500-999	24	21	2.4	2.0	13.3	12.4	12.4	11.9	13.5	12.2	15.0	15.0	17.6	22.2	6.4	8.0	80.1	80.4
1000-1499	13	9	1.3	0.8	11.0	9.1	8.3	8.3	9.5	8.5	8.0	7.3	24.4	24.4	6.6	7.5	83.1	81.6
1500-1999	10	3	1.0	0.3	18.4	4.4	16.5	4.2	17.2	3.9	16.6	2.9	17.5	19.7	5.1	9.6	84.3	77.5
2000+		6		0.6		22.4		20.6		20.3		23.8		21.8		9.3		79.4
TOTAL	995	1076	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	16.4	20.8	5.2	7.4	82.9	81.1

Size group	Per establishment										Per employee							
	Employment		Sales		Net output		Cap. expend.		Stock/WIP		Sales		Net output		Cap. expend.		Stock/WIP	
	1970	1975	1970	1975	1970	1975	1970	1975	1970	1975	1970	1975	1970	1975	1970	1975	1970	1975
	No.	No.	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000
1-99	30	24	143	160	53	70	7	4	25	29	4.7	6.8	1.8	3.0	0.2	0.2	0.8	1.2
100-199	135	144	637	920	218	421	36	23	130	183	4.7	6.4	1.6	2.9	0.3	0.2	1.0	1.3
200-299	256	242	1283	1619	428	733	63	40	250	336	5.0	6.7	1.7	3.0	0.2	0.2	1.0	1.4
300-399	361	351	1430	1934	566	924	67	34	312	991	4.0	5.5	1.6	2.6	0.2	0.1	0.9	1.4
400-499	477	459	1664	2421	628	1198	68	68	404	567	3.5	5.3	1.3	2.6	0.1	0.1	0.8	1.2
500-999	760	695	2891	3965	1182	1851	175	133	645	988	3.8	5.7	1.6	2.7	0.2	0.2	0.8	1.4
1000-1499	1159	1187	3553	6414	1532	3058	175	152	854	1417	3.1	5.4	1.3	2.6	0.1	0.1	0.7	1.2
1500-1599	2512	1741	9180	9729	3616	4166	464	181	231	2516	3.7	5.6	1.4	2.4	0.2	0.1	0.9	1.4
2000+		4386		24033		10794		741		5992		5.5		2.5		0.2		1.4
TOTAL	137	109	560	650	211	296	28	17	120	144	4.1	5.9	1.5	2.7	0.2	0.2	0.9	1.3
Change (%) on previous year		-20.4		16.1		40.3		-39.3		20.0		43.9		80.0		0.0		44.3

WIP - Work in progress

TABLE A11: ESTABLISHMENT ANALYSIS - WARP KNITTING, 1975

	Size group: 1-99	100-199	200-499	500+	Total
Establishments (No.)	71	12	11	5	99
Share of total:					
Establishments (%)	71.7	12.1	11.1	5.1	100.0
-Employment (%)	14.7	14.1	28.8	42.5	100.0
-Sales (total) (%)	15.4	14.7	26.7	43.2	100.0
-Net output (%)	10.7	13.7	22.2	53.4	100.0
-Capital expenditures (%)	16.2	21.2	25.1	37.6	100.0
Wages as % of sales:					
- Operatives (%)	13.3	13.5	18.1	16.3	15.9
- Other (%)	6.0	4.5	6.8	6.4	6.2
Operatives as % of employment (%)	78.0	83.3	78.7	77.6	18.8
Per establishment:					
-Equipment (No.)	27	153	342	1108	132
-Sales (£'000)	310	1749	3467	12343	1443
-Net output (£'000)	66	497	879	4659	440
-Capital expenditure (£'000)	7	51	66	217	29
-Stocks/WIP (£'000)	72	466	1160	5662	523
Per employee:					
-Sales (£'000)	11.5	11.4	10.1	11.1	10.9
-Net output (£'000)	2.4	3.3	2.6	4.2	3.3
-Capital expenditure (£'000)	0.2	0.3	0.2	0.2	0.2
-Stocks/WIP (£'000)	2.7	3.0	3.4	5.1	4.0

TABLE A12: SMALL ESTABLISHMENTS - EMPLOYMENT: 1970 and 1975

Size Group	Establishments 1970	Establishments 1975		Percentage share of total 1970	Percentage share of total 1975		Percentage share of employment 1970	Percentage share of employment 1975		Employment per establishment 1970	Employment per establishment 1975	
		Weft	Warp		Weft	Warp		Weft	Warp		Weft	Warp
	No.	No.	No.	%	%	%	%	%	%	%	%	%
1-10	183	356	23	18.4	33.1	23.2	0.9	1.6	0.8	7	5	5
11-19	244	170	22	24.5	15.8	22.2	3.3	2.1	2.5	19	14	15
20-49	114	185	12	11.5	17.2	12.1	3.1	5.0	3.2	37	32	35
50-99	157	138	14	15.8	12.8	14.1	8.1	8.4	8.2	71	72	77
1-99	698	849	71	70.2	78.9	71.7	15.4	17.1	14.7	30	24	27
TOTAL	995	1076	99	100.0	100.0	100.0	100.0	100.0	100.0	137	109	132

TABLE A13: ENTERPRISE ANALYSIS (size, by average number employed), 1975

	Hosiery + knitwear (MLH 417.1) size group:							Warp knitting (MLH 417.2) size group:					Largest five companies	
	1-99	100-199	200-499	500-999	1000-1499	1500+	Total	1-99	100-199	200-499	500+	Total	MLH 417.1	MLH 417.2
Enterprises (No.)	776	69	55	23	7	8	938	64	9	6	5	84	5	5
Establishments (No.)	194	75	75	51	19	62	1076	64	9	7	19	99	56	19
Employment ('000)	17.5	9.4	17.1	15.8	8.3	49.3	117.6	1.5	1.3	2.1	8.1	13.0	43.4	8.1
Operatives ('000)	142	8.1	14.2	12.7	6.8	39.3	95.3	1.2	1.1	1.7	6.3	10.3	34.7	6.3
Other employees ('000)	2.6	1.5	2.9	3.1	1.5	10.0	21.5	0.3	0.2	0.5	1.8	2.8	8.7	1.8
Sales (total) (£m)	118.2	60.6	100.0	89.8	45.8	285.0	699.0	16.4	12.4	21.7	92.3	142.8	246.7	92.3
Gross value added (factor cost) (£m)	71.4		42.1	38.2	20.8	114.9	287.4	5.4		6.3	20.1	31.8	103.3	20.1
Net capital expenditure (£m)	3.1	1.5	2.3	2.4	1.3	8.1	18.7	0.4	0.4	0.4	1.7	2.9	7.6	1.7
Estab./Enterprise(%)	1.02	1.09	1.36	2.22	2.71	7.75	1.15	1.00	1.00	1.17	3.80	1.18	11.20	3.80
Operatives as % of employment (%)	81	84	83	80	82	80	81	80	85	81	78	79	80	78
Sales/Enterprise (£m)	0.15	0.81	1.33	1.76	2.41	4.60	0.65	0.26	1.38	3.10	4.86	1.44	49.3	4.86
Sales (per capita) (£'000)	6.75	6.25	5.85	5.68	5.52	5.78	5.94	10.93	9.54	10.33	11.40	10.98	5.68	11.40
Sales/Operative(£'000)	8.32	7.48	7.04	7.07	6.74	7.25	7.33	13.67	11.27	12.76	14.65	13.86	7.11	14.65
Gross value added (per capita)(£'000)	2.63		2.46	2.42	2.51	2.33	2.44	1.92		2.99	2.47	2.44	2.38	2.47
Gross value added per operative (£'000)	3.20		2.96	3.01	3.06	2.92	3.02	2.35		3.71	3.19	3.09	2.98	3.19
Net capital expenditure (per capita) (£'000)	0.18	0.15	0.13	0.15	0.16	0.16	0.16	0.27	0.31	0.19	0.21	0.22	0.18	0.21
Net capital expenditure/Operative (£'000)	0.22	0.19	0.16	0.19	0.19	0.21	0.20	0.33	0.36	0.24	0.27	0.28	0.22	0.27
Wages as % of sales(%)	23	26	28	30	31	30	28	20	19	24	23	22	31	23
Stocks as % of sales (%)	17	19	23	23	22	24	22	26	30	35	39	36	25	39
Enterprises (%)	82.7	7.4	5.9	2.5	0.7	0.8	100.0	76.2	10.7	7.1	6.0	100.0	0.5	6.0
Establishments (%)	73.8	7.0	7.0	4.7	1.8	5.8	100.0	64.6	9.1	7.1	19.2	100.0	5.2	19.2
Employment (%)	14.9	8.2	14.5	13.8	7.1	41.9	100.0	11.5	10.0	16.2	62.3	100.0	37	63
Sales (%)	16.2	8.7	14.3	12.8	6.6	40.8	100.0	11.5	8.7	15.2	64.6	100.0	35	65
Value added (%)	24.8		14.6	13.3	7.2	40.0	100.0	17.0		19.8	63.2	100.0	36	64
Capital expenditures (%)	16.6	8.0	12.3	12.8	7.0	43.3	100.0	13.8	13.8	13.8	58.6	100.0	40	60

TABLE A14: EMPLOYMENT (UK), 1971 TO 1978

June -	All industries	Manufacturing	Textiles: Man-made fibres	Cotton spinning	Cotton weaving	Woolen, worsted	Hosiery, knitwear	Carpets	Finishing	All Textiles
	'000	'000	'000	'000	'000	'000	'000	'000	'000	'000
1971*	10092	8058	47	79	60	114	134	44	54	622
1972	9814	7779	44	71	54	108	134	45	54	597
1973	9917	7830	45	69	54	108	134	45	54	594
1974	9897	7873	48	67	52	102	132	45	53	585
1975	9509	7490	43	59	48	89	121	40	48	529
1976	9256	7246	43	57	44	82	118	38	48	513
1977	9310	7346	42	57	44	83	124	37	49	517
1978	9265	7301								496
			Change on previous year							
	%	%	%	%	%	%	%	%	%	%
1972	-2.8	-3.5	-6.4	-10.1	-10.0	-5.3	-	2.3	-	-4.0
1973	1.0	0.7	2.3	-2.8	-	-	-	-	-	-0.5
1974	-0.2	0.5	6.7	-2.9	-3.7	-5.6	-1.5	-	-1.9	-1.5
1975	-3.9	-4.9	-10.4	-11.9	-7.7	-12.7	-8.3	-11.1	-9.4	-9.6
1976	-2.7	-3.3	-	-3.4	-8.3	-7.9	-2.5	-5.0	-	-3.0
1977	0.6	1.4	-2.3	-	-	1.2	5.1	-2.6	2.1	0.8
1978	-0.5	-0.6								-4.1
			Share of all manufacturing							
1971	125.2	100.0	0.6	1.0	0.7	1.4	1.7	0.5	0.7	7.7
1977	126.7	100.0	0.6	0.8	0.6	1.1	1.7	0.5	0.7	7.0
			Share of textiles plus clothing and footwear							
1971	937.0	748.2	4.4	7.3	5.6	10.6	12.4	4.1	5.0	57.8
1977	1026.5	809.9	4.6	6.3	4.9	9.2	13.7	4.1	5.4	57.0

* At June.
Source: Based on Dept. of Employment.

TABLE A14: EMPLOYMENT (UK), 1971 TO 1978 (Cont'd)

June -	Clothing and Footwear: Outerwear: Weather proof	Men's, boys tailored	Women's, girls tailored	Overalls, men's shirts, underwear	Dresses, lingerie	Hosiery	Dresses nes	Footwear	All Clothing and Footwear
	'000	'000	'000	'000	'000	'000	'000	'000	'000
1971	20	95	50	48	104	7	36	93	455
1972	20	95	49	51	105	7	35	90	450
1973	20	92	49	48	103	7	34	87	440
1974	19	88	45	48	102	6	33	86	427
1975	19	84	43	45	97	5	32	77	402
1976	18	76	40	43	94	5	30	74	381
1977	18	16	41	45	96	5	32	76	390
1978									383
			Change on previous year						
	%	%	%	%	%	%	%	%	%
1972	-	-	-2.0	6.3	1.0	-	-2.8	-3.2	-1.1
1973	-	-3.2	-	-5.9	-1.9	-	-2.9	-3.	-2.2
1974	-5.0	-4.3	-9.2	-	-1.0	-14.3	-2.9	-1.	-3.0
1975	-	-4.5	-4.4	-6.2	-4.9	-16.7	-3.0	-10.3	-5.9
1976	-5.3	-9.5	-7.0	-4.4	-3.1	-	-6.2	-3.9	-5.2
1977	-	-	2.5	4.7	2.1	-	6.7	2.7	2.4
1978									-1.8
			Share of all manufacturing						
1971	0.2	1.2	0.6	0.6	1.3	0.1	0.4	1.2	5.6
1977	0.2	1.0	0.6	0.6	1.3	0.1	0.4	1.0	5.3
			Share of textiles plus clothing and footwear						
1971	1.9	8.8	4.6	4.5	9.7	0.6	3.3	8.6	42.2
1977	2.0	8.4	4.5	5.0	10.6	0.6	3.5	8.4	43.0

TABLE A15: UNEMPLOYMENT(UK), 1971 TO 1978

	Textiles							
	Man-made fibres	Cotton spinning	Cotton weaving	Woollen worsted	Hosiery, Knitwear	Carpets	Finishing	TOTAL TEXTILES
	Number ('000)							
June -								
1971	1.4	3.9	2.7	5.6	2.7	1.2	2.5	24.3
1972	1.6	4.4	2.4	4.7	2.8	1.1	2.6	24.0
1973	1.0	2.4	1.3	2.6	1.7	0.7	1.5	14.2
1974	0.9	1.7	1.0	2.0	1.7	0.6	1.4	11.4
1975	1.4	3.4	2.2	3.9	3.5	1.4	2.4	22.2
1976	1.7	3.8	2.7	5.5	5.1	1.7	3.4	29.2
* May 1977	2.3	4.0	2.9	4.9	5.0	1.7	3.4	29.4
May 1978	2.0	3.9	2.7	5.3	5.3	2.1	3.6	30.3
	Change from previous year (%)							
1972	14.3	12.8	-11.1	-16.1	3.7	-8.3	4.0	-1.2
1973	-37.5	-45.5	-45.8	-44.7	-39.3	-36.4	-42.3	-40.8
1974	-10.0	-29.2	-23.1	-23.1	0.0	-14.3	-6.7	-19.7
1975	55.6	100.0	120.0	95.0	105.9	133.3	71.4	94.7
1976	21.4	11.8	22.7	41.0	45.7	21.4	41.7	31.5
1977	35.3	5.3	7.4	-10.9	-2.0	0.0	0.0	0.7
1978	-13.0	-2.5	-6.9	8.2	6.0	23.5	5.9	3.1
	Unemployment as percentage of 'All industries' (%)							
1971	0.2	0.5	0.4	0.8	0.4	0.2	0.3	3.4
1978	0.1	0.3	0.2	0.4	0.4	0.2	0.3	2.2
	Unemployment as percentage of Textiles plus clothing and footwear (%)							
1971	4.2	11.6	8.0	16.6	8.0	3.6	7.4	72.1
1978	3.6	7.1	4.9	9.6	9.6	3.8	6.5	55.1

* Mid-year industry analysis of unemployment changed from June to May in 1977. The impact on comparability is not thought to be significant.

Source: Based on Dept. of Employment.

TABLE A15: UNEMPLOYMENT(UK), 1971 TO 1978 (Cont'd)

	Clothing and Footwear							
	Weather-proofed outerwear	Men's, boys' tailored outerwear	Women's, girls tailored outerwear	Overalls, men's shirts, underwear	Dresses lingerie, etc.	Dresses nes	TOTAL CLOTHING + Footwear	ALL INDUSTRIES
June -								
1971	0.5	2.0	1.0	1.3	2.0	0.8	9.4	724
1972	0.7	2.4	1.3	1.9	2.8	0.9	12.0	814
1973	0.4	1.5	0.8	1.4	1.7	0.6	7.7	582
1974	0.3	1.2	0.7	1.1	1.5	0.5	6.4	549
1975	0.5	2.4	1.4	2.2	3.2	0.8	13.4	876
1976	0.9	4.5	2.9	3.4	5.4	1.3	22.4	1332
May 1977	1.0	4.6	2.9	3.4	5.8	1.4	22.5	1342
May 1978	1.0	5.4	3.1	4.0	6.2	1.4	24.7	1387
	Change from previous year (%)							
1972	40.0	20.0	30.0	46.2	40.0	12.5	27.7	12.4
1973	-42.9	-37.5	-38.5	-26.3	-39.3	-33.3	-35.8	-28.5
1974	-25.0	-20.0	-12.5	-21.4	-11.8	-16.7	-16.9	-5.7
1975	66.7	100.0	100.0	100.0	113.3	60.0	109.4	59.6
1976	80.0	87.5	107.1	54.5	68.8	62.5	67.2	52.1
1977	11.1	2.2	0.0	0.0	7.4	7.7	0.4	0.8
1978	0.0	17.4	6.9	17.6	6.9	0.0	9.8	3.4
	Unemployment as percentage of 'All industries' (%)							
1971	0.1	0.3	0.1	0.2	0.3	0.1	1.3	100.0
1978	0.1	0.4	0.2	0.3	0.4	0.1	1.8	100.0
	Unemployment as percentage of Textiles plus clothing and footwear (%)							
1971	1.5	5.9	3.0	3.9	5.9	2.4	27.9	"
1978	1.8	9.8	5.6	7.3	11.3	2.5	44.9	"

TABLE A16: EMPLOYMENT AND WAGES - KNITTING INDUSTRY, 1907 TO 1975

	Employment					Wages							
							Operatives			Other			
	Total	Operatives	Admin., Technical, clerical	Operavies/ Total	Sales /Empl.	Total	Total	per capita		Total	per capita	Wages /Sales	Operatives wages /Sales
	'000	'000	'000	%	£'000	£m	£m	£		£m	£	%	%
1907	51.2	47.7	3.5	93.2	"	"	"	"		"	"	"	"
1912	64.2	60.3	3.9	93.9	"	"	"	"		"	"	"	"
1924	97.9	90.6	7.3	92.5	"	"	7.9	87		"	"	"	"
1930	108.6	99.3	9.4	91.4	"	"	8.0	89		"	"	"	"
1935	117.3	107.5	9.8	91.6	"	"	9.5	89		"	"	"	"
1948	97.8	87.2	10.4	89.2	1.12	22.5	17.5	201		5.0	484	20.5	15.9
1953	123.9	109.4	14.3	88.3	1.62	41.2	32.8	300		8.4	590	20.5	16.4
1958	115.2	100.7	17.2	87.4	1.81	50.3	40.5	402		9.7	689	24.2	19.5
1963	124.5	106.3	20.9	85.4	2.28	65.0	50.7	477		14.3	829	22.9	17.9
1968	134.7	112.8	22.9	83.7	3.42	101.4	77.1	683		24.3	1163	22.0	16.8
1970	136.6	113.2	23.4	82.9	4.08	120.0	91.2	805		28.8	1259	21.5	16.4
1972	128.0	106.0	21.0	82.8	4.28	134.9	101.4	957		33.5	1595	24.6	18.5
1975	130.6	105.6	24.3	80.9	6.45	228.9	168.3	1594		60.6	2494	27.2	20.0
1975 -													
Weft	117.6	95.3	21.5	81.0	5.95	197.4	145.6	1527		51.8	2405	28.2	20.8
Warp	13.0	10.3	2.8	79.2	10.99	31.5	22.7	2213		8.8	3182	22.1	15.9

Note: Figures may not add to totals because of small business coverage difficulties on yearly data.

Source: Based on Census of Production, Department of Industry.
Business Statistics Office.

TABLE A17 EMPLOYMENT - MLH 417[a], 1971 TO 1975 ('000)

	Weft	Warp	Total
1971	-	-	130.9
1972	117.6	10.4	128.0
1973	122.2	11.4	133.6
1974	126.6	12.3	138.9
1975	117.6	13.0	130.6

a Coverage differs from Table 14, based on Census of Production Data.

Source: Dept. of Industry, Census of Production

TABLE A18: AVERAGE WAGES (Per employee), 1948-1975 (£ per annum)

	Textiles	Hosiery + knitwear	All manufacturing
1948	249	230	308
1954	363	333	448
1958	443	437	576
1963	533	522	677
1968	808	753	995
1970	973	878	1213
1972	-	1054	-
1975	2083	1753	2535

Source: Based on Census of Production, Dept. of Industry.

TABLE A19: FULL-TIME AND PART-TIME EMPLOYMENT, BY SEX (MLH 417), 1975 (per cent)

	Full time	Part time	TOTAL
Male	33	1	34
Female	53	13	66
TOTAL	86	14	100

Source: Census of Production, Department of Industry.

TABLE A20: EMPLOYMENT, UNEMPLOYMENT, WEEKLY EARNINGS AND LABOUR COSTS BY REGION: SELECTED YEARS

	Average Employment - Knitting industry										Employment in textiles, clothing + footwear as % of total regional employment	
	1970		1972				1975					
	No.	Share of UK	Weft No.	Share of UK	Warp No.	Share of UK	Weft No.	Share of UK	Warp No.	Share of UK	Male	female
	'000	%	'000	%	'000	%	'000	%	'000	%	%	%
North	3.2	2.4	2.8	2.4	*	*	2.8	2.4	*	*	2.5	6.9
Yorkshire	4.1	3.0	5.7	4.8	*	*	6.3	5.3	0.3	2.0	6.4	9.4
East Midlands	78.4	57.4	69.5	59.1	3.4	32.4	70.2	59.7	4.3	33.2	7.3	17.5
East Anglia	*	*	*	*	*	*	0.1	0.1	*	*	1.2	3.4
South East	8.7	6.4	5.3	4.5	*	*	5.1	4.4	0.4	3.1	1.0	2.2
South-West	*	*	*	*	*	*	0.4	0.4	*	*	1.9	3.0
West Midlands	3.1	2.2	3.0	2.5	*	*	2.7	2.3	*	*	1.3	3.2
North West	10.1	7.4	7.5	6.4	1.7	15.9	6.8	5.8	1.8	13.8	5.7	9.3
England	109.3	80.0	94.5	80.3	8.0	76.8	94.5	80.4	10.3	79.0	2.9	5.6
Wales	2.9	2.1	2.2	1.8	*	*	2.2	1.9	0.5	4.0	2.1	4.4
Scotland	18.6	13.6	15.8	13.4	*	*	15.8	13.4	1.1	8.1	2.6	6.8
Great Britain	130.7	95.7	1125	95.6	9.2	88.9	112.5	95.7	11.9	91.1	-	-
Northern Ireland	5.9	4.3	5.1	4.4	1.2	11.1	5.1	4.3	1.2	8.9	7.9	14.2
UK	136.6	100.0	1176	100.0	10.4	100.0	117.6	100.0	13.0	100.0	3.0	5.9

TABLE A20: EMPLOYMENT, UNEMPLOYMENT, WEEKLY EARNINGS AND LABOUR COSTS BY REGION: SELECTED YEARS (Cont'd)

	Unemployment (All activities)			Unfilled vacancies (All activities)			Average(1977) weekly earnings (All manufacturing		Total Labour Costs (1975) per hour	
	1971	1975	1977	1971	1975	1977				
	%	%	%	%	%	%	£	UK=100	£	GB=100
North	5.7	5.9	8.4	4.4	6.4	5.8	71.09	104.8	1.65	101.9
Yorkshire	3.8	4.0	5.8	7.6	7.2	7.9	71.79	97.6	1.53	94.9
East Midlands	2.9	3.6	5.1	6.1	5.5	6.6	70.11	95.3	1.48	91.4
East Anglia	3.2	3.4	5.4	2.7	3.0	2.9	71.43	97.1	1.53	94.7
South East	2.0	2.8	4.5	43.9	40.6	41.0	75.49	102.6	1.73	107.2
South-West	3.3	4.7	6.9	7.8	4.8	5.8	69.99	95.1	1.58	97.8
West Midlands	2.9	4.1	5.8	7.0	8.5	6.2	73.17	99.5	1.61	99.3
North West	3.9	5.3	7.5	10.1	6.9	8.1	72.20	98.2	1.59	98.3
England	3.0	3.9	5.8	89.6	83.1	84.3	73.58	100.0	1.62	100.1
Wales	4.4	5.6	8.1	3.8	3.5	4.0	75.21	102.2	1.73	106.7
Scotland	5.8	5.2	8.3	5.1	11.3	10.5	73.49	99.9	1.53	94.9
Great Britain	-	-	-	-	-	-	-	-	1.62	100.0
Northern Ireland	7.9	7.9	11.2	1.5	2.0	1.2	68.82	93.6	-	-
UK	3.5	4.2	6.2	100.0	100.0	100.0	73.56	100.0	-	-

TABLE A21: IMPORT PENETRATION-KNITTED FABRICS, 1970 TO 1978

	Volume						Value					
	1970	1974	1975	1976	1977	1978	1970	1974	1975	1976	1977	1978
	'000kg	'000kg	'000kg	'000kg	'000kg	'000kg	£'000	£'000	£'000	£'000	£'000	£'000
UK manufacturer's sales												
- Weft knitted	47.8	63.9	62.2	66.4	67.6	68.3	103.1	146.0	146.9	164.7	182.0	181.9
- Warp knitted	32.1	27.6	31.6	36.2	34.9	35.6	58.2	91.6	94.8	119.3	132.4	142.5
Total (A)	79.7	91.5	91.8	102.5	102.4	103.9	161.3	237.5	241.7	284.0	314.4	324.4
Less exports (B)	16.7	15.4	12.6	15.7	15.2	13.9	32.7	44.9	44.3	51.7	57.0	55.5
(C)	63.2	76.1	79.3	86.9	87.2	90.1	128.6	192.6	197.4	232.4	257.4	268.9
Plus imports (D)	6.6	5.1	4.8	5.3	5.2	7.1	13.0	16.4	18.5	22.8	24.3	33.3
Apparent consumption (E)	69.8	81.2	84.1	92.2	92.4	97.1	141.5	209.0	215.9	255.2	281.6	302.2
Imports / Home demand $\frac{D}{E} \cdot 100$	9.5	6.3	5.7	5.8	5.6	7.3	9.2	7.8	8.6	9.0	8.6	11.0
Imports / Home demand + exports $\frac{D}{E+B} \cdot 100$	7.6	5.3	5.0	2.1	4.8	6.4	7.5	6.4	7.1	7.4	7.2	9.3
Trade balance / Home demand + exports $\frac{B-D}{E+B} \cdot 100$	11.7	10.6	8.0	9.6	9.3	6.1	11.3	11.2	9.9	9.4	9.7	6.2
Exports / Sales $\frac{B}{A} \cdot 100$	20.9	16.8	15.5	15.3	14.8	13.4	20.3	18.9	18.3	18.2	18.1	17.1
Exports / Imports $\frac{B}{D} \cdot 100$	252.7	300.3	261.7	294.5	294.0	196.1	251.2	274.2	239.5	225.1	234.9	166.8

Note: Figures may not add to totals because of rounding.
Source: Based on Knitstats, published by the Knitting Industrial Federation.

TABLE A22: IMPORT PENETRATION-KNITTED GLOVES, 1970 TO 1978

	Volume						Value					
	1970	1974	1975	1976	1977	1978	1970	1974	1975	1976	1977	1978
	'000 doz	'000d	'000d.	'000d.	'000d.	'000doz.	£'000	£'000	£'000	£'000	£'000	£'000
UK manufactures sales(A)	75	117	92	146	146	198	252	680	649	945	1087	1580
Less exports (B)	38	101	79	108	145	151	168	351	437	533	885	1004
(C)	37	16	13	38	1	47	83	329	212	412	202	576
Plus imports (D)	1175	3267	2773	3781	4557	4802	1985	7499	6038	9326	12258	12651
Apparent consumption(E)	1202	3283	2786	3819	4558	4849	2068	7828	6250	9738	12460	13227
Imports D / Home demand E . 100	96.9	99.5	99.5	99.0	100.0	99.0	96.0	95.8	96.6	95.8	98.4	95.6
Imports D / Home demand E+B . 100	94.0	96.5	96.8	96.3	96.9	96.0	88.0	91.7	90.3	90.8	91.9	88.9
Trade balance B-D / Home demand + exports E+B . 100	-91.0	-93.6	-94.0	93.5	93.8	93.0	81.3	87.4	83.8	95.6	85.2	81.8
Exports B / Sales A . 100	50.7	86.3	85.9	74.0	100.0	76.3	66.9	51.6	67.3	56.4	81.4	63.5
Exports B / Imports D . 100	3.2	3.1	2.8	2.9	3.2	3.1	8.5	4.7	7.2	5.7	7.2	7.9

TABLE A23: IMPORT PENETRATION-WOMENS' FULL-LENGTH STOCKINGS (Seamless, fully-fashioned), 1970 TO 1978

	Volume						Value					
	1970	1974	1975	1976	1977	1978	1970	1974	1975	1976	1977	1978
	'000doz.	'000doz.	'000doz.	'000doz.	'000doz.	'000doz.	£'000	£'000	£'000	£'000	£'000	£'000
UK manufactures sales (A)	9467	5086	3555	3464	3299	3382	14025	8868	7284	7837	8145	9253
Less exports (B)	519	127	113	209	295	250	889	308	259	616	994	760
(C)	8949	4959	3442	3255	3004	3132	13136	8560	7025	7221	7151	8493
Plus imports (D)	1123	152	125	182	169	206	1344	272	368	486	512	571
Apparent consumption (E)	10071	5111	3567	3437	3173	3338	14480	8832	7393	7707	7663	9064
Imports / Home demand $\frac{D}{E} \cdot 100$	11.2	3.0	3.5	5.3	5.3	6.2	9.3	3.1	5.0	6.3	6.7	6.3
Imports / Home demand + exports $\frac{D}{E+B} \cdot 100$	10.6	2.9	3.4	5.0	4.9	5.7	8.7	3.0	4.8	5.8	6.1	5.8
Trade balance / Home demand + exports $\frac{B-D}{E+B} \cdot 100$	-5.7	-0.5	-0.3	0.7	3.6	1.2	-3.0	-0.4	-1.4	1.6	5.6	1.9
Exports / Sales $\frac{B}{A} \cdot 100$	5.5	2.5	3.2	6.0	8.9	7.4	6.3	3.5	3.6	7.9	12.2	8.2
Exports / Imports $\frac{B}{D} \cdot 100$	46.2	83.6	90.4	114.8	174.6	121.4	66.1	113.2	70.4	126.7	194.1	133.1

TABLE A24: IMPORT PENETRATION - WOMEN'S, CHILDREN'S AND INFANTS' TIGHTS (Synthetic), 1970 TO 1978

		Volume						Value					
		1970	1974	1975	1976	1977	1978	1970	1974	1975	1976	1977	1978
		'000doz.	'000d.	'000d.	'000d.	'000d.	'000d.	£'000	£'000	£'000	£'000	£'000	£'000
All manufacturer's sales	(A)	29585	43693	37133	36088	34479	35496	59657	71403	66510	70287	75481	91434
Less exports	(B)	1431	2469	3241	5400	5333	4271	3473	4344	6508	10073	11592	10799
	(C)	28154	41224	23892	30688	29164	31225	56184	67059	60002	60214	63889	80635
Plus imports	(D)	3434	7822	7036	7215	6712	8246	5398	11781	11405	12126	12607	16885
Apparent consumption	(E)	31588	49046	40928	37903	35273	39471	61852	78840	71407	72376	76496	97520
Imports / Home demand	D/E . 100	10.8	15.9	17.2	19.0	18.7	20.9	8.8	14.9	16.0	16.8	16.5	17.3
Imports / Home demand + exports	D/E+B .100	10.4	15.2	15.9	16.7	16.5	18.9	8.3	14.2	14.6	14.7	14.3	15.6
Trade balance / Home demand + exports	D-B/E+B .100	-6.0	-10.4	-8.6	-4.2	-3.4	-9.1	-3.0	-8.9	-6.3	-2.5	-1.2	-5.6
Exports / Sales	B/A . 100	4.3	5.7	8.7	15.0	25.4	12.0	5.8	6.1	9.8	14.3	15.4	11.8
Exports / Imports	B/D . 100	41.8	31.6	46.1	74.8	79.5	51.8	64.3	36.9	57.1	83.1	91.9	64.0

TABLE A25: IMPORT PENETRATION - OTHER SOCKS AND STOCKINGS, 1970 TO 1978

	Volume						Value					
	1970	1974	1975	1976	1977	1978	1970	1974	1975	1976	1977	1978
	'000doz.	'000d.	'000d.	'000d.	'000d.	'000d.	£'000	£'000	£'000	£'000	£'000	£'000
UK manufacturer's sales (A)	15242	17102	18675	19703	20538	21250	30063	42011	49594	59234	73060	85058
Less exports (B)	1811	3041	2773	3360	3994	3370	3888	8254	9454	11896	17551	17805
(C)	13431	14061	15902	16343	16544	17880	26175	33757	40140	47338	55509	67253
Plus imports (D)	519	429	758	1175	1100	1615	554	1107	1624	3022	3695	4455
Apparent demand(E)	13950	14490	16660	41764	50360	69204	26729	34864	41764	50360	69204	71708
Imports / Home demand D/E .100	3.7	3.0	4.5	6.7	6.2	8.3	2.1	3.2	3.9	6.0	5.3	6.2
Imports / Home demand + exports D/E+B .100	3.3	2.4	3.9	5.6	5.1	7.1	1.8	2.6	3.2	4.9	4.3	5.0
Trade balance / Home demand + exports B-D/E+B .100	8.2	14.9	10.4	10.5	13.4	7.7	10.9	16.6	15.3	14.3	16.0	14.9
Exports / Sales B/A . 100	11.9	17.8	14.8	17.1	19.4	15.9	12.9	19.6	19.1	20.1	24.0	20.9
Exports / Imports B/D . 100	384.9	708.9	365.8	286.0	363.1	208.7	701.8	745.6	582.1	393.6	475.0	399.7

TABLE A26: IMPORT PENETRATION - KNITTED SHIRTS (All fibres), 1970 TO 1978

		Volume						Value					
		1970	1974	1975	1976	1977	1978 *	1970	1974	1975	1976	1977	1978 *
		'000doz.	'000d.	'000d.	'000d.	'000d.	'000d.	£'000	£'000	£'000	£'000	£'000	£'000
All manufacturer's sales	(A)	1279	928	936	1564	1827	1647	10107	12285	14800	24524	36064	32702
Less exports	(B)	123	302	222	347	417	236	1436	3641	4084	5872	8026	6064
	(C)	1156	626	714	1217	1410	1411	3671	8644	10716	18652	26038	26638
Plus imports	(D)	2118	2236	2423	2709	3262	906	7800	14721	20927	29426	35139	15099
Home demand	(E)	3274	2862	3137	3926	4627	2317	16471	23365	31643	48164	61177	41737
Imports / Home demand E	D.100	64.7	78.1	77.2	69.0	69.8	39.1	47.4	63.0	66.1	61.1	57.4	36.2
Imports / Home demand E+B + exports	D.100	62.3	70.7	72.1	63.4	64.1	35.5	43.6	54.5	58.6	54.5	50.8	31.6
Trade balance / Home demand E+B + exports	B-D.100	-58.7	-61.1	-65.5	-55.3	-55.9	-26.2	-35.5	-41.0	-47.1	-43.6	-39.2	-18.9
Exports / Sales A	B.100	9.6	32.5	23.7	22.2	22.8	11.3	14.2	29.5	27.6	23.9	22.3	18.5
Exports / Imports D	B.100	5.8	13.5	9.2	12.8	12.8	26.0	18.4	24.7	19.5	20.0	22.8	40.2

* From 1978 trade figures exclude T-shirts, now classified under "Other Outerwear" see Table A28.

TABLE A27: IMPORT PENETRATION - OTHER KNITTED UNDERWEAR, 1970 - 1978

		Volume						Value					
		1970	1974	1975	1976	1977	1978*	1970	1974	1975	1976	1977	1978 *
		'000doz.	'000d.	'000d.	'000d.	'000d.	'000d.	£'000	£'000	£'000	£'000	£'000	£'000
UK manufacturer's sales	(A)	16145	15447	14721	14417	14524	14365	41591	65333	71362	77919	98170	108142
Less exports	(B)	736	1070	997	2074	2430	2738	2604	6829	7913	15274	23401	28937
	(C)	15409	14377	13724	12343	12094	11627	38987	58504	63449	62645	74769	79205
Plus imports	(D)	3439	3623	2818	3848	4623	7887	4486	11750	10664	21043	27454	49875
Home demand	(E)	18848	18000	16542	16191	16717	19516	43473	70254	74113	83688	102223	129080
Imports / Home demand	D.100 / E	18.2	20.1	17.0	23.8	27.7	40.4	10.3	16.7	14.4	25.1	26.9	38.6
Imports / Home demand + exports	D.100 / E+B	17.6	19.0	16.1	21.1	24.1	35.4	9.7	15.2	13.0	21.3	21.9	31.6
Trade balance / Home demand + exports	B-D.100 / E+B	-13.8	-13.4	-10.4	-9.7	-11.5	-23.1	-4.1	-6.4	-3.4	-5.8	-3.2	-13.3
Exports / Sales	B . 100 / A	4.6	6.9	6.8	14.4	16.7	19.1	6.3	10.5	11.1	19.6	23.8	26.8
Exports / Imports	B . 100 / D	21.4	29.5	35.4	53.9	52.6	34.7	58.0	58.1	74.2	72.6	85.2	58.0

* From 1978, trade figures include cotton T-shirts previously classified under "shirts" - See Table A27.

TABLE A28: IMPORT PENETRATION - KNITTED OUTERWEAR (Jerseys, pullovers, etc.-all fibres): 1970 TO 1978

		Volume						Value					
		1970	1974	1975	1976	1977	1978	1970	1974	1975	1976	1977	1978
		'000doz.	'000d.	'000d.	'000d.	'000d.	'000d.	£'000	£'000	£'000	£'000	£'000	£'000
UK manufacturer's sales	(A)	9271	12001	11105	11634	11611	11423	126574	223303	247345	297760	369148	398181
Less exports	(B)	1075	1419	1257	1627	1844	1583	22982	45185	45833	68408	94437	99945
	(C)	8196	10582	9848	10007	9767	9840	103592	178118	201512	229352	274711	298236
Plus imports	(D)	1366	4491	5502	5910	5831	5715	15392	56783	72899	103473	112130	134304
Apparent demand	(E)	9562	15073	15350	15917	15598	15555	118984	234901	274411	332825	386841	432540
Imports / Home demand	D/E .100	14.3	29.8	35.8	37.1	37.4	36.7	12.9	24.2	26.6	31.1	29.0	31.1
Imports / Home demand + exports	D/E+B .100	12.8	27.2	33.1	33.7	33.4	33.3	10.8	20.3	22.8	25.8	23.3	25.2
Trade balance / Home demand + exports	B-D/E+B .100	-2.7	-18.6	-25.6	-24.4	-22.9	-24.1	5.3	-4.1	-8.5	-8.7	-3.7	-6.5
Exports / Sales	B/A . 100	1.6	11.8	11.3	14.0	15.9	13.9	18.2	20.2	18.5	23.0	25.6	25.1
Exports / Imports	B/D . 100	78.7	31.6	22.8	27.5	31.6	27.7	149.3	79.6	62.9	66.1	84.2	74.4

TABLE A29: IMPORT PENETRATION - OTHER OUTERWEAR (including dresses), 1970 TO 1978
(£'000)

		1970	1974	1975	1976	1977	1978
UK manufacturers' sales	(A)	22911	14072	16023	15663	24217	22158
Less exports	(B)	9806	13360	15678	35113	58921	67160
	(C)	13105	712	345	"	"	"
Plus imports	(D)	13102	30223	42632	59330	69011	71428
Apparent demand	(E)	26207	30935	42977	"	"	"
Imports / Home demand D.100 / E		50.0	97.7	99.2	"	"	"
Imports / Home demand + exports D.100 / E+B		36.4	68.2	72.7	"	"	"
Trade balance / Home demand + exports B-D.100 / E+B		-9.2	-38.1	-46.0	"	"	"
Exports / Sales B . 100 / A		42.8	94.9	97.8	"	"	"
Exports / Imports B . 100 / D		74.8	44.2	36.8	"	"	"

TABLE A30: IMPORT PENETRATION - ALL KNITTED PRODUCTS, 1970 TO 1978

(£'million)

		1970	1974	1975	1976	1977	1978
UK manufacturer's sales	(A)	466.5	675.5	715.2	838.2	997.8	1072.9
Less exports	(B)	77.9	127.2	134.4	199.4	272.9	288.0
	(C)	388.5	548.3	580.8	638.8	724.9	784.9
Plus imports	(D)	63.1	150.5	185.0	261.2	297.1	338.5
Apparent demand	(E)	451.6	698.8	765.8	900.0	1022.0	1123.5
Imports / Home demand	$\frac{D}{E}$. 100	14.0	21.5	24.2	29.0	29.1	30.1
Imports / Home demand + exports	$\frac{D}{E+B}$. 100	11.9	18.2	20.6	23.8	22.9	24.0
Trade balance / Home demand + exports	$\frac{B-D}{E+B}$. 100	2.8	-2.8	-5.6	-5.6	-1.9	-3.6
Exports / Sales	$\frac{B}{A}$. 100	16.7	18.8	18.8	23.8	27.3	26.8
Exports / Imports	$\frac{B}{D}$. 100	123.6	84.5	72.7	76.4	91.8	85.1

Note: Figures may not add to totals because of rounding.

TABLE A31: ANALYSIS OF UK TEXTILES AND APPLIED PRODUCTS TRADE, 1955 TO 1978

	Value									Change					Annual Change						
	1955	1960	1965	1970	1974	1975	1976	1977	1978	1960/1955	1965/1960	1970/1965	1975/1970	1978/1975	1970/1965	1974/1970	1975/1974	1976/1975	1977/1976	1978/1977	1978/1970
	£m	£m	£m	£m	£m	£m	£m	£m	£m	%	%	%	%	%	%	%	%	%	%	%	%
Imports (A)																					
Fibres	328	267	233	184	311	262	439	467	480	-18.6	-12.7	-21.0	42.4	83.2	-4.6	14.0	15.8	67.6	6.4	2.8	12.7
Yarns, fabric	74	136	152	256	688	682	911	1118	1455	83.8	11.8	68.4	66.4	113.3	11.0	28.0	-0.9	33.6	22.7	30.1	24.3
Clothing	18	60	57	129	402	505	684	766	921	233.3	-5.0	126.3	291.5	82.4	17.7	32.9	25.6	35.4	12.0	20.2	27.9
All UK imports	3886	4556	5763	9051	23234	24128	31155	36476	40942	17.2	26.5	57.1	166.6	69.7	9.4	26.6	3.8	29.1	17.1	12.2	20.8
Exports (B)																					
Fibres	80	90	86	96	202	185	260	308	282	12.5	-4.4	11.6	92.7	52.4	2.2	20.4	-8.4	40.5	18.5	-8.4	14.4
Yarns, fabric	311	261	274	397	746	699	934	1147	1238	-16.1	5.0	44.9	76.1	77.1	7.7	17.1	-6.3	33.6	22.8	7.9	15.3
Clothing	45	48	50	123	230	266	412	598	670	6.7	4.2	146.0	116.3	151.9	19.7	16.9	15.7	54.9	95.1	12.0	23.6
All UK exports	2905	3678	4897	8063	16600	19921	25769	32974	37343	26.6	33.1	64.7	147.1	87.5	10.5	19.8	20.0	29.4	28.0	13.2	21.1
										Net change					Net annual change						
										%	%	%	%	%	%	%	%	%	%	%	%
Trade balance (A-B)																					
Fibres	248	177	147	88	109	77	179	159	198	-71	-30	-59	-11	121	-12	5	-32	102	-20	39	14
Yarns, fabric	-237	-125	-122	-141	-58	-17	-23	-29	217	112	3	19	124	234	4	21	41	-6	-6	246	45
Clothing	-27	12	7	6	172	239	272	168	251	39	-5	-1	233	12	-	42	67	33	-104	83	31
UK trade balance	981	878	866	988	6634	4207	5386	3502	3599	-103	-12	122	321.9	-1787	24	1412	-2427	1179	-1886	97	449
	%	%	%	%	%	%	%	%	%												
All UK Imports																					
Fibres	8.4	5.9	4.0	2.0	1.3	1.1	1.4	1.3	1.2												
Yarns, fabrics	1.9	3.0	2.6	2.8	3.0	2.8	2.9	3.1	3.6												
Clothing	0.5	1.3	1.0	1.4	1.7	2.1	2.2	2.1	2.2												
Analysis of UK Trade in Textiles And Allied Products: 1955-1978																					
Fibres	2.8	2.4	1.8	1.2	1.2	0.9	1.0	0.9	0.8												
Yarns, fabrics	10.7	7.1	5.6	4.9	4.5	3.5	3.6	3.5	3.3												
Clothing	1.5	1.3	1.0	1.5	1.4	1.3	1.6	1.8	1.8												

Source: Official UK Trade Statistics

TABLE A32: UK IMPORTS - TEXTILES (ISIC 65), 1955 TO 1978

	1970	1974	1975	1976	1977	1978	Index(1974=100)* 1970	1975	1976	1977	1978	Annual change in index 1974/1970	1975/1974	1976/1975	1977/1976	1978/1977	1978/1970
Value	£m	£m	£m	£m	£m	£m						%	%	%	%	%	%
Yarns, thread	61	196	166	236	292	349	31	85	120	149	178	34.0	-15.0	41.2	24.2	19.5	24.4
Woven cotton fabrics	53	131	126	191	219	282	41	96	146	168	216	25.0	-4.0	52.1	15.1	28.6	23.1
Other fabrics	75	201	218	257	336	468	37	108	128	167	232	28.2	8.0	18.5	30.5	38.9	25.8
- Knitted, crocheted	13	16	18	23	24	35	79	113	140	148	213	6.1	13.0	23.9	5.7	43.9	13.2
Tulle, lace, etc.	6	16	19	29	33	46	40	123	182	211	291	25.7	23.0	48.0	15.9	37.9	28.2
Felt, cordage, etc. fabrics	24	54	51	66	86	94	45	95	122	161	176	22.1	-5.0	28.4	32.0	9.3	18.6
Made-up articles	16	44	52	63	64	88	35	118	142	146	200	30.0	18.0	20.3	2.8	37.0	24.3
Floor coverings	21	47	51	70	88	128	45	109	151	188	274	22.1	9.0	38.5	24.5	45.7	25.3
Volume	'000 t.	'000 t.	'000 t.	'000 t.	'000 t.	'000 t.											
Yarns, thread	78	161	144	165	174	203	48	89	102	108	126	20.1	-11.0	14.6	5.9	16.7	12.8
Woven cotton fabrics	67	79	78	98	85	106	85	99	125	108	135	4.1	-1.0	26.3	-13.6	25.0	6.0
Other fabrics	"	150	97	96	110	137	"	64	64	73	91	"	-36.0	0.0	14.1	24.7	"
- Knitted, crocheted	7	5	5	5	5	7	131	95	106	103	148	-6.5	-5.0	11.6	-2.8	43.7	1.5
Tulle, lace, etc.	"	3	3	3	4	4	"	95	109	118	137	"	-5.0	14.7	8.3	16.1	"
Felt, cordage, etc. fabrics	"	44	38	48	54	51	"	86	109	122	116	"	-14.0	26.7	11.9	-4.9	"
Made-up articles	23	27	27	28	24	32	84	102	106	91	121	4.5	2.0	3.9	-14.2	33.0	4.7
Floor coverings	"	27	25	30	32	57	"	92	109	119	208	"	-8.0	18.5	9.2	74.8	"
Price	£'000 tonne	£'000 t.	£'000 t.	£'000 t.	£'000 t.	£'000 t.											
Yarns, thread	0.78	1.22	1.15	1.43	1.68	1.72	65	96	118	138	141	11.4	-4.0	22.9	16.9	2.2	10.2
Woven cotton fabrics	0.79	1.66	1.68	1.95	2.58	2.66	48	97	117	156	160	20.1	-3.0	20.6	33.3	2.6	16.2
Other fabrics	"	1.34	2.25	2.68	3.05	3.42	"	169	200	229	255	"	69.0	18.3	14.5	11.4	"
- Knitted, crocheted	1.86	3.20	3.60	4.60	4.80	5.00	60	119	132	144	144	13.6	19.0	10.9	9.1	0.0	11.6
Tulle, lace, etc.	"	5.33	6.33	9.67	8.25	11.50	"	129	187	179	212	"	29.0	29.5	7.2	18.4	"
Felt, cordage, etc. fabrics	"	1.23	1.34	1.38	1.59	1.84	"	110	112	132	152	"	10.0	1.8	17.9	15.2	"
Made-up articles	0.70	1.63	1.93	2.25	2.67	2.75	42	116	134	160	165	24.2	16.0	15.5	19.4	3.1	18.7
Floor coverings	"	1.74	2.04	2.33	2.75	2.25	"	118	139	158	132	"	18.0	17.8	13.7	-16.5	"

* based on actual unrounded trade figures.

Source: Official UK Trade Statistics

TABLE A33: UK EXPORTS - TEXTILES (ISIC 65), 1970 TO 1978

	1970	1974	1975	1976	1977	1978	Index (1974=100)* 1970	1975	1976	1977	1978	Annual change in index 1974/1970	1975/1974	1976/1975	1977/1976	1978/1977	1978/1970
Value	£m	£m	£m	£m	£m	£m						%	%	%	%	%	%
Yarns, thread	117	237	202	286	329	376	49	85	120	139	158	19.5	-15.0	41.2	15.8	13.7	15.8
Woven cotton fabrics	27	52	47	72	94	104	51	90	138	182	200	18.3	-10.0	53.3	31.9	9.9	18.6
Other fabrics	153	237	221	269	348	370	64	93	113	147	156	11.8	-7.0	21.5	30.1	6.1	11.8
-Knitted, crocheted	39	45	44	52	57	58	87	99	115	127	129	14.9	-1.0	16.2	10.4	1.6	5.0
Tulle, lace, etc.	8	13	15	19	20	23	62	118	148	153	183	12.7	18.0	25.4	3.4	19.6	14.5
Felt, cordage, etc. fabrics	35	73	77	88	112	113	48	107	121	154	156	20.1	7.0	13.1	27.3	1.3	15.9
Made-up articles	15	29	35	49	66	72	54	122	169	229	252	16.7	22.0	38.5	35.5	10.0	21.2
Floor coverings	43	106	101	152	184	179	40	95	144	174	170	25.7	-5.0	51.6	20.8	-2.3	19.8
Volume	'000 tonnes.	'000 tonnes.	'000 t.	'000 t.	'000 t.	'000 t.											
Yarns, thread	173	171	131	164	157	187	66	77	96	91	109	10.9	-23.0	24.7	-5.2	19.8	6.5
Woven cotton fabrics	20	22	18	23	23	24	93	81	104	104	108	1.8	-19.0	28.4	-	3.8	1.9
Other fabrics	"	73	64	73	78	74	"	88	100	107	108	"	-12.0	13.6	7.0	0.9	"
-Knitted, crocheted	20	15	15	16	15	14	130	97	104	101	95	-6.3	-3.0	7.2	-2.9	-5.9	-3.8
Tulle, lace, etc.	"	3	3	3	3	3	"	94	99	83	91	"	-6.0	5.3	-16.2	9.6	"
Felt, cordage, etc. fabrics	"	48	43	44	"	44	"	90	91	"	91	"	-10.0	1.1	"	"	"
Made-up articles	17	12	13	21	19	19	140	105	166	152	154	-8.1	5.0	58.1	-8.4	1.3	1.2
Floor coverings	"	94	78	98	105	91	"	82	104	111	96	"	-8.0	26.8	6.7	13.5	"
Price	£'000/ tonnes	£000/ t.	£000/ t.	£000/ t.	£000/ t.	£000/ t.											
Yarns, thread	1.04	1.39	1.54	1.74	2.10	2.01	74	110	125	153	145	7.8	10.0	13.6	22.4	-5.2	8.8
Woven cotton fabrics	1.35	2.36	2.61	3.13	4.09	4.33	55	111	133	175	185	16.1	11.0	19.8	31.6	5.7	16.4
Other fabrics	"	3.25	3.45	3.68	4.46	5.00	"	106	113	137	144	"	6.0	6.6	21.2	5.1	"
-Knitted, crocheted	1.95	3.00	2.93	3.25	3.80	4.14	67	98	111	126	136	10.5	-2.0	13.3	13.5	7.9	9.3
Tulle, lace, etc.	"	4.33	5.00	6.33	6.67	7.67	"	126	149	184	201	"	26.0	18.3	23.5	9.2	"
Felt, cordage, etc. fabrics	"	1.52	1.79	2.00	"	2.57	"	119	133	"	171	"	19.0	11.8	"	"	"
Made-up articles	0.88	2.42	2.69	2.33	3.47	3.79	39	116	102	151	164	26.5	16.0	-12.1	48.0	8.6	19.7
Floor coverings	"	1.13	1.29	1.55	1.75	1.97	"	116	138	157	177	"	16.0	19.0	13.8	12.7	"

* based on actual unrounded trade figures.

TABLE A34: UK IMPORTS - CLOTHING (ISIC 84), 1970 TO 1978

	1970	1974	1975	1976	1977	1978	Index(1974=100) 1970	1975	1976	1977	1978	Annual change in index 1974/1970	1975/1974	1976/1975	1977/1976	1978/1977	1978/1970
	£m	£m	£m	£m	£m	£m						%	%	%	%	%	%
Value																	
Clothing(textile-not knitted)	61	226	287	376	405	509	27	127	166	179	225	38.7	27.0	30.7x	7.8	25.7	30.3
Accessories " "	9	18	20	28	33	39	52	113	156	182	216	17.8	13.0	38.1	16.7	18.7	19.5
Knitted clothing, accessories	52	135	168	240	275	300	39	124	178	204	225	26.5	24.0	43.5	14.6	10.3	24.5
Leather clothing,acces.	3	12	15	20	27		20	121	165	216		49.5	21.0	36.4	30.9		
Headgear	2	5	6	9	11	69	43	131	196	234	292	23.5	31.0	49.6	19.4	28.1	33.5
Rubber apparel	-	1	2	2	2		31	155	144	167		34.0	55.0	-7.1	16.0		
Fur clothing	2	5	7	8	14		36	129	162	268		29.1	29.0	25.6	65.4		
	'00	'00	'00	'00	'00	'00											
Volume tonnes		t.	t.	t.	t.	t.											
Clothing(textile-not knitted)	"	452	537	598	550	659	"	119	132	122	146	"	19.0	10.9	-7.6	19.7	"
Accessories "	"	25	25	30	29	35	"	100	121	119	142	"	-	21.0	-1.7	19.3	"
Knitted clothing, accessories	"	292	336	378	385	412	"	115	130	132	141	"	15.0	13.0	1.5	6.8	"
Leather " "	"	32	34	43	46		"	106	135	144		"	6.0	27.4	6.7		
Headgear	"	14	13	16	18	110	"	91	112	129	192	"	-9.0	23.1	15.2	37.0	"
Rubber apparel	"	8	9	7	9		"	120	98	115		"	20.0	-183	17.3		
Fur clothing	"	4	4	4	8		"	104	106	200		"	4.0	1.9	88.7		
	£'000/	£'000	£'000	£'000	£'000	£'000											
Price tonnes.		t.	t.	t.	t.	t.											
Clothing(textile-not knitted)	"	5.00	5.35	6.29	7.36	7.72	"	107	126	147	154	"	6.7	17.9	16.7	5.0	"
Accessories(")	"	7.20	8.00	9.33	11.38	11.14	"	113	129	153	152	"	13.0	14.1	18.7	-0.5	"
Knitted clothing, accessories	"	4.62	5.00	6.35	7.14	7.38	"	108	137	155	160	"	7.8	27.0	12.9	3.3	"
Leather " "	"	3.75	4.41	4.65	5.87		"	114	122	150		"	14.2	7.1	22.7		
Headgear	"	3.57	4.62	5.63	6.11	6.27	"	144	176	181	152	"	44.0	21.5	3.6	-6.5	"
Rubber apparel	"	1.25	2.22	2.86	2.22		"	129	147	145		"	29.2	13.7	-1.1		
Fur clothing	"	12.50	17.50	20.00	13.50		"	124	153	134		"	24.0	23.3	-12.3		

x based on actual, unrounded figures.
.. = not available

TABLE A35: UK EXPORTS - CLOTHING (ISIC 84), 1970 TO 1978

	1970	1974	1975	1976	1977	1978	Index (1974=100)* 1970	1975	1976	1977	1978	Annual change in index 1974/1970	1975/1974	1976/1975	1977/1976	1978/1977	1978/1970
	£m	£m	£m	£m	£m	£m						%	%	%	%	%	%
Value																	
Clothing (textile-not knitted)	56	105	127	195	298	343	53	121	186	285	327	17.2	21.0	53.7	53.2	14.7	25.5
Accessories (")	5	8	10	15	22	31	54	121	180	264	361	16.7	21.0	48.8	46.7	36.7	26.8
Knitted clothing, accessories	47	84	91	150	218	232	56	108	178	260	277	15.6	8.0	64.8	46.1	6.5	22.1
Leather " "	4	12	14	19	18		32	114	157	144		33.0	14.0	37.7	-8.3		
Headgear	5	8	10	14	19	64	57	123	169	222	196	15.0	23.0	37.4	31.4	8.9	19.2
Rubber apparel	3	6	6	8	9		56	115	149	172		15.6	15.0	29.6	15.4		
Fur clothing	4	6	7	10	13		61	103	157	199		13.2	3.0	52.4	26.8		
Volume	'00 tonnes	'00 t.	'00 t.	'00 t.	'00 t.	'00 t.											
Clothing (textile-not knitted)	"	132	133	209	260	252	"	101	158	197	266	"	1.0	56.4	24.7	35.0	"
Accessories (")	"	11	14	14	16	20	"	130	130	143	179	"	30.0	-	10.0	25.2	"
Knitted clothing, accessories	"	116	110	161	186	175	"	95	138	159	150	"	-5.0	45.3	15.2	-5.7	"
Leather "	"	10	12	12	11		"	115	119	104		"	15.0	3.5	-12.6		
Headgear	"	21	19	22	23	92	"	90	106	110	114	"	-10.0	17.8	3.8	17.5	"
Rubber apparel	"	45	43	43	41		"	95	96	91		"	-5.0	1.1	-5.2		
Fur clothing	"	5	5	4	5		"	88	77	86		"	-12.0	-12.5	11.6		
Price	£'000 tonnes	£'000 t.	£'000 t.	£'000 t.	£'000 t.	£'000 t.											
Clothing (textile-not knitted)	"	7.95	9.55	9.33	11.46	13.61	"	120	118	145	123	"	19.8	-1.7	22.9	-15.0	"
Accessories (")	"	7.27	7.14	10.71	13.75	15.50	"	93	138	185	202	"	-6.9	48.8	33.4	9.2	"
Knitted clothing, accessories	"	7.24	8.27	9.32	11.72	13.26	"	114	129	164	185	"	13.7	13.4	26.8	12.9	"
Leather clothing, accessories	"	12.00	11.67	15.83	16.36		"	99	132	138		"	-0.9	33.0	4.9		
Headgear	"	3.81	5.26	6.36	8.26	6.96	"	137	159	202	172	"	36.7	16.6	26.6	-7.3	"
Rubber apparel	"	1.33	1.40	1.86	2.20		"	121	155	189		"	21.1	28.2	21.7		
Fur clothing	"	12.00	14.00	25.00	26.00		"	117	204	231		"	17.0	74.2	13.6		

* based on actual unrounded trade figures.

TABLE A36: UK IMPORTS-KNITTED CLOTHING AND ACCESSORIES(1970-1977:ISIC 841.4;1978:ISIC 845, 846.1-4, 847.2), FABRICS (1970-1977: ISIC 653.7; 1978: ISIC 655), 1970 TO 1978

	1970	1974	1975	1976	1977	1978	Index(1974=100)* 1970	1975	1976	1977	1978	Annual change in index 1974/1970	1975/1974	1976/1975	1977/1976	1978/1977	1978/1970
Value	£m	£m	£m	£m	£m	£m						%	%	%	%	%	%
Gloves	3	7	6	9	12	13	45	81	125	164	169	22.1	-19.0	54.3	31.2	3.0	18.0
Stockings, etc.	3	1	2	3	4	5	239	144	253	305	364	-19.6	44.0	75.7	20.6	19.3	5.4
Undergarments	16	38	43	63	75	82	43	112	164	196	214	23.5	12.0	46.4	19.5	9.2	22.2
Outergarments	28	87	116	163	182	204	33	133	187	209	234	31.9	33.0	40.6	11.8	12.0	27.7
Articles of knitted, crocheted fabric	-	1	1	1	2	1[a]	73	153	209	303	75[a]	37.0	53.0	36.6	45.0	-75.2[a]	0.3[a]
All knitted, etc. clothing, access.	52	135	168	240	275	304	39	124	178	204	225	26.5	24.0	43.5	14.6	10.3	-24.5
Knitted, etc.fabrics	13	16	18	23	24	35	79	113	140	148	213	6.1	13.0	23.9	5.7	43.9	13.2
Volume	'00 tonnes	'00 t.	'00 t.	'00 t.	'00 t.	'00 t.											
Gloves	"	25	20	25	31	34	"	80	101	127	136	"	-20.0	26.3	25.7	7.1	"
Stockings, etc.	13	3	4	7	7	9	507	161	260	251	342	-33.4	61.0	61.5	-3.5	36.3	-4.8
Undergarments	50	90	94	108	110	121	56	105	120	123	136	15.6	5.0	14.3	2.5	10.6	11.7
Outergarments	"	173	214	234	233	247	"	124	136	135	143	"	24.0	9.7	0.7	5.9	"
Articles of knitted, crocheted fabric	1	2	4	4	5	1[a]	61	179	199	229	36[a]	13.2	79.0	11.2	15.1	-84.3[a]	-6.4[a]
All knitted, etc. clothing, access.	"	292	336	378	385	412	"	115	130	132	141	"	15.0	13.0	1.5	6.8	"
Knitted, etc. fabrics	70	50	50	50	50	70	131	95	106	103	148	-6.5	-5.0	11.6	-2.8	43.7	1.5
Price*	£'000/ tonnes	£'000/ tonnes	£'000/ tonnes	£'000/ tonnes	£'000/ tonnes	£'000/ tonnes											
Gloves	"	2.80	3.00	3.60	3.87	3.82	"	101	124	129	124	"	1.3	22.2	4.4	-3.8	"
Stockings, etc.	2.48	5.24	4.72	5.11	6.37	5.59	47	89	97	122	106	20.7	-10.6	8.8	25.0	-12.5	10.7
Undergarments	3.20	4.22	4.57	5.83	6.82	6.78	77	107	137	159	157	6.8	6.7	28.1	16.6	-1.3	9.4
Outergarments	"	5.03	5.42	6.97	7.81	8.26	"	107	138	155	164	"	7.3	28.2	11.0	5.8	"
Articles of knitted, crocheted fabric	3.93	3.29	2.81	3.44	4.35	6.83	120	85	105	132	208	21.0	-14.5	22.8	26.0	58.0	7.2
All knitted, etc. clothing, access.	"	4.62	5.00	6.35	7.14	7.38	"	108	137	155	160	"	7.8	27.0	12.9	3.3	"
Knitted, etc.fabrics	1.86	3.20	3.60	4.60	4.80	5.00	60	119	132	144	144	13.6	19.0	10.9	9.1	0.0	11.6

* based on actual unrounded trade figures.
a. 1978 coverage differs from previous years.

TABLE A37: UK EXPORTS-KNITTED CLOTHING AND ACCESSORIES (1970-1977: ISIC 841.4; 1978: ISIC 845, 846.1-4, 847.2), FABRICS (1970-1977: ISIC 653.7; 1978: ISIC 655), 1970 TO 1978

	1970	1974	1975	1976	1977	1978	Index (1974=100)* 1970	1975	1976	1977	1978	Annual change in index 1974/1970	1975/1974	1976/1975	1977/1976	1978/1977	1978/1970
Value	£m	£m	£m	£m	£m	£m						%	%	%	%	%	%
Gloves	-	-	-	1	1	1	48	125	152	252	286	20.1	25.0	21.6	65.8	18.5	25.0
Stockings, etc.	5	8	10	13	19	19	57	116	149	221	221	15.1	16.0	28.4	48.3	0.0	18.5
Undergarments	8	15	19	31	43	46	50	123	208	287	306	18.9	23.0	69.1	38.0	6.6	25.4
Outergarments	33	58	61	103	153	166[a]	56	104	178	264	286[a]	15.6	4.0	71.2	48.3	8.0[a]	22.6
Articles of knitted, crocheted fabric	2	2	2	2	3	1[a]	88	78	95	120	56[a]	3.2	-22.0	21.8	26.3	-53.3[a]	-5.5[a]
All knitted etc. clothes, access.	47	84	91	150	218	232	56	108	178	260	277	15.6	8.0	64.8	46.1	6.5	22.1
Knitted, etc. fabric	39 '00	45 '00	44 '00	52 '00	57 '00	58 '00	87	99	115	127	129	14.9	-1.0	16.0	10.4	1.6	5.0
Volume	tonnes	t.	t.	t.	t.	t.											
Gloves	-	1	1	1	2	2	"	95	141	175	173	"	-5.0	45.4	24.1	-1.1	"
Stockings, etc.	12	16	18	19	23	20	75	114	120	142	123	7.5	14.0	5.3	18.3	-13.4	6.4
Undergarments	14	25	31	46	48	46	56	124	186	194	182	15.6	24.0	50.0	4.3	-6.2	15.9
Outergarments	"	68	56	90	108	197[a]	"	83	132	159	157[a]	"	-17.0	59.0	20.5	-1.3[a]	
Articles of knitted crocheted fabric	8	6	4	5	4	1[a]	117	60	71	67	18[a]	-3.8	-40.0	18.3	-5.6	-73.1[a]	-20.9
All knitted, etc. clothes, access.	"	116	110	161	186	175	"	95	138	159	150	"	-5.0	45.3	15.2	-5.7	"
Knitted, etc. fabric	200	150	150	160	150	140	130	97	104	101	95	-6.3	-3.0	7.2	-2.9	-5.9	-3.8
Price*	£'000/ tonnes	£'000/ tonnes	£'000/ tonnes	£'000/ t.	£'000/ tonnes	£'000/ t.											
Gloves	"	3.74	4.91	4.03	5.41	6.18	"	132	108	144	165	"	31.6	-18.1	33.6	14.8	"
Stockings, etc.	3.97	5.21	5.31	6.47	8.13	9.37	76	102	124	156	180	7.1	1.8	21.9	25.4	15.5	11.4
Undergarments	5.42	6.00	5.97	6.67	8.88	10.06	89	99	112	148	168	2.9	-0.8	12.7	32.3	13.6	8.2
Outergarments	"	8.55	10.80	11.55	14.16	15.52	"	125	135	166	182[a]	"	25.3	7.7	23.1	9.4[a]	"
Articles of knitted crocheted fabric	2.45	3.28	4.25	4.39	5.86	9.91[a]	75	130	134	179	311[a]	7.5	30.0	3.0	33.8	73.6[a]	19.5[a]
All knitted, etc. clothes, access.	"	7.24	8.27	9.32	11.72	13.26	"	114	129	164	185	"	13.7	13.4	26.8	12.9	"
Knitted, etc. fabric	1.95	3.00	2.93	3.25	3.80	4.14	67	98	111	126	136	10.5	-2.0	13.3	13.5	7.9	9.3

* based on actual unrounded trade figures

a 1978 coverage differs from previous years.

TABLE A38: UK IMPORTS - KNITTED AND CROCHETED FABRICS (ISIC 653.7), BY COUNTRY OR ORIGIN, 1970 TO 1977 (per cent)

	Value					Volume				
	1970	1974	1975	1976	1977	1970	1974	1975	1976	1977
France	1.9	6.8	5.2	6.5	8.0	1.7	5.7	3.8	4.6	6.1
Netherlands	1.7	3.9	5.4	-	5.5	1.2	4.9	3.9	..	4.3
Germany FR	12.0	14.0	18.6	19.7	15.5	8.3	11.3	17.7	16.8	13.5
Italy	5.0	7.3	8.3	10.4	9.1	22.0	5.7	5.4	6.3	6.6
Ireland	4.9	19.9	14.5	13.9	13.8	4.2	25.7	19.5	20.3	17.9
Belgium/Luxembourg	1.0	2.1	4.3	-	-	1.0	1.8	3.4	-	-
Denmark	4.7	5.0	2.3	-	-	2.8	3.8	1.7	-	-
EEC	31.2	59.0	58.6	61.9	56.4	41.1	58.9	55.4	57.8	52.4
Sweden	4.4	6.6	5.0	-	5.3	3.5	6.2	5.3	-	4.6
Finland	2.7	0.7	0.3	-		2.5	0.8	0.4	-	
Austria	11.9	12.9	5.5	-	6.0	11.1	14.0	6.7	-	4.4
Switzerland	8.0	7.8	6.8	6.3	8.0	4.1	4.8	5.6	7.1	8.1
Portugal	-	-	1.2	-	-	-	-	1.9	-	-
Spain	-	-	-	-	8.3	-	-	-	-	9.3
USA	36.2	5.7	13.8	11.2	8.6	32.5	5.3	13.3	11.2	9.7
Canada	-	0.8	2.6	-	-	-	1.0	3.0	-	-
Other	5.6	6.5	6.2	20.6	7.4	5.2	9.0	8.4	23.9	11.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Based on UK Official Trade Statistics

- = nil

TABLE A39: UK EXPORTS - KNITTED AND CROCHETED FABRICS (ISIC 653.7), BY COUNTRY OF DESTINATION, 1970 TO 1977

(per cent)

	Value					Volume				
	1970	1974	1975	1976	1977	1970	1974	1975	1976	1977
France	"	2.8	4.4	7.3	8.0	"	2.2	4.4	7.8	8.7
Netherlands	1.7	2.2	3.2	4.1	5.1	2.2	2.1	3.2	4.2	5.3
Germany FR	2.8	4.6	6.2	6.7	6.2	3.1	5.1	6.8	7.2	6.7
Italy	0.7	1.8	0.9	1.0	1.7	0.6	2.1	1.0	1.1	2.6
Ireland	5.8	10.5	9.4	11.0	12.0	5.5	11.9	10.0	11.9	13.6
Belgium/Luxemburg	"	1.6	2.0	3.1	3.1	"	1.6	2.1	3.7	4.1
Denmark	4.1	4.4	4.6	4.8	3.8	3.9	4.4	4.4	5.1	4.0
EEC	16.7	27.8	30.6	38.0	39.9	16.9	29.4	31.9	41.0	45.3
Sweden	12.3	8.5	8.5	8.0	7.9	14.4	8.7	7.8	7.6	7.9
Norway	2.0	2.4	3.8	4.6	4.3	2.0	2.2	3.2	4.3	4.0
Finland	8.7	4.2	3.8	3.1	3.9	12.5	4.7	4.0	2.9	4.0
Austria	4.0	4.9	3.3	"	"	4.4	5.2	3.4	"	"
Switzerland	7.8	3.4	2.5	"	"	7.2	3.1	2.2	"	"
Portugal	"	0.7	0.2	"	"	"	0.6	0.2	"	"
Malta	"	1.2	0.8	"	"	"	1.2	0.9	"	"
Hong Kong	1.0	1.3	1.6	"	"	1.2	1.7	1.7	"	"
Nigeria	"	0.6	1.0	"	"	"	0.5	1.0	"	"
Zambia	"	1.3	1.2	"	"	"	1.2	1.2	"	"
Jamaica	"	3.6	2.9	"	"	"	3.5	2.8	"	"
Trinidad/Tobago	"	2.1	1.9	"	"	"	1.9	1.8	"	"
USSR	1.0	5.0	14.9	6.7	3.3	1.3	6.3	16.5	8.01	3.3
Poland	"	1.0	0.7	"	"	"	0.9	1.0	"	"
USA	11.1	2.3	1.2	2.8	"	8.3	2.0	0.9	1.8	"
Japan	1.1	1.5	0.5	"	"	0.7	0.9	0.3	"	"
Australia	1.6	4.9	3.7	4.3	4.9	2.0	4.2	3.3	3.6	3.4
New Zealand	0.7	2.3	1.2	"	-	0.7	2.0	0.9	"	"
South Africa	3.3	4.0	2.4	2.7	"	2.6	3.3	2.0	2.1	-
Canada	22.0	4.8	3.9	5.9	4.7	19.0	4.9	3.6	5.2	4.4
Other	6.7	12.0	9.4	23.9	31.1	6.8	11.6	9.4	23.5	28.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 440: UK IMPORTS - KNITTED AND CROCHETED FABRICS (ISIC 655), BY COUNTRY OR ORIGIN, 1978

	Value							Volume						
	Synthetic	Wool	Cotton	Regenerated	Other	Elastic pulverised	TOTAL	Synthetic	Wool	Cotton	Regenerated	Other	Elastic, pulverised	TOTAL
	£	£	£	£	£	£	£	£	£	£	£	£	£	£
France	5.4	"	"	1.0	"	"	"	3.2	"	"	0.4	"	"	"
Netherlands	4.6	"	"	"	"	"	"	3.1	"	"	"	-	"	"
Germany FR	16.2	"	0.4	"	"	"	"	14.3	"	0.3	"	"	"	"
Italy	9.3	0.5	"	"	"	0.6	"	7.4	0.4	"	"	"	0.7	"
Ireland	9.7	"	"	"	"	0.7	"	11.9	"	"	"	"	0.6	"
TOTAL EEC	47.3	0.8	1.3	2.3	0.2	2.4	54.2	41.9	0.5	1.0	2.5	0.2	2.2	48.3
Sweden	-	-	1.2	"	"	"	"	"	"	0.9	"	"	"	"
Ireland	-	0.5	"	"	"	"	"	"	0.3	"	"	"	"	"
Austria	4.7	"	0.5	"	"	"	"	3.5	"	0.3	"	"	"	"
Switzerland	3.8	"	1.8	"	"	"	"	5.0	"	0.5	"	"	"	"
Spain	9.4	"	"	"	"	"	"	9.7	"	"	"	"	"	"
Greece	"	"	"	"	"	0.6	"	"	"	"	"	"	0.6	"
USA	4.6	"	"	5.3	"	1.4	"	4.1	"	"	5.1	"	1.9	"
Other	18.7	0.4	0.8	1.0	0.1	0.3	45.8	15.6	0.3	1.4	2.0	"	0.5	51.7
TOTAL	79.1	1.7	5.6	8.6	0.3	4.7	100.0	79.8	1.1	4.1	9.6	0.1	5.2	100.0

	Average Prices			
	Synthetic	Wool	Cotton	Regenerated
	£/kg	£/kg	£/kg	£/kg
France	7.9	"	"	13.2
Netherlands	6.9	"	"	-
Germany FR	5.3	"	6.3	"
Italy	5.9	5.7	"	-
Ireland	3.8	"	"	-
TOTAL EEC	5.3	6.7	6.0	4.2
Sweden	"	"	5.8	"
Ireland	"	7.6	"	"
Austria	6.4	"	8.7	"
Switzerland	3.5	"	15.5	"
Spain	4.6	"	"	"
Greece	"	"	"	"
USA	5.2	"	"	4.8
Other	n.a.	n.a.	n.a.	n.a.
TOTAL	4.6	7.0	6.4	4.2

.. = not available

TABLE A41: UK EXPORTS - KNITTED AND CROCHETED FABRICS (ISIC 655), BY COUNTRY OF DESTINATION, 1978

	Value							Volume						
	Synthetic	Wool	Cotton	Regenerated	Other	Elastic, rubberised	TOTAL	Synthetic	Wool	Cotton	Regenerated	Other	Elastic, rubberised	TOTAL
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
France	7.0	"	"	1.3	"	"		9.3	"	"	2.3	"	"	
Netherlands	4.5	0.4	"	1.7	"	"		4.5	0.3	"	2.1	"	"	
Germany FR	5.0	-	"	1.8	"	0.5		4.2	"	"	1.7	"	0.5	
Italy	"	"	"	"	"	"		"	"	"	"	"	"	
Ireland	10.6	"	0.6	0.7	0.2	"		10.9	"	0.7	0.8	0.2	"	
Belg./Lux.	"	"	"	1.2	"	"		"	"	"	1.8	"	"	
Denmark	2.9	"	"	"	"	"		2.7	"	"	"	"	"	
EEC	34.3	0.8	1.1	7.2	0.4	1.1	45.0	36.7	0.7	1.3	9.4	0.5	0.9	49.5
Sweden	6.2	0.3	0.4	1.0	"	0.5		6.1	0.1	0.6	0.7	"	0.3	
Norway	2.4	"	0.2	0.8	"	"		2.1	"	0.2	0.8	"	"	
Finland	1.9	"	"	"	"	"		1.8	"	"	"	"	"	
Nigeria	"	"	"	0.8	"	"		"	"	"	0.4	"	"	
Zambia	"	"	0.4	"	"	"		"	"	0.4	"	"	"	
USSR	1.9	"	"	"	"	"		1.8	"	"	"	"	"	
Poland	"	"	"	"	"	0.7		"	"	"	"	"	0.5	
USA	"	"	"	1.2	"	"		"	"	"	0.7	"	"	
Australia	3.1	"	"	0.3	"	"		2.4	"	"	0.2	"	"	
New Zealand	"	"	"	"	-	0.4		"	"	"	"	"	0.4	
Canada	2.9	"	0.3	"	"	-		3.0	"	0.3	"	"	"	
Other	21.3	0.7	1.6	4.0	0.5	1.3	55.0	20.3	0.6	1.6	3.8	0.4	1.1	50.5
TOTAL	74.0	1.8	4.0	15.3	0.9	4.0	100.0	74.2	1.4	4.4	16.0	0.9	3.2	100.0

	Average Price								
	Synthetic	Wool	Cotton	Regenerated		Synthetic	Wool	Cotton	Regenerated
	£/kg	£/kg	£/kg	£/kg					
France	3.0	"	"	2.2	Nigeria	"	"	"	8.8
Netherlands	4.0	5.1	"	3.2	Zambia	"	"	3.7	"
Germany FR	4.8	"	"	4.3	USSR	4.3	"	"	"
Italy	"	"	"	"	Poland	"	"	"	"
Ireland	3.9	"	3.2	3.6	USA	"	"	"	2.1
Belg./Lux.	"	"	"	2.7	Australia	5.2	"	"	6.8
Denmark	4.3	"	"	"	New Zealand	"	"	"	"
EEC	3.8	4.8	3.6	3.1	Canada	3.9	"	3.6	"
Sweden	4.1	7.7	2.6	5.4	Other	n.a.	n.a.	n.a.	n.a.
Norway	4.7	"	2.7	3.8	TOTAL	4.0	5.4	3.6	3.9
Finland	4.4	"	"	"					

TABLE A42: UK TRADE - KNITTED AND CROCHETED GLOVES (1970 - 1977: ISIC 841.41; 1978: 847.21), 1970 TO 1978 (per cent)

	Value						Volume					
	1970	1974	1975	1976	1977	1978	1970	1974	1975	1976	1977	1978
IMPORTS												
EEC	0.7	0.4	1.0	0.5	1.2	3.3	"	0.2	0.5	0.2	0.8	2.0
Hong Kong	87.9	85.5	77.8	77.2	71.9	76.6	"	89.4	86.2	84.2	80.7	82.8
Rep. of Korea	"	"	1.6	"	6.7	2.5	"	"	0.9	"	3.8	1.5
Taiwan	"	"	3.0	"	6.6	3.0	"	"	1.7	"	4.0	1.6
Peoples Rep. of China	"	1.8	"	"	"	"	"	1.4	"	"	"	"
Hungary	2.0	"	2.7	"	"	"	"	"	0.8	"	"	"
Other	9.4	12.3	13.9	22.3	13.6	14.3	"	9.0	9.9	15.6	10.7	12.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	"	100.0	100.0	100.0	100.0	100.0
EXPORTS												
Ireland	"	"	"	24.8	23.5	20.3	"	"	"	21.8	21.9	27.3
EEC	21.4	51.6	51.9	61.0	44.5	55.3	"	48.1	50.1	63.7	44.0	64.9
Other	78.6	48.4	48.1	39.0	55.5	44.7	"	51.9	44.9	36.3	56.0	35.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0

TABLE A43: UK IMPORTS - KNITTED AND CROCHETED SOCKS AND STOCKINGS (1970-1977: ISIC 841.42; 1978: 847.22), BY COUNTRY OF ORIGIN, 1970 TO 1978

(per cent)

	Value						Volume					
	1970	1974	1975	1976	1977	1978	1970	1974	1975	1976	1977	1978
France	"	"	"	5.1	6.9	5.3	"	"	"	2.4	3.2	1.8
Italy	"	"	"	10.7	5.1	6.5	"	"	"	16.5	4.8	7.3
Ireland	72.3	"	18.1	12.8	11.2	9.6	74.5	"	17.8	13.8	12.8	8.5
EEC	75.3	40.5	41.5	34.9	29.2	23.9	76.1	43.5	36.6	36.1	24.6	18.9
Portugal	7.2	4.7	"	"	"	5.4	12.1	9.1	"	"	"	6.2
Austria	5.8	28.6	10.4	12.4	14.6	11.2	4.6	19.5	6.2	6.9	7.2	6.2
Norway	"	11.8	9.8	5.2	"	5.4	"	14.8	10.2	4.5	"	4.6
Hong Kong	"	"	"	9.2	9.7	6.0	"	"	"	6.5	8.8	5.1
Rep. of Korea	"	"	"	14.2	17.7	22.7	"	"	"	20.6	28.7	32.6
Taiwan	"	"	"	13.1	12.1	10.6	"	"	"	15.9	15.1	13.2
Other	11.7	14.4	38.3	11.0	16.7	14.8	7.2	13.1	47.0	9.5	15.6	13.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A44: UK EXPORTS - KNITTED AND CROCHETED SOCKS AND STOCKINGS (1970 - 1977: ISIC 841.42; 1978: 847.22), BY COUNTRY OF DESTINATION, 1970 TO 1978
(per cent)

	Value						Volume					
	1970	1974	1975	1976	1977	1978	1970	1974	1975	1976	1977	1978
Netherlands	"	"	"	"	5.3	6.1	"	"	"	"	5.5	5.6
Ireland	14.1	9.1	14.3	16.2	12.6	15.6	18.5	10.8	15.9	18.5	14.7	18.2
Denmark	9.8	17.1	13.7	15.4	13.0	14.1	9.0	16.9	13.2	14.4	12.2	13.7
Germany FR	4.9	4.7	4.9	"	"	"	4.4	4.2	4.5	"	"	"
EEC	32.0	33.5	33.6	41.0	39.6	44.5	34.3	34.4	37.1	41.4	41.3	46.0
Switzerland	"	6.5	6.4	"	"	"	"	6.1	5.4	"	"	"
Finland	"	3.8	2.3	"	"	"	"	4.8	3.3	"	"	"
Sweden	9.2	8.7	8.8	10.9	11.2	7.9	9.1	8.2	9.0	10.1	11.1	8.4
Norway	"	8.8	8.4	8.2	9.7	12.5	"	9.0	7.5	8.9	10.3	12.7
USA	10.9	4.9	3.2	"	"	"	8.3	4.2	3.0	"	"	"
Japan	"	4.7	3.6	"	"	"	"	3.5	2.9	"	"	"
Canada	12.9	8.5	9.5	9.3	6.1	5.0	13.9	8.6	9.7	10.0	6.7	5.1
Australia	1.3	2.7	1.8	"	"	"	1.1	2.4	1.7	"	"	"
Other	33.7	17.9	19.7	30.6	33.4	30.1	33.3	18.8	20.4	29.6	30.6	27.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE A45: UK IMPORTS - KNITTED AND CROCHETED UNDERGARMENTS (ISIC 841.43), BY COUNTRY OF ORIGIN, 1970 TO 1977
(per cent)

	Value					Value				
	1970	1974	1975	1976	1977	1970	1974	1975	1976	1977
France	0.5	-	1.8	-	-	0.4	-	0.8	-	-
Netherlands	0.4	-	0.2	-	-	0.2	-	0.3	-	-
Germany FR	-	1.9	0.9	-	-	-	2.5	0.9	-	-
Italy	0.9	2.3	3.6	2.6	3.0	0.4	1.5	2.0	2.3	3.2
Ireland	6.7	22.9	21.2	16.1	15.0	8.5	23.8	25.0	22.0	18.3
Denmark	2.8	1.2	0.9	-	-	2.2	0.8	0.6	-	-
EEC	11.6	29.7	28.8	22.0	22.0	12.0	29.8	29.7	26.1	23.6
Sweden	-	0.2	-	-	-	-	0.1	-	-	-
Norway	0.7	0.4	-	-	-	0.3	0.3	-	-	-
Finland	3.3	0.8	0.5	-	-	4.7	0.6	0.6	-	-
Austria	9.8	9.2	8.3	5.1	5.6	7.0	5.4	4.1	2.9	2.7
Switzerland	2.3	0.5	0.5	-	-	1.4	0.2	0.2	-	-
Spain	0.4	-	0.2	-	-	0.4	-	0.1	-	-
Portugal	32.8	17.7	13.4	18.0	18.4	21.1	17.6	14.1	20.7	18.6
Malta	-	0.4	-	-	-	-	0.3	-	-	-
Israel	1.5	1.3	1.9	-	3.5	1.1	0.7	1.0	-	2.6
Hong Kong	28.1	27.1	31.0	23.6	20.2	36.5	26.5	29.6	21.4	18.0
Taiwan	-	3.4	4.9	-	-	-	3.0	4.8	-	-
Rep. of Korea	-	-	3.3	-	-	-	-	4.5	-	-
Macao	-	-	-	3.4	-	-	-	-	2.8	-
Pakistan	0.3	1.6	0.4	-	2.5	0.6	3.5	0.8	-	4.1
India	-	0.4	0.2	-	5.6	-	0.3	0.2	-	7.2
Hungary	1.0	-	-	-	-	1.6	-	-	-	-
Poland	-	1.1	1.1	-	-	-	2.0	1.8	-	-
Romania	5.5	2.2	2.5	-	-	11.0	5.7	6.1	-	-
USA	-	..	1.0	2.5	..	-	-	0.8	2.2	-
Other	2.7	4.0	2.0	25.4	22.2	2.3	4.0	1.6	23.9	23.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a Excludes corsets, etc. (1978: ISIC 876.5)

TABLE A46: UK EXPORTS - KNITTED AND CROCHETED UNDERGARMENTS (ISIC 841.43[a]), BY COUNTRY OF DESTINATION, 1970 TO 1977
(per cent)

	Value					Volume				
	1970	1974	1975	1976	1977	1970	1974	1975	1976	1977
France	"	1.6	3.3	4.6	4.3	"	1.9	3.2	3.9	3.6
Netherlands	"	1.0	2.0	4.7	"	"	1.0	2.2	4.9	"
Germany FR	"	5.4	7.9	6.1	4.3	"	4.6	7.5	7.3	4.7
Italy	"	"	0.6	"	"	"	..	0.4	"	"
Ireland	18.5	23.1	20.4	19.9	21.3	24.1	27.5	25.1	23.8	26.4
Denmark	"	4.1	2.9	"	"	"	4.0	2.9	"	"
EEC	26.5	36.8	38.9	42.9	39.9	30.5	40.2	43.1	46.1	43.1
Sweden	13.6	12.0	10.5	10.4	8.8	13.7	11.5	10.1	10.4	8.7
Norway	"	9.7	9.5	7.6	8.4	"	12.2	11.3	10.1	11.7
Finland	"	3.2	3.3	6.0	6.1	"	4.0	4.3	6.9	7.5
Austria	"	1.7	2.2	"	"	"	2.0	2.2	"	"
Switzerland	"	2.8	2.2	"	"	"	2.4	2.0	"	"
Portugal	..	1.3	0.4	"	"	"	1.5	0.4	"	"
Hong Kong	"	3.0	1.4	"	"	"	2.0	1.0	"	"
Singapore	"	"	0.9	"	"	"	"	0.6	"	"
Kuwait	"	2.5	2.3	"	"	"	2.2	1.9	"	"
Libya	"	1.5	2.7	.	..	..	1.2	2.1	"	"
Nigeria	"	1.1	2.2	4.2	5.2	"	1.1	1.9	3.7	3.6
Zambia	"	0.3	"	"	"	"	0.4	"	"	"
Panama	"	"	0.9	"	"	"	"	0.4	"	"
USA	8.3	3.5	2.1	"	"	10.7	1.8	1.6	"	"
Japan	..	0.5	0.7	"	"	"	0.5	0.4	"	"
Canada	"	2.4	5.1	"	"	"	2.1	4.0	"	"
Australia	"	4.8	4.0	"	"	"	3.7	3.5	"	"
Other	51.4	12.9	10.7	28.9	31.6	45.1	11.2	5.2	22.8	25.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

a Excludes corsets, etc (1978 ISIC 876.5)

TABLE A47: UK IMPORTS - KNITTED AND CROCHETED UNDERGARMENTS (ISIC 846), BY COUNTRY OF ORIGIN, 1978

	Value						Volume						Average Price				
	Wool	Cotton	Synth-etic	Regen-erated	Corsets	Total	Wool	Cotton	Synth-etic	Regen-erated	Corsets	Total	Wool	Cotton	Synth-etic	Regen-erated	Corsets
	%	%	%	%	%	%	%	%	%	%	%	%	£/kg	£/kg	£/kg	£/kg	£/kg
Ireland	-	0.9	11.4	-	-	12.3	-	0.8	14.3	-	-	15.1	-	8.2	5.9	-	-
Italy	-	-	4.0	-	-	4.0	-	-	4.9	-	-	4.9	-	-	8.0	-	-
EEC	0.1	4.0	16.7	"	4.1	24.9	0.1	2.9	19.9	"	2.1	25.1	12.5	10.7	6.2	19.0	14.6
Austria	-	2.1	4.0	-	-	6.1	-	0.8	2.3	-	-	3.1	-	19.2	13.0	-	-
Portugal	-	12.7	1.8	"	-	14.5	-	14.0	1.9	"	-	15.9	-	6.7	7.1	7.5	-
Spain	-	-	0.6	-	-	0.6	-	-	0.6	-	-	0.6	-	-	7.5	-	-
Greece	-	2.2	-	-	-	2.2	-	2.6	-	-	-	2.6	-	6.4	-	-	-
Israel	-	-	1.0	-	-	1.0	-	-	0.5	-	-	0.5	-	-	14.0	-	-
Hong Kong	-	14.7	3.4	0.3	-	18.4	-	15.1	4.0	0.4	-	19.5	-	7.2	6.4	5.1	-
Rep. of Korea	-	-	1.1	-	-	1.1		-	1.2	-	-	1.2	-	-	6.5	-	-
Taiwan	-	-	1.4	-	-	1.4	-	-	1.7	-	-	1.7	-	-	6.2	-	-
Singapore	-	-	0.3	-	-	0.3	-	-	0.3	-	-	0.3	-	-	7.4	-	-
Macao	-	0.7	-	-	-	0.7	-	0.7	-	-	-	0.7	-	7.6	-	-	-
Philippines	-	-	1.3	-	-	1.3	-	-	1.8	-	-	1.8	-	-		-	-
Thailand	-	-	1.1	-	-	1.1	-	-	1.8	-	-	1.8	-	-	4.5	-	-
India	-	1.1	-	-	-	1.1	-	2.0	-	-	-	2.0	-	4.1	-	-	-
Other	-	9.7	3.8	-	11.7	25.8	-	13.8	4.4	-	5.0	23.2	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL	0.1	47.2	36.5	0.4	15.8	100.0	0.1	51.9	40.4	0.5	7.1	100.0	13.1	6.8	6.7	6.0	11.4

TABLE A48: UK EXPORTS - KNITTED AND CROCHETED UNDERGARMENTS (ISIC 846), BY COUNTRY OF DESTINATION, 1978

	Value						Volume						Average Price				
	Wool	Cotton	Synthetic	Regenerated	Corsets	Total	Wool	Cotton	Synthetic	Regenerated	Corsets	Total	Wool	Cotton	Synthetic	Regenerated	Corsets
	%	%	%	%	%	%	%	%	%	%	%	%	£/kg	£/kg	£/kg	£/kg	£/kg
France	-	2.0	1.3	-	-	3.3	-	1.3	0.9	-	-	2.2	-	15.5	15.5	-	-
Netherlands	-	-	1.5	-	-	1.5	-	-	1.4	-	-	1.4	-	-	11.2	-	-
Germany FR	-	1.6	0.7	-	-	2.3	-	1.6	0.5	-	-	2.1	-	11.3	14.2	-	-
Ireland	-	6.3	13.2	-	-	19.5	-	7.2	19.2	-	-	26.4	-	9.7	7.5	-	-
Denmark	-	-	1.5	-	-	1.5	-	-	1.6	-	-	1.6	-	-	11.0	-	-
Bel./Lux.	-	-	0.9	-	-	0.9	-	-	0.7	-	-	0.7	-	-	14.3	-	-
EEC	0.2	14.1	22.6	0.1	13.4	50.4	0.2	14.1	28.6	0.1	9.4	52.4	10.6	11.0	8.7	8.1	15.7
Sweden	-	3.9	1.6	-	-	5.5	-	2.9	3.4	-	-	6.3	-	14.5	5.1	-	-
Norway	-	1.2	4.3	-	-	5.5	-	1.2	7.0	-	-	8.2	-	11.0	6.7		
Finland	-	-	1.7	-	-	1.7	-	-	2.8	-	-	2.8	-	-	6.6	-	-
Saudi Arabia	0.5	-	-	-	-	0.5	0.6	-	-	-	-	0.6	9.7	-	-	-	-
Kuwait	1.0	-	-	-	-	1.0	1.3	-	-	-	-	1.3	8.3	-	-	-	-
Iran	-	-	0.1	-	-	0.1	-	-	0.1	-	-	0.1	-	-	15.8	-	-
Nigeria	-	1.2	1.1	-	-	2.3	-	0.9	1.0	-	-	1.9	-	14.9	11.8	-	-
USA	-	0.4	-	-	-	0.4	-	0.2	-	-	-	0.2	-	19.4	-	-	-
Australia	-	1.3	0.6	-	-	1.9	-	1.1	0.5	-	-	1.6	-	13.1	13.8	-	-
Other	1.1	10.4	10.6	0.1	8.5	30.7	0.8	8.9	9.1	0.1	5.7	24.6	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL	2.8	32.5	42.6	0.2	21.9	100.0	2.9	29.3	52.5	0.2	15.1	100.0	10.5	12.1	8.9	8.8	15.8

TABLE A49: UK IMPORTS - KNITTED AND CROCHETED OUTERGARMENTS (ISIC 841.44), BY COUNTRY OF ORIGIN, 1970 TO 1977

	Value					Volume				
	1970	1974	1975	1976	1977	1970	1974	1975	1976	1977
France	3.1	3.2	3.7	3.7	3.9	"	1.1	1.2	1.6	1.6
Netherlands	0.8	0.7	0.7	-	-	"	0.4	0.3	-	-
Germany FR	1.0	0.6	0.8	-	1.2	"	0.4	0.5	-	0.9
Ireland	10.9	7.6	5.5	5.1	5.8	"	6.6	4.4	5.0	5.4
Italy	5.7	5.8	8.0	15.5	14.9	"	3.6	4.3	12.8	11.3
Denmark	3.8	2.2	1.7	1.5	1.3	"	1.5	1.0	1.1	0.9
Belg./Lux.	0.3	0.4	0.3	-	-	"	0.2	0.2	-	-
EEC	25.5	20.3	20.7	27.5	28.1	"	13.7	11.8	21.3	20.6
Norway	0.5	0.7	0.6	-	-	"	0.5	0.4	-	-
Sweden	2.1	1.9	1.8	1.3	1.2	"	0.7	0.5	0.5	0.4
Finland	-	0.7	0.4	-	-	"	0.4	0.2	-	-
Austria	2.3	1.7	1.6	1.7	2.0	"	1.2	0.9	1.0	1.0
Switzerland	4.5	1.2	1.6	1.2	-	"	0.6	0.7	0.7	-
Portugal	4.8	6.3	4.0	3.2	3.5	"	6.8	3.2	3.7	3.6
Spain	0.3	-	0.3	-	-	"	-	0.2	-	-
Malta	1.2	0.8	1.1	1.0	-	"	0.7	0.7	0.8	-
Israel	2.6	1.7	1.4	1.6	2.0	"	1.0	0.8	1.1	1.3
Hong Kong	47.6	32.6	35.5	31.2	27.8	"	32.7	35.9	30.3	26.9
Taiwan	2.6	16.9	16.0	7.1	9.5	"	22.3	23.9	10.2	14.0
Rep. of Korea	1.6	9.9	10.3	10.5	8.4	"	12.4	14.8	13.8	11.4
Singapore	-	-	-	1.6	2.8	"	-	-	1.7	4.1
Macao	-	-	-	2.0	1.3	"	-	-	2.2	1.2
Philippines	-	-	-	1.6	1.1	"	-	-	1.6	1.2
Thailand	-	-	-	1.0	1.1	"	-	-	1.2	1.7
Romania	-	0.8	0.5	-	-	"	1.5	0.9	-	-
Poland	-	0.5	0.3	-	-	"	0.5	0.4	-	-
USA	-	0.3	0.3	-	1.1	"	0.3	0.4	-	1.0
Japan	0.8	0.4	0.7	-	-	"	0.4	0.9	-	-
Canada	-	--	0.3	-	-	"	"	0.2	-	-
Other	3.6	3.3	2.6	7.5	10.1	"	4.3	3.2	9.9	11.6
TOTAL	100.0	100.0	100.0	100.0	100.0	"	100.0	100.0	100.0	100.0

TABLE A50: UK EXPORTS - KNITTED AND CROCHETED OUTERGARMENTS (ISIC 841.44), BY COUNTRY OF DESTINATION, 1970 TO 1977
(per cent)

	Value					Volume				
	1970	1974	1975	1976	1977	1970	1974	1975	1976	1977
France	7.1	7.7	10.4	10.8	9.9	"	7.1	9.5	11.2	9.7
Netherlands	2.0	2.8	4.1	6.9	8.2	"	3.7	5.2	7.6	8.7
Germany FR	4.9	5.9	6.8	6.8	7.3	"	6.1	6.7	6.2	6.1
Ireland	4.3	9.8	10.9	12.2	10.9	"	13.9	16.2	17.1	15.7
Italy	2.2	2.9	3.2	3.7	2.9	"	1.7	1.9	2.0	1.8
Denmark	3.6	3.5	3.1	2.8	3.0	"	3.9	3.5	2.9	3.0
Belg./Lux.	1.5	2.1	3.3	4.0	4.6	"	2.0	2.8	4.0	4.8
EEC	25.7	34.6	41.9	47.2	46.7	"	38.3	45.7	51.1	49.8
Norway	2.4	3.3	3.8	4.4	4.4	"	3.5	4.0	4.2	4.4
Sweden	7.1	5.1	5.3	5.1	5.1	"	5.3	5.7	5.0	4.9
Finland	2.8	1.7	0.9	-	-	"	1.9	1.0	-	-
Austria	2.5	1.9	1.8	1.6	1.8	"	1.9	1.9	1.7	2.0
Switzerland	10.6	8.3	7.0	5.8	5.0	"	6.5	4.9	4.4	3.8
Portugal	-	1.4	0.4	-	-	"	1.1	0.4	-	-
Spain	1.0	1.3	1.4	1.3	-	"	0.9	0.7	0.9	-
Israel	-	-	0.4	-	-	"	-	0.5	-	-
Hong Kong	2.9	2.4	1.4	-	1.5	"	1.6	0.9	-	1.2
Saudi Arabia	-	-	-	-	1.4	"	-	-	-	1.1
Kuwait	-	0.3	0.6	-	1.2	"	0.3	0.5	-	1.2
Libya	-	1.0	1.7	1.3	1.8	"	1.0	1.8	1.2	1.8
Nigeria	-	0.3	1.0	2.0	1.7	"	0.3	1.6	3.1	2.4
USSR	9.1	2.6	0.9	-	-	"	3.7	1.4	-	-
Poland	-	1.1	0.9	-	-	"	1.5	1.0	-	-
USA	15.8	12.9	9.6	10.6	10.6	"	9.1	6.7	7.2	7.5
Japan	2.0	2.7	2.2	1.8	1.6	"	1.7	1.1	0.9	0.8
Australia	-	3.0	3.9	2.3	2.0	"	2.6	3.7	2.3	2.0
Canada	3.7	6.5	6.9	5.4	4.2	"	6.9	7.3	5.6	4.3
South Africa	1.7	0.9	0.7	-	-	"	1.9	1.0	-	-
Other	12.7	8.7	7.3	11.2	11.0	"	10.0	8.2	12.4	12.8
TOTAL	100.0	100.0	100.0	100.0	100.0	"	100.0	100.0	100.0	100.0

TABLE A51: UK IMPORTS - KNITTED AND CROCHETED OUTERGARMENTS (ISIC 845), BY COUNTRY OF ORIGIN, 1978

	Value						Volume						Average Price				
	Wool	Cotton	Synth-etic	Regen-erated	Other	Total	Wool	Cotton	Synth-etic	Regen-erated	Other	Total	Wool	Cotton	Synth-etic	Regen-erated	Other
	%	%	%	%	%	%	%	%	%	%	%	%	£/kg	£/kg	£/kg	£/kg	£/kg
France	1.3	-	1.3	-	-	2.6	0.5	-	0.4	-	-	0.9	18.0	-	24.9	-	-
Italy	2.2	0.9	13.0	0.5	0.2	16.8	1.0	0.6	12.2	0.2	0.2	14.2	18.8	12.3	8.8	16.8	11.3
Ireland	0.8	-	4.5	0.2	-	5.5	0.5	-	3.6	0.1	-	4.2	13.1	-	10.4	23.0	-
Denmark	-	-	0.6	-	-	0.6	-	-	0.4	-	-	0.4	-	-	12.5	-	-
EEC	5.1	2.0	21.3	0.9	0.6	29.9	2.4	1.3	17.9	0.4	0.4	22.4	17.2	13.6	10.1	18.3	14.9
Austria	-	0.1	-	-	-	0.1	-	"	-	-	-	"	-	21.0	-	-	-
Portugal	-	2.0	1.1	0.1	-	3.2	-	2.1	1.0	0.1	-	3.2	-	7.8	9.6	8.2	-
Malta	-	-	-	0.2	-	0.2	-	-	-	"	-	"	-	-	-	25.6	-
Israel	-	-	0.7	-	-	0.7	-	-	0.5	-	-	0.5	-	-	10.7	-	-
Hong Kong	10.3	5.8	9.2	-	0.1	25.4	8.4	6.7	10.0	-	0.1	25.2	10.1	7.2	7.6	-	9.1
Taiwan	-	-	6.9	-	-	6.9	-	-	11.1	-	-	11.1	-	-	5.1	-	-
Rep. of Korea	-	-	10.1	-	-	10.1	-	-	14.4	-	-	14.4	-	-	5.8	-	-
Singapore	-	-	1.2	-	-	1.2	-	-	2.0	-	-	2.0	-	-	5.2	-	-
Macao	1.1	-	-	-	-	1.1	1.2	-	-	-	-	1.2	7.4	-	-	-	-
Mauritius	2.8	-	-	-	-	2.8	2.4	-	-	-	-	2.4	9.3	-	-	-	-
USA	-	0.6	-	-	-	0.6	-	0.7	-	-	-	0.7	-	7.0	-	-	-
Other	3.8	4.1	9.2	0.4	0.3	17.	3.8	4.4	8.0	0.5	0.2	16.9	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL	23.1	14.6	59.7	1.6	1.0	100.0	18.2	15.2	64.9	1.0	0.7	100.0	10.5	7.9	7.6	13.6	11.0

TABLE A52. UK EXPORTS - KNITTED AND CROCHETED OUTERGARMENTS (ISIC 845), BY COUNTRY OF DESTINATION, 1978

	Value						Volume						Average Price				
	Wool	Cotton	Synth-etic	Regen-erated	Other	Total	Wool	Cotton	Synth-etic	Regen-erated	Other	Total	Wool	Cotton	Synth-etic	Regen-erated	Other
	%	%	%	%	%	%	%	%	%	%	%	%	£/kg	£/kg	£/kg	£/kg	£/kg
France	6.1	-	2.4	-	0.3	8.8	4.8	-	2.8	-	0.2	7.8	19.7	-	14.0	-	17.8
Netherlands	1.6	1.6	5.7	0.1	-	9.0	1.3	1.3	7.1	0.1	-	9.8	19.2	19.3	14.5	14.7	-
Germany FR	5.7	0.1	3.7	-	0.3	9.8	3.3	0.1	3.9	-	0.2	7.5	26.5	14.8	13.3	-	19.8
Italy	2.5	-	-	-	-	2.5	1.1	-	-	-	-	1.1	34.1	-	-	-	-
Ireland	4.3	0.7	7.8	-	0.2	13.0	5.0	0.9	17.2	0.1	0.2	23.4	13.2	11.5	7.0	13.8	14.1
Belg./Lux.	1.8	-	1.1	-	-	2.9	1.5	-	1.3	-	-	2.8	19.0	-	13.5	-	-
EEC	23.3	3.4	23.7	0.5	1.2	52.1	18.3	3.4	34.2	0.5	1.1	57.5	19.8	15.6	10.7	15.9	16.8
Sweden	2.1	1.0	1.3	-	-	3.5	1.7	0.2	1.6	-	-	3.5	19.2	9.8	13.3	-	-
Norway	-	0.1	2.6	-	-	2.7	-	0.1	1.8	-	-	1.9	-	11.0	14.8	-	-
Switzerland	3.5	-	1.4	-	-	4.9	1.7	-	1.7	-	-	3.4	31.7	-	13.4	-	-
Saudi Arabia	-	0.3	-	-	-	0.3	-	0.2	-	-	-	0.2	-	22.9	-	-	-
Libya	-	0.2	-	-	-	0.2	-	0.2	-	-	-	0.2	-	16.0	-	-	-
USA	7.2	0.3	-	-	0.4	7.9	5.1	0.3	-	-	0.3	5.7	21.8	17.1	-	-	17.4
Japan	1.9	-	-	-	0.2	2.1	0.9	-	-	-	0.1	1.0	33.6	-	-	-	34.5
Australia	0.2	-	-	-	-	0.2	0.2	-	-	-	-	0.2	22.7	-	-	-	-
Canada	1.9	-	0.3	-	-	2.2	1.6	-	0.3	-	-	1.9	17.8	-	12.5	-	-
Other	8.3	2.4	11.4	0.8	1.0	23.9	6.8	2.6	13.4	0.6	1.1	24.5	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL	48.4	6.8	40.7	1.3	2.8	100.0	36.3	7.0	53.0	1.1	2.6	100.0	20.7	15.0	11.9	17.2	17.3

TABLE A53: UK TRADE-ARTICLES of KNITTED AND CROCHETED FABRIC (1970 - 1977: EIC 841.45; 1978: 847.23), 1970 TO 1978
(per cent)

	Value						Volume					
	1970	1974	1975	1976	1977	1978	1970	1974	1975	1976	1977	1978
IMPORTS												
Italy	49.7	-	-	18.7	10.3	-	32.0	-	-	17.8	10.9	-
Germany FR	-	-	-	-	9.3	-	-	-	-	-	4.4	-
EEC	63.3	48.3	30.6	41.2	35.3	21.9	47.6	43.5	24.2	32.7	32.9	19.1
Hong Kong	-	-	-	-	15.1	20.7	-	-	-	-	9.5	22.6
USA	-	-	-	40.7	39.8	-	-	-	-	47.9	45.3	
Other	36.7	51.7	69.4	18.1	9.8	57.4	52.4	56.5	75.8	19.4	12.3	58.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EXPORTS												
France	-	-	5.8	-	-	-	-	-	9.2	-	-	-
Ireland	"	12.1	12.7	9.7	10.4	12.9	"	15.3	12.5	9.0	12.5	9.9
Germany FR	"	5.2	5.6	-	-	-	"	4.8	4.8	-	-	-
EEC	18.8	33.9	30.5	24.9	28.1	35.1	13.5	37.1	32.8	23.4	31.1	29.2
Sweden	"	"	4.6	6.8	8.1	-	"	"	3.8	5.2	8.2	-
Poland	-	-	-	-	13.4	-	-	-	-	-	12.0	-
Australia	"	9.9	7.1	7.0	7.5	-	"	9.3	5.9	5.4	6.7	-
Canada	-	1.8	-	-	-	-	-	2.1	-	-	-	-
South Africa	"	8.7	8.8	8.8	+	-	"	8.1	6.4	6.8	-	-
Other	81.2	45.7	49.0	52.5	47.9	64.9	86.5	43.4	51.1	59.2	60.6	70.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

APPENDIX B

RECENT TECHNOLOGICAL DEVELOPMENTS

RECENT TECHNOLOGICAL DEVELOPMENTS

Technological developments do not occur in a vacuum, and whatever their influence on, say, maintaining the "technological gap" with developing countries they also deeply affect other areas of the textiles and clothing industry. Indeed, advances in technology during the early sixties helped to create some remarkable growth in knitting production at the expense of woven products. Despite over-capacity in warp knitting in the late sixties, further developments in knitting speeds and better quality yarns continued to have beneficial effects throughout the early seventies which was a period of rapidly rising imports. The differences between knitting and weaving technology are, in fact, a major factor in the industry's defense against imports, both because of the lower labour content in knitting and because of the facility to incorporate design changes during production.

The main aspects of the technological changes (and their relationships with other sections of the industry) that have taken place in the knitting industry in recent years are outlined below.

Knitting Machines

There are four basic types of weft knitting machines, and that the interchange between them is extremely limited: These are:

- flatbed - straight bar machine (This machine shapes as it knits, and in so doing, reduces waste);
- circular (mainly fabric lengths);
- sock machine (narrow circular); and
- tights machine.

Weft knitting basically takes place across the fabric length whereas warp knitting occurs down it. Warp knitting is, therefore, obviously a much faster process, since operations are occuring across the whole width all the time. Weft knitting, however, is also a very fast process since, by its very nature, it involves a kind of multiphase operation when compared with weaving.

Knitting speeds have increased dramatically over the past 10 to 15 years, not simply because of increased machine precision and speed, nor indeed because improved yarns have meant few stoppages, but also because of an increase in the width or number of picks (which on a garment knitting machine can affect the number of garment pieces that can be produced at once): the use of computerized patterning tapes to run the machine; less patterning due to more plain fabric and greater reliance on printing; and automatic cut-off mechanisms for faults (allowing a faster speed because of both the need to inspect for faults and to backtrack to repair them).

These speed developments are unlikely to be a universal across-the-industry phenomenon and indeed vary between types of machine (flatbed being faster than circular) and products. However, in general, speed has improved so that for instance one operator can now efficiently operate over eighty machines whereas eight years ago he could manage only twenty. These improvements have been more a matter of mechanics than of principle (the introduction of warp knitting in the early sixties was, however, a major change in principle. Although in certain instances more fundamental factors were at work (e.g., electric pile fabrics) and, indeed, a major speed phenomenon was the switch from stockings to tights.

It is important to acknowledge the interrelationship between knitting speeds and efficiency, and the various inputs and requirements of output. The machine itself is only a part of a total system: differences of and developments in yarns have a major impact on speeds (these are discussed below); and so does the ability to control work flow. The more complicated the design, the slower the process (although complications in design add other costs as well). Faults, and a lack of uniformity at the knitting stage, add to problems and, therefore, add to operational time and cost at the making-up stage.

This latter point highlights relationships with later stages of production. In particular, it seems that movements towards knitting the entire garment in a piece on the machine (with perhaps a single seam to close it, or small tubes on circular machines) would greatly increase the speed of knitwear manufacture. However, in fact, at current technology levels, this system is much slower than making-up because it tends to encourage

waste of space on a machine (a one garment at a time approach) plus pattern changes (a delay factor), whereas a more straightforward knitting operation can handle several garments at once (i.e., the comparison for one product may be faster, but for a number it is slower). On the other hand, a judicious combination of the two can prove faster than either knitting the entire garment or fabric plus making-up. There has been a feeling for some time in the knitting industry (especially underwear) that this combination system is about to take off. If it did, it would certainly have an effect on making-up costs.

Making-up: Cutting and Sewing

It has already been pointed out that the nature of knitted fabric makes it very difficult to automate the making-up activities of cutting and sewing. Although some machine cutting of fabric is undertaken, cutting around garment pieces (the products of garment knitting machinery) is predominantly manual (hand-guided through mechanized/electric cutters).

At the point of cutting, significant costs are added to the garment in waste up to 30 per cent - see above). This is less for garment pieces and less still for the more complex knitting of garments. Yarn waste varies with the size and type of garment, but its cost is a function of the basic yarn cost (some work has been done on the recycling of this waste - especially for synthetics - through such processes as repolymerization).

Sewing likewise is a fundamentally manual problem: hand-guiding through various types of seaming machines, hand-guided because, as has been mentioned, knitted fabric tends to be uneven and to stretch, and so eliminating automated guiding. Actual hand-sewing does occur, but only with very expensive garments (whereas in developing countries this may be a preferred and cheaper alternative to sewing machines).

Sewing is the most labour-intensive activity in the manufacture of knitted garments. As a result, imports from developing countries tend to have, and are likely to retain, comparative advantage in those fields where sewing is greatest; basic cut and sewn underwear as opposed to capital-intensive acrylic jumpers. On the other hand, shirts are mass produced (long-run) products with little making-up and yet have a high level of import penetration, so sewing content

is only one factor. In those areas, like underwear, where labour-intensive sewing methods are important, the cost advantage of developing countries would only be reversed by the development of the "knitting in one piece" approach (keeping sewing to a single side seam) designed to reduce labour content. However, most experts doubt the likelihood of technological developments of this sort in the foreseeable future. In the meantime, the market has moved away from fully-fashioned garments (where this kind of technology might be appropriate), to cut and sew designs, where it is not. (Appendix Table A9). This is a combination of current feasible technology and fashion which presently dictate a cost advantage for low labour-cost producers.

Finishing

Two developments have occurred in finishing which affects costs. The first, and probably the less important, is a reduction in inspection and scouring to check on and remove lubricants and oils. For this to happen in the UK industry, it is necessary to achieve a much higher standard than presently applies of machine cleanliness; a factor that also relates to the age on buildings and equipment over which the UK is probably at a disadvantage.

The second development relates to patterning. The elimination of patterning in the knitting process (both garments and fabrics) adds considerably to speed. In the last ten years, printing of patterns has become significantly more important, especially the use of transfers, a process two or three times as fast as knitting patterns. Transfers are expensive, but add considerably to manufacturing profitability in those relevant garment areas: T-shirts and underwear especially. At the same time, manufacturers, particularly on bulk orders from large retailers, have tended to internalize the printing process.

Yarn and the relationship with weaving

One of the crucial determinants of the level of activity in knitwear is its success in the competition between knitted and woven fabrics and garments. But the branches are not entirely competitive, since the different properties of each are only interchangeable for certain uses. Knitted outerwear (jerseys, etc.) is obviously one such area. On the other hand, mock corduroy is derived from weft knitted fabric and certain wovens. Changes in yarn qualities and types (particularly the polyester/cotton mixes) expanded

industry's capability to match demand requirement for both utility and aesthetic shirts, and the like. In contrast, the development of soft wool-like acrylics expanded opportunities for knitting vis-á-vis the previous advantages of weaving natural fibre yarns. Yarn development was probably a more important factor for weft fabric production in this instance than any increase in knitting speeds (a concurrent event) just as they had been all important in the collapse of the 'crimplene boom' for the same manufacturers in the late sixties.

Yarn quality is very important in knitting. Faults are much more obvious than in weaving, not least because the garment falls apart with yarn breakages. Yarns must have a combination of strength, uniformity, and lubrication. The activity of knitting puts much greater stress on the yarn than it does on weaving. Changes in thickness alter the tension and, therefore, the compactness or tightness of the knit, making it uneven. Moreover, more yarn is required in knitting than in weaving, because of the more tortuous yarn path, the yarn wriggling in and out of various combinations of loops. Yarn cost per square metre of fabric are, therefore, higher for the same quality of yarn, but in addition, yarns must also be finer (otherwise the fabric becomes too heavy, uneven, unmanageable and unsuitable and they must be stronger, i.e., of higher quality). However, early British filament yarns were of relatively low quality, so that warp knitting required patterning to cover the faults. This is no longer acceptable as the market has changed: plain fabric now accounts for 88 per cent of demand. The low UK quality led to a large reliance on imported yarns. UK spinners tended to look to cost cutting of their own processes rather than manufacturing a better product. This was partly related to a virtual monopoly control of spinning and link with a captive market, but this situation has been changed. Present day higher spinning speeds, plus a decline in the use of filament yarns, have led to a significant general improvement in UK yarns.

Other factors have reversed the earlier advantages of knitting over weaving. The development of polyester/cotton mixes in the early seventies, combined with faster weaving speeds and re-inforced by the effect of the long hot summer of 1976, gave a stimulus to weaving in shirts, sheetings, interlinings, and pockets - all formerly warp dominated. Knitted women's trousers were also affected (as noted stretch slacks also disappeared). The

problems for warp (especially in the trend towards natural fibres and mixes in spun yarns) were the additional costs, not only of the yarn, but also because their lower strength produced a reduction in warp knitting speed by a factor of ten - concurrently, weaving was becoming more rapid.

Looms in production now use some form of power-assisted shuttle mechanism (the so-called "shuttleless" looms). The most popular is the water-jet which mainly produces plain fabric and at a very fast rate. It is still, however, very much slower than knitting: 1 - 1 1/2 metres per 130 minutes compared with only 1 minute for 180 inches wide, and it is also limited in width by the power and trajectory of the shuttle. However, although weaving was thought to have reached its peak in terms of speed some fifteen years ago, just as knitting has now, there is some hope for very much faster weaving speeds in the near future. The latest developments include a Czechoslovakian designed multiphase loom (i.e., several shuttles in phase rather than one at a time). Its use is expected to become widespread fairly shortly. It is calculated that costs will be reduced by 30 per cent as a result of the increase in speed that this will bring. It should be stressed, however, that this is a very simplified account of recent technological developments, and that knitting retains some basic advantages; the yarn is held for a much shorter time. Weaving, by contrast, has higher working capital and stockholding requirements and these can become very expensive with some natural fibres (e.g., cashmere). Thus, the more expensive varieties of natural fibre are less cost-effective in weaving because they are held longer, and because, with few yarn faults to disrupt knitting, there are no special advantages over weaving.

One other area of competition between knitting and weaving is important. Cutting and sewing of woven fabric is much easier to automate because the fabric is more stable (stretches less) and is more uniform than knitted fabric. At the same time it is not so necessary to cover loose threads. Woven fabrics are now cut by laser and although the same is true of some of the smoother warp-knitted fabrics, the chunkier the material, the more difficult it becomes. Similarly, following the seam is easier with woven fabrics, and the nature of much knitted fabric is such as to require lining. Nonetheless, making-up costs are not yet significantly different,

chiefly because garments from woven fabric tend to be more complicated, and hence require more labour input. It must, however, be said that whereas further automation is envisaged in the making-up of woven garments, the same is not true of knitted ones.

Other fabric developments - Non-wovens

There have been attempts, by some fibre producers in recent years, to reduce fabric production costs by cutting out both spinning and weaving/knitting stages. Millions of pounds have been invested in the UK in the search for directly moulding fabric, while maintaining the variety of more traditional products.

These "non-wovens" are produced by the fusion of fibres with adhesive or heat compression. Although on the market since the late sixties, they have suffered generally from a lack of aesthetic look and feel, being stiff, with poor drape and handling qualities. Besides, they have remained relatively expensive despite low production costs, mainly because of the capital investment. More seriously, however, they are handicapped because they fall apart fairly easily. Additionally, the processes that have been cut out are the lower value added activities. The fabric still needs to be sewn, and sewing is the major production cost. Attempts to eliminate sewing by welding seams has met with only limited success (e.g., in brassiers and water-proof clothing) because it causes stiff seams. Besides, the machinist cost remains because of the need to still follow the seams, the major saving being, therefore, the thread (about 20 per cent of the sewing cost).

Despite occasional phases of excitement about the competition of non-woven, so far they have made little inroads into clothing sectors. "Paper" underwear (and even dresses) was heralded in the mid-sixties as the death knell of fabric underwear, but found little lasting favour with consumers. Platic clothing (not strictly a "non-woven") likewise settled down to an extremely limited market segment. Only in Eastern European markets non-wovens are used extensively in clothing (a kind of felted, "metton" cloth).

Non-wovens in the UK seem to have settled down to a 10 per cent market penetration by weight, mainly in "non-aesthetic" areas: hospital gowns, tea-bags (previously woven from hemp), sausage skins, and especially J-cloths and interlinings. Unseen consumer costs in "throw-away" non-wovens include the additional costs of storage and disposal (although less laundering costs).

There is obviously much more investigation and development required before "non-wovens" become really large competitors with more traditional fabrics. However, they should not be dismissed entirely, especially since, in relation to developing countries, they currently have distinct technology and investment advantages. When these problems have been more successfully overcome, non-wovens will present fabric production with a conversion cost of between 25 per cent and 50 per cent of weaving and knitting costs (because of the very high levels of machine productivity).

The main technical changes have been described in some detail: The most important is that there is continuing technical change, which renders any simplistic and static picture of comparative advantage of limited use. The knitting revolution has itself been stimulated by pressures on the textiles industry to transform man-made fibres in a more efficient, labour-saving, manner than the traditional Lancashire weavers. But, the making-up, or sewing of knitted goods remains, in essence, a highly labour-intensive business in which developed countries are at an inevitable disadvantage. The prospects of eliminating this stage of production seem remote. The first of these changes - a switch back to wovens - may also make the automation of saving and making-up more feasible. This suggests the possibility of meeting low cost competition through improved machine efficiency, but it is a solution which has depressing prospects for employment.