PROTECTIONISM AND ADJUSTMENT POLICIES IN THE OECD

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CONTENTS

Part I : Introduction

1. Before 1973 there was an almost uninterrupted trend towards greater liberalisation of international trade, following the various rounds of GATT negotiations which led to a systematic reduction in the use of quantitative controls and tariffs to restrict trade flows. Deteriorating economic conditions in most Western countries since then have, however, led to increasing pressures to introduce selective import restrictions, in order to safeguard jobs and profits in particular industries (over and above the restrictions which have long applied to agricultural trade). Under existing GATT arrangements Article XIX provides the only basis for official trade restrictions. It allows for 'emergency safeguard measures' to be taken by importing countries when a domestic industry becomes subject to 'rapid' and 'damaging' import increases. The EEC and some other developed countries (DCs) have, however, been hesistant to apply this rule, believing that under the Article compensation would have to be paid to injured exporters and that the Article could only be invoked on a non-discriminatory basis. The response to this has been the emergence of the so-called 'new protectionism', which has brought a proliferation of non-tariff barriers operating outside the GATT rules. These have been increasingly adopted by OECD countries, in order to control imports and to protect a declining domestic industry from growing international competition. Products from newly industrialising countries have been particularly affected. The measures include quotas, countervailing and anti-dumping duties, minimum pricing, and direct government subsidy of domestic industries declining in the face of imports. Bilateral Voluntary Export Restraints (VERs) have also been extensively used. Under these, a producing country undertakes to limit its exports to the consuming country.

2. Internationally agreed protectionist devices have also been used increasingly. These include 'Orderly Marketing Arrangements' (OMAs), which define growth rates for the imports of each consumer, and for the exports of each supplier, and are usually regarded as agreements with formal government involvement. Trade in textiles and clothing has been subject to official regulation for several years under the GATT Multi-Fibre Arrangement.

3. International organisations are deeply worried about the growth of the new protectionism. The International Monetary Fund (IMF) has observed that :

> 'the widening application by many developed countries of the various forms of import restraint .... is a matter for serious concern'.

It has also drawn attention to the fact that :

> 'the rise in protectionism has had a deleterious effect on the efforts of those LDCs seeking to enhance economic growth through outward looking economic policies.'

The effects of increased protectionism were also discussed at UNCTAD V :

> 'the most prominent feature of the new protectionism is its rapid growth in the past ten years ... from 1975-1977 import restrictions introduced or seriously threatened by developed market economies have affected between 3 per cent and 5 per cent or roughly from $ 30-50 billion of international trade.'

Recent Trends in Protectionism

4. The monitoring of protectionism has been attempted in two recent studies by Riedel (1)* (1979) and Page (2) (1979). Riedel attempted to provide a detailed account of the changes in official trade barriers (3) in the EEC, Japan and the USA during 1973-1978. There are several approaches that can be used to assess quantitatively the impact of changes in trade barriers. Riedel uses the simplest, which is merely to measure the flow of trade in products subject to changing trade barriers. The major shortcoming of this is that it only provides a measure of trade flows subject to official barriers. And in all probability these are relatively insignificant. His estimates indicate that the total imports of goods into the EEC and the USA receiving safeguard protection constitute only small shares of total manufactured imports into those markets. The share of protected products as a percentage of total imports of manufactures from LDCs is also low, exceeding 3 per cent in only four cases excluding textiles and clothing. Much more interesting is his inventory of individual country action which has been used to construct Table 1. This led Riedel to the more serious conclusion that his quantitative measure merely indicated a shift from 'official' protectionist measures to the use of VERs or the direct subsidy of domestic industry by the DCs. On this question Riedel is clear :

> 'Defensive subsidisation of industry in Europe is on the rise. Unofficial, secretive agreements between governments and industries to restrict trade are by all reports proliferating ..... Whatever the present level of industrial protectionism an upward trend is all too clear.'

5. Page (1979) has attempted to measure how much of world trade is 'managed' or 'controlled' in some way other than by tariffs. Unfortunately her definition of controlled trade is wide reaching and includes trade controls by both exporters and importers, internationally agreed OMAs and commodity agreements, which makes it much less useful as a measure of protection. Her method was to take the 1974 trade figures and to use them to weight the controlled sectors under the restrictions in force at the end of 1974 and those in force now (1979). Between 40-50 per cent of world trade is shown to be directly controlled and the proportion has risen by almost a sixth in the last few years. For the OECD as a whole Page noted that 33.6 per cent of total imports were 'managed' (under 1974 restrictions) whereas 39.2 per cent of total imports in 1977 would have been defined as 'managed' under the restrictions in force in 1979. Imports from the non-oil developing countries were much more heavily 'managed', reaching 54.17 per cent in 1974 under 1974 restrictions and rising to 65.5 per cent in 1977 under the restrictions in force in 1979. There are, however, as has been pointed out, methodological drawbacks to this approach.

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* References designated by bracketed figures are given on pages 78 - 80.

6. In order to supplement these studies a simple inventory operation has been carried out in Table 1. It seeks to outline the type of restrictions imposed by different countries for particular products. The table generally confirms Riedel's finding that there has been an upward trend in protectionism in recent years. It indicates that the EEC has relied on unilateral quantitative restrictions (QRs) rather than on OMAs or tariffs, and that the latter have been favoured by the USA. The extent and variety of OECD trade restrictions is clear. The most seriously affected products are comparatively few, but important : textiles, shoes, motor vehicles, steel, transport equipment (especially ships), and certain sectors of light engineering, particularly electrical goods and electronic components such as TV sets, radios and calculators. Two of the most protectionist countries would seem to be the USA and the UK. For EEC countries, however, including Britain, the measures have been subsumed in Community-wide actions, and it is difficult to say whether on particular issues it has been the UK or other member states (mainly France) which has been the decisive restrictive influence.

The Multi-Fibre Arrangement

7. The MFA was the outcome of negotiations instituted by GATT in 1973, in order to establish mutually satisfactory arrangements for the organisation of world trade and production of textiles. In common with the Long Term Arrangement for cotton textiles (LTA) which preceded it, the MFA was supposed to be a temporary measure whilst structural adjustment in the DC industries took place. The aim of the MFA was to expand trade in textiles in an orderly way by allowing an annual increase of 6 per cent in LDC exports to DCs, which it was hoped would not be too disruptive to DC markets. The MFA was drawn up within the framework of GATT so that all parties to the agreement had to maintain the principles and obligations of GATT. Implementation was through a series of bilateral agreements on quantitative restrictions, which were completed in 1975 by the USA and 17 supplying countries but not until 1977 by the EEC. The delay by the latter was due to the increasing pressure from domestic producers concerning 'low cost' imports from LDCs which emerged due to the recession and the resultant contraction of the EEC textile market. The EEC took a hard negotiating line, particularly in relation to 'sensitive products', which were defined in terms of the degree of import penetration of the domestic market for any given sub-product. The outcome in late 1977 was bilateral agreements with twenty-three supplying countries, arrangements to curb imports from six countries with which the EEC had preferential agreements, and unilateral restrictions on Taiwan and several state trading countries.

8. The EEC's bilateral agreements were renewed for a further four years in 1978, in a manner which was more restrictive, less flexible and more detailed than before. In order to accommodate these changes, the original GATT formulation of the MFA was amended to include important changes such as "the possibility of jointly agreed departures from particular elements" of the MFA in certain cases.

9. In reality the continued existence of the MFA represents the more or less permanent institution of 'organised free trade' in textiles and clothing. Eighteen years after the first temporary organisation of trade under the LTA almost all DCs have restraints of one kind or another on imports of textiles

and clothing. Moreover, as we shall see, the structural adjustment policies of the DCs toward their domestic industries have been less concerned with moving resources out of these industries than with committing more resources in an effort to increase productivity, whilst sheltering from LDC competition behind the protection of the MFA.

Multilateral Trade Negotiations

10. The recent completion of the 'Tokyo round' negotiations (begun in 1973) has important implications for protectionism in the OECD. First, although tariffs are no longer the most important issue in trade negotiations, tariff reductions of 33 per cent for all industrial products and 26 per cent for the industrial products of LDCs have been agreed. This excludes textiles, of course, since all textile exports are quota controlled, so that tariff cuts will only have a minimum effect in stimulating trade in this area. Moreover, the overall effects of the tariff cuts, which are higher on LDCs' exports of raw materials and semi-manufactures than on the finished goods, may be to increase effective tariff protection in DCs on final stage processing. Second, LDCs will suffer from the erosion of their preference margins both under the Generalised System of Preferences and under particular arrangements such as the EEC's Lome Convention.(4)

11. A more significant issue for the LDCs has been the negotiations over the use of emergency safeguard measures (Article XIX of GATT) which, as we observed (see para 1) the EEC and other DCs found difficult to use. Major disagreements emerged, notably between the EEC and the LDCs over the selective use of safeguards, and particularly over the question whether greater selectivity would make protectionist actions more or less frequent. Disagreements have also emerged between the EEC on the one hand and the USA and GATT on the other, over the possible terms of the safeguards code. Negotiations on the code so far have failed. The EEC has, however, since made it clear that it will not be deterred from using Article XIX selectively if necessary, as it did in the recent case of Korean TV imports into the UK. One major potential source of benefit to LDCs from the Tokyo Round would be a successful implementation of the non-tariff codes which would allow improved market access for LDCs' exports in return for limited reciprocity. At the time of writing, however, the Tokyo Round negotiations have failed to satisfy the LDCs and almost all of them have refused to initial the final agreement.

Part II : Impact of Trade with LDCs on Western Economies

Sources of structural change (5)

12. It is apparent that structural change, or the process of adjustment in the industrial structure of the OECD economies has had several causes, including the changing structure of domestic demand, technical progress, and the trade experience of particular manufacturing sectors. This has been highlighted by a group of studies (6) using a 'growth accounting' framework. These studies seek to quantify the economic impact on advanced country employment levels of changes in domestic demand, productivity and trade flows in particular industrial sectors.

13. In the case of the UK, a Foreign and Commonwealth Office Report (7) attempted to quantify the effect on employment of increased imports into the UK from LDCs during 1970-1975 for four main product groups: footwear, leather

and leather products, textiles and clothing, using the methodology developed by Cable (1977).(8) The changes in employment in these sectors during 1970-1975 are attributed to changes in productivity (measured by output per man in real terms); changes in home demand (output plus imports, less exports in real terms) and changes in net import penetration from all countries, and with LDCs (see Table 2).

14. Estimates are derived from the model outlined in footnote (8) and, taking all four industries together, increased productivity emerges as the most important job displacement factor - more than twice as important as the increase in net import penetration. In each individual case increased imports from the LDCs emerged as the least important cause of employment losses during the 1970-1975 period. The effect of increased imports from the LDCs was highest in the textile and clothing sectors, where they accounted for 19 per cent of identified job losses, and in the leather industry where the figure was 10 per cent (see Table 3). Cable (1977) estimated that the annual direct loss of jobs due to net trade with the LDCs as a percentage of sectoral employment was of the order of 1 per cent in clothing (the worst case), 0.8 per cent for cotton textile fabrics, 0.4 per cent for footwear, and negligible for textile yarn. It was however, recognised that the calculations were based on restrictive and static assumptions, and that there must inevitably be room for argument over interpretation of the results.

15. A similar, though more dated study has been conducted for the USA by C. Frank(6) (1977) on the effects of foreign trade on employment in the USA between 1963 and 1971. The study concentrated upon 207 'import competing' industries which accounted for 46 per cent of total manufacturing output and 40 per cent of US employment in 1971. The change in employment is divided into two categories : increases in employment potential due to the expansion of domestic demand and exports; and declines due to increased imports and labour productivity.(9) Changes in labour productivity and domestic demand are shown to be the most important factors affecting employment growth, and the loss of job potential due to increased labour productivity was six to nine times as great as the loss due to net foreign trade (imports less exports) between 1963 and 1971. Nonetheless, the import competing industries lost a total job potential of 600,000 jobs, due to increased imports during this period. The net effect, however, after accounting for increased employment was 350,000 (or over this period as a whole 1.2 per cent of total manufacturing employment in the USA). The study then attempts to estimate job losses caused by imports from LDCs. The total loss of job potential due to increased imports from LDCs was estimated to be nearly 300,000 which amounts to 42,000 jobs per year. It should, however, be underlined that this figure takes no account of job expansion brought about by increased USA exports.

16. F. Wolter(6) (1977) has carried out an analysis of job displacement and import penetration for the Federal Republic of Germany, based on past job displacement during the period 1962-1975 and projected displacement up to 1985. For all manufacturing industries combined, the direct labour displacement during 1962-1975 is estimated to be 132,800 from the growth of imports from the LDCs, 1,684,400 due to growth of imports from all sources, and 6,531,100 due to changes in labour productivity. The projections indicate that in overall terms the cumulative net displacement due to intensified trade with LDCs from 1973 to 1985 was 450,000, which was greater than in the past, but below the annual displacement due to productivity growth which was on average 500,000 per year.

17. These studies indicate that the total employment impact of imports of manufactures from LDCs is very modest in relation to other factors. Even in those industries most markedly affected, imports from LDCs are responsible for significantly less of the job losses concerned than lobbyists claim, and are in fact often less important as an immediate causal factor than productivity growth or trade with developed countries. These studies are, of course, retrospective and do not tell us what could happen under greater or lesser degrees of liberalisation.

Input/Output studies (10)

18. A second major group of studies (11) are those which quantify the total (i.e. direct and indirect) employment effects of an increase in trade flows. These include studies by de Grauwe et al (1977) on Belgium, Grinols and Thorbecke (1978) on USA, Kol and Mennes (1978) on Holland and Schumacher (1977) on Germany. All adopt a similar approach by assuming a given increase (i.e. a balanced expansion)* of trade. The direct and indirect employment effects of this expansion can then be estimated, using sectoral labour coefficients from the input/output table. The results of these studies, together with further methodological details are summarised in Table 4. As the table shows, the input/output analyses of Belgium, Germany and Holland lead to similar conclusions, namely, that the expansion of trade with LDCs involves only small net job losses.

19. There are, however, important differences in the estimates of the ratio of labour requirements to output in a balanced trade expansion with the LDCs. These range from Balassa's (12) (1979) recent estimate of 0.65 for direct labour requirements in the OECD and for the ratio of total labour requirements in the USA (Grinols and Thorbecke 1978) to 0.84 for total labour requirements** in Belgium (de Grauwe et al), 0.93 in the Netherlands (Kol and Mennes) and 0.96 in Germany (Schumacher). This constitutes a significant difference between the US and European studies because if Balassa and Grinols and Thorbecke are right about the ratio of labour coefficients, then the employment impact will become significantly negative if trade in manufactures with developing countries balances (see description of Balassa's work below).

20. Another important area of research has been the work of Baldwin(13) (1976) and (1979), and Baldwin and Lewis(13)(1976), which has concentrated upon an examination of the net trade and employment effects on US industry of multilateral tariff cuts. In these studies Baldwin assigned import and export demand elasticities to each tradeable sector in the US input/output table. Changes in exports for each tariff line item within a particular sector were then calculated and summed, to give the net change in final demand (i.e. the change in exports minus imports for each sector). (14) These changes were then pre-multiplied by the inverse of the matrix of production coefficients in the input/output table to obtain output change by industry. Lastly changes in employment were determined by multiplying these output changes in each sector by the appropriate industry labour coefficients. (15) Baldwin estimates that an across-the-board tariff cut

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* An equal increase in the value of imports and exports.

** These figures represent the ratio of the number of jobs required for a unit increase in the value of exports to the number of jobs lost due to a unit increase in the value of imports from the LDCs.

of 50 per cent (measuring both direct and indirect employment effects) would lead to a total labour displacement of 151,200 (148,200 of these in manufacturing). This would however be mostly offset by exports which would increase total employment by 136,000. The net change in employment was a decline of 15,200 jobs in all industries (31,700 lost in the manufacturing sector). Baldwin and Lewis conclude (page 148) :

> 'Not only are aggregate economic effects of a significant tariff-cutting exercise small, but the effects on individual industries, on various occupational groups and on employment in different states are minimal in most cases'.

21. In a recent and important study Balassa (1979) has attempted to calculate the employment effects in the developed countries (OECD, USA, EEC and Japan) of a balanced trade expansion with the developing countries on the basis of 1976 trade flows. He used a 184 commodity category breakdown of the US manufacturing sector and labour-input coefficients were taken from the US Census of Manufacturing for 1975. The US labour coefficients were also used for other developed countries as well. Assuming an unchanged composition of exports and imports he used comparisons of average labour-input coefficients* for exports and for goods competing with imports as an indication of the employment effects of a balanced trade expansion. For the OECD as a whole the average number of jobs for $1 million of output is found to be 18.4 for exports to and 28.5 for imports from LDCs; the ratio of the two being 0.65. According to Balassa this result conflicts with the view of the studies cited above which suggest that a balanced expansion of trade between DCs and LDCs has negligible net employment effects. This comparison suggests that a balanced expansion of trade between DCs and LDCs would mean that the number of jobs lost through increased imports would be significantly higher than the number gained through increased exporting by the OECD as a whole.

22. As an alternative hypothesis Balassa assumes identical rates of change for exports and imports between DCs and LDCs or a proportional expansion of trade. Since for most DCs the total value of exports to developing countries greatly exceeds the total value of imports from these countries, a proportional increase in trade implies a larger absolute increase in the value of total exports to, than total imports from, LDCs. This will be likely to lead to more job creation through increased exports than job destruction through increased imports. In fact in reworking the model the results suggest that there would be substantial positive employment effects for the OECD as a whole. The ratio of jobs gained to those lost becomes 2.8 for the OECD as a whole. A 10 per cent proportionate increase in trade flows would entail the loss of 31,000 jobs, and a gain of 183,000 jobs.

23. In fact Balassa regards this scenario as equally unrealistic and suggests that the most likely future pattern of trade flows would be based on a projection of past experience. Therefore he uses estimates from the World Bank's World Development Report as a basis for a projection of future trade flows, in order to evaluate the employment implications of future trade

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* The number of jobs required per unit value of sectoral output.

in manufactured goods between DCs and LDCs. Assuming unchanged labour coefficients, estimates for 1976-1986 indicated that the projected expansion of trade in manufactured goods between DCs and LDCs would have practically no net effect on employment in the DCs. The increase in employment due to greater exports is estimated to be 1,747,000 and the decline in employment due to increased imports is 1,736,000 in the OECD as a whole.

24. Nevertheless, substantial differences in labour-input coefficients and in capital intensity remain as between projected exports and imports in manufactured trade between developed and developing countries. There are also significant differences in projected changes in employment among occupational categories, involving a shift from low skill to high skill employment. The major losers are the unskilled and semi-skilled production workers with a net decline of 197,000 jobs. The sectoral impact of the projected increase in trade with LDCs is discussed in the next section.

25. Finally, one study by Deardorff et al(16) (1977) has adopted an entirely different methodology for examining the employment effects of a cut in tariffs by DCs. The estimates are derived using a numerical general equilibrium model in a multi-country framework. The model determines exchange rate changes endogenously together with prices and these results are used to estimate output and employment effects taking into account input/output relations. The model is a simple general equilibrium model where M countries supply and demand the products of A industries (both tradeable and non-tradeable). Equilibrium prices in all markets are attained by equalising supply and demand. The model includes eighteen OECD countries and involves numerous stringent assumptions, notably that the structure of the 1967 US table would be taken to represent the structure of all countries in the study. The model was used to simulate a 50 per cent linear cut in post-Kennedy Round tariffs in all the included countries. Absolute and percentage changes in employment were reported for each industry under fixed and flexible exchange rates. Once again the employment effects of a tariff cut were shown to be small since the simulated change in aggregate employment never exceeded 1 per cent except in the case of Belgium-Luxembourg (and then only under fixed exchange rates). However this does not imply that sectoral employment effects were equally insignificant, since employment changes in excess of 10 per cent or even in some cases 20 per cent were recorded.

26. The evidence of these studies is conflicting because, whilst the European studies suggest that a balanced expansion of trade between DCs and LDCs will have a negligible effect on total employment, the studies by Balassa and Grinols and Thorbecke suggest that it might significantly reduce total employment in the OECD and the USA. However, Balassa's more realistic assumption of identical rates of change etc. (para 22) in DC-LDC trade during 1976-1986 confirms that the total employment effects are likely to be negligible for the OECD as a whole.

27. Although total employment effects may be negligible all the studies indicate that substantial inter-industry and inter-regional movements of labour and capital are likely to occur in the DCs. This movement will cause a shift of factors from low skill sectors to high skill sectors (see next section). If these adjustments proceed smoothly and are in line with the long-run comparative advantage of the LDCs, they are likely to have a positive effect on the efficient functioning of DC factor markets and to

contribute to the long-term growth potential of these economies. The political problems they represent are, however, obvious.

Sectoral impact of increased imports from the LDCs

28. Historically, the major impact of increased LDC exports to the DCs has been upon labour intensive industries such as textiles, clothing and leather manufacturing. In the textile industry the dominance of the DCs has clearly declined in the last decade. In 1970 the industrialised countries accounted for 74 per cent of world exports and more than 71 per cent of world textile imports (see Table 5). By 1976 the figures were 63 per cent and 69 per cent respectively. In the same period the LDCs increased their share of world exports from 17 per cent in 1970 to 27 per cent in 1976 while their share of world imports declined from 19.3 per cent to 18.8 per cent. The most significant change in trade patterns in the textile industry has been the shift since 1970 from an overall DC trade surplus to a deficit of over $5 billion in 1976 and 1977.

29. The FCO report (7) (1979) on the newly industrialising countries (NICs)* indicates, however, that the economic impact of increased import penetration from NICs is not confined only to the textile and clothing sectors. As Table 6 shows, the share of the NICs in the imports of the OECD countries is becoming increasingly significant, especially in electrical machinery, light manufactures, metal manufactures, and rubber manufactures.

30. Balassa's (12) (1979) study has also indicated the likely future sectoral employment effects of increased trade in manufactures between the OECD and the developing countries. As described earlier, the estimates were based on a projected expansion of trade in manufactured goods during the 1976-1986 period. Although Balassa shows that there is practically no net effect on employment in the OECD, there are substantial changes in employment among occupational categories involving a shift from low-skill employment. The major losers are "unskilled and semi-skilled production workers". The employment effects by industrial sector are shown in Table 7. One area where the future net employment effect is likely to be large is in electrical equipment and supplies, which will increasingly involve imports of parts, components and accessories, and an eventual dominance of the LDCs in the world export of radios, televisions, automotive electrical equipment, and standardised electronics. Other areas where net employment displacement in DCs will be significant are textiles, clothing, timber and wood products, furniture, rubber goods, and leather products. The LDCs are also predicted to make significant inroads into the chemicals and primary metal sectors.

31. The evidence presented in Table 7 suggests that the retention of a liberal trading system with concomitant increases in imports of manufactures by the OECD from the LDCs will not increase overall unemployment in the OECD area. However the effects of this increased trade on the skill composition of labour in the OECD countries will necessitate a continuing shift of labour from low skill to high skill occupations. Moreover it should

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* These include Hong Kong, Singapore, South Korea, Taiwan, Malaysia, Philippines, Thailand, India, Pakistan, Iran, Brazil, Argentina, Mexico, Spain, Portugal, Yugoslavia, Greece, Turkey, Malta, Poland, Romania and Hungary.

be evident that what applies to the OECD as a whole may be very different for individual developed countries. The employment effects will inevitably be unevenly distributed between the different countries of the OECD according to economic structure, performance, and policy.

Part III : Industrial experience of adjustment

32. An examination of the reactions of certain industries in different OECD countries to increased competition from 'low cost' Third World producers indicates that adjustment in manufacturing industry mainly consists of the spontaneous response of individual firms to market forces. There are several 'survival strategies' or adjustment measures that individual firms may adopt.

33. One option is to leave the sector altogether and to begin production of an entirely different product. This seems to have been the response encouraged by the Japanese government, which stimulates employers to convert to "more viable activities" under its Employment Adjustment Scheme. A second option is for firms to move 'up market', producing within the same sector, but getting out of the mass production lines and into goods with a higher fashion and design content. The development of new products is another aspects of the 'up market' strategy. An example of this is the case of the European electrical consumer durable firms, which have constantly adapted to Japanese competition and new technology by moving first from radios to black and white TVs, then to colour TVs, and now to TV recorders. A third option is to use different production techniques, which increases cost competitiveness through improved productivity. Examples of this are the spinning and weaving of cotton textiles and the knitting industry in the UK, where substantial increases in productivity were induced by technological advances in the production process.

34. Another possibility is the development of substitute products - the strategy followed by the UK jute industry - which has been switching to the manufacture of the synthetic substitute, polypropylene (see below). The final option, which has been important for firms in the German clothing industry, is to attempt to 'internationalise' the production process. This may involve either a reciprocal agreement between DC and LDC producers, or direct investment by DC firms in low-wage countries.

35. Government policy, however, also has a significant influence upon the adjustment process. Intervention can induce adjustment either through general or selective measures and may involve trade, industry, manpower, and regional policies. These policies can impede or accelerate the process of structural change and adjustment. Significant differences may be seen between the general and broadly positive government adjustment measures of Germany on the one hand, and the more selective and negative activities of the UK and France on the other. It is also important to note the interrelationship between trade policy and selective industrial intervention. This may be assessed through a case study.

Textiles and Clothing

36. The DC textile and clothing industries provide examples of both spontaneous adjustment through the market and of different types of government intervention. As Table 8 indicates, most members of the EEC have similar restructuring schemes to help their textile or clothing industries, or

both. In addition, in many of these countries the industries are aided by general measures, such as regional policy.

37. These two industries are intimately related, since the clothing industry provides the major outlet for the yarns, fabrics and fibre output produced by the textile industry. The textile industry is the more capital-intensive and has seen some significant advances in productivity during the last 10-15 years. The clothing industry is relatively labour-intensive and, as a result, has suffered more heavily from LDC competition. Since the early 1950s the textile and clothing industries of the DCs have faced increasing difficulties, both from internal problems such as low profitability and productivity, as well as from increasing external competition from the LDCs, whose successful import substitution policies led, first, to declining export markets for the DCs, and later to increasing import penetration of the DC domestic markets. By the late 1950s the textile and clothing industries of the DCs were declining according to the various performance criteria of the DCs productivity, output and employment (de Bandt (17) (1978).

38. In the late 1950s, DC governments and textile industry firms reacted to the increased competition from the LDCs by calling for a temporary restraint of LDC exports in order to obtain a 'breathing space', whilst domestic production was restructured and 'adjusted' to the prevailing competitive conditions. In 1978 the British Cotton Board had obtained a VER with Hong Kong producers of cotton goods and the USA had already obtained voluntary restrictions of Japanese exports. These moves were the forerunners of the multilateral agreements (such as the LTA which attempted to balance increased access for LDC exports with the need to avoid market disruption in the DCs). In so far as these were intended to be temporary and to allow restructuring in DCs, this trade policy could be regarded as aiding the process of structural change by encouraging the development of a new international division of labour.

39. The problems of domestic DC textile industries were overcapacity, low productivity, the use of outdated equipment, and the fragmented nature of ownership and production. All of these brought declining competitiveness and a lack of funds to generate finance for the necessary adjustment measures. The UK, in common with many other DC governments, instituted a special restructuring policy in its Cotton Industry Act of 1959 (18) which provided subsidies for the scrapping of obsolescent equipment and for firms wishing to close down. Funds were also provided for new investment for the re-equipment of the remaining firms. The result of this strategy in the UK was a reduction in overcapacity and employment through the closure of marginal plants, and the emergence of a more competitive, capital-intensive, higher productivity industry. The UK industry had therefore followed the route of increased investment and productivity as a means of re-establishing cost competitiveness. As Miles (18) points out, however, there was a question mark over whether even these modernised plants might have been able to compete with low cost imports without protection, even after an 'infant industry' pause for reconstruction behind tariff barriers. de Bandt (1978) explains why :

> "In the last 15 to 20 years most DCs have implemented policies of this kind, the hypothesis being that, because of the increasing capital intensity of the textile industry such policies would indeed restore cost competitiveness. In fact, even with technical progress none of these policies has been able to achieve the objective....."

and

> "it has not proven possible to restore external competitiveness; even if the most sophisticated techniques are used, the costs remain higher in most cases than in the LDCs."

40. Certain firms and sub-sectors of the DC textile industries have, however, flourished. For example, the expansion and success of man-made fibres was the result of a quick reaction by DC fibre producers to changes in the demand pattern from natural to man-made fibres, a shift which has occurred in the last 10-15 years. As a result this sub-sector developed rapidly and obtained dominance over the LDCs in the production of synthetics, so that DC textile exports increased markedly. But this monopoly position is swiftly being eroded as LDCs increasingly move into this field.

41. Other successful sub-sectors, such as Scottish knitwear, have adopted an 'up market' strategy by specialising in the production of high quality products. Specialised manufacturers of industrial clothing and industrial textiles have also been relatively successful. These firms may well be able to survive without protection, but they are essentially specialised forms of textile activity and, in general, the more usual case is that the continued survival of firms in most textile sub-sectors is heavily dependent upon the continued use of trade restrictions. de Bandt has estimated that if complete liberalisation of trade in textiles were implemented, 70 per cent of total DC production of textiles would come under severe competition from LDCs.

42. Another possible adjustment strategy has been demonstrated by the ODI jute study.(19) The European jute industry has been protected from Asian imports for many years, because manufacturing costs are significantly higher in the former countries due to the unsophisticated nature of the production process and the simple technology used in jute manufacturing. In UK the industry has declined in terms of output and employment since the 1950s although most markedly since 1970. This decline, however, is not due to low cost Asian imports, since these have been restricted by protection. It is caused by the manufacture of a synthetic substitute, polypropylene which, by 1976, had replaced jute in most of its traditional markets. During the past ten years all the significant jute manufacturers have switched to mainly polypropylene production which, because it involves a capital-intensive production process, has meant a substantial net loss of jobs. Protection facilitated this development by allowing jute firms to survive whereas in the more open US market they disappeared. In this case protection postponed trade adjustment, but precipitated a technological adjustment that would have occurred later anyway, with all the painful consequences for labour of industrial contraction.

43. There are two ways to approach the adjustment problems presented by the DC clothing industry. One is to rely more heavily on market forces to guide the adjustment process, which seems to be the strategy in Germany. And the other is to use government intervention as a stimulus for structural change. Schwarting's study(20) of the German clothing industry has provided a useful description of its attempts to circumvent the competitive disadvantage of the comparatively high level of wages in the German clothing industry. Many German firms adjusted by entering an agreement with a producer in a low-wage country. This arrangement, known as 'outward

processing', involves the export of cloth from Germany to the low wage country, where it is made up into finished articles and reimported. This has become an important adjustment strategy for the German industry since about 16 per cent of total German clothing imports now come from this source. The German manufacturers have thus attempted to 'internationalise the production process' and to 'internalise' the advantages of low wage within the German firms.

44. Schwarting also identifies two other 'survival' strategies that are likely to become important for the survival of the German industry. First, there is the option of direct investment by German firms in the low wage countries. Second, some German firms might attempt to move out of the production of 'down market' goods where prices are lower and no longer profitable, and concentrate on high grade products where quality, design and marketing skills are important, and where the German industry may have an advantage over foreign low-cost producers, since it is closer to the main markets.

45. As regards government intervention in the clothing industry Torre and Bacchetta (21) have provided an interesting insight and comparison of policy measures. They make a distinction between those countries (Holland, Belgium, Italy and the UK), where intervention has been selective and explicitly designed to preserve employment, and those like Germany where intervention is economy wide and no employment subsidies are used. As Table 9 shows, the former group of countries have all spent substantial sums on a per capita basis solely for the preservation of employment. The trading performance of the European clothing industry is shown in Table 10.

46. In the United Kingdom the government instituted the Temporary Employment Subsidy (TES) in 1975 as a means of encouraging firms to defer redundancies in the wake of the 1974 recession. The textile and clothing sectors became the major beneficiaries, and it has been estimated that more than 80,000 workers in both industries benefited from the scheme. Although it was abandoned in mid-1978, due to EEC opposition, a new scheme involving employer subsidies for temporary short-time working has recently been introduced.

47. The other major strand of policy in the UK was the clothing industry development scheme (CIDS) which was operated as part of the government's Industrial Strategy of 1975. The CIDS sought to encourage reorganisation, rationalisation, and greater concentration of activity in more efficient units. Selective financial assistance was provided under the 1972 Industry Act for reorganisation or restructuring projects and for the introduction of new machinery to increase productivity. This is similar to the scheme which was operated in the woollen and worsted sector, where selective financial assistance was provided for re-equipment, combined re-equipment and rebuilding projects, and grants for companies ceasing to trade.

48. In contrast, the German government has largely avoided direct intervention in the industry, despite the rapid contraction of domestic employment during 1973-1977. No special programmes of assistance were adopted, but clothing manufacturers could benefit from general and regional assistance programmes. The European Recovery Programme, originally set up in 1947, provides assistance to small businesses for structural adaptation and for export promotion and development assistance. Over 3 billion DM were dispersed in 1978 as loans at reduced rates of interest,

credit facilities for the export of capital goods to LDCs, and soft loans to encourage direct investment by German firms in LDCs. Each province also supplies subsidies and loan guarantees as part of the regional assistance programme.

49. The most significant conclusion to emerge from this brief examination of the DC textile(22) and clothing industries is that, despite the diversity of possible adjustment measures open to DC firms, they remain reliant upon continued protection for their future existence in anything like their present size and form. Second, although there is no doubt that individual schemes such as the CIDS have substantially increased productivity, there is still virtually no prospect of these rejuvenated firms being able to compete at world market prices. Instead the protection of the DC industries has effectively meant that these industries were shielded from LDC competition so that any restructuring activity has in fact merely made them more able to compete amongst themselves. Finally, selective industrial assistance for the support of industrial sub-sectors with limited growth potential is essentially protectionist, and may not only slow down overall economic growth, but may also be counter-productive in employment terms, since any new investment usually involves 'capital deepening' and consequently declining employment. This has certainly been the case in cotton and wool textiles.

Part IV : Positive Adjustment - Problems and Policies

50. The OECD(23) defines positive adjustment measures as those which aid the reorganisation of existing industries affected by changes in the pattern of world production and trade in a way which is economically efficient, does not attempt to maintain the status quo, and assists structural change which is taking place through market forces or would take place if market forces were allowed to play. Positive policies should also be temporary and compatible with trade agreements.

51. However in the ex ante situation it is often very difficult to categorise government policy according to its 'positive', 'negative' or 'neutral' character. For example, DC trade policy toward 'low-cost' textile and clothing supplies was originally designed to have a 'positive' effect. Yet in practice in many countries trade protection has been used to shelter domestic textile and clothing industries, whilst selective government assistance has encouraged new investment even though this could not be justified at world market prices. In contrast Japan has avoided such 'negative' adjustment measures, and has maintained the original 'positive' element of the multilateral trade negotiations by actively encouraging diversification away from those lines of production in which the country had no comparative advantage. This has been attained through an active disinvestment policy, involving large-scale compensation of labour and capital.(24) An active disinvestment policy has also been a feature of Swedish and Dutch industry policy, as well as figuring prominently in the selective US footwear industry scheme and the UK Cotton Industry Act.

52. Equally some policies such as selective employment subsidies to labour-intensive industries have been labelled as 'negative' measures since they slow down industrial transformation and are therefore inhibiting to efficiency and growth in the long run. However these policies may have had some positive effects. This possibility is suggested by recent research

(admittedly disputed) which indicates that the United Kingdom's Temporary Employment Subsidy scheme has actually facilitated product diversification by beneficiaries and has not adversely affected productivity growth. (25) Finally, one cannot even assume that selective intervention in expanding industries necessarily constitutes positive adjustment, since government intervention in advanced technology industries, such as aerospace, has often been economically inefficient, and has become permanent. Other difficulties concerning the distinction between negative and positive policies are dealt with in the OECD paper quoted above.

Manpower Adjustment Policies

53. Despite these difficulties the OECD has outlined the essential elements of positive manpower policies, (26) which should attempt to increase the speed of labour mobility and therefore economic efficiency. Favoured policies include easily accessible and flexible provisions for the retraining of displaced workers. This can be achieved through the provision and subsidisation of government vocational training centres, and by the subsidy of private schemes or individual workers who may wish to seek their own retraining independently. A second, positive adjustment policy is the use of generous redundancy payments (preferably as a lump sum cash payment), in order to encourage movement to other jobs or alternatively a degressive unemployment supplement could be used. Another precondition for an efficient labour market is geographical mobility which may be encouraged by housing and other general policies. Specific measures could also be adopted on the lines of the European Social Fund and US Trade Adjustment provisions, which were designed to cover all or most of relocation expenses. Finally, demand measures, such as job creation schemes, can also have positive adjustment effects.

54. Government manpower policies in the OECD countries have had both positive and negative adjustment effects. As Table 11 indicates, as a result of the recession of 1974/75, there was a general shift in the manpower policies of the OECD countries toward job creation and employment maintenance programmes which were added to the more traditional income maintenance policies. In many countries the subsidised maintenance of employment in the business sector, as a means of carrying workers over a temporary economic slow-down, was introduced. This was accomplished by a variety of means, including temporary wage subsidies for building up inventories and for short-time work programmes.

55. The retention and even in some cases increased use of job maintenance programmes in recent years has concerned the OECD Secretariat (27) which argues that such policies, if kept in place too long, are likely to inhibit the adjustment process. In Sweden, for example, employment subsidies have been continued and even increased. In Canada Public Service Employment Programmes and the Local Employment and Assistance Programmes are to be increased.

56. Current trends in the manpower policies of some OECD countries have, however, given rise to a cautious optimism that a shift toward policies which facilitate adjustment is already underway. This is suggested by the fact that job retention and job creation measures have actually declined. For example, the German short-time working programme (which allowed workers to receive partial compensation from their employers for hours not worked) provided support for over 750,000 workers in the recession of the

mid-1970s but only 250,000 in 1978. In the UK a decision to terminate the TES was taken in 1978. (28) Second, there has been a shift to 'targeted' programmes. This has been most noticeable in the USA where the public service employment programme is gradually being reduced and increasingly targeted toward structurally unemployed, and other groups of disadvantaged workers. Finally, and most significantly, there seems to be an increasingly close relationship in some OECD countries between specific adjustment targets and manpower policy. In the Netherlands manpower and employment policy has become specifically tied to industrial restructuring plans, whereby the government supplies a range of support for enterprises involved in the plan. These include special support for workers affected by the reorganisation, including special training programmes and allowances, incentives for moving to new jobs, and supplementary retirement benefits. Japan has also introduced new measures to facilitate adjustment, including the conversion of the Employment Adjustment Scheme to the New Employment Stabilisation Fund, by which employers are encouraged to convert to more viable activities.

Industry Policy and Positive Adjustment

57. In examining the question of how industry policy can stimulate positive adjustment it is important to recognise that the optimum industry policy may in fact be not to have one at all. (29) Support for this view comes from the successful example of certain OECD countries, like Germany (and to a lesser extent the USA) which has experienced massive job creation since 1973 (10 million new jobs since 1975 albeit with a decline in productivity) despite the almost total lack of an industry policy. Second, although OECD countries with active industry policies have produced some genuine positive adjustment effects (notably the activities of the National Enterprise Board in the UK), these governments have often directly intervened in declining sectors. This is likely to be unsuccessful unless assistance is linked to, and made conditional upon, diversification strategies by the firms involved. Successful diversification involves a movement toward the production of goods which can be sold profitably at world market prices. This can occur through upgrading styles and technologies and, in fact, in most sectors this happens without government intervention. Government encouragement of this process through industry policy is comparatively rare, but possible examples are Dutch restructuring policy and the US footwear industry scheme.

58. A second aspect of positive adjustment policy in industry concerns the need to develop some anticipatory or forecasting mechanism by which governments can 'pick the winners' of the future. This could involve the improvement of medium-and long-term forecasting of industry and sub-sector development patterns, which would allow the active encouragement of the most promising sectors and the discouragement of problem ones. In fact some OECD governments already follow that strategy on an ad hoc basis (e.g. the UK government's micro-electronics industry support programme). Japan's economic planning agency, MITI, is engaged in this type of anticipatory activity, by attempting to encourage the development of Japanese firms in eight industries for the future, which include automation of assembly line industries, and high technology industries like computers.

59. Assistance to small firms, possible through the manipulation of the tax system, could also assist the long-run adjustment process, since comparative research on DC economies suggests that the rates of formation of new firms explains a significant proportion of the difference in industry performance.

60. Finally protection through either subsidy, tariff or quotas should be used as little as possible and only as a last resort. If such a policy encourages new investment, in order to ensure positive rather than negative adjustment effects, the protected sector should be subject to strict 'infant industry' controls, whereby an eventual return to competition at world market prices would be envisaged.

61. It would be pointless to attempt to summarise the numerous industry policy measures of the OECD countries, and in fact an inventory of adjustment measures taken by member governments since 1974 is available (30). Nevertheless, a tentative general conclusion may be drawn as regards industry policy and the objective of positive adjustment. In terms both of efficiency and employment objectives, the avoidance of direct government intervention in industry would seem to be the optimum positive adjustment policy for those countries which have traditionally been more market oriented. For those countries where government intervention has traditionally been more important, an anticipatory system based on long-term planning with strict efficiency controls might constitute an effective positive adjustment industrial policy.

62. This brief examination of the positive adjustment measures in the industry and manpower policies of the OECD countries indicates that most government policy has conflicting elements which are likely to lead to both positive and negative adjustment effects. But the balance of these forces has become increasingly negative in countries like the UK, and this may be recognised by the greater resort to quota and other forms of trade protection, as well as the failure to entirely phase-out selective employment or to discourage reinvestment in declining industrial sectors.

FOOTNOTES

1. See J. Riedel, 'Monitoring Trends in Protectionism', World Bank, February, 1979.

2. See S. Page,'The Management of International Trade', in National Institute of Economic and Social Research, Review, April 1979.

3. This refers to policies that directly limit foreign competition such as safeguard (or escape) clauses which are measures to mitigate economic dislocation from increasing import competition. Countervailing duties and anti-dumping duties are excluded in this study.

4. See V. Cable,'Britain, the MTNs and Developing Countries', Submission to the House of Lords Select Committee of the European Communities Committee - Sub-Committee Investigation into the Multilateral Trade Negotiations.

5. See Note on the methodological problems of employment models in Appendix.

6. See V. Cable,'British Protectionism and LDC Imports', in ODI Review, No. 2 pp 29-48.

   C. R. Frank Jnr., 'Foreign Trade and Domestic Aid' (The Brookings Institution), 1977.

   F. Wolter, 'Adjusting to imports from Developing Countries - The evidence from a Human Capital Rich - Resource Poor Country', in H. Giersch (ed.) 'Reshaping the World Economic Order' 1977.

7. Foreign and Commonwealth Office -'The Newly Industrialising Countries and the Adjustment Problem' - January 1979.

8. Estimates are derived from the formula :

$$dE_i = \frac{1}{P_{it-1}} \left[dC_i + dX_i - dM_i - E_{it-1} \cdot dP_i \right]$$

   where C = domestic consumption, P = labour productivity, i = ith sector, E = employment, X = exports, M = imports.

9. Frank uses the following formula :

$$r_e = r_d (D/Q) + r_x (X/Q) - r_m (M/Q) - r_p$$

   where r_e = growth or employment in each of the five digit import competing industries.

   r_d, r_x, r_m and r_p are the percentage rates of growth of domestic demand, exports, imports and productivity respectively. The quotients D/Q, X/Q and M/Q are the ratios of domestic demand,

exports and imports to output (Q). r_d (D/Q) and r_x (X/Q) can be interpreted as the contribution of the growth in domestic demand and exports respectively to the growth of employment and r_m (M/Q) and r_p as the (negative) contributions of the growth of imports and productivity, respectively.

10. In input/output studies employment changes are calculated using the formula : $\Delta E = \hat{L} \ (I-A)^{-1} \quad \Delta B$

where $\hat{L}$ = diagonal matrix of labour coefficients, $(I-A)^{-1}$ = an inverse leontief matrix and ΔB = vector of changes in trade flows.

11. P. de Grauwe, et al,'Trade Liberalisation with the Less Developed Countries : A case study of Belgium', Bulletin de l'Ires No. 44, 1977, pp 1-6.

E. Grinols and E. Thorbecke, 'The Effects of Trade between the US and Developing Countries on US Employment'. Working Paper No. 171, Department of Economics, Cornell University 1978.

J. Kol and L.B.M. Mennes, 'The Role of the Developing Countries in the Dutch Market of Manufactures. Impact on Income and Employment', Netherlands Economic Institute, deelrapport 6, Rotterdam, February 1978.

D. Schumacher, 'Increased Trade with the Third World : German Workers will have to switch jobs, but not lose them'. Deutches Institut fur Wirtschaftforschung, Economic Bulletin No. 5,1977, pp 37-41.

12. B. Balassa, 'The Changing International Division of Labour in Manufactured Goods', Banca Nazionale Del Lavoro Quarterly review, September 1979.

13. R. E. Baldwin, 'Trade and Employment Effects in the US of Multilateral Tariff Reduction', American Economic Review Vol. 66, May 1976, pp 142-148.

R. E. Baldwin, 'Measuring Trade and Employment Effects of Various Trade Policies', in Baldwin, Stern and Kierzkowski, 'Evaluating the effects of trade liberalisation', 1979.

See also R. E. Baldwin and W. E. Lewis, 'US Tariff Effects on Trade and Employment in Detailed SIC industries', US Department of Labour 1976.

14. Baldwin assumed that foreign and domestic goods within each sector were imperfect substitutes and that import and export supply curves are completely elastic (see Baldwin 1976).

15. The increase in the value of imports or exports of any commodity is calculated by :

$$\Delta M = Mo \ . \ em \ . \ \frac{t}{1+t}$$

where Mo = the initial value of imports.

Employment effects are calculated using a modified version of the the input/output formula described earlier.

$$\Delta E = \hat{L} (I-A)^{-1} \left[\pi_j \right] \Delta B$$

where π_j = a diagonal matrix of substitution terms normally between zero and one.

16. A. Deardoff, et al, 'A Multi-Country Simulation of the Employment and Exchange Rate Effects of Post-Kennedy Round Tariff Reduction', in N. Aknasaree, S. Naya and V. Vichit-Vadakan (eds.), 'Trade and Employment in Asia and the Pacific', 1977.

17. Jacques de Bandt, 'Interfutures - study of the Textile Industry' - 1978.

18. See C.Miles, 'Protection of the British Textile Industry', in W.M. Corden and G. Fels, 'Public Assistance to Industry'.

19 S. McDowall and P. Draper, 'Trade Adjustment and the British Jute Industry : A Case Study', ODI Research Monograph No. 5.

20. U. Schwarting, 'Strategies for Survival of the German Clothing Industry', Intereconomics, January/February 1979.

21. J. de la Torre and Bacchetta, 'Decline and Adjustment : European Policies toward their Clothing Industries' - European Institute of Business Administration, Fountainbleu, France, June 1979.

22a. For a further discussion of German experience in the textiles sector see A.D. Neu, 'Protection of the German Textile Industry', in Corden and Fels op.cit.

22b. The adjustment experience of UK textiles, clothing and footwear industries is dealt with in 'Adjustment to North-South Trade in the UK Economy' (ODI consultancy for ILO).

23. OECD Industry Division - Meeting of Experts to Examine Positive Adjustment in Industry, Paper II : Factors influencing the shift to positive adjustment policies (prepared by V Cable).

24. ibid. p 2.

25. ibid. p 2.

26. OECD Manpower and Social Affairs Committee, 'Manpower and Employment Measures for Positive Adjustment', 1979.

27. ibid. p 19.

28. ibid. p 18.

29. OECD Industry Division, p 16.

30. OECD Industry Committee: Report to the Council on Positive Adjustment Policies in the Industry Sector, Annex 1, 'Inventory of the Adjustment Measures Taken by Member Governments since 1974'.

Table 1

Recent Non-Tariff Barriers in Selected OECD Countries

Product / Country	USA	UK	Italy	France	Germany
Steel	TP (1977)	All EEC members use QR (since February 1978) (previously TP 1977)			
Non-leather footwear		QR (1977) on Taiwan, VER on Eastern Europe			
Motorcycles			QR (1977) on Japan		
Motor cars		VER (1977) on Japan			
Portable black and white television sets		OMA (Japan) QR (1977) on South Korea			
Colour television sets and parts	OMA (1977) on Japan, South Korea and Taiwan, and (1978) on China				
Enamelled iron and steel				QR (1977) on Spain	
Cast iron tubes and pipes			QR (1976, extended 1978) on Taiwan		
Bags and sacks of polyethylene		QR (1976) on South Korea			
Sisal binder twine		All EEC members use QR (1975)			
Textiles and textile products	QR under MFA	Bilateral quotas for all EEC members under MFA (QR 1975/76), principally aimed at South Korea, Taiwan and Brazil			

Table 1 Cont..

Product/Country	USA	UK	Italy	France	Germany
Tape recorders			QR (1973) VER (1974)		
Bolts, nuts and screws	T on Japan and Canada (Dec 1978)				
High carbon ferro-chromium	T on South Africa, Brazil, Rhodesia, Japan				
Non-rubber footwear	OMA (1977) on Taiwan and South Korea, (1978) on Hong Kong				
Stainless steel and alloy tool steel	OMA on Japan, global quota other suppliers (March 1976) Retained (Jan 1978)				
Radios	VER on Japan	OMA on Japan		Restrictions on South Korea	
Umbrellas				Restrictions on South Korea	Restrictions on South Korea
Jute		Bilateral EEC quotas and VER on India and Bangladesh			
Calculators	OMA (Japan)	OMA on Japan			

Notes :

1. Tariffs granted under GATT escape clauses = T
2. Quantitative Restrictions = QR
3. Voluntary Export Restraint Agreements = VER
4. Orderly Marketing Arrangements = OMA (OMAs are regarded as arrangements with formal and explicit government involvement).
5. 'Trigger pricing' = TP (a system of trigger prices according to which anti-dumping actions would be automatically initiated if imports should enter below minimum (trigger) prices established on the basis of the level of production cost of the most efficient supplier).

Sources : Compiled from: Riedel (tables 3 and 5), IMF survey (1978), Foreign Trade Review, Quarterly Journal of Indian Institute of Foreign Trade.

Table 2

Import Penetration in Industrial Countries[a]

(per cent of home market)

		Textile imports		Clothing imports	
		Total	From developing countries	Total	From developing countries
EEC[b]	1959/60	6.1	0.9	2.4	0.6
	1971/72	10.5	2.3	8.2	2.8
	1973/74	14.1	3.5	12.9	4.7
UK	1959/60	14.0	5.2	9.5	3.9
	1971/72	26.8	5.2	21.9	8.8
	1973/74	34.6	6.4	30.3	11.7
USA	1959/60	5.5	1.6	3.5	0.8
	1971/72	9.4	2.8	12.6	4.4
	1973/74	8.7	3.3	13.4	5.8
Japan	1959/60	1.1	0.1	1.4	0.7
	1971/72	9.0	1.6	8.4	3.5
	1973/74	12.7	3.1	17.0	8.6
All industrial countries	1959/60	3.0	1.6	1.7	1.0
	1971/72	7.5	2.6	8.2	4.1
	1973/74	7.8	3.6	11.8	6.0

Notes : a EEC figures exclude intra-EEC trade; all industrial countries figures exclude trade between the EEC, UK, USA and Japan.

b Original six members.

Source : UNCTAD Handbook of International Trade and Development Statistics, 1976.

Table 3

Sources of Employment Changes in Selected UK Industries Competing with NICs, 1970-75[1]

MLH Industry Group	Attributable to changes in: Overall change in employment	Home demand	Productivity	All external trade	Ext. trade with LDCs	All imports	Imports from LDCs
444 Men's shirts, overalls, underwear	+ 1,800	+ 29,282	- 12,439	- 15,043	- 12,429	- 19,709	- 13,475
417 Hosiery and other knitted goods	- 14,200	- 6,472	+ 2,187	- 9,915	- 6,666	- 8,412	- 7,442
445 Dresses, lingerie, etc	+ 3,900	+ 47,245	- 36,259	- 7,086	- 4,794	- 9,625	- 5,676
442 Men's and boys' underwear	- 12,900	+ 24,676	- 22,862	- 14,714	- 4,377	- 18,924	- 5,127
413 Weaving of cotton and man-made fibre	- 13,800	+ 15,430	- 12,377	- 16,853	- 4,269	- 20,264	- 4,337
443 Women's and girls' tailored outerwear	- 3,100	+ 11,983	- 10,895	- 4,185	- 2,576	- 5,330	- 2,719
441 Weatherproof outerwear	- 3,500	+ 4,246	- 4,452	- 3,294	- 1,190	- 3,135	- 1,230
414 Woollen and worsted	- 36,100	- 22,846	- 5,925	- 7,329	+ 975	- 2,723	- 159
422 Made-up textiles	+ 2,100	+ 10,908	- 5,273	- 3,535	+ 480	- 4,697	- 50
411 Man-made fibres	- 1,600	+ 10,445	- 9,234	- 2,811	+ 671	- 3,505	+ 23
449 Dress industries	- 2,700	+ 6,577	- 8,412	- 865	+ 1,417	- 242	+ 1,348
412 Cotton spinning and doubling	- 26,300	- 18,802	- 7,176	- 322	+ 4,239	- 1,751	+ 3,571
Jute	- 1,600	- 2,760	- 984	+ 2,144	+ 1,956	+ 2,171	+ 1,983
TOTAL TEXTILES	-108,000	+109,912	-134,101	- 83,813	- 26,563	- 96,146	- 33,290
432 Leather goods	+ 400	+ 5,270	- 2,668	- 2,202	- 1,119	- 2,202	- 1,047
431 Leather tanning	- 2,700	+ 3,151	- 5,089	- 762	- 3	- 308	- 3
TOTAL LEATHER INDUSTRY	- 2,300	+ 8,421	- 7,757	- 2,964	- 1,122	- 2,510	- 1,050
TOTAL FOOTWEAR INDUSTRY	- 8,300	+ 16,283	- 18,277	- 6,306	+ 314	- 3,702	+ 502
OVERALL TOTAL	-118,600	134,616	-160,135	- 93,083	- 27,371	-102,358	- 33,838

(1) Data derived from formula: $dE = \frac{1}{P_t}(dD + dX - dM - E_{t+1} dP)$ where dE is the change in employment, P is productivity per worker year, D is home demand, X is exports, M is imports, t is the initial time period 1790, and t+1 is 1975.

Source: UK Foreign and Commonwealth Office, table 17.

Table 4

Input/output Studies

Study	de Grauwe et al	Grinols and Thorbecke	Baldwin (1979)	Kol and Mennes	Schumacher
Country	Belgium	USA	USA	Holland	Germany
Input/output table used	1970	1972 (157 sectors) 22 industries	1967(367 sectors) trade and tariff data, import and export demand elasticities, labour coefficient.	1973 trade data	1972 prices and trade patterns and 1976 sectoral labour coefficients.
Focus	effects of BF1 bn expansion of exports and imports.	effects on sectors where changes in the net trade balance exceeded $175mn.	employment effects of 50% cut on dutiable imports by the USA.	Dutch Fl. 10mn balanced trade expansion.	Increased imports from LDCs of Dm 1bn. Sectoral effects on precision and optical products, leather manufactures (including footwear), textiles and clothing.
Employment effects	Minimal effect on net labour demand in Belgium. In no case does the net decline exceed 0.1% of total employment.	Net gain of 219,000 jobs (reduced to 147,000 if four food processing industries are omitted).	Net change in employment of 15,200 in all industries. Net change in manufacturing of 31,700.	Total employment hypothetically foregone due to imports of manufactures from LDCs of 55,000 or 1.3% of 1973 employment (40,000 in manufacturing sectors).	Net effect virtually zero. But structural effects large: 60% of workers displaced by imports would have to move to another industry. By 1980 140,000 jobs lost due to increased imports from LDCs.
Sectoral effects	Sectoral analysis shows displacement effect of increased trade with LDCs to be three times greater than trade with other areas. Concentration of job losses in textiles, clothing, leather and footwear.			Net losses concentrated on food products, textiles, clothing, leather, wood and furniture. Net gains in chemicals, metal products, machinery, engineering products and transport equipment.	66% of job losses concentrated in textiles and clothing.

Table 5

Balance of trade in textiles between industrial countries and other groups, 1963-1977

($ billion)

	1963	1968	1970	1973	1976	1977
EEC						
Total	1.01	1.21	1.46	1.97	1.47	1.70
With Southern Europe	0.04	0.08	0.09	-0.09	-0.05	-0.01
With LDCs	0.29	0.31	0.27	0.11	-0.06	0.07
With Eastern bloc	0.01	0.12	0.15	0.28	0.38	0.32
USA						
Total	-0.10	-0.44	-0.54	-0.36	0.32	0.17
With Southern Europe	-0.02	-0.03	-0.02	-0.02	0.03	0.02
With LDCs	-0.08	-0.18	-0.14	-0.24	-0.20	-0.16
With Eastern bloc	0.00	-0.01	-0.01	-0.01	-0.05	-0.03
Japan						
Total	0.86	1.28	1.50	1.32	2.39	2.84
With LDCs	0.51	0.77	0.90	1.01	1.65	1.93
With Eastern bloc	0.02	0.03	0.08	-0.02	0.12	0.23
Industrial Countries						
Total	1.14	1.43	1.64	1.71	2.59	3.17
With Southern Europe	0.02	0.04	0.06	0.04	-0.02	0.02
With LDCs	0.70	0.86	0.99	0.76	1.27	1.76
With Eastern bloc	0.01	0.10	0.19	0.18	0.39	0.48

Source: Torre and Barcetta.

Table 6

Share of NICs in total OECD and UK imports of manufactures by major categories, 1977

(per cent of total for category)

	OECD	UK
Clothing	39.1	45.6
Leather, travel goods and footwear	31.3	25.1
Textiles	12.1	14.8
Electrical machinery, apparatus and appliances	12.0	6.3
Light manufactures, excluding clothing and footwear	11.2	8.9
Miscellaneous manufactures of metal	7.4	8.9
Manufactures of rubber	7.6	5.5
Iron and steel	4.8	3.8
Machinery other than electric	2.8	2.8
Transport equipment	2.8	0.8

Source: UK Foreign and Commonwealth Office, table 13.

Table 7

Sectoral employment effects in OECD of increased trade with LDCs (1976/86)

(000 jobs)

	Exports	Imports	Balance
Textile mill products	47.8	158.6	-110.8
Apparel and other textile products	14.0	266.1	-252.1
Lumber and wood products	3.6	41.9	38.3
Furniture and fixtures	6.8	16.8	-10.0
Paper and allied products	24.6	4.5	20.1
Printing and publishing	18.5	4.3	14.2
Chemicals and allied products	121.1	56.0	65.1
Petroleum products	.4	.1	.3
Rubber and plastic products	11.0	100.6	-89.6
Leather and leather products	3.4	57.7	-54.3
Stone, clay and glass products	17.8	17.4	.4
Primary metal and allied products	66.8	48.9	17.9
Fabricated metal products	31.6	12.9	18.7
Non-electrical machinery	510.1	100.0	410.1
Electrical equipment and supplies	403.6	656.1	-252.5
Transportation equipment	360.1	73.2	286.9
Instruments and related products	70.3	28.4	41.9
Miscellaneous manufactured products	35.4	92.5	-57.1
Total	1,746.8	1,736.0	10.8

Source : Balassa, page 280.

Table 8

Adjustment measures in the OECD Textile and Clothing Industries

Italy (1969)

Large-scale government subsidies for the establishment of new firms and for the re-equipment, modernisation and improvement of existing firms (since 1971). Applies to both industries. Emphasis is on increasing investment. Investment grants and interest-free loans for firms in South Italy (1976). General aids to small firms. Government ownership greately extended.

Belgium (1975)

Interest-free loans for firms in clothing and knitwear.

France

Changes on imported textiles (1965). Finance for maintenance of employment loans from the Economic and Social Development Fund (1977).

U K (1974)

Selective financial assistance in wool textile scheme for modernisation, improvement of industrial structure, reduction in excess capacity. Clothing industry scheme (1975). Grants for consultants, and new machinery to increase productivity. Assistance for re-organisation and restructuring. Grants under the Industry Act (1972).

Germany

Funds to both industries via Federal and provincial governments for increased productivity. Assistance from regional development at Federal and provincial level.

Netherlands (1975)

Grants to cotton, linen, rayon sectors for investment and R & D. Payroll grant to knitwear and hosiery for restructuring.

U S A

Government Trade Adjustment Assistance Programme. General to all industries. Financial assistance to firms and workers displaced by trade. Export promotion programme for entire textile and apparel industry.

Table 9

Average Yearly Financial Subsidies Per Worker in the EEC Clothing Industry, 1975-77 [1]

(in current US dollars)

	Italy	Belgium	France	UK	Germany	Netherlands
1. Employment :						
Assistance	-	40 [2]	-	150	-	200 [3]
Creation	-	-	30	-	-	-
2. Investment :						
Specific	35	-	-	30	-	60
General	4	10	1	5	0.5	-
Regional	7	-	6	15	1.5 Federal (?) Lander	-
3. Marketing + Export	7	-	4	-	-	40
4. R & D	1	-	0.5	-	-	-
5. Specific intervention	220 [4]	-	4.5	-	-	-
Total	274	50	46.0	200	2(?)	300

1 The corresponding figures for Norway and Sweden were $2130 and $2250 per worker respectively.

2 A second programme of similar magnitude was planned for 1978.

3 Discontinued since 1977.

4 Represents losses incurred in nationalised firms (over $2200 per worker in 1976, or 20% of turnover), which accounted for about 10% of clothing industry employment.

Source : Torre and Barcetta.

Table 10

EEC Clothing industry, 1970-76

Changes in employment

	1970-73	1973-76	1970-76	1976-77
Italy	+4.3	-4.6	-.5	-2.4
Belgium	+12.0	-19.4	-9.7	-11.6
France	-.3	-12.7	-12.9	-2.8
UK	0	-12.6	-12.6	+2.1
Germany	-5.1	-22.2	-26.6	-4.0
Netherlands	-32.2	-37.6	-57.7	

Trade performance: Net exports over apparent consumption[1]

	1970	1973	1976
Italy	+9.8	+8.5	+12.4
Belgium	+17.2	+13.4	-4.5
France	+7	+9	+3.8
UK	-1.6	-9.0	-11.0
Germany	-6.8	-11.8	-15.6
Netherlands	-3.6	-23.9	-49.1

1 Ratio (X-M)/C

Trade performance: change in net exports over apparent consumption[2]

	1970-73	1973-76	1970-76
Italy	-1.3	+13.9	+12.6
Belgium	-3.8	-17.9	-21.7
France	+2.0	-5.2	-3.2
UK	-7.4	-2.0	-9.4
Germany	-5.0	-3.8	-8.8
Netherlands	-20.3	-25.2	-45.5

2 Arithmetic change in the level of import penetration from from the beginning to the end of the relevant period.

Source: V.Cable,'World textile trade and protectionism'.

Table 11

Spending On Selected Manpower Adjustment Policies in Selected Countries in the Period 1961-1977

		As a Percentage of Gross Domestic Product				As a Percentage of Public Expenditure	Unemployment Rate
		Measures to improve the labour exchange	Training	Job Creation & Job Maintenance	Total	Total	
Canada	1968	.06	.26	.03	.35	1.05	4.8
	1969	.07	.30	.00	.37	1.09	4.6
	1977	.19	.30	.23	.73	1.82	8.1
Germany	1968	.13	.04	.15	.32	.87	1.2
	1969	.13	.06	.16	.35[a]	.98[a]	0.7
	1976	.16	.19	.61	1.00[a]	2.24[a]	4.1
Japan	1969	.15	.02	.08	.25	1.64	1.1
	1970	.18	.02	.07	.27	1.75	1.1
	1976	.19	.04	.07	.30	1.63	2.0
Norway	1964	.08	.11	.11	.30	.90	2.1
	1968	.10	.10	.09	.29	.77	2.2
	1976	.01	.09	.49	.59	1.21	1.8
Sweden	1961	.07	.09	.36	.51	1.65	1.5
	1970	.16	.28	.24	.68[b]	1.59[b]	1.5
	1976	.28	.72	1.10	2.16[b]	3.99[b]	1.6
U.K.	1968	.04	.03	.00	.07	.18	3.3
	1970	.06	.04	.00	.09	.23	3.1
	1976	.09	.34	.38	.82[c]	1.77[c]	5.5
U.S.A.	1969	.05	.09	.05	.19	.62	3.5
	1970	.06	.11	.05	.22	.66	4.9
	1976	.04	.26	.41	.71	2.03	7.6
Data available for 1976 only:							
Australia		.06	.11	-	.17	.50	4.5
Austria		n.a	n.a	n.a	.17[d]	.54[d]	1.7
Finland		.02	.33	.91	1.28[e]	3.26[e]	4.0
Ireland		.01	.45	.14	.67	n.a.	9.4
New Zealand		n.a.	.03	.25	.28	n.a.	0.5
Switzerland[f]		.01	.17	-	.18	.62	0.3

Notes to Table 11

a These totals include DM 430 million for "Temporary Measures to Facilitate the Reintregration of Unemployed Persons" and DM 10.5 million for "Assistance to Workers in Coal, Iron and Steel." These figures do not appear in any of the three sub-categories due to unavailability of detailed breakdowns.

b These totals include an amount of SKr 170 million for "Incentives for the Employment of Handicapped" that does not appear in any of the three sub-categories due to unavailability of a detailed breakdown.

c These totals include £.45 million for "Integrated Work Force Units" that does not appear in any of the three sub-categories due to unavailability of a detailed breakdown.

d These totals include an amount of Aus. Sch. 1,027 million for the "Labour Market Promotion Act" that does not appear in any of the three sub-categories due to unavailability of a detailed breakdown.

e These totals include an amount of Fmk 21.4 million for "Regional Development Laws" that does not appear in any of the three sub-categories due to unavailability of a detailed breakdown.

f Data are for 1975.

Sources :

Data on GDP in current prices in domestic currency, taken from OECD, National Accounts of OECD Countries.

Data for spending on manpower adjustment policies for the years previous to 1976 are taken from OECD, Inflation, The Present Problem.

Public expenditure was defined as total expenditure, both current and capital, of general government, taken from OECD National Accounts of OECD Countries.

Unemployment rates taken from MAS (78) 22.

Data for spending on manpower adjustment policies for 1976, 1977, 1978 are taken from Inventories of Employment and Manpower Measures MAS/WP5(78)3. In the case of Japan, data for all of the years indicated, i.e. 1969 and 1976, was provided especially for inclusion in this table by the Japanese authorities.

APPENDIX

Note on the methodological problems of employment models

1. One important issue is whether a fixed or flexible exchange rate is assumed. All of the studies examined in this paper apart from the work of Baldwin implicitly assume a fixed exchange rate regime throughout or that changes in the trade balance will have such a small impact on the exchange rate that the additional employment effects can be ignored. It is important to remember that changing exchange rates can generate important employment effects which in some cases may be non-neglible.

2. A second issue is the substitutability of economic variables, since all these studies require an assumption about the relationship between imports (or exports) and domestic output. With a few exceptions the studies examined assumed that imports are perfect substitutes for domestic output. However, while this may be a realistic assumption for primary commodities the available evidence suggests it is much less plausible for most manufactured goods.

3. The input/output studies have the advantage of being able to capture the indirect employment effects of increased trade, which are generally significant. However all of these models suffer the familiar methodological drawbacks of their approach, not least of which are the difficulties of obtaining input/output tables for some countries and the fact that those available are usually outdated anyway. In addition, the static framework of the input/output studies, with its implicit assumption of fixed technological coefficients, is inappropriate for studying these effects of changing trading flows.

4. The accounting procedures also face formidable methodological problems. Clearly, the dependent variables determining employment change may be interdependent so that, for example, domestic productivity may have been stimulated by increased LDC competition. Secondly, exogenous factors may have been significant, such as LDC price competition which may well have increased domestic demand. Lastly, these estimates ignore the indirect employment effects on other industries supplying those which contract (or expand) their output.

5. For further details see J. Martin (1979) 'Measuring the Employment Effects of Changes in Trade Flows : A survey of recent research' and D. Schumacher 'The Impact of Trade with Developing Countries on Employment in Developed Countries' - UNIDO Working Papers on Structural Change, No. 3.