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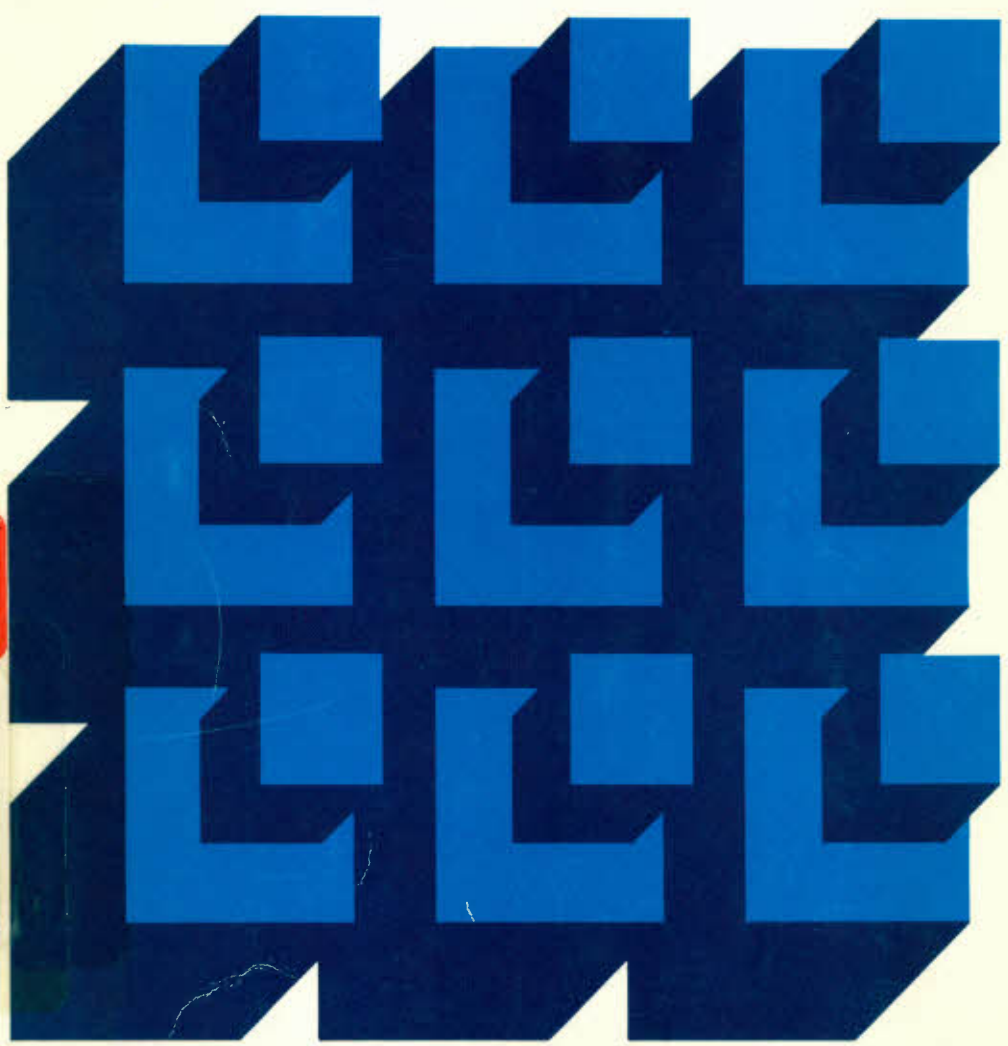

DISCUSSION PAPER NO. 345

Trade-Related, Sector-Specific Industrial Adjustment Policies in Canada: An Analysis of Textile, Clothing, and Footwear Industries

by

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RÉSUMÉ

Le présent document a pour objet d'examiner le rôle des politiques gouvernementales destinées à protéger et à subventionner les industries du textile, du vêtement et de la chaussure au Canada, et d'évaluer leurs répercussions sur le processus d'adaptation récemment mis en place dans ces industries. Pour donner une perspective suffisamment vaste à cette étude, l'auteur a également analysé les barrières commerciales appliquées dans ce secteur, les investissements de capitaux, l'emploi et ses caractéristiques, ainsi que la structure des marchés, dans la mesure où ces éléments ont déterminé les instruments d'adaptation choisis et leurs résultats. L'auteur a donné assez de flexibilité à son cadre d'analyse pour pouvoir tenir compte des problèmes que soulève l'adaptation intra et inter-industrielle de la main-d'oeuvre et du capital.

Malgré certaines similitudes, les politiques publiques et les comportements en matière d'adaptation ont beaucoup varié d'une industrie à une autre. Le soutien actif des pouvoirs publics aux industries du textile et du vêtement s'inspire de la politique sur l'industrie textile de 1970, qui est devenue de plus en plus interventionniste. En fait, elle a dépassé son objectif initial qui était d'assurer une protection temporaire, pour manifester plutôt un engagement sans cesse croissant du gouvernement à restructurer ces industries au moyen de subventions financières directes, surtout par le biais de l'Office canadien pour un renouveau industriel, créé en 1981. Depuis 1970, le gouvernement semble s'être éloigné de la seule protection pour axer ses politiques sur l'incitation active à des modifications structurelles à long terme, en vue d'assurer aux industries une viabilité constante.

L'apport de nouveaux capitaux et de nouvelles technologies dans les industries du textile et du vêtement et, à un moindre

degré, dans celle de la chaussure, a été le principal atout des stratégies de restructuration entreprises par ces industries et que le gouvernement a acceptées d'emblée et activement soutenues. D'ailleurs, ces stratégies semblent reposer sur l'hypothèse implicite que les difficultés de ces industries, à cause de la concurrence, ne sont attribuables qu'à une productivité insuffisante, et que les écarts de salaires internationaux pouvaient être compensés par des améliorations suffisamment importantes de la productivité du travail par l'injection de capitaux. Il n'est pas facile de procéder à une évaluation des politiques, car les objectifs apparents de l'intervention publique, soit le "rajeunissement" et la "revitalisation" de ces industries, n'ont pas été définis en fonction de critères mesurables pouvant permettre d'en évaluer les résultats réels. Néanmoins, il est évident que la politique relative à l'industrie textile n'avait jamais prévu une contraction ou un ajustement à la baisse dans les industries du textile et du vêtement. Par contre, le Tribunal canadien des importations avait envisagé un échéancier précis pour l'élimination progressive des restrictions quantitatives et des programmes de subventions dans l'industrie de la chaussure.

Près de 60 % de l'aide financière directe aux secteurs du textile, du vêtement et de la chaussure, de 1975 à 1985, était destiné aux immobilisations, et une proportion d'environ 25 % allait à l'adaptation de la main-d'oeuvre, exclusivement sous forme de compensation. Dans l'ensemble, l'industrie du textile a reçu - et de loin - la part du lion (57 %), suivie de l'industrie du vêtement (34 %) et de celle de la chaussure, y compris le tannage (9 %). Mais si l'on se place maintenant dans une perspective différente, les subventions et quasi-subventions gouvernementales ont compté pour 54 % de l'investissement total dans l'industrie du vêtement, 26 % dans celle de la chaussure et 12 % dans l'industrie textile, au cours de la période de 1981 à 1985. Les subventions de l'État ont représenté une plus forte proportion de la valeur ajoutée par le capital que celle qui l'a été par la main-d'oeuvre.

L'auteur a aussi tenté de mesurer l'adaptation en fonction du comportement de certaines variables très importantes - l'emploi, l'investissement et la productivité - dans chacune des industries concernées, par rapport à leurs homologues dans l'ensemble du secteur manufacturier. L'adaptation qui semble s'être produite, dans ce contexte comparatif, s'est traduite par une baisse de l'emploi et de l'investissement réel, par rapport à l'ensemble du secteur manufacturier. Elle est plus évidente dans les secteurs de la bonneterie et de la chaussure, mais moins visible dans celui du vêtement.

Les effets des barrières commerciales sur la production des industries protégées ont été atténués par des déplacements du commerce international attribuables à la déviation des échanges, à des modifications de la composition et de la qualité des importations, ainsi qu'à des réductions de la demande imputables au prix. Néanmoins, on ne note aucune tendance à une diminution de la production dans les industries du textile et du vêtement. Elles ont toutes deux réussi à maintenir leur production réelle totale depuis 1978, en dépit des variations cycliques prononcées. C'est seulement dans l'industrie de la chaussure que l'on constate une baisse importante d'activité, attribuable à une réduction de la production et de la diversité des produits.

Par suite d'importants investissements de capitaux entre 1981 et 1984, et de la diversification des fibres et des produits, la production textile canadienne s'est orientée vers une plus grande spécialisation. La création de catégories de produits haut de gamme, nettement différenciées, a permis à l'industrie d'atteindre un juste degré de viabilité et de conserver de façon plus ou moins constante sa part du marché des fibres et tissus synthétiques. Le processus d'adaptation a été également facilité par l'apport d'importants investissements étrangers et par l'accès, au marché international, des principales catégories de produits qu'elle fabrique.

Les stratégies de restructuration fondées sur les immobilisations ont été particulièrement inefficaces dans l'industrie du vêtement, à cause du coefficient élevé de main-d'oeuvre de ce type de production, et du fait que les coûts de la main-d'oeuvre sont des déterminants très importants de la concurrence internationale. En outre, la stratégie de l'industrie du vêtement ne semble pas avoir réussi à créer, par un processus d'adaptation interne axé sur des catégories restreintes, de "créneaux" particuliers sur le marché. L'insuccès de ces stratégies est attribuable autant à la fragmentation du marché de cette industrie qu'aux rigidités de l'adaptation des entreprises manufacturières elles-mêmes. Celle-ci n'a pas encouragé le choix et la concentration de la production intérieure sur des segments du marché relativement vigoureux. En outre, l'industrie n'a pas eu beaucoup recours à certains moyens compétitifs, comme "les travailleurs étrangers", qui a grandement contribué à l'adaptation de l'industrie du vêtement dans les pays de l'OCDE.

Aucun des programmes d'adaptation de l'État ne semble avoir accordé suffisamment d'attention à l'adaptation de la main-d'oeuvre, même si on a régulièrement invoqué les intérêts des travailleurs pour justifier, sur le plan politique, l'aide financière publique aux industries. Ni la protection, ni l'octroi manifeste de subventions n'ont suffi à préserver les emplois. En

fait, les politiques de l'Office canadien pour un renouveau industriel, dans le cadre de son Programme des secteurs visés, ont peut-être aggravé le problème du chômage en influant sur le comportement des entreprises aidées par l'OCRI en matière de licenciements, dans leurs efforts pour modifier le niveau des effectifs des entreprises et leur structure professionnelle.

Le problème de l'excédent de main-d'oeuvre n'a été réglé que par l'indemnisation des travailleurs mis à pied, sans rien faire pour les garder ou les recycler. Ces programmes fondés sur l'équité ont probablement contribué à une certaine forme d'adaptation dans l'industrie, en réduisant ses coûts privés, mais ont peu fait pour favoriser la mobilité des travailleurs ou atténuer la congestion du marché du travail. L'inaptitude à régler les problèmes d'adaptation de la main-d'oeuvre - qui n'est pas sans lien avec le fait que l'accent portait tout d'abord sur les investissements de capitaux - doit être considérée comme le plus grand échec de toutes les politiques d'adaptation.

L'analyse quantitative présentée dans ce document indique que le remplacement du travail par le capital, et l'accroissement de la productivité du travail qui en est résulté, ont été - et de loin - le plus important facteur de la diminution de l'emploi dans les secteurs du textile, du vêtement et de la chaussure, laquelle a été suivie par une plus grande pénétration des importations, tandis que l'effet des exportations a été en général neutre. Les répercussions négatives de la productivité de la main-d'oeuvre et de la pénétration des importations ont annulé l'influence, en grande partie positive, de la croissance de la demande intérieure sur l'emploi.

Somme toute, sauf dans l'industrie de la chaussure, les politiques mises en oeuvre n'ont pas permis de créer et d'appliquer une méthode efficace d'adaptation de ces industries à l'évolution de la concurrence internationale. Les politiques gouvernementales ont favorisé le maintien des ressources de production dans les industries non concurrentielles, au lieu de faciliter leur transfert aux secteurs en croissance. Ces échecs tiennent non pas au fait que les politiques formulées n'ont pas été assez bien appliquées, mais aux carences des politiques elles-mêmes. Ces déficiences prennent d'ailleurs diverses formes : a) des approches sectorielles trop étroites qui ont eu tendance à faire oublier les mesures qui auraient pu éventuellement contribuer à l'adaptation; b) l'absence d'une définition claire des objectifs à atteindre, et c) l'adoption d'instruments d'adaptation inappropriés. Notre analyse démontre qu'il sera nécessaire, à l'avenir, de procéder à un examen indépendant et plus minutieux des problèmes qui se posent, comme celui des répercussions des octrois sur le secteur visé et du "fardeau" de leurs retombées dans le reste de l'économie; cet examen doit être fait avant que les politiques ne soient formulées et doit viser, par la suite, à en assurer la transparence.

ABSTRACT

The purpose of this paper is to examine the role of government policies of protection and subsidies to textiles, clothing, and footwear (TCF) industries in Canada, with a view to assess their impact on recent adjustment within the industries. In order for this to be done in a sufficiently broad perspective, the study has also analyzed the sector's trade barriers, capital investments, labor employment and its characteristics, and market structure, in so far as they have determined the adjustment options and outcomes. The framework of analysis is kept deliberately flexible to allow for consideration of issues arising from inter- and intra-industry adjustment of labor and capital.

Despite certain similarities, both the government policies and the adjustment behavior has varied considerably from industry to industry. Active public support of the textiles and clothing industries originated with the Textile Policy of 1970 which gradually became more interventionist. The aims of the textiles policy went beyond the provision of temporary protection and encompassed an increasing involvement of the government in restructuring the industries by means of direct financial subsidies, most notably through the Canadian Industrial Renewal Board (CIRB) in 1981. The focus of government policies since 1970 appears to have shifted from mere protection to active promotion of long-term structural changes to ensure continuing viability.

Infusion of new capital and technology in textiles and clothing, and to a lesser extent in footwear, industries was the chief ingredient of the restructuring strategies undertaken by the industries and actively endorsed and assisted by the government. These strategies themselves appear to rest on the implicit presumption that the competitive difficulties of the industries are due solely to lagging productivity, and that international wage differences could be compensated for by sufficiently large improvements in labor productivity through capital investments. An evaluation of the policies is hampered by the fact that the ostensible objectives of government intervention, e.g., "rejuvenation" and "revitalization" of the industries, were not defined in terms of measureable criteria, against which actual outcomes could be assessed. It is clear, nonetheless, that the textile policy never envisaged a contraction or "downside" adjustment in the textile and clothing

industries. By contrast, the Canadian Import Tribunal had envisaged a clear time-table for the phasing out of QRs and subsidy regimes in the footwear industry.

Close to 60 per cent of direct financial assistance to the TCF sectors during the 1975-85 period was for capital investment, and roughly 25 per cent for labor adjustment, exclusively in the form of compensation. The textile industry was, by far, the largest recipient (57 per cent) of total assistance, followed by clothing (34 per cent), and footwear, including tanning (9 per cent). Looking at it from a different perspective, government grants and quasi-grants accounted for 54 per cent of total investment in the clothing industry, 26 per cent in footwear, and 12 per cent in textiles during the 1981-85 period. Government grants represented a higher proportion of value-added attributable to capital than that of attributable to labor.

This study has attempted to measure adjustment with reference to the behavior of certain crucial variables, e.g., employment, investment, and productivity, in individual TCF industries relative to their counterparts in the manufacturing sector as a whole. The adjustment that appears to have taken place in this comparative framework consists of a decline in employment and real investment, relative to manufacturing as a whole. The adjustment is farthest along in the knitting and footwear industries, and is least visible in clothing.

The impact of trade barriers on the output of protected industries was blunted by inter-country shifts througth trade diversion, compositional changes in imports and in their quality, and by price-induced reductions in demand. Nevertheless, there is no clear evidence of scaling down in textiles and clothing industries. Both have been able to maintain total real outputs since 1978, though with pronounced cyclical variations. Only the footwear industry exhibits significant scaling down, both through reduced output and through reduced variety.

Heavy capital investment in the textile industry during the 1981-84 period, combined with fiber and product specialization, has brought domestic production closer to a more specialized range. The move toward differentiated, high-value segments has enabled the industry to acquire a fair measure of viability and to maintain a more or less constant market share in the production of synthetic fibers and fabrics. The adjustment process was also facilitated by sizable foreign investment and internationalization of the major segments of its production.

Capital-based restructuring strategies have been singularly ineffective in the clothing sector, because of the inherent labor-intensity of apparel production and the fact that labor costs are crucial determinants of international competitiveness. Moreover, the development of market "niches" through intra-industry adjustment along narrow product lines does not seem to figure in the clothing industry's strategy. This lack of success is attributable both to the industry's fragmented market structure and the rigidities of the MFA itself. The latter did not encourage the selection and concentration of domestic production on market segments of relative strength. Furthermore, the industry has not utilized

to any significant degree such competitive devices as "foreign sourcing" which has been an important element in the adjustment of clothing industries in other OECD countries.

None of the government adjustment programs appears to have paid adequate attention to labor adjustment, despite the fact that the presumed interests of the workers were routinely invoked to provide political justification for public financial assistance to the industries. Neither protection nor overt subsidization were sufficient to protect employment. Indeed, the policies of the CIRB under its SFP program may have deepened the problem of unemployment by influencing the layoff behaviour of CIRB-assisted firms in their efforts to change both the level of firm employment and its occupational structure.

The problem of worker redundancy was handled exclusively through compensation of the separated worker, rather than through retention or retraining. These equity-based programs probably helped in bringing about some sort of adjustment within the industry by reducing its private costs, but did little to promote labor mobility or relieve labor market congestion. The inability to deal with labor adjustment problems, which is not unconnected with the prime focus on capital investments, must be judged as the major failure of all adjustment policies.

The quantitative analysis in this paper suggests that substitution of capital for labor and the consequent rise in labor productivity was, by far, the largest contributor to the decline of employment in the TCF sectors, followed by rising import penetration, while the effect of exports was generally neutral. The largely positive impact of the growth of domestic demand on employment was swamped by negative influences of labor productivity and import penetration.

In an overall sense, the adjustment policies, except in the footwear industry, have failed to design and implement a workable approach to adjusting to international competitive shifts. Government policies have encouraged productive resources to remain in non-competitive industries, instead of promoting their transfer to growing sectors. The lapses are due not to the lack of implementation of the policies that were formulated, but to the shortcomings of the policies themselves. The latter, in turn, can be traced to (a) overly narrow and sectoral approaches that have tended to obscure potentially adaptive adjustment; (b) an absence of clear definition of goals; and (c) the adoption of inappropriate means of adjustment. Our analysis underscores the need in future for a closer and independent scrutiny of issues, e.g., the impact of subsidies on the sector concerned and their "excess burdens" elsewhere in the economy, before policies are formulated, and for their transparency once they are formulated.

CONTENTS

FOREWORD

There is a substantial amount of adaptation continuously taking place in the Canadian economy as individuals and firms respond to the pressures for change. In a few cases, however, these pressures are judged to impose an intolerable burden of adjustment on particular regions, industries and/or groups of workers. In these cases, governments intervene by adopting and implementing sector-specific policies.

In the research program for the Council's Manufacturing Firm Adjustment project a small number of case studies were undertaken of some of the most important examples of sectoral policies for trade sensitive industries. This paper examines the textile, clothing, and footwear experience where a variety of policy instruments -- subsidies, high tariffs, quantitative restraints on imports, preretirement benefit programs for older workers -- have been applied. In one instance quite a novel institutional arrangement, the Canadian Industrial Renewal Board (1981-86), was used. The central conclusion of the paper is that these policies "except in the footwear industry, have failed to design and implement a workable approach to adjusting to international competitive shifts." The paper examines in detail the factors that may have contributed to the lack of success in adjustment, and suggests more workable policy directions for future.

Jaleel Ahmad has written widely on trade, finance, and economic development. He is currently professor in the Department of Economics at Concordia University in Montreal.

Judith Maxwell
Chairman

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INTRODUCTION

This paper examines trade-related, sector-specific, industrial adjustment processes and the role of government in the textiles, clothing, and footwear industries in Canada. The focus of the study is on the analysis of government policies of protection, direct financial subsidies, and other assistance measures directed toward these sectors, although autonomous adjustment efforts of the industries themselves are also considered. In particular, we attempt to identify the various objectives of public policy toward these industries, the factors that appear to have shaped the policies, and the extent to which individual objectives are consistent with each other. In doing so, we undertake an analysis of the major trade policy and government subsidy regimes, their economic consequences, and their influence on the ensuing adjustment process in each of the industries in question. The analysis is undertaken in a framework which identifies a variety of alternative adjustment paths, their long-run and short-run implications, and highlights the relationship between a given industry's market structure and its adjustment options.

Adjustment assistance programs have long been an integral part of trade and industrial policies in Canada, at least since the implementation of the Kennedy Round of tariff cuts. The primary purposes of

government intervention in the process of adjustment were initially (a) to alleviate the private burden of adjustment to trade liberalization by providing compensatory payments to displaced or potentially redundant workers; (b) to dampen the severity of short-run adaptation shocks to firms by prolonging the process of adjustment - a task which was facilitated by the gradual year-to-year implementation of the multi-laterally negotiated tariff reductions; and (c) to promote enhanced mobility and search for alternative avenues of employment. Economic justification for adjustment assistance has always been a tenuous mixture of allocative efficiency and distributional equity, and frequently seen as a necessary complement to macroeconomic policies. By and large, the guiding principle behind government intervention was to preserve the necessary degree of flexibility in allowing the underlying market forces to produce new equilibria. The assistance mechanism tended to lean toward "affirmative" adjustment, seeking to relocate and regroup productive resources through desired changes in relative prices, costs, and profitability. Adjustment programs were envisaged as reflecting a commitment to progressively disengage from manifestly uncompetitive production activities.

The commitment to goals of positive adjustment, despite economic hindrances and predictable political opposition from vested interests, has in the past resulted in continual and sustained adaptation to trade-related upheavals.[1] Whether the resulting adjustment has been rapid enough, or whether government intervention was justified in what are essentially private economic activities are undoubtedly matters of disagreement. Nonetheless, continual liberalization of trade in the wake of the Kennedy and Tokyo Rounds, as well as the Canada-US Auto

Pact of 1965, is a testimony to the fact that firms and workers were able to adjust to changes in international trade, and subsequently reaped the benefits of specialization and higher incomes.

In the more recent past, overall liberalization of trade and the positive adjustment policies associated with it has been accompanied by "special" and discriminatory protection to a selected number of beleagured industries. "Tailor-made" protection for a small number of producers in the economy is supplemented by a significant amount of direct and indirect subsidization from public budgets. Together, they have tended not only to polarize government interventions in the trading system, but have also profoundly distorted the adjustment process. Particularly since the late 1970's, adjustment assistance measures tied to sector-specific distresses have tended to differ markedly from their earlier counterparts in a number of respects.

First, adjustment assistance and benefit eligibility are no longer tied to episodes of multilateral trade liberalization. Instead, they are triggered by arbitrary notions of "high" or "unacceptable" levels of import penetration in industries where prolonged and unprecedented levels of trade barriers have failed to stabilize the level of imports. As a result, adjustment assistance measures have become tied to a process which effectively moves the economy from a relatively free to a less free constellation. Both efficiency and equity grounds for adjustment assistance are open to serious question if they spawn regimes of special protection and result in a situation which is quite opposite to that of gradual liberalization.

Second, government subsidies to factors of production employed in industries adversely affected by rising imports are no longer in the

nature of a "bribe" (the Hicksian "equivalent variation") to vacate the industry in question and, thus, to allow the economy to nudge toward less restricted trade. On the contrary, they have tended to provide additional layers of protection, over and above the subsidy implicit in trade barriers. The consequent rise in the profitability of production behind protective barriers and subsidies has not only prevented the exit of resources from these industries, but has often prompted the influx of new resources on the margin.

Third, the focus of government adjustment policies, never very clear to begin with, seems to have perceptibly shifted from compensating the workers threatened with unemployment and assisting their relocation to supporting the firms to continue to produce, often with a smaller work force, through internal restructuring devices. This is despite the fact that the presumed interests of the workers are routinely invoked to provide political justification for public assistance and other transfers to firms in question. The income-distributional implications of these transfers turn out to be quite different from those that were originally intended.

Finally, the commitment to disengage from sectors rendered non-competitive as a result of non-reversible, long-run shifts in terms-of-trade seems to have been eroded. Public resources and transfer payments on an unprecedented scale have been directed toward declining industries for the avowed purpose of their "renewal" and "rejuvenation", often to the point of "regaining international competitiveness" through restructuring strategies. Adjustment assistance has come to mean not having to move from the industry in question.

The thrust of these newer dimensions of adjustment policy is

nowhere more evident than in the textiles, clothing, and footwear (TCF) industries, where a significant part of the adjustment problem, though by no means all of it, is due to the surge of highly competitive imports from a small number of newly industrializing countries - the "low-cost" countries. These sectors represent the most dramatic example of combining heavy protection, without clear and contestable criteria of "import injury", with unprecedented levels of direct and indirect government subsidies and other support measures. A distinguishing feature of the adjustment assistance aimed at the rejuvenation of textile and clothing industries is its emphasis on investment and capital subsidies for the renewal and modernization of equipment and production processes. A frequently-stated objective of government subsidies is to enable the industries in question to compensate for the international wage differences through sufficiently large improvements in labor productivity. This sort of defensive adjustment is widely seen as a more "permanent" solution to the import penetration problem than the one afforded by trade barriers alone.

The prime objective of restructuring policies is to secure the continuing profitability of production by the relatively larger firms, and only secondarily on problems of worker redundancy which has been handled exclusively through compensation rather than adjustment. Inter-sectoral or intra-industry mobility of production factors, of the kind envisaged in earlier programs, does not seem to figure in any meaningful way in any of the recent adjustment measures directed toward the TCF sectors. Consequently, the adjustment assistance policies seem to bear the strain of numerous contradictions and distortions of their own, which are inevitable when market adjustments are suspended for long periods of time. It has become commonplace to

suggest that protection and overt subsidization in these sectors (and in possibly others) is the outcome of a political process in which narrow interest groups appear to play a decisive role. But this ex post explanatory role of interest groups, which tends to assign a purely passive role to government response, fails to explain a process of decision-making which is more complex than appears at first sight. Two major difficulties appear to be super-imposed on those that are inherent in any adjustment process. First, none of the government programs provides a clear definition of "restructuring" and "rejuvenation" with identifiable indicators against which outcomes of intervention can be assessed. Second, the emphasis on sectoral approaches has been instrumental not only in fostering powerful coalitions, but have also masked the overall adjustment possibilities elsewhere in the economy and, hence, inhibited transition to newer sectors.

Plan of the Study

This study is divided into six chapters. Chapter I lays down the conceptual framework, highlighting the proper task of adjustment, and the role of government intervention. Chapter II discusses import penetration and the evolution of trade barriers in the TCF sectors. Problems of labor employment, capital investments, and productivity are discussed in Chapter III. Chapter IV analyzes the role of government policies in influencing the adjustment by firms and workers, as well as provides a comparative evaluation of government measures for individual TCF sectors. Chapter V highlights the interaction between the individual industry's market structure and its adjustment performance. A concluding chapter brings together various elements of adjustment in a scenario of alternative paths.

I. THE TASK OF ADJUSTMENT

Before embarking on a detailed quantitative analysis of adjustment policies in Canada's TCF sectors, it is worthwhile spelling out the nature of required adjustment in response to import competition. It is evident that the nature, as well as the direction and the speed, of adjustment will vary from industry to industry, depending upon the nature and durability of the exogenous "shock" that prompts adjustment, and the organization and market structure of the industry in question, as reflected in industry concentration, the elasticity of its market demand curve, pricing behavior, and other relevant variables. Government policies can significantly influence the adjustment outcomes that would emerge from the interaction of unfettered markets. Such policies can either reinforce the market processes as they converge toward the predicted outcome, or moderate the speed of adjustment by "leaning against", or distort the direction of adjustment itself, or, in extreme cases, prevent adjustment altogether. A full analysis of adjustment mechanisms in open economies and their relationship to government intervention is beyond the scope of this paper.[2] The following paragraphs attempt to throw light on a few pertinent issues as they relate to the limited concern of this paper.

Let TT' in Figure 1 represent the long-run transformation surface between an importable good x (for example, the output of the TCF sector), and another composite good y which is a surrogate for other tradable goods in the economy. The tangency of $(p_y/p_x)_1$, whose slope represents the relative price of x and y as determined in the world market, with TT' defines the initial equilibrium at point A. At A

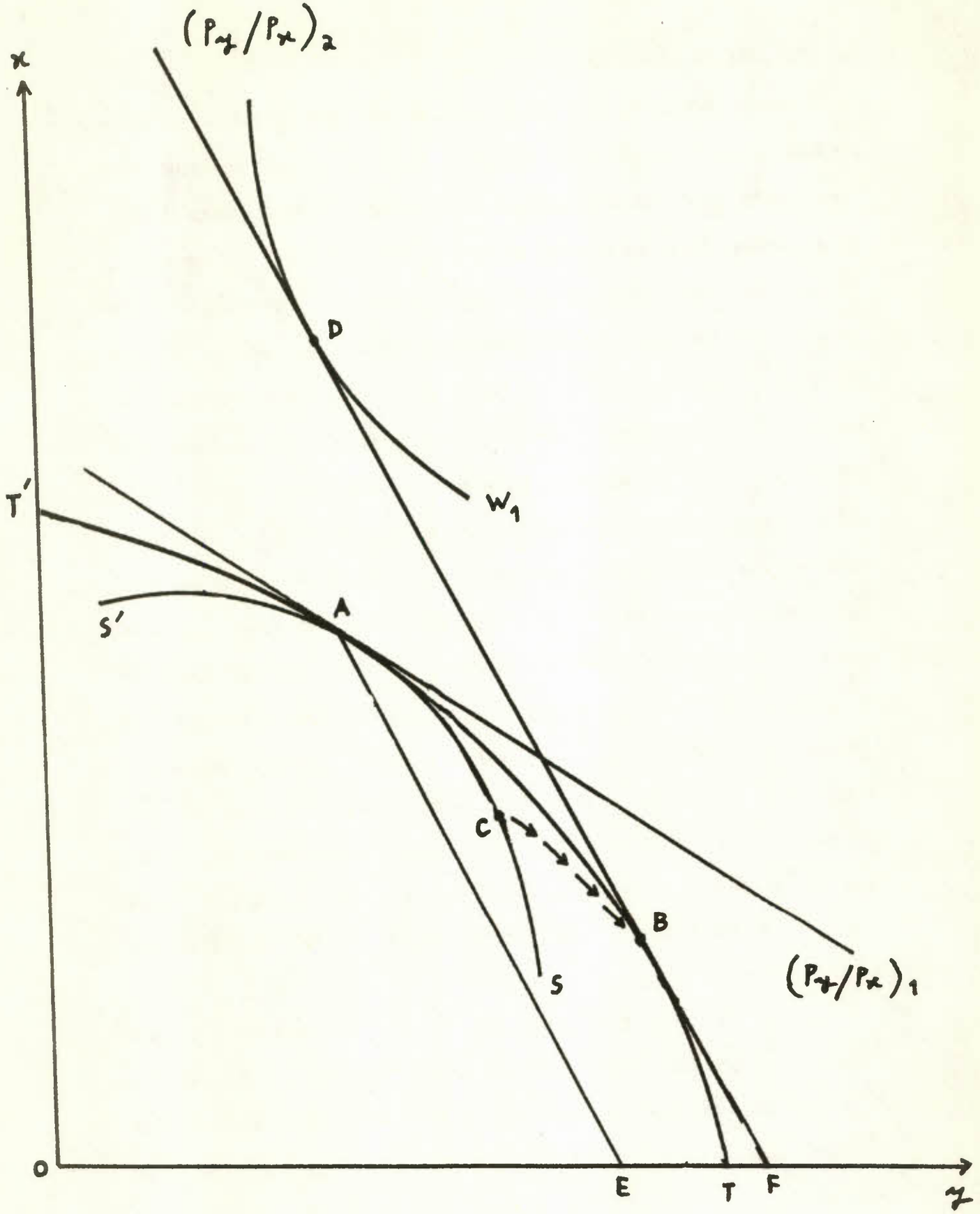

FIGURE 1

goods and factor markets clear at a given wage-rental ratio, w/r.

A change in terms-of-trade, viz., a fall in the relative price of x due to increased competition from imports represented by the slope of the new price line $(p_y/p_x)_2$, requires a shift of the production equilibrium to B. Provided lump-sum transfers are possible, both efficiency and welfare would be maximized by producing at B and trading at the new price ratio, which signifies the "consumption possibilities" set for the open economy. A market-determined adjustment consists of an exit of some resources from the production of x whose output declines and their reemployment in the increased production of y. The wage-rental ratio will change, depending on the factor-intensity of the x-sector; if it is relatively labor-intensive, the change in terms of trade at B will, in general, lower wages relative to rentals.

The move from A to B is, however, unlikely to be either instantaneous or smooth if the factors of production employed in x are "specific" and are, therefore, incapable of alternative employment without considerable transformation. The difficulties of adjustment arising from the specific nature of production factors may be compounded by further difficulties arising from the lack of perception of the need to adjust, inertia, factor market imperfections, such as wage stickiness and labor market congestion, and possibly other rigidities. The move from A to B is, in reality, an "adjustment path", rather than a quantum jump, representing a succession of sub-optimal equilibria. The path itself is characterized by temporary unemployment of factors, private and social losses of earnings and output, and possibly cyclical variations in employment and output.

The various impediments to inter-sectoral adjustment may conveniently be represented by a short-run transformation curve, such as SS', which lies uniformly inside the long-run surface TT', except at point A. If short-run transformation difficulties arise from market imperfections which are unavoidable, government intervention through a regime of taxes and subsidies is required for their correction.[3] In the absence of government intervention, the economy may fail to adjust properly, and may remain permanently on a sub-optimal point, such as C, or, in extreme cases, the output combination may fall to a point directly below the initial equilibrium at A.

If the cause of transformation difficulties lies in the "specific" nature of one or more factors of production, the market is, in principle, capable of yielding a desirable adjustment outcome. If prices and wages are reasonably flexible, a reduction in both of them governed by the rate of decline of the import price would eventually nudge the economy toward the long-run equilibrium at B. The essential mechanism involved in this transition is the emergence of a differential between rewards to factors of production in different sectors. The fall in the price of importable good translates into a lower reward to factors employed in its production relative to other sectors in the economy, e.g., production of exports, domestic goods, and services. The increased relative attractiveness of higher wages and rentals in other sectors is what induces the inter-sectoral reallocation of factors. The speed of adjustment is governed by the useful life of the equipment, its rate of depreciation, the attrition and the rate of turn-over of labor, the cost of retraining and relocation, as well as the size of factor reward differential.

The problems posed by the "specific" nature of capital equipment

and labor are quite different from each other. Capital equipment built to specification for particular tasks is quite rigid during its useful life. The only feasible transformation is to allow it to depreciate and build new equipment suitable for other tasks. However, in industries where a portion of capital equipment is rented (most notably in footwear and, to a lesser extent, clothing) or if there is an international market for the equipment (e.g., textiles machinery), then the opportunity cost of capital equipment is not zero, and its specific nature less of a constraint to desirable adjustment. The specific skills and aptitudes embodied in workers, frequently tied to particular locations, effectively "depreciate" immediately if not used in its customary employment. But the cognitive and learning capacities remain undiminished throughout the working life, and are capable of being redirected to other occupations through retraining and recycling. The policies to deal with "specificness" of labor are, therefore, different from those that are appropriate for capital.

The speed of adjustment may be slower if correct policies to deal with specific factors are not in place, or if the system is otherwise not in a state of resilience. Production equilibrium is likely to move initially from A to C on the adjustment path as a result of the exogenous "shock". Competitive forces imbedded in a resilient economy, reinforced by correct government intervention, will shift SS' progressively to the right on the path indicated by the dashed line CB, and adjustment would be complete. The failure to reallocate resources, and thus to equalize the marginal products of factors in each of the sectors, is expected to lower the national income below the maximum attainable with a given level of resources. Government

intervention to facilitate the process of adjustment in the face of rigidities is justified on both efficiency and equity grounds, as argued later in this essay.

Industry Adjustment and Market Structure

Adjustment to market forces is, as a rule, undertaken by firms. The nature of adjustment by firms, in turn, is determined by the industrial characteristics and market structure within which firms' production and pricing decisions are made. Adjustment strategies and responses available to firms in fragmented industries that closely resemble conditions of "perfect" competition are not the same as those in oligopolistic industries with differentiated products, barriers to entry and, through large sunk costs, to exit as well, market-sharing, and non-price competition. Firms in competitive industries, such as the TCF sector, have few non-tangible assets which provide them with durable competitive edge over their rivals. Product differentiation and economies of scale, to the extent that they are significant, accrue only to a few relatively large producers. A competitive firm is, in general, unable to raise domestic price by the full extent of tariff on competing imports without inducing the entry of new firms in the market or increased production by existing ones. Attempts to raise cost-price margins through collusion are unlikely to succeed. Nonetheless, product differentiation and specialization in narrow product lines through market "segmentation" can be an effective adjustment strategy even in fragmented industries, such as the production of clothing, as we discuss below.

Import restrictions and direct government subsidies can ease the constraints to desirable forms of adjustment both for the competitive

and oligopolistic industries. Although tariffs and non-tariff barriers are, on balance, complementary, the two forms of protection differ markedly in their attractiveness to industries with different market structures. In particular, non-tariff barriers are apt to be relatively more appealing than tariffs to industries with a fragmented structure. There is some empirical evidence to suggest that the incidence of protection through quotas and "negotiated" trade barriers is negatively related to seller concentration, with the converse being the case for tariff barriers.[4] Similarly, capital subsidies, rather than payroll subsidies may be more attractive to firms in fragmented industries, because of constraints arising from lower retained earnings and high capital costs of borrowing.

The degree to which domestic firms take advantage of trade barriers in changing their prices and quantities varies systematically with the level of seller concentration, and with the degree of elasticity of individual sellers' market demand. In industries with high seller concentration, firms are able to raise prices of domestic substitutes by a substantial proportion of tariffs due to their ability to prevent protection-created rents from dissipating. As a result, protection merely raises prices, with little or no change in quantity produced. By contrast, in industries with low seller concentration, trade barriers induce a shift toward domestic substitutes, and the main effect is on quantities produced, rather than on price. Thus, the main effects of protection on domestic quantities and prices cannot be inferred merely from the change in trade policy; a knowledge of the industry's market structure is necessary.[5]

Type of Adjustment:
Inter-Industry or Intra-Industry

The type of adjustment depicted in Figure 1 signifies a movement of resources from one well-defined industry to another, following the change in terms-of-trade. This is, indeed, a simplification which avoids difficult issues involving industry classification. In practice, an industry consists of a collection of firms producing a number of different products, either singly or jointly. The products can be fairly homogeneous, or they can be "similar" but differentiated by size, quality, ingredients, brand image, and other hedonic attributes. Domestic response to changes in foreign prices takes on an entirely different character when there are significant possibilities of intra-industry adjustment relating to movement of resources within a given industry and often within a given firm, usually across narrow, specialized product lines. No larger-scale shifts of labor and capital are involved. Faced with a decline in international competitiveness, a firm can attempt to recreate its competitive advantage, relative to foreign and domestic rivals, by focusing on market segments with a low price elasticity of demand. It can try to alter the market parameters by means of strategic shifts from one product to another, just as crop rotation practised by farmers who produce homogeneous goods of different kind. The permutations of adjusting strategies through product selection may not be as high as those available to oligopolistic firms, but they are not totally absent.

In Figure 2, x_i and x_j represent two products which are different from each other, but are part of the same industry, e.g., textile fabrics produced with cotton or with man-made fibers, or are differentiated products, e.g., womens' clothing with unique style attributes.

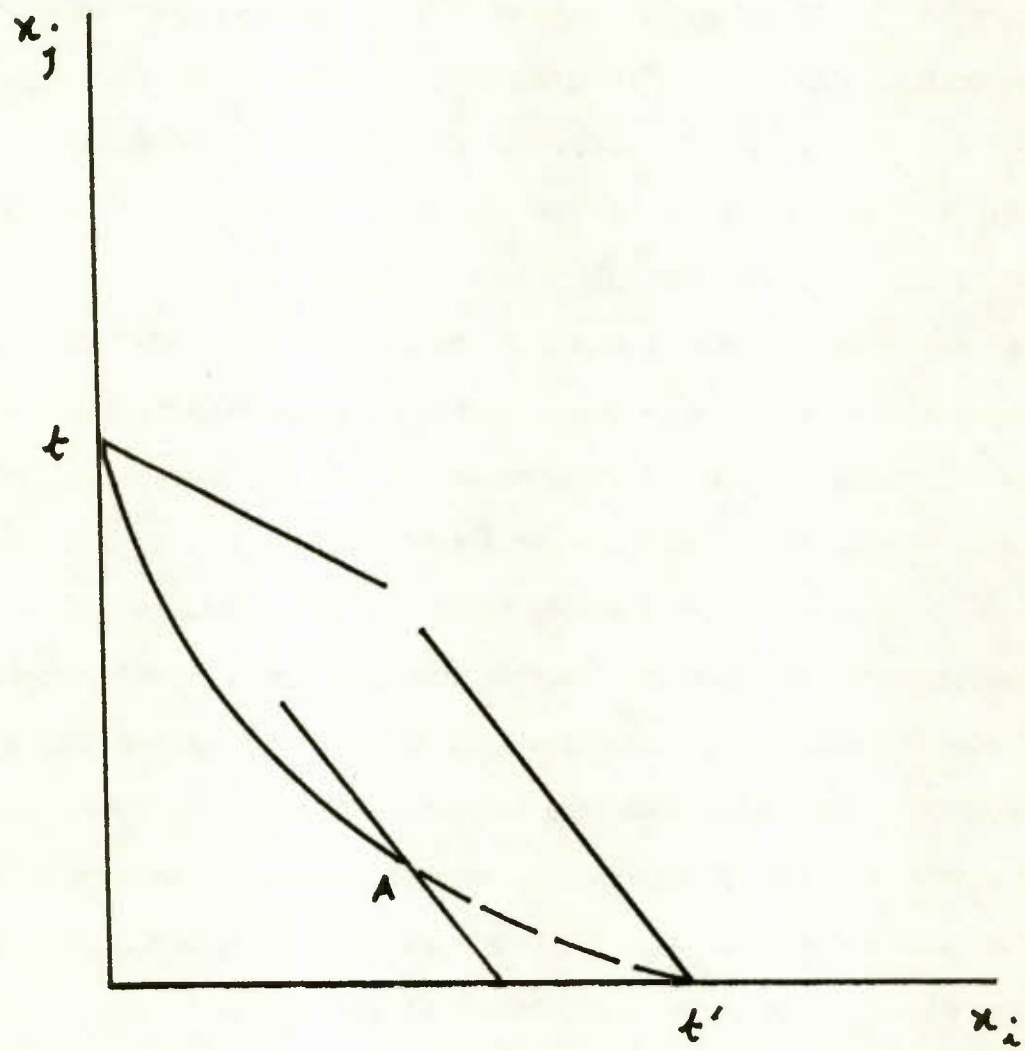

FIGURE 2

The transformation curve tt' between the two products within a given industry, and often within a single firm, is convex from below, signifying that internal economies of scale and economies arising from plant specialization dominate all other influences on costs of production. A fall in the relative world price of one of the goods will prompt domestic producers to reallocate resources toward the production of the other good. However, trade barriers that attempt to neutralize changes in international terms-of-trade also prevent correct intra-industry adjustment. For simplicity, we assume that the initial specialization in the production of x_i at t' is no longer available due to irreversible changes in terms-of-trade, as indicated by the truncated lower portion of the tt' curve. Trade barriers on imports of x_i will, in general, prevent an intra-industry shift toward a full exploitation of scale economies in the production of x_j. Profit-maximizing production will take place at a point such as A. Such a situation could easily arise if, for instance, there are product-specific quantity restrictions (QRs) on a wide variety of products within the industry, and no clear-cut pattern of intra-industry comparative advantage emerges. If now full optimality is restored by trade liberalization, domestic producers can specialize in the production of x_j at t and remain competitive by exploiting scale economies. Intra-industry adjustment of the kind depicted in Figure 2 offers a cooperative solution to the problems posed by import competition.[6] In the real world, where there are more than two products, possibilities of intra-industry specialization increase dramatically.

The development of market "niches" along narrow product lines allows the adjustment process to be internalized within the industry in question, and the role of inter-sectoral transfers is minimal.

While the problems posed by the specific nature of production factors do not altogether disappear, they are considerably less than in the case of inter-industry shifts. The possibilities of specialization and, therefore, the containment of the adjustment problem within the industry, can themselves be enhanced by product development. A purely passive response to terms-of-trade changes is replaced by strategic behavior which brings into sharper relief a product-specific market segmentation, which tends to reduce the elasticity of demand faced by domestic firms. The degrees of freedom in adjusting behavior contingent on intra-industry adjustment may not be available equally to all firms in the industry whose exit may mean that some inter-industry adjustment in response to foreign price change may be unavoidable.

Most industrial adjustment in OECD countries in the recent past, both in response to multilateral trade liberalization and to the formation of free trade blocs, such as the EEC, has in fact been of the intra-industry kind.[7] As a result, factor movements have been largely confined to their shift from one segment of the industry to the other, without large scale or prolonged factor migration. Retraining of workers and retooling of equipment - tasks which cannot be completely avoided in any adjustment - were justified as the price for "market-swapping" with trading partners and have clearly rationalized production. Intra-industry adjustment has also meant that no single element in the firm's cost function, e.g., wage costs, is the decisive factor in its competitiveness, and that the reasons for inter-firm cost differences go beyond international differences in factor and input prices.

A possible reason for the severity of adjustment problems in certain sectors - textiles, clothing, and footwear being prime examples - is that import competition in these sectors introduced structural problems of a kind that are different from those in oligopolistic manufacturing industries producing differentiated products. Foreign competition rendered large segments of the industries in question suddenly non-competitive, and seemed to require substantial movements of resources out of them. Since these industries are invariably labor-intensive, the main brunt of adjustment was perceived to fall on labor groups. Oligopolistic types of behavior which could permit continued viability without vacating the industry were, in general, not available. The intensification of import competition in labor-intensive manufactures represents a structural shift of profound implications for domestic producers in industrial countries. The collective inability to manage this structural change, rather than any marked deterioration in the flexibility of labor markets, as often claimed, is what lies behind the current rigidities in the adjustment process. Nonetheless, these developments enhance both the need and the potential for industrial adjustment. These same factors have doubtlessly involved the public sector ever more intricately in the adjustment process.

Role of Government
Adjustment Policies

Industrial adjustment in market economies is, as a rule, undertaken by firms and households who bear the private costs of such adjustment, and appropriate the eventual gains from it. This principle is firmly rooted in market-determined economic systems, and cannot be altered without redefining the limits of state intervention

in economic matters. Therefore, any direct involvement of the government in the process of industrial adjustment has to be expressly defended. A key question is whether there are distortions in product and factor markets, which prevent the attainment of a socially efficient adjustment outcome. The distortions can arise from a variety of sources, such as inadequate information, absence of risk-bearing mechanisms, trade-union induced restrictions on wage flexibility, cultural and language barriers to labor mobility, and congestion in the process of search for new employment. If such distortions exist, the correct intervention policy is to "countervail" these distortions at their source, without direct intervention in the adjustment process.[8] A principal objective of government policy should be to create a market-determined environment in which private decisions lead to a socially optimal outcome by removing general distortions in labor and capital markets. In terms of Figure 1, the task of an efficient adjustment policy is to intervene in product and factor markets in a way that minimizes the present discounted value of welfare losses along the adjustment path ACB.[9] It is only when countervailing measures are either unavailable or give rise to by-product distortions of their own that a direct intervention in the adjustment process may be required.

A distinction between private and social costs of adjustment is crucial. Private decision-making units, whether firms or households, incur the cost of adjustment in the form of lost earnings as a result of temporary unemployment and redundancy, as well as the cost of retooling, retraining, and readaptation necessary for mobility and reemployment. The purely monetary costs may be compounded by psychic

costs of dislocation, particularly when a change in the customary place of work and residence is involved. Social costs of adjustment accrue to the economy at large, and can be approximated by the difference between the potential value of national income at the predicted long-run equilibrium (such as at B in Figure 1) and the one that results from temporary unemployment, or employment in low-productivity occupations, during the process of adjustment. It is clear that social costs significantly depend on the speed with which adjustment takes place, and are susceptible to intervention policies themselves. It should also be noted that private and social costs do not always converge. Private costs do not disappear when social costs are eliminated and the long-run equilibrium is attained, and frequently require lump-sum compensatory transfers. By the same token, social costs may continue to be incurred if private costs are extirpated by the absence of required adjustment.

Recent experience with adjustment difficulties in the wake of import competition, particularly in the TCF sectors, has demonstrated that private costs of market-determined adjustment are often quite high and fall disproportionately on labor groups which, for a variety of reasons, are unable to bear the full burden of their own adjustment. The costs are particularly onerous when the macroeconomic environment is one of recession punctuated with mild recoveries, misaligned exchange rates, and the absence of adequate non-inflationary growth. As a result, labor markets have tended to become inflexible and less resilient to structural changes. Nonetheless, enhanced adjustment difficulties are due less to any marked deterioration in labor market flexibility, as argued in some quarters, but rather to the change in government intervention policies themselves

and in the political constraints within which policies are formulated, as argued later in this paper.

It is now generally recognized that governments everywhere have the undisputed task of smoothing out the course of industrial adjustment. The importance and the urgency of domestic industrial adjustment is underscored by recent structural changes in the pattern of international trade and investment, whose speed itself is quickened. The question is no longer whether or not to intervene, but relates rather to the direction, nature, and the means of intervention itself. Insufficient attention has been paid to the task of formulating a constellation of intervention policies that are coherent, efficient, and adjustment-enhancing in the correct direction. It is clear that incorrect or slow adjustment can prolong the short-run disequilibria inherent in the process of adjustment and thereby increase both social and private costs.

Both efficiency and equity, tempered by political expediency, are likely to figure among the justifications for direct government intervention in the adjustment process. The notion of efficiency is generally unambiguous. A given constellation of resources yields the highest attainable level of national income if all factors of production are employed in the activity of their highest marginal products, which are equalized in all activities. When markets are inoperative or sluggish, government intervention and adjustment assistance promotes efficiency if it nudges factors of production to where they contribute most to the national income at given factor and product prices. Correct intervention not only countervails the wedge

between private and social values, but also reduces the private and social costs of adjustment.

There is, nevertheless, the possibility that the economy will incur a disproportionately large social cost in undergoing adjustment. The discounted present value of transition costs can, under certain conditions, exceed that of the gains from adjustment, due to the loss of potential output from unemployment and dislocation. There are, however, not too many empirical results that support such a possibility.[10] Similarly, labor market congestion means that the ability of the market to reemploy displaced workers is affected by the size and distribution of unemployment in segmented labor markets. It is then possible to use protection as a means of slowing the pace of change. On the other hand, it could be argued that by-product distortions can be avoided if intervention is directed toward removing the original distortions that give rise to labor market congestion.[11]

The notion of equity, on the other hand, admits of no simple interpretation, since it necessarily involves a comparison of interpersonal states of welfare. The tradeoffs between equity and efficiency, particularly as balancing acts for political expediency, lead to further complications. The most accessible interpretation of equity is the use of adjustment assistance as a redistributional tool in compensating factors tied to declining industries. It is in the nature of a "bribe" to the "losers", in an attempt to overcome the political opposition to less restricted trade. It presupposes that the terms-of-trade gain to the economy at large is higher than private losses incurred by some factors adversely affected by the change. This aspect of adjustment assistance has been extensively used to justify benefits to displaced workers in excess of customary unemploy-

ment and layoff benefits.

The trade-off between efficiency and equity is frequently sought to be justified, with considerably less flair, in attempts to prevent adjustment on the ground that private costs would be too high. The most defensible argument for direct intervention in the adjustment process, and the one in which private and social purposes coincide, is for subsidization of the movement of factors out of low productivity employment in industries that have lost their long-run competitiveness. The speed of adjustment itself, which crucially depends on particular industrial characteristics, can be slowed down to minimize any residual private costs. There may also be valid arguments for redistributing income through tariffs, following an adverse terms-of-trade shock, from individuals with a low marginal utility of income to those with a higher marginal utility, or if the resulting distribution of income is unacceptable.[12] The overall costs of adjustment depend on the combination of the means of adjustment assistance, discussed in the next section, as well as on the sequence and coordination of the movement of labor and capital. There are no defensible arguments for preventing adjustment by inducing factors of production to remain in low-productivity employment.

Other possible interpretations of equity are less straightforward. If continuing and escalating trade barriers induce factors to remain tied to declining industries and welfare losses to consumers continue to mount, is it equitable to extract a penalty from factors that have become artificially "immobile" as a result of government policies and compensate the consumers for their losses? And, the exporting groups that are likely to lose from trade-distorted relative

prices, exchange rate misalignments, and retaliation? Is it "equitable" to provide compensation only to certain "special" producers and not to all producers across the board? When the economy suffers internal shocks (e.g., changes in technology, demand, and tastes) as against external ones arising from terms-of-trade change, the coalition of losers is generally less powerful to block the change. Is it then equitable not to compensate them simply because they lack political power? Arbitrary notions of equity, divorced from those of efficiency, are fraught with serious dangers of misuse.

It has now become clear that sluggish adjustment, and often non-adjustment, on the part of factors currently employed in import-threatened industries arises in large measure from expectations of government assistance, and the consequent non-adjusting behavior becomes a prima facie ground for actual assistance. These expectations, whether rationally held or adaptively formed, frequently spawn lobbying and pressure groups and assorted coalitions of vested interests, and give rise to social costs (the counterpart of their own "rents") which are clearly avoidable. The "excess" cost of incorrect government adjustment policies is not confined to the sectors toward which such measures are directed, but extend to other sectors through inter-industry repercussions, just as nominal tariffs on a range of inputs influence the degree of protection afforded to final goods industries. Moreover, through the expectations mechanism, they set dangerous political precedents that are difficult to resist.

Adjustment Assistance Measures

The purpose of the adjustment assistance measures undertaken by the government is to alter the conduct of economic activity with a

view to achieve an outcome different from the one that would result in the absence of adjustment. Accordingly, adjustment measures are designed to induce, directly or indirectly, a change in the relative price of goods or factors of production. Adjustment measures to assist import-threatened industries have taken a variety of forms. (1) trade barriers can range from tariffs, including countervailing duties, quota restrictions (QRs), and voluntary export restraints (VERs); (2) direct and indirect financial subsidies to owners of firms and workers, including investment grants, concessional loans, loan guarantees, retraining and relocation grants, and compensation for separation; and (3) fiscal measures, such as investment tax credits, accelerated write-offs and depreciation, and favorable tax treatment. In addition, regional policies of investment, employment, and growth in designated areas may often be guided by trade policy. A common feature of all government adjustment measures is that they invariably give rise to a transfer payment from the consumers (in the case of trade barriers) and from taxpayers (in the case of subsidies and fiscal concessions) to factors of production remaining in or moving from affected industries. As such, they redistribute income in a selective and discriminatory manner.

Trade barriers are, by far, the most common form of government intervention for the support of TCF industries. While all trade barriers involve an implicit subsidy to the protected industry, they also give rise to a "by-product" distortion in the form of consumer losses through higher prices of importables.[13] A trade barrier that wholly or partly negates the fall in world prices prevents the exit of resources by raising the profitability of domestic production of importables, and thus hinders long-run adjustment. A frequent justi-

fication for trade barriers in declining industries has been that they provide the necessary "breathing space" for the industry beset by altered competitive conditions, and allow time for a gradual and orderly contraction. This may indeed be defensible if trade protection is contingent on a gradual winding down of the industry, and an eventual removal of trade barriers. In practice, however, trade barriers in the absence of a clear time-table for their removal have provided incentives for maintaining production levels unchanged, even though factor substitution and other technological adaptations have taken place.[14]

Recently, trade barriers which themselves have been increasing over time have been supplemented by direct and indirect financial subsidies for the imprecisely defined purpose of "restructuring" of the industries in question. Subsidies can be distinguished from each other according to where they produce the initial relative price impact. Subsidies can take the form of a production subsidy or a factor subsidy either to capital or to labor.[15] Two initial considerations need emphasis. First, a flow transfer payment to capital or labor initially employed in a declining industry and in the process of exit is very different from a flow transfer to capital and labor that remain employed in that industry. The latter type of transfer contingent on factors remaining in the declining industry seriously distorts the adjustment process. This is because the linking of transfer payments to the current location of the factor, rather than its potential relocation, creates an artificial incentive to remain employed in its initial location. In fact, if the level of subsidy were set equal to the differential between factor earnings in the

declining industry and in other sectors of the economy, then all incentives for movement would be removed and there would be no adjustment. Second, the presumed superiority of direct subsidies over trade barriers, often invoked in the adjustment literature, rests on the proposition that subsidies avoid the gratuitous consumption losses associated with trade barriers. Nevertheless, it is important to recognize that subsidies give rise to efficiency losses of their own by distorting product and factor prices.[16]

The arguments for intervention through factor subsidies generally rest on the existence of some "specific" factor of production. Labor subsidy on efficiency grounds is justified if there is nominal (or real) wage rigidity which prevents re-employment, or if the market-determined rate of unemployment, following the terms-of-trade change, is not optimal. Equity considerations, in turn, favor lump-sum transfers to labor if the subsequent redistribution of income within the economy is unacceptably large. The case for capital subsidies to owners of firms is considerably weaker. The divergence between private and social costs that could conceivably suggest a presumption in favor of capital subsidy has not been demonstrated. The capital markets provide the mechanism of insurance to owners of assets and stockholders to choose the extent of risk they like to assume. Furthermore, capital is not permanently sector-specific. If it is slow to respond to the differential between the rental earned in its customary employment and the one potentially available in an alternative use, investment tax credits and interest rate subsidies (purely fiscal measures) may be necessary to move capital out of the low-rent to relatively higher rent industries. The argument that subsidies to firms are justified for maintaining employment confounds the issue;

both capital and labor subsidies to firms in a protected labor-intensive industry are liable to induce substitution of labor for capital.[17]

The foregoing considerations reinforce the importance of co-ordinating the adjustment processes of labor and capital. It may be necessary to slow the speed of adjustment of one of the factors if it is not in step with that of the other. Investment plays a pivotal role in bringing about adjustment in market-oriented economies, and labor adjustment largely follows the lead of capital. If capital adjustment is thwarted, it is difficult to visualize smooth adjustment of labor. In the same vein, it must be recognized that time-minimizing adjustment policies of the "bang-bang" type which attempt to secure reallocation in the shortest possible time, without regard to their coordinated movements, are unlikely to be practical.[18]

In judging the role of factor subsidies in the process of industrial adjustment, it is necessary to keep in mind the distinction between a declining industry and a growing ("infant") industry with dynamic externalities. Market failures and imperfections and, hence, the rationale for intervention, in the two cases are quite different from each other. The infant industry argument rests on dynamic allocative efficiency, and derives its cogency from the apparent failure of capital and labor to make socially optimal allocation decisions. In addition, the infant industry must demonstrate that it has an attainable potential competitive advantage, i.e., the present discounted value of benefits is higher than the current costs of the subsidy. The arguments for intervention in the case of a declining industry, on the other hand, seem to rest on the irreversibility of

investment which has created non-transferable, industry-specific assets. The asymmetry between declining and growing industries would indicate that the proper role of factor subsidies in the declining industries is to let them decline gradually and without unacceptably large private costs. At best, attempts to preserve an industry-specific factor's income in the event of a change in terms-of-trade may lead to an equity-based argument for intervention, in contrast to the efficiency-based argument for growing industries.[19]

Another way to pose the problem is to ask the question as to whether the purpose of government intervention in declining industries is (a) to assist the industry to overcome a temporary distress; or (b) to assist it to decline in a gradual and orderly manner, rather than precipitately; or (c) to enable it to permanently maintain its level of production. Efficiency arguments for intervention, either through subsidies or through trade barriers, can be invoked to support objective (a) if it enables the industry to overcome its temporary difficulties by means of restructuring of production. Both efficiency and equity grounds of subsidization coalesce in favor of tax-subsidy intervention for adjustment of labor, but not necessarily of capital, if the purpose of the policy coincides with (b). If capital is specific to the declining industry, it no longer has an opportunity cost to the economy and, in general, requires no intervention. The absence of contingency markets for risk-bearing may, in special cases, lead to a case for compensation on equity grounds. There appears to be no valid basis, either on efficiency or equity grounds, to support objective (c), viz., the maintenance of the status quo. The grounds are quintessentially political.

It should also be noted that the use of subsidies for the attain-

ment of a legitimate domestic objective rests on the implicit assumption that non-distortionary means of financing the subsidy are available. In practice, this is seldom the case. Fiscal measures to finance subsidies give rise to distortions of their own, with adverse income and price effects. In addition, subsidization frequently entails "excess burden" over and above the cost of financing. Excess burdens signify further losses in efficiency resulting from sub-optimal and non-adjusting postures merely to take advantage of the subsidy. Subsidies lead to what Boulding has termed the "dependency trap", i.e., subsidies designed to meet a temporary need create such a successful adaptation to them that the need becomes permanent. The continuing receipt of subsidies may give rise to, more or less, permanent losses through inappropriate measures undertaken as part of the adjustment process, while trade barriers, at least in principle, are removable. If non-distorting revenue sources are unavailable or if budget deficits are mounting, the levels of subsidy must be modified to reduce their by-product distortion.

We have so far discussed the role of government adjustment policy in cases where the terms-of-trade change is irreversible and reflects a structural shift in the pattern of trade. By their very nature, these changes are long-run in character, but pose a problem of identification, since they seldom occur in sudden and discrete jumps. In particular, they are liable to be confused with other short-run changes in relative prices. The effect of the latter on terms-of-trade may be indistinguishable from that of the more permanent shifts in comparative costs of production, but policy prescriptions are markedly different.

Two such short-run influences on terms-of-trade may be noted here. First, cyclical variations in demand and output of internationally-traded goods periodically change the terms-of-trade between groups of products. These changes alternate in unison with phases of the business cycle, and quickly reverse themselves without any perceptible long-run trends. If so, no long-run move, such as from point A to B in Figure 1, is indicated. In general, no policy intervention is called for, except that which is directed toward smoothing out the business cycle itself by means of macroeconomic policies. Second, the dumping of foreign-produced goods or their subsidization by foreign governments may abruptly lower their relative prices. Again, no long-run adjustment is called for. If dumping is carried out in a predatory fashion, the correct policy is the use of countervailing trade barriers, in order to neutralize the effect of dumping or state subsidization on the cost of imports. In either case, it is important to avoid the ambiguity concerning permanent and transitory changes in terms-of-trade.

Political Factors in Economic Adjustments

Political opposition to adjustment necessitated by economic upheavals is not new. But the organized exercise of political pressures through durable coalitions of narrow interest groups has recently emerged as a powerful deterrent to economically desirable adjustment. Political lobbying for rent-seeking, super-imposed on the purely technological and economic hindrances to orderly adjustment, transform essentially routine economic matters into contentious political issues. The availability of protection and other means of overt subsidization bears no necessary relationship to legitimate difficul-

ties of adjustment. In reality, protection and subsidies are both determined as the outcome of a complex political process which shapes the demand for and the supply of uncommon privileges. The motivations underlying the pressure of interest groups in seeking insulation from market forces is clear enough. Trade barriers and direct subsidies in the form of unrequited transfers to the industry mean increases in producers surplus, and the demand for such rents varies inversely with its price in terms of resources spent in lobbying. The government's response to, and its ability to cope with, protectionist pressures, which may loosely be termed the supply of protection, is not quite so straight forward.

It is not simply that the government passively reacts to these demands in securing its overriding objective of getting re-elected. Neither do governments actively choose to dole out protection to maximize their own self-interest. Several mutually reinforcing factors tend to complicate the process. First, the government's response is conditioned by political and ideological traditions which themselves are shaped by political spectrum of the party in power or through a bi-partisan consensus. The propensity to cosset particular industries from market forces would be less in countries where liberalism in economic matters is the prevailing consenus, and a positive adjustment bias is ingrained in public policy. On the other hand, in countries where providing public support to vocal industry groups is not considered a political liability, the susceptibility to pressures for intervention would be correspondingly higher. Where intervention is invoked, the premise usually is that public intervention can promote adjustment in a less disruptive manner than the one achieved by market forces. These predilections and partiality toward

public assistance measures, rooted in the political decision-making process, more than anything else, have played an important part in shaping industry-government relations. Consequently, demand for protection is likely to find a sympathetic and ready response in the supply of protection. Although the determinants of the ability to adjust are far from clear, there is little doubt that flexibility in this regard is greatly influenced by overall policy orientation.

Second, when the need for adjustment arises because of an internal shock, there usually are strong producer and consumer lobbies within the country in favor of the change, and act as decisive counter-weights to the coalition of the losers. When the need to adjust lies in a change in the level of imports, it is usually possible to shift, at least, a part of the burden of adjustment (and most of the blame) to the trading partners. It then becomes difficult to assemble a coalition of interest groups that favor the change and are willing to lobby for it. Trade barriers impose direct costs on consumers through higher prices, and indirect costs on export-oriented industries and regions through over-valued exchange rates, negative protection through higher input prices, and through other allocative inefficiencies. It is well-known that consumer interests are too diffuse and fragmented to pose a countervailing force to protectionist elements which, by contrast, are highly organized. Moreover, when trade-barriers are sector-specific and are not generalized to a majority of imports, their price effects on a per capita basis may appear too small, in comparison with the highly localized and concentrated impact on producer interests in protected industries. Similarly, a coalition of exporters against protectionist measures

that reduce the profitability of exports indirectly is also difficult to establish, because the adverse impact of sector-specific protectionist measures on any single export-oriented interest would be marginal or, at least, would be seen in that light. In countries with a liberal economic philosophy, consumer and exporting interests have relied on the government to safeguard their interests vis-a-vis those of special industries.

The threat of international retaliation and other disruptive behavior on the part of trading partners, which is by far the most potent barrier to protectionist pressures of sectional interests, is generally absent in the case of negotiated trade barriers. Negotiated export restraints not only reduce international conflict and obviate the need for compensation under Article 19 of the GATT, but are also a facilitating device for collusion among the exporting and importing firms. Firms in exporting countries that capture the export licences are able to expropriate the quota rent to themselves and are able to adjust by other means, though not costlessly, such as quality changes, upgrading of the value-added of exports, and sheltering from competition from new producers. In general, the burden of adjustment tends to be shared between importing and exporting countries. To that extent, importing country governments are less inhibited in their grant of protection.

Finally, problems of adjustment are, as a rule, approached exclusively in terms of costs, without any discussion of "willingness" to adjust. Some countries (and industries) might make more adjustment by introducing new products and new methods of production than others because of a greater willingness to adjust rather than because of lower costs. A positive approach to adjustment, and to its inherent

risks, is what determines whether to adjust or not at a given level of adjustment costs.

II.TRADE BARRIERS AND ADJUSTMENT

Trade barriers have been, by far, the most important policy instruments in the textiles, clothing and footwear industries in Canada, although their particular form and transparency has varied from sector to sector. While negotiated (voluntary) export restraints have been the major trade restricting device in the textiles and clothing industries, global quantity restrictions (QRs) have governed the imports of footwear. The VERs in the case of textiles and clothing and QRs in the case of footwear are super-imposed on statutory tariffs which, despite gradual reductions during the Kennedy and Tokyo Rounds, remain significantly higher than the average for the manufacturing as a whole. The purpose of this chapter is to analyze the consequences of trade barriers for adjustment in the three sets of industries, with particular reference to the differences in their economic and market structure.

All trade barriers are designed to reduce the foreign supply of a product to a particular market. The lower levels of imports raise domestic prices and, depending on the price elasticity, reduce the domestic demand. The domestic industry is presumed to benefit both from the increase in domestic price which raises the profitability of the firms, as well as a rise in the industry's market share vis-a-vis imports. The change in market shares, however, cannot be inferred merely from the size of trade barriers, and further assumptions about the industry's market structure have to be made. Protection-augmented prices enable marginal producers, who were unable to compete at world

prices, to remain in the industry, while infra-marginal, lower-cost producers experience a rise in their cost-price margins. Both factors combine to raise the proportion of domestic demand supplied by domestic industry. These effects are true, by and large, when trade barriers take the form of tariffs and QRs. VERs and other organized marketing arrangements, on the other hand, induce complex shifts in foreign supply which, at least partially, offset the intended effects of trade barriers, and influence the ensuing adjustment process in the domestic industry. The three most important shifts in foreign supply that are pertinent to this study are (a) the inter-country shift in the source of imports; (b) the inter-commodity shift in the composition of imports; and (c) the change in the "quality" or value-added of imports that are subject to quantity ceiling. All three types of shifts have been important in the Canadian textiles and clothing industries where VERs have been extensively used. Global quotas, such as those on footwear imports, are by and large immune to such shifts, although changes in the "quality" of imports are presumed to have occurred.

Trade barriers in textiles and clothing have three further complicating effects. First, trade barriers in textiles induce inter-fiber substitution between yarns and fabrics made from natural fibers and those made from synthetic materials. Second, since the textile and clothing complex includes a chain of different products embodying different degrees of processing, viz., yarns, fabrics, and clothing, tariff barriers in one product category are bound to have repercussions for the other. Third, there is a two-way relationship between individual firms within the group as a source of inputs and as a

destination for their own outputs. This vertical interdependence of domestic producers at different stages is important in understanding the structure of protection and its evolution over time. It is also important in explaining the adjustment behavior of firms since the existence or otherwise of a domestic source of supply of inputs and their prices relative to competing imports are important determinants of costs and competitiveness.

Trade Barriers in Textiles and Clothing

Negotiated export restraints have a particularly long history in textile and clothing industries in Canada.[20] Canada was a signatory to the Short-Term Agreement (STA) negotiated in 1961, and the the Long-Term Arrangement in Cotton Textiles (LTA) from 1962 until the end of 1973. The LTA was directed primarily against imports of cotton textiles from Japan. While the LTA did have a restraining effect on imports from Japan, it did not prevent the continuous growth of total imports from all other sources. In addition to the LTA provision for a modest automatic annual growth of imports, three other factors had a major influence on the subsequent evolution of the trade pattern. First, the decline in imports from Japan was more than compensated for by the rapid and phenomenal increase in imports from the as yet non-restrained countries, chiefly Hong Kong and Taiwan. Second, the inter-fiber shift from cotton to synthetics, partly fostered by the world-wide development of petro-chemical industries, accounted for most of the growth in imports. Third, exporters barred from the markets for yarns and fabrics attempted to move increasingly into exports of clothing, where import regimes were free of quantitative restrictions. The subsequent evolution of trade barriers in the

textile and clothing sector is a string of ad hoc measures instituted to deal with the "loopholes" that were the unanticipated results of discriminatory trade barriers themselves.

The first comprehensive Multi-Fiber Arrangement (MFA) was negotiated in January 1974 for an initial period of four years, bringing textiles and clothing made from wool and synthetic fibers within the purview of export restraints. Since the MFA-imposed ceilings on import levels are based on past levels, there was a built-in incentive to keep current import levels as high as possible. It is not surprising then that there was a sudden surge of imports of clothing from the "low wage" countries, while textile imports had a more stable growth. This sudden surge, which was nonetheless predictable, prompted Canada to impose a global quota under Article 19 of the GATT on virtually all clothing imports from all sources. The global quota remained in place until the end of 1978, with a ceiling of approximately 90 per cent of actual 1975 import levels.

The 1977 renewal of MFA II brought in more countries and more products in its purview in order to overcome trade diversion and inter-commodity substitution which had by now established a recognizable pattern of their own. The extent of trade diversion depends, in particular, on the ease with which producers can enter or exit the market in response to cost differentials created by discriminatory quantitative barriers. In the textile and clothing sector, where variable costs dominate total costs and sunk costs are not high enough to deter entry, trade diversion encouraged the development of new sources of supply among the unrestrained countries. This latter is often claimed as a by-product benefit of the MFA to non-major supplying countries. Discriminatory restraints on established

suppliers were quickly offset by the emergence of new sources of supply, without a significant change in the domestic industry's market share, despite the probability of restrictions being extended to new suppliers as well. In a similar fashion, systematic incentives were generated for import patterns to shift toward products that were not restrained or were restrained less severely.

The extent of trade diversion and inter-product shift were sought to be countered by extending the country and product coverage through progressive tightening of the MFA provisions, such as "reasonable departure" and "anti-surge" clauses. The "reasonable departure" clause of MFA II meant that if imports were deemed to cause serious injury or threat to a particularly sensitive domestic sector, the growth rates and other flexibility provisions (viz., carry-over, carry-forward, and swing) could fall below those stipulated in the Protocol or be suspended altogether. The anti-surge clause in MFA III negotiated in 1981 abolished base-year guarantees of import levels in "sensitive" products, and permitted only nominal growth in others. Through successive renewals of the MFA, the generalized system of discriminatory imports was extended to a majority of all non-OECD sources and to virtually all product categories. Quite in line with its increasingly restrictive stance, MFA IV was renegotiated in the summer of 1986, and has now brought silk and ramie fibers and clothing under restraints as well.

During the period 1960-1975, the various negotiated export restraints covered mainly yarns and fabrics, but since 1976 they have covered mainly clothing. In 1983, only 7 per cent of Canada's imports of textiles were covered by bilateral agreements, in contrast to 75

per cent of clothing. The data on imports are presented in Tables 15 through 19, while Tables 23, 24, and 25 show exports of textiles and clothing. Unlike the clothing sector, the main thrust of textile protection is directed against a small number of large-volume exporters, viz., Hong Kong, South Korea, Taiwan, Poland, and, to a lesser extent, some of the ASEAN countries. In 1984, 51 per cent of total primary textile imports in Canada originated in the United States, and were subject only to an MFN tariff. Nonetheless, imports from "low cost" countries have been increasing steadily since 1975, particularly in cotton and polyster yarns. The bulk of Canada's imports is in man-made fibers (SIC 183), which accounted for over half of total imports in 1983. Canada is also a sizable exporter in this category; man-made fibers accounted for 56 per cent of textile exports in 1983.

Several overlapping kinds of evidence confirm the gradually increasing size and coverage of trade restrictions on imports of clothing since the beginning of the first MFA in 1973. First, as shown in Table 57, successive MFA's have brought a larger number of countries as well as a larger number of product categories under their purview. The restrictive drift is most pronounced in clothing, particularly between MFA I and MFA II, presumably to counteract trade diversion toward non-restrained countries as the restraint levels for major suppliers themselves gradually became more binding. However, these data by themselves do not tell whether bilateral quota levels and the available degree of flexibility, and not demand and other influences, were the major factor restricting imports of specific products.

One way to ascertain this is to compute the extent to which

restraint limits on particular products and the volume of imports of that product which were not subject to restraint have changed over time. The premise of this exercise is that if most of those limits were filled, then imports would have been greater in the absence of restraints. Extensive simulations of restraint levels on disaggregated product categories reveal that the limits to which individual quotas of major exporting countries to Canada were filled rose dramatically during the life of the second MFA in 1978 to 1981, and have remained uniformly high since then. The major restraining influence of quotas is evident in winter outerwear, mens shirts, and mens tailored suits. This is where the major "surge" in imports appears to have occured. The utilization of restraint levels, i.e., actual exports as per cent of restraint ceilings, for non-major suppliers were considerably lower. Hence, in principle, exports were free to increase from these sources and bilateral quotas with the latter do not appear to restrain imports from them. Import restraint utilization levels in textile products during the 1979-83 period (shown in Table 31) present a mixed picture. In yarns and fabrics, the two major import items, the utilization levels during the period have actually fallen. Finally, the ratio of all restrained imports of clothing to total imports in Canada rose from an average value of 69 per cent during the 1974-77 period to an average of 84 percent during the 1978-81 period. The growth of the ratio is more moderate from the second to the third MFA, i.e., from 84 per cent to 86.5 per cent.[21]

The inter-country substitution of sources of supply inherent in the MFA did not significantly change the market share of the Canadian textile industry, although it would be misleading to suggest that

trade restrictions did not reduce overall imports. The import penetration ratio in the textile sector as a whole rose by 8 per cent during the 1971-1982 period, while the corresponding change for the clothing sector during 1975-1984 period was 17 per cent. But negotiated export restraints have had an uneven and haphazard product incidence. Within the overall protected sector, the degree of restrictiveness typically has varied greatly among products. As a result, the primary impact of protection seems to have been on the composition rather than on the total volume of imports. The change in import penetration ratios in the disaggregated product categories shows a large variance from the mean, as the data in Tables 27, 28, and 29 reveal. In the textile industry during the 1971-82 period, the change in the import ratio varied from 468 per cent (SIC 1870, cotton, jute and canvas bags) to -68 per cent (SIC 1852, pressed felt mills product). The domestic industry's market share appears to have increased significantly only in felt mills product (SIC 1852), cotton yarns and cloth mills (SIC 1810), and in carpet manufactures (SIC 1860). Import restrictions in the clothing industry have not increased the market share of the domestic producers in any of the major disaggregated product groups. The change in the import penetration ratio during the 1975-84 period ranges from a low of 3 per cent (pants, shorts, overalls) to a high of 79 per cent in outerwear, as seen in Table 29.

Protection and Prices

Despite any appreciable change in market share, domestic producers have benefited from above-normal increases in import prices over their free-trade values. The progressive narrowing of trade diversion "loopholes" in successive MFA's has aggravated the upward

pressure on import prices, because the less restricted sources, in general, produce at a higher average cost than the restricted ones. An analysis of unit import value indices suggests that the wedge between domestic and world prices in the clothing industry is explained largely by the differential in the supply price between relatively more and less restricted sources of imports. The index of import prices seems to have risen most in products where the utilization levels of quotas of low-cost producers have the highest values.[22] Shifts in the composition of imports have involved still further increases in import prices, as a result of relative price changes within the protected group. The inter-commodity shifts imply that price increases in disaggregated product categories are not proportional. This is particularly evident in the case of the clothing industry, where severely restricted countries have moved "up-market", leaving the supply of lower-priced varieties to newer entrants in the market and to domestic producers, who have higher costs of production. This shift, together with the effects of reduced supply, increases the price of the lower-quality products proportionately more than that of the higher-price products. This relative price shift also means that clothing protection in Canada has cost lower-income households more than their higher-income counterparts.[23]

The inter-commodity shifts described above, i.e., from the more-restricted to less-restricted ones, are accompanied by further compositional changes. Since export quotas of foreign producers are typically quantity-based, there is a systematic tendency to substitute higher value-added products for lower value-added ones, and products

with lower demand elasticity for those with higher demand elasticity. This shift is facilitated by the fact that the ad valorem tariff equivalent of a VER on a higher-priced item is lower than that of the lower-priced one.[24] Exporters of higher value-added product categories also have an incentive to raise prices above competitive levels, because the firms' elasticity of demand is lower.

In the absence of monopoly in consumption, domestic prices of imports generally rise by the full amount of tariff or of non-tariff equivalents. As regards prices of competing domestic output, they may or may not rise proportionately as large as the rise in import prices, depending on the degree of substitutability between imports and domestically-produced goods. For a given degree of substitutability, the rise in prices of domestic goods is contingent on the ability of the domestic industry to raise prices without attracting new producers in the market. In competitive industries, such as clothing and footwear, any attempt to raise domestic prices induced by tariff protection may be short-lived as the entry of new producers in the industry exerts a downward pressure on prices. As a result, even though prices of domestic goods are likely to rise in symbiosis with prices of imports, the rise tends to be moderate.

A detailed analysis of industry selling prices, wholesale prices, and consumer price indices enables the following broad generalizations. In general, the selling prices of clothing products during the 1976-79 period, most notably in the mens clothing industry, increased at a slower rate than average prices for all manufactured goods.[25] The industry selling prices were also lower than the wholesale prices of all clothing, which includes imports. A significant part of the rise in price that did occur appears to be due to higher

input prices as a result of protection of yarns, fabrics, and other inputs. The rise in industry selling prices since 1983 has averaged 5.5 per cent per year.[26] Finally, the increases in the clothing component of the consumer price indices during the 1980-84 period have been smaller than those for the overall index, as well as that for non-durables. There is, of course, no reason why prices of all goods in an inflationary setting should rise in the same proportion over the base year prices. In fact, a general rise in the price level is always accompanied by changes in relative prices of pairs of goods, as some prices rise at a faster rate than others. It is, therefore, misleading to suggest that a smaller proportionate rise in retail clothing prices signifies that protection did not matter.

The pricing behavior in the textile industry is markedly different. The industry selling prices of all textile products, and particularly of yarns, during the 1976-79 period rose at approximately the same rate as that of imports.[27] In comparison with the clothing and footwear industries, domestic textile producers were able to take full advantage of tariffs and other trade barriers in their pricing behavior, presumably due to relatively higher level of industry concentration.

The pricing behavior in the footwear industry is quite similar to that of the clothing industry. The rise in the industry selling prices during the 1977-83 period appears to be considerably lower than that of import prices, as measured by the wholesale price index. In fact, Hazeldine (1981) estimates that domestic output prices during 1976-79 even failed to keep pace with the rise in the price of the industry's major input, viz., leather. However, during the two years

1978-1980, industry selling prices rose at a higher rate than import prices. From 1980 to 1984, domestic and import prices appear to have

grown at approximately the same rate.

The rise in footwear import prices is moderated to a certain extent by a "trading down" effect of lower unit-value imports, as a result of shifts in the product-mix of imports toward lower-priced footwear. The price (and capacity) implications of quality changes in footwear imports are opposite to those in the clothing industry, where there is widespread evidence of a continual upgrading of imports.

Trade Barriers in the Footwear Industry

The nature of trade barriers, and indeed the pattern of trade itself, is markedly different in the footwear industry. Non-discriminatory global quotas (QRs) on the majority of footwear imports were first imposed in 1977, and were designed to limit overall imports to a maximum of 32.5 million pairs per year. The QRs were initially non-transferable between narrowly-defined products. In 1981, QRs were extended for a further period of three years. The 1981 renewal brought canvas and rubber footwear within the purview of QRs for the first time, but lifted import restrictions on leather footwear, on the grounds that domestic manufacturers could easily compete in leather footwear which were imported primarily from the developed countries. However, the contraction of demand in 1982 prompted the re-imposition of leather footwear quotas in July 1982. The 1981 extension also witnessed some relaxation through an increase in the size of the quota, and the provision of "swing" in product categories. Quotas were further extended to March 1986, to coincide with the termination of the Canadian Industrial Renewal Board (CIRB). QRs on men's and

boys' shoes were lifted in the fall of 1986, while an annual growth rate of 6 per cent per year was permitted in quota limits for women's shoes.

Until 1975, Canada imposed both an ad valorem tariff on footwear and a "valuation uplift" surcharge, which raised the c.i.f. value of imports for duty purposes. The latter practice was discontinued after the introduction of the GATT system of valuation based on the "transaction" price of the good in question. The bulk of footwear imports in Canada (approximately 90 per cent by value in 1983) is subject to MFN tariff of 23.4 per cent, while the rest is subject to a general tariff rate of 40 per cent. The General Preferential Tariff (GPT) for developing countries was withdrawn in 1976.

The existing QRs on women's shoes include intermediate products, such as leather and non-leather uppers, beyond a certain stage of fabrication. The 6 per cent growth in quota limit is allocated primarily to domestic manufacturers, rather than to importers, who are now able to import a larger quantity of uppers for final assembly by attaching soles in domestic plants. Since close to 50 per cent of the cost of finished footwear is attributed to the cost of the uppers, this change in the allocation of quota is expected to result in a substantial cost reduction.[29]

Import competition appears to be most intense in women's footwear, as well as special purpose footwear, such as ski boots, athletic footwear, and ice and roller skates (Tables 30 and 32). These two categories represent, by far, the largest share of total imports, both in volume and value terms. The import vulnerability in women's footwear is reflected in the fact that, of the five broad product categories, it is the only product whose percentage share in total imports

increased between 1981 and 1984. Non-leather footwear, particularly the injected molded plastic footwear "jellies", largely accounted for this increase. In the special footwear category, the strongest import thrust since 1970 has occurred in athletic shoes, while imports of skating footwear have experienced a rapid decline since 1980.

In volume terms, Taiwan is Canada's major source of footwear imports, accounting for 33 per cent of total, followed by South Korea (21 per cent), and Italy (11 per cent). Data on imports of footwear are presented in Tables 20, 21, and 22, while Table 26 shows exports of footwear. The picture changes slightly when one looks at the distribution of import shares in value terms. Italy contributes the largest share (26 per cent), followed by Taiwan (23 per cent) and South Korea (17 per cent). Imports from Taiwan and South Korea consist primarily of non-leather footwear, while those from Italy are exclusively leather. Brazil, with 9 per cent of total import value, is the only developing country which supplies a significant quantity of leather footwear to the Canadian market. The shares of imports from different countries since the imposition of QRs in 1977 have been remarkably stable, the only exception being the rise in the relative share of Taiwan and Korea, largely at the expense of developed country exporters.[30]

The QR regime in the footwear sector had a more predictable effect on the market share of the domestic industry. The import penetration ratio for total imports, shown in Table 30, remained more or less stable during 1977-84; it rose by only 3 percentage points. The market share of the domestic industry increased by a sizable percentage (33 per cent change during 1977-84) only in the lower-

priced category of slippers and house footwear.

Overall Assessment of Trade Barriers

The evolution of trade barriers in textiles and clothing industries exhibits the classic case in which new and more comprehensive restrictions are imposed to deal with "by-product" distortions created by the earlier ones. Despite its increasingly restrictive stance, the MFA did not permit the domestic industry any significant increase in its market share. However, significant inter-product substitution through MFA-induced relative price changes took place in the textile industry, which have had the effect of bringing the domestic production closer to a more specialized range. In the production of man-made fabrics, which is the largest single component of domestic production in Canada, the domestic industry's market share has remained remarkably stable since 1978. In the clothing industry, despite the restraining influence of the MFA, the domestic industry has consistently lost ground to imports. This is perhaps the clearest measure of its long-run non-competitiveness, which not even the most absurd set of trade restrictions can be expected to reverse. Moreover, the protective mechanisms embodied in the MFA did not encourage selection and concentration of domestic production on those market segments where it had the greatest relative strength.

Protection of the Canadian footwear industry, by contrast, has had a less untidy course due to several mutually reinforcing factors. First, the agencies responsible for regulating footwear imports had initially a more realistic assessment of the industry's problems and potentialities. The impact of the QRs and its costs were looked at in a wider economic framework, which included the changing pattern of world trade. The concepts that guided the Canadian Import Tribunal in

determining the degree and causation of "serious injury" from imports were less imprecise than those that seem to underly the protective mechanisms in clothing and textile industries. Second, the nature of protective measures employed, viz., global quotas, avoided many of the problems inherent in bilateral export restraints, not the least of which is that they confer valuable scarcity rents abroad and increase the over-all cost of protection to the economy.[31] Third, special protective measures were accompanied by a commitment for phasing out over time in line with GATT provisions of periodic monitoring and the necessity to pay compensation if they were to be continued indefinitely. Finally, protection policies allowed domestic producers considerable scope to adapt to import competition. The protection policies, along with direct assistance measures discussed in later chapters, were largely responsible in shaping the adjustment behavior of domestic producers which underlined concentration on those market segments in which they had the greatest competitive strength.

Economic Costs of Trade Barriers

Trade barriers in an industry producing a final consumption good, e.g., clothing, impose two different sorts of economic costs: (a) "welfare" losses arising from distortions in consumption when domestic prices are raised above their free trade level; and (b) "efficiency" losses through distortions in production when competing goods are produced domestically at a higher resource cost than obtaining them through imports. These losses are simply the expenditure of additional domestic resources in producing the protected output. The sum of the two losses is estimated by netting out pure transfers, such as revenues to the government and implicit subsidy to domestic producers,

from the total loss of consumer surplus caused by the trade barrier. Hence, the efficiency and welfare losses to the economy are generally smaller than costs to consumers, since a large part of the latter are reflected in higher producer incomes. When trade barriers are levied on intermediate goods as well, such as fiber and textiles, the resulting structure of protection becomes more complicated, and requires the determination of "effective" rates of protection for a more complete specification of the costs of protection.

In general, both consumer welfare losses and departures from production efficiency are higher in the case of non-tariff barriers, including VERs, than in the case of tariffs. This is because QRs, by creating an artificial scarcity of the good in question, give rise to both a price and a quantity effect causing economic costs to increase, while a tariff has no ceiling on imports and gives rise to only a price effect. Furthermore, negotiated bilateral restraints, such as those under the MFA, subject the domestic economy to an additional loss because the quota rent, i.e., the difference between domestic and export prices times the quantity imported, normally accrues to the exporters. This is equivalent to a terms-of-trade loss for the domestic economy.

The estimation of economic costs of a trade barrier from actual data is not as straightforward as it may seem. The magnitude of efficiency and welfare losses depends on the predicted behavior of prices and domestic outputs which, at best, can be estimated imprecisely. The extent to which quota rents are lost to the domestic economy depends on the way restraint agreements are administered and whether a "market" for trading export licences exists. In a deeper

sense, price and quantity effects of trade barriers significantly depend on the market structure of the industry in question. The extent to which purely domestic factors, such as costs, the elasticity of a firm's demand curve and the elasticity of substitution between competing goods, are explanatory variables for domestic price changes can be estimated only with a wide margin of error.

Economic costs of protection can also be expressed as the cost of employment created or "saved". An ostensible reason for Canadian trade barriers in the TCF sectors is to protect employment. If protected output increases employment (or prevents it from falling), the real cost of this employment can be ascertained by comparing the increase in employment with the net (of transfers) economic costs of trade barriers. The cost per job "saved" is simply the ratio of net economic costs to additional employment ascribable to protection. The employment effect of a trade barrier is generally calculated on the assumption that the ratio of labor to output (i.e., the labor coefficient) remains unchanged after the imposition of trade barriers. This is a reasonable assumption in the short run. But over the longer run, if trade barriers induce productivity changes that mean the use of less labor per unit of output, the employment effects are smaller and the per job cost correspondingly higher.

Despite considerable conceptual and measurement difficulties, the estimated costs of protection do provide useful orders of magnitude. The two comprehensive estimates of the economic costs of protection relevant to our study are those of Jenkins (1980) and Hazeldine (1981). Hazeldine's estimates are derived from a comprehensive econometric model with explicit specification of the behavior of prices, outputs, and capacities in each of the industries. Jenkins' esti-

mates, by contrast, are based on a detailed micro analysis of import prices and quota charges of selected Canadian imports from three major developing country suppliers.

Hazeldine estimates of the net economic costs of protection in textiles, clothing, and footwear industries are summarized in Table 54. The annual economic cost of protection in the clothing industry (minus SIC 2390, knitting mills, which is really part of the textile industry) are estimated to be $49 million in 1978 prices. Most of this is generated by the loss to consumers unable to purchase clothing at its opportunity cost. With the inclusion of nearly $52 million as the estimated value of quota rents appropriated by foreign exporters, the net cost of protection amounts to $101 million. The corresponding cost for the textile industry (including knitting mills) is $164.8 million. The net cost per job saved in the clothing and textile industries is estimated to be $45,000 and $14,877, respectively.[32]

Jenkins' estimates of the economic cost of protection in the clothing industry are shown in Table 55. Subtracting the accrual of revenue to federal government ($98.2 million) and the transfer to domestic producers through higher industry profits ($267.1 millions), the annual net economic cost of tariffs and quotas on clothing imports from Hong Kong, South Korea, and Taiwan amount to $107.5 million in 1979 prices. Approximately 38 per cent of this cost is attributable to quota rents transferred to foreign suppliers. The table also shows that 57 per cent of the total estimated cost to consumers through higher prices is a subsidy to clothing producers in Canada ($267.1 million). Jenkins' analysis also highlights the fact that the bilateral clothing quotas are a remarkably inefficient instrument of

protection. Compared to the net economic costs of tariffs alone ($20.9 million), the additional costs attributable to bilateral quotas is over four times larger, i.e., $86.5 million in 1979 prices. Table 56 shows protection (tariffs plus quota charges) as per cent of both FOB prices and net landed costs. On an average, protection of clothing raises net landed costs in Canada by 40 to 50 per cent.

Jenkins' estimate of per-job cost of approximately $35,000 (in terms of consumer costs, not net of transfers, Table 7, p. 39) is considerably lower than that of Hazeldine. The wide difference in the two estimates is due wholly to differences in the estimate of jobs saved as a result of trade barriers - 13,500 by Jenkins versus 2,300 by Hazeldine. This difference, in turn, is due to differences in the underlying models; Jenkins assumes an infinite elasticity of substitution between imports and domestic output, while Hazeldine assumes that imports and domestic goods are only imperfect substitutes for each other. As a result, a given change in tariff (or VERs) leads to a higher domestic production in Jenkins' model than in Hazeldine's.

The net economic cost of protection in the footwear industry (also shown in Table 54) is $16.3 million, or about 3 per cent of the industry's 1978 production. This is broken down as loss to consumers from higher prices ($100.9 million) minus revenues to government ($49.0 million) and higher profits to Canadian manufacturers ($35.6 million). Adding the economic costs of quota allocations, the total net annual cost of protection of the footwear industry amounts to $46.6 million in 1978 prices. Estimates of the cost of per job saved vary from $9,400 if quota rents are captured domestically as industry profits to $26,900 on the assumption that all quota profits are dissipated in higher domestic costs.

If the estimates of annual cost of protection were to be added up for all the years that TCF industries have been protected by trade barriers, their totals would add up to a staggering cost borne by the Canadian economy. The costs of per job saved, particularly in the clothing industry, appear to be considerably higher than normal industry wages. Despite their high implicit costs, trade barriers save remarkably few jobs. The Canadian economy could recoup some of these losses by simply paying a direct subsidy to workers in the absence of trade barriers. Finally, the estimates show that the substantial transfer of quota rents to foreign producers in the clothing industry serves as tacit compensation to foreign producers.

Trade Barriers and Adjustment

Trade barriers in non-competitive industries are primarily devices for maintaining status quo; any resulting adjustment is uncertain and dubious. The "breathing space" that they presumably provide is usually sufficient to afford a precarious existence. However, in cases where there is a clear time-table for the gradual phasing down of trade barriers, protected industries can gain some measure of viability by scaling down the size of the industry through elimination of non-competitive firms, products, and processes. There is a wide variety of ways in which firms and industries adjust to import competition, but they all involve down-sizing, either through reduced output or through a smaller variety of products, in some significant ways.[33] There is no clear evidence of down-sizing through reduced output either in textiles or in clothing - both have been able to maintain real output, at least, since 1976, although with pronounced cyclical variations due to changes in demand.[34] A major

constraint on the growth of output has been the slow growth of domestic demand and exports, which itself results from the high domestic prices induced by trade barriers.[35] Textile producers, while maintaining the value of output in real terms, have adjusted to a certain extent by concentrating production on a limited range of products, e.g., man-made fibers and industrial textiles. Only the footwear industry exhibits significant downsizing, both through reduced outputs and through reduced variety.

While down-sizing has played little or no role, continuing protection (and direct government assistance, as discussed in later chapters) has led to significant changes in capital investments, chiefly in textile mills, but also in clothing and footwear production in varying degrees. The direction of adjustment set by the firms has been to initiate a process of restructuring with emphasis on capital investment, capital-intensity of production processes, rise in labor productivity, and increased seller concentration through mergers and acquisitions. Government policies have actively assisted in this process of restructuring, both by strengthening the protective measures and by providing direct financial subsidies. It is doubtful whether such restructuring has resulted in any significant fall in the average costs of production, because of the heavy initial costs of investment. What is clear is that this sort of defensive adjustment is quite different from the sort that relies on exit of resources from the industry in question. It is not, therefore, a question of whether adjustment has been slow, but rather of whether it has been in a direction which increases the probability of TCF industries being viable without extensive protection.

One by-product of protection in the textile group that should be mentioned is the inter-industry repercussions of trade barriers. The protection of fibers and textiles materially influences the competitiveness of the clothing industry, which is determined not only by relative wages but also by costs of its major input. In addition, the limited range and quality of domestically-produced textiles forces clothing producers to either rely on a restricted assortment of domestic fabrics (which are themselves produced with yarns obtained at protected prices) or to use imported supplies at high protected prices. As a result, the implicit rate of protection of value-added in the clothing sector is less by the extent of protection of fabrics and yarns, and adversely affects its costs of production.[36] The consequent decline in the market share of clothing producers reduces their demand for domestically-produced fabrics, thereby reinforcing the lack of competitiveness and, hence, the demand for higher protection in the textile industry. But that simply enhances the collective non-competitiveness of both.

III. PROTECTION, LABOR EMPLOYMENT, AND ADJUSTMENT

The principal rationale for, and the source of import restrictions and direct subsidies in the TCF sectors, and most of its political support, has been the desire to preserve employment. The TCF sectors represent a not insignificant part of total manufacturing employment and real domestic product. As shown in Table 14, they account for roughly 11 per cent of total employment, of which close to half is in the clothing sector. It is generally believed that labor adjustment in this sector is difficult and adjustment costs are high. If protection increases employment in these industries, it is argued,

it can significantly reduce costs of adjustment by slowing down the outward flow of displaced workers in congested labor markets. However, the links between protection, the level of domestic output, and labor employment are more complex than appears at first sight. First, as was argued in the previous chapter, the impact of trade restrictions on the output of the protected industry can be blunted by trade diversion, compositional changes in imports, and by price-induced reductions in demand. Second, even if domestic production rises, labor employment does not necessarily rise. This is because increases in labor productivity as a result of shifts in factor-intensity and increases in total factor productivity as a result of autonomous technological changes may either reduce the size of the increase in employment, or may, in fact, lower the level of employment. Third, the productivity-enhancing factors may alter the composition of employment in a manner that the new jobs that are created do not go to those that are displaced as a result of import pressures.

It is, therefore, incorrect to assume that each percentage increase in domestic output as a result of import restrictions will lead to an equal increase in employment. In fact, there are systematic influences on the production process that imply an actual fall in employment. In the short run, a fuller utilization of capacity mitigates against employment of additional labor or capital. Over the longer run, the enhanced profitability of firms and the accumulated rents from protected markets may increase the stock of capital and, hence, potential employment of labor. However, in the context of slow industry growth, investment will generally go to replace existing plant capacity, rather than for expansion. The new

investment, as a rule, is in equipment embodying technological improvements that permit higher labor productivity. In addition, the "restructuring" strategies in labor-intensive sectors typically aim at reducing labor costs. This is due to the fact that, as shown in Chapter I, at least a part of the industry's rent from protection accrues to its labor force as higher wages, which increases the relative price of labor, and, hence, the incentive to substitute capital for labor. Government grants for capital investments accentuate the capital-deepening process by actually encouraging the scrapping of older labor-intensive plants. Provision of investment funds at subsidized rates, as well as loan guarantees on funds secured from private capital markets, effectively decrease the cost of capital relative to labor in the industry by socializing part of the risk of investment.

Labor Productivity and Employment

Restructuring strategies in the textile industry, and to a lesser extent in the clothing industry, have resulted in a rapid growth of labor productivity throughout the entire range of output produced. Labor productivity, as measured by value-added per production worker, in the textiles and knitting industries grew on an average by 2.4 and 2.9 per cent per year, respectively, during the 1971-1982 period.[37] Highest productivity growth rates appear to have occurred in cotton and wool cloth mills, hosiery, and carpets. In the clothing industry, productivity growth averaged only 1.3 per cent per year.[38] These gains are due almost entirely to a shift in the mix of factor inputs toward capital equipment, accentuated by faster speed of production and other technological improvements "embodied" in newer vintages of

machines. Changes in total factor productivity are negligible, signifying a relatively insignificant contribution of new technology. Textile and knitting industries had an ambitious program of capital investment in the modernization of production facilities, which grew at the rate of 7 and 3.1 per cent per year respectively, during the 1971-1985 period. Capital investment in the clothing industry averaged 7.1 per cent per year during the same period, as shown in Table 42. During the more recent years, e.g., 1980-85 capital investments in the textile industry have grown dramatically, while they have not grown at all in the clothing industry.

A comparison of the relative rates of decline of domestic output and of employment suggests that a greater part of the fall in employment was due to increases in labor productivity, rather than to the direct effect of changes in import penetration. The attribution of employment decline to its "components" shown in Tables 51 and 52 reveals that the increase in labor productivity was by far was the most important contributory cause of unemployment, followed by changes in import penetration, while the effect of export growth has been neutral.[39] Employment-dampening effects of productivity growth, even under constant import penetration, were so large as to swamp the employment-creating effects of the growth of domestic demand. Clearly, the pressure of imports provided strong incentives for textile firms to increase productivity to remain competitive. The growth of labor productivity was, in no small measure, induced by innovations in textile machinery industries themselves. But it is questionable whether capital-deepening at the observed pace and scale (capital-labor ratios rising from well below the manufacturing average in the 1960s to close to average now) could have been attained in the

absence of public intervention through trade barriers and overt subsidies.

Another factor that limits long-term employment gains through protection is the change in the composition of jobs. A majority of jobs "saved" by long-term protection do not go to those who face the greatest adjustment burden. New employment created as a result of the introduction of improved equipment goes to better-trained workers from an entirely different segment of the labor market, rather than to the manual workers they are replacing.[40] In view of the occupational shift, it is difficult to argue that workers who benefitted from productivity shifts, and hence indirectly from protection, would otherwise have incurred a disproportionate adjustment burden. Protection rarely provides a safety net for workers who have the greatest adjustment difficulties, and, to that extent, is a blunt instrument as an employment-sustaining policy. It may, under certain circumstances, slow down the rate of decline of employment, relative to what it otherwise would have been, but this impact is likely to be small, and occurs where it is least needed.

Labor Force Characteristics and Problems of Adjustment

Labor adjustment in the TCF industries is believed to be difficult, because of low average level of skills, and high regional concentration which limits alternative job opportunities. For the clothing sector, in particular, workers are aged and married females, which further reduces flexibility. There are no empirical studies that throw light on the question as to whether labor mobility in general is positively or negatively correlated with skill or regional

concentration. It could easily be argued that relatively low-wage, low-skilled labor in the majority of production activities in the TCF sector is relatively easier to shift than would be the case with high-wage, specially-trained workers in such sectors as automobile, speciality steel, and ship-building.

In order to focus on the problems of adjustment in the TCF industries, it is necessary to analyze with some precision the salient characteristics of the labor force currently employed in, or expected to move from, these industries. An obvious characteristic of the labor force in the TCF sectors in Canada is its geographic concentration in Quebec and Southern Ontario. Most primary textile production takes place in mid-sized towns, while clothing production tends to concentrate in larger metropolitan areas for the design, grading, cutting, and shipping. The actual assembly of garments takes place in satellite plants located in rural areas. As a result, close to 40 per cent of the labor force in textiles and clothing industries is located in rural regions, where the rate of turn-over is considerably smaller than in large cities.

The fact of geographical concentration, however, is not particularly unique to textile and clothing industries. Most manufacturing industries, unlike services, tend to cluster in spatial "nodes" because of agglomeration economies, as highlighted by economic base and growth pole theories. In fact, textiles and clothing industries are not as concentrated as might seem at first sight. Textile and clothing plants exist in 71 out of 75 federal constituencies in Quebec and in 86 out of 95 in Ontario. Moreover, on a national basis, textile and clothing production takes place in 230 of the 282 federal ridings that elect members of Parliament.[41] Far from being concen-

trated, the dispersion of textile and clothing over a large part of the manufacturing belt in Canada accounts for their enduring political support. It is difficult to argue that geographical concentration plays a particular role in adjustment difficulties of the TCF sector, any more than for other manufacturing industries.

Adjustment difficulties arising from low educational levels, traditional skills not readily transformable, and the high proportion of married women and aged individuals are only a problem for sewing machine operators, where no major technological change, except perhaps the speed of newer machines, has taken place. On the other hand, considerable upgrading of skills and wages has taken place in the textile labor force, which is directly attributable to rising capital-labor and capital-output ratios in the industry. The textile industry has already shed a large proportion of that part of its work force traditionally believed to have abnormal difficulties. Similar trends can be observed in the clothing industry. Few unskilled workers remain in pattern-making, grading, and cutting of fabrics for final assembly into garments.

The labor force in the footwear sector with respect to educational levels and skills is quite similar to that in the clothing sector. But unlike the textiles and, to a lesser extent, clothing, there is an extremely high turn-over of footwear workers, which is estimated to lie between 56 and 230 per cent per annum.[42] The high turn-over rate reflects partly cyclical swings of demand, and partly the attraction of better-paying employment alternatives, particularly in large metropolitan centers. In a sample study of worker characteristics in the footwear industry, dislike of job as the reason for

leaving is cited with greater frequency than any other single reason.[43]

Any adjustment effort in the TCF sector must come to grips with labor force characteristics and the associated difficulties of adjustment which, though often exaggerated, nonetheless remain non-trivial. But two observations are in order. First, the adjustment difficulties persist precisely because neither the industry nor the government has made any significant effort toward resolving legitimate adjustment difficulties. The latter has been merely used as a justification for protection, whose major motivations lie somewhere else. The industry has never been required to retrain and redeploy, at least, a part of its potentially redundant labor force, as a quid pro quo for its long enjoyment of uncommon privileges of trade barriers and direct grants. The stance of the various labor adjustment policies, as we discuss in a later chapter, has been overwhelmingly on the side of compensation, presumably on grounds of equity and political containment, and only marginally on adaptation. Such efforts as are add up to less than the sum of their parts.

Second, quite apart from the fact that protection is a blunt instrument for creating employment, some segments of the TCF sectors provide, at best, jobs that are below standard and, therefore, there are no efficiency grounds for artificially creating conditions that keep them in place. The equity case for such policies is not particularly convincing, either. The protectionist argument that rests essentially on the poor quality of labor in the TCF sector is particularly weak, and not necessarily in the long-run interest of the labor force. It is precisely because of the lower quality of employment in certain segments of TCF industries that better policies toward

adaptation of labor are required.

New and challenging employment opportunities are created only in economies that have efficient and well-trained work forces. Recent structural and technological changes throughout a wide spectrum of economic activities have rapidly transformed the qualitative demand for labor. Low-wage jobs are fast disappearing, as unskilled workers tend to be replaced by machines and robotics. Occupational adjustment of the labor force through better industry- and government-sponsored programs of adaptation and adjustment is more crucial than ill-designed attempts to preserve sub-standard jobs. The only adjustment policy that has any long-run future (and is not a non-starter) is the one that confronts the employment rigidities in the TCF sector and devises ways for dealing with it. None of the current adjustment programs has faced the basic issue that concerns large segments of the workforce in the TCF sector, viz., structural unemployment whose causes lie not so much in changes in the trading pattern, but in the redundancy of previous skills and training.

IV. GOVERNMENT INTERVENTION IN THE ADJUSTMENT PROCESS

The important role of the Canadian government in assisting the TCF industries consists of the provision of trade barriers, as well as associated programs of direct subsidies. Although bilateral restraints on textiles and clothing imports were utilized throughout the 1960s, it was not until May 1970 that the first coherent "textile policy" was formulated and implemented by the Textile and Clothing Board (TCB). The implementation of the Policy envisaged elements of commercial policy (tariffs, VERs, and anti-dumping and countervail

legislation), financial support measures for approved restructuring plans for the industry, and financial assistance to displaced workers. The task of adjustment, perceived by the TCB and enunciated in the "textile policy", was to "provide conditions within which the textiles and clothing industries can plan, invest, and develop with a greater degree of confidence toward viable lines of production on increasingly competitive basis internationally".[44] This policy was the first step toward institutionalizing "special" protection and related assistance measures for the textile and clothing industries in Canada. This perception of the problem of adjustment, which has remained essentially unaltered since then, culminated in three inter-related programs of action.[45]

First, the "textile policy" provided legitimacy and coherence to the hitherto haphazard process of negotiating progressively restrictive bilateral restraint agreements within the protocols of the MFA. In invoking special measures of protection, the TCB relied exclusively on "sudden surges of imports" and declining import prices from the "low cost" countries in defining "injury" to domestic industry.[46] In recommending protection, the TCB seldom examined the question of "viability" of domestic production in lines where imports were becoming competitive, in order to assess the industry's ability to adjust by means of clear measurable criteria, eventually without trade restrictions. In other words, protection could be stretched to suit the "needs" of all production activities subject to injury, regardless of their potential survivability.

Second, the aims of the "textile policy" went beyond the provision of temporary protection, and involved assistance to firms for the purposes of "restructuring" through productivity improvements and

other internal adjustments. This assistance, initially administered by the General Adjustment Assistance Program (GAAP), provided direct government loans, government insurance of loans from the private sector, and cash grants to cover a proportion of the cost of consulting services to develop restructuring proposals. These measures were supplemented by additional funding from the Program to Enhance Productivity (PEP), and the Department of Regional Economic Expansion (DREE). The focus of the latter programs was also on improvements in labor productivity, modernization and expansion of capital equipment. During the decade of the 1970s, close to $65 million were disbursed as grants of which the major beneficiary was the textile industry.

Third, the "textile policy" also initiated a program of assistance to labor, viz., the Adjustment Assistance Program (AAB), whose sole purpose was to provide compensation to workers permanently laid off as a result of trade dislocation. The adjustment assistance was in the form of pre-retirement benefits, last-resort income maintenance, and supplementary unemployment benefits in excess of normal UIC payments. Apart from the compensatory nature of benefits, the AAB had no visible mechanism for encouraging worker mobility and adaptation.

A major new step in the federal government's involvement in the TCF industries came with the establishment of the Canadian Industrial Renewal Board (CIRB), as a result of the "new" textile and clothing policy announced in June 1981. All adjustment assistance activities for the TCF sector, undertaken by a variety of government agencies, were henceforth to be coordinated by the CIRB, while the TCB continued to retain the task of determining import injury and of recommendations

with respect to trade barriers. The establishment of the CIRB underscored the need for (a) coordination of adjustment activities scattered over a wide spectrum of programs; (b) sharper focus on the "special" problems of the TCF sector; and (c) additional funding. The CIRB was established in 1981 with an initial funding of $350 million for a 5-year period.[47]

The CIRB's program of assistance consisted of three major components: (1) Sector Firms Program (SFP) for the "revitalization" of the TCF sector through "restructuring, modernization, and consolidation"; (2) the strengthening and diversification of the economic base of the regions dependent on TCF production, by means of the Business and Industrial Development Program (BIDP); and (3) the adjustment of TCF labor force through the Labor Adjustment Program (LAP), which was to be administered by the Canada Employment and Immigration Commission (CEIC).

The following paragraphs provide a brief discussion of the three components of the CIRB's program, before returning to an evaluation of their impact on the adjustment process in the later part of this section.

1. Sector Firm Program

The major part of the CIRB's total funding was earmarked for assisting the firms in the TCF sector through capital grants and loans for modernization of investment.[48] The SFP also provided loan insurance for costs associated with mergers and acquisition. The assistance policies of the CIRB, as reflected in the SFP, had a number of features which represented a significant departure from the past. First, the focus of attention, particularly in the textile sector,

tended to shift from the "need" for assistance to potential for "viability" and competitiveness of individual firms. This meant effectively that the Program focused its attention on "stronger" firms, selected on the basis of proven performance and financial resources. By definition, it excluded from the purview of the Program newer entrants into the industry, regardless of need or potential. This focus was defended on the ground that government support of stronger firms could strengthen the international competitiveness of the industry as a whole. Second, the government support of the firms was predicated on their commitment to restructuring, as reflected in the ability to provide "matching" internal funds. Operationally, this meant that the assisted firms had to commit at least 75 per cent of their after-tax profits to the activity in question. This provision was designed to ensure that the assistance provided by the CIRB was additional to that internally mobilized by the firms themselves.

Of the total assistance disbursed under the SFP, 92 per cent was given for capital expenditures, 5 per cent for financing the consulting services, and the rest for consolidation and merger of firms. Within this allocation, the primary emphasis was clearly on the textile industry. Primary textiles received 54 per cent of the total funding, followed by clothing (36 per cent), and footwear (9 per cent).[49] In all sectors, the bias toward investment in machinery and equipment is reflected in the fact that of the total capital expenditures, 89 per cent was spent for the purchase of new equipment, 6 per cent for buildings, 3.5 per cent for consulting services, and 3.5 per cent for the support of R&D activities. The reach of the SFP can be judged by considering the fact that the Program was able to provide financial assistance to firms whose combined sales accounted for 65

per cent of total sales in the textiles industry. The corresponding figure for assisted firms in the clothing and footwear sectors was 40 per cent and 50 per cent, respectively.

2. Business and Industrial Development Program

The purpose of the BIDP was envisaged as the strengthening and diversification of the economic base of the communities where TCF production activity represented at least 20 per cent of the area's manufacturing activity and 5 per cent of its employment. In 1982, seven special areas were designated as highly vulnerable to the erosion of production activity and were eligible for priority treatment. The program included in its assistance firms and enterprises engaged in manufacturing or other business activities that are either already located in, or are willing to move to, the special areas. During its tenure, the CIRB approved BIDP assistance to 376 projects, of which 252 were capital investment projects, expected to generate 5,400 new jobs. Most of the assistance went to small and medium businesses already established in the special areas, while only a handful were attracted from outside the area.

3. Labor Adjustment Program

The LAP, administered by the CEIC as part of its general labor adjustment programs, did extend the scope of the earlier labor-related programs under the TCB in a number of respects.[50] These were the introduction of "portable" wage subsidies, enriched mobility assistance up to three times the regular CEIC rate, and training allowances. Nonetheless, only 7 per cent of total CIRB expenditures were designated for labor adjustment purposes. The largest part of this expen-

diture ($51.3 million out of a total of $51.6 million) supported the regular CEIC programming, in particular the early retirement benefits under the Labor Adjustment Benefits Program (LABP) instituted in 1982. The "special adjustment measures" available under the CIRB involving worker training and mobility allowances benefited relatively few workers. The total cost of these measures is estimated to be just under $300,000. The LAB programs are discussed later in this chapter.

Assessment of the CIRB

The CIRB represented a major policy initiative in the sphere of government intervention in the TCF sectors. Its one notable accomplishment was to bring diverse adjustment programs under one umbrella and, thus, to provide some measure of coordination. But, by the same token, it also became the focal point of interest group lobbying and vulnerable to industry pressures. Its bias toward capital investment is reflected most clearly in its mandate from the Textile Policy of 1981 that the "rejuvenation" and "restructuring" through capital support is the most appropriate adjustment strategy available. In fact, neither the TCB nor the CIRB ever provided a clear and measurable definition of "rejuvenation" (and "restructuring") against which the future evolution of the industry could be judged. In practice, restructuring simply meant a drive to achieve high growth of labor productivity, without regard to its predicted effects on the average costs of production. The artificial cheapening of the relative price of capital through public subsidization had the effect of dramatically shifting the capital-labor input combination, particularly in the textile and clothing industries, without any significant reduction in the average costs of production.[51] The emphasis on capital deepening

would have been defensible if it were accompanied by "down-sizing" of the industry. The contrived increase in capital-labor ratios in the industry, over and above those dictated by normal market considerations, had the effect of increasing the labor market congestion, which the CIRB's own meager allocation toward labor adjustment was unable to cope with. To that extent, it may have hastened the rate of separation of the workers, relative to what it would have been as a result of rising import penetration alone.

The CIRB's emphasis on "stronger" firms, and possibly a bias toward larger size, has its partisans and detractors. There are arguments for and against such an emphasis, and a subsequent appraisal by Price Waterhouse, Inc., was unable to provide conclusive evidence for or against.[52] This merely underscores the difficulty of a public agency in picking winners and losers outside of the normal market criteria. It is clear, however, that whatever bias there was toward stronger firms reflected in its financial disbursement may have contributed to the rise in the industry concentration and barriers to entry, in addition to those arising from economies of scale and capital-intensity.

The CIRB program undoubtedly succeeded in hastening the speed and timing of capital investment in the industry, mostly in the renewal of existing capacity. The "incrementality" of CIRB-sponsored capital investment appears, however, rather limited. An analysis of the Price Waterhouse sample of firms suggests that over 62 per cent of investment by recipient firms would have been eventually undertaken without the CIRB assistance. Similarly, close to a third of the non-recipient firms claimed to have realized their investment plans without the CIRB assistance.[53] Nonetheless, the CIRB program had a modest incremental

multiplier on capital expenditures in both textile and clothing industries. Its major impact was not so much through funding, but more crucially through fostering improved planning environment within the firms.

The labor adjustment program is discussed in the following section. The BIDP, despite its relatively small scale, must be judged as a partial success in its own right. Participation level under the Program was consistently high, and led to the establishment of permanent production activities, rather than merely "make-work" gimmicks. Nonetheless, the BIDP recipients did not in general employ displaced TCF workers, with the exception of one of the seven designated areas where 29 per cent of the new jobs created went to former TCF employees. This underscores not only the inherent unemployablity of the TCF workers whose skills are not readily transferable, but also the fact that the BIDP did not specifically address this problem. Further, the additionality of BIDP grants in creating new employment must be questioned. It is not clear as to whether there was any significant difference in job creation rates of the BIDP recipients and non-recipients. Nevertheless, the rate of job creation by the non-recipients may itself have been influenced by that of the recipient firms as a result of the income multiplier effect.

Government Programs for Labor Adjustment

An early attempt to deal with the problem of worker adjustment to trade-related changes in the TCF sectors began with the Adjustment Assistance Program (AAB) in 1972, as a direct result of the implementation of the "textile policy" of 1970. Its objective was to assist older (54-65 age) workers with industry-specific skills laid off due

to non-cyclical causes, who had no immediate prospect of employment with or without further training or relocation assistance. The assistance took the form exclusively of compensatory payments from the time the normal UIC payments stopped to when the retirement benefits commenced.

In 1981-82, the then existing AAB designations were subsumed under the Labor Adjustment Benefits (LAB) Act, which sought to bring the adjustment assistance criteria for the TCF workers in line with those of the other programs, and in the process made them more flexible. In particular, benefit eligibility was extended to relatively younger workers.[54] Despite increased flexibility, however, the LAB programs remained primarily last-resort income maintenance for workers permanently laid off, without re-employment options. To the extent that it provided security of income maintenance after severance, it probably diminished resistance to being phased out. In general, the TCF firms do not offer early retirement benefits (as do firms in many other industries), and the ready availability of the LAB program may, in fact, have been an inducement not to offer such benefits. What seems also plausible is that the LAB's existence may have prompted the textile firms to lay off a larger number of older workers than they otherwise would have. The tendency to lay off older workers as part of the adjustment strategy is believed to have been aggravated by the CIRB.[55]

A detailed examination of the LAB involvement in the TCF layoff profile would require extensive data and would be time-consuming. However, a few pertinent facts may be briefly noted here. Close to 80 per cent of total layoffs certified by LARB (roughly 50,000 workers)

during the 1980-85 period were in the TCF (inclusive of tanning) industries.[56] The upsurge in the LAB certification activity in 1982-83 coincided with the restructuring programs undertaken by the CIRB. The proportion of CIRB-related employees among the total laid-off workers eligible for LAB assistance rose from 14 per cent in 1982-83 to 42 per cent in 1984-85. According to LARB (Labor Adjustment Review Board) certifications issued between 1980 and 1984, the layoffs from textile and clothing industries accounted for 35 per cent of their work forces, while the corresponding figure for the footwear industry is 19 per cent. A large proportion of these layoffs involved older (54-64 year of age) workers. Another noteworthy feature is that the bias toward the layoff of older workers is more pronounced in larger establishments of over 500 employees. The last resort income-maintenance character of LAB programs was sought to be preserved through periodic reviews of each claimant's reemployment prospects. The available data confirm the absence of any significant re-entry of LAB recipients into active labor market. The LAB program did not attempt to influence the direction of adjustment, except as indicated below; it merely served the need for compensation after it had occurred.

Although the LAB program objectives did not include any direct involvement in the employment policy of individual firms, the particular use of its certification program meant effectively that the private cost of changing the age and skill composition of labor force in individual firms and enterprises was shifted to the government. Given its overall mandate, the LAB program had a built-in flexibility in the sense that the characteristics (and not merely the number) of potential claimants were greatly influenced by the layoff behavior of

designated firms and enterprises. By the same token, the layoff behavior of firms themselves could be, at least partially, attributed to the existence of the LAB. The layoff behavior can be reconstructed from the limited, but often quite detailed, claimant profiles in the LARB certification records. In general, layoffs from textiles and clothing establishments represented a larger proportion of older (age 54-64) workers, with pronounced industry-specific skills, and lower levels of schooling, relative to ILAP (Industrial and Labor Adjustment Program) aimed at specific industries in designated communities. Sixty seven per cent of all workers laid off during the 1981-84 period emanated from textiles and clothing industries. Moreover, there was a rising trend in the proportion of older workers laid off from textiles and clothing, which rose from 7 per cent in 1980-81 to 26 per cent in 1984-85. The rising trend is particularly pronounced since 1983-84, a period which coincides with the preponderance of CIRB-assisted firms in LAB designations.

Worker Experience in Adjustment

Available descriptions of "downside" labor adjustment processes in the textile and clothing industry provide some insights.[57] During the period 1974-76, available data on worker lay-offs suggest that younger and relatively junior employees were more likely to be laid off than senior, experienced workers. Of a sample of 753 laid-off workers in the clothing industry during the two-year period only 78 (roughly 10 per cent) were 55 years of age and older. The proportion was even smaller in the case of the textile industry where only 250 out of the sample population of 2664 were 55 years and older. As pointed out in the previous section, the tendency to lay-off older

workers was, however, accentuated by the introduction of the LAB which served as a surrogate for the firms' early retirement programs. The percentage of older workers in total lay-offs in the textile and clothing industry rose from 7 per cent in 1980-81 to 26 per cent in 1984-85, while in the footwear sector, it remained stable around 11 per cent.[58] Permanently laid-off workers in the footwear sector were 10 years younger than the average worker in the industry. It is common in the footwear industry for the majority of workers to experience frequent spells of unemployment alternating with re-employment in the industry. After a temporary lay-off, few workers seek re-employment outside of the industry.

Close to a quarter of the laid-off workers in clothing and 17 per cent in textiles left the labor force altogether. The majority of these were either females or 55 years of age and older. The proportion of laid-off workers during the 1974-76 period, who had found re-employment by mid-1977, was 62 per cent in clothing and 67 per cent in textiles. The majority of those that remained unemployed were 55 years and older individuals and females. Of the older, undiscouraged workers that remained in the labor force, 56 per cent in clothing and 42 per cent in textiles had found another job by the time the Survey was undertaken in mid-1977.

The data on duration of unemployment of those that had found alternative employment outside the textile and clothing sector is summarized below:[59]

Sector		Duration of Unemployment
Clothing	mean	22 weeks
	median	7 weeks
Textiles	mean	21 weeks
	median	8 weeks
Textile and Clothing[60]	mean	12.5 months
	median	7.3 months
average worker	mean	5.4 months
older worker	mean	12-13 months

The Tracking Study underlines the fact that unemployment duration is shorter for workers with higher wage levels. In both textiles and clothing industries, there is a five-week difference in average unemployment duration between higher- and lower-paid workers. Of the workers displaced and subsequently re-employed, 90 per cent found work outside of the textile sector, compared to 63 per cent in the clothing sample. The average unemployment spell was shorter for workers who found re-employment in the same sector, rather than outside: 18 weeks as against 25 in the clothing industry, and 17 weeks versus 21 in the case of textile workers. The majority of workers who found re-employment after a period of lay-off recorded a wage increase. Those who achieved a higher wage rate in reemployment also reported shorter durations of unemployment of only 2-3 weeks.

Income losses, estimated as the difference between after-tax income the worker would have received if employed and after-tax income, including the UIC benefits, after lay-off, over the three-year period after the textile plant close-out, are estimated to be $2,100 in 1977 prices.[61] A simulation analysis of delaying the lay-off for 5, 10, and 20 years estimated the maximum economic gain per worker in textiles to be $15,400, $24,970, and $40,630, respectively.

These studies confirm that both the private and social costs of

the unemployment/reemployment sequence are likely to vary with socio-economic characteristics of the work force. Among these, age, sex, education, and marital status appear to be the important ones, both with respect to the duration of initial unemployment and the speed of subsequent re-remployment. What is noteworthy, however, is that, after allowing for differences in socio-economic characteristics and the effect they have on the duration of unemployment, there were no systematic or significant differences according to the industry of layoff.[62] If the results of this study are any guide, the unemployment difficulties are not unique to TCF sectors and occur in other sectors that exhibit similar labor force characteristics.

Government Assistance Measures in the Footwear Industry

The Footwear and Tanning Industries Adjustment Program (FTIAP) is the centerpiece of the government's assistance to the footwear industry. Begun in 1974, under the administration of the GAAP Board, the objective of the program was to provide financial assistance to firms for productivity improvements and for strengthening the management structure. A total of $17.9 million were spent during the life of the Program (1974-81), of which the bulk ($15 million) was disbursed as loans for capital renovation. The FTIAP also offered management development and training programs, particularly for small firms, which are common in the footwear industry. In addition, the Enterprise Development Program (EDP) also provided grants and loan assistance, particularly for high-risk projects with emphasis on product and process innovation.

Assistance under the FTIAP and the EDP was available to firms in

clear financial distress, without discrimination with respect to size. Of the 12 firms that were given loans during the 1974-80 period, 4 had failed, representing roughly 45 per cent of total loan disbursements. The firms that had opted for a professional audit had a better record of survival; only 7 of the 46 firms that underwent operational audit had failed. While the Program contributed significantly to enhanced labor and management productivity, there was little visible change in the number of firms, their scale of production, or average employment. Even though the Program had anticipated a 10-20 per cent reduction in the number of firms as a result of restructuring, the absence of barriers to entry and of economies of scale meant that the floating population of firms at the end of 1980 was virtually the same as in 1974.[63]

The FTIAP was revised in 1981 and was placed under the overall purview of the CIRB, with an initial capital of $17 million to be administered along with the CIRB's program for textile and clothing industries. A total of $22.8 million was spent during the life of the CIRB (1981-86), with 93 per cent being spent for modernization of plant and other production facilities. It is estimated that CIRB's initial grants and loans generated a further matching investment of $50 million from within the industry. The firms that received assistance by the end of March 1986 accounted for 60 per cent of the total industry sales. The industry did not make any use of the CIRB's program of assistance for mergers and acquisitions, presumably because large-scale operations through consolidation were not considered a viable adjustment option.

A comparison of the relative performance of the FTIAP and the CIRB's component for the footwear industry reveals some differences.

First, the proportion of total CIRB funds earmarked for footwear industry were insignificant in comparison with those for the textile industry. Second, the CIRB's sector assistance program supported firms that were already doing well, a fact which had undermined to a large extent the additionality of its own assistance in total industry investments. By contrast, the willingness and commitment to restructure were the major criteria for assistance under the FTIAP, and the "strength" of the firm played no decisive role. Finally, the CIRB placed almost exclusive emphasis on assistance for costly new equipment, while the FTIAP had a more balanced strategy that included management training and education of junior executives.

The Extent of Government Aid to TCF Industries

The extent of government's financial assistance to the TCF sectors is shown in Tables 47 and 48 , and only the briefest details can be given here. During the decade of 1974/75-1984/85, the federal government spent close to $500 million at current prices for assisting the TCF sector.[64] The largest part of these expenditures were undertaken during the 1981-85 period, which coincided with the life of the CIRB. Out of this total, roughly 60 per cent ($300 million) represented grants for capital investments to firms, and only 25 per cent for labor adjustment. The textile industry accounts for the largest part of capital grants during the 1981-85 period (57 per cent), followed by the clothing industry (34 per cent), and footwear and tanning industries (9 per cent). However, looking at it from a different perspective, government grants amounted to 54 per cent of total investment in the clothing industry during the 1981-85 period,

26 per cent in the footwear industry, and only 12 per cent in the textile industry. Capital grants as a proportion of sector value-added by capital again puts the textile industry in the leading position (2.3), followed by footwear industry (2.2), and clothing (1.6). It is clear that while the textile industry accounted for the largest allocation of public funds, it also brought forth the largest part of total investment ($1.2 billion) from its internal resources.

Assistance to labor clearly played a secondary role in the government's financial assistance. As a proportion of value-added contributed by labor at 1.4, it was well below the corresponding proportion of 2.1 for capital assistance to firms. Nonetheless, the average financial assistance per displaced worker in the TCF sector during the 1981-85 period amounts to $13,000 in current prices.[65]

V. GOVERNMENT INTERVENTION, INDUSTRY STRUCTURE, AND THE ADJUSTMENT PROCESS

Adjustment to changes in market conditions, including those emanating from foreign trade, is undertaken primarily by firms and workers. Government intervention in the form of trade barriers and direct subsidies can either facilitate or thwart these adjustment efforts. The nature of adjustment by the firms is, in turn, influenced by structural characteristics of the industry in question. It is customary to lump TCF industries together in analyzing their adjustment behavior because of large similarities in their characteristics. In comparison with other manufacturing industries, the TCF sector is relatively labor-intensive, producing fairly uniform and homogeneous goods, in a market structure where competition among producers is strictly on the basis of costs and prices. Despite these

similarities, however, there are notable differences in their economic and market structure which have profoundly influenced their adjustment behavior and ultimate outcome in different ways.

While the TCF sector as a whole is characterized by a cost structure dominated by wage costs, the relative capital-intensity and the minimum efficient scale is relatively higher in the production of primary textiles.[66] The high sunk costs and the associated economies of scale imply significant barriers to entry and exit, as well as the likelihood of above-normal profits. The clothing and footwear industries, by contrast, are inherently labor-intensive, and are likely to remain so at all relevant factor prices. Their market structure closely corresponds to fully competitive markets with price competition, weak barriers to entry and exit, fragmentation into a large number of relatively small firms, high rates of firm turn-over, limited product differentiability, and, in general, the absence of oligopolistic behavior.[67] The clothing industry has a virtual sub-industry within - comprising of contractor shops, subsidiary firms and jobbers that rely on secondary labor markets.

These characteristics, more than the extent of government intervention, have influenced the direction of adjustment in each of the industries. The rationale for trade barriers in the TCF sector has been that they would provide the necessary "breathing space" to firms in pursuing restructuring and adaptation to enhanced foreign competition. It is clear, however, that the particular type of adaptation envisaged in the TCF sectors was biased from the beginning toward internal strategies for survival, rather than for exit. Import controls were never designed to facilitate a scaling down of the industry, consistent with a relatively protection-free trading

environment. In fact, import controls create rents for domestic producers, which in a competitive market are dissipated either through expansion of output by existing firms, or by the entry of new firms. Individual firms can succeed by sharply improving their competitiveness through cost reductions, selective specialization, product development, and process innovation. A high degree of industry concentration may enable firms to prevent entry, and keep their own profitability high. But the less profitable firms, with industry-specific assets and the lack of transferable physical and financial resources, may also be able to survive at the margin. It is clear that protective measures alter the balance between options for adjustment for firms with varying degrees of profitability.

Restructuring Strategies in the Textile Sector

The strategies followed, and the degree of success, have predictably differed between the textiles, clothing, and the footwear industries. The basic strategy adopted by the textile industry is an ambitious program of capital investment for renewal of capacity, which in some years has been higher than the average for manufacturing sector as a whole. The emphasis has been on raising capital-intensity through extensive automation of production processes, and a pronounced reduction in labor costs. These strategies have drawn on a wave of innovations in the textile machines industry, which has significantly
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altered the production structure of knitting and weaving operations. Technological innovations have been embodied into all newer equipment, with the use of electronic and computer technology in designing products and monitoring production. Computerization is also evident in such support activities as inventory control, delivery systems, and

general accounting. It is estimated that technological changes have affected 65 per cent of production processes in the textile industry.[69] The shift in product composition toward high value-added industrial products in the textile industry, with possibilities of non-price competition, also appears to have taken place. Many of these developments would probably have taken place sooner or later, but their speed has been quickened by abnormally high trade barriers and overt government subsidies, as shown elsewhere in this paper.

These developments have had a marked influence on the structure of the industry. The exit of smaller, less efficient producers has meant a rise in industry concentration. Cotton yarns and cloth mills, fiber and filaments, thread mills, and automobile fabric production are highly concentrated, with the 4-firm leading enterprise concentration ratios based on value of shipments ranging between 84 and 93 per cent. The concentration ratios markedly increased during the 1970-80 period in woollen yarn and cloth mills, fiber processing mills, carpet manufacturers, and hosiery.[70]

The abandonment of unprofitable products has led to an improvement in the competitive position of the industry vis-a-vis imports. Nonetheless, the textile industry in Quebec remains particularly entrenched in basically undifferentiated segments of the market, producing primary textiles for the apparel industry. In these segments of the industry, efforts to improve productivity have not been particularly successful and capacity remains chronically underutilized. The restructuring attempts have over-estimated the extent to which production costs of standardized products can be reduced through rising capital-labor ratios.

Existing technology does not seem to permit sufficient reductions in labor inputs to eliminate wide cost differentials related to lower wages in non-OECD countries. The prime reason is the competitive nature of the textiles machines industry which sells essentially identical equipment in a worldwide market. Thus, identical technology for high-speed and high-volume production is freely available to all countries, including those that continue to retain sizable advantage of cheaper labor. The speed of international diffusion of textile technology has been unusually rapid. Producers in low-cost countries, e.g., Taiwan and South Korea, despite sizable differences in factor endowments, employ essentially the same technology and same factor proportions in the production of standard products, with the result that the international competitiveness of the Canadian industry has not changed materially in segments which produce standard fabrics for use in the apparel industry.

The textile industry's strategy based on investments in capital-intensive equipment has had, therefore, a mixed record of success. Long-run competitiveness has been secured in the differentiated, high-value segments, producing chiefly industrial textiles and home furnishings. These segments are relatively more capital-intensive than the production of standard textiles, involve high labor productivity, and also high skill-intensity of occupations. It seems clear that this segment offers the greatest potential for specialization and growth of the Canadian textile industry without high levels of protection. It is estimated that the high-value, up- market segments account for close to a third of total demand and offer the greatest survival potential for the domestic industry.

Another strategy, with great unutilized potential, is foreign

investment and internationalization of production. The expansion of international activity is usually pursued through foreign acquisitions, joint ventures, and cooperative marketing arrangements. In particular, the possibility of shifting labor-intensive operations to low-wage locations has created opportunities for a variety of world-wide sourcing patterns, and should be part of a strategy to maintain overall profitability. International operations of large Canadian textile producers comprise an increasing geographical and product base. Initially, the difficulties in the Canadian market led to investments and acquisitions in the United States, followed by investments in Europe and in Hong Kong. In 1985-86, Domtex owned 22 plants in Canada, 7 in the United States, 5 in Europe, and one in Hong Kong. Of its total sales in 1985-86, 62 per cent were in Canada, followed by 27 per cent in the United States, and 11 per cent in Europe and Asia. A little over 30 per cent of its labor force is employed in overseas plants. Investment in overseas facilities at $24.6 million in 1985-86 was higher than in Canada ($21 million). In that year, overseas activities achieved record sales and revenues, while north-American facilities were responsible for a net loss of revenues.[71]

Adjustment in the Clothing Industry

The adjustment strategies in the clothing industry, by contrast, have had little visible success, due largely to the industry's fragmented structure. Not surprisingly, the strategy based exclusively on increasing labor productivity has also dominated in the clothing industry. But the opportunities for reducing costs of production through increases in capital-intensity are vastly more limited

in clothing production than in textiles. The major technological innovations embodied in better machines have centered on the pre-sewing room operations, viz., design, cutting, and grading, where the use of sophisticated capital equipment and computer-assisted operations is now fairly common. Advances in knitting and the introduction of non-stitching techniques have permitted a notable increase in the capital-intensity of certain types of garments, such as synthetic knitted apparel and hosiery. However, apart from of the automated sewing machines in the production of jeans, the large majority of sewing room operations remain highly labor-intensive and outside the scope of further automation and economies of scale.

Despite inherent technological difficulties, the Canadian industry seems to have relied primarily on cost-cutting through substitution of capital for labor. As a result, and not unlike textile producers in the standardized segment, they remain single-minded in attempting to seek cost competitiveness through capital acquisition in a highly labor-intensive industry, where wages dominate the cost of production. This particular channel of adjustment, therefore, offers little further potential for survival. The outlook is unlikely to change in the near future, unless technological innovations radically alter the production process in the sewing room and assembly operations. To the extent that adjustment has occured through this route, it has merely resulted in a large scale displacement of labor, as discussed earlier in this paper.

Difficulties of adjustment in the clothing sector are compounded by the fact that the scope for product differentiation, though not entirely absent, is limited. Yet, the clothing industry contains a

wide variety of market segments, with pronounced non-homogeniety of products, and wide variations in demand elasticity. While price competition does not altogether cease to be critical, its degree varies from segment to segment. One clearly distinct segment is the fashion-oriented and design-sensitive component of the market, whose size is variously estimated to be between 25 to 33 per cent. Design, quality, non-imitation, and constant flux are chief attributes of this market segment. Another is the athletic wear segment which is rapidly growing, where new product development and image (appropriately blended with youthfulness, beauty, and sex) is the major competitive device. Still another is the home furnishing market, where product differentiation is a viable market strategy.

The distinguishing feature of the fashion segment is that capital-intensity and scale economies offer no decided advantage. Flexibility in smaller establishments and rapid adaptation to vagaries of fashion are decisive factors. However, established traditions of creating new designs and of translating design innovations into commercial ventures are necessary for adopting this strategy. It is arguable whether the Canadian clothing industry can muster the minimum critical effort needed to make this strategy viable, but it remains a credible adjustment option. A major factor that has mitigated against the successful adaptation of this strategy is paradoxically the trade barriers themselves. The actual operation of the MFA has meant a continual upgrading of exports into higher-priced, higher-quality, and higher value-added products. This is essentially because the tariff-equivalent of MFA-sponsored quotas is lower for higher-priced products than for lower-priced ones, and provides the exporters an incentive to move up-market. As a result, the Canadian industry finds itself

progressively locked up in the lower end of the market, producing low-priced clothing at high cost behind protective barriers. This "low quality" trap is unlikely to change without a conversion of VERs into tariffs.

Another potential strategy is to reduce costs of production through foreign processing ("sourcing") by means of joint production with foreign producers. These involvements can range from direct foreign investments in production and assembly operations to parcelling of production of either certain products or a part of the production process of one product to foreign producers. This adjustment option has been successfully used by clothing industries in Germany, Japan, and Netherlands, and increasingly in the United States under item 807 of the U.S. Tariff Schedule. The internationalization of production imbedded in these approaches leads, not only to an efficient use of production resources, but also to a cooperative alliance against proliferating trade barriers.

The involvement of the Canadian clothing industry in foreign sourcing is almost non-existent. The option of direct foreign investment is clearly limited by the lack of financial resources at the disposal of the Canadian clothing industry. Offshore sourcing, on the other hand, has been hampered by the lack of flexibility in the tariff system. The more recent enactment of duty remission schemes is a beginning in that direction, but is limited to men's shirts.[72] Moreover, it is unlikely to provide much adjustment, because it is contingent on maintaining an equal and <u>similar</u> domestic production in Canada. It is possible to devise better duty remission schemes e.g., duty remission on fabrics imported by clothing manufactuirers, which

will allow for greater flexibility and rationalization of production, and to improve long-run competitiveness. It is possible that more comprehensive arrangements, e.g., those involving export of textiles linked to imports of clothing, will be opposed by particular labor groups.

Adjustment in the Footwear Industry

The Canadian footwear industry is quite similar to the clothing industry in its structure: high labor intensity, ease of entry, small size (20 to 200 workers) of enterprises, short production cycles, and chronic over-capacity. The 4-firm leading enterprise concentration ratio based on value of shipments has in fact declined slightly from 0.25 in 1970 to 0.21 in 1982, as shown in Table 36. The concept of capital investment in the industry is itself ambiguous in that the industry makes extensive use of leased equipment. It is estimated that 60 to 70 per cent of the dollar value of equipment in the footwear industry is leased, and the proportion has remained stable over the years.[73] The conventional practice of leasing equipment has decided advantages in terms of flexibility during cyclical swings of demand, avoidance of high sunk costs and the fact that even small producers can take advantage of better equipment. The uniformly small size of establishment allows the firms in the industry to respond quickly to changes in fashion and market conditions. It also allows easier adjustment through down-sizing of the industry, since individual firms own relatively smaller stock of industry-specific equipment.

The industry does not appear to have followed any single dominant strategy. The overall restructuring has been both pragmatic and

comprehensive, involving all phases of production and management. The major renewal of capital stock took place between 1974-77, when the industry unprotected by quotas engaged in a rapid process of modernization. It is nearly impossible to arrive at consistent measures of the sector's capital intensity, due to the widespread use of leased equipment. Capital stock measured in constant dollars appears to have declined in the period after 1977, implying a decline in the industry's capital intensity, with insignificant change in labor employment. Yet, value-added per employee shows a gain in all subsequent years, as shown in Table 41. If labor productivity is measured in volume (pairage) terms, the index of output per employee declined from 23.3 in 1974 to 21.2 in 1983. If, however, productivity is measured in constant dollars, the GDP per employee rose by 17 per cent during the same period.[74] Evidently, the discrepancy in the two measures is due to a qualitative shift in products.

The evolution of new technology, exclusively the result of independent R&D activities of international equipment manufacturers, is constrained by the preponderance of traditionally labor-intensive tasks that cannot be fully mechanized, and considerably reduce the scope of economies of scale. The introduction of "injection moulding" is virtually the only new process which is highly capital-intensive and requires large production runs to realize the economies of scale. Without the development of sizable export markets, this technology does not appear feasible for Canadian producers.

The search for identifiable market niches in which to develop specialization has proved to be difficult for the Canadian footwear producers. The production of women's shoes, centered mostly in Quebec, has been devastated by particularly fierce competition from

established fashion producers in Italy. A majority of firms that have vacated the industry since 1979 were producers of women's footwear. It is clear that the manufacture of footwear that requires mature craftsmanship with high labor-intensity is not a realistic option for the Canadian industry. A majority of Canadian producers concentrate on high-value leather footwear for men and low-price basic footwear for children. This market, however, has witnessed only modest growth during the 1980-84 period.[75] One reason is the high cross-elasticity, and the consequent substitution, with casual-athletic type of footwear made with canvas and other materials. Large-scale substitution from leather footwear to canvas took place between 1977-80, due both to a shift in consumer taste toward casual footwear and a substantial increase in lower-priced canvas footwear imports which were initially excluded from the 1977 global QRs. This "loophole" was closed by imposing QRs on canvas shoes and sandals in 1981, but the demand for leather footwear has not recovered from its 1982 level.

By 1985, the industry has shown good overall performance and flexibility in whatever it produces, and appears to be fairly competitive in the production of basic, good quality, non-fashion footwear. Lack of fashion changes allows large production runs. The withdrawal of quotas on men's footwear in 1986 did not lead to any major increase in the flow of imports. The adaptation to changed market conditions is reflected in a decrease in the number of establishments employing more than 200 workers. The number of establishments declined rapidly throughout the 1970s, but seems to have stabilized in more recent years. One reason for the decline in the size of establishments is that footwear manufacturers rely increasingly on purchasing components

they used to produce themselves. This has also allowed the component manufacturers to utilize the economies of scale resulting from specialized production. It is noteworthy that the change in output patterns and the change in the structure of the industry which have occured since 1980 have taken place without any overall increase in the constant dollar net capital stock of machinery and equipment available to the producers.

The general infeasibility of large-scale production means that consolidations or mergers and acquisitions are not considered as workable adjusting strategies. In fact, the footwear industry did not make any use of the CIRB's program for assisting consolidation. A few large footwear manufacturers integrated forward into retailing, or diversified into textiles and clothing but no backward integration into tanning operations has occurred. The industry has adjusted basically by reducing its size through exit, and improvement in management and information systems. Another innovative departure has been the garnering of external economies through cooperative purchase of inputs. These economies are estimated to have resulted in a 50 per cent reduction in the cost of transportation, insurance, and other services.[76]

Overall Adjustment

The adjustment patterns of the three industries discussed in the previous paragraphs can now be interpreted in a broader and comparative framework. We look at the behaviour of labor productivity, employment, and investment in each of the sectors, relative to their corresponding values for the manufacturing sector as a whole. This relative picture is shown in Table 53. Labor producti

vity measured in constant prices has been higher than the average for the manufacturing sector as a whole in all sectors, with the exception of clothing where it is quite close to the manufacturing average. The differential in the growth of labor productivity during the decade of 1971-82 has been the highest in knitting (1.4 per cent), followed by textile fabrics production (0.9 per cent), footwear (0.5 per cent), and clothing (-0.2 per cent). Total factor productivity in the TCF sectors cannot be compared with that of the total manufacturing sector for lack of ready availability of data.

The sustained, long-term growth of labor productivity in all sectors is matched by a long-term decline in the level of employment, relative to the growth of employment in the total manufacturing sector. The differential in the rate of fall of employment is highest in knitting and footwear sectors (-2.3 per cent each), followed by textiles fabrics (-1.8 per cent), and clothing (-1.3 per cent). The differential between sectoral rates of investment and the manufacturing average is negative in all cases, implying that investment in the TCF sectors has not kept pace with the manufacturing average. It should be pointed out that investment in the TCF sectors, though positive and increasing in current dollars, shows a rapid decline when expressed in constant prices. In any event, its rate of growth has been considerably slower than that of investment in the manufacturing sector as a whole, whether expressed in current or constant prices.

The foregoing comparison of TCF sectors with the manufacturing averages suggests that their sectoral developments during the decade of the 1970s are not totally devoid of change. Some minimum adjustment has indeed taken place, but it is significantly short of

the one that would be necessary for attaining competitiveness without continuing high trade barriers. The adjustment that has taken place consists essentially of a movement of labor out of the sectors, and a decline in real terms in the rate of investment in the industry. In relative terms, the magnitude of adjustment has been higher in knitting textiles, and footwear, while it is much less pronounced in the clothing sector. Only the footwear industry exhibits significant inter-industry adjustment through phasing out. Some intra-industry adjustment through internal reallocation within the industry and the firms has also taken place.

VI. CONCLUSIONS, REAPPRAISALS AND LESSONS

One major difficulty in evaluating the effectiveness of government policies is that objectives such as "rejuvenation" and "international competitiveness" were never clearly defined in terms of measureable criteria, against which future performance could be judged. In particular, the link between various restructuring devices sponsored by government intervention and the preservation of employment in the TCF sector was not fully understood. In retrospect, to the ultimate effectiveness of government policy in the TCF sectors may be judged on three counts: (a) the progress on restructuring strategies whose linch-pin was new capital investment; (b) the consequences for employment of labor and its adjustment; and (c) the internal consistency of these objectives themselves. The discussion in the following pages is designed to throw light on these three inter-related questions.

The strategies that emphasized new investment in the industry confused the direction of causation. The investment in these

industries was low or non-existent because of lack of profitability, rather than, as was assumed, the lack of profitability being due to lack of investment. Moreover, the objective of regaining international competitiveness was remarkable for its lack of realism, since Canadian textiles and clothing industries have seldom been internationally competitive, and have always been protected by means of above-average trade barriers. Despite protection, a secular decline has been occuring for a long time. Their distress became more pronounced in the 1970s, not because terms of trade shifted abruptly against them, but because historical levels of protection became progressively more inadequate with the emergence of new competitive sources of supply. The situation would have been different if import competition had threatened to reverse well-established comparative advantage.

The clarity with respect to means of adjustment was blurred by an underlying lack of perception as to the causes of the domestic industry's distress and its lack of competitiveness. This cognitive failure, rather than any inherent shortcoming of policy implementation, seems to have led to the adoption of inappropriate means of intervention which retarded adjustment and may even have altered its direction. Adjustment should have been a consistent, coherent and comprehensive domestic policy designed to facilitate appropriate structural change in the industries in question. These policies should be evolved in a framework which acknowledges the global context of change and transformation under way, and reorients domestic production accordingly. Sector-specific approaches, dominant in the TCF sectors, that do not include consideration of their by-product

distortions in the rest of the economy are unsatisfactory, because the cost of such distortions may well swamp the more immediate and, at best, questionable benefits to the sector concerned. In addition, they tend to develop a tunnel vision, with exclusive focus on partisan, short-run interests of a few large firms in the industries, which themselves become part of the interest group coalitions that lobby against adaptive adjustment. Their response to adjustment thus becomes "endogenous" without visible links to a coherent overall policy.

Adjustment for Survival

Nevertheless, it would be incorrect to conclude that Canada's TCF industries have been devoid of change. The dominant strategy in the textile and clothing industries based on an infusion of capital and technology was not only endorsed but was actively supported by the federal government through financial assistance from a variety of different programs, and most notably by the CIRB between 1981 and 1986. A large part of this financial assistance, particularly to large textile producing firms, was simple unrequited transfer payments, perhaps justified by their catalytic role in eliciting further and matching investments from retained earnings in the industry and from private capital markets. It is difficult to confirm, however, as to whether the bulk of these transfers represented additional investments in the industry or merely took the place of those that would have been undertaken in its absence. In any event, the financing from public funds of investments that increase private profitability and earning in a market-oriented economy have to be defended in a less perfunctory manner than was the case.

Capital investments in newer equipment embodying latest technological advances and rising labor productivity have been able to prevent the decline of the textile industry, particularly in the knitting segment. The same solution applied to the clothing industry has had less visible success and is unlikely to be feasible in the future. The reason is the inherent labor-intensity of apparel production, where no radical transformation of the sewing room operations has occured, without which large scale automation remains infeasible. Moreover, the diffusion of new technology to apparel producers in low-wage countries, the main source of Canadian competition, has been far more rapid than in textiles.

Apart from efforts to raise labor productivity through capital investments, there are significant differences between the adjustment behavior of the textile and clothing industries. The textile industry has made visible progress toward developing fiber and product specialization by discontinuing production of less profitable lines. This specialization by larger firms in the industry has enabled them to rationalize production and to trim costs. By contrast, in the clothing industry, product specialization and the development of market "niches", which appear to be vital to its survival, have not figured at all in the adjustment pattern. The clothing industry has, in fact, sought to acquire competitiveness throughout the entire gamut of apparel production, without regard to comparative costs of production, demand elasticities, and the pattern of international trade. The inability to develop concentration on narrower range of products, relative to textile, can be traced to the fragmented nature of the industry's structure, as well as to faulty corporate strategies. But

the major reason is the proliferation of negotiated export restraints, encompassing an ever-increasing number of products (and countries of origin) which were successively brought under the purview of the MFAs. The gradual extension of protection to virtually the entire range of apparel production artificially raised the profitability of domestic production over a wide spectrum and concealed the opportunities for specialization. In fact, the protective mechanisms imbedded in the MFA provided built-in incentives for foreign exporters to continually move up the ladder to products of higher value-added that command higher prices and are relatively price-inelastic in the Canadian market. The result of this up-grading of imports has been to lock up a large part of Canadian producers into the lower end of the market which is crowded by "low-cost" producers, and where competition takes place on the basis of price alone.

International wage differences, viewed exclusively as a threat by the textile and clothing industries, nevertheless provide opportunities for direct foreign investments and other foreign engagements of varying degrees of involvement. Indeed, they are essential for ensuring optimal production loci in the highly interdependent world economy. The Canadian textile industry has only recently begun to utilize this particular route toward adjustment, but the clothing industry has not utilized even such straight-forward wage-cost reduction measures as foreign "sourcing", which has been steadily growing in the U.S. apparel industry. Import-threatened industries that have been able to restore competitiveness and have flourished are the ones that are able to respond quickly and efficiently by locational shifts. In an environment where overall profitability in an industry is declining, only firms operating from least-cost locations can maintain

earnings by enlarging their share of a shrinking market. Such locational shifts, moreover, need not be accompanied by absolute reductions in capacity. Frequently, relative changes in its international distribution are sufficient to restore profitability. Despite some progress, under-investment overseas is part of the textile industry's current problems.

These and other differences in the adjustment behavior between the textile and clothing industries have led to marked differences in their profitability, which are masked by the common practice of lumping them together. A majority of firms in the textile industry have noticeably improved their initial poor performance by means of competitive strategies involving capital renewal, selective specialization, and direct foreign investments since 1983. However, the ill-advised emphasis on capital-intensity, inability to develop specialization, absence of product development, and absence of locational shifts has not materially altered the competitive position of the clothing industry.

As was pointed out earlier, the footwear industry was able to adjust fairly adequately without massive infusions of capital and technology. The main ingredients in its success were adjustment in a "downward" direction reinforced by intra-industry specialization in selected market segments and the development of managerial skills. The course of adjustment was facilitated by a more realistic government policy that eschewed indefinite support programs. The Canadian Import Tribunal, which was responsible for guiding the footwear import policy during the early 1980s, correctly perceived that a gradual liberalization would enable the industry to adapt to import competi-

tion. The lesson from the experience of the footwear industry is also that "modernization" through capital equipment alone is not always a correct strategy.

Restructuring and Employment

Declining shares of domestic producers in apparent domestic consumption need not necessarily result in unemployment. The level of employment in an industry falls when either (a) the volume of domestic production falls, or (b) the labor coefficient, i.e., the amount of labor required to produce a unit of output, falls.[77] The major part of employment declines, particularly in the textile industry, is due less to falling domestic production, and more to up-grading of skill requirements due to change in capital-intensity, and the fact that new jobs do not go to workers displaced as a result of the change in production methods.[78] The textile industry's strategy to gradually modernize production facilities and replace existing equipment with more productive machinery was probably inevitable, and would have happened without the active support of the government through capital subsidies and other indirect measures which not only lowered the relative price of capital to firms but also externalized the risk. The government's financial subsidies, however, did influence the speed and the timing of capital investments. The Sector Firms Program (SFP) of the CIRB played a central role in hastening the process of equipment modernization and, hence, of labor displacement.

The CIRB strategy was to support dynamic firms in a declining industry as part of the rationalization process. This strategy is not without its merits, even though the task of identifying dynamic firms is difficult and, at best, subject to a wide margin of error. The

implicit and perhaps indirect bias of the Sector Firm Program against smaller firms, which tended to equate dynamism with large size, has neither theoretical nor empirical support.[79] Smaller firms, particularly in the clothing sector, would probably have displayed more resilience and innovation in adapting to import competition. If so, it would also have been possible to trade off slow-downs in labor productivity for a more orderly decline of employment in the sector. This postulate has some empirical support, as shown by the clothing industries in Italy and Germany. A judicious blend of design and craftsmanship can make production of some labor-intensive goods feasible in mature industrial countries.

Subsidies to firms in declining industries may be justified on efficiency grounds if they facilitate the required outward movement of capital and investment and their relocation elsewhere in the economy. In fact, there is an interdependence between movements of capital and labor. Investment plays a key role in the adjustment process, and its own movement acts as a catalyst for the movement of labor. Firm subsidies under the aegis of the TCB and the CIRB were given to enable them to continue to produce an unchanged output with a smaller labor force. As a result, there is little evidence of a net movement of resources out of the textile and clothing industries. The attrition of labor, largely as a result of vigorous capital-labor substitution, was nearly offset by the influx of capital resources into the industry. It is also clear that the investment of new capital in the industries would have been less in the absence of the government's direct and indirect capital subsidies to firms.

Neither the TCB nor the CIRB paid adequate attention to the problem of adjustment of labor. Government aids to textile and cloth-

ing industries were implicitly and explicitly justified on the grounds that they would prevent unemployment. In reality, however, the CIRB's adjustment assistance to firms under the SFP deepened the problem of unemployment and quickened its rate of change. Its policies and procedures influenced the layoff behavior of CIRB-assisted firms and contributed to the redundancy and separation of a large proportion of textile workers, particularly in the older age group.

The government assistance to firms by promoting survival rather than exit, therefore, is the opposite of that to the worker. The AAB and LAB programs were almost exclusively geared toward providing compensation to workers separated for reasons of old age or other causes of redundancy. In fact, the LAB was never more than a generous early retirement benefits program for the textile industry, and may have contributed to increased layoffs of the older workers whose separation tacitly became a part of the adjustment process.[80] The justification of the LAB programs for the textile industry on grounds that it diminished the resistance to adjustment misses the point by equating the layoffs of the older workers with adjustment. The separation of older workers in pursuit of rising labor productivity enabled the firms to rationalize their production processes, but did not assist in bringing about long-run adjustment through scaling down of industry capacity and inter-industry movement. It merely facilitated the process of substitution of capital for labor, without a net outward movement of resources, resulting inevitably in a change in the occupational structure within the industries and a net loss in employment.

The generally low estimates of wage losses as a result of separation of older and technologically redundant workers led to the

conclusion that private losses arising from adjustment were small enough to be offset by lump-sum compensation. The argument is essentially correct, but is still second-best on two counts. First, it is not clear as to why public assistance should be provided to enable certain firms to increase their private profitability through upgrading of occupational skill in their production processes without bearing any of its major costs. Moreover, the benefits of this sort of adjustment continue to remain totally and exclusively appropriable by the firms and have no spill-over benefits to the economy at large, except in a perverse sense that their absence would have resulted in higher trade barriers and, hence, higher economy-wide welfare losses. Second, the efficiency losses to the Canadian economy resulting from the potential loss of output in alternative employment could have been avoided if the process of displacement of workers from the textile industry were to be coordinated with a publicly-assisted program of re-employment through enhanced mobility and retraining. In other words, the labor adjustment programs inherent in the AAB and IAB would have been more intrinsically defensible if their focus were to be placed in correcting the labor market imperfections by promoting adaptive adjustment, and not merely assisting the firms to achieve their "restructuring" objectives at public cost without any redeeming social benefits.

In addition to standard dead-weight losses in production and consumption, government policies to assist textile and clothing industries had other undersirable consequences. One such consequence has been that the protection of the industries' output was not sufficient to protect employment. The primary explanation lies in the substitution of capital for labor, which is due to the effect of capital

subsidies being super-imposed on long-run protection. The wage rates of those that remained in the industry increased, relative to what they would have been in the absence of protection. The net effect of changes in output and input prices has been to reduce total demand for labor.

Nor has the continuation of protection and subsidies encouraged structural adjustment aimed at making production competitive at world prices. Assistance by means of protection from import competition has provided incentives to maintain inefficient production. There have, of course, been plant closures, consolidations, merges and other structural adjustments within the industry. But the quasi-permanent nature of protection, reinforced by overt subsidization, has removed most of the incentives for the firms to become competitive with producers in other countries. Large sections of the industry remain non-competitive, and are expected to remain so.

Thus the high level of protection accorded to textile and clothing industries since 1970 has failed to achieve its two ostensible objectives, viz., protecting employment and encouraging more efficient production. When net subsidy-equivalents of protection are added to direct government grants, they amount to a sizable transfer to the industries. By contrast, adjustment has been tentative and minimal. One of the unforeseen consequences of protection and assistance measures has been their unwitting anti-labor bias. Protection failed to protect jobs, while direct government assistance merely subsidized owners of capital assets.

Political Influences

Any analysis of protection and direct subsidization of the

textile and clothing sector would be grossly incomplete without a parallel analysis of the underlying "political market" in which demand and supply of protection is determined.[81] It would indeed be futile to attempt to explain the generally high levels of protection in the TCF industries and their rising trend and durability, exclusively in terms of economic variables. But to recognize this is not to assert, as is often the case, that only political motives and constraints have exclusive claim to legitimacy and relevance. To do that would be to undermine the essential properties of a market economy, and would open the door to all sorts of inefficiencies in the name of political expediency. While there is a legitimate role for government intervention in import-related adjustment, as was shown in Chapter I, such intervention must complement rather than supplant the underlying market forces. Furthermore, in instances where adjustment and reallocation is costly, unsure, and difficult, there are valid arguments for "leaning against" the market by slowing down the speed of adjustment, but not for maintenance of the status-quo or, at worse, for frustrating adjustment. The price signals provided by labor and capital markets are necessary and desirable for correct adjustment and should not be tampered with. Finally, tactical behavior involving sub-optimizing in the light of political constraints, while defensible in the short-run, should not be considered a permanent and unalterable constraint. To do so would imply that political institutions and processes that give rise to such constraints are themselves optimal and should not be changed. The search for better adjustment policies must include a reappraisal, and if necessary a mitigation, of these political constraints themselves.

The most note-worthy political "constraint" that appears to have played a part in the design of Canadian protection policies toward the TCF sectors[82] is the political voice of the textile lobby. Strong political pressure exerted by the textile industry exhibits an intriguing display of narrow sectoral issues being elevated to national importance. The fact that such political pressures were incommensurate with their intrinsic merit is explained by two factors. First, the textile industry has been successful in keeping textiles and apparel together for garnering larger political support, but in fact rising imports have been a problem only for the apparel sector. In fact, protection for the textile industry reduces the effective protection afforded to value-added in apparel production, and is not an insignificant factor in the latter's lack of competitiveness. Second, owners and managers of firms in both the textile and apparel industries have forged an improbable alliance with organized labor groups in demanding protection and overt subsidization, even though corporate strategies of "restructuring" are against the employment interest of workers. This alliance is explained paradoxically by the trade barriers themselves. Trade barriers result in an increase in producers surplus, i.e., monopoly profits and the distorted wage differential accruing to a smaller number of workers, and motivate both factors to act in concert.

But the crucial question concerns, not the existence of powerful sectional interests of the textile industry, but rather the government's response to it. It would be implausible to argue, as is frequently done, that the "supply" of protection on the part of decision-makers was merely a passive reaction to political pressures. It is evident that democratically-elected governments, both at the federal

and provincial levels, are vulnerable to political pressures from industries employing a significant number of workers with a marked regional orientation. But the fact that the process of accommodation to political pressures is selective (some and not all political pressure are listened to) and trade barriers are not accorded across-the-board to all those who "demand" it suggests that the decision-making process was much more complicated than is generally recognized. The whole array of government interventions in this sector cannot be dismissed as mere political opportunism, even though the industry pressure for protection may have provided a convenient band-wagon for political parties and individual politicians. Other systematic factors were at play.

The distress of the textile and clothing industries in Canada attributed to import competition is real and has not been conjured up to garner higher "rents". But the causes of this distress are located elsewhere. They are explained by a syndrome of the long history of protection, the absence of adjustment through phasing out of non-competitive firms, and a long-term secular decline which is aggravated by the emergence of highly competitive sources of supply, initially from Japan in the 1950s and from a small number of NICs since then. It is inconceivable that any government would have totally avoided intervention in the light of deteriorating competitiveness of the industry and the consequent need to do something. This is reinforced by international pressures arising from simultaneous intervention in all major industrial countries and the increasing institutionalization of organized marketing arrangements in international trade in textiles and apparel. The major failures of government policy directed toward

this sector are due not to intervention per se but to incorrect and perverse intervention which is itself traceable to an incorrect perception of the problem and the solutions.

The perception of the problem, viz, the distress of the textile and clothing industries, rested on the following assumptions. First, the industries were non-competitive because of "low wages" and government subsidization in developing countries, and the state-trading practices in East European countries. Second, they were non-competitive due to the lack of capital investment in the industry. Third, that these industries would disappear altogether if protection and other life support systems were discontinued. This perception of the problem was basically that of the industry itself but had permeated all echelons of government policy-making. The real political puzzle is to explain as to how a self-serving industry position came to be widely shared by policy-makers and formed an almost exclusive basis for government intervention.

The adjustment policies, and their supporting mechanisms, first enunciated by the Textile Policy of 1970 and continued unchanged since then, reflect no independent analysis or empirical verification of the key questions. The policies of the Textile and Clothing Board were shaped in large part by what was generally believed to be the dominant industry position, which was never subjected to close public scrutiny.[83] The TCB never seriously investigated the contention of the textile industry that Canadian imports of textiles were subsidized by governments of exporting countries. If this was indeed true then the nature of intervention in the form of counter-vailing duties in line with the GATT code of subsidies would have been markedly different than the one which was actually undertaken. The perception of the

import and adjustment problem by the TCB from a narrow perspective resulted in a situation in which intervention policies relevant to sectors in which Canada has actual and potential international comparative advantage were applied to industries that are unlikely to regain their pre-1960 status and be competitive without indefinite protection and subsidization.

Lessons for the Future

If the success rate of adjustment efforts is to be raised, better policy packages need to be devised. The newer policy packages for the TCF sectors should evolve in a broader context encompassing a few essential preconditions. First, the TCF policies should be placed in the context of a comprehensive and consistent domestic policy designed to facilitate structural change in Canada's industry and employment. Such a broader framework must necessarily deal with the question of "declining" industries in a global context of multilateral and bilateral trade relations. The sector-specific framework necessary to identify sectoral problems must be supplemented with the more comprehensive framework suggested here to avoid losing sight of the interrelatedness of the economy and to curb the propensity of sector-specific approaches to create negative externalities from their own narrowly-based policies and actions. Second, it would be desirable to evolve a policy-making environment which relies less on government intervention and more on "indicative" signals that prompt firms to mold their strategic responses to changes in market conditions and competitive environment. Intervention would still be required, but should be undertaken only when markets work imperfectly, such as in the case of sluggish labor markets and regional disparities. Such a

market-oriented framework for intervention should not focus exclusively on short-run costs of adjustment to the neglect of its long-run benefits. Such an orientation of government intervention policies would allow an explicit recognition of the fact that a given industry's market structure significantly affects the ways in which firms in the industry bring about adjustment. This enhanced understanding of the close connection between market structure and the nature of firms' adjustment will allow a more judicious blend of various competing forms of trade barriers, and of trade barriers and direct subsidies.

Given the over-all focus, viz., a comprehensive policy-making framework which relies more on market-induced mechanism and less on intervention, the contours of desirable intervention in the textile and clothing sectors may now be summarized.

Broadly defined, there are three alternative responses by the federal government to import-related problems in the TCF sectors and correspondingly divergent adjustment paths. The first of these is a total reliance on markets and a complete absence of sector-specific protection and direct subsidies, but with general, nation-wide assistance programs such as the UIC (unemployment insurance commission) and the Canada Manpower Training and Mobility programs, as well as the various provincial assistance programs. The adjustment path generated by this option will be characterized by a rapid adjustment of the "bang-bang" type with a drastic curtailment of output and capacity, particularly in the clothing industry. The market will bring about a speedy adjustment but the cost of adjustment will be high, though confined to a shorter time period.

The second alternative is to maintain the status quo and the

existing capacity and size of the two industries, while the actual output levels may fluctuate with cyclical swings of demand. The resulting adjustment scenario implies an indefinite maintenance of protective structures, though not necessarily of direct subsidies. The protective structure would still allow possibilities of substitution between tariffs, QRs, and negotiated voluntary export restraints. Neither QRs nor tariff-equivalents of VERs are very likely, however, as long as textile and clothing trade is governed by the MFA (and its future extensions?) and is thus outside of the normal GATT rules. The continuation of protection will mean continuing welfare losses to consumers, and continuing net loss of employment opportunities in the sector accompanied by gradual changes in the occupational structure. The change in occupational structure and the net employment loss will, however, be less rapid than in the past, primarily because possibilities of capital -labor substitution and of introducing new technology are very nearly exhausted. Nonetheless, continuing protection will have the effect of condemning a sizable proportion of Canadian labor force to low-productivity employment. Despite protection, the goal of achieving "international competitiveness" will remain as unrealistic as it was when first enunciated, even though the competitive pressure from the NICs may lessen as they diversify their economies away from textiles and clothing. But the clothing industry is likely to remain crowded with producers as export platforms vacated by the NICs are filled up by the entry of would-be NICs, most notably China.

The third possible response is that of affirmative adjustment where underlying market forces are supplemented by correct adjustment policies in producing a long-run equilibrium with a gradual elimina-

tion, or at least a substantial reduction, of trade barriers. The adjustment path associated with this scenario is markedly different from those of the other two, although the final equilibrium will coincide with the one resulting from reliance on unfettered markets. The distinguishing features of this path are a moderation of the speed of adjustment to minimize its short-run private costs without affecting its direction, and sharply-focused government intervention policies based on some mixture of efficiency and equity and a smaller number of instruments. In addition to achieving more normal levels of protection, it would also seem important to redress the tendency toward protection-induced inappropriately capital-intensive modes of production. There is a potentially important role for policy in increasing the employment content of adjustment measures supported by the government. The trade-off between slower productivity growth and higher employment retention may make down-size adjustment more palatable. Overall, this adjustment scenario implies a political commitment to gradually scale down the size of the clothing and textile industries to a level compatible with the elimination of the more blatant forms of protectionism. It also implies no "free lunch" to powerful sectional interests and a restoration of normal price signals and economic motivations in the sector. An important by-product for the government would be to avoid getting caught in a vicious circle where incorrect policies to deal with an existing disequilibrium generate other distortions which provide a rationale for further intervention which will likely entrench and aggravate the existing disequilibrium.

The analysis in this study suggests that all three industries have adjusted to varying extents and in different ways. The adjust-

ment in the footwear industry is nearly complete, and no further government intervention is required. The textile industry is farthest along in adapting to changing circumstances. As a result, government intervention in this sector is quickly approaching a point of diminishing returns. The "need" for textile industry protection should, therefore, be reassessed in the light of a possible Canada-USA bilateral free trade agreement. Depending on this particular assessment, some protection through moderate tariff levels seems adequate to ensure its future viability along competitive lines. The scaling down of protection in the textile industry is bound to have a favorable effect on competitiveness of the clothing industry by freeing the cost of its major input from protection-induced increases. The cost of fabrics is nearly 50 per cent of the total cost of production of clothing, and a significant reduction in this cost will enable apparel production to increase its profitability. In addition, there is the further need for tariff-induced measures for promoting off-shore processing activities. Any continuing trade barriers in the industry must relinquish their comprehensiveness, and should instead become selective in order to provide incentives for product specialization.

Table 1

Value of Shipments in the Textile and Knitting Industries, 1970-1983
(million dollars)

SIC 1970	Category	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983(a)	Rate of Growth (percent per year)
181	Cotton Yarn & Cloth Mills	282.5	282.1	309.6	287.0	370.0	319.2	363.9	392.0	446.9	589.1	661.8	803.0	627.7	708.7	6.8
182	Wool Yarn & Cloth Mills	122.0	117.8	129.0	152.3	164.7	160.4	170.3	175.1	192.0	222.0	235.7	271.6	259.2	259.4	5.5
183	Man-made Fibre, Yarn & Cloth	481.8	494.6	553.1	667.1	733.1	719.4	749.8	851.9	983.4	1212.8	1270.0	1400.0	1230.0	1558.9	8.7
184	Cordage & Twine	16.9	16.2	14.9	13.7	21.5	25.1	17.8	17.9	19.6	30.4	30.7	32.4	30.9	35.3	5.1
185	Felt & Fibre Mills	30.4	30.8	32.7	37.0	42.0	34.5	39.3	41.2	51.6	60.8	60.0	65.0	63.8	73.8	6.5
186	Carpet, Mat & Rugs	159.6	187.8	241.0	302.2	348.0	356.3	383.6	417.2	462.1	541.4	558.7	669.5	546.9	711.2	11.2
187	Canvas, Cotton & Jute Bags	61.6	61.7	64.9	78.8	88.0	91.8	90.7	90.2	101.6	131.0	145.6	159.5	162.7	162.7	7.2
188	Auto Fabrics	136.4	182.2	202.8	229.3	229.0	227.1	305.5	348.6	427.7	424.6	424.5	520.9	479.2	---	9.4
189	Miscellaneous Textiles	284.5	324.8	371.4	415.9	481.6	505.2	579.9	621.2	718.4	862.5	1027.1	1130.2	1107.3	1301.9	11.5
231	Hosiery	112.4	102.5	90.8	94.6	96.2	103.7	109.3	117.7	132.2	156.8	192.1	216.5	225.1	250.3	5.8
239	Knitting Mills except Hosiery	302.2	352.5	379.3	435.6	504.4	520.8	522.0	520.2	579.6	673.2	752.6	795.8	722.7	807.9	7.3

Notes: (a) where possible observations for 1983 were based on the 1970 SIC code.

Sources: Statistics Canada Catalogue No. 31-203.

Table 2

Clothing: Value of Shipments of Goods of Own Manufacture, 1975-1982
(thousands of dollars)

Commodity Classification SIC Code 1970	1975	1976	1977	1978	1979	1980	1981	1982
Men's Clothing Factories SIC 2431	877.9	1015.6	1041.1	1171.5	1378.1	1513.4	1511.6	1364.4
Men's Clothing Contractors SIC 2432	65.2	74.2	77.3	103.1	121.6	112.9	131.2	150.2
Women's Clothing Factories SIC 2441	847.0	913.5	958.4	1311.4	1338.6	1467.6	1467.6	1471.9
Women's Clothing Contractors 2442	76.8	86.9	84.4	119.9	144.2	138.8	154.3	176.5
Children's Clothing Industry 245	171.0	177.5	174.4	217.7	264.0	287.0	292.2	306.3
Foundation Garment Industry SIC 2480	68.8	74.2	83.3	87.8	96.2	104.0	114.7	109.0
Total (1)	2106.3	2342.0	2418.9	2819.7	3315.6	3494.8	3671.5	3578.3

Note (1) Total may not add up due to rounding.

Source: Statistics Canada Catalogue No. 31-203.

Table 3

Clothing: Value of Shipments of Goods of Own Manufacture, 1982-1984
(million dollars)

SIC Code 1980	Category	1982	1983	1984
2431	Men's & Boys' Coat Industry	198.0	189.0	229.6
2432	Men's & Boys' Suits & Jackets	342.0	345.5	355.8
2433	Men's & Boys' Pant Industry	445.5	490.4	461.8
2434	Men's & Boys' Shirts & Underwear	401.2	436.5	450.3
2435	Men's & Boys' Clothing Contractors	135.7	129.9	155.1
2441	Women's Coats & Jackets	244.2	256.3	261.2
2442	Women's Sportswear	552.9	594.8	627.7
2443	Women's Dresses	298.2	319.9	318.2
2444	Women's Blouses & Shirts	148.6	153.5	152.4
2445	Women's Clothing Contractors	182.1	188.3	217.6
2450	Children's Clothing	326.9	348.0	364.4
2490	Other Clothing & Apparel Industries	1348.7	1439.0	1580.8
	Total Clothing	4624.2	4891.1	5174.9

Source: Statistics Canada Catalogue No. 31-203.

Table 4

Footwear Industry: Shipments, 1971-1984 (a)

Year	Shipments
1971	242.2
1972	252.4
1973	286.3
1974	320.9
1975	351.2
1976	396.9
1977	389.9
1978	461.5
1979	600.4
1980	618.7
1981	704.4
1982	728.9
1983	766.0
1984	856.4

Note: (a) 1970 SIC Code applies until 1981. The 1980 SIC code applies from 1982 onwards and includes Rubber footwear.

Source: Statistics Canada Cat. No. 31-203.

Table 5

Value Added In Constant Dollars In The Textile and Knitting Industry
(million 1971 dollars)

Year	Total Textile	Cotton Yarn and Cloth Mills	Man-made Fibre, Yarn and Cloth Mills	Knitting Mills
1973	781.9	85.6	268.3	199.5
1974	753.7	84.5	247.7	192.0
1975	725.3	82.6	243.0	190.3
1976	747.5	85.0	233.4	187.9
1977	790.7	75.1	282.8	180.9
1978	833.5	80.2	300.1	189.5
1979	910.1	101.3	338.6	200.6
1980	860.0	97.1	316.9	297.9
1981	890.0	104.6	323.5	207.3
1982	720.2	80.6	241.7	182.3
Average Annual Rate of Growth (per cent)	-1.0	-0.5	-1.0	-1.0

Source: Statistics Canada Cat. No. 61-213.

Table 6

Value Added of the Textile, Clothing and Footwear Industries by Province for Selected Years

	1970			1975			1980		
Value-Added: (million dollars)	Textiles and Knitting	Clothing	Footwear	Textiles and Knitting	Clothing	Footwear	Textiles and Knitting	Clothing	Footwear
Quebec	463.6	420.6	66.1	713.9	725.7	88.7	1136.6	1146.3	130.0
Ontario	358.9	158.7	50.2	564.1	253.2	83.1	1067.7	538.7	167.6
Canada	868.1	652.5	119.3	1361.8	1105.6	176.8	2360.9	1933.8	306.4

	(a) 1983			1984		
Value-Added: (million dollars)	Textiles	Clothing	Footwear	Textiles	Clothing	Footwear
Quebec	1088.1	1493.3	151.3	770.6	1554.2	168.1
Ontario	963.4	703.7	241.8	916.7	697.6	278.5
Canada	2204.2	2537.1	403.7	2267.5	2684.8	460.0

Note: (a) Observations for 1983 and 1984 are based on the SIC code 1980: The Knitting category is amalgamated by Textiles and Clothing and the Footwear category includes Rubber footwear.

Source: Statistics Canada Cat. Nos. 31-203, 34-223, 34-221, 34-216, 34-217, 34-218, 33-002.

Table 7

Apparent Consumption of Textiles and Textile Products, 1975-1984

Category	1975	1978	1979	1980	1981	1982	1983	1984
Woollen and Worsted Fabrics (million square metres)	33.2	44.0	48.7	36.0	39.0	32.8	40.7	49.8
Rayon, Nylon and Polyester Fabrics (million square metres)	N/A	197.4	221.9	191.2	202.3	174.3	210.6	215.6
Coated Fabrics (million square metres)	50.2	56.5	57.2	47.0	42.6	36.5	41.3	46.3
Terry Towels, Washcloths and Sets (million Kilograms)	5.6	7.3	7.8	7.3	7.9	6.7	8.9	9.7
Bedsheets (million units)	14.7	14.5	14.3	14.7	14.6	11.7	14.8	11.9
Hosiery (million dozen pairs)	6.0	6.4	7.5	6.9	6.9	7.0	8.3	9.0
Cotton Yarns (million Kilograms)	18.3	21.2	21.4	19.6	15.3	12.4	15.5	15.8
Polyester Cotton Yarns (million Kilograms)	5.8	11.1	11.3	14.6	15.4	18.7	25.8	27.1
Cotton Spun Acrylic Yarns (million Kilograms)	N/A	5.9	6.2	6.1	7.9	7.9	8.0	6.5
Worsted Spun Acrylic Yarns (million Kilograms)	8.8	9.2	10.1	9.6	9.3	9.6	9.9	10.3
Acetate Rayon, Nylon and Polyester Filament Yarns (million Kilograms)	N/A	109.8	113.6	100.2	98.6	77.6	101.6	85.0
Cotton, Polyester-Cotton, Corduroy and Denim Fabrics (million square metres)	N/A	376.6	412.9	333.4	390.1	279.1	324.4	356.6
Pillowcases (million units)	12.9	12.3	13.1	12.2	12.4	9.7	12.1	10.7
Cordage, Ropes and Twine (million Kilograms)	47.8	31.1	39.9	36.7	36.0	28.5	31.6	33.4
Work Gloves (million dozen pairs)	3.1	3.9	5.1	4.3	4.3	3.3	4.2	5.3
Handbags (million dozen)	N/A	0.7	0.6	0.6	0.6	0.6	0.7	0.7

Source: Textile and Clothing Board (1985), Textile and Clothing Inquiry Vol.2, Ottawa.

Table 8

Apparent Consumption of Clothing, 1975-84
(million garments)

Category	1975	1978	1979	1980	1981	1982	1983	1984	Average Annual Rate of Growth in per cent
All clothing (control nos. 32, 37 to 50)	523.2	511.6	524.7	515.2	534.0	497.9	536.5	577.9	1.0
Winter Outerwear	7.9	7.7	7.6	6.2	5.7	6.2	5.2	4.8	-5.0
Pants, shorts and overalls	73.9	82.7	82.9	84.4	82.1	76.0	88.5	89.5	2.0
Blouses, shirts, t-shirts and sweatshirts	117.5	112.3	111.3	100.8	119.3	113.2	123.3	134.3	1.4
Sleepwear, bathrobes, and dressing gowns	31.7	28.5	33.2	34.7	39.0	35.2	35.5	37.6	1.7
Dresses, skirts, suits, sets and coordinates	51.7	48.9	55.1	56.4	54.5	52.7	63.5	67.1	2.6
Foundation Garments	24.9	21.9	21.1	20.5	21.1	16.9	19.5	19.4	-2.5
Underwear	106.5	108.8	114.7	117.2	118.6	103.0	103.9	111.7	0.5
Outer jackets, coats and shopcoats	13.2	11.7	13.5	12.6	14.2	14.7	15.2	19.1	3.8
Sportscoats, blazers and fine suits	4.2	4.6	4.3	3.9	3.6	3.2	2.9	3.1	-3.0
Tailored collar shirts	26.2	32.6	31.9	30.6	26.4	26.7	25.6	28.4	0.8
Sweaters, pullovers and cardigans	56.1	42.9	38.4	37.7	39.5	36.9	41.2	44.4	-2.3

Source: Canada, Textile and Clothing Board (1985), Textile and Clothing Inquiry, Vol. 2, Ottawa.

Table 9

Apparent Domestic Consumption of Footwear, 1971-1984
(million pairs)

Year	Men's and Boys' Footwear	Women's and Girls' Footwear	Children's and Infants' Footwear	Slippers and House Footwear	Special Purpose Footwear	Total[a]
1971	15.2	32.4	4.9	11.7	20.8	85.0
1972	15.5	30.8	5.4	12.3	23.0	87.0
1973	16.2	27.3	4.3	11.2	22.1	81.0
1974	19.0	28.5	4.8	10.6	20.5	83.4
1975	18.1	26.5	4.3	9.6	16.9	75.4
1976	20.1	30.5	5.5	12.9	17.2	86.2
1977	18.3	28.8	5.0	10.3	17.0	79.5
1978	17.4	30.6	5.1	9.2	16.4	78.7
1979	15.8	30.9	5.0	8.9	17.2	77.9
1980	14.3	30.0	3.8	8.3	20.8	76.8
1981	15.6	33.3	4.1	8.9	24.3	86.2
1982	14.0	31.5	3.9	8.1	20.1	77.6
1983	14.2	33.3	3.4	8.5	22.0	81.4
1984	15.8	35.0	4.0	9.1	22.3	86.2

[a]Total may not add up due to rounding.

Source: Canadian Impact Tribunal (1985), Report Respecting the Canadian Footwear Industry, Ottawa.

Table 10

Production Workers in the Textile and Knitting Industry, 1970-1983
(thousand workers)

SIC 1970	Category	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983(a)	Percentage Change 1973-1983
181	Cotton Yarn & Cloth Mills	10.5	10.0	10.1	8.7	8.7	7.9	6.8	6.5	6.5	7.0	7.0	7.4	6.0	6.3	-27.6
182	Wool Yarn & Cloth Mills	5.8	5.3	5.4	5.5	5.2	4.7	4.3	4.0	4.1	4.1	3.9	3.7	3.2	3.3	-40.0
183	Man-made Fibre, Yarn & Cloth	15.7	15.7	16.8	18.1	17.4	15.6	14.2	13.2	13.3	14.3	13.6	12.6	10.8	11.6	-35.9
184	Cordage & Twine	0.8	0.7	0.5	0.4	0.5	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.3	0.4	0
185	Felt & Fibre Mills	1.0	0.9	0.9	1.0	1.0	0.9	0.9	1.0	1.1	1.1	1.0	0.9	0.8	0.8	-20.0
186	Carpet, Mat & Rugs	4.0	4.1	5.0	5.5	5.5	5.2	5.1	4.8	5.0	4.9	4.5	4.2	3.4	3.7	-32.7
187	Canvas, Cotton & Jute Bags	2.4	2.3	2.3	2.6	2.4	2.6	2.3	2.2	2.4	2.4	2.4	2.4	2.5	2.4	-7.7
188	Auto Fabrics	3.1	3.7	4.5	5.0	5.0	4.2	4.8	5.7	5.9	5.3	4.9	5.4	4.7	—	-6.0
189	Miscellaneous Textiles	11.8	12.4	13.3	14.4	14.1	14.7	15.2	13.8	14.9	15.5	15.6	16.2	14.0	16.0	+11.1
	Total Textiles	55.2	55.2	59.1	61.3	59.8	56.5	54.0	51.6	53.4	55.0	53.5	53.1	45.9	45.0	-26.6
231	Hosiery Mills	7.1	6.0	5.1	5.1	4.6	4.3	4.3	4.0	4.1	4.1	4.5	4.5	4.3	4.5	-11.8
239	Knitting Mills Except Hosiery	13.5	14.9	16.7	17.8	17.8	17.3	16.4	14.2	13.5	14.5	14.1	13.3	11.5	—	-35.4
	Total Knitting Mills (b)	20.6	20.9	21.8	22.9	22.4	21.6	20.7	18.2	17.6	18.6	18.6	17.8	15.8	—	-31.0

Note: (a) where possible observations for 1983 were based on the 1970 SIC code.
(b) total may not add up due to rounding

Source: Statistics Canada Cat. No. 31-203.

Table 11

Clothing: Production and Related Workers, 1974-1982
(thousand persons)

SIC Code 1970	Category	1974	1975	1976	1977	1978	1979	1980	1981	1982	Percentage Change 1974-82
2441	Women's Clothing Factories	25.7	26.8	26.7	25.9	26.0	26.9	25.3	25.4	24.2	-5.8
2442	Women's Clothing Contractors	9.8	9.2	9.4	8.1	10.6	10.7	9.6	9.6	9.9	1.0
2431	Men's Clothing Factories	32.2	32.3	33.4	30.6	30.7	29.5	28.1	27.2	24.2	-24.8
2432	Men's Clothing Contractors	7.7	7.3	7.3	6.8	8.1	8.0	7.1	7.9	7.9	2.6
2450	Children's Clothing Industry	6.3	5.9	5.6	5.0	5.2	5.7	5.6	5.2	5.5	-12.7
2480	Foundation Garments SIC 2480	3.4	2.9	2.8	2.5	2.5	2.3	2.2	2.6	2.2	-35.3
	TOTALS	85.1	84.4	85.2	78.9	83.1	83.1	77.9	77.9	73.9	-13.2

Source: Statistics Canada, Cat. Nos. 34-217, 24-216

Table 12

Clothing: Production and Related Workers, 1982-1984
(thousand persons)

SIC Code 1980	Category	1982	1983	1984	Percentage Change
2431	Men's & Boys' Coat Industry	3.9	3.9	4.1	5.1
2432	Men's & Boys' Suits & Jackets	6.3	6.1	6.3	0
2433	Men's and Boys' Pant Industry	7.2	7.7	6.5	-9.7
2434	Men's & Boys' Shirts and Underwear	7.6	8.1	8.5	12.0
2435	Men's & Boys' Clothing Contractors	7.2	7.8	8.6	19.4
2441	Women's Coats & Jackets	4.4	4.2	4.2	-4.5
2442	Women's Sportwear	8.6	8.4	8.1	-5.6
2443	Women's Dresses	4.3	4.3	3.8	-11.6
2444	Women's Blouses & Shirts	2.3	2.5	2.3	0
2445	Women's Clothing Contractors	10.4	11.7	12.4	19.2
2450	Children's Clothing	6.1	6.5	6.7	9.8
2490	Other Clothing & Apparel Industries	24.5	25.4	26.0	6.1
	Totals	92.7	96.6	97.4	5.1

Source: Statistics Canada Catalogue Nos. 34-216, 34-217, 34-218.

Table 13

Production Workers in the Textile, Clothing and Footwear Industries by Province for Selected Years

	1970			1975			1980		
	Textiles and Knitting	Clothing	Footwear	Textiles and Knitting	Clothing	Footwear	Textiles and Knitting	Clothing	Footwear
Quebec	41532	55903	8199	41707	58756	7457	35682	51042	5452
Ontario	29160	20658	6635	30984	19773	6906	31064	21356	7402
Canada	75817	86617	15352	78017	89347	14809	72172	83452	13262

	1983(a)			1984		
	Textiles	Clothing	Footwear	Textiles	Clothing	Footwear
Quebec	24442	56609	5726	18882	56808	5644
Ontario	19470	28001	8318	17560	25115	8752
Canada	47508	96636	14465	47068	97419	14886

Note: (a) Observations for 1983 and 1984 are based on the SIC code 1980: The Knitting category is amalgamated by Textiles and Clothing and the Footwear category includes Rubber footwear.

Source: Statistics Canada Cat. Nos. 31-203, 34-223, 34-221, 34-216, 34-217, 34-218, 33-002.

Table 14

Share of Textiles, Knitting, Clothing and Footwear in Total Employment and Total Real Domestic Product (1)

Category	1971		1975		1980		1981		1982		1983	
	RDP	Emp.	RDP	Emp.	RDP	Emp.	RDP	Emp.	RDP	Emp.	RDP	Emp.
Textiles and Knitting	4.3	5.7	4.1	5.2	4.1	4.9	4.2	4.8	3.9	4.6	4.0	4.7
Clothing	3.3	6.0	3.1	5.7	2.9	5.2	2.9	5.2	3.0	5.3	3.0	5.2
Footwear (2)	0.5	1.1	0.4	1.4	0.4	0.8	0.5	0.9	0.4	0.8	0.4	1.0
Total Share	8.1	12.8	7.6	12.3	7.4	10.9	7.6	10.9	7.3	10.7	7.4	10.9

Note: (1) employment data are based on total activity and RDP is in constant 1971 dollars.
(2) employment data for footwear 1983 include rubber footwear.

Source: Statistics Canada Cat. Nos. 31-203, 61-213.
Textile and Clothing Board (1984), Report On Textiles and Clothing 1984, Ottawa.

Table 15

Imports of Textile and Knitting, 1971-1983
(million dollar)

SIC Code	Category	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
1810	Cotton Yarn & Cloth Mills	95.8	131.7	134.9	169.2	135.7	191.8	178.5	195.6	226.0	214.5	216.8	160.5	206.8
1820	Wool Yarn & Cloth Mills	28.4	36.0	55.1	46.2	45.6	55.1	64.3	87.6	113.4	101.4	129.0	113.4	126.6
1830	Man-made Fibre Yarn & Cloth Mills	194.4	247.8	310.6	364.6	332.4	410.2	433.0	539.2	747.1	644.8	810.0	663.5	835.6
1840	Cordage & Twine Industry	18.1	19.5	27.8	77.1	58.3	26.3	35.3	37.6	50.3	53.6	48.3	41.7	41.4
1851	Fibre Processing Mills	16.4	22.4	33.7	29.4	27.7	37.0	39.1	44.7	58.4	52.0	51.4	35.5	37.2
1852	Pressed & Punched Felt Mills	0.8	0.8	1.1	1.2	0.8	0.8	1.4	1.3	1.9	1.7	2.0	1.3	1.9
1860	Carpet, Mat & Rug Industry	24.1	35.4	49.7	61.3	64.9	69.1	61.2	56.4	58.1	69.9	81.0	62.6	80.1
1870	Cotton & Jute Bags Canvas Industries	1.9	5.0	5.1	9.2	6.0	6.2	7.3	8.2	13.2	14.3	16.6	16.7	16.8
1891	Thread Mills	3.3	3.3	3.8	5.3	5.0	4.9	5.2	7.1	8.6	8.7	8.7	7.7	8.5
1892	Narrow Fabrics	12.5	13.4	15.0	16.5	16.1	16.8	19.1	23.4	32.5	31.3	37.2	33.2	41.8
1893	Embroidery	2.8	3.7	4.1	4.5	4.7	5.4	4.8	7.2	6.7	3.5	5.7	5.1	7.1
1899	Misc. Textiles	84.0	102.8	112.4	139.5	126.7	153.5	159.2	186.1	214.9	257.6	277.1	236.8	283.6
	Textile Industries Total	482.7	622.1	753.4	924.1	824.1	977.2	1008.6	1194.5	1531.3	1453.5	1684.0	1378.1	1686.1
2310	Hosiery Mills	3.4	3.6	4.3	6.0	12.2	15.3	18.2	18.2	24.4	19.9	19.2	19.8	24.8
2390	Knitting Mills except Hosiery	164.7	195.9	185.4	213.6	264.7	331.1	292.5	302.0	337.4	332.3	379.5	361.5	457.9
	Knitting Mills Total	168.1	199.5	189.7	219.6	276.9	346.4	310.7	320.2	361.8	352.2	398.7	381.3	482.7

Source: DRIE (1984), Commodity Trade by Industrial Sector Historical Summary 1966-1983, Ottawa.

Table 16

Imports of Textiles for Selected Years
(million dollars)

SIC Code 1980	Category	1966	1970	1975	1980	1985	Average annual rate of growth 1970-1985 (per cent)
181	Man-made Fibre & Filament Yarns	36.8	79.8	151.8	262.1	364.1	10.0
182	Spun Yarn and Woven Cloth	238.9	198.2	342.0	663.0	1011.7	10.7
183	Broad Knitted Fabrics	9.7	52.9	76.0	68.6	83.3	2.9
191	Natural Fibres Processing and Felt Products	46.2	25.0	31.3	56.4	51.0	4.6
192	Carpet, Mat & Rugs	17.1	21.6	65.0	70.0	111.8	10.8
193	Canvas and Related Products	0.7	1.3	4.3	8.0	12.4	15.1
199	Other Textile Products	85.3	120.0	223.0	375.6	473.0	9.0
	Total Imports (1)	434.7	498.8	893.5	1503.7	2107.4	9.4

Note: (1) Total may not add up due to rounding.

Source: DRIE (1986), Commodity Trade by Industrial Sector, Historical Summary 1966-1985, Ottawa.

Table 17
Clothing Imports, 1975-1984
(million garments)

Category	1975	1978	1979	1980	1981	1982	1983	1984
All clothing (control nos. 32, 37, 50)	180.9	163.7	167.3	141.3	165.5	166.4	202.4	237.3
Winter Outerwear	2.0	1.6	2.4	1.5	1.5	1.6	1.7	1.6
Pants, shorts and overalls	27.5	23.7	23.4	21.3	25.0	24.9	32.5	34.3
Blouses, shirts, t-shirts and sweatshirts	62.6	60.1	57.9	43.5	53.4	52.2	60.9	70.7
Sleepwear, bath-robes and dressing gowns	4.9	4.5	6.2	3.9	5.0	4.9	6.3	7.7
Rainwear	1.2	1.6	1.8	1.7	1.4	1.2	1.7	2.3
Dresses, skirts, suits set and co-ordinates	14.8	13.1	15.4	12.8	16.2	16.0	23.7	29.4
Foundation garments	2.5	2.0	2.5	2.0	2.1	1.5	2.8	3.1
Swimwear	3.0	2.5	2.9	2.8	2.9	3.0	4.3	6.6
Underwear	14.5	13.0	14.6	13.4	14.4	14.2	16.3	19.3
Outer jackets, coats and shopcoats	5.1	4.3	5.2	5.3	7.4	8.7	9.2	13.4
Sportscoats, blazers and fine suits	0.6	0.7	0.9	0.6	0.4	0.6	0.4	0.7
Tailored collar shirts	12.5	12.5	13.4	12.2	11.8	14.1	14.4	18.3
Sweaters, pull-overs and cardigans	29.5	24.1	20.5	20.4	23.9	23.1	28.0	29.7

Source: Canada, Textile and Clothing Board (1985), Textile and Clothing Inquiry, Vol. 2, Ottawa.

Table 18

Import of Clothing for Selected Years
(million dollars)

SIC Code 1980	Category	1966	1970	1975	1980	1985	Average annual rate of growth 1970-1985 (per cent)
243	Men's & Boys' Clothing	38.9	75.5	220.7	334.3	723.2	15.1
244	Women's Clothing	16.8	29.4	90.1	172.7	381.8	17.4
245	Children's Clothing	----	----	8.0	15.6	36.8	10.1
249	Other Clothing & Apparel	40.4	58.0	143.3	265.7	540.7	15.0
	Total Imports (1)	96.1	162.9	462.1	788.3	1682.5	15.7

Note: (1) Total may not add up due to rounding.

Source: DRIE (1986), Commodity Trade by Industrial Sector, Historical Summary 1966-1985, Ottawa.

Table 19

Clothing Imports, 1975-1984
(million pieces)

Source	1975	1978	1979	1980	1981	1982	1983	1984
Imports from Developed Countries	25.3	18.6	20.5	18.2	18.5	16.8	16.7	20.3
Imports from the U.S.	10.7	7.2	9.2	9.8	10.0	7.7	6.8	6.7
Imports from low-cost countries	151.7	143.2	144.4	121.7	146.0	148.6	184.6	213.9
Total Imports	180.9	163.8	167.3	141.3	165.5	166.4	202.4	237.3

Source: Canada, Textile and Clothing Board (1985), Textile and Clothing Inquiry, Vol. 2, Ottawa.

Table 20

Imports of Men's/Boys' Footwear, 1973-1985
(million dollar)

Year	Boots and Shoes, Work, Leather	Boots and Shoes, Dress, Leather	Boots and Shoes, Dress, NES	Sandals, Except Beach Type	Cowboy Boots	Boots and Shoes, Work, NES	Total
1973	1.5	1.9	1.8	0.9	1.7	0.4	8.2
1974	3.4	2.5	3.2	1.2	2.8	0.5	13.6
1975	3.3	27.2	4.0	1.7	3.3	0.2	39.7
1976	2.9	31.6	4.9	2.0	4.1	0.4	46.0
1977	3.3	38.6	5.4	2.6	4.4	0.5	54.8
1978	2.9	38.7	5.2	2.5	3.0	0.4	52.6
1979	3.4	40.6	4.7	1.6	3.6	0.7	54.7
1980	2.7	38.2	7.5	2.7	5.8	0.7	57.8
1981	2.7	45.4	11.9	1.7	11.1	1.1	73.7
1982	2.2	45.0	11.4	1.8	5.6	0.4	66.4
1983	1.8	43.0	15.8	1.5	4.1	0.5	66.8
1984	2.6	51.7	18.6	1.4	4.0	0.6	78.9
1985	2.8	56.5	22.3	1.4	5.0	0.5	88.5

Source: Canadian Import Tribunal (1985), Report Respecting the Canadian Footwear Industry, Ottawa.
Statistics Canada, Catalogue No. 65-203.

Table 21

Imports of Women's/Girls' Footwear, 1973-1985
(million dollar)

Year	Boots & Shoes, Dress Leather Cemented	Boots & Shoes, Dress Leather NES	Boots & Shoes, Dress, Cemented NES	Boots & Shoes Dress, NES	Sandals, Leather, Cemented	Sandals, Leather, NES	Sandals, Plastic	Sandals, NES	Wooden Footwear	Total*
1973	11.8	2.9	2.0	1.3	5.6	1.8	4.3	0.5	1.5	31.7
1974	18.2	3.7	1.7	2.6	4.8	2.6	5.7	0.9	1.6	41.8
1975	26.3	4.6	1.5	2.5	8.5	3.8	5.1	1.4	2.8	56.6
1976	35.5	6.5	3.5	4.9	8.1	4.8	6.7	1.7	4.0	75.3
1977	41.9	6.9	4.6	4.1	9.1	4.5	7.4	2.6	4.6	85.7
1978	36.2	9.1	6.9	6.4	12.0	4.3	8.8	9.9	7.6	101.0
1979	40.0	20.6	7.6	4.1	14.3	8.7	9.0	12.9	7.6	124.8
1980	42.0	22.1	7.7	5.7	13.7	11.8	12.0	12.6	3.8	131.5
1981	51.7	26.4	10.6	10.5	15.3	12.0	16.2	12.2	2.1	156.8
1982	75.1	17.9	13.7	9.2	23.7	9.1	12.8	7.1	0.8	169.4
1983	92.3	18.1	33.5	8.6	14.3	2.5	7.7	4.9	0.2	182.0
1984	110.3	18.2	44.1	10.5	13.0	3.1	7.0	4.6	0.2	211.0
1985	123.1	18.4	46.0	12.8	11.5	2.9	6.9	3.3	0.1	225.1

*Total may not add up due to rounding.

Source: Canadian Import Tribunal (1985), Report Respecting the Canadian Footwear Industry, Ottawa.
Statistics Canada Catalogue No. 65-203.

Table 22
Imports of Children's/Infants' Footwear, 1973-1985
(million dollar)

Year	Boot and Shoes Leather	Boot and Shoes NES	Sandals, Except Beach Type	Total*
1973	2.0	0.4	0.5	2.9
1974	2.9	0.9	0.7	4.5
1975	2.7	0.8	0.8	4.4
1976	3.3	1.4	1.5	6.2
1977	3.5	1.2	1.8	6.5
1978	2.6	2.1	1.7	6.4
1979	2.2	3.0	2.5	7.6
1980	1.9	2.7	1.8	6.4
1981	2.6	3.3	1.9	7.8
1982	2.9	3.7	2.0	8.6
1983	2.5	4.3	1.1	7.9
1984	2.6	4.9	1.5	9.0
1985	3.4	5.7	0.9	10.0

*Totals may not add up due to rounding.

Source: Canadian Import Tribunal (1985), Report Respecting the Canadian Footwear Industry, Ottawa. Statistics Canada Cat. No. 65-203.

Table 23

Exports of Textile and Knitting, 1971-1983
(million dollar)

Category	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Cotton Yarn & Cloth Mills	16.6	19.8	30.0	24.4	17.6	17.3	13.9	11.6	11.9	18.4	15.3	16.2	16.7
Wool Yarn & Cloth Mills	9.9	10.2	12.5	15.0	13.0	11.4	14.7	19.3	22.6	26.2	27.0	25.8	22.3
Man-made Fibre Yarn & Cloth Mills	41.1	42.4	60.4	78.1	58.9	71.9	101.0	124.9	159.4	222.6	270.0	220.4	213.3
Cordage and Twine Industry	1.7	1.5	1.1	3.0	2.6	1.5	2.3	2.3	2.3	2.3	3.4	4.5	4.4
Fibre Processing Mills	0.2	0.2	0.4	0.6	0.5	2.7	1.3	0.5	0.5	0.8	0.8	0.6	0.8
Pressed & Punched Felt Mills	0.1	0.1	0.1	0.2	0.2	0.3	1.0	1.1	0.8	0.6	0.7	1.0	1.7
Carpet, Mat & Rug Industry	3.6	3.4	5.4	7.5	8.3	12.5	15.3	30.7	59.6	66.1	55.1	42.8	36.1
Cotton & Jute Bags, Canvas Industries	0.6	0.7	0.9	2.0	1.8	0.6	0.6	1.0	1.7	1.8	1.0	3.4	3.6
Narrow Fabrics	0.9	1.1	1.1	0.9	1.1	1.5	1.0	0.6	1.8	1.2	1.3	1.4	2.2
Misc. Textiles	17.0	15.8	21.7	34.0	25.7	28.9	31.3	34.1	45.0	50.0	60.9	73.5	76.1
Textile Industries Total	91.9	95.2	133.7	165.7	129.6	148.6	182.3	226.2	305.7	390.1	453.1	389.6	377.1
Hosiery Mills	0.9	1.0	1.6	2.1	0.7	1.3	1.3	1.7	1.0	1.6	1.8	1.4	1.6
Knitting Mills, Except Hosiery	11.4	12.7	13.1	12.4	10.2	12.2	9.8	12.4	14.6	13.8	16.2	14.4	13.5
Knitting Mills Total	12.3	13.7	14.7	14.5	10.9	13.5	11.1	14.1	15.6	15.4	18.0	15.8	15.1

Source: DRIE (1984) Commodity Trade by Industrial Sector, Historical Summary 1966-1983, Ottawa.

Table 24

Exports of Textiles for Selected Years
(million dollars)

SIC Code 1980	Category	1966	1970	1975	1980	1985	Average annual rate of growth 1970-1985 (per cent)
181	Man-made Fibre & Filament Yarns	6.9	7.1	22.0	162.3	191.4	23.0
182	Spun Yarn and Woven Cloth	39.1	53.4	67.6	140.9	124.3	5.4
183	Broad Knitted Fabrics	1.7	3.0	5.6	6.0	3.4	0.8
191	Natural Fibres Processing and Felt Products	3.1	1.7	4.7	8.9	25.0	18.3
192	Carpet, Mat & Rugs	3.5	3.7	8.3	66.1	48.4	17.4
199	Other Textile Products	17.0	21.5	27.1	47.9	91.2	9.4
	Total Exports (1)	71.4	90.4	135.2	396.0	483.8	11.1

Note: (1) Total may not add up due to rounding.

Source: DRIE (1986), Commodity Trade by Industrial Sector, Historical Summary 1966-1985, Ottawa.

Table 25

Export of Clothing for Selected Years
(million dollars)

SIC Code 1980	Category	1966	1970	1975	1980	1985	Average annual rate of growth 1970-1985 (per cent)
243	Men's & Boys' Clothing	7.7	27.8	42.0	62.5	77.8	6.6
244	Women's Clothing	0.8	12.9	17.0	16.9	33.4	6.1
245	Children's Clothing	----	----	1.3	1.0	3.2	5.8
249	Other Clothing & Apparel	23.1	34.6	48.6	151.4	207.4	11.8
	Total Exports (1)	31.6	75.3	109.0	231.8	321.9	9.5

Note: (1) Total may not add up due to rounding.

Source: DRIE (1986), Commodity Trade by Industrial Sector, Historical Summary 1966-1985, Ottawa.

Table 26

Export of Footwear, 1971-1985
Including Rubber and Plastic Footwear
(million dollars)

Category	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Boot and Shoes Men's/Boys	2.3	2.5	5.1	5.3	6.7	6.1	6.4	8.8	18.8	18.5	18.9	26.4	25.3	13.4	13.7
Boots and Shoes Women/Child	2.4	2.8	3.8	2.6	2.7	5.9	6.3	4.4	7.3	8.6	9.6	11.8	11.4	11.9	11.2
Slippers/House Footwear	0.9	0.8	0.8	1.0	0.3	0.4	0.2	0.1	0.3	0.4	0.5	0.4	0.3	0.3	0.6
Rubber and Plastic Footwear	3.9	4.3	5.1	6.8	1.4	0.5	0.3	0.3	0.6	0.4	0.5	0.3	0.9	18.3	19.3
Special Purpose Footwear and NES	3.9	3.2	3.6	1.9	8.5	10.9	10.0	26.1	14.8	9.0	6.2	10.4	8.9	8.1	10.3
Total	13.3	13.6	18.3	17.6	19.7	23.8	31.1	39.8	41.7	36.9	35.7	49.3	46.8	52.0	55.1

Sources: Anti-Dumping Tribunal (1981) Report of the Anti-Dumping Tribunal Respecting The Canadian Footwear Industry, Ottawa.
Statistics Canada Catalogue No. 65-202.

Table 27

Import Penetration Ratios in Textile and Knitting Industries, 1971-1983
(per cent)

Category	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
Cotton Yarn & Cloth Mills	26.3	31.1	34.3	32.8	28.6	35.5	31.9	30.9	28.0	24.9	21.5	20.7	22.9
Wool Yarn & Cloth Mills	20.5	22.8	28.2	23.5	23.4	25.7	28.4	33.5	36.2	32.5	34.4	32.5	34.7
Man-made Fibre, Yarn & Cloth Mills	30.0	32.6	33.8	35.7	33.4	37.6	36.6	38.4	41.5	38.0	44.0	39.6	39.6
Cordage and Twine Industry	54.5	59.3	69.2	81.0	71.6	61.9	70.0	68.5	64.1	65.4	62.3	61.1	56.9
Fibre Processing Mills	45.8	52.5	60.4	53.2	54.4	60.6	66.1	65.1	68.6	64.8	80.6	78.8	76.6
Pressed & Punched Felt Mills	6.0	6.8	6.7	7.2	6.0	6.4	5.2	3.7	3.1	3.2	3.8	1.9	1.6
Carpet, Mat & Rug Industry	11.5	12.8	14.1	15.2	15.2	15.6	13.1	11.4	10.7	12.2	11.5	10.9	10.5
Cotton & Jute Bags, Canvas Industry	1.6	7.3	6.0	9.5	6.2	6.2	7.3	11.7	5.8	8.8	9.2	9.1	8.7
Thread Mills	12.0	11.1	10.0	15.1	15.1	10.8	12.8	14.5	14.5	13.5	11.9	12.0	12.5
Narrow Fabrics	24.8	25.0	24.5	24.5	24.6	23.1	24.9	26.0	31.6	30.6	31.0	32.6	32.8
Embroidery	11.8	16.7	20.2	17.3	16.0	18.5	13.3	17.9	16.2	7.6	11.3	11.9	14.5
Misc. Textiles	34.4	35.0	33.0	35.2	30.3	30.7	28.7	29.6	28.3	27.4	27.1	24.2	22.5
Hosiery	2.8	3.2	4.1	6.0	10.4	12.1	13.4	12.0	13.4	9.0	8.1	7.8	8.7
Knitting Mills except Hosiery	32.4	34.6	30.4	30.2	34.1	39.4	36.4	34.7	33.8	30.9	32.7	33.7	36.2

Source: DRIE (1984), Commodity Trade by Industrial Sector, Historical Summary 1966-1983, Ottawa. Statistics Canada Cat. No. 31-203.

Table 28

Import Penetration Ratios for Total and Imports From Low-Cost Countries in Textile Industries, 1975-84
(per cent of total units)

Category		1975	1978	1979	1980	1981	1982	1983	1984
Woollen and Worsted	total	37	43	49	46	53	57	56	60
	low-cost	7	10	11	11	14	13	12	13
Rayon, Nylon and Polyester Fabrics	total	N/A	43	41	47	44	42	43	44
	low-cost	N/A	5	5	5	4	4	6	6
Coated Fabrics	total	53	48	49	45	51	50	55	62
	low-cost	neg.	3	3	1	1	1	3	3
Terry Towels, Washcloths	total	39	42	42	40	47	41	47	52
	low-cost	N/A	29	27	26	30	29	35	39
Bedsheets	total	43	29	22	25	29	19	21	27
	low-cost	14	11	7	7	11	5	7	11
Hosiery	total	29	31	35	27	29	28	29	29
	low-cost	15	14	16	11	14	16	18	19
Cotton Yarns	total	32	44	51	49	45	45	58	54
	low-cost	13	26	26	25	28	31	43	40
Polyester Cotton Yarns	total	17	20	25	30	30	28	42	39
	low-cost	neg.	9	4	14	16	15	29	36
Cotton Spun Acrylic	total	N/A	17	13	12	14	14	16	10
	low-cost	N/A	1	neg.	1	1	2	8	8
Worsted Spun Acrylic Yarns	total	32	32	40	38	40	39	39	38
	low-cost	N/A	18	17	12	18	20	19	21
Acetate Rayon, Nylon and Polyster Filament Yarns	total	N/A	18	27	21	21	24	32	36
	low-cost	N/A	neg.	neg.	neg.	neg.	neg.	2	4
Cotton, Polyester-cotton, Corduroy and Denim Fabrics	total	N/A	61	61	52	50	53	55	63
	low-cost	N/A	30	26	23	26	28	34	42
Pillowcases	total	55	39	39	33	38	30	28	29
	low-cost	28	21	24	13	19	17	15	12
Cardage, Ropes and Twine	total	80	78	77	74	71	61	65	67
	low-cost	32	47	56	49	49	51	48	51
Work Gloves	total	52	47	58	59	62	66	68	71
	low-cost	47	43	54	54	56	59	64	66
Hand Bags	total	N/A	72	63	62	63	67	74	81
	low-cost	N/A	64	55	54	56	60	66	75

Sources: Textile and Clothing Board (1985), Textile and Clothing Inquiry Vol.2, Ottawa.

Table 29

Clothing: Import Penetration Ratios, 1978-1984
(in percent)

	Total	Low cost countries	HK/ SK	ASEAN	Developed countries	Others
All Clothing						
1978	32	28	13.0	0.6	3.6	.3
1980	27	24	9.8	1.3	3.0	.2
1982	33	30	13.0	1.9	3.0	.1
1984	41	37	13.0	4.6	3.5	.5
Winter Outerwear						
1978	20	19	17.0	.4	1.0	—
1980	24	22	19.0	1.6	1.5	—
1982	26	22	19.0	.6	3.6	—
1984	32	30	23.0	1.9	2.1	—
Pants						
1978	29	25	10.0	.1	2.4	.9
1980	25	21	7.9	.4	3.2	.7
1982	33	29	7.8	2.9	3.3	.4
1984	38	35	11.3	4.9	3.0	.2
Blouses						
1978	54	50	22.5	.6	3.6	.1
1980	43	39	12.9	1.8	3.8	—
1982	46	43	16.7	1.2	3.3	—
1984	53	49	16.0	5.5	3.0	.2
Sleepwear						
1978	16	14	.5	.3	1.5	—
1980	11	10	.3	.4	1.1	—
1982	14	13	.5	.5	1.0	—
1984	20	19	1.4	3.1	1.3	—
Rainwear						
1978	57	51	18.0	9.3	5.2	—
1980	51	48	16.0	—	3.4	—
1982	54	51	15.0	—	3.4	—
1984	65	63	12.0	.2	2.2	—
Dresses, Skirts						
1978	27	19	7.9	2.0	7.4	.2
1980	23	17	5.3	3.4	5.0	.2
1982	30	24	6.1	4.1	6.0	.2
1984	44	38	6.6	8.5	5.0	.4

contd.....

Table 29 (cont'd)

	Total	Low Cost countries	HK/ SK	ASEAN	Developed countries	Others
Foundation Garment						
1978	9	5	2.2	3.1	3.8	—
1980	10	5	1.9	2.9	4.6	—
1982	9	6	2.8	1.5	3.1	—
1984	16	11	6.0	1.0	5.0	—
Swimwear						
1978	42	30	20.0	.2	10.0	1.4
1980	40	31	9.4	.1	8.6	.8
1982	39	32	5.9	.3	6.8	.8
1984	55	50	11.0	8.0	4.2	.8
Underwear						
1978	12	9	5.8	.3	2.5	.5
1980	12	9	5.5	.2	2.6	.3
1982	14	11	6.9	.5	2.5	.1
1984	17	12	7.0	2.0	3.5	1.5
Outer Jackets						
1978	37	29	22.0	.4	6.5	.7
1980	42	35	17.0	3.0	6.5	.7
1982	59	54	28.0	2.1	3.8	.2
1984	70	66	37.0	6.4	3.9	.3
Sportscoats						
1978	15	12	6.4	—	2.5	—
1980	17	14	6.5	.7	2.9	—
1982	19	17	8.0	.4	2.2	—
1984	22	19	8.8	.4	2.9	.3
Fine Suits						
1978	18	16	9.2	—	1.6	—
1980	18	16	7.6	.6	1.8	—
1982	22	20	8.0	.5	1.8	.1
1984	18	15	9.9	.8	3.3	.1
Tailored Shirts						
1978	38	37	22.0	1.2	1.5	—
1980	40	38	20.0	2.6	2.3	—
1982	53	51	27.0	6.3	2.0	—
1984	64	62	28.0	6.2	1.7	—
Sweaters						
1978	56	50	25.0	.1	6.0	.2
1980	54	49	26.0	.9	5.2	—
1982	63	58	33.0	1.5	4.5	.4
1984	67	61	34.0	3.2	5.9	.3

Source: Canada, Textile and Clothing Board (1985, Textile and Clothing Inquiry, Vol. 2, Ottawa.

Table 30

Import Penetration Ratios for the Footwear Sector, 1971-1984
(percentage)

Year	Total Footwear	Men's and Boys' Footwear	Women's and Girls' Footwear	Children's and Infants' Footwear	Slipper and House Footwear	Special Purpose Footwear
1971	49	30	36	40	56	79
1972	50	32	40	43	46	81
1973	49	31	39	37	55	74
1974	50	33	40	46	58	77
1975	49	33	41	42	47	80
1976	55	36	51	55	59	84
1977	58	36	50	57	70	89
1978	57	32	51	53	63	93
1979	53	28	49	55	63	80
1980	56	31	48	53	58	87
1981	60	37	51	59	56	90
1982	62	39	54	69	54	98
1983	62	41	51	70	58	94
1984	61	39	53	71	47	95

Source: Canadian Import Tribunal (1985), Report Respecting The Canadian Footwear Industry, Ottawa.

Table 31

Import Restraint Utilization Rates in Textile Products, 1979-1983
(per cent)

Products	1979	1980	1981	1982	1983
Yarns	73.7	59.5	73.6	73.7	72.5
Fabrics	80.7	55.4	58.4	79.8	75.5
Sheets and Pillowcases	42.5	41.8	47.0	29.8	51.2
Towels	86.0	76.2	84.6	75.1	108.6
Other Household Products	33.3	31.2	29.9	52.0	39.4
Miscellaneous Textiles	79.8	79.5	32.8	26.3	37.8
Work Gloves	99.1	63.0	55.0	75.4	85.3
Textile Handbags	55.8	50.8	65.6	87.9	70.7
Hosiery	101.2	69.4	92.3	98.7	119.0

Source: Textile and Clothing Board (1983), Annual Report on Textiles and Clothing 1983, Ottawa.
Textile and Clothing Board (1984), Report on Textiles and Clothing 1984, Ottawa.

Table 32

Footwear Quota Utilization Rates, 1977-1984
(per cent)

Year	Total	Men's/Boys'		Women's/Girls'			Children's/Infants'			Slippers Housewear	Special Purpose Footwear	Total Footwear
		Leather	Non-Leather	Total	Leather	Non-Leather	Total	Leather	Non-Leather			
1977-78	76.9	75.5	79.4	86.5	86.7	86.4	68.7	72.0	66.8	71.9	79.5	79.5
1978-79	80.3	78.1	84.1	88.5	87.8	89.3	70.7	70.6	70.8	75.7	73.2	81.1
1980-81	76.3	68.8	87.4	86.4	82.9	90.7	64.2	57.7	68.9	63.5	52.2	74.4
1981-82	95.0	102.4	93.6	87.9	85.9	88.3	76.8	56.1	77.8	85.3	84.8	87.0
1982-83	96.4	93.6	97.7	93.5	95.0	92.6	88.0	85.7	88.4	88.3	93.3	93.0
1983-84	93.2	91.7	93.9	93.0	92.2	93.3	93.5	83.5	95.4	87.4	83.9	90.8

Source: Canadian Import Tribunal (1985), Report Respecting The Canadian Footwear Industry, Ottawa.

Table 33

Nominal and Effective Tariffs on Imports

Industry	Nominal Tariffs				Effective Tariffs*			
	1966	1970	1975	1978	1966	1970	1975	1978
Textiles	16.3	14.2	14.2	12.5	22.9	17.9	20.3	18.7
Knitting Mills	26.2	27.6	24.1	22.9	37.4	43.0	34.5	35.0
Clothing	22.5	21.6	21.9	20.3	28.8	25.0	28.2	25.7

*simple effective tariff rates, calculated as the decline in value-added that may occur if tariff protection is removed.

Source: Economic Council of Canada (1983), The Bottom Line.Technology, Trade and Income Growth, Ottawa.

Table 34

Concentration Ratios in the Textile Sector 1970 and 1980
(per cent)

SIC (1970)	Industry		Leading Enterprise Concentration Ratios based on values of shipments					
			4	8	12	16	20	50
181	Cotton Yarn and Cloth Mills	1970	93.3	X	100.0	—	—	—
		1980	X	100.0	—	—	—	—
182	Wool Yarn and Cloth Mills	1970	38.1	58.6	72.2	81.1	88.2	X
		1980	48.0	71.2	84.6	92.1	96.8	100.0
1831	Fibre and Filament	1970	82.8	100.0	—	—	—	—
		1980	X	X	100.0	—	—	—
1832	Throwsters, Spun Yarn & Cloth Mills	1970	36.8	55.6	66.2	73.9	80.5	98.4
		1980	36.8	51.7	61.3	68.9	75.5	97.6
184	Cordage and Twine Industry	1970	77.4	94.1	97.7	99.4	100.0	—
		1980	70.6	88.9	95.2	98.2	99.8	
1851	Fibre Processing Mills	1970	49.3	71.2	85.5	93.8	98.9	100.0
		1980	63.9	87.0	95.9	X	100.0	—
1852	Pressed and Punched Felt Mills	1970	78.3	X	100.0	—	—	
		1980	67.9	93.2	X	100.0	—	—
186	Carpet, Mat and Rug Industry	1970	42.6	67.6	86.9	95.3	98.7	100.0
		1980	48.4	70.0	84.9	95.3	99.1	100.0
1872	Canvas Products	1970	34.3	47.7	56.9	63.1	67.2	85.7
		1980	29.1	42.3	50.7	57.4	62.7	83.5
188	Automobile Fabric Accessories	1970	83.8	96.8	99.4	99.8	100.0	100.0
		1980	X	98.4	99.5	99.9	100.0	100.0
1891	Thread Mills	1970	82.1	94.7	X	100.0	—	—
		1980	84.8	X	100.0	—	—	—
1892	Narrow Fabric Mills	1970	55.2	71.8	81.7	88.0	92.9	100.0
		1980	47.4	70.7	80.9	87.9	92.8	100.0
1893	Embroidery, Pleating	1970	27.7	44.8	55.0	61.7	67.5	88.5
		1980	X	58.9	71.0	77.7	83.4	97.7
1894	Textile Dyeing and Finishing	1970	41.7	60.9	72.5	79.7	84.5	98.6
		1980	45.1	60.8	70.1	76.3	81.2	96.8
1899	Miscellaneous Textile	1970	36.7	49.4	58.9	66.1	70.7	86.3
		1980	29.0	39.5	49.1	56.8	62.7	82.8
231	Hosiery	1970	24.9	39.0	51.0	61.1	67.8	91.5
		1980	29.2	46.8	61.4	73.1	81.5	99.2
2391	Knitted Fabric Manufacturers	1970	35.1	51.8	65.8	75.6	82.3	100.0
		1980	27.7	45.5	58.8	68.2	74.3	98.1
2392	Other Knitting Mills	1970	20.9	33.0	42.0	49.0	54.6	80.5
		1980	18.3	29.8	39.2	47.4	54.3	85.9

Source: Statistics Canada Cat. No. 31-402.

Table 35

Concentration Ratios in Clothing Industries, 1970 and 1980

SIC Code 1970	Industry	Leading Enterprise Concentration Ratios Based of Values of Shipments 4	8	12	16	20	50
2431	Men's Clothing Factories						
	1970	12.0	19.6	24.9	29.8	34.0	54.7
	1980	20.6	27.3	33.1	38.3	42.7	64.1
2432	Men's Clothing Contractors						
	1970	16.8	27.3	35.6	43.0	49.2	77.0
	1980	16.4	26.6	35.5	42.8	48.6	76.1
2441	Women's Clothing Factories						
	1970	8.0	11.7	14.9	17.8	20.3	35.6
	1980	6.4	11.9	16.4	20.5	24.0	42.7
2442	Women's Clothing Contractors						
	1970	8.8	14.9	20.1	23.9	27.3	46.8
	1980	6.9	11.9	15.6	18.9	21.9	39.9
245	Children's Clothing Industry						
	1970	13.1	24.6	34.1	40.8	46.8	78.6
	1980	21.0	31.9	39.8	46.3	52.6	84.1
248	Foundation Garment Industry						
	1970	54.6	72.1	83.0	91.1	96.9	100.0
	1980	66.3	88.8	96.8	99.7	100.0	—

Source: Statistics Canada Catalogue No. 31-402

Table 36

Concentration Ratios and Herfindahl Index in the Footwear Industry, 1970-1982

Year	Leading Enterprise Concentration Ratios Based on Values of Shipments						Herfindahl Index (on value added)
	4	8	12	16	20	50	
1970	0.25	0.38	0.47	0.54	0.60	0.62	0.0276
1974	0.24	0.39	0.48	0.55	0.61	0.83	---
1976	0.24	0.39	0.47	0.54	0.60	0.83	---
1978	0.25	0.40	0.52	0.60	0.66	0.87	---
1979	0.22	0.36	0.48	0.56	0.62	0.85	---
1980	X	0.37	0.47	0.54	0.59	0.84	0.0266
1981	X	0.39	0.48	0.55	0.61	0.84	---
1982*	0.21	0.35	0.45	0.53	0.59	0.84	---

* Preliminary
X Confidential

Source: Canadian Import Tribunal (1985) Report Respecting The Canadian Footwear Industry, Ottawa. Statistics Canada Catalogue No. 31-402.

Table 37

Herfindahl Indices (Value Added) for the Textile Sector

SIC (1970)		1970	1980
182	Wool Yarn and Cloth Mills	0.0556	0.0816
1831	Fibre and Filament Yarn Manufacturers	0.2338	0.3384
1832	Throwsters, Spun Yarn & Cloth Mills	0.0496	0.0496
184	Cordage and Twine Industry	0.2429	0.1950
1851	Fibre Processing Mills	0.0934	0.1594
1852	Pressed and Punched Felt Mills	0.2039	0.1516
186	Carpet, Mat and Rug Industry	0.0821	0.1037
1871	Cotton and Jute Bags Manufacturers	0.1729	0.1240
1872	Canvas Products Manufacturers	0.0321	0.0337
188	Automobile Fabric Accessories Industry	0.2449	0.2775
1891	Thread Mills	0.3384	0.2750
1982	Narrow Fabric Mills	0.1102	0.0738
1983	Embroidery	0.0339	0.0587
1894	Textile Dyeing and Finishing Plants	0.0462	0.0933
1899	Miscellaneous Textiles	0.0838	0.0490
231	Hosiery Mills	0.0336	0.0515
2391	Knitted Fabric Manufacturers	0.0566	0.0408
2392	Other Knitting Mills	0.0215	0.0212

Source: Statistics Canada, Cat. No. 31-402.

Table 38

Value-Added Per Production Worker In The Textile and Knitting Industries, 1970-1983[a]
(thousand dollars)

SIC 1970	Category	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	Average Annual Rate of Growth in percent
1810	Cotton & Cloth Mills	10.4	11.5	12.6	13.3	18.8	17.1	21.8	22.0	24.4	33.3	36.8	40.6	38.6	46.8	11.4
1820	Wool & Cloth Mills	10.8	11.6	12.6	14.7	17.2	16.1	18.9	20.8	24.2	28.6	30.9	42.2	46.4	48.1	11.3
1831	Fibre & Filament Yarns	19.6	18.4	20.9	23.8	27.1	27.2	26.2	34.3	42.3	56.0	60.3	68.1	56.9	71.7	9.7
1832	Throwsters, Yarn & Cloth	10.9	9.7	11.3	12.4	15.0	15.8	17.9	20.9	23.8	27.5	30.8	35.0	33.4	41.0	9.9
1840	Cordage & Twine	9.9	12.1	14.1	17.0	23.9	24.2	16.9	21.4	24.2	32.1	31.2	34.6	39.7	43.2	10.3
1851	Fibre Processing	13.5	15.1	15.4	17.6	19.2	17.2	19.0	18.4	20.5	24.2	29.1	24.8	30.0	34.8	7.0
1852	Pressed & Punched Felt	12.1	15.6	16.2	18.3	20.0	17.2	19.2	21.5	25.5	26.3	28.4	33.8	34.8	39.5	8.8
1860	Carpet, Mat & Rug	15.1	16.7	18.5	22.1	24.8	25.1	29.5	31.9	33.6	38.7	42.6	56.7	47.0	64.2	10.9
1871	Cotton & Jute	11.7	11.8	12.1	13.2	17.7	16.9	17.9	19.7	18.4	24.4	27.7	30.8	27.5	30.9	7.2
1872	Canvas Products	8.2	8.9	10.1	11.4	14.8	14.9	16.3	16.2	17.4	22.1	24.9	28.0	27.9	29.0	9.4
1880	Auto Fabric	17.8	20.8	20.4	20.1	20.9	24.3	29.0	28.8	33.6	34.9	39.9	45.8	48.0	NA	7.3
1891	Thread Mills	13.9	15.9	17.0	16.9	20.8	17.7	24.4	26.0	30.3	36.4	43.0	48.8	43.2	46.4	9.0
1892	Narrow Fabric	10.5	12.1	12.8	13.5	15.7	15.3	18.4	19.2	19.8	21.5	23.8	26.5	31.7	33.0	8.5
1893	Embroidery	8.5	8.9	9.2	10.3	11.2	11.8	12.9	15.0	15.8	16.9	19.4	20.9	21.4	23.1	7.4
1894	Textile Dyeing	11.3	13.4	14.0	14.6	15.4	12.8	17.1	17.2	21.0	24.3	25.9	26.4	30.1	32.8	7.9
1899	Misc. Textiles	12.6	13.1	13.7	14.9	19.0	20.4	21.9	27.4	28.8	31.5	37.4	41.6	44.0	45.0	9.5
2310	Hosiery	7.8	8.5	9.3	9.8	11.1	12.1	13.4	15.0	16.7	20.2	20.6	24.2	26.9	30.6	10.3
2391	Knitted Fabric	14.9	17.5	14.9	15.9	17.7	17.3	19.5	21.8	27.0	29.2	32.1	38.4	34.0	43.9	8.0
2392	Other Knitting Mills	7.5	8.2	8.9	9.4	10.8	12.7	13.4	15.0	17.4	19.1	21.4	23.3	25.2	24.7	8.9

Note: (a) observations for 1983 are estimates based on the 1970 SIC code. Source: Statistics Canada Cat. No. 31-203.

Table 39

Clothing: Value-Added Per Production Worker, 1978-1982
(thousand dollars)

Commodity Classification SIC Code 1970	1978	1979	1980	1981	1982	Average Annual Rate of Growth (per cent)
Men's Clothing Contractors SIC 2432	11.3	13.5	14.2	14.7	16.2	7.5
Men's Clothing Factories SIC 2431	18.3	22.9	26.2	27.9	27.3	8.3
Women's Clothing Contractors SIC 2442	9.9	11.8	12.8	14.4	15.6	9.5
Women's Clothing Factories SIC 2441	20.0	23.1	24.5	27.6	27.9	6.9
Children's Clothing Industry SIC 2450	19.1	20.8	22.8	25.4	25.7	6.1
Foundation Garment Industry SIC 2480	19.8	24.1	28.2	27.1	32.3	10.3
Total Clothing	19.7	22.2	24.8	26.9	27.0	6.5

Source: Statistics Canada, Catalogue No. 31-203.

Table 40

Clothing: Value-Added per Production Worker, 1982-1984
(thousand dollars)

SIC Code 1980	Category	1982	1983	1984	Average Annual Rate of Growth (per cent)
2431	Men's & Boys' Coat Industry	26.2	24.5	27.5	1.6
2432	Men's & Boys' Suits & Jackets	26.6	26.6	28.3	2.0
2433	Men's & Boys' Pant Industry	29.2	32.0	35.1	6.3
2434	Men's & Boys' Shirts & Underwear	26.0	26.6	26.0	0
2435	Men's & Boys' Clothing Contractors	16.0	14.0	15.4	-1.5
2441	Women's Coats & Jackets	27.4	29.6	30.1	3.2
2442	Women's Sportswear	29.9	33.9	35.7	6.1
2443	Women's Dresses	29.9	34.5	37.9	8.2
2444	Women's Blouses & Shirts	26.7	29.5	29.6	3.5
2445	Women's Clothing Contractors	15.6	13.7	14.8	-1.6
2450	Children's Clothing	25.2	26.0	26.9	2.2
2490	Other Clothing & Apparel Industries	27.9	29.4	31.6	4.2
	Total Clothing	25.4	26.3	27.6	2.8

Source: Statistics Canada, Catalogue No. 31-203.

Table 41

Value-Added per Production Worker in the Footwear Industry
(thousand dollars)

1970	7.8
1971	8.1
1972	8.6
1973	9.7
1974	11.4
1975	11.9
1976	14.5
1977	16.5
1978	17.9
1979	21.1
1980	23.2
1981	25.3
1982	27.4
1983 (1)	27.9
1984	31.0
Average Annual Rate of Growth	9.6%

Note: (1) Observations for 1983 and 1984 include Rubber footwear.

Source: Statistics Canada Cat. No. 31-203, 33-002.

Table 42

(1)
Investment Expenditures in Textile, Clothing and Knitting Sectors 1971-1985
(million dollar)

	1971	1975	1980	1985	Average Annual Rate of Growth (per cent)
Textiles	74.8	163.2	164.0	207.7	7.0
Clothing	11.8	23.1	32.9	32.9	7.1
Knitting	15.7	11.0	27.1	25.0	3.1
Total	102.3	197.3	224.0	265.6	6.6

Note: (1) Investment includes expenditures on construction, machinery and equipment.

Source: Statistics Canada Cat. No. 61-205.

Table 43
Scale* of the Textile and Knitting Industry, 1970-1982
(thousand dollars)

SIC code 1970	Category	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	Percentage Change 1971-1983
1810	Cotton & Cloth Mills	3654	4133	4727	4805	6534	5458	6754	6800	7908	11676	12826	14964	11108	204
1820	Wool & Cloth Mills	1113	1126	1683	1756	1975	1778	2122	2324	2469	2802	2675	3557	3956	255
1831	Fibre & Filament Yarns	8810	7390	8980	11583	13228	10726	10389	12909	14414	18580	19123	22393	11736	33
1832	Throwsters, Yarn & Cloth	1267	1148	1533	1735	1993	1973	1980	2362	2740	3482	3823	3715	2998	137
1840	Cordage & Twine	392	391	360	447	626	798	490	556	610	644	684	627	676	72
1851	Fibre Processing	361	381	428	476	571	544	572	444	594	641	769	438	371	2
1852	Pressed & Punched Felt	389	404	452	516	501	394	462	658	831	923	1006	1612	1514	289
1860	Carpet, Mat & Rug	1827	2091	2789	3462	4171	3963	4681	5084	5403	5919	5992	7740	4573	150
1871	Cotton & Jute	316	316	324	434	550	502	452	529	472	665	789	801	632	100
1872	Canvas Products	99	105	121	148	173	201	197	200	201	247	308	329	304	207
1880	Auto Fabric	2337	3218	3859	4235	4379	5338	6989	8149	7966	7781	8474	13054	11200	379
1891	Thread Mills	578	719	720	748	921	712	1019	986	1147	1608	2350	2269	2229	286
1892	Narrow Fabric	413	510	539	613	748	720	812	828	983	960	957	1068	1020	147
1893	Embroidery	90	96	99	117	131	156	168	237	292	291	331	409	358	298
1894	Textile Dyeing	449	620	681	763	784	641	776	674	743	819	926	846	742	65
1899	Misc. Textiles	315	343	394	450	518	571	742	925	875	934	1130	1298	1227	289
2310	Hosiery	555	528	574	641	700	803	891	989	1080	1319	1466	1714	1834	230
2391	Knitted Fabric	756	830	814	939	1012	964	1016	1077	1327	1474	1536	1805	1444	91
2392	Other Knitting Mills	502	623	723	800	864	1025	1145	1188	1244	1414	1591	1796	1730	245

*Scale equals the ratio of value added to number of establishments in thousand dollars.
Source: Statistics Canada Catalogue No. 31-203.

Table 44

Size and Scale of Establishments in the Footwear Sector, 1970-1984

Year	Size*	Scale**
1970	81	631
1971	81	660
1972	86	741
1973	88	862
1974	85	971
1975	94	1119
1976	92	1341
1977	79	1304
1978	84	1498
1979	82	1717
1980	82	1891
1981	90	2280
1982	75	2064
1983(a)	82	2294
1984	86	2643

Note: (a) observations for 1983 and 1984 include Rubber Footwear.
* Size equals the number of employees per establishment.
** Scale equals value - Added per establishment in thousand dollar.
Source: Statistics Canada Cat. No. 31-203, 33-002.

Table 45

Average Hourly Earnings in Textile, Clothing and Footwear Industries
(dollars)

	1974	1975	1975	1977	1978	1979	1980	1981	1982	1983	1984
Textiles	3.39	3.35	4.50	5.00	5.38	5.90	6.44	7.06	7.82	8.52	9.11
Clothing	2.90	3.40	3.86	4.23	4.59	4.95	5.31	5.76	6.24	6.41	6.65
Footwear	2.86	3.32	3.77	4.13	4.38	4.78	5.20	5.70	6.12	6.36	6.74

Source: Canadian Import Tribunal (1985) Report Respecting the Canadian Footwear Industry, Ottawa.

Table 46

Cost Breakdown of the Footwear, Textile, Knitting, Clothing Industries and of Total Manufacturing
(million dollars and percentagesa)

	Value of Shipments of own Manufacture	Cost of Materials And Supplies		Cost of Direct Labour		Other Costs and Profit	
Shoe Factories							
1975	351.2	174.1	(49.6)	93.8	(26.7)	83.2	(23.7)
1980	618.7	306.5	(49.5)	142.1	(23.0)	169.9	(27.5)
1981	704.4	347.7	(49.3)	167.5	(23.8)	189.1	(26.8)
1982	651.0	307.0	(47.2)	152.3	(23.4)	191.6	(29.4)
1983(b)	686.4	338.4	(49.3)	168.9	(24.6)	173.6	(25.3)
Textile Industries							
1975	2439.0	1344.4	(55.1)	435.8	(17.9)	658.6	(27.0)
1980	4423.2	2417.7	(54.7)	709.9	(16.0)	1295.6	(29.3)
1981	5051.8	2789.0	(55.2)	774.6	(15.3)	1488.0	(29.5)
1982	4507.5	2416.6	(53.6)	711.4	(15.8)	1379.4	(30.6)
1983(c)	5339.9	2847.8	(53.3)	829.9	(15.5)	1662.1	(31.1)
Knitting Mills							
1975	624.4	323.7	(51.8)	141.8	(22.7)	158.8	(25.4)
1980	944.7	506.1	(53.6)	198.2	(21.0)	240.3	(25.4)
1981	1012.2	541.7	(53.5)	208.3	(20.6)	262.2	(25.9)
1982	947.7	491.6	(51.9)	195.0	(20.6)	261.1	(27.5)
1983(d)	—	—	—	—	—	—	—
Clothing							
1975	2306.6	1201.3	(52.1)	573.2	(24.9)	523.0	(23.1)
1980	3867.1	1934.2	(50.0)	893.3	(23.1)	1039.6	(26.9)
1981	4090.2	2019.6	(49.4)	954.3	(23.3)	1116.2	(27.3)
1982	3962.3	1902.6	(48.0)	935.0	(23.6)	1124.6	(28.4)
1983(c)	4191.0	2052.3	(49.0)	1005.7	(24.0)	1132.9	(27.0)
Total Manufacturing							
1975	88427.0	51177.9	(57.9)	12669.2	(14.3)	24579.8	(27.8)
1980	168051.2	99779.9	(59.4)	22161.5	(13.2)	46109.7	(27.4)
1981	190927.2	114341.5	(59.9)	24532.8	(12.9)	52052.8	(27.2)
1982	187932.8	112059.6	(59.6)	24261.5	(12.9)	51611.7	(27.4)
1983	203255.9	119608.9	(58.8)	25748.8	(12.6)	57898.2	(28.5)

Notes: (a) Numbers in parentheses refer to percentage shares.
(b) estimate
(c) observations for 1983 are based on the 1970 SIC code
(d) No data available

Sources: Canadian Import Tribunal (1985), Report Respecting The Canadian Footwear Industry, Ottawa.
Statistics Canada Cat. 31-203.

Table 47
Government Assistance Programs
(million dollars)

Program	Objective	Type of Assistance	Expenditure by Sector Textiles	Clothing	Footwear	Total Expenditure Textile, Clothing, Footwear	Expenditure on TCF sectors as a proportion of total expenditures under the program (per cent)
Sum of DREE's Contribution 1968-1976	assist industries in slow-growth areas	investment incentive grants	..... 52.0			52.0	——
EDP Enterprise Development Program 1977-1984	assist small & medium sized firms to undertake high risk projects	loan guarantees, capital subsidies	0.29	0.23	0.73 (1980-1984)	1.25	0.5
RDIP Regional Development Incentives Program 1974-1984	create jobs, increase capital investment and modernization in slow-growth regions	loan guarantees, non-repayable and repayable contributions to capital costs	45.88	13.61	——	59.49	5.5
PAIT Program for the Advancement of Industrial Technology 1964-1977	promote the development of new and better products & processes with which to serve larger markets	loans	3.3		——	3.3	1.4

Table 47(1)

IRDP Industrial and Regional Development Program 1983-ongoing	promote the application of technology and innovations to existing industries, with emphasis on small & medium sized businesses	loan guarantees non-repayable or repayable contributions, grants for studies/ scholarships	1.59 (1983-1985)	0.02	----	1.16 (1983-1985)	0.3 (1983-1985)
CIRB Canadian Industrial Renewal Board 1981-1986	promote the revitalization and international competitiveness of the TCF sectors	loans, loan insurance, contributions to consulting costs and capital expenses				274.7 (SFP and IAP)	100
-----SFP Sector Firms Program	promote restructuring and modernization		120.20	80.10	22.80	223.10	100
-----IAP Labour Adjustment Program	provide assistance to workers affected by foreign competition in the TCF sectors	wage subsidies, mobility assistance enhanced training allowance incentives	..... 51.60			51.60	100
LAB Labour Adjustment Benefits 1981-86	protect older laid-off workers and to provide them with last-resort income maintenance	benefits equal to 60 per cent of the employee's average weekly insurable earnings prior to layoff	..... 70.70			70.70	100
Regular Canada Employment and Immigration Commission Manpower Assistnace Programs 1972-1976	help with job placement, staffing and training	contributions to on-the-job training, attendance of vocational training institutions	..... 18.4			18.4	----

Table 47 (2)

AAB Adjustment Assistance Benefits 1972-1980	last resort income maintenance to laid-off older workers in the TCF sectors	benefits equal to 66 per cent of the employee's average weekly insurable earnings prior to layoff	.....	10.20		10.20	100
ILAP Industry and Labour Adjustment Program 1981-1984	promote restructuring and manpower training and mobility in areas of particular need	contributions to consulting costs, repayable interest-free contributions to capital costs	0.54	0.07	----	0.61	0.5
FTIAP Footwear and Tanning Industries Adjustment Program 1974-1981	make the footwear industry competitive with imported products	grants for consulting costs, direct loans for mergers and new equipment	----	----	17.90	17.90	100
Footwear Management Scholarships 1974-1981	manpower development	scholarships	----	----	0.90	0.90	100

Sources: see Table 48.

Table 48
Evaluation of Capital Assistance Programs for the Textile, Knitting, Clothing, Footwear and Tanning Sectors(1)
(million dollars)

	Textiles (2)		Clothing		Textiles, Clothing, Knitting (3)	Footwear & Tanning (4)	(5)	Total all Sectors: TKCFT	
	1981/82 1984/85	1974/75 1984/85	1981/82 1984/85	1974/75 1984/85	1968-1976	1981/82 1984/85	1974/75 1984/85	1981/82 1984/85	1974/75 1984/85
Capital Assistance	137.80	168.50	81.97	94.03	52.00	22.8	41.43	242.6	303.96
Capital Generated Value-added	6043.9	13288.9	4987.7	10074.8		1046.6	1976.7	12078.2	25340.4
Capital Assistance as Percentage of Capital Generated Value-added	2.3	1.3	1.6	0.9		2.2	2.1	2.1	1.2
(6) Total Investment	1176.6	2663.0	152.2	360.7		87.7	226.5		
Capital Assistance as Percentage of Total Investment	11.7	6.3	54.0	26.1		26.0	18.3		

Notes: (1) The 1970 SIC Code is used until 1982, then the 1980 SIC code applies. Knitting is included in textiles until 1982 and is then split between clothing and textiles.
(2) Assistance programs include EDP, ILAP, RDIP, CIRB.
(3) DREE's contributions between 1968-1976.
(4) Includes CIRB only.
(5) Assistance Programs include CIRB, FTIAP, EDP.
(6) Total investment includes capital and repair expenditure.

Sources: Statistics Canada Catalogue Nos. 31-203, 61-214, 61-205, 61-007
Textile and Clothing Board (1985), Textile and Clothing Inquiry Vol. 1, Ottawa.
DRIE (1985) Annual Reports 1983-84, Ottawa.
Tarasofsky, A. (1984) The Subsidization of Innovation Projects by the Government of Canada, Economic Council of Canada, Ottawa.
DRIE (1985) Industrial and Regional Development Program, Ottawa.
DRIE, Office of Industrial Adjustment (1984) Sector Profile of the Canadian Non-Rubber Footwear Industry, Ottawa.
DRIE (1984) Outline: Domestic Adjustment to Trade Policy Changes and External Shocks. Experience in Canada with Adjustment Policies for: MacDonald Commission Research Symposium.
Canada Employment and Immigration, Labour Adjustment Programming (1985) Canadian Industrial Renewal Program, Labour Adjustment Measures, Annual Report 1984-1985, Ottawa.
Canadian Import Tribunal (1985) Report Respecting the Canadian Footwear Industry, Ottawa.
Canadian Industrial Renewal Program (1985), Labour Adjustment Measures Annual Report 1984-85, Ottawa.
Federal-Provincial Relations Office (1979), The Textile Industry - A Canadian Challenge, Ottawa.

Table 49

Evaluation of Labour Assistance Programs for the Textile, Clothing, Knitting, Footwear and Tanning Sectors

	(1) 1981/82-1984/85	(2) 1972-1976	(3) 1972-1980
Expenditure of labour adjustment programs (million dollars)	122.3	18.4	10.20
Number of displaced workers	9265		
Labour assistance per displaced worker (dollars)	13,000		
Labour-generated value-added (million dollars)	8595.7		
Assistance as percentage of labour generated value-added	1.4		
Capital and labour assistance as percentage of total value-added	1.8		

Notes: (1) Programs include LAB and LAP.
(2) Regular CEIC assistance programs.
(3) Income maintenance under the AAB.
Sources: see Table 48.

Table 50

Provincial Government Assistance Programs, Quebec and Ontario
(million dollars)

Program	Objective	Type of Assistance	Expenditure by Sector Textiles	Clothing	Footwear	Total Expenditure Textile, Clothing, Footwear	Expenditure on TCF sectors as a proportion of total expenditures under the program (per cent)
Quebec							
SDI Societe de Developpement Industriel 1971-ongoing	promoting the economic development of Quebec by offering financial incentives	loans, loan guarantees, interest subsidies, equity	105.0	76.0	3.8	184.8 (1971-1986)	----
Innovation Chaussure 1979-1982	encourage innovation in the footwear industry, subsidize marketing	grants	----	----	5.9	5.9	100
Ontario							
Ontario Development Corporation 1966-ongoing		loans	..... 19.87 (1966-1979)		4.50 (1971-1982)	19.87 (1966-1979)	7.3 (1966-1979)
Eastern Ontario Development Corporation 1972-ongoing		loans	..... 9.7 (1972-1979)			9.7 (1972-1979)	11.5 (1972-1975)

Sources:
Societe de developpement industriel du Quebec (1985), Annual Report 1984-1985, Quebec.
Anti-dumping Tribunal (1981) Report of the Anti-Dumping Tribunal Respecting the Canadian Footwear Industry, Ottawa.
Quebec Apparel Productivity Center (1986) Guide to Financial and Technical Assistance Programs offered by the Federal and Provincial Government, Montreal.

Table 51

Textiles: Overall Change in Employment Attributable To Changes
In Home Demand, Exports, Imports and Productivity, 1978 - 1983
(Thousand Workers)

	Change in Employment due to:	Change in Home Demand	Change in Exports	Change in Imports	Change in Productivity
1810	Cotton Yarn & Cloth Mills	-.22	3.87	.07	-.15	-4.0
1820	Wool Yarn & Cloth Mills	-.84	2.209	.064	-.831	-2.29
1830	Man-made Fibre, Yarn & Cloth Mills	-1.73	9.59	1.19	-4.03	-8.48
1840	Cordage & Twine Industry	-.02	.33	.04	-.07	-.32
1851	Fibre Processing Mills	-.41	-.44	.005	.17	-.14
1852	Pressed & Punched Felt Mills	.23	.60	.009	-.009	-.37
1860	Carpet & Rug Industry	-1.27	2.87	.06	-.25	-3.95
1870	Cotton, Jute Bags, Canvas Industries	-.01	1.77	.06	-.20	-1.63
1891	Thread Mills	-.05	.23	—	-.02	-.27
1893	Embroidery	-.11	.40	—	.004	-.52
1899	Misc. Textiles	3.01	10.75	.72	-1.66	-6.80
3210	Hosiery Mills	.45	3.83	-.005	-.20	-3.17
2390	Knitting Mills, Except Hosiery	-1.22	9.14	.03	-3.63	-6.75
1892	Narrow Fabrics	-.42	.95	.04	-.47	-.94

Source: Own calculations. For methodology, see footnote 39.

Table 52

Overall Change in Employment Attributable to Changes
in Home Demand, Exports, Imports and Productivity, 1978-1983(a)

	SIC Code 1970	Change in Employment due to:	Change in Home Demand	Change in Exports	Change in Imports	Change in Productivity
174	Shoe Factories	.02	10.79	0.21	-4.70	-6.28
07	Clothing	-5.70	39.04	2.10	-10.72	-36.13
05	Textile	-8.45	35.75	2.37	-7.72	-38.85
06	Knitting (b)	-1.77	7.30	0.04	-1.51	-7.60

Notes: (a) Observations for 1983 are estimates based on the 1970 SIC code.
(b) Time period for Knitting: 1978-1982.

Sources: Own calculations. For methodology, see footnote 39.

Table 53

Indicators of Adjustment in Textiles, Knitting, Clothing and Footwear Industries, 1971-1982
(Based on Constant Prices 1971=100)

		Labour Productivity	Total Factor Productivity	Employment	Investment(1)
Knitting	Per cent per year	2.9	1.3	-2.0	-7.5
	Manufacturing	1.5		0.3	3.2
	Difference	1.4		-2.3	-10.7
Clothing	Per cent per year	1.3	1.3	-1.0	-3.5
	Manufacturing	1.5		0.3	3.2
	Difference	-0.2		-1.3	-6.7
Textiles	Per cent per year	2.4	1.8	-1.5	12.5
	Manufacturing	1.5		0.3	3.2
	Difference	0.9		-1.8	-5.7
Footwear	Per cent per year	2.0	1.4	-2.0	-10.0
	Manufacturing	1.5		0.3	3.2
	Difference	0.5		-2.3	-13.2

Note: (1) Investment in Machinery, Equipment and Buildings.

Source: Own calculations, based on data in statistics Canada, Cat. Nos. 61-205, 13-001, 31-203, 61-213, 13,001.

Table 54

Net Economic Costs of Protection in
Textiles, Clothing, and Footwear Industries
($ million)

Industry and Product Classification		Net Value Cost Without Quota	Value of of Quota	Net Economic Cost, incl Quota
	CLOTHING			
2310	Hosiery Mills	2.6	2.5	5.1
2430	Mens Clothing	18.4	19.1	37.5
2440	Womens Clothing	19.6	20.1	39.7
2450	Childrens Clothing	3.8	4.2	8.0
2480	Foundation Garments	1.7	0.3	2.0
2490	Misc. Clothing	3.0	6.	8.4
	Total Clothing	49.1	52.4	101.4
	TEXTILES			
2390	Knitting Mills			65.9
1810	Cotton yarn and cloth			14.8
1820	Wool yarn and cloth			6.3
1830	Man-made fiber yarn and cloth			42.0
1840	Cordage and twine			0.3
1851	Fiber processing			0.8
1852	Felt mills			1.0
1860	Carpets, mats, rugs			11.2
1891	Thread mills			1.4
1892	Narrow mills			2.6
1880	Auto fabric			18.5
	Total Textiles			164.8
	FOOTWEAR	16.3	30.3	46.6
	Total for TCF Sectors			312.8

Source: Hazeldine (1981)

Table 55

Estimated Costs of Protection
(Tariffs and Bilaterial Quotas
in the Clothing Industry - 1979
(million dollars)

Item	Product Category			
	Outerwear	Shirts	All other garments	Total of all garments
1. Consumer costs of which	36.2	56.4	374.9	467.4
2. Quota rents to foreign suppliers	4.4	10.9	25.8	41.1
3. Tariff Revenue	5.7	8.1	79.0	92.8
4. Gain to Domestic Producers	20.0	27.2	220.0	267.1
5. Economic Waste of Resources in Production	4.5	7.3	34.0	45.7
6. Loss in Living Standard due to Reduced Consumption	1.6	2.8	16.2	20.7
7. Net Economic Cost (2+5+6)	10.5	21.0	75.9	107.5
8. Transfer to Domestic Producers as percent of Consumers Costs (4-1)	0.55	0.48	0.59	0.57

Source: Jenkins, (1980)

Table 56

Protective Effects of Tariffs and Quotas on Clothing Imports from Selected Developing Countriesa 1979

Product Category	Protection[b] as percent of FOB Net of Duty and Quota	Net Landed Cost[c]
1. Outerwear	0.68	0.60
2. Structure Suits, Blazers	0.49	0.43
3. Shirts with tailored collars	0.99	0.74
4. Blouses and Skirts	0.42	0.34
5. Sweaters, Pullovers, and Cardigans	0.39	0.33
6. T-Shirts, Sweatshirts	0.59	0.41
7. Trousers, Slack (Men's and Boy's)	0.49	0.33
8. Trouser, Slacks (Women's and Girl's)	0.43	0.34
9. Overalls, Coveralls	0.59	0.37
10. Dressesand Skirts	0.47	0.32
11. Underwear	0.60	0.41
12. Shorts	0.55	0.37
13. Pyjamas, Sleepwear	0.30	0.24
14. Foundation Garments	0.36	0.31
15. Swimwear	0.50	0.35
16. Overcoats, Topcoats Rainwear	0.42	0.38

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a. Hong Kong, South Korea, and Taiwan
b. Protection includes statutory tariffs and quota changes
c. Landed cost is the sum of FOB values and freight, insurance, and foreign buying costs

Source: Jenkins, (1980)

TABLE 57

CANADA'S NON-TARIFF RESTRICTIONS ON TEXTILES AND CLOTHING IMPORTS FROM THE DEVELOPING COUNTRIES

(Figures in brackets show the number of categories subject to quotas or fixed consultation levels)

Sector	MFA I	MFAII	MFA III
Yarn		Brazil (1) Hong Kong (1) S. Korea (2) Malaysia (1) Philippines (1) Article XIX quota on acrylic yarn, 1976-78	Brazil (1) S. Korea (1) Malaysia (1) Philippines (1) Singapore (1)
Fabrics	Hong Kong (1) India (1) S. Korea (3)	China (2) Hong Kong India (1) S. Korea (4) Article XIX quota on double knit fabrics, 1976-79	China (2) India (1) S. Korea (3)
Made-up Garments	China (1) Hong Kong (1)	China (4) Hong Kong (4) India (1) S. Korea (2) Pakistan (1)	China (4) India (1) S. Korea (2)
Clothing	China (1) S. Korea (2) Singapore (1)	China (21) Hong Kong (24) India (6) S. Korea (19) Macao (10) Malaysia (2) Philippines (10) Singapore (7) Sri Lanka (2) Thailand (5) Article XIX quota on shirts 30.11. 1971 to 31.12. 1978	China (12) Hong Kong (13) India (6) Indonesia (1) S. Korea (15) Macao (7) Malaysia (3) Philippines (12) Singapore (8) Thailand (7) Article XIX quota on 17 clothing items 29.11.1976 to 31.12.1978

Source: General Agreement on Tariffs and Trade (1984).

FOOTNOTES

1. The US-Canada Auto Pact of 1965 is the prime example of the long-run rationalization of Canadian production facilitated by the Transitional Assistance Benefit Program (TAB) in place from 1965 to 1976 for worker adjustment, and the Automative Adjustment Assistance Program (AAA), later subsumed under the Enterprise Development Program (EDP) in 1977 for concessional loans to auto-parts manufacturers. For details, see Matthews (1971), Langdon (1977), Robertson and Grey (1984), Department of Regional and Industrial Expansion (1985), and Trebilcock (1986).

2. Theoretical discussions of the adjustment process, and of the means for achieving it, are scattered throughout the voluminous literature on the theory of trade barriers and of domestic distortions. For recent developments, the reader is referred to Magee (1973), Corden (1974), Mayer (1974), Lapan (1976), Mussa (1978, 1982), Parsons (1980), Leamer (1981), Diamond (1982), Neary (1982), Flam, Persson and Svensson (1983), and Harris, Lewis and Purvis (1984).

3. Market imperfections usually arise when market prices of goods and factors do not reflect their true scarcities and marginal products in optimal uses. The purpose of counter-vailing government intervention is to restore the equality between private and social values.

4. See Marvel and Ray (1983).

5. For more, see Hazeldine (1981).

6. Intra-industry specialization frequently results in "two-way" trade in similar products. But intra-industry trade is not strictly necessary for intra-industry adjustment of the kind depicted in Figure 2 to take place. As long as total domestic market for all varieties of goods produced by an industry (xi, xj ..... xn|x) is partitioned into submarkets for individual xjs distributed between domestic and foreign producers, all properties of intra-industry specialization remain valid. Any two-way trade is incidental.

7. For empirical evidence, see Williamson and Bottrill (1971), Verdoorn and Schwartz (1972), Prewo (1974), Truman (1975), and Owen (1976), among others.

8. For a formal treatment, see Mussa (1982).

9. The equivalent-variational measure of welfare loss at A vis-a-vis the long-run equilibrium at B, measured in good y, is given by the distance EF. Part of this "social" loss is unavoidable if it arises from technical constraints, such as specific nature of factors.

10. See, for example, Baldwin and Mutti (1973).

11. For a fuller analysis, see Parsons (1980).

12. See, for example, Eaton and Grossman (1985), and Staiger and Tabellini (1987).

13. The differences in the domestic economic impact of alternative forms of trade barriers are well-known and will not be repeated here.

14. Factor substitution following a trade barrier is in line with the "Stolper-Samuelson" theorem: trade barrier in a labor-intensive industry raises wages relative to rentals and prompts firms to substitute capital for labor.

15. Production subsidies, just like trade barriers, distort prices faced by producers, and shift production resources to subsidized industries or prevent their exit. The subsidy changes the relative rewards to factors of production, just like a tariff. Consumers continue to trade at world prices, but suffer a consumption loss due to income effects of changes in the output-mix, even though their loss is less than what it would be in the case of a trade barrier. The effect of a factor subsidy on unit costs is similar to the effect of an increase in the relative price of the good in question. Therefore, the effect of a factor subsidy on the wage-rental ratio and, hence, factor proportions in the subsidized industry, is also similar to that of a production subsidy and a trade barrier. A capital subsidy to a labor-intensive industry, for example, lowers the cost of capital relative to that of labor in that industry. The effective increase in the wage-rental ratio tends to raise the capital-intensity of the subsidized sector. A labor subsidy to the labor-intensive industry reduces the wage-rental ratio, but capital-labor ratio still rises, because (as shown by Neary 1978) the Stolper-Samuelson effect tending to raise the wage-rental ratio is larger than the subsidy effect.

16. Factor subsidies cause distortions in factor markets. Both capital and labor are drawn to the subsidized sector, the economy operates on a less efficient contract curve and "inside" its long-run transformation surface. As a result, the value of national income is below potential.

17. For details, see Neary (1978).

18. For a discussion of 'bang-bang' adjustment policies, see Harris, Lewis and Purvis (1984).

19. See Hillman (1977) and Wood (1974).

20. For a review of major developments, see Pestieu (1976) and Trebilcock (1986).

21. Own calculations.

22. High utilization levels of VERs in individual product categories imply that restraints are binding, and that import prices would have been lower if quota ceilings were to be raised. In a simple regression equation, close to 80 per cent of the variance in the index of import prices was explained by quota utilization levels.

23. This conclusion is highlighted in Jenkins (1980) and Biggs (1980).

24. See Hamilton (1984,1984a).

25. For details, see Hazeldine (1981)

26. Canada, Textile and Clothing Board (1985, p. 35).

27. Hazeldine (1981).

28. Canadian Import Tribunal (1985, Tables C-10 and C-11, pp. 217-218).

29. See MacLeod (1986) and Kuryllowicz (1986).

30. Canadian Import Tribunal (1985).

31. These costs are discussed in the next section.

32. These costs differ sightly from those cited in the text by Hazeldine (1981) because we have recalculated them from the larger tables in Appendix A, and have included the costs of SIC 2390 in the textiles, rather than the clothing, industry.

33. For a taxonomy and recent evidence from U.S. industries, see Hufbauer and Rosen (1986) and Hufbauer, Berliner and Elliott (1986).

34. Own calculations, based on data contained in Tables 1,2,3,5 and 6.

35. See Tables 7 and 8, for the growth of apparent consumption.

36. The empirical results of the econometric model in Hazeldine (1981) estimates that a large part of the rise in industry selling price of the clothing industry is due to rising cost of its inputs, chiefly fabrics.

37. Own calculations, based on data in Table 38.

38. Own calculations, based on data in Tables 39 and 40.

39. The estimation of the sources of employment changes is derived from the basic identity $Q = D + X - M$ which is manipulated to yield

$$E_t = 1/P_{t+1} \left(D + X - DM - PE \right)$$

and the symbols have the following meaning: Q = output; D = domestic demand; X = exports; M = imports; E = employment of labor; and P = productivity per worker, i.e., Q/E.

40. Data on occupational shifts in the Canadian TCF sectors is not readily available. Such information as exists is based on the testimony of knowledgeable people in industry and government. There is also some international experience (OECD 1983, 1987) which enhances the plausibility of such changes in the occupational structure.

41. See Barry (1983), and Trebilcock (1986), p. 79.

42. See Canadian Import Tribunal, 1985.

43. For details, see Portis (1975).

44. The National Textile Policy was instituted for "dealing not only with protection against disruptive competition, but just as importantly, providing positive inducements for adjustments, for restructuring, and for the optimum use of new technology, creative research and design", quoted in Sector Task Force (1978); also see Pestieu (1976).

45. The Sector Task Force on the Canadian Textile and Clothing Industries (1978) reiterated that "the broad objectives of the Policy as set out in 1970 remain valid: to preserve for the domestic industry a reasonable share of the Canadian market growth; to build a long-term climate for renewed capital investment; to permit the industry to plan for an improved market share; to encourage the rationalization, restructuring and productivity improvement necessary for long-term viability" (p. 59).

These objectives were to reappear essentially in the same form in the 1981 Textile Policy which created the Canadian Industrial Renewal Board (CIRB). It is clear that all subsequent policy initiatives are firmly rooted in the 1970 Textile Policy.

46. The 1970 Textile Policy contained a "lowcost" import policy empowering the Textile and Clothing Board to make "formal non-appealable determinations of serious injury or the threat of injury" (Sector Task Force, 1978, p. 19).

47. The objectives of the CIRB were "to secure for Canada viable and competitive textile and clothing industries and to revitalize the economy of communities most vulnerable to foreign competition" (News Release, June 19, 1981).

48. The aims of the SFP were based on two underlying principles: (a) "major segments of the industry were fundamentally viable and with the existing tariff structure and other normal restraint measures (i.e., anti-dumpting and countervailing duties), increased access to export markets and adequate encouragement, these segments could move progressively towards viable lines of

production on an increasingly competitive basis internationally". (b) "appropriate protection and encouragement would create conditions that would help the industry plan, invest and develop with a greater degree of confidence". (CIRB 1983, 1985). These aims essentially reiterate those established in the 1970 Textile Policy.

49. Own calculations based on CIRB (1983, 1985, 1986).

50. The labor component of the CIRB program was predicated on the assumption that "the restructuring process would, through the combined effect of improved productivity in stronger firms and the closure of weaker ones, result in diminished sector employment" (CIRB, 1985, p. 9)

51. Changes in capital-labor ratios connot be estimated directly. However, data on changes in value-added per production worker, capital investments, and employment (included in the Statistical Appendix) appear to be sufficiently robust to warrant this conclusion.

52. The Price Waterhouse conclusion that SFP supported strong firms was based on the difference in the performance of recipients and non-recipients between 1979 and 1982, with respect to equipment expenditures. But this hardly settles the issue of the criteria for initial selection, since the better performance of recipients in capital equipment expenditures cannot be independent of the CIRB's assistance. See Price Waterhouse Inc. (1986) p. 61.

53. Price Waterhouse Inc. (1986) p. 62.

54. The "rule of 80", for instance, meant that an individual would be eligible for lay-off benefits if his age plus year of service in the industry added up to 80. However, the extension of the benefits to relatively young workers was confined, according to the eligibility criteria, to certain limited circumstances and financial hardship.

55. This inference is based on data contained in the Labor Adjustment Policy Review (1985).

56. These and the following data are based on Labor Adjustment Benefits Policy Review (1985).

57. See Labor Force Tracking Project (1979), and Glenday and Jenkins (1981).

58. Glenday and Jenkins (1981).

59. Labor Force Tracking Project (1979).

60. Glenday and Jenkins (1981).

61. Labor Force Tracking Project (1979), Table 16, p. 35.

62. The displacement survey samples (1977 and 1978) included in the Labor force Tracking Project Study are drawn from textiles, clothing, footwear, pulp and paper, shipbuilding and electronics sectors.

63. See Canadian Anti-Dumping Tribunal (1981).

64. Some data on provincial government assistance programs in Quebec and Ontario are presented in Table 50.

65. The figure of $13,000 (Table 49) represents a rough measure of the per capita cost of government assistance programs directed toward labor displaced from TCF sectors. This is derived by dividing the aggregate cost of labor programs during 1981/82-1984/85 by the number of workers assisted through LAB and LAP programs. These costs repesent the costs of income maintenance support programs in excess of the normal UIC payments and other benefits to laid-off workers in the TCF sectors.

66. Data on the scale of production in relation to the number of establishments in the textile industry is shown in Table 43.

67. The seller concentration ratios and Herfindahl indices for the three industries can be seen in Tables 34 through 37.

68. For a brief review of technological developments in textiles group, see Canadian Textile and Clothing Board (1985), Toyne et. al. (1984) and Thibodeau and Julien (1986).

69. See Textile and Clothing Board (1985).

70. See Table 34.

71. Dominion Textiles Ltd (1986).

72. In May 1986, the Federal Government announced a three-year pilot duty remission scheme which gives Canadian manufacturers of tailored collar shirts access to duty-free imports of these goods. The duty-free volume is set in relation to their volume of domestic production.

73. See Canadian Import Tribunal (1981) and Canadian Import Tribunal (1983) for details.

74. Canadian Import Tribunal (1983).

75. Table 9 shows that demand for footwear, measured by apparent domestic consumption, during 1971-1984 has been static. In volume terms, it grew from 85.0 million pairs in 1971 to 86.2 million pairs in 1984. The only noticeable growth appears to be in the demand for special purpose footwear.

76. See Canadian Import Tribunal (1983).

77. It is, of course, possible for both to fall jointly as they did in the footwear industry, at least, since 1981. But in this case, the direction of industry adjustment is clearly toward "downsizing".

78. Such changes in the occupational structure within the textile industry are well-known to observers, but the current state of data does not allow quantification.

79. For a discussion of SFP's bias against smaller firms, see Williams (1987, p. 23).

80. The data contained in the Labor Adjustment Policy Review (1985) clearly points in that direction.

81. For a recent analysis of political determinants of tariffs and other trade barriers in Canada, see Baldwin and Gorecki (1985). They find a positive correlation between high effective tariffs and an "equity" variable, viz., low wages. That high effective tariffs are found in low-wage industries was also stressed earlier by Helleiner (1977).

82. Also see Trebilcock (1986) on the influence of the textile lobby on the Textile and Clothing Board.

83. See Mahon (1984) and Mahon and Mytelka (1983) for further analysis of these and related issues.

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