

## CHAPTER 6

### OUTLOOK FOR INVESTMENT IN THE CANADIAN AUTOMOTIVE ASSEMBLY AND IN-HOUSE PARTS INDUSTRY

#### The Record of Investment in Assembly and Captive Parts Facilities

The period of most rapid increase in the rate of investment flows into the Canadian automotive industry occurred between 1965 and 1967. Some \$400 million was invested by the Big Five in this period, and Canada received almost one-eleventh of the total North American investment by this group.

This surge in activity was in response to the rationalization and specialization opportunities offered and required<sup>1</sup> by the Auto Pact. The rate of investment gradually eased off until in the three year period 1971-73 it registered some \$190 million. Over the whole period the Auto Pact has been in existence, namely 1965 to 1977, the Big Five invested almost \$1.4 billion. This is an amount that represents 6.5 per cent of the total North American automotive net capital formation by the Big Five.

---

<sup>1</sup> The automobile producers gave separate undertakings to the Canadian government that they would meet certain investment targets in the early years of the Auto Pact.

The Value of the Automotive Industry's Assets

The peak Canadian share of total North American net fixed assets at book value was recorded as 7.1 per cent in 1967. At that time these Canadian located net fixed assets were valued at \$520 million. There was very little advance in the value of this stock of capital between 1967 and 1976. Indeed the lowest share of Canadian to total North American automotive capital equipment owned by the Big Five was recorded in 1975. A spurt in investment in 1977 revived this ratio to 6.6 per cent and increased the net book value of Canadian net fixed assets to almost \$750 million.

To summarize the investment record of the Big Five in Canada:

- (1) There was a flurry of investment activity between 1964 and 1967, which caused the net value of fixed assets to increase by about 45 per cent.
- (2) As we shall see, these new capital expenditures gradually led to significant increases in the productivity of the Canadian automobile assembly industry.
- (3) From 1967 to 1976, the book value of net fixed assets used in the manufacture of automobiles by the Big Five rose by only \$36 million to reach \$556 million. Thus net additions to the Canadian capital stock in the

automotive assembly industry were relatively minor over a period of ten years.

- (4) It should be remembered that the foregoing data were reported in current or nominal dollars. It is obvious that the use of a correctly deflated capital stock series<sup>2</sup> would show an actual decline in the real book value of Canadian net fixed assets used in the manufacture of products related to the Auto Pact.
- (5) There has been a recent revival of investment, dating from 1977. This signals the beginning of a new generation of investment requirements in the automotive industry which has been prompted by the need to "down-size" vehicles, improve economy, curtail pollution, and strengthen the safety features of new models.

---

<sup>2</sup> The Commission has not attempted to deflate these capital stock estimates. The development of a theoretically acceptable capital stock deflator involves very difficult conceptual problems which could not be tackled during the short lifetime of this Commission. For a discussion of these problems see T.K. Rymes, Estimates of the Canadian Capital Stock, Volumes I & II, Statistics Canada, Ottawa, 1972.

The interested reader may wish to note that the Canadian GNP implicit price deflator rose by almost 75% between 1967 and 1976, while the nominal book value of the Big Five net fixed assets in Canadian automotive manufacturing rose by just 7% during this period. In the U.S. these assets rose in nominal value by 25%, 1967-76.

Sources of Investment Funds

Since the beginning of the Auto Pact in 1965, the Big Five automotive manufacturers have retained almost exactly \$1 billion of their Canadian earnings for re-investment in this country. On net, there has been a capital inflow from U.S. sources of only \$54.5 million over the last thirteen years (1965 - 1977). Most of the inflows actually occurred in the early investment boom period of 1965-67, and these gross values (\$169 million) were later offset by the repayment of loans (\$115 million) between 1968 and 1976. These loan repayments coincide with the period in which there was a decline in the real value of Canadian net fixed assets used by the Big Five in automotive manufacture.

The Rate of Return on Investment in  
Automotive Assembly and Captive Parts

It has been noted that \$1 billion of retained earnings was re-invested in the industry by the Big Five between 1965 and 1977. Coincidentally, these producers repatriated to their U.S. parents some \$1.1 billion in net income generated by their Canadian operations.

The adjacent table shows that the Big Four<sup>3</sup> in the U.S.A. have recorded double digit rates of return after tax on

---

<sup>3</sup> The Commission was unable to isolate the profitability of motor vehicle manufacturing activities of International Harvester.

shareholder equity in every year from 1960 to 1976, with the exceptions of 1970, 1974 and 1975. While these results have by no means been homogeneous across the Big Four, their group average has consistently outperformed the results for all U.S. manufacturing. Recall that 1970 was a year of industrial disputes, and that the energy crisis of 1973 precipitated the severe slowdown in U.S. industrial activity and especially automotive sales in the following two years.

Having established that the Big Four are consistent high performers by American industrial standards, we may now ask how do their Canadian operations rate? Unfortunately the basis of comparison can no longer be the return on shareholders equity since some Canadian operations are wholly-owned subsidiaries. When net profit is expressed as a proportion of total assets (see Table 3.25), we find it possible to compare the operating results of the Big Four in Canada and the U.S.A. These ratios indicate that between 1965 and 1968 the return on Canadian total assets was below that in the U.S.A. This was during the early years of the Pact when the Canadian asset base was being rapidly expanded by investment, but before the new plants, production lines and systems had been brought on-stream or reached full operational capacity. By the end of the 1960s, the pay-off from these new investments was beginning to show up. With the exception of the strike-affected 1970 model year, the rate of return up to 1976 was strong and always at a higher level than in the U.S.A. Averaging the

TABLE 6.1

## AFTER-TAX RETURN ON SHAREHOLDERS' EQUITY:

## THE BIG FOUR MOTOR VEHICLE MANUFACTURERS IN U.S.A.

<u>Year</u>	<u>General Motors</u>	<u>Ford</u>	<u>Chrysler</u>	<u>AMC*</u>	<u>Industry Average</u>	<u>All Manufacturing</u>
1960	16.5%	14.9%	4.5%	21.6%	15.2%	13.1%
1961	14.8	13.1	1.5	10.5	13.2	12.8
1962	21.9	14.1	8.4	13.7	18.4	--
1963	22.4	18.0	17.6	13.8	18.9	14.9
1964	22.8	12.6	19.1	9.4	19.1	15.9
1965	25.8	15.7	14.9	2.0	21.0	17.8
1966	20.6	13.0	11.2	- 4.9	16.8	18.3
1967	17.6	1.8	10.9	-42.0	11.6	15.3
1968	17.8	12.7	14.4	6.2	15.7	15.7
1969	16.7	10.5	4.6	2.4	13.3	13.3
1970	6.2	9.4	- 0.4	-27.6	6.0	9.7
1971	18.0	12.5	3.8	2.6	14.2	9.7
1972	18.6	15.3	9.1	6.8	16.0	10.6
1973	19.1	14.8	9.5	13.2	16.4	12.8
1974	7.6	6.0	- 2.0	7.4	5.7	14.9
1975	9.6	3.8	- 8.7	- 7.9	5.8	11.6
1976	20.2	14.4	11.8	-15.5	17.3	13.9
9 months Annual Rate						
1976	19.4	15.5	15.0	1.7	17.5	14.6*
1977	20.3	20.9	9.5	2.2	19.1	14.6**

\* Fiscal year ending September 30; nine months' figures are from October to June

\*\* 6 months at annual rates

SOURCE: 1960-1970; calculated from financial statements; United States Internal Revenue Service, "Statistics of Incomes"

1971-1977; U.S. Council on Wage and Price Stability, News Release dated November 14, 1977.

differential rate of return in Canada over the U.S. results between 1970 and 1976 shows Canada ahead by 2.85 per cent annually. Only with the sudden resumption of investment in Canada in 1977 did this differential swing around in favour of the U.S. operations by 2.8 per cent<sup>4</sup>. This result echoes the second half of the 1960's, when Canada experienced the earlier automotive investment upswing by the Big Four.

The excellent profitability of the Big Four Canadian operations<sup>5</sup> can be traced to a number of sources:

First, it stems from the higher price charged for the final product in Canada. Good results in 1974 and 1975 partially arise from strong sales in Canada, during a period of slow sales in the U.S.A.<sup>6</sup>

Second, it arises from the strong productivity gains achieved in the Canadian assembly industry. This profit performance could scarcely have been achieved with wage parity if productivity had not also surged ahead. The existence of wage parity, while Canadian labour productivity continued to be 10 to 15 per cent

---

<sup>4</sup> The effect of the AIB on Canadian profits must also be remembered.

<sup>5</sup> Within the Big Four group there have of course been excellent results by some companies, and poorer results by others.

<sup>6</sup> But see also the third argument below.

below that in the U.S.A., on a value added basis, would have precluded high profits. However, the rate of return performance of Canadian installations in the 1970's, ceteris paribus, casts doubt on the received doctrine of "low Canadian labour productivity in automotive assembly". Earlier analysis in Chapter 3 (see Table 3.23) argues convincingly that in assembly operations Canadian labour productivity has matched or exceeded its American counterpart over the past decade. Thus, sustained high output per man hour in volume terms since 1968 has contributed to the excellent record of investment earnings.

Third, the impressive Canadian results in 1974 and 1975 indicate profit ratios more than double those recorded in the U.S.A. This reflects in part the relatively high level of utilisation during these years. Canada was producing the lines of vehicles still exhibiting demand vitality in the North American market during this generally depressed period (compacts and medium-size luxury cars).

There are no reasons to think that the high profitability of Big Four operations in Canada during the 1970's were either accidental or even ephemeral. These results are the fruits of sound investments and balanced managerial decisions. If these investments have been so successful should Canada not expect to see more of the same? Moreover, given the better returns in Canada compared to the U.S.A., should there not be confident expectation



that funds will flow into Canada from U.S. parent companies to complement the normal flow of re-invested Canadian earnings?

The fall in the Canadian dollar relative to the U.S. dollar and other currencies has made land and buildings relatively cheaper to the foreign buyer, while also reducing the relative cost of Canadian labour. Furthermore, the cost of such vital inputs as energy must now appear attractive when compared with U.S. energy costs. These factors are particularly important when considering the likelihood of Canada attracting in the future such energy-using activities as aluminum engine plants, stamping plants, metal refinery operations, and ethylene based extrusions.

The decline in the Canadian dollar will affect the volume of automotive trade undertaken by some U.S. automotive manufacturers. If the volume of their imports into Canada more or less matches the volume of their exports from Canada, then exchange rate losses on sales into Canada are washed out against gains from purchasing from their Canadian subsidiaries. But this balancing act would only occur for a short time, since the U.S. automotive manufacturers would soon recognize the gains to be made from expanding their Canadian production and exports. Providing that the Canadian dollar remains at a significant discount to the U.S. dollar for several years, then Canadian output could expand, net revenues rise, and the rate of return on investment remain strong.

This last point about the rate of return remaining strong is vital, since among other things Canadian dollar

depreciation has for the moment wiped out the price differential between Canadian and American cars. This differential has fallen gradually since the inception of the Auto Pact. But the privileged market position given by the original "designation of manufacturers" under the Pact allowed them to retain a small but important differential through market discrimination. This margin disappeared as a result of exchange rate adjustments in 1977 and 1978, and its disappearance no doubt contributed to the reduction of the profit rate traditionally earned on automotive investments in Canada. The question then becomes will gains from expanded production and exports appear sufficiently profitable with a lower dollar to overcome the immediate loss of the price differential and induce new investment. If these gains do not outweigh the loss of the price differential, then an early reappearance of the differential may be expected.

Barriers to Expanded Investment by North  
American Automobile Producers

Once the dust has settled, it appears that the decline in the dollar is not likely to affect adversely the perceived potential rate of return of further Big Four investments. Nevertheless, there are some important issues of political economy which impinge on these crucial capitalization decisions. For the most part, they are vital hurdles in the thicket of "institutional barriers" to investing in Canada. Some of

these impediments are:

- (1) Sovereign risk - the uncertainty of Canadian federal and provincial political stability and the longevity of policy stances;
- (2) The desire by the Big Four to maintain managerial control over production; to ensure that production itself is in close proximity to the major automotive markets in East, Central and Western U.S.A.;
- (3) The prejudice of some American consumers for vehicles "Made in the United States of America";
- (4) The fact that the Auto Pact is only a short term agreement, which at times has seemed quite fragile; it was reported that the Pact came close to being scrapped as part of the Nixon economic measures considered by Secretary Connally in 1971: allegedly was reprieved only at the eleventh hour;
- (5) The risk for the Big Four that not only might the Auto Pact wither or be stricken, but that substantial shifts in U.S. or Canadian commercial policy might occur. In other words, they must always keep in mind the possibility of unexpected tariffs or non-tariff

barriers to parts and vehicles exchanged across the Canada - U.S. border. A change in these laws or rulings could affect the ultimate profitability of the Canadian operations of the Big Four.

Growth in motor vehicle manufacture depends in the foreseeable future on locational decisions to be made by major U.S. automotive producers. This is because Japanese and European automotive manufacturers seem unlikely to extend their assembly operations to Canada.

Policy Measures to Encourage Investment by  
North American Automotive Producers

While sovereign risk will always exist because Canada is not the U.S.A., and consequently American investors will always require a rate of return premium for choosing Canada, there are measures which can reduce to a minimum the differential required to compensate for this type of risk. Most obviously, Canada must cultivate an economic environment which once again clearly welcomes foreign capital participation that is in the national interest. Perception and reality may differ greatly in this area, but certainly foreign investors consider that Canada no longer offers the industrial hospitality evident in the mid-1960's. They argue that the operations of FIRA, the conflicts between federal and provincial policy objectives, the record of industrial disputes

in both the private and public sectors, and the failure to achieve any semblance of internal or external economic equilibrium, have all worked against the selection of Canada as a site for expansion of the automotive industry. However to be fair the American companies rate these factors far less detrimentally than do overseas automobile producers. Nevertheless, a politically and economically strong Canada would command a lower risk premium in the board-rooms of prospective investors.

Turning from sovereign risk to the institutional barriers cited in (2) and (3) above, it is obvious that there is little which Canadians can do to change the realities of North American population concentration and consumer tastes. These factors probably tend to limit the extent to which economic rationality and the attractiveness of Canadian locations could determine automotive investment. Yet, in the Commission's view, these constraints are far from binding at present levels.

The ever-present possibility of abrogation of the Auto Pact is an important drawback to future investment planning in the automotive industry. Accepting that all the principal parties on both sides of the border wish to retain the Auto Pact it would be helpful if the Agreement were to be put on a more permanent footing, say for ten or twenty years. In the context of drafting this new Treaty, there are a number of terms and conditions which will

require renegotiation. Even though our American colleagues at this time are focussed on national and international concerns which have distracted their attention from Canada, an opportunity may well arise before very long to proceed with such a project.

A ten year Treaty to cover the decade of the 1980's would give security and continuity to the trade during a vital period of re-investment in the North American automotive industry. As part of this Treaty, a monitoring commission could be established to oversee the workings of the Pact. This commission would undertake annual reviews of trade, employment and investment; it would also suggest regulatory adjustments to encourage an efficient and equitable distribution of activity and employment in the industry. Such a Treaty would go far toward alleviating some of the anxiety about future trade developments on both sides of the border, and might serve as a model for the extension of conditional free trade agreements to other North American industrial sectors.

A complementary policy to enshrining the Auto Pact in a Treaty would involve establishing an insurance scheme to indemnify automotive exporters against damaging changes in U.S. or Canadian commercial policy. This device would cope with the uncertainties discussed in paragraph (5) above. Drawing upon the principle of Export Credit Insurance, the Government of Canada would offer insurance to compensate for export revenue reversals singularly associated with a change in U.S. or Canadian policies.

Compensation should be made available, however, only over a relatively short period of time after a policy shift. In order to ensure that such a scheme is consistent with our international commercial obligations and operated on a sound business footing, potential beneficiaries should be required to buy a policy and be paying premiums prior to any claim. After a realistic period of time, the fund should be reasonably self supporting. If trade disruptions should occur, the Government of Canada would no doubt attempt through both bilateral and multilateral negotiations to alleviate the kind of policy problem covered by this type of insurance.

#### Investment in Canada by Overseas Automotive Producers

The Commission went to great lengths to discern the attitudes of Japanese and European automotive producers to investment in Canada. There are important perceived barriers to setting up production facilities and entering the North American automotive market from a Canadian base. Not only do overseas manufacturers detail the kind of risks enumerated in the section "Barriers to Expanded Investment by North American Automobile Producers" above, but in common with Canadian and American investors are concerned about the general business environment in Canada. Being further from the scene they are more inclined to exaggerate the importance of management — labour relations and constraints on foreign investment.

Japanese Automotive Producers

The Japanese Big Five are Toyota, Nissan (Datsun), Honda, Mitsubishi and Toyo Kogyo (Mazda), in order of their domestic production. Honda currently leads in exports to Canada with Nissan and Toyota vying for second place. Mitsubishi vehicles are marketed in Canada through Chrysler and include such models as the Arrow and Sapporo. Mazda is currently staging a comeback in Canada after suffering sales reversals connected with the fuel consumption of its rotary engined vehicles.

For the reasons stated above, only the Japanese Big Three can be considered very likely to set up automotive assembly operations in North America. Of this group, Honda alone has taken any obvious steps to build assembly facilities. However, these facilities -- in the Columbus, Ohio area -- are for motorcycle assembly, although enough land has been accumulated to expand this plant to include automobiles. Honda is nearing peak utilization in Japan (700,000 vehicles) whereas Toyota and Nissan still have ample production capacity. Nevertheless, each of the Japanese Big Three appears to have considered investing in an assembly plant in North America. Are these facilities likely to be built in the next five years and will they be located in Canada? These two questions will be discussed in turn.



Japanese export sales growth to the North American market is becoming increasingly difficult because of Japan's enormous bilateral balance of payments deficit with the U.S.A., and the threat of possible retaliatory U.S. commercial measures. Indeed, a global auto export quota is enforced by Japan's Ministry of International Trade and Industry and this measure is capable of being used to restrict sales to the U.S.A. With their domestic market nearing saturation, Japanese auto producers have looked to new markets in the Mid-East, Africa, Europe, and South America for expansion, but their principal hopes still rest with the abundant North American market. Cost pressures resulting from appreciation of the yen, rising energy costs at home, and a narrowing of the Japan — North America wage gap, together with increased competition among small car producers all argue for careful consideration of North American assembly operations.

There are, however, some important offsets to the advantages of moving to North America. Of these, transportation and distribution expenses seem to be the most overwhelming. Using especially designed roll-on/roll-off vessels, Japanese cars and trucks are transported now to North American ports ranging from Vancouver and Long Beach, California in the West; the Gulf Ports; to New Jersey and the Canadian Maritime terminals in the East. The Commission understands that even with the recent appreciation of the yen and other cost advantages this delivery system results

in landed costs per unit at least \$200 below what could be produced by a Japanese operated North American assembly plant. A large measure of the parts for such a plant would still have to be shipped in knocked-down form from Japan and then hauled overland to assembly points. For the foreseeable future these cost considerations appear so important to Toyota and Nissan that only political pressure could overcome them. If such circumstances prevailed, the choice of an American location would be mandatory.

Looking beyond the next five years, it does appear possible that the Japanese Big Three might choose assembly sites in North America but with the very clear purpose of assuring access to the U.S.A. market<sup>7</sup>. Thus, a scenario of first establishing an assembly plant in the American West, then in the Mid-West, and finally in the East could be possible over a time horizon up to the year 2000. Canada might be able to attract any one of these plants which may be constructed by Japanese automotive manufacturers.

The Commission has concluded, however, that whatever cost advantages in assembly operations Canada can offer Japanese producers, there are very poor prospects in the short run for attracting an assembly plant in Canada. If the initial major assembly investments by Japanese producers were at American

---

<sup>7</sup> Note that in 1976 Japan produced 7.8 million vehicles. Of these 3.7 million were exported, including 1.4 million sold in the U.S.A. and 127,779 sold in Canada. About half of the production of Japan's Big Three was exported in 1976.

locations, there could well be a complementary investment in a Canadian parts plant, e.g. aluminum engine blocks and asbestos brake lining facilities. Furthermore, Japanese vehicles assembled in the U.S.A. might become eligible for duty-free entry through the purchase of original equipment parts sourced from Canadian manufacturers. To achieve this objective, the Government of Canada must devise a mix of policies which will not invite U.S. countervailing measures. This will be discussed in the next Chapter.

#### European Automotive Producers

The Commission's discussions with European automotive manufacturers did not produce any affirmations of interest in locating assembly plants in Canada. Volvo will likely continue their operations at Dartmouth, N.S.; Renault is unlikely to resume their operations in Quebec; there are no new plans by European manufacturers to assemble in Canada. Reasons given more or less mirror those offered by the Japanese. With the exception of Volkswagen and a French joint venture, who are already committed to U.S. locations, there appears to be very little interest in North American assembly. In their discussions with the Commission, European manufacturers took the view that major assembly investment in North America would occur only after market share was sufficient to justify it.

Once again it is parts sourcing, or even investment in a major parts plant, that holds interesting prospects for Canada.

European producers expressed some interest in Canadian locations if they offered competitive skills, fuel costs and raw material sources, and it is conceivable that parts might be fabricated for shipment to European plants. There is already some production and trade of this type in re-manufactured parts.

As discussed in the previous sub-section, Canada will have to develop an imaginative set of policies if a portion of the parts needs of European automotive producers, particularly those which may be U.S. based, is to be supplied from Canadian sources. This problem is examined in greater detail in the next Chapter dealing with the prospects for expansion of the Canadian automotive parts manufacturing industry.

## CHAPTER 7

### OUTLOOK FOR INVESTMENT IN THE CANADIAN AUTOMOTIVE PARTS INDUSTRY

#### The Original Equipment Market

Parts are produced in Canada for use in vehicles being assembled here, for vehicles to be assembled in the U.S.A., and for export to assembly plants overseas. When a part is destined to be used in the assembly process, it is termed an Original Equipment part. The market for parts of this kind in North America is relatively oligopsonistic; that is to say, there are few buyers. It is dominated by the Big Four as principal actors with the truck and bus manufacturers in strong supporting roles.

Within the original equipment sector of the Canadian automotive parts industry there are three distinct groups of manufacturers. First, there are the in-house parts producers who actually are owned and operated by one of the assembly companies. For instance, one of the Big Four operates an automatic transmission plant. These in-house parts production facilities are large and use more capital and equipment than do assembly operations. In-house parts production usually involves key automotive items of high value which are produced in long production runs such as stampings, engine blocks, engines, transmissions and drive shafts.

The second group of O.E.M. parts producers is the independent multinational enterprises which can be found on both sides of the border and often in Europe and Asia as well. These companies produce high value-added items such as frames, suspensions, ignitions and a wide range of proprietary products.

Third, is the largest group of firms — over four hundred -- ranging in size from fewer than ten employees to several hundred, who from their Canadian-based plants sell original equipment parts in North America and to a limited extent overseas. For the most part these Canadian independents turn out parts which involve a fairly low value-added in production using relatively labour-intensive production techniques. However, there are several exceptions to this type-casting, including corporations employing very sophisticated techniques and extremely advanced plants and equipment.

The original equipment parts industry in Canada is then composed of in-house plants of the Big Four, eight independent multinational parts producers, and about four hundred other producers many of which are Canadian-owned. The Big Four in the U.S. have produced from their own plants about 55 per cent of the total annual value of original equipment output over the last decade. In 1977, the U.S. total O.E.M. parts production was worth over \$50 billion. In Canada, the Big Four hold a 40-45 per cent share of the total O.E.M. output of the whole industry which was valued at \$4.4 billion in 1977.

In the previous sections concerned with investment by the automotive manufacturers, we noted that the real book value of their net fixed assets declined between 1968 and 1976 even though they continued nominal flows of investment. Included in those investment flows and capital stock estimates were monies spent by the Big Five not only on assembly facilities, but also on in-house parts plants. Unfortunately, these two streams cannot be unravelled in the data at the disposal of the Commission.

However, it is known that for the industry as a whole relatively more has been invested since 1972 in the parts sector of the automotive industry by all participants than has been invested by the Big Five in assembly alone. Indeed, examination of both Canadian and American data series over longer spans always indicates that the parts' industry has been the target of more investment than the assembly industry. This is not surprising since on average parts production requires more capital per employee, and gives rise to greater value added per man hour than does assembly. There are also grounds for believing that as much as half of the gross annual investment in the parts industry is for upgrading, maintenance and repairs of existing facilities.

Examination of investment flows in the Canadian parts industry reveals that there have been four cycles in these expenditures since 1965. There was an initial surge of new capacity installations between 1965 and 1967. The next wave of expansion came in 1969-70, and then trailed off to 1972. With the continued strength of the Canadian automotive industry in 1974 another peak of new machinery and equipment purchases was reached. After that year, the flow of investment diminished

quite sharply but has been on the upswing once again since 1976. This pattern of surge and ebb in Canadian investment spending since 1967 has not coincided with the even more cyclical record of parts production capacity investment in the U.S.A. Not only does the Canadian industry have a plant and production mix that is quite different from that of the U.S.A., but its record of industrial activity and investment in the last decade has been completely at variance with American experience.

Profitability of the Canadian Automotive  
Parts and Accessory Manufacturing Industry

Because many of the four hundred odd smaller Canadian parts producing corporations are privately owned, or not publicly quoted, it is not possible to present data on their investment and profit achievements. However, when we examine a cross section of in-house plants, multinationals, and local firm's records drawn from the U.S.A. and Canada, some conclusions concerning overall industrial profitability can be reached. Table 7.1 shows that between 1967 and 1975 the annual average rate of return for automotive parts and accessory manufacturers in the U.S.A. was 9.4 per cent, while in Canada it was 13.2 per cent. These percentages are calculated by expressing profit before taxes as a ratio of net assets. While this ratio has the drawback of not allowing for differential tax rates, it does indicate that Canadian parts operations on average yield a substantially higher rate of return than the same activities in the U.S.A. Indeed, the differential rate of return in Canada's favour is even more evident than in assembly operations.



TABLE 7.1

CANADA/U.S. COMPARISON OF PROFITABILITY  
OF AUTOMOTIVE PARTS AND ACCESSORIES MANUFACTURERS

PROFIT BEFORE TAXES AS PERCENT OF NET SALES

<u>Year</u>	U.S.A.	CANADA
	<u>Industry Average</u>	<u>Industry Average</u>
1965	-	11.6
1966	-	6.0
1967	10.8	8.4
1968	11.1	13.9
1969	9.8	14.9
1970	7.9	11.9
1971	10.0	12.4
1972	11.6	16.1
1973	11.1	18.7
1974	7.5	11.8
1975	4.8	11.4

SOURCE: Robert Morris Associates of U.S.A., Statistics Canada  
special tabulation

SAMPLE For U.S.A. about 145 financial statements were analyzed.  
SIZE: For Canada, industry average applies to 200 firms.

Further evidence is also provided by a comparison of profitability among some major multinational corporations producing automotive parts in both Canada and the U.S.A. In Table 7.2 it is possible to examine both the Before Tax and After Tax results. The Canadian operations yielded a rate of return more than 7 per cent higher than the U.S. corporation when calculated Before Tax, and a positive differential of more than 5 per cent After Tax. These results are averages based on 1973-77 results, and are slightly exaggerated by an excellent year in Canada during 1973. Nevertheless, even on a year by year basis, there was not one in which the Canadian rate of return was less than in the U.S.A.

The evidence available to the Commission suggests that:

1. The Canadian parts and accessories manufacturing industry as a whole is consistently more profitable than its counterpart in the U.S.A.; and
2. The Canadian parts producing operations of selected multinational enterprises are distinctly more profitable than the activities of these U.S. corporations as a whole.

Canada does not appear to have a competitive disadvantage in attracting potential investment to its automotive parts industry, other factors being constant.

TABLE 7.2

CANADA/U.S. COMPARISON OF MAJOR INDEPENDENT  
ORIGINAL EQUIPMENT MOTOR VEHICLE PARTS MANUFACTURERS

PROFITABILITY COMPARISON

	Before Tax Profit as Percent of Net Worth		After Tax Profit as Percent of Net Worth	
	Canadian Operation	U.S. Corporation	Canadian Operation	U.S. Corporation
1973	37.9	21.8	23.1	12.2
1974	24.2	18.4	15.7	10.6
1975	20.6	17.0	12.2	10.3
1976	30.0	25.5	16.5	14.4
1977	35.4	28.2	21.0	15.5
Five Year Average	29.9	22.2	17.8	12.6

SOURCE: Financial Statements, S.E.C. 10K reports.

Re-Investment in the Canadian Parts and  
Accessories Manufacturing Industry

It has been noted in an earlier chapter of this Report that the Canadian Automotive Parts Manufacturers' Association has argued that investment funds should be made available to their members at below bank rate if they are to be internationally competitive in the future.

The rate of return results suggest that this industry is already internationally competitive. What has happened to the profits earned? Were they re-invested or withdrawn from the industry? For the reasons already mentioned, the Commission has no information on the re-investment practices of the vast majority of the Canadian independent parts manufacturers which are not publicly quoted corporations. The only evidence available concerns the re-investment decisions of a selected group of multinational parts producers. Table 7.3 shows that as a group these manufacturers only re-invested about one third of their substantial Canadian profits, whereas in the U.S.A. the proportion was much higher, at three-fifths of the sum of their after tax profits, depreciation and deferred taxes.

When earlier analysing problems of investment in the Canadian automotive assembly and captive parts industry, a number of "institutional barriers" to expand investment were noted. From that discussion it became clear that even though the bottom line of the profit and loss account seemed to consistently favour growth of productive capacity in Canada, there were important risk and uncertainty factors which seemed to run

TABLE 7.3

CANADA/U.S. COMPARISON OF MAJOR INDEPENDENT  
ORIGINAL EQUIPMENT MOTOR VEHICLE PARTS MANUFACTURERS

REINVESTMENT COMPARISON

Capital Expenditure on Plants and Equipments as  
Percent of After Tax Profits, Depreciation and Deferred Taxes

	<u>Canadian Operation</u>	<u>U.S. Corporation</u>
1973	44.1	67.3
1974	44.7	75.7
1975	26.0	52.4
1976	29.6	48.8
1977	31.2	56.9
Five Year Average	35.3	59.3

SOURCE: Financial Statements, S.E.C. 10K reports.

counter to the balance sheet indicators. These institutional factors would appear to have taken on an extraordinarily important aspect in deterring re-investment in the Canadian O.E.M. parts and accessories manufacturing industry. Principal among them is the reluctance to commit to new capacity in the face of changing technology and production processes in the automotive industry.

The targets of better mileage, cleaner emissions, and greater safety have lead the Big Four auto manufacturers to change the concept of the North American car. There is a general shift towards a smaller, lighter, front-wheel drive vehicle that will be globally acceptable as individual transportation. These "World Cars" may herald an age of immense scale mass production, often using automated assembly plants, robotics, and highly complex numerical control production and inventory systems. Side by side with these developments in assembly will come opportunities for parts producers to achieve world scale production of automotive components. This view of probable industrial developments in the 1980s has apparently been construed as more of a threat than a challenge by some Canadian automotive parts manufacturers.

The Big Four are contemplating a substantial increase in North American parts capability plus large-scale retooling and revitalising of existing production facilities. There will be very heavy demands upon their financial resources during this new wave of investment. It is not to be expected, given their priorities, that their investment plans will range beyond their traditional assembly activities and high-value added parts production. There will be an intensification and up-grading of

their facilities, but there will only be a limited number of major new investments in Canada which would involve a broadening of the spectrum of their parts production. Cash flow imperatives are likely to dictate that the Big Four continue to buy, rather than make, the broadest range of automotive parts and accessories. There will still be plenty of scope for Canadian parts producers to market competitively made products.

The Commission believes that the Canadian original equipment parts producing industry has the potential to develop and exploit new technologies. However, these objectives can best be realized if a number of initiatives are undertaken forthwith to make the best use of Canadian management ability, labour force skills and natural resource endowments. In general, the Commission considers that future developments in the Canadian automotive parts industry should emphasize the use of capital intensive, technologically sophisticated production methods to turn out world scale runs of key components. Likewise, the Commission believes that there must be further rationalization and corporate consolidation, together with sustained expansion of both the multinational and Canadian locally owned parts producers. To achieve these objectives, it will be necessary not only to promulgate policies which spur investment but also to devise those which give added importance to the adoption of new technology, the development of new processes and products and, in certain instances, the furtherance of basic research. The next chapter of this Report deals with the R & D question at length, and outlines some feasible policy measures. Many of these measures are complementary to the investment policy framework set out below.

This is not to argue that there will be a decline in the interesting and profitable opportunities open to the smaller Canadian parts producers. However, in some cases these producers may find that the required magnitudes of the orders are rather more than they can immediately handle. A combination of exchange rate advantages and the need for U.S. automotive assemblers to obtain supplies from independent sources will give rise to attractive sales opportunities in the medium term. These market openings will yield good returns to those smaller producers who can position themselves accordingly and retain their output flexibility in such a way as to quickly take advantage of enquiries and potential orders. They should also be able to discover new avenues for sales in export markets which will allow them to sell not only the goods they currently produce but also afford them the stimulus to develop and market new product lines.

The Commission is convinced that a prosperous and active future for the Canadian automotive industry can be achieved principally through a substantial increase in automotive parts production. While the assembly of vehicles should continue to be of importance in Canada, it is evident that better rates of return, more fruitful employment opportunities, challenging managerial environments, and opportunities for Canadian R & D are most likely to be realized through growth and expansion of the Canadian automotive parts industry. Furthermore, the future competitive realities may cause an international diffusion of automobile assembly activity. This would lead to substantial proportions of "World Cars" being assembled in the developing nations, therefore, allowing less potential for a



quantitative increase in the number of vehicles being assembled in North America. In comparison, there appears to be a much longer time horizon for the viability of North American parts production based upon advanced technology and world scale production runs. With these possibilities in mind we turn to an examination of strategies designed to assist the Canadian automotive parts industry to make a strong response to these challenging developments.

Investment Policies for the Canadian  
Independent Original Equipment Automotive  
Parts Manufacturers

The independent parts producers have been successful in selling their products throughout North America. Although Canada has run a substantial deficit in the parts trade under APTA, this is to be expected and not feared. The 1977 results show that Canada exported \$3.5 billion worth of parts to the U.S.A. and imported from there some \$6.2 billion so producing a bilateral deficit of \$2.7 billion under the Auto Pact. However, much of that import total is made up of large-scale items produced in-house by the U.S. automotive assemblers themselves. These include such costly parts as engines, transmissions and major stampings. Some production of this type has occurred in Canada, but to a large extent Canada has not had facilities to produce these items at home. In the previous chapter of this Report some conditions were described which could improve the prospects for the establishment of more in-house production capabilities in Canada. To the extent these were achieved, new output would substitute for a proportion of the present flow of capital intensive parts imports, and add to the stream of parts exports going to the U.S.A.

The independent parts producers have contributed between 50 and 60 per cent of the total value of parts produced in Canada during the 1970's. The Commission believes that the recent depreciation in the value of the Canadian dollar has enhanced the attractiveness of Canadian parts sourcing to North American automotive parts buyers. There are now real opportunities for Canadian producers to negotiate medium term contracts to supply parts to members of the Big Four. Thus, there is no prospect that the Canadian parts manufacturers are in danger of losing their existing North American market. However, the continental market may not give rise to the only opportunities for growth in the next decade. Automotive trade originating outside North America, and between third parties appears to offer substantial prospects for new markets. The Canadian parts producers will need to prepare, both in terms of technology up-grading and capacity rationalization, if the industry is to meet the marketing challenges of the forthcoming industrial decade.

Bearing in mind these factors, a policy framework for this sector of the automotive industry should have among its objectives:

1. to maintain and enhance the existing competitiveness of the Canadian parts producers so as to ensure their continuing participation in the North American market;
2. to encourage the parts producers to respond and adopt new techniques and product processes so as to keep them abreast of mainstream developments in the North American automotive industry;

3. to lay the groundwork for a rationalization of the Canadian parts industry so that as the "World Car" concept evolves, Canadian parts manufacturers may be able to produce parts in global-scale runs and reap all the attendant production efficiencies; and
4. to secure for the Canadian parts industry a greatly expanded share of the rapidly growing international vehicle parts market.

In the long run, growth in this industrial sector as a whole can only be achieved by gaining for Canada a bigger share of world trade in automotive parts and accessories and expanding capacity to serve those wider markets.

To achieve these objectives, the Commission proposes a set of policies which bear upon both sides of the global market equation. Objectives 1 to 3 above are concerned with supply capability, not only in terms of capacity and efficiency, but also in the sense of the industry's adaptability to new production methods, re-tooling and switches in product mix. Objective 4 is concerned with the need to open up new international markets — in one country or another — for Canadian parts producers. Penetration of new markets cannot be widely achieved unless and until the parts industry is fully competitive and cost-effective internationally.

To commence the discussion of policies which might be used to assist the Canadian parts industry to expand efficiently, we shall examine policies to promote investment in new plant, equipment and machinery.

The Department of Industry, Trade and Commerce is considering a plan for the formation of an Automotive Investment Corporation (AIC). This plan has been proposed by the Automotive Parts Manufacturers' Association of Canada. In essence, it is proposed that the AIC be a government fund of \$250 million from which loans would be made to the Canadian independent parts industry at or below the U.S. prime interest rates. These loans would be available solely to this industry and earmarked for use in capital expansion, tooling, research and development.

The Commission has examined the AIC proposal in detail and finds that it cannot recommend it. There are a number of reasons why this policy is unacceptable. First, the evidence suggests that there is a high rate of return in the Canadian parts industry. Second, what evidence exists suggests that multinational parts producers may have been reluctant to re-invest their own funds in their Canadian facilities. Third, there is no evidence that the larger independent parts producers are unable to raise funds in either the Canadian or American capital markets. Fourth, there does not seem to be any reason why the Canadian automotive parts producers should be singled out for government subsidized lending arrangements.

Once interest-subsidized loans were made available to the automotive parts producers, others would quickly request them also, presenting similar arguments about the comparative costs of investing in U.S. and Canadian plants. If there is a differential cost, it is certainly not unique to any Canadian manufacturing industry. Thus, adoption of the AIC

plan would soon lead the Government of Canada into widespread subsidization of industrial loans. Not only would this be extremely costly to the public purse, but it seems likely that such subsidization measures would become a target for countervailing trade action.

The Commission acknowledges that the small independent Canadian parts makers may have some difficulties in securing adequate sources of new capital in private money markets. For this reason the Commission recommends that:

- (i) The Government of Canada recognize that there are real opportunities for profitable new investments in the Canadian automotive parts industry. In these circumstances, the Government should ensure that it is in a position to respond to the demand for loan guarantees from its adjustment assistance program, the ceiling of which has been recently raised from \$350 million to \$1 billion. In the expectation that there will be large numbers of applications from the automotive parts sector, the Commission recommends that the Government prepare accordingly. Officers who are competent and experienced in this field should be assigned to these applications so that an effective and expeditious response can be made to credit worthy borrowers.

In order to facilitate an expansion in the supply capability and an upgrading of the technological sophistication of the Canadian independent parts industry, the Commission recommends:

- (ii) A duty-free provision of materials to be used in the production of Canadian automotive parts and accessories be established. Provision be made for Canadian automotive parts manufacturers to import duty-free necessary raw materials from any source. This will enable these producers to obtain their requirements at world competitive prices. This could be particularly important for such new materials as graphite light-weight alloys, and plastics which may well be the focus of parts materials in the future.

In an earlier section, it was concluded that there were slim chances for attracting an overseas manufacturer to a Canadian site for assembly purposes. This is not because Canada offers a lower expected rate of return, but because of the political imperatives of locating inside the U.S.A. In most cases, as we have underscored in previous discussion, parts production would be more profitable, pay higher wages and be likely to have a longer technological and competitive life span than assembly

in Canada. What measures could be used to encourage overseas manufacturers to source parts from Canada, or enter into joint ventures for new production facilities here?

In discussions with the Commissioner, European and Japanese manufacturers agreed that Canada may have some comparative advantages vis-à-vis parts production over other principal automotive producing countries. Certain resources of which Canada has a relative abundance will become increasingly attractive to producers in the future, particularly as manufacturers strive to reduce vehicle weight and improve operating efficiency. If Canadians can marry their advantages in aluminum production, ferrous and non-ferrous alloys, petro-chemicals and competitively priced energy to the new technological processes in automotive parts production, then Canada's drawing power as a manufacturing location could be considerably enhanced.

To encourage overseas auto manufacturers to consider sourcing and producing parts in Canada, the Commission suggests a wider use of the designation procedure first adopted in the Auto Pact to include approved purchasers of Canadian parts for export to automotive assembly plants elsewhere. The parts purchasing agent would be nominated by a respective foreign automotive assembler as its representative for "designated vehicle importer" status. The "designated vehicle importer" would acquire the right to import foreign vehicles — produced by an undesignated manufacturer in the U.S.A. or overseas — free of duty provided that a minimum

of 60 per cent Canadian Value Added (CVA) requirement is met by its parts purchasers in the first year, moving progressively to 75 per cent in five years. This system would be an extension of the current Canadian procedure under the Auto Pact whereby North American vehicle producers can be "designated" as having fulfilled the 60 per cent CVA condition to allow them duty free entry into the Canadian automotive market.

An important consideration favouring the extended use of the "designation" approach to stimulating parts purchases and vehicle trade is its acceptability under international trading regulations. Indeed, the "designated manufacturer" formula was first adopted when certain American companies complained against Canada's 1963 "duty-remission" program, and threatened to countervail against them.<sup>1</sup>

Recently, Canadian authorities have resurrected "duty-remission" as a technique for encouraging the sourcing of Canadian parts by Volkswagen. Similar programs have also been discussed with Japanese and other automotive producers. However, during the Commission's discussions with U.S. Treasury officials in Washington, D.C., it became very clear that implementation of a "duty-remission" program by Canada would run the risk of attracting countervailing duties by the American authorities. Even if the U.S. Administration did not take the initiative immediately in this instance, there would be a high probability that an individual

---

<sup>1</sup> For a discussion of the history of these policies and the events which finally lead to the Auto Pact and its use of the "designated manufacturer" technique, see Chapter 2.



company would make application for countervailing action. Countervailing duties could be applied to parts sold from Canada to Volkswagen in such a way as to wholly neutralize the Canadian "duty-remission" on vehicle imports into Canada. It would, therefore, discourage a major incentive for Canadian parts procurement by Volkswagen, U.S.A.

The Commission, therefore, believes that the "duty-remission" approach to inducing increased parts sourcing by foreign automotive assemblers — be they located in U.S.A. or overseas — will not be an effective policy. Indeed, this program is likely to lead to a commercial, or trade irritant situation between Canada and the U.S.A. A more acceptable policy procedure would be to extend the "designation" mechanism beyond North American automotive manufacturers to the Canadian import representatives of foreign automotive manufacturers. The terms under which foreign automobiles might be imported duty free into Canada would be identical with those used for North American vehicles under the Auto Pact. There would be no discrimination on a bilateral basis. The policy would be a clear and well understood move in the direction of freer automotive trade between Canada and the rest of the world. It would stimulate parts production activity and engender more competition in vehicle sales at home.

The policy of designating vehicle importers would work in the following manner:

- (iii) Each vehicle producer not already enjoying "designated manufacturer" status in North America under the Auto Pact will be allowed to nominate an exclusive "designated vehicle importer" in Canada.

The "designated vehicle importer" may not necessarily be owned or controlled by the foreign vehicle manufacturer. However, the "designated vehicle importer" must be the exclusive purchaser of automotive parts from Canada to the assembly plants — in the U.S.A. or overseas — of the foreign vehicle manufacturer.

The approved "designated vehicle importer" would be responsible to the Department of National Revenue for filing records of all parts exports and vehicle imports.

Upon achieving a CVA of 60 to 75 per cent, the "designated vehicle importer" would be allowed duty-free import into Canada of vehicles to a total defined value. An example using sample value is given below.

The CVA proportion would be calculated as the value of Canadian parts shipped, F.A.S. to the foreign manufacturers assembly plants as a ratio to the cost of vehicle sales in Canada. This is the same basis for calculating CVA used in the Auto Pact.

A simple example will illuminate this proposal. Supposing a "designated vehicle importer" purchases and ships \$15 million worth of parts sourced in Canada. These parts would be destined for the U.S.A. or overseas based plants of a foreign vehicle producer. The shipment could be an assortment of parts bought from various Canadian parts producers, or it could be one product supplied in bulk from one parts plant. This plant might be independently owned, a captive plant of the North American Big Four, or a new in-house parts producing facility established in Canada which by itself might achieve sufficient CVA to qualify for the duty-free privilege under the "designated vehicle importer" scheme.

The \$15 million shipment of parts would earn for the "designated vehicle importer" the right to import duty-free vehicles whose cost of sales value in Canada would be \$25 million.

In the opinion of the Commission, the policy proposal outlined above will encourage both domestic and foreign new investment in the Canadian automotive parts industry. Not only will the existing economic environment and comparative advantages of Canada be brought sharply to the notice of foreign vehicle assemblers, but an important offset will have been offered to overcome the "institutional barriers" retarding foreign automotive investment in Canada.

The opportunity to earn duty-free entry for foreign vehicles as a consequence of achieving 60 to 75 per cent CVA will be difficult to resist. This will be particularly true for those producers who have been adversely affected by recent exchange rate adjustments. The opportunity to escape

the Canadian MFN import tariff of 15 per cent on vehicles not traded under the Auto Pact should have considerable appeal in a period when such key currencies as the Deutsch Mark, Yen and even the U.S. dollar have been appreciating against the Canadian dollar. Duty-free entry would assist leading foreign car manufacturers to ameliorate, for a while, the rate of price increase of their vehicles sold in Canada. Retaining their competitiveness will give them a better chance to maintain their market shares, particularly when other indications suggest that their rapidly advancing prices have been moving their sales in a more elastic portion of the vehicle demand curve, e.g. the sudden easing of Honda sales after multiple price advances due to Yen appreciation in 1977-1978.

Once one foreign vehicle manufacturer decides to take advantage of the "designated vehicle importer" system by sourcing parts or building a parts facility in Canada, then competitive pressure in the consumer market will rapidly persuade the other producers to also adopt the plan. As a consequence, the Canadian automotive parts industry should enjoy a worthwhile expansion of investment, employment, output and foreign exchange earnings under this Plan.

#### Aftermarket Automotive Parts Distribution and Production in Canada

In the previous two major sections we have been discussing the outlook for future investment in both the automotive assembly and captive parts sector, and the independent parts producers. In these discussions we have not dealt directly with a very important final market for automotive

parts and accessory makers. This is the aftermarket, in which spare parts for repair and replacement are traded, and accessories are purchased for addition to original equipment specifications.

As noted previously, the trade in aftermarket automotive parts, which is not covered by the Auto Pact, accounts for a large portion of the total deficit in Canadian trade in automotive products. This deficit, which amounted to less than \$100 million in 1966, had grown to more than \$380 million in 1977. Most of these imported parts originate in the United States.

Although consideration was given during the negotiation of the Canada-United States Automotive Agreement to the inclusion of aftermarket parts, the Automotive Industries' Association of Canada requested that aftermarket parts be not included in the Agreement. The Association feared, it stated, that if tariff protection were eliminated, its members could not compete with the United States on a cost basis.

More than 375 companies in Canada manufacture aftermarket parts. Parts and components are used by individual Canadians, by garages and vehicle dealers to repair and service motor vehicles. They are distributed by a large number of warehouse distributors and wholesalers. At retail, there are a multitude of outlets, some affiliated with chain stores, others with oil companies, while many are independent specialty stores and garages or motor vehicle dealerships.

Sales in Canada of aftermarket parts are large, being in excess of one and a half billion dollars at factory prices. If accessories and ancillary automotive products are included in sales, the market exceeds \$3 billion at the wholesale level. While the available statistical data

do not permit precise comparison, it is clear that imports supply a sizeable portion of the Canadian aftermarket, perhaps close to half of the sales of parts proper, as distinct from accessories.

Imports can be divided into four categories. First, there are the major components which are produced by captive facilities of the motor vehicle assemblers in the United States. These include major stampings or assemblies made therefrom, which are not available from Canadian production. Second, there are those parts and components made by or for the motor vehicle assemblers in the United States using tooling which they own and retain in the United States. Third, there are those parts which are made in both the United States and Canada. Lastly, there are some additional items made only in the United States or elsewhere. In total, imports from all sources are substantial, amounting to \$633 million in 1976 and \$588 million in 1977.

Most of the Canadian parts manufacturers make both original equipment and aftermarket parts. In fact, out of the total 375 odd firms in the field, it appears that only about fifty are exclusively manufacturers of aftermarket parts. About 35 per cent of the total number of firms in Canada producing aftermarket parts are U.S. owned. These American firms produce in value between 60 and 65 per cent of the total output of aftermarket parts turned out in Canada.

Eighty of the Canadian aftermarket producers are component rebuilders. They rebuild used components, such as engines, and can offer them for sale at considerably lower prices than the cost of original

equipment. Because this kind of activity is not as developed in other countries and since the Canadian rebuilders have shown very considerable initiative and precision skill, they have developed a substantial advantage in selling to export markets.

Canadian producers which are owned in the United States often do not have a free hand in promoting their own export sales. In other words, they are precluded from competing with their parents when the same parts are made in both countries. Because the Canadian subsidiary firms are restricted to a more limited market, they have not the same opportunities to realize those productivity and cost advantages which volume and specialization can offer. This does not mean that there are no exports from Canada by such subsidiaries. In fact, some of them, plus a number of Canadian owned manufacturers are successfully exporting aftermarket parts from Canada. They have shown considerable initiative in searching for ways to expand their export sales. Despite these efforts, the ratio of imports to exports in 1977 was something like 3.6 to 1.

Most Canadian aftermarket exports entering the United States are subject to customs tariff duties averaging 4 per cent. Canadian tariff rates range from  $12\frac{1}{2}\%$  to  $17\frac{1}{2}\%$  and are considerably greater than the U.S. levies against aftermarket components. Because many truck aftermarket parts are not made in Canada, a sizeable portion of such imports enter duty-free, being of a class or kind not made in Canada.

In many ways there is a close similarity in the present after-market situation to conditions which prevailed for motor vehicles and original equipment parts in the early 1960s. At that time, Canadian producers experienced rising costs and increasingly keen competition from manufacturers both in the United States and overseas. Because of their ability to specialize and achieve the economies of volume output, these foreign producers could reduce their costs and prices. In face of these economic realities, even substantial tariff protection could not protect the Canadian industry and prevent imports from increasing. Since 1965, however, the reciprocal removal of customs duties between Canada and the United States has enabled Canadian producers to share the North American market for original equipment and, thus, to specialize and manufacture in much greater volume. As part of this rationalization process, many Canadian subsidiaries, which previously were precluded from exporting, were encouraged by their parent firms to specialize and rationalize their output in selected volume lines in order to supply customers in both Canada and the United States at competitive prices.

Thus, while many Canadian parts makers are now able to compete effectively with producers in the United States for original equipment business, the same firms still find it more difficult to compete for aftermarket sales in Canada, even with 12½% tariff protection or more. Despite a growing interest in the vast United States market and very low U.S. tariffs, Canadian aftermarket parts exports continue to lag far behind imports.



The prospect of a reduction in the United States tariff to minimal levels offers Canadian manufacturers a new opportunity to overcome the constraints of their present more limited markets. To make the most of these challenges, consideration should be given to an expansion of the definition of "designated vehicle importer" to include the aftermarket parts trade. Using the technique outlined in the previous section, it should be possible to devise a parallel duty-free entry system for aftermarket parts producers and distributors. Aftermarket parts could be imported duty free from the U.S.A. or overseas sources by aftermarket parts manufacturers in Canada, i.e. "designated parts importers" who met a stipulated CVA requirement. The details would have to be worked out carefully to take into account the special circumstances in the aftermarket business.

Because of the key role played by distributors in the aftermarket and their potential to assist in its rationalization, they should be considered as highly eligible for designation under such a program. The extension of the duty-free privilege to any of this class of firm would be upon the understanding that it would continue to maintain at least its historic relationship between aftermarket parts purchases in Canada and total sales of this class of commodity.<sup>2</sup>

---

<sup>2</sup> This caveat constitutes a ratio safeguard similar to that embodied in the original Auto Pact.

The Commission believes that there is scope for an imaginative and successful use of the "designated parts importer" procedure using both actual aftermarket parts manufacturers and parts distributors operating in Canada. There is little to be gained from further elaboration of the policy strategy proposed above, since in essence it is conceptually similar to proposal (iii) discussed in detail for the original equipment parts sector. Furthermore, many of the same firms would be affected by the initiatives for both classes of commodities and they will wish to devise complementary responses to both programs.

The Commission believes that the approach of designating importers who can qualify for duty-free entry in either or both the original equipment and aftermarket parts industry is potentially an effective strategy for expanding and rationalizing the Canadian independent parts industry as a whole. This approach is much to be preferred over any continuation or elevation of the present level of tariff protection for aftermarket parts. The Canadian industry would mark time and then continue its gradual sideslip into industrial obsolescence without some new impetus to nudge it toward modernization and specialization. Stagnation in aftermarket parts would be particularly unfortunate if at the same time the original equipment parts sector of this industry was rapidly moving towards a new found vitality of production and international competitiveness.

## CHAPTER 8

### REGIONAL ASPECTS OF THE AUTOMOTIVE INDUSTRY

Canadian automotive production is heavily concentrated in Ontario. In 1976, Ontario accounted for 89 per cent of the value of shipments of motor vehicles, Quebec for about 6 per cent, the Prairie provinces 2 per cent, and British Columbia and the Atlantic provinces 1.5 per cent each. In the parts sector, Ontario accounted for 98 per cent of output, with the remainder being distributed principally between Quebec and the Prairies.

By the time the Automotive Agreement was negotiated, the industry's presence in southern Ontario was well established. In 1964, Ontario enjoyed 98 per cent of both assembly and parts output. This proportion has remained constant in the parts sector since implementation of the Agreement. Ontario's share of output in assembly declined from 98 per cent to 89 per cent. GM's plant in Ste. Thérèse, Quebec, (which accounts for most of the non-Ontario increase in assembly) and the four truck plants in Western Canada account for the decline in Ontario's share of assembly operations.

It is sometimes claimed that the Automotive Agreement prevented increased regional activity in the automotive industry because the ensuing North-South rationalization of production favour southern

Ontario locations near the centre of automotive activity in the United States. It is contended that without the Agreement vehicle manufacturers would have treated the Canadian market as a separate entity, developing the industry on an East-West basis. There may be some merit in this argument that had the Automotive Agreement not been negotiated the industry might have been more regionally dispersed, but the retention of the status quo would have maintained a high cost, inefficient industry dependent on high tariff protection to survive. Furthermore, any negative effects of the Automotive Agreement on regional development would have to be weighed against the benefits in which all regions have shared, such as lower automobile prices to consumers and the indirect regional employment benefits of rapid growth in automotive activity. With respect to the latter point, the Department of Regional Economic Expansion has estimated that more than a third of the indirect employment increase associated with expansion of automobile production takes place outside of Ontario.

### Outlook for Regional Automotive Investment

#### Assembly

Prospects for investment by U.S. companies in new auto assembly plants are not favourable at this time because of continuing excess capacity in North America. There may, however, be some limited opportunities for commercial vehicle assembly as this market continues to

expand. In a regional context, there may be some prospects for further investment in truck assembly in Western Canada as a result of rapid resource-based growth in that region.

Investment in assembly operations by off-shore manufacturers also does not appear to be favourable at present. Although west coast and east coast locations might be attractive to Japanese and European manufacturers respectively, as compared to central Canadian locations, initial investments will almost certainly be made in the United States, as indicated in Chapter 5.

Some European vehicle manufacturers informed the Commission of proposals from provincial authorities to establish assembly operations in Canada. Such proposals invariably involved small-scale, inefficient assembly for the Canadian market. Although these small-scale assembly operations may confer short term benefits on regional economies, few have proven economically viable over the longer term — witness the closing down of the Bricklin operation in New Brunswick, Renault's in Quebec and of Toyota's in Cape Breton. Their subsequent closure can result in painful adjustment for affected communities. The Commission recommends, therefore, that federal and provincial governments not pursue assembly investment by offshore producers, unless such investment is of sufficient scale to ensure long-term competitiveness. This implies that in most cases the plants would need to serve both Canadian and U.S. markets.

Parts

Notwithstanding the concentration of parts production in Ontario, prospects for regional investment in parts facilities appear to be more favourable than in assembly. As the automotive industry increasingly substitutes light-weight materials for iron and steel there should be new opportunities for regions which have a strong competitive position in the manufacture of these alternatives. GM is considering whether it requires an aluminum engine block facility with Quebec being a possible site, primarily because of the local supply of aluminum ingots and relatively inexpensive energy. Japanese manufacturers have expressed interest in aluminum parts facilities on the west coast because their own aluminum industry faces high energy costs. Interest has also been expressed in the manufacture of asbestos brake linings in Quebec. Another opportunity area which merits exploration is plastic parts production. One third of Canadian plastics production currently takes place outside Ontario, principally in Quebec and the West.

It should be noted, as well, that investment by offshore vehicle manufacturers in large-scale captive parts facilities to take advantage of duty-free entry arising from the proposed revisions to "designated manufacturer" criteria would not necessarily be most advantageously located in southern Ontario. In addition to raw materials and energy considerations, proximity to the assembly plants requiring these components in the U.S., Japan or Europe will be an important factor in the investment decisions.

### Investment Incentives

The attractiveness of particular regions for the kinds of investments outlined above will, of course, be augmented by the regional development incentives available from the federal and provincial governments. These incentives are intended to offset the locational advantages of the industrial heartland.

It can be argued that the principal issue is not where in Canada automotive investment will take place, but whether it will take place at all in Canada in competition with the United States, Mexico, Brazil or elsewhere. The Commission believes that the overall Canadian investment climate has improved to the point where Canada can obtain a reasonable proportion of automotive investment on its merits. Subject to the caveat above, some of this investment could be expected to be located in the regions enjoying certain comparative advantages, reinforced by regional development assistance. In the Commission's view a rigid approach is neither warranted nor desirable.

Unfortunately, governments on both sides of the border have intervened strongly in the investment decision-making process in recent months by offering incentives to locate in prime industrial areas. This practice has seriously undermined Canada's regional development objectives by, in effect, neutralizing the impact of legitimate regional incentives. The Commission is opposed to such ad hoc incentive payments as only the shareholders win when the automotive producers hold a

subsidy auction and award the new plant to the highest bidder. Competitive subsidization by municipal, state, provincial, and federal governments will lead to irrational decision-making.

In the circumstances, the Commission would urge that the Canadian government join with the United States and other governments to try to resolve the problem of competitive subsidization on a multilateral basis. While the resolution of this problem will not be easy, it is to be hoped that the current GATT negotiations aimed at developing a code governing such subsidies will be successful. In the event they are not, the Canadian and U.S. governments should seek to work out a bilateral arrangement. It must be recognized, of course, that one of the main problems is that of ensuring compliance by other levels of governments in each country.



## CHAPTER 9

### RESEARCH AND DEVELOPMENT

Design, research and development activities employ highly qualified scientists, engineers and managers. They create an atmosphere conducive to the wider development of technology-based industries. Although the North American automotive industry undertakes a great deal of R & D, very little of this occurs in Canada.

The U.S. automotive industry spent an estimated \$3.4 billion on R & D in 1977 — an increase of about 15 per cent over the previous year. R & D expenditures in Canada amounted to only about \$8 million, and most of this was incurred by the parts makers. The Canadian subsidiaries of the "Big Four" undertook about \$2 million in R & D, but paid in excess of \$300 million for R & D performed on their behalf at U.S. installations. The technology developed in the United States is then embodied in new parts, designs and styles used in Canadian assembled vehicles.

TABLE 9.1

## RESEARCH AND DEVELOPMENT EXPENDITURES

## AUTOMOTIVE INDUSTRY IN CANADA

\$000

	<u>1964</u>	<u>1973</u>	<u>1975</u>	<u>1976<sup>P</sup></u>	<u>1977<sup>P</sup></u>
(1) *	--	3,251	2,491	2,672	2,101
(2) **	--	4,347	4,385	5,025	5,420
(3) ***	--	400	1,150	1,234	1,092
	-----	-----	-----	-----	-----
TOTAL	1,894	7,998	8,026	8,931	8,613

NOTES

1964 covers R & D expenditures in all transportation equipment manufacture except aircraft and parts.

\* (1) Covers Motor Vehicle Manufacturers

\*\* (2) Covers Motor Vehicle Parts and Accessory Manufacturers

\*\*\* (3) Covers Truck Body and Trailers

P Provisional

SOURCE: Statistics Canada

These figures suggest strongly that there is a serious and growing imbalance in the technological composition of Canada's automotive industry. The imbalance is particularly severe in the automotive assembly industry, where if anything, there has been a reduction in real R & D activity since North American assembly was rationalized.

It has been stressed in earlier sections that even when Canada is fully competitive on all counts, there still exist some fundamental "institutional barriers" to attracting automotive activity to Canada. The presence of these "institutional barriers" was recognized by both American and Canadian negotiators when the Auto Pact was originally negotiated in 1964, but none of the barriers to R & D in Canada have been materially reduced.

The principal institutional barriers to greater diffusion of North American R & D activity stem from the organizational structure of the industry. The industry has always undertaken the bulk of its R & D in the United States. It could be argued that by integrating the U.S. and Canadian markets the Agreement took away the rationale for any independent Canadian R & D capability. The North American automotive industry has rationalized itself on the basis of centralized head office and R & D functions and decentralized production. Certain other international industries have been organized in such a way that particular branches of the firm undertake all functions, from R & D through to production and marketing. Neither system can be considered superior to the other from a

technical point of view, and it would be naive to assume that the automotive industry will find it advantageous to change its way of doing business without a substantial incentive to do so.

In the North American automotive industry, R & D activities are clustered close to head office locations because of the importance of communications between key personnel. The directors and senior staff of R & D facilities must have well-forged links with top management, marketing executives, production engineers, and other technical people in the design sector of the automotive industry. The Big Four consider there are significant economies of scale to be achieved through consolidation of their design and R & D activities in proximity to head offices or centers of technical expertise.

This interaction between key personnel groups in common locations creates a substantial barrier to decentralization of R & D operations. It should be pointed out that more than 90 per cent of R & D expenditures are devoted to the development of new and improved products and production processes. Only one-tenth is spent on more basic research, which may not have immediate application.

In recent years, the upsurge in automotive R & D has been prompted by the need to meet new U.S. standards for energy conservation, emission control and safety. For instance, in 1975, General Motors spent \$485 million out of a total budget of \$1.1 billion on emission control research. This is likely to be a primary R & D concern to 1985 and beyond. The Big Four will have great difficulty in meeting these standards, particularly the fuel economy

requirements. It is difficult to conceive of the automobile manufacturers conducting R & D in Canada which has been necessitated by American regulations. Differences in Canadian environmental and safety standards could create the need for independent developmental work in Canada.

A number of Canadian observers have suggested that Canada is the obvious site for research into problems related to northern climates. The automobile manufacturers respond, however, that their products are suited for all North American climatic conditions and that, therefore, a car built for Canadian conditions already exists, to which the consumer may add whatever heavy duty or special cold weather packages he may require — which is open to question.

Notwithstanding existing institutional barriers, there is evidence to suggest that some R & D could be conducted in Canada at less cost than in the United States. The experience of Canadian companies in the telecommunications field suggests that costs in Canada do not compare unfavourably with those in, say, California. Canadian R & D has a highly successful record in a number of industries, both from a technical and commercial standpoint.

Canadian tax treatment of R & D operations appears to be as generous or more so than in the United States. However, substantial U.S. government grants to industry in that country have contributed greatly to the overall financing of R & D efforts. The cost of equipment, much of which is imported into Canada, is generally more expensive than in the United States if only because of customs duty and sales taxes levied on the duty paid value.

To summarize, Canada is a competitive site for R & D installations. Canada may, however, be at some disadvantage vis-à-vis the United States because of U.S. government grant programs and due to the higher cost of imported apparatus. To overcome the "institutional barriers" to expanding the Canadian share of North American automotive R & D requires a broad range of policies.

Measures to Increase R & D in the  
Canadian Automotive Industry

Currently a number of measures are in effect to provide incentives to all industry to establish or expand R & D activities in Canada. These include: (1) regular tax deduction of 100 per cent of R & D expenses from taxable income; (2) special tax credit of 5 per cent of R & D expenses, introduced in April, 1977 to run for three years; in designated areas this amount increases to 7½ per cent and 10 per cent; and (3) special additional write-off of 50 per cent of the amount by which the current year's expenditures are in excess of the average of the preceding years.

Some examples of the way these measures may be used to advantage by Canadian firms are given in Appendix D of this report. Despite these and other incentives, the motor vehicle and parts industry in Canada has undertaken little R & D. It is, therefore, necessary to provide additional incentives.

1. Special CVA Credit for Increased Research and Developmental Activity in Canada

Vehicle producers should be permitted for a period of five years to claim 200 per cent CVA credits for annual

increments of R & D expenditures over a base period value. Under this proposal, R & D expenditures dispensed in-house or in independent laboratories or universities could, upon acceptable verification, be an allowable credit.

2. Improved Tariff Rates on Imported Research Equipment

The government should consider implementing duty drawbacks on imported equipment earmarked for research and development purposes in Canada. The drawback for authorized imports of this type might be in the vicinity of two-thirds of the duty payable.

3. An Additional Element in the Program for Export Market Development (PEMD)

It is suggested that the Department of Industry, Trade and Commerce institute a new section of the existing PEMD program. This section would be designed to make grants to manufacturers who wish to shop for ideas or designs from outside Canada which could be developed here. It would also provide special assistance to Canadian producers with an innovative process or product to lease or sell outside the country.

4. A Decrease in the Tax Allowance for the Cost of Imported Research and Development

As noted previously, the Big Four automotive assemblers are charging their Canadian subsidiaries more than a quarter of a billion dollars annually for R & D done on their behalf

in the United States. Should the measures proposed by the Commission not prove effective in increasing automotive R & D in Canada, the government should give serious consideration to adjusting the basis upon which R & D payments to foreign affiliates are deductible for tax purposes. One approach would be to balance these deductions against R & D expenditures made in Canada. For example, transfer payments might initially be deductible in a ratio of \$5 to \$1 of Canadian R & D. The ratio could then be adjusted progressively until it became \$1 deductible for transfer payments for every \$1 spent for Canadian R & D.

Several of the foregoing proposals to increase R & D activity in the automotive industry might be applicable to a broad range of industries in the Canadian manufacturing sector. The problem is clearly not limited to the automotive industry, and similar types of measures might assist in offsetting some of the institutional barriers which have developed over the years.

Additional Measures to Increase R & D  
in the Canadian Parts Industry

The Commission believes that the Canadian parts industry has the potential to develop and exploit new technologies related to certain areas in which Canada may have a competitive advantage vis-à-vis the principal automotive producing countries. In fact, European and Japanese manufacturers stressed this point in discussions with the Commission and expressed some interest in possible joint ventures in



component development and manufacturing. Certain resources of which Canada has relative abundance will become increasingly important in the future as manufacturers strive to reduce vehicle weight and improve operating efficiencies. These include aluminum, ferrous and non-ferrous alloys, plastics and composite materials and, as well, a secure supply of competitively priced energy and petrochemical feedstocks. A key to future development will be the ability to marry these material technologies with automotive technologies.

Existing R & D programs go some way in encouraging indigenous innovation in the auto parts sector. Innovation assistance under the Enterprise Development Program (EDP) of the Department of Industry, Trade and Commerce, which provides grants of up to 50 per cent of approved development costs, has been used relatively frequently by the smaller, Canadian-owned parts producers. But larger parts makers would not in most cases be eligible for assistance because the EDP requires that the proposed project constitute a "significant burden" on the firm's resources.

To give a new impetus to research, development and design activities in the Canadian automotive parts industry, it is proposed that the fund available under the EDP be substantially enlarged. Furthermore, it is proposed that the financial assistance available for individual firms also be enriched, particularly with respect to the smaller Canadian-owned operations.

With respect to the smaller parts makers, who have more limited financial and technical resources at their disposal, it is proposed that product development assistance take the form of grants to cover no less than 75 per cent of costs and for particularly promising ventures, where

financing would be a burden, this assistance may be raised to cover full costs. Also, the Commission recommends that the test of "significant financial burden" that currently applies over the whole range of assistance and for all applicants be eliminated for the small independents.

For the foreign-owned parts makers, which for the most part are the large enterprises, the Commission recommends that the assistance take the form of forgivable loans, not to exceed 75 per cent of the cost of the development project. In all those instances where the project is a commercial success, the firm would be expected to repay the loan in full with reasonable interest over a period of years.

On the basis of consultations with the industry, the Commission is concerned that the EDP embracing such a variety of industrial assistance and such a range of industries runs the risk of becoming unwieldy and excessively bureaucratic. Recommendation two proposed that an advisory body be established to conduct an annual review of developments pertaining to the automotive industry. The Commission recommends that this body also be charged with the task of reviewing the operations of the EDP as it relates to the automotive industry.

## CHAPTER 10

### THE "CANADIAN CAR"

Canada is the only major automotive market in the world which does not have an indigenous auto manufacturing capability. As noted previously, France, Italy, Germany, Britain and Japan all have several indigenous manufacturers. Even Sweden whose domestic market is one-third the size of Canada's can claim two vehicle manufacturers. The reasons for the development of the Canadian industry along a path quite different from other countries lie in history, but the Commission has asked itself, like other observers of the Canadian automotive scene over the years, whether there are any prospects in the future for the establishment of a viable, Canadian-controlled auto manufacturing capability.

The attractiveness of the Canadian car concept lies in its potential to redress the major structural deficiency which the Commission identified in other chapters as being endemic to the Canadian industry, namely its truncated, branch-plant organization whereby research, design, development, engineering, product planning and other corporate activities are virtually all conducted by the parent organization from a U.S. base and only production and distribution are decentralized.

There does not appear to be any interest on the part of the vehicle manufacturers in considering changing the present system. Therefore, the Commission decided to examine in some detail the prospects

for establishing an independent Canadian capability. The establishment of such a capability would help foster a more balanced, integrated industry in which the entire innovation cycle from research through to marketing would be conducted from a Canadian base. This would permit the development of a car better suited to harsh Canadian driving conditions than those currently offered; it would generate increased employment for Canadian engineers, scientists, technicians and business graduates; and it might result in increased production employment if the Canadian car displaced imports and penetrated export markets. Perhaps more importantly, in the longer term, the Canadian car would help secure Canada a place in the future of the automotive industry which might not otherwise be available under foreign ownership and control. As the automotive market in western industrialized countries approaches saturation and market growth shifts to developing countries, production may also turn increasingly to developing countries, leaving developed countries the knowledge-intensive research, design, engineering, production of high technology components, and corporate planning activities. To some extent, this trend has already begun as Canadian production locations compete with Mexico and Brazil. If the automotive industry does indeed evolve in the same manner as textiles and consumer electronics — i.e. production in low-cost developing countries and product development, management and control in developed countries — only those countries with an indigenous capability may be in a position to maintain a presence in the industry of the future.

If a Canadian car were to be developed, it would need to be produced in substantial volume in order to be cost competitive with

vehicles currently offered available to the consumer. The Commission estimates that although scale economies in some aspects of automotive production are not completely exhausted beyond 500,000 units annually, a volume of 250,000 units a year would involve only a marginal cost penalty and would permit an enterprise to be competitive provided that model changes were infrequent. A facility producing 250,000 vehicles annually would create about 15,000 automotive jobs, although some of these could be at the expense of existing employment.

The Canadian car would need to find a "niche" in the market where there is sufficient demand and where it can compete successfully with vehicles of a similar type. The Canadian car envisaged by the Commission is a "northern car" designed to operate in a superior fashion in Canadian climatic conditions. This would include such attributes as front wheel drive for traction, superior starting capability, more efficient heating and defrosting systems and improved corrosion resistance. The total market for passenger cars in regions subject to "northern climatic conditions" might approach 4 million vehicles annually: 1 million in Canada; another 2 1/4 million in the northern part of the United States, and another 3/4 million in the Scandinavian countries and Europe. To achieve a volume of 250,000 units, the Canadian car would need a market penetration of about 6 per cent, or 10 per cent in Canada and 5 per cent in export markets.

The Commission estimates that the cost of setting up new integrated facilities to produce 250,000 units annually could approach \$2 billion, including launch costs. The costs are broken down as follows:

Vehicle assembly	11%
Engine line and foundry	27%
Transmission line	11%
Stamping plant	19%
Trim plant	7%
Components manufacture and assembly (non-proprietary components excluded)	25%
Total	100%

This \$2 billion figure does not include R & D costs which, at a minimum, could amount to 5 to 10 per cent of the cost of the facility or \$100 to \$200 million. This estimate is based on the assumption that a great deal of existing technology is acquired from other sources. The \$2 billion estimate does not include the costs of setting up a dealer and service network which involves major investments for each dealer. It should be pointed out, however, that initial costs could be reduced substantially by procuring major components, such as engines and transmissions from outside sources. In fact, it is only reasonable to expect that most of the major components would be purchased from other suppliers, at least at the outset because the economies of scale would not permit economic production on this scale. Thus, the initial operation might largely be confined to assembly, which would require a plant cost of approximately \$225 million.

The staggering costs of establishing a new, world scale, integrated automotive manufacturing facility are matched by the risks inherent in such an undertaking. First, there is a certain degree of technical risk associated with launching a new product; even established auto makers bring out new models with design and

engineering faults which result in costly recalls and loss of consumer acceptance. Second, there is the risk that costs of production will be greater than forecast, that prices will be too high to attract customers, or that they will be forced down to unprofitable levels by competition from existing manufacturers. Third, and perhaps most importantly, there is the risk of consumers not being attracted by the design and overall concept of the vehicle in sufficient numbers to make its manufacture profitable. The risk is exacerbated if only one or two models are offered. The major vehicle manufacturers spread this risk by offering a wide range of models whose production can be accelerated or reduced according to the dictates of the market. Moreover, consumer loyalty to a particular name takes time to develop; some 60 to 80 per cent of each vehicle producer's sales are from repeat business. Consumer acceptance of a new car whose existence in the market may be short-lived would be difficult to establish.

The development of a viable Canadian vehicle manufacturing company would become increasingly difficult over time as concentration in the industry increases. Some observers estimate that only some ten manufacturers world-wide will survive. As examples of this trend, Peugeot-Citroën recently bought out Chrysler's European operations, making it the largest producer in Europe; Renault and AMC, and Renault and Mack are negotiating joint marketing and production arrangements; joint engine development programs are becoming quite common among European manufacturers; and the Japanese government is interested in encouraging mergers in its industry in order to maintain international competitiveness.

These arrangements have been necessitated in part by the development of the international or "world car". A world car is an automobile sold in international markets and whose component specifications are virtually identical, wherever produced. This enables the manufacturer to achieve economies of scale heretofore unrealizable because of different market requirements. Smaller vehicle manufacturers will have difficulty in competing in the mass market unless they make arrangements that will give them similar economies.

A number of companies appear to have decided that their future viability as relatively small and independent manufacturers depends on establishing a place in the market where their automobiles sell on the basis of quality, performance, and reliability and command a price premium. Some manufacturers have been very successful at exploiting this segment of the market, while others have had difficulties and their long-term survival may be in doubt. The prospects for the success or failure of a Canadian car are difficult to judge on the basis of others' experiences, but two obvious prerequisites are superior quality to avoid competing head-on with the mass-produced world car and aggressive export marketing to overcome domestic demand deficiencies.

On the basis of these considerations, the Commission considers the likelihood of a Canadian entrepreneur establishing a motor vehicle company on an internationally competitive scale to be



extremely remote. There are, however, a number of options available to government to make the environment more hospitable for the establishment of a Canadian car company.

One option would be to protect the Canadian market from import competition and perhaps restrict the activities of foreign producers in Canada in order to guarantee a Canadian car the required number of sales. The Canadian market is large enough — one million passenger vehicles a year — to make this option feasible. The Commission does not believe, however, that this is the direction which government policy should take. It would restrict unduly personal freedom and consumer choice. It would inevitably increase prices to the consumer. It could well result in a trade war with our major trading partners which would be extremely damaging to Canada's overall economic interests. It would jeopardize the achievements made in output and employment in this industry over the last dozen years, and it would inevitably involve government ownership and its attendant problem.

A second option would be a Canadian takeover of an existing vehicle manufacturer. There are several manufacturers who may experience difficulty in adjusting to the automotive requirements of the 1980s and who may be interested in selling off their Canadian operations. The Commission has found no evidence of a desire on the part of any company to divest itself of its Canadian interests and does not consider this to be a feasible option at this time.

Another means of establishing an indigenous presence in the industry would be to undertake a joint venture with an existing producer. Such a joint venture would have a number of important advantages. Access to the design and engineering capability of an established producer would substantially reduce technical risk, especially if the Canadian car were initially based on an existing model. Minority equity participation by the foreign producer would spread financial risk. Access to an existing dealer network would significantly reduce costs and would enhance consumer identification with a new product.

The Commission explored this alternative in some detail in its discussions with American, Japanese and European motor vehicle manufacturers. None of the foreign manufacturers expressed any great interest in the joint development of a Canadian car. Their view was that by and large existing vehicles satisfied the Canadian consumer's needs and that a special northern car would be too expensive to achieve a sales volume needed to support an internationally competitive facility. Many manufacturers felt that their own vehicles were evolving into the kind of car that would be better suited to northern conditions with the increasing use of front-wheel drive, better corrosion protection and improved electrical systems. Some cited the lack of consumer acceptance of special optional "winter packages" which increased the price of the automobile. The manufacturers also expressed the view that a Canadian car would not be able to compete, at least initially, against GM and Ford without some measures of protection. Some suggested that the

development of a niche in the small specialty market (50,000 vehicles annually) might support a high quality, expensive automobile but that competing in the mass market was too difficult.

The Commission observed as well from these discussions that a joint venture of this kind did not appear to dovetail with any major producer's corporate strategy. The industry is, for better or worse, going in the opposite direction towards the development of a world car which will be suitable for all markets, and the concept of a special northern car is anithetical to this approach. Moreover, the producers who are well-established in the Canadian market might view the Canadian car as a possible threat to some of their existing sales and not just incremental business. On the other hand, the producers who have an insignificant share of the Canadian market at this time and who, therefore, might be expected to have an interest in a joint venture, tend to view Canada as part of the North American market, not as a separate entity, and in these circumstances the requirements of the much larger U.S. market take priority in the allocation of scarce resources.

The Commission cannot recommend on the basis of its discussions with virtually all of the world's major automobile manufacturers that the government actively pursue the Canadian car option at this time. This is not to say, however, that the Canadian car should be completely dismissed from future consideration. As long as developments in the automotive industry are favourable to Canada, the cost and risk of this

option will remain high relative to the potential benefits. But failure to ameliorate trading arrangements or failure of key participants to treat the Canadian market in a fair and equitable way may make the Canadian car a much more attractive option than it is today.

## CHAPTER 11

### SOME CONCLUDING OBSERVATIONS AND RECOMMENDATIONS

Unlike most of the advanced industrial countries, Canada does not have, nor has it ever had, an indigenous integrated automotive industry. Almost all the actual or perceived problems for Canada in this sector flow from this compelling fact, e.g. a large and persistent sectoral balance of payments deficit, the absence from Canada of any significant decision-making or other head office functions, the lack of significant design, research or development activities, a weak machinery and equipment support industry, constant danger of inadequate investment, an inadequate share of employment both qualitatively and quantitatively, products not quite suited to the country, climate and geography.

The large and continuing international accounts deficit in this sector is made up of many elements of which the most persistent are; the deficit for finished vehicles in trade with overseas countries; the deficit for aftermarket and service components with the U.S. and overseas countries; payments for research and development and for business services; the remittance of profits, dividends and interest to U.S. owners and investors; the deficit in machinery and equipment used in the auto industry; and a deficit on original equipment parts trade with the U.S.A.

Contrary to widely held public perception, owing in part to incomplete data or misinterpretation of published statistics, Canada does not have a chronic trade deficit with the U.S.A. under the Automotive Products Trade Agreement (Auto Pact).

In seeking answers to the issues confronting Canada in the automotive sector, it is tempting to speculate on the possibility of an all-embracing solution in the form of the creation of a domestic integrated industry. The existence in this country of an annual market for some 1 million automobiles and 350 thousand commercial vehicles gives support to this idea in that it provides a basis at least for its technical feasibility. The Commission believes that such a development will not be forthcoming in response to the initiative of either Canadian or foreign entrepreneurs. If it were to be attempted, it would have to come largely as a government enterprise. Given the facts that, from the world point of view, we are dealing with a mature, highly competitive industry approaching market saturation in the industrialized countries, the huge capital costs entailed in designing, producing and marketing of a Canadian range of cars, the formidable risks of failure in a relatively open market, the massive disruption to established businesses and channels of trade in Canada and abroad, the Commission has concluded that it would be imprudent for government to consider such a course unless circumstances change to the point where Canada's future in the industry could not otherwise be assured.

The Bladen Commission of 1960, the initiators of the duty-remission programs of the early sixties and authors of the Auto Pact of 1965, presumably considered the alternative of creating an indigenous integrated auto industry in Canada and rejected it in favour of more modest and less comprehensive solutions. Developments since then both in Canada and abroad and the massive expansion of assembly and parts production in Canada associated with the Auto Pact make the option of a Canadian car even less practical now than it may have been at that time.

The Canada-U.S. Auto Pact did not solve all the actual or perceived problems confronting Canada in the auto industry. Indeed, it did not set out to solve all these problems. It was a limited purpose agreement invented to head off a threatened trade war between Canada and the United States kindled by Canadian efforts to halt the decline of the Canadian auto industry. Its essential purpose was to obtain for Canada a better share of North American assembly and parts production and employment than it had in 1964, without imposing additional penalties on the Canadian consumer or Canadian labour. It sought to achieve this objective by introducing conditional free trade with the U.S. in this sector, combined with a guarantee of certain minimum assembly and parts production in Canada relative to Canadian vehicle consumption. It more than achieved its limited objectives. It failed to do many other things which some Canadians, perhaps mistakenly, expected of it. What did it achieve? Where did it fail?

Looked at from the Canadian side, the Auto Pact rescued Canada from the inefficient high-cost assembly and parts production associated with short runs, small scale, and highly differentiated car models and

parts to serve a relatively small and highly protected domestic market. By encouraging the production of a more limited range of cars and original equipment parts for the whole North American market it soon developed the capability of competing fully with assembly and parts plants on the U.S. side of the border. Output in Canada grew by leaps and bounds in both absolute and relative terms. On average, during the 14 years since the Pact, the value of output in Canada of North American vehicles and parts was approximately in balance with the value of consumption in Canada when valued at the factor gate, net of taxes and other charges not directly involved in the production process. A large number of new jobs were created. Wages advanced to virtually close the gap with those in the U.S. Price differentials declined substantially to the benefit of consumers.

The results of the Pact were disappointing in several important respects. The Canadian industry performs virtually no design, research and development work. Indeed, certain tasks of this nature which in the pre-Pact era were carried out to make minor changes in U.S.-designed cars or to apply different paint techniques were lost to Canada. Similarly, certain head office activities performed in Canada in the pre-1965 era such as procurement were also largely lost to Canada. In short, under the Pact, the Canadian industry lost none of its satellite characteristics. If anything, this condition became more pronounced as the U.S. side took advantage of the free trade arrangements to rationalize its overall activities, including those in the management, professional and scientific areas of its operations. But it would be a mistake to conclude that much



was lost to Canada in this process. The simple truth is that Canada had virtually nothing real in this area before 1965. We have even less now: but the appearances and the realities are now closely in line.

A perceived failure of the Auto Pact relates to the regional distribution of the Canadian automotive industry. From its inception Canadian automobile and parts production were concentrated in Southern Ontario in close proximity to the U.S. industry and the largest segment of the Canadian market. A major assembly plant in St. Thérèse, Québec, some truck manufacturing in the West, a failed Renault plant in Québec, a failed Toyota plant in Cape Breton, and a small scale Volvo plant in Halifax, are hardly a large tribute to the regional dispersion impact. However, the supply of materials to the automotive industry has, no doubt, improved the regional benefits balance sheet, but not in a decisive way. It needs to be said that there are no specific provisions in the Pact to induce regional dispersion although it was not unreasonable to have expected that out of a large total expansion the ripple effect would take the benefits further and deeper than in fact occurred.

Another perceived failure which has attracted a great deal of attention in recent years relates to the balance within the industry itself as between assembly and parts production. This perception is based on an examination of the trade statistics which show a substantial deficit for Canada for auto parts and a surplus for vehicles. While these facts are obvious, an analysis of production and employment in the industry reveals greater growth in both absolute and relative terms in the parts sector as compared with assembly.

A failing in the view of some Canadians is the fact that the Pact does not appear to have provided any significant inducement to the greater ownership and control of automotive companies by Canadians. There has been no change whatever in the ownership and control of the automobile manufacturing companies operating in Canada, and the largest of the independent parts makers are wholly owned Canadian subsidiaries of U.S. corporations. Independent parts companies in Canadian hands have been reduced in numbers, although the survivors are much improved in strength and quality. It is disappointing that no more than a few new entrants in the industry are owned and controlled in Canada. The Pact itself had nothing to say about ownership and control of the companies participating in the industry, but again it was not unreasonable to have hoped that vastly expanded opportunities would be no less attractive to Canadian entrepreneurs than to American entrepreneurs.

From a somewhat different vantage point, but no less important, the Auto Pact has not lived up to its early expectations of contributing a strong and steady positive influence on Canada-U.S. relations in this sector or on our economic relationships more generally. Although the Pact has demonstrably been of substantial benefit to both Canada and the United States as well as to individual residents and corporations of both countries, it is nonetheless true that its decade and a half of history has been attended by recurrent shrillness and complaint on both sides of the border, sometimes even threatening to end in the sudden demise of the Agreement.

The Pact itself is vague on the subject of trade balance, and even more vague on the subject of the life of the safeguards. This is perhaps why it has been the subject of continuing controversy. The U.S. insists that the safeguards are transitional and must go in favour of pristine free trade. Canadians cling stubbornly to the safeguards insisting that they were meant to be permanent — sometimes even after some of them may have outlived their usefulness. Some Canadians also contend that the Pact's success or failure should be judged by whether or not, year in and year out, Canada achieves production in Canada equal to consumption not only in total, but also in the components of the trade. It is sometimes said of international agreements that their quality is attested to by their survival in circumstances where they satisfy no one, at least not completely. If this be true, the Auto Pact is perhaps a good living testimonial to this dictum.

There is perhaps one truth which has been distilled from the ongoing controversy surrounding the Auto Pact. It would appear from the record that as a practical matter, the greatest satisfaction — or at least the least dissatisfaction — on both sides of the border, can be observed when the commodity trade governed by the Pact is roughly in balance. If peace be our objective, we may have discovered a useful guidepost even though it may have nothing to recommend it in good theory or in logic.

It is somewhat of an enigma that the Auto Pact has not been modified in any significant way since its inception. Apart from the addition of snowmobiles and certain off-highway vehicles where inadvertence rather than policy dictated change, the Pact stands as originally

negotiated. While this may be interpreted as a tribute to its quality and original wisdom, it is a disappointment in at least several respects to its progenitors.

First, it is undeniable from the record that there have been important changes in the industry which demand, let alone justify, modification in the Agreement. Yet, like an ancient religion, even the most minute clause attracts its worshippers. This may be more the fault of the parties to the Agreement than the Agreement itself. Nonetheless, it needs to be said that the Auto Pact has failed to provide a flexible framework within which real and sometimes urgent problems cry for attention. This deficiency needs to be corrected.

Second, it is also an undeniable fact that, despite the hopes and aspirations of the originators, the Auto Pact has failed to provide the stimulus or inspiration to beget similar agreements in its image for the enhancement of international specialization and efficiency in the massive trade between Canada and the U.S.A. Although it is true that there are no obvious examples of other cross-border industries where quite the same conditions prevail, it is no less true that there are many examples of industries in Canada, and to a lesser extent in the U.S., where a greater measure of specialization in the respective jurisdictions would yield substantial benefits for the citizens of both countries. Conditional free trade arrangements in such industries, where Canada might venture forth, without the danger of being blotted out, deserve continuing attention in both countries. It is again something of an enigma at a time when more and more Canadian voices are being heard in support of such initiatives that the response from the U.S. side has been a deafening silence.

The Commission has explored with senior U.S. officials the desirability of reformulating the Auto Pact at this time, given the changing conditions and needs which have emerged in the two countries since the Agreement was signed, as well as the formidable restructuring which is likely to take place in the world industry during the next decade. It has not been encouraged to believe that this would be a propitious time to engage in such a re-examination. Preoccupation with more compelling issues, concentration on the multilateral tariff negotiations in Geneva as a larger and more immediate concern, reasonable satisfaction with the present state of Canada-U.S. trade including the automotive sector, and stresses and strains in the executive and legislative decision-making process militate against opening new issues from the U.S. point of view. The Commission has also gathered the impression that these same considerations together with concern about relationships with other large trading partners have obscured for the moment the long-term interest which the United States may have in exploring possibilities for imaginative trade initiatives in the Canada-U.S. bilateral context. For these reasons the Commission has concluded that it would not be timely to request the U.S. to reopen the Auto Pact. It has also concluded that it would not be fruitful at this time to initiate discussions looking to the extension of automotive type conditional free trade in relation to other industrial sectors. Following the completion — or termination — of the Geneva multilateral negotiations, it may be useful to canvass these possibilities afresh.

The Canadian automotive industry today assembles substantially more vehicles than the entire Canadian vehicle consumption. The assembly industry is specialized, efficient and competitive. Although large new investments in assembly facilities will be needed to meet the changing requirements of the next decade over and above the traditional model changeovers, this is not likely to result in new assembly plants in North America. Canada cannot, therefore, look forward to major additional assembly capacity. Present plants, when modernized, will be fully capable of turning out larger numbers of smaller vehicles in line with the moderate growth anticipated for vehicle consumption in North America.

Overseas automobile producers have been canvassed with a view to ascertaining their intentions with respect to the manufacture of motor vehicles in North America. There is no reason to expect, during the near future, any major moves in this field along the lines of the Volkswagen plant in Pennsylvania on the part of the Japanese or the European automotive corporations. In any event, Canada would not rank very high in their priorities should any such assembly operations materialize in North America.

To the above considerations should be added the further observation that assembly operations with their requirement for relatively unskilled, relatively low cost labour, are progressively gravitating to Third World countries of Latin America, the Far East and the Middle East, all of which are competing with one another for assembly plants. This may well be an inevitable trend, and it is probably not in the Canadian interest to resist these developments with extraordinary measures of subsidization or increased protection.

The future holds more promise for Canada in the potential for new and enlarged facilities for the production of original equipment parts to be used for assembly in Canada, the United States and elsewhere in the world. Prospective developments in the design of smaller, lighter, safer, and more efficient cars to meet government mandated requirements as well as the imperative of rising energy costs will require refurbished and new plants for a wide variety of major and minor automotive components. This will entail the use of lighter materials, such as aluminum and plastics as well as composite materials only now in the process of development. It will also require new components for the monitoring and control of various vehicular functions related to safety, clean air, and the efficient use of energy. A canvass of virtually all the automobile manufacturing corporations in the United States, Japan, Germany, France, Italy and Sweden revealed that very large new investments will be required for the manufacture of components over the next five to ten years to build the next generation of cars.

Canada has some definite advantages in competing for a share of this new business. As a major producer of aluminum and other light metals with a large and growing capacity for basic plastic materials and a good supply of energy at competitive prices, Canada has the basic requirements for the new generation of components. When to this is added a capable and plentiful work force, good location in relation to major markets in the U.S., proximity to tide-water for overseas customers, a highly competitive exchange rate, and a substantial domestic market for both cars and parts,

it would seem that a strong drive should be mustered to encourage the expansion of existing Canadian parts plants, to encourage Canadian entrepreneurs to enter this potentially lucrative business, and to attract investors from the U.S. and abroad.

Among the various barriers which obstruct the fuller development of the auto parts industry in Canada are the severe risks which are confronted in a market where the buyers are few and strong and the sellers numerous and not nearly as strong. Indeed, it is no exaggeration to say that the independent parts makers, particularly those that are based in Canada, are often at the mercy of their customers. In circumstances where rapid technological changes make these risks very real, there is often a reluctance to undertake the large investments required and there are practical problems in obtaining the equity and loan financing required.

It is understandable then that the auto parts industry should be pressing the government for special considerations — in the form of assured markets, and finance through government institutions at subsidized interest rates. The Commission does not believe that it is practical, at the present time, to negotiate for assured markets beyond those generated by the Auto Pact. Nor does it believe that a case has been made for government finance at lower than market rates of interests. It does believe, however, that good opportunities may be missed by the Canadian independents because of difficulties in obtaining financing for expansion or for new products.

As was noted earlier, Canada suffers a large and growing deficit in aftermarket components trade, despite the fact that this sector is protected by substantial tariffs. It bears repeating that independent Canadian manufacturers who produce exclusively for the aftermarket are the



least efficient sector of the automotive industry. It is apparent that a continuation of present policies and practices in this sector in the face of the changes anticipated in the market will simply perpetuate the problems and lead to declining production and employment. It is difficult to see why an extension to this sector of opportunities for specialization and export along the lines of the techniques embodied in the Auto Pact and applied to original component parts should not yield positive results.

Reference has been made in several chapters of this report to various "institutional barriers" which impede the fuller development of the automotive industry in Canada. Referred to most frequently by virtually every segment of the industry, is the fear that a sudden change in commercial policy may destroy the market for a major product, rendering a large capital investment worthless and sometimes threatening to bankrupt the company. This point was made to the Commission by institutions which are at present producing in Canada, as well as by potential investors from the U.S., Canada, Japan, Germany and other countries. Hard examples can be cited in this industry and in other manufacturing industries in Canada where this consideration has led to decisions against investing in Canada even where other factors including the return on investment were favourable to locating in Canada.

In the context of investment in Canada this worry, of course, surrounds the uncertainties associated with U.S. commercial policy — or that of Canada itself arising out of possible disputes with the U.S. authorities. The application of countervailing duty in the Michelin Tire case, the threat of countervail in the Volkswagen case, and the world

cognizance of the not infrequent threats of restricting measures add credence to this fear and render this uncertainty a costly economic variable and a serious deterrent to investment in Canada.

It should be noted that it is not essential for many actual instances of restrictive trade actions to occur to convert this fear into a serious and costly barrier. It is sufficient for the threat to exist in the background and to be raised from time to time in Congressional or international debate for it to become an effective barrier. Indeed, it needs to be acknowledged that the U.S. Government has made the most sparing use of its countervailing or other powers to restrict trade. This, of course, is not the issue; the dog need not bite; he need only bark now or then — or perhaps simply be a dog that neither bites nor barks.

This problem is not new. It has been the subject of debate in Canada-U.S. trade relations over the years, and in the GATT and other international trade forums involving other major trading partners as well. Indeed, uncertainty about the U.S. countervailing law particularly in respect to the power of the U.S. executive branch to set aside its application in particular cases has become one of the serious obstacles to the completion of the current GATT multilateral tariff negotiations.

There is no easy answer to this problem, and only a long and consistent history of "abstinence" in the U.S. in particular will serve to overcome it. A novel proposal has been made in this report — included in the recommendations below — which may at least mitigate some of the adverse effects of uncertainty in commercial policy. It is being put forward on the assumption that the U.S. will, in practice, continue to

to be circumspect in the use of extraordinary barriers to trade, and that Canada will refrain from employing measures that blatantly invite that kind of response. Indeed, the proposal is designed in such a way that it can only be invoked in circumstances of fairly obvious departures from the application of agreed international trade rules.

### Recommendations

There follows a list of recommendations drawn from the body of the Report. Although the Commission concluded that this is not an appropriate time to reopen the Auto Pact, there are a number of policy initiatives which do not require an immediate response from the U.S. or other trading partners and are believed not to entail serious risk of attracting an adverse reaction from them. While in some instances unilateral action is not likely to be as effective as joint action with our trading partners, time is very much of the essence in a rapidly changing automotive environment, and Canada does not really have a realistic alternative to early and effective measures. Also included are several recommendations of a negative character where it is suggested that the government refrain from certain policies which in the judgement of the Commission are likely to prove harmful.

#### Institutional

1. There is clearly a need for better data covering this industry than are generally available to governments and the public on a regular basis. The government should adopt a format for statistical analysis based

on the concepts which the Commission has outlined in this report with a view to providing a more comprehensive picture of developments in the trade and production in automotive products.

2. Because the automotive industry will be undergoing rapid change over the short to medium term, the industry should be reviewed at least on an annual basis. The Commission recommends that the government conduct such a review through the mechanism of an independent advisory body which would have the authority to make enquiries and advise the government on developments in the industry.

#### The Automotive Agreement

3. The Commission does not believe that this is a good time to attempt to re-negotiate the Auto Pact with the U.S. Government. The Commission recommends, therefore, that the safeguards under the Agreement, namely the assembly ratio, the CVA requirement and the "bogey", as well as the prohibition on imports of used cars and the restriction of duty-free imports to designated manufacturers, not be modified at the present time. They should be the subject of serious study in light of probable future negotiations.

#### Investment Climate

4. Potential investors tend to perceive a Canadian base for the North American market to be subject to the risk that commercial policy changes could disrupt sales to the U.S. market. In order

to offset this perception, the Commission recommends that the government implement a trade insurance program which will indemnify investors who are affected by unexpected changes in commercial policy.

5. The duty-remission program which the government negotiated with Volkswagen and which is being used as a model for other companies runs the risk of attracting countervailing duty. The Commission recommends that these programs be terminated and replaced by a program as outlined in 6.
6. The Commission recommends that vehicles made by producers in any country, which do not currently enjoy duty-free entry into Canada under the Auto Pact, be permitted duty-free entry if a "designated vehicle importer" acting on behalf of the foreign vehicle producer, achieves a Canadian Value Added (CVA) equal to 60-75 per cent of the cost of sales in Canada of the foreign producers' vehicles. The CVA may be achieved through the purchase of Canadian parts from independents or the "in-house" production of components in Canada.
7. Ad hoc grants to auto manufacturers to locate in prime industrial areas seriously undermine Canada's regional development objectives. The Commission recommends that the government try to obtain on a multilateral basis, or failing that, bilaterally with the U.S., agreement that governments will cease industrial subsidization as it applies to jurisdictions which do not merit special regional development considerations.

Industry Restructuring

8. The Commission believes that there are real opportunities for profitable new investments in the Canadian automotive parts industry and that adequate financial facilities may prove to be an obstacle. Accordingly the Commission recommends that the government position itself to respond to the demand for loans or loan guarantees to this sector of the recently enlarged Enterprise Development Program. In the expectation that there will be large numbers of applications from automotive parts producers, the Commission recommends that the government prepare accordingly by assigning special officers who are competent and experienced in this field to handle such applications so that an effective and expeditious response can be made.
  
9. Despite continuing protection, Canada has suffered a chronic deficit in aftermarket parts. The Commission believes that rationalization of the aftermarket industry on a basis similar to that of the vehicles and original equipment markets is the best means of promoting internationally competitive production in this sector. Consideration should be given to an expansion of the "designated vehicle importer" concept to include aftermarket parts trade. "Designated parts importers" could import duty-free from the U.S.A. and overseas providing that they met an agreed upon CVA requirement. "Importers" in this category might include aftermarket parts manufacturers and distributors. Distributors of aftermarket parts would be required to at least maintain the historic ratio between their purchases of Canadian aftermarket parts and their total sales of these commodities in order to qualify.

10. The Commission recommends that a tariff provision be introduced for duty-free import of materials to be used in the production of Canadian automotive parts and accessories. This would take the form of a special end-use item along the lines of similar tariff items now available for the agricultural implements industry and certain other industries. This will enable auto parts producers to obtain their requirements at world competitive prices. This could be especially important for such new materials as light-weight alloys, and plastics which may well be the focus of parts materials in the future.
11. The implementation of the Commission's recommendations could result in significant restructuring of the automotive parts industry. It is recommended, therefore, that if the recommendations are adopted an assistance program be established to provide compensation for workers who are dislocated as a result of major industrial adjustments.

#### Research and Development

12. In recommendation number 8, the Commission proposed that officers who are competent and experienced in matters relating to auto parts manufacturing be assigned to the administration of applications from such firms for financial assistance under the Enterprise Development Program (EDP) in order that this activity be administered in an efficient and expeditious manner.

To give a new impetus to research, development and design activities in the Canadian automotive parts industry, it is proposed that the fund available under the EDP be substantially enlarged. Furthermore, it is proposed that the financial assistance available for individual firms also be enriched, particularly with respect to the smaller Canadian-owned operations.

With respect to the smaller parts makers, who have more limited financial and technical resources at their disposal, it is proposed that product development assistance take the form of grants to cover no less than 75 per cent of costs and for particularly promising ventures, where financing would be a burden, this assistance may be raised to cover full costs. Also, the Commission recommends that the test of "significant financial burden" that currently applies over the whole range of assistance and for all applicants be eliminated for the small independents.

For the foreign-owned parts makers, which for the most part are the large enterprises, the Commission recommends that the assistance take the form of forgivable loans, not to exceed 75 per cent of the cost of the development project. In all those instances where the project is a commercial success, the firm would be expected to repay



the loan in full with reasonable interest over a period of years.

On the basis of consultations with the industry, the Commission is concerned that the EDP embracing such a variety of industrial assistance and such a range of industries runs the risk of becoming unwieldy and excessively bureaucratic. Recommendation two proposed that an advisory body be established to conduct an annual review of developments pertaining to the automotive industry. The Commission recommends that this body also be charged with the task of reviewing the operations of the EDP as it relates to the automotive industry.

13. The Commission further recommends that vehicle producers be permitted to claim 200 per cent CVA credits under the Agreement for annual increases of R & D expenditures over a base period value.
14. In order to offset the higher equipment costs associated with R & D in Canada, the Commission recommends that two-thirds of the customs duties payable on equipment imported into Canada for R & D use be remitted.
15. The Commission recommends that a new section be added to the Program for Export Market Development to assist Canadian manufacturers in obtaining foreign technical "know-how" which can be adapted and developed in Canada.

16. Should the measures proposed by the Commission for increasing automotive R & D in Canada not prove effective, the government may wish to consider a more far reaching measure of a restraining nature to achieve the desired results, as described in chapter nine. Such measure might take the form of limiting the amount of R & D payments to foreign affiliates which may be deducted for tax purposes.

#### Multilateral Tariff Negotiations

17. The government is at present engaged in multilateral tariff negotiations under the G.A.T.T. in Geneva. It may be that consideration is being given by Canada to offering tariff reductions for motor vehicles and automotive parts in the context of these negotiations. The Commission is not in a position to judge whether such concessions may be justified in order to achieve a balanced overall agreement. However, the Commission is of the firm view that within the framework of the automotive industry itself such concessions would not be helpful. Indeed, the prospect of achieving expanded and new production and employment in Canada, which is the principal purpose of this Commission's recommendations, would be impeded if commitments were made to reduce M.F.N. tariffs on vehicles and parts at this time.

## LIST OF TABLES AND CHARTS

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
3.1	Canadian-U.S. Automotive Trade for Selected Years as Published by Statistics Canada	50
3.2	Canadian-U.S. Automotive Trade for Selected Years Within and Outside the Automotive Products Trade Agreement	52
3.3	Canadian-Overseas Automotive Trade for Selected Years	57
3.4	Canadian-Overseas Automotive Trade for Selected Years Within and Outside the Automotive Products Trade Agreement	59
3.5	Trade in Automotive Products Between Canada and All Countries Under the Automotive Products Trade Agreement	60
3.6A	The Canadian-U.S. Automotive Balance in Non- Merchandise Trade Related to the APTA for Selected Years	67
3.6B	Canadian Imbalance in All Countries Current Account Transactions Related to the Automotive Sector	68
3.7	Value of Canadian Production Compared to the Value of Canada/U.S. Production Related to APTA	72
3.8	Value of Canadian Production and Consumption Compared to Value of Canadian & U.S.A. Production and Consumption Related to APTA	74
3.9	Total Canadian Value Added Produced as a Percent of Cost of Sales in Canada	75

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
3.10	Causal Relationship Between Canada/U.S. APTA Trade Imbalance and Canadian Value Added in Automotive Production	77
3.11	Total Canadian Value Added Produced	84
3.12	Production of Original Equipment Motor Vehicle Parts for Incorporation into Motor Vehicles Assembled in Canada and U.S.A.	86
3.13	International Sourcing Pattern of Original Equipment Parts of the Big Five Motor Vehicle Manufacturers	90
3.14	Productivity in Automotive Parts Manufacturing Canada and U.S.A.	94
3.15	Canada/U.S. Comparison of Profitability of Automotive Parts and Accessories Manufacturers	97
3.16	Canada/U.S. Comparison of Major Independent Original Equipment Motor Vehicle Parts Manufacturers; Profitability Comparison	98
3.17	New Capital Expenditures for Automotive Parts and Accessories Manufacturers in Canada and U.S.A. 1964 - 1977	100
3.18	Canada/U.S. Comparison of Major Independent Original Equipment Motor Vehicle Parts Manufacturers; Cash Flow Comparison	101
3.19	Canada/U.S. Comparison of Major Independent Original Equipment Motor Vehicle Parts Manufacturers; Capital Expenditure Comparison	102
3.20	Canada/U.S. Comparison of Major Independent Original Equipment Motor Vehicle Parts Manufacturers; Reinvestment Comparison	103
3.21	Employment Related to Automotive Manufacture in Canada 1964 - 1977	106

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
3.22	Skill Distribution of Employment in Canada and U.S.A.: Big Five	107
3.23	Physical Productivity Ratios: Canada/U.S. Motor Vehicles per Manhour Worked	110
3.24	Canada/U.S.A. Average Car Price Differential (At Factory Cost)	113
3.25	Return on Assets of the Big Four	117
3.26	Net Income After Tax as Percent of Total Assets	118
3.27	Comparison of Motor Vehicle Manufacturers' Profitability	119
3.28	Net Direct Investment Expenditures on Plant and Equipment for the Production of Motor Vehicle Products Related to APTA	121
3.29	Book Value of Net Fixed Assets in Manufacture of Products Related to APTA in Canada and U.S.A.	122
3.30	Financing of Net Direct Investment Expenditures in Canada for the Production of Motor Vehicle Products Related to APTA	123
3.31	Net Investment Income Flows Derived from Operations in Canada	124
5.1	Imports from U.S.A. of Production Machinery and Equipment and the Transfer of Miscellaneous Services From the United States to Canada	149
7.1	Canada/U.S. Comparison of Profitability of Automotive Parts and Accessories Manufacturers	177
7.2	Canada/U.S. Comparison of Major Independent Independent Original Equipment Motor Vehicle Parts Manufacturers: Profitability Comparison	179
7.3	Canada/U.S. Comparison of Major Independent Original Equipment Motor Vehicle Parts Manufacturers: Reinvestment Comparison	181
9.1	Research and Development Expenditures, Automotive Industry in Canada	210

CHARTS

<u>Chart No.</u>	<u>Title</u>	<u>Page</u>
1A	Canada/U.S. Trade Balance in Automotive Products	54
1B	Canada/All Countries Trade Balance in Automotive Products	61
2	Total CVA Produced: Non Parts CVA in Vehicles, Parts CVA In Vehicles, O.E. Parts Exported	85

A P P E N D I C E S

APPENDIX A-1

CANADIAN-U.S. TRADE IN AUTOMOTIVE PRODUCTS (AS REPORTED BY STATISTICS CANADA)

In Canadian \$ Millions	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<u>U.S. IMPORTS FROM CANADA</u>													
Motor Vehicles	95	488	995	1603	2267	2127	2536	2752	3060	3407	3790	4774	5996
Parts	151	339	512	846	1037	1127	1496	1778	2171	1953	2045	2942	3721
Tires and Tubes	4	9	13	9	5	15	8	22	68	64	68	163	144
Total	250	886	1520	2458	3309	3269	4040	4552	5299	5424	5903	7879	9861
<u>CANADIAN IMPORTS FROM U.S.</u>													
Motor Vehicles	154	384	720	998	1055	934	1321	1551	2082	2531	3126	3291	3948
Parts	797	1093	1314	1820	2307	2107	2485	2907	3553	3892	4522	5474	6847
Tires and Tubes	10	10	8	29	37	24	36	50	92	219	174	115	153
Total	961	1487	2042	2847	3399	3065	3842	4508	5727	6642	7822	8880	10948
<u>BALANCES</u>													
Motor Vehicles	( 59)	104	275	605	1212	1193	1215	1201	978	876	664	1483	2048
Parts	(646)	(704)	(802)	(974)	(1270)	( 980)	( 989)	(1129)	(1382)	(1939)	(2477)	(2532)	(3126)
Tires and Tubes	( 6)	( 1)	5	( 20)	( 32)	( 9)	( 28)	( 28)	( 24)	( 155)	( 106)	48	( 9)
Total	(711)	(601)	(522)	(389)	( 90)	204	198	44	( 428)	(1218)	(1919)	(1001)	(1087)

SOURCE: Statistics Canada



APPENDIX A-2

CANADIAN-U.S. TRADE IN AUTOMOTIVE PRODUCTS WITHIN AND OUTSIDE THE AUTOMOTIVE PRODUCTS TRADE AGREEMENT

In Canadian \$ Millions	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>U.S. IMPORTS FROM CANADA</b>												
Under APTA	481.4	988.0	1588.0	2247.7	2115.4	2473.6	2738.1	3040.2	3391.0	3726.1	4703.6	5942.8
- Motor Vehicles	338.8	458.2	789.4	953.6	1037.8	1386.2	1645.0	2048.0	1816.9	1909.2	2766.6	3488.4
- Parts	820.2	1446.2	2377.4	3201.3	3153.2	3859.8	4383.1	5088.2	5207.9	5635.3	7470.2	9431.2
- Sub-Total												
Outside APTA	4.4	4.4	9.9	10.3	12.3	62.1	13.5	20.8	14.3	60.5	69.1	51.4
- Motor Vehicles	49.2	53.2	54.3	70.9	89.4	109.3	133.3	123.6	136.1	131.4	174.9	112.7
- Parts	8.6	12.9	8.6	5.4	14.6	8.1	21.8	68.0	63.6	68.1	163.7	143.6
- Tires and Tubes	62.2	70.5	72.8	94.6	116.3	179.5	168.6	212.4	214.0	260.0	407.7	307.7
- Sub-Total												
<b>CANADIAN IMPORTS FROM U.S.</b>												
Under APTA	371.3	772.9	1073.4	1120.8	880.3	1283.6	1538.7	2010.1	2443.9	3000.3	3129.7	3846.1
- Motor Vehicles	989.7	1216.0	1705.7	2168.2	2005.4	2313.5	2718.5	3236.3	3546.6	4039.9	4800.8	6218.3
- Parts	1361.0	1988.8	2779.1	3289.0	2885.7	3597.1	4257.2	5246.5	5990.5	7040.2	7930.5	10064.4
- Sub-Total												
Outside APTA	38.5	36.3	37.7	56.6	65.6	75.6	87.2	94.1	108.1	277.6	201.3	206.2
- Motor Vehicles	132.1	140.0	149.4	196.6	183.3	213.6	237.6	303.8	341.4	356.6	578.8	511.7
- Parts	9.7	7.6	29.1	36.8	24.0	36.4	50.5	92.0	218.1	172.8	114.4	153.1
- Tires and Tubes	180.3	183.9	216.2	290.0	272.9	325.6	375.3	489.9	667.6	807.0	894.5	871.0
- Sub-Total												
<b>BALANCES</b>												
Under APTA	110.1	215.1	514.6	1126.9	1235.1	1190.0	1199.4	1030.1	947.1	725.8	1573.9	2096.7
- Motor Vehicles	(650.9)	(757.9)	(916.3)	(1214.6)	(967.6)	(927.3)	(1073.5)	(1188.3)	(1729.7)	(2130.7)	(2034.2)	(2729.9)
- Parts	(540.8)	(542.7)	(401.7)	(87.7)	267.5	262.7	125.9	(158.2)	(782.6)	(1404.9)	(460.3)	(633.2)
- Total												
Outside APTA	(34.1)	(31.9)	(27.8)	(46.3)	(53.3)	(13.5)	(73.7)	(73.3)	(93.8)	(217.1)	(132.2)	(154.8)
- Motor Vehicles	(82.9)	(86.8)	(95.1)	(117.7)	(93.9)	(104.3)	(104.3)	(180.2)	(205.3)	(225.2)	(403.9)	(399.0)
- Parts	(1.1)	5.3	(20.5)	(31.4)	(9.4)	(28.3)	(28.7)	(24.0)	(154.5)	(104.7)	49.3	(9.5)
- Tires and Tubes	(118.1)	(113.4)	(143.4)	(195.4)	(156.6)	(146.1)	(206.7)	(277.5)	(453.6)	(547.0)	(486.8)	(563.3)
- Total												

SOURCE: Compiled from data in the "Commodity Imports by Tariff Item" Series, Statistics Canada, and various issues of the U.S. President's Report to the Congress on the Operations of the Canada-U.S. Automotive Agreement.

APPENDIX A-3

CANADA-OVERSEAS TRADE IN AUTOMOTIVE PRODUCTS (AS REPORTED BY STATISTICS CANADA)

In Canadian \$ Million	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
<b>CANADIAN EXPORTS</b>												
Motor Vehicles	110	100	133	108	141	114	117	126	204	421	427	614
Parts	42	53	68	91	99	85	88	119	142	180	171	195
Tires and Tubes	4	4	3	2	3	4	3	5	5	5	8	7
Re-Exports	6	9	11	10	9	7	6	8	7	10	10	10
Total	162	166	215	211	252	210	214	258	358	621	615	826
<b>CANADIAN IMPORTS</b>												
Motor Vehicles	111	114	177	245	240	374	464	377	450	410	522	592
Parts	33	35	60	93	130	133	191	212	260	206	231	235
Tires and Tubes	5	7	10	13	19	27	42	57	70	82	79	110
Total	149	156	247	351	389	534	697	646	780	698	842	937
<b>BALANCES</b>												
Motor Vehicles	( 1)	( 14)	( 44)	(137)	( 99)	(260)	(347)	(251)	(246)	11	( 95)	22
Parts	9	18	8	( 2)	(31)	(48)	(103)	( 93)	(118)	( 26)	( 60)	( 40)
Tires and Tubes	( 1)	( 3)	( 7)	( 11)	( 16)	( 23)	( 39)	( 52)	( 65)	( 77)	( 71)	(103)
Re-Exports	6	9	11	10	9	7	6	8	7	10	10	10
Total	13	10	( 32)	(140)	(137)	(324)	(483)	(388)	(422)	( 82)	(227)	(111)

SOURCE: Statistics Canada

APPENDIX A-4  
CANADA-OVERSEAS TRADE IN AUTOMOTIVE PRODUCTS WITHIN AND  
OUTSIDE THE AUTOMOTIVE PRODUCTS TRADE AGREEMENT

- IN CDN. \$ MILLION -	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Canadian Exports to Overseas												
Under APTA - Motor Vehicles	101.3	89.3	120.8	98.0	123.0	97.8	102.0	109.5	177.5	356.5	376.0	546.5
Parts	36.0	42.8	49.5	66.8	72.0	60.8	63.8	85.5	102.8	132.8	128.3	146.3
TOTAL	137.3	132.1	170.3	164.8	195.0	158.6	165.8	195.0	280.3	489.3	504.3	692.8
Outside APTA - Motor Vehicles	6.7	8.7	11.2	10.0	19.0	16.2	15.0	16.5	26.5	64.5	51.0	67.5
Parts, Tires & Tubes	16.0	18.2	19.5	24.2	27.0	24.2	24.2	33.5	39.2	49.2	50.7	55.7
TOTAL	22.7	26.9	30.7	34.2	46.0	40.4	39.2	50.0	65.7	113.7	101.7	123.2
Canadian Imports from Overseas												
Under APTA - Motor Vehicles	1.9	2.2	8.2	12.2	7.7	31.8	43.6	51.7	51.5	40.8	65.7	73.3
Parts	6.0	8.2	11.5	14.2	32.1	39.1	64.9	63.4	91.3	109.6	127.8	128.9
TOTAL	7.9	10.4	19.7	26.4	39.8	60.9	108.5	115.1	142.8	150.4	193.5	202.2
Outside APTA - Motor Vehicles	86.8	86.6	180.5	265.2	266.4	355.3	436.7	350.7	405.4	262.8	481.5	563.0
Parts, Tires & Tubes	26.5	26.8	36.0	46.6	67.1	105.2	107.5	129.7	148.8	158.6	163.3	203.9
TOTAL	113.3	113.4	216.5	311.8	333.5	460.5	542.2	480.0	554.2	421.4	644.8	766.9
BALANCES												
Under APTA	129.4	121.7	150.0	138.4	155.2	97.7	57.3	79.9	137.5	338.9	310.8	490.6
Outside APTA	(90.6)	(86.5)	(185.8)	(277.6)	(287.5)	(420.1)	(503.0)	(403.4)	(488.5)	(307.7)	(543.1)	(643.7)

SOURCE: See Appendix A2

## APPENDIX B

### CONSUMPTION, PRODUCTION AND THE TRANSFER VALUE OF MOTOR VEHICLES

The shares of consumption and production shown in Chapter 3 are based on information reported by the major manufacturers and data supplied by the Department of Industry, Trade and Commerce. U.S. manufacturers were asked to show transfer values on a uniform basis, namely that at which they transferred vehicles to their Canadian affiliates. This transfer value is determined by the company as the vehicle passes to the first level of distribution, which in most cases is another branch of the company.

Both cost of sales, which is the measure of consumption used, and Canadian value-added (CVA), the production measure, are defined in the tariff regulations relating to the Agreement. The CVA values have been reported on a model year basis (beginning August 1 of each year), while the transfer values reported to this Inquiry are on a calendar year basis.

As defined in Tariff Item 950, Canadian value added includes all costs related to assembly or original equipment parts production, e.g. parts and material for assembly, fuel, transportation, maintenance, depreciation, tools, dies, and jigs, research and design costs incurred in Canada, and general administration expenses related to

production, but not including the net profits of the vehicle manufacturer of either assembly or original equipment parts manufacture. Cost of sales is the amount charged at the first level of distribution in Canada. Normally the cost of sales includes all the production costs and some costs related to distribution and sales, as well as some profits charged. This is equivalent to the valuation of output transferred within the company, or transfer value.

APPENDIX C

EMPLOYMENT STATISTICS IN SELECTED SIC'S RELATED TO  
THE AUTOMOTIVE INDUSTRY IN CANADA AND THE U.S.A.

1976

Employment in Canada

SIC 323-325	Motor Vehicles and Equipments	106,800
SIC 188	Automobile Fabrics Accessories	5,557
	Total SIC 323-325 and SIC 188	112,357

Employment in U.S.A.\*

SIC 371	Motor Vehicles and Equipment	797,000
SIC 2396	Automotive Trim	20,000
SIC 3231	Glass Products (Automotive Portion)	2,000
SIC 3465	Automotive Stampings	123,000
SIC 3493	Steel Springs, except Wire (Automotive Portion)	5,000
SIC 3592	Carburetors, Pistons, Piston Rings and Valves (Automotive Portion)	25,000
SIC 3647	Vehicular Lighting Equipment (Automotive Portion)	12,000
SIC 3694	Electrical Equipment for Internal Combustion Engines (Automotive Portion)	46,000
SIC 3825	Instruments for Measuring and Testing of Electricity and Electrical Signals (Automotive Portion)	4,000
	Total U.S. Employment	1,034,000

NOTE: \* On the basis of 1972 U.S. Standard Industrial Classification

SOURCE: Statistics Canada Catalogue Numbers 72-002 and 34-222 and Bureau of Domestic Business Development, Commerce.

APPENDIX D  
DETAILS OF CALCULATIONS

EXAMPLE 1

Taxable income 1978	\$10,000,000
Current year R & D - \$1,000,000	
R & D expenditures in 3 previous years:	
1975 - \$400,000	
1976 - \$600,000	
1977 - \$800,000	
Three year average - \$600,000	
Add 5% special tax credit	<u>50,000</u>
Total income 1978	\$10,050,000
Less: Current year R & D - \$1,000,000	
plus 50% of difference between current	
year and average of preceding 3 years	
- \$200,000	<u>1,200,000</u>
	\$ 8,850,000

Assume combined federal and provincial tax rate is 50%

$$\frac{50}{100} \times 8,850,000 = 4,425,000 - 50,000 = 4,375,000$$

Without the special credits (5% - 50%) the tax would be

$$\frac{50}{100} \times 9,000,000 = 4,500,000$$

Thus the saving is \$125,000 because of the special incentives.

EXAMPLE 2

Taxable income 1978	\$10,000,000
Current year R & D - \$1,000,000	
R & D expenditures in 3 previous years:	
1975 - \$751,200	
1976 - \$826,400	
1977 - \$909,000	
Three year average - \$828,867	
Add 5% special tax credit	<u>50,000</u>
Total income 1978	\$10,050,000
Less: Current year R & D - \$1,000,000	
plus 50% of difference between current	
year and average of preceding 3 years	
- \$85,566	<u>1,085,566</u>
	\$ 8,964,434

Assume combined federal and provincial tax rate is 50%

$$\frac{50}{100} \times 8,964,434 = 4,482,217 - 50,000 = 4,432,217$$

Thus the saving is \$67,783 because of the special incentives.