INDUSTRY PROFILE

Industry, Science and Technology Canada
Industrie, Sciences et Technologie Canada

On- and Off-highway Medium/Heavy-duty Trucks

Canada

INDUSTRY PROFILE

ON- AND OFF-HIGHWAY MEDIUM/HEAVY-DUTY TRUCKS

1988

FOREWORD

In a rapidly changing global trade environment, the international competitiveness of Canadian industry is the key to survival and growth. This Industry Profile is one of a series of papers which assess, in a summary form, the current competitiveness of Canada's industrial sectors, taking into account technological and other key factors, and changes anticipated under the Canada-U.S. Free Trade Agreement. Industry participants were consulted in the preparation of the papers.

The series is being published as steps are being taken to create the new Department of Industry, Science and Technology from the consolidation of the Department of Regional Industrial Expansion and the Ministry of State for Science and Technology. It is my intention that the series will be updated on a regular basis and continue to be a product of the new department. I sincerely hope that these profiles will be informative to those interested in Canadian industrial development and serve as a basis for discussion of industrial trends, prospects and strategic directions.

Robert de Cotret

Minister

Canada

Introduction

In broad terms, the automotive industry in Canada includes the manufacturers of motor vehicles (passenger cars, trucks, buses and specialty vehicles), motor vehicle parts and tires and tubes for use as original equipment in the assembly of motor vehicles as well as in the aftermarket. Automotive production is directly linked to many other key industries in Canada: iron and steel, fabricated metals, aluminum alloys, rubber, plastics, textiles, glass and chemicals.

In 1986, this wide range of automotive activities accounted for some 16 percent of total Canadian shipments of manufactured products, and approximately 44 percent of the total of manufactured exports (fabricated materials and end products) to the United States. In 1986, automotive shipments reached almost $41 billion*, composed of $25.1 billion in automobile, truck and bus assembly, $12.2 billion in parts, $1.8 billion* in specialty vehicles and in excess of $1.8 billion* in tires and tubes. In the same year, total employment reached some 148 800* persons, with 49 800 engaged in automobile, truck and bus assembly, 16 600* in specialty vehicle production, 68 400 in parts production and an estimated 14 000* in the manufacture of tires and tubes.

In addition to on- and off-highway medium/heavy-duty trucks, profiles have been prepared covering:

- Automotive Parts
- Automotive Tires and Tubes
- Buses
- Light Motor Vehicles
- Specialty Vehicles

1. Structure and Performance

Structure

The medium/heavy-duty truck industry consists of manufacturers mainly engaged in assembling cabs and chassis for the largest highway freight haulers; off-highway haulage vehicles for the construction, mining and forestry industries; and special-purpose products, such as concrete mixers. Truck-trailer and body manufacturers, which provide a customized product mounted on chassis provided by truck manufacturers, are covered in the Specialty Vehicles Industry Profile.

In 1986, the medium/heavy-duty truck industry employed 3630 persons in the production of 19 637 vehicles, with a value of $1.5 billion. More than half of the shipments were exported to the United States. Imports, largely from the United States, represented close to half the domestic market. A significant portion of truck production occurs outside the automotive corridor in southern Ontario. Of the eight establishments in Canada, four are located in Ontario, one is in Quebec and three are in British Columbia. The industry is particularly important to British Columbia, where the three establishments constitute the province's total vehicle-assembly industry.

* *ISTC estimate*

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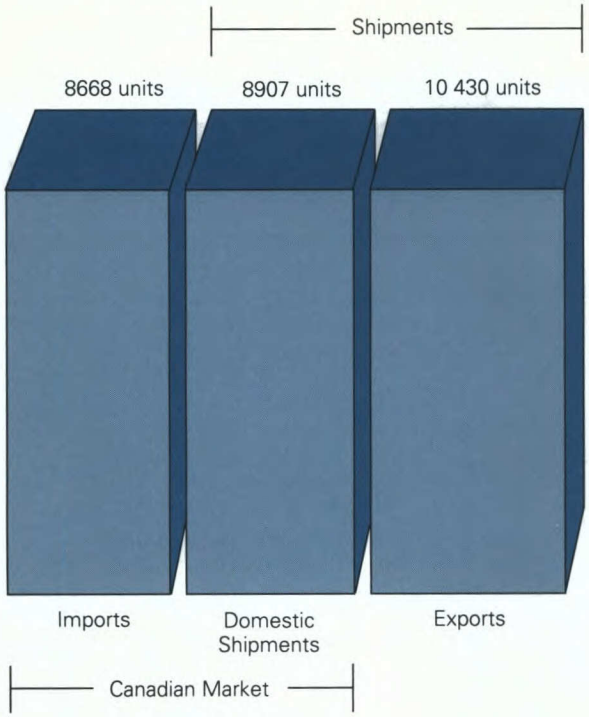


Imports, Exports and Domestic Shipments 1986

Note: Data are for on-highway trucks only.

The on- and off-highway vehicles are two distinct sub-sectors of the truck industry. The on-highway sub-sector is confined to one product area, specifically Class 8 trucks, defined as heavy-duty highway freight haulers over 16.76 tonnes (33 000 lb.) gross vehicle weight. This sub-sector, which employed 3230 persons in 1986, consists of four subsidiaries of American companies — Freightliner of Canada Ltd. of Burnaby, British Columbia; Paccar Canada Ltd. of Ste-Thérèse, Quebec; Navistar International Corporation Canada of Chatham, Ontario; and Mack Canada Inc. of Oakville, Ontario — in addition to one wholly owned Canadian company, Western Star Trucks Inc. of Kelowna, British Columbia.

These manufacturers operate under the 1965 Canada-U.S. Automotive Products Tariff Agreement (Auto Pact), which allows duty-free trade in new vehicles and original equipment parts, conditional on the achievement of certain Canadian performance criteria. Canadian producers assemble a limited range of models which are also assembled in larger plants in the United States. The Auto Pact has strongly influenced the pattern of trade. Of the 19 337 units produced in 1986 (net sales value of $1.3 billion), approximately 10 430 vehicles were exported to the United States (54 percent of shipments). At the same time, some 8668 units were imported, largely from the United States (49 percent of the domestic market).

In contrast, the off-highway sub-sector is much smaller and produces more specialized vehicles. This sub-sector, which employed an estimated 400 persons in 1986, consists of two wholly owned subsidiaries of U.S. firms (Wabco Haulpack Division of Dresser Canada of Paris, Ontario, and V.M.E Equipment of Canada, Guelph, Ontario) and one British-owned firm (Pacific Truck & Trailer Ltd. of Vancouver, British Columbia). These firms are not limited to any one class of vehicle but, instead, have the capacity to produce a range of haulers for the construction, mining and forestry industries with payloads ranging from 20 tonnes to more than 200 tonnes. They not only assemble, but also undertake application-oriented research and development.

The sub-sector operates under the Off-highway Vehicle Duty Remission Order which provides the same benefits and imposes the same conditions as the Auto Pact. In contrast to the on-highway sub-sector, there are practically no export sales to the United States and imports are minimal. This is due to the fact that production is geared to specific resource-based projects around the world, mostly in developing countries. Consequently, of the estimated 300 units (net sales value of $224 million) produced in 1986, almost all were exported to overseas markets.

Performance

The growth of the medium/heavy-duty truck industry peaked in the late 1970s. In the 1973-80 period, both the on- and off-highway truck sub-sectors were robust due to the expansion of resource-based industries around the world. For example, North American retail sales of Class 8 trucks reached a high of 174 000 units in 1979, as compared to 115 000 units in 1986. The industry, however, was dealt a severe blow in the 1981-82 recession when production declined by more than 50 percent, and has never fully recovered. Since 1983, there has been modest recovery, but production is still at only 78 percent of the 1979 level. Decreased performance can be attributed to the international debt crisis which has significantly constrained sales to the developing countries, increased import competition, and led to a restructuring of the North American economy, which has resulted in a lower demand for trucks. Furthermore, North American manufacturers, since the early 1980s, have been facing increased international competition for the remaining market.

Canadian production of on-highway trucks, which is confined to Class 8 vehicles, has been averaging 15 180 units over the last five years, as compared to just under 30 000 units prior to 1980. Of this amount, some 8767 vehicles are exported annually to the United States. The Canadian market of 12 400 units is supplied by domestic production and 6000 imported units. Overseas imports have been taking an increasing share of the Canadian market as a result of European companies following a strategy of purchasing interests in U.S. corporations during downcycles (i.e., Renault/Mack and Mercedes Benz/Freightliner) or forming strategic links (GM/Volvo).

Similarly, the off-highway truck sub-sector has shrunk significantly because of a protracted softening of markets. Until the early 1980s, there were five Canadian manufacturers of off-highway mining and construction trucks. Since overseas markets collapsed and because significant, major new markets have not developed in North America, three Canadian operations dropped their off-highway product line by 1984: General Motors Diesel Division, Unit Rig and Equipment Company and Caterpillar Tractor Company. Two of the remaining companies — V.M.E (formerly Euclid) and Wabco Haulpack— export a significant portion of their production to offshore markets. The Pacific Rim represents an important market for Pacific Truck & Trailer, which manufactures Class 8 logging trucks.

While the Canadian on-highway truck sub-sector has been competitive within its market segments vis-à-vis U.S. operations, it will have to make significant adjustments in the near future in order to maintain its share of the North American market and to regain a foothold in developing countries. Basically, the industry is facing increasing competition from Europe, Japan and Latin America at a time when North American markets are expected to remain flat. In order to move inventories and maintain or increase market share, truck manufacturers have been cutting prices. This has led to an erosion in the profit margins of all truck manufacturers and has put further pressure on the industry to reduce costs through plant rationalization, productivity improvement, or both.

The basic strategy of all Canadian truck manufacturers in a highly competitive market is to trim costs, round out their product lines through imported vehicles and parts and, finally, to focus their resources on those areas where they have a competitive advantage.

2. Strengths and Weaknesses

Structural Factors

The Canadian truck industry largely consists of assembly operations. What has given Canadian on-highway producers a competitive advantage is their access to the whole North American market, as a result of the Auto Pact, and competitive Canadian assembly costs. Canadian plants, as profit centres on the production side, are more profitable than their U.S. counterparts, due to the more reliable Class 8 market, lower debt burdens and greater economy and efficiency associated with producing one model of vehicle.

Competitive assembly costs have also been important for the off-highway sub-sector where assembly may take longer than 200 hours. In addition, Export Development Corporation (EDC) export financing, and Canadian International Development Agency (CIDA) aid programs facilitate export sales of trucks to developing countries, since most of the customers are governments and comparable financing is available to offshore competitors.

The major weakness of the Canadian on- and off-highway truck industry is that it lacks significant product research and development (R&D) capabilities. This is a result of foreign ownership and a lack of sufficient economies of scale. These same factors also inhibit the adoption of more efficient and innovative production technologies involving automation, robotics and computer-aided design.

Canada's relatively low volume of production has resulted in a lack of capacity to manufacture major components. While heavy-duty truck assemblers are able to source body, frame, driveline and suspension parts in Canada, all diesel engines, transmissions and systems are imported from the United States. This has meant that, despite meeting Auto Pact performance requirements on a corporate basis, the truck industry from time to time has difficulty in meeting EDC's and CIDA's "in-vehicle" Canadian-content threshold in order to be eligible for export financing under their programs.

Trade-related Factors

Canada produces highly competitive on- and off-highway vehicles which have been holding their own in North America, despite the growing competition from European and Japanese vehicles. The Canadian Most Favoured Nation (MFN) tariff of 9.2 percent provides local manufacturers with a degree of protection and encourages participation under the Auto Pact. The U.S. tariff is 25 percent, although vehicles produced in Canada enter duty-free if they meet the Auto Pact rule of origin (50 percent).

European tariff and non-tariff barriers are of little relevance to Canadian companies because there are few, if any, sales opportunities on the Continent. Canadian heavy-duty trucks are generally too large for European highways and there is a scarcity of resource-based projects requiring heavy-duty off-highway haulers.

Under the Canada-U.S. Free Trade Agreement (FTA), bilateral tariffs on vehicles and original equipment parts will be eliminated over 10 years and aftermarket parts over five years. Canadian provisions of the Auto Pact remain unchanged, although only those companies listed in the FTA will be able to participate. Companies participating in Canada must continue to meet Auto Pact performance requirements to retain eligibility for duty-free imports from third countries after bilateral tariffs are phased out. Under the FTA, vehicles and parts exported to the United States will be required to meet a new 50-percent North American rule of origin which is higher than the current U.S. Auto Pact requirement. This will encourage increased parts sourcing and provide opportunities for North American parts suppliers.

The FTA will also remove the restrictions on the importation of used trucks into Canada over a five-year period.

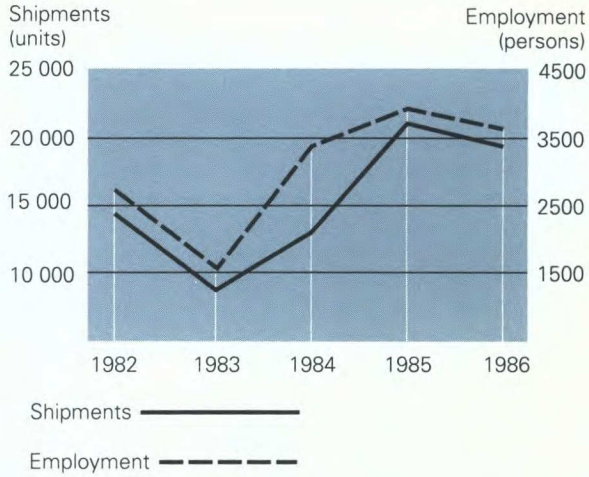
Technological Factors

Vehicle R&D is not carried out in Canada to any significant degree. This is primarily due to the fact that Canadian companies build-to-print and import most of the high-tech components.

The manufacture of power-train components for heavy trucks is concentrated in the United States. There is little incentive to manufacture such items in Canada as the broad range of variants required for Canadian production volumes are not sufficient to warrant the large capital investment that would be required. Although there is no capability in Canada for manufacturing diesel engines and transmissions, etc., for heavy-duty trucks, Canadian automotive parts producers are capable of providing other basic components.

Other Factors

Currency exchange rates and a high U.S. tariff have constrained Japanese and European direct exports of on-highway vehicles to North America. In order to minimize these effects, some overseas companies have begun to source trucks for the North American market from lower-cost producers such as Brazil.



Total Shipments and Employment

As well, the Canadian exchange rate with other currencies plays a significant role in the competitiveness of the off-highway sector. EDC financing is essential for successful bidding on overseas projects, including projects financed by the World Bank. Without the benefits of favourable exchange rates and export financing, Canadian off-highway hauler manufacturers would not be able to match foreign competition, which is increasing world market share through significantly lower wages and overheads, in addition to favourable financing packages.

3. Evolving Environment

The truck industry in North America is mature. It competes in a market which is also mature and only expected to grow at one or two percent per annum. In the case of off-highway haulers, while there may be an increase in demand in overseas markets, the debt problems of the developing countries will continue to constrain sales.

Weak demand and excess capacity globally have led to increased international competition in the North American market, and will likely be accompanied by highly competitive pricing, not only for the vehicles but also for components. Consequently, many companies are likely to experience low profitability. This will lead to further restrictions and continued implementation of cost-reduction measures.

The Canada-U.S. Free Trade Agreement is not expected to have a significant impact on the truck sector in the short to medium term. Performance in the long term will depend on the competitiveness of Canadian plants, the importance of multilateral benefits to individual producers under the Auto Pact and the demand for North American-type trucks.

4. Competitiveness Assessment

In the present economic and regulatory environment, the Canadian on- and off-highway truck industry is competitive within its market niche. However, the North American industry is faced with excess capacity, and plants in Canada often produce models identical to those in the United States where production volumes are higher. In addition, European, Japanese and developing countries have targeted North America for market share growth. Consequently, as bilateral tariffs drop under the FTA, Canadian operations will have to demonstrate cost competitiveness and the importance of a Canadian location for responding to the specialized needs of the Canadian heavy-duty market. Continued access to export financing will remain an important factor when competing in export markets.

For further information concerning the subject matter contained in this profile, contact:

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Medium/Heavy-Duty Trucks
235 Queen Street
Ottawa, Ontario
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(613) 954-3725

PRINCIPAL STATISTICS

SIC(s) COVERED: 3231 (1980)

On- and off-highway	1979	1982	1983	1984	1985	1986
Establishments	10	10	10	9	9	8
Employment	5 646	2 728	1 574	3 439	3 950	3 630
Shipments ($ billions)	1.8	0.77	0.65	0.90	1.74	1.52
Shipments (units)	28 585	14 760	8 516	13 145	21 371	19 637

TRADE STATISTICS

On-highway only*	1979	1982	1983	1984	1985	1986
Shipments (units)	27 585	14 452	8 206	12 865	21 036	19 337
Exports (units)	14 617	8 032	6 201	7 382	11 790	10 430
Domestic shipments (units)	12 969	6 420	2 005	5 483	9 246	8 907
Imports (units)	8 617	4 454	2 718	6 048	8 062	8 668
Canadian market (units)	21 585	10 874	4 723	11 531	17 308	17 575
Exports as % of shipments	53	56	76	57	56	54
Imports as % of domestic market	40	41	57	52	47	49

On- and off-highway Source of imports (% of total value)		U.S.	E.C.	Asia	Others
	1982	95	5	—	—
	1983	95	5	—	—
	1984	90	10	—	—
	1985	90	10	—	—
	1986	90	10	—	—

On- and off-highway Destination of exports (% of total value)		U.S.	E.C.	Asia	Others
	1982	90	—	5	5
	1983	90	—	5	5
	1984	90	—	10	—
	1985	90	—	10	—
	1986	90	—	10	—

(continued)

REGIONAL DISTRIBUTION — Average over the last 3 years

	Atlantic	Quebec	Ontario	Prairies	B.C.
Establishments – % of total	—	10	60	—	30
Employment – % of total	—	17	51	—	32
Shipments – % of total	—	10	65	—	25

MAJOR FIRMS

Name	Ownership	Location of Major Plants
Freightliner of Canada Ltd.	American	Burnaby, British Columbia
Paccar Canada Ltd.	American	Ste-Thérèse, Quebec
Navistar International Corporation Canada	American	Chatham, Ontario
Mack Canada Inc.	American	Oakville, Ontario
Western Star Trucks Inc.	Canadian	Kelowna, British Columbia
Wabco Haulpack Division of Dresser Canada	American	Paris, Ontario
V.M.E. Equipment of Canada	American	Guelph, Ontario
Pacific Truck & Trailer Ltd.	British	Vancouver, British Columbia

*Detailed off-highway statistics are not available.

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