DISCUSSION PAPER

MANUFACTURING PERFORMANCE

Horizontal papers c/3

DISCUSSION PAPER

<Canada. Dept of Industry, Trade and Commerce>

MANUFACTURING PERFORMANCE

These notes were prepared at the request of provincial and federal Deputy Ministers of Trade and Industry.

MANUFACTURING PERFORMANCE

TABLE OF CONTENTS

MANUFACTURING PERFORMANCE

PROBLEM

1. During recent years of unstable international economic performance, the Canadian economy has lost buoyancy and the malaise appears particularly acute for manufacturing. The situation has raised concerns about the viability of the manufacturing sector, and more particularly about the capability of that sector and, indeed, of the economy as a whole to continue to contribute to the fulfillment of Canadian aspirations for satisfying jobs and rising real incomes. It is clear that while a number of current problems are essentially cyclical in nature and might prove to be largely amenable to solution by sound stabilization policies, the Canadian economy also faces changes of a fundamental structural character which may require a more direct and specific attack. Another troublesome aspect is the fact that the unfavourable situation is more accentuated in particular sectors and regions.

OBJECT

2. This paper is designed to examine the past performance and potential of manufacturing within the Canadian economy, the manner in which governments have influenced industrial development, alternative policies which could be brought to bear to strengthen the capability of manufacturing and the economy. Specifically, this paper looks at the postwar record of production, employment and foreign trade in terms of their own evolution and in relation to the economy as a whole. It compares Canadian results with those of other industrialized countries. References to sectoral and regional concerns should not in any way be regarded as comprehensive or complete. Much more detailed and specific treatment is the subject of further federal-provincial consultation.

PRESENT MANUFACTURING STRUCTURE

3. The value of goods shipped by Canada's 30,099 manufacturing establishments exceeded $89 billion (including production for inventory) in 1975, made up of $1.8 billion for fuel and electricity, $51 billion for materials and supplies and $36 billion for wages and salaries, other charges and profits. It is estimated that shipments rose by a further 12 per cent in value during 1976. Employment, based on the Census of Manufacturers, totalled 1.7 million workers for 1975, of which 1.3 million were production and related workers. Based on the Labour Force Survey (which gives a slightly higher total for manufacturing employment than the number indicated above) manufacturing accounted for just over 20 per cent of total employment and for 57 per cent of the jobs in the goods-producing sectors in both 1975 and 1976.

4. The regional distribution of manufacturing value added and employment for 1961 and 1975 are presented in Table I, which for purposes of comparison also shows the share of population for which each region accounted in mid 1961 and 1975. In addition to pointing up the very heavy concentration of manufacturing in the two central provinces, the table brings out the relatively high productivity characteristic of activity in Ontario and the West as compared with the more labour intensive nature that prevails in the Quebec and Atlantic regions. It will also be noted that all regions with the exception of Quebec slightly increased their shares of national employment and value added between 1961 and 1975. The reasons for these shifts are more fully documented in a paper on "Canadian Manufacturing Prospects from the Regional Perspective".

5. Breakdowns of manufacturing activity by broad sectoral groupings for Canada and the regions are shown in Table II. The table brings out the heavy orientation towards foods and beverages in the Atlantic and Prairie regions, the dependence on forest products in the Atlantic Region and, in particular, in British Columbia, the high concentration on textiles in Quebec and the relative emphasis on the metal working and machinery and electrical and transportation equipment sectors in Ontario.

TABLE I

REGIONAL DISTRIBUTION OF MANUFACTURING ACTIVITY (PER CENT OF TOTAL FOR CANADA)

			Manufacturing Industry			
	Population		Employment		Value Added	
Region	1961	1975	1961	1975	1961	1975
Atlantic	10.4	9.5	4.6	4.7	3.8	4.1
Quebec	28.8	27.1	33.5	30.6	30.5	27.6
Ontario	34.2	36.1	47.2	48.9	50.3	50.8
Prairies	17.4	16.2	7.0	7.4	7.1	8.4
B.C.	9.2	10.8	7.7	7.9	8.3	9.1
Canada	100.0	100.0	100.0	100.0	100.0	100.0

6. The heavy concentration of manufacturing in central Canada, particularly in Ontario, is brought out more forcefully in Table III, which shows by major sectoral groupings the distribution of value added among the various regions. The regional distribution of labour force is also indicated.

TABLE II

SECTORAL MIX OF MANUFACTURING — CANADA AND REGIONS — 1975(p), CANADA 1961
PER CENT OF TOTAL MANUFACTURING VALUE ADDED FOR REGIONS*

	1975						1961
	Canada	Atlantic	Quebec	Ontario	Prairies	B.C.	Canada
Food and beverages	13.9	25.1	12.7	12.2	23.8	12.0	16.4
Textiles, clothing and leather	6.9	1.1	13.9	4.8	3.8	1.4	8.7
Wood and paper	14.0	28.2	14.2	6.9	9.6	47.1	14.5
Petroleum, coal and non-metallic mineral products	6.4	7.4	6.1	5.2	11.2	6.6	6.4
Chemicals, plastics and rubber	9.3	1.8	8.9	11.3	6.8	4.2	9.4
Primary metals and metal fabricating	16.7	4.3	14.7	19.2	15.6	11.9	15.7
Machinery	4.9	0.1	3.4	6.1	6.2	3.0	3.4
Electrical equipment	6.4	1.9	6.0	8.5	2.8	1.9	5.9
Transportation equipment	9.7	7.9	5.7	13.7	5.7	4.7	7.4
Other products	11.8	6.1	14.4	12.1	9.6	6.2	12.2
Total for region	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*A small proportion (2 per cent or less for each sector) cannot be allocated regionally because of the confidentiality of data.

POSTWAR OVERVIEW

Production

7. Manufacturing has accounted for between 22 and 24 per cent of the nation's total real output of goods and services. The volume of Canadian manufacturing output has generally kept pace with the nation's total real output over the postwar period (Chart I), although the amplitude of cyclical fluctuations about the line of advance has been greater for manufacturing.

Employment

8. As can be seen from Chart II, employment in manufacturing rose from about 1.3 million for 1951 to 2 million for 1976. Nevertheless, this represented a decline in the proportion of total employment because output per worker in manufacturing has risen about two-thirds again as fast as national productivity. Productivity gains in manufacturing have in fact contributed about one-third of the gains in real per capita income in the postwar period. Thus, the proportion of total employment accounted for by manufacturing gradually declined from about 25 per cent in 1951 to 20 per cent in 1976 despite the fact that the sector maintained its share of national output. Because workers in manufacturing are relatively high paid, however, wages and salaries in manufacturing still account for about 24 per cent of total wages and salaries in the economy. The declining relative importance of manufacturing employment was also characteristic of the United States and was paralleled in other Canadian goods producing industries, which in fact now employ a smaller number of people than in 1961 because a large drop for agriculture offset small gains elsewhere.

TABLE III

REGIONAL DISTRIBUTION OF MANUFACTURING VALUE ADDED — MAJOR SECTOR — 1975

Sector	Not Allocated	Atlantic	Quebec	Ontario	Prairies	B.C.
Food and beverages	0.1	7.5	25.1	44.7	14.3	8.3
Textiles, clothing and leather	1.3	0.7	55.9	35.7	4.6	1.8
Wood and paper	2.3	8.4	28.0	24.9	5.8	30.6
Petroleum, coal and non-metallic mineral products	3.4	4.8	26.3	41.3	14.8	9.4
Chemicals, plastics and rubber	1.6	0.8	26.2	61.3	6.0	4.1
Primary metals and metal fabricating	1.7	1.1	24.2	58.6	7.9	6.5
Machinery	0.6	0.1	19.3	63.7	10.7	5.6
Electrical equipment	0.2	1.2	25.7	66.7	3.6	2.6
Transportation equipment	—	3.4	16.0	71.3	4.9	4.4
Other products	0.2	2.2	33.8	52.2	6.8	4.8
All manufacturing	—	4.1	27.6	50.8	8.4	9.1
Labour force		7.9	26.5	38.3	16.2	11.0

9. Looked at another way, manufacturing accounted for only 16 per cent of the total rise in employment between 1951 and 1976, two points of which were offset by the decline for other goods producing industries, including construction and utilities. In other words, the services sectors — transportation and communication, wholesale and retail trade, finance, insurance and real estate, community, business and personal services, and public administration and defence — have provided almost 86 per cent of net job creation since 1951.

10. Some insight into the linkages between goods and service producing sectors can be obtained through input/output analysis. Table IV is the aggregation of a 1971 input/output table, showing the intermediate input demands of various sectors. The importance of the manufacturing sector is highlighted in that it purchases over one-third of primary products used as inputs, over one-half of manufactured products, three-quarters of repair construction, 15 per cent of utilities and more than 16 per cent of services. A previous study indicated that almost 60 per cent of service industry output went to consumer demand which is not included in this table. Incomes generated in the goods producing sector play a major role in stimulating consumer demand for these services.

Foreign Trade

11. While Canada, with rare exceptions, incurs a deficit in its international trade in manufactured goods, both exports and imports rose more rapidly than the value of manufacturers' shipments over the decade of the 1960s (Chart III). This reflects the changes in trade patterns induced by the Auto Pact, Canada's role as a supplier to the United States during the escalation of the Vietnam war, and the favourable competitive position induced by a low exchange rate. The trade balance (whether surplus or deficit) for all the major manufacturing groups moved in this country's favour during the last half of the 1960s, but this situation has been reversed since 1970 with the import surplus on manufactured goods rising to $6.3 billion for 1975. The deficit was reduced to $4.2 billion for 1976 and to an estimated $3.2 billion in 1976.

12. Manufactured goods have accounted for a significant and probably rising share of the total of all goods and services demanded by Canadians. Currently about 30 per cent of the fabricated materials and end products consumed in

CHART I

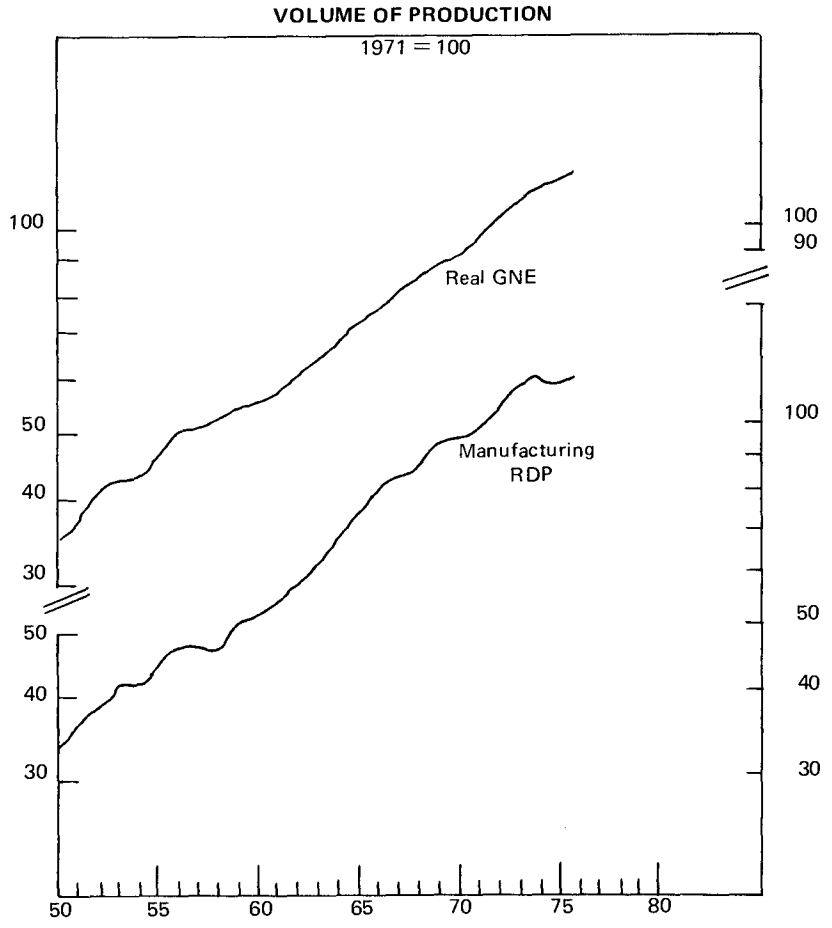


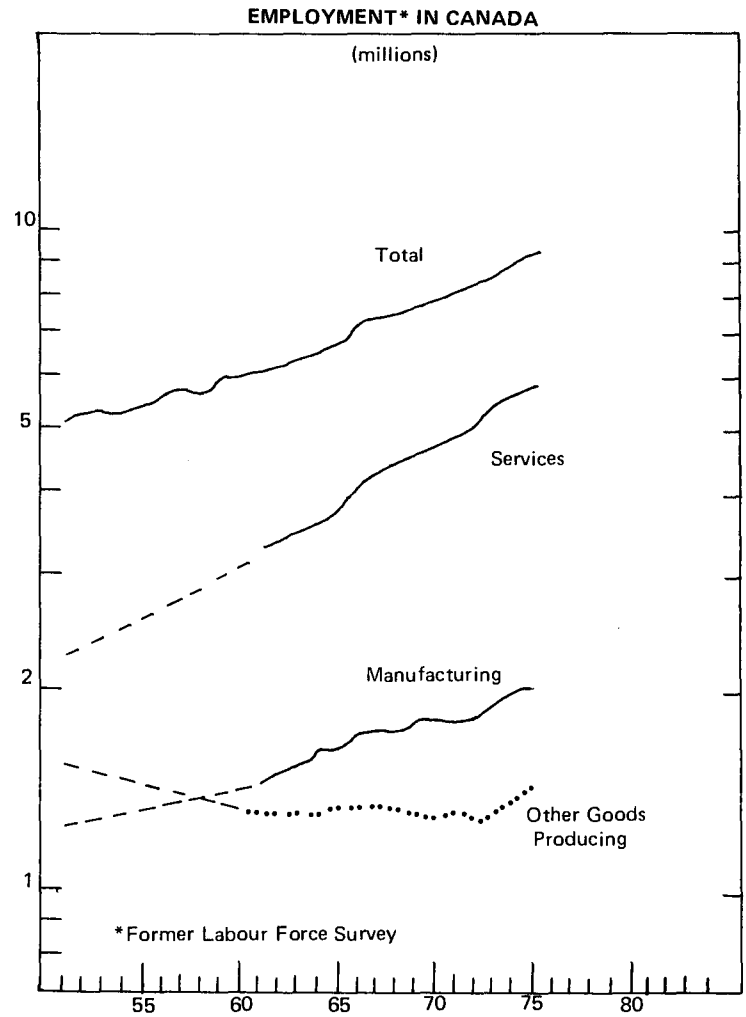
TABLE IV

1971 DISTRIBUTION OF INTERMEDIATE INPUT DEMANDS BY SECTOR

Purchasing Sector	Supplying sector: Primary Products	Mfg'd. Products	Construc-tion*	Utilities	Services	Other	Total
Primary products	12.76	21.76	2.0	10.67	2.53	.38	11.62
Manufactured products	33.68	55.9	75.5	15.09	16.18	46.65	47.59
Construction	5.35	—	.08	16.33	9.69	—	2.71
Utilities	3.86	2.50	.43	11.24	8.02	2.22	3.51
Services	23.69	6.08	14.58	31.84	36.38	49.11	21.55
Other	20.66	13.85	7.41	14.87	27.20	1.69	13.02
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Refers only to repair construction.

CHART II



Canada are imported. Four-fifths of these incoming shipments are paid for by manufactured exports (the ratio exceeded 90 per cent in some years in the 1960s).

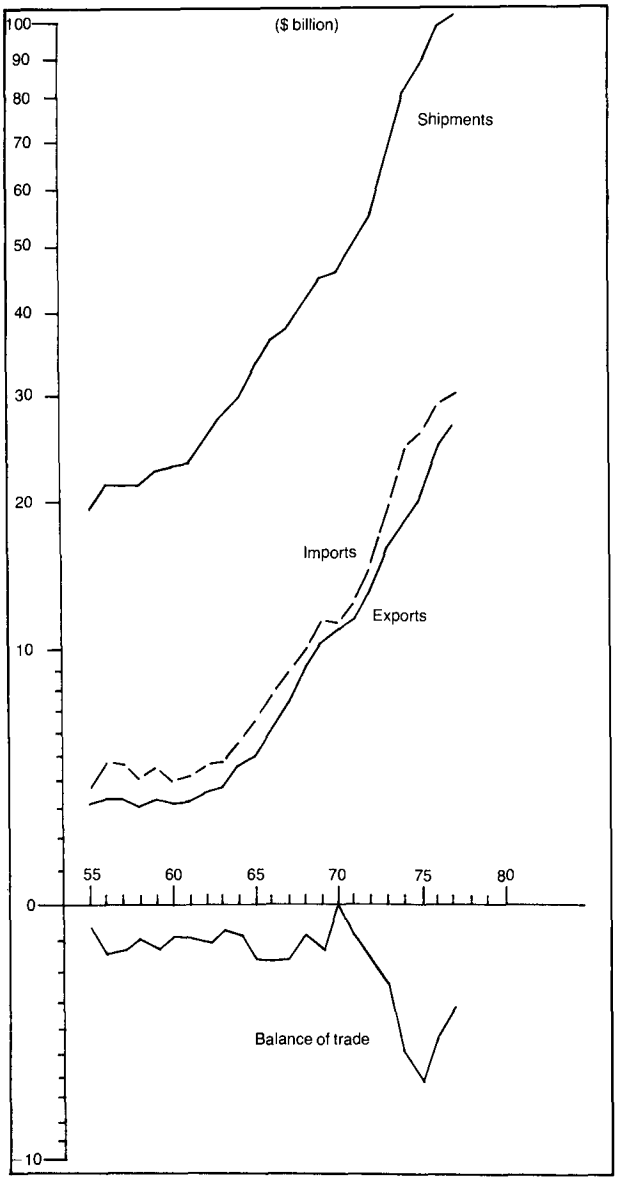
13. Table V illustrates the share of this domestic market captured by imports and the percentage of shipments destined for export markets for various manufacturing sectors. Generally, the degree of trade exposure is high by international standards although it varies from sector to sector. It is useful to consider the industries in terms of four fairly distinct groups. First, there is a group of industries, such as parts of food and beverage, metal fabricating and non-metallic mineral products, that operate on a localized basis. Trade exposure is naturally low in these sectors and the general level of economic activity in the domestic economy is a more important factor. The second group of resource oriented industries, such as primary metals, paper and wood products, enjoys high export orientation but lower import penetration. The third group includes sectors such as machinery and transportation equipment which tend to be more rationalized on a North American basis, and as a result have offset high import penetration with success in export markets. Finally, the fourth group, which includes industries such as textiles, leather products, and electrical products, has been facing the high import penetration with little offsetting exports.

Exchange Rate Adjustments

14. Canada pursued a policy of a floating exchange rate throughout the decade of the 1950s, with the value of the dollar rising to a premium over U.S. currency by 1952 and reaching the 103-104 range by the end of the decade. A downward adjustment in the exchange rate began late in 1960, and the dollar was subsequently pegged at 92½ U.S. cents in June 1962. It fluctuated narrowly about this peg through the remainder of the decade until May 1970 when substantial upward pressure led to a return to a floating rate. During most of the 1970s, the Canadian dollar maintained a value close to or above the U.S. dollar until late last year. By year-end 1977 the rate was down to 91.3 U.S. cents. This development suggests some temporary relief of competitive pressures.

CHART III

SHIPMENTS, EXPORTS AND IMPORTS OF MANUFACTURED GOODS



The Importance of Manufacturing

15. To recapitulate, the significance of the Canadian manufacturing sector can best be illustrated through its impact on employment, output and incomes, and trade.

(a) Direct *employment* in manufacturing accounted for about 20 per cent of total jobs in the economy in 1976. In addition, manufacturing provides a significant share of employment indirectly through extensive linkages with other economic sectors.

(b) The share of *output* generated by the manufacturing sector has remained fairly steady at around 22 to 24 per cent of national real output.

(c) The rising productivity needed in the manufacturing sector to maintain this share in the face of falling employment has accounted for about one-third of the increase in per capita *incomes*.

TABLE V

TRADE ORIENTATION

	Export Orientation (per cent)			Import Penetration (per cent)		
	65-70	71-76	76	65-70	71-76	76
Food and beverages	9.4	9.5	9.5	6.7	8.6	9.6
Tobacco products	0.6	0.5	0.5	1.1	1.4	1.8
Rubber products	4.3	6.9	10.3	16.1	22.8	21.8
Leather products	5.2	6.4	7.6	17.8	29.2	35.0
Textiles	4.2	5.1	4.7	23.1	26.3	26.9
Knitting mills	2.0	2.1	1.8	15.6	30.3	36.8
Clothing	3.0	5.2	4.2	6.0	9.9	14.8
Wood products	40.4	44.0	42.7	8.5	12.2	12.6
Furniture	2.7	4.7	4.5	5.4	9.6	12.2
Paper and allied industries	50.7	53.1	55.8	7.7	8.6	11.5
Printing and publishing	1.2	2.4	2.9	13.5	14.0	14.0
Primary metals	45.9	43.0	44.0	24.8	25.9	22.6
Metal fabricating	3.0	5.1	5.1	12.3	15.4	15.1
Machinery	32.7	41.7	43.7	65.1	70.4	71.2
Transportation	45.4	65.3	66.2	51.2	68.2	68.9
Electrical products	11.7	13.7	13.6	23.8	32.1	34.6
Non-metallic mineral products	6.0	7.5	7.0	15.3	15.9	16.2
Petroleum and coal products	1.6	5.5	2.8	11.1	6.7	3.0
Chemicals	14.8	16.2	17.8	25.1	28.9	29.8
Miscellaneous manufacturing	22.1	19.4	17.6	49.7	52.9	54.1

(d) With respect to *trade*, manufactured products accounted in 1976 for $25.4 billion or 67 per cent of total Canadian merchandise exports of $38 billion, and $30.6 billion or 83 per cent of total Canadian merchandise imports of $37 billion.

International Comparisons

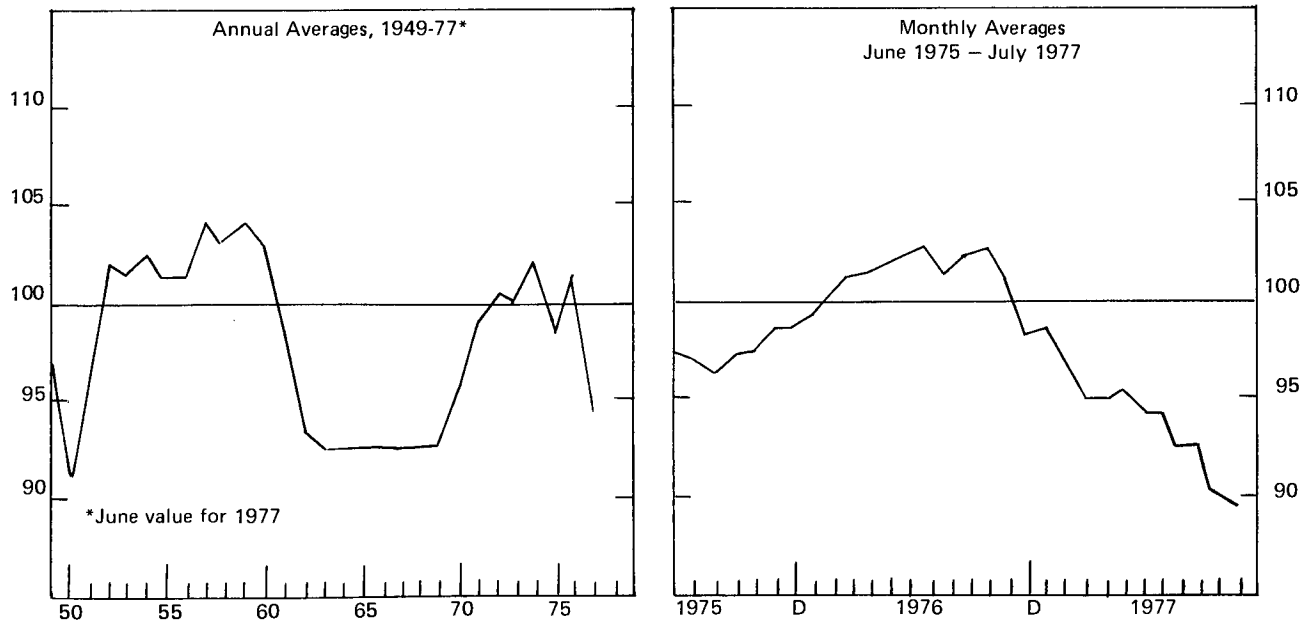
16. The growth rate of Canadian manufacturing production compared favourably with that of other industrial countries, with the exception of Japan, during the 1960s and the early years of the current decade. In fact, the level of output has held up much better in this country in the difficult period since 1973. Table VI compares changes in manufacturing production for selected countries during 1961-67, 1967-73 and 1973-75. It will be noted that the relatively good performance of Canadian industry in 1973-75 is largely attributable to policies to insulate the Canadian economy from worldwide recession.

17. The percentage increase in Canadian manufacturing jobs since 1960 exceeded that in other major industrialized countries with the exception of Japan. Nevertheless, manufacturing accounts for a smaller share of total employment in Canada than in most other countries of the OECD (Table VII). With regard to overseas countries, the reason is the high proportion of service industries in North America.

CHART IV

CANADA'S FOREIGN EXCHANGE RATE

(U.S. cents per Canadian dollar)



18. Canada accounted for about 4½ per cent of the world's exports of manufactured goods in 1975, about the same proportion as fifteen years earlier. The share had risen during the 1960s reaching a high of 6 per cent by the end of the decade. The deterioration in the 1970s is not peculiar to Canada as similar but sharper declines were experienced by the United States and Britain. Turning to imports, Canada takes about 7 to 8 per cent of the manufactured goods, exclusive of those from this country entering world trade. The proportion varies with the business cycle and has fluctuated within the indicated range during this decade. The proportion at 7.5 per cent for 1974 is the same as that which prevailed in 1960.

TABLE VI

CHANGES IN MANUFACTURING OUTPUT (PER CENT)

	1961-67	1967-73	1973-75
Canada	53	37	– 2.5
United States	53	25	–10.1
Britain	20	23	– 8.1
West Germany	27	49	– 8.8
France	39	51	– 7.3
Italy	54	34	– 5.3
Japan	97	97	–14.1
Australia	25(1963-67)	34	– 6.9
OECD countries	47	40	– 9.2

Source: OECD — Industrial Production: Historical Statistics, September 1976.

TABLE VII

	United States	France	Germany	Italy	Netherlands	Britain	Japan	Canada
	Ratio of Manufacturing to Total Employment (per cent)							
1960	25.5	27.2	37.6	26.8	30.6	37.5	21.3	24.1
1969	25.9	26.7	40.0	31.0	29.5	36.5	26.7	23.4
1970	24.6	26.7	40.5	31.7	25.6	36.6	27.0	22.6
1971	23.5	26.6	40.2	32.0	24.7	35.9	27.0	22.1
1972	23.4	26.5	39.2	31.9	27.7	34.6	27.0	22.2
1973	23.8	26.7	39.1	31.9	24.1	34.1	27.4	22.4
1974	23.3	26.5	39.3	32.3	23.9	34.1	27.2	22.0
1975	21.6	25.7	38.3	32.3	23.5	32.6	25.8	20.5*
1976	21.7			32.1		32.0	25.5	20.6*
1977								

*Estimated on basis of Labour Force Survey.
Source: OECD Industrial Production: Historical Statistics, September 1976.

THE CURRENT SITUATION

19. The foregoing analysis has shown that the Canadian economy as a whole, and the manufacturing sector within it, have achieved a high standard of production performance, which if duplicated in the future would lead to rising levels of employment and incomes consistent with projected advances in labour force. By far the largest proportion of jobs, as much as 80 per cent, would be provided directly by the services sectors, with the role of manufacturing and the other goods producing sectors much more oriented towards the generation of increases in real incomes and the maintenance of international solvency.

20. Despite a relatively encouraging past record, there is no doubt that momentum has been lost in both manufacturing and the total economy. Manufacturing output remains no higher than the levels reached in early 1974. Employment in manufacturing, on the other hand, in December 1977 was 4.0 per cent or approximately 80,000 workers less than the level in December 1974. Capital expenditures by manufacturing firms have been declining in real terms for several years. In 1975 and 1976, this country incurred deficits of $7.0 billion and $5.2 billion respectively in its international trade in partly and fully manufactured products. In other words, at the present time the economy and especially manufacturing are moving away from rather than towards their long-term paths of advance. It may be noted, however, that the slackening of output in 1973-75 was less in Canada than in most other industrialized countries. Employment in the sector also held up well by international standards during 1974-76, but sharper curtailments have been experienced this year.

21. Other factors of the current situation which are causing concern include:

(1) Canadian unit labour costs in manufacturing, expressed in United States dollars, rose by nearly three-quarters again as much as in the U.S. between 1970 and 1976, and the differential has been only partially offset by the recent downward adjustments in the value of the Canadian dollar (Table IX).

(2) Manufacturing after tax profits in relation to equity invested has performed well when stated in current dollars, although falling since 1974 in percentage terms, but is significantly below the comparable rates of the 1950s and 1960s when viewed in relation to the level of inflation in the economy (Chart V).

(3) Capital investments by manufacturers, which averaged 16 per cent of total capital investment during the 1960s. have not attained this share in any year since 1970 including even the limited surge in 1973 and 1974.

(4) Rates of capacity utilization in Canadian manufacturing during the last two and a half years have been lower than at any time since early 1961.

TABLE IX

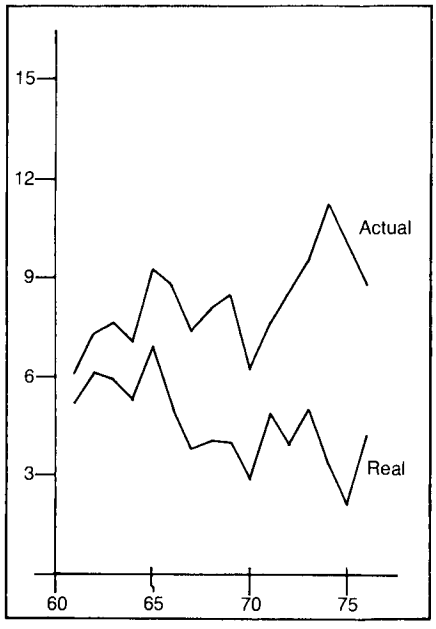
UNIT LABOUR COSTS IN U.S. DOLLARS
(1970=100)

	Canada	United States	Japan	Germany	Britain	France	Italy
1971	103.8	100.9	115.4	113.8	111.1	106.4	113.8
1972	109.3	101.4	141.3	130.4	119.1	121.2	127.7
1973	113.5	105.8	171.5	166.8	126.5	148.7	144.7
1974	130.4	120.9	206.0	186.3	148.3	156.7	153.6
1975	143.7	134.2	240.1	210.6	187.7	209.7	206.5
1976	161.4	135.5	231.5	200.1	170.5	190.6	178.9

Source: Bureau of Labour Statistics, U.S. Department of Labour.

CHART V

AFTER-TAX PROFIT ON EQUITY MANUFACTURING



(5) While overall R&D expenditures by manufacture have grown in absolute terms, a recent report by the Science Council of Canada has pointed out that spending on R&D as a percentage of value of output has declined since 1965. The rate of decline has accelerated since 1971 and reached a level of 0.58 per cent of output in 1975 compared with about 0.75 per cent in the late 1960s.

(6) As noted earlier, Canada's share of world exports of manufactured goods, which had risen during the 1960s, fell steadily after 1970, a situation that was not paralleled in Germany, France, Italy, the Netherlands or Japan, and was not as severe in the United States.

(7) Imports have taken a higher share of the Canadian market for manufactured goods since 1970.

(8) The adverse trade balance on manufactured goods rose sharply after 1970, from levels averaging $1.2 to $1.5 billion for the late 1960s to almost $7 billion for 1975 and $5.2 billion for 1976.

(9) Within manufacturing trade, the deficit on end products was in excess of $10 billion for 1976.

TABLE X

CHANGES IN AVERAGE ANNUAL EMPLOYMENT IN MANUFACTURING — 1977 vs 1976 (THOUSANDS)

Majour Groups	Canada	Atlantic	Quebec	Ontario	Prairies	B.C.
Food and Beverages	3	1	3	−1	—	—
Tobacco Products	−1	—	−1	—	—	—
Rubber and Plastic	2	—	2	1	−1	—
Leather	−1	—	−1	—	—	—
Textile	−12	—	−9	−4	1	—
Knitting Mills	−4	—	−5	1	—	—
Clothing	−4	—	−4	2	−1	−1
Wood	2	—	3	4	−1	−4
Furniture and Fixtures	3	−1	4	−1	1	—
Paper and Allied Products	−15	—	−11	—	−2	−2
Printing, Publishing and Allied	9	—	5	3	—	1
Primary Metals	−4	—	−5	—	−1	2
Metal Fabricating	2	—	−4	2	3	1
Machinery	3	—	−2	4	−1	2
Transportation Equipment	12	—	−2	13	−2	3
Electrical Products	−12	—	—	−13	—	1
Non-metal Minerals	−2	—	1	−4	2	−1
Petroleum and Coal	−1	—	—	−1	—	—
Chemicals and Chemical Products	−7	−1	−3	−3	—	—
Miscellaneous	−4	—	—	−5	—	1
All Manufacturing	−31	−1	−29	−2	−2	3

Source: Statistics Canada.

(10) Import competition in the Canadian market has been particularly severe for a number of product groups including textiles and leather products, clothing, electrical products and furniture and fixtures. Sub-sectors of manufacturing which have sustained marked losses of market share to imports accounted for nearly 20 per cent of total manufacturing shipments in 1976, and have a sizable proportion of their activities concentrated in Quebec.

(11) Employment in manufacturing for 1977 averaged 31,000 fewer workers than the comparable figure for the previous year. The decline was borne disproportionately by Quebec where the drop was 29,000, with paper and allied products and textile clothing industries the most severely affected. For other provinces sharp losses in some sectors were to a large extent offset by increases for others (Table X).

SOME FACTORS IN CANADA'S MANUFACTURING GROWTH

22. It is true that in many respects the performance of the economy during recent years is not unlike that which transpired during the late years of the 1950s. The sluggishness of that earlier period, it will be recalled, was reversed early in the subsequent decade, and a prolonged period of vigorous expansion ensued. While the drop in the exchange rate over the past year is similar in magnitude to that which occurred in 1961-62, the current situation is different in a number of important aspects from that which prevailed a decade and a half ago.

Canada's Cost Structure

23. One of these important differences surrounds our internal cost structure. Because of limitations of maket size, the high degree of foreign ownership and other factors leading to inadequate scales of operation, excessive product diversification and duplication of productive facilities, Canada has traditionally not been able to match the United States in the productivity of its capital and labour. The gaps have narrowed steadily over the years, as the growth of the domestic market and emphasis on exports presented opportunities for rationalization, but Canada remains on average some 20 per cent below comparable U.S. productivity levels. The shortfall in productivity in earlier periods was offset at least in part by a structure of wage and other costs significantly below those south of the border, but the situation began to change late in the 1960s. Canadian wage rates, for example, have risen very rapidly to the point where in many cases they are *above* those prevailing in the United States. The impact is reflected in all the costs of production through a higher labour cost content of raw material, construction and capital equipment and service inputs.

24. This country has lost much of the advantage it formerly possessed in the supply and cost of energy. There has been some weakening of comparative advantage in such energy intensive activities as newsprint and non-ferrous metal smelting. The favourable energy situation also had worked to offset some of the scale disadvantages faced by this country in the production of petrochemicals for such end-uses as plastics and man-made fibres. On the other hand, western energy sources and electricity in Quebec still give Canada considerable strength in this area.

Canada–U.S. Relationships

25. A second fundamental change is the economic relationship with our major customer, supplier and competitor, the United States. For a large part of the postwar period, Canadian industrial performance benefited from close co-operative ties with that country. In the 1950s this was reflected in the joint effort to construct the St. Lawrence Seaway and in the Defense Sharing Agreements. In the 1960s, strong demand from the U.S. economy resulted in a major stimulus to Canadian industrial development. The Canada-U.S. Auto Pact provided a further upward thrust to industrial activity in this country. The results obtained for Canada in the Kennedy Round of tariff negotiations, while formally achieved in the multilateral forum of the GATT, in large measure were based on the mutuality of interests between this country and the United States. It may be difficult to achieve the same concentration of positive effects from the Canada/U.S. relationship in the future.

The World Competitive Environment

26. The state of international competition has changed drastically from that which prevailed during the late 1950s and the early 1960s. During these earlier periods the Japanese and European economies were, with the exception of particular commodities or products, largely preoccupied with rebuilding and the development of internal markets. Their emergence as industrial powers has meant tougher competition across the board. But as these economies have become more advanced and costs have risen, the competition has increasingly taken the form of product quality and technology rather than price. This has meant intensified competition in the domestic and international markets in such sectors as transportation equipment including automobiles, machinery and electronic equipment. Today these countries are aggressive competitors in all parts of the world. They are investing heavily in less developed countries to take advantage of low labour costs, easier environmental regulations, economic raw material supplies and opportunities to exploit the system of General Tariff Preferences accorded by industrial countries to the developing world.

27. The United States has also been placing much more emphasis on its own self-interest, favouring investment and production at home rather than abroad. In fact, as the competitive position of the U.S. economy has improved due to currency devaluation and containment of costs, the U.S. has become a more attractive investment location for both U.S. and foreign firms.

28. For their part, based on the inspiration provided by the OPEC nations on oil, the less developed countries have been making a much more aggressive assault on the capture of investment in and markets for industrial products. These countries have focussed their efforts on labour intensive, basic technology, standard product industries such as textiles and clothing, leather industries, consumer electrical products, toys and sporting goods.

29. To offset their deteriorating cost position vis à vis the developing countries, the strategy of many industrialized nations has been to attempt to shift their industrial structures into sectors producing more sophisticated, higher technology products where quality and level of technology rather than price are the major competitive factors. Among the industrialized countries, Canada does not rank highly in terms of R&D expenditures as a percentage of industrial output.

30. These developments amount to a permanent shift in the competitive situation facing Canadian industries which compete in international markets. At the same time, increasing recognition is being given to the obligations of the industrialized nations to facilitate growth in the less developed countries, and GATT countries have committed themselves to international trade liberalization. This suggests that significant competitive adjustment and restructuring would be required in many manufacturing sectors.

The Domestic Business Environment

31. Extensive and rapid changes in government policies and shifts in political power have in recent years undermined the traditional understanding and trust that had been established between business and government. This has complicated the problems of industrial planning and led to internal and external uncertainties which impede the ability of industry to respond. A major preoccupation of business has been the direct and indirect costs it must bear because of broadening of environmental protection, social programs and government regulations.

SECTORAL IMPLICATIONS

32. An analysis of problems and prospects for individual manufacturing sectors reveals some of the sectoral manifestations of these developments. The sectoral issues that emerge from this preliminary review are those enumerated below.

(1) The Emergence of Lesser Developed Countries

33. As noted above, industrialization efforts of lesser developed countries have focussed on sectors producing labour intensive, low technology, and highly transportable goods. Increasing import penetration from LDC's has therefore been identified as a significant problem in such sectors as clothing, certain textiles, the lower range of the footwear market, and consumer electrical products. Increasing imports in these sectors have resulted in cutbacks in production and employment, and pressures for special measures of protection. The government has responded with special assistance in the clothing, footwear and consumer electrical sectors. The problem facing these industries could be worsened if concessions to lesser developed countries result from the MTN. Given that these industries compete almost exclusively on the basis of price and there is no relief in sight for their cost position vis-à-vis LDC competitors, the future of these industries, at least in their present form, appears difficult in the absence of continued or even increased government assistance and protection.

(2) Small Scale and Fragmentation

34. There is a group of industries in which the inherent cost disadvantages of Canadian production are not so significant and might partially be overcome by techniques to exploit the gains from larger, more efficient units using more advanced technology and management techniques. This would include such sectors as furniture, commercial printing, parts of footwear, and plastic fabrication. In other cases, such as parts of machinery and systems electronics, an important competitive requirement is the capability to provide an integrated package of products and services, and industry fragmentation has been identified as an important constraint on Canadian firms attempting to compete on these terms. An identified need in this group of industries is for firms to achieve a certain "critical mass" to give them increased financial strength, management depth, and market power.

(3) Foreign Government Involvement

35. Certain industries, usually capital or research intensive in nature, tend to be identified by governments around the world as key elements in national development or prestige, and are therefore selected as candidates for special measures of government assistance. Examples of this are iron and steel, shipbuilding, aerospace, computers, electrical generating equipment, and telecommunications. Government intervention may take the form of import restraints, subsidies, procurement preferences, or direct participation. Although the Canadian government has intervened fairly extensively in some of these sectors, for example through generous subsidies to shipbuilding and partial ownership of the aerospace sector, Canadian firms in these industries tend to find that they do not compete in international markets with the same level of government support as their competitors. It is doubtful whether any reduction of non-tariff barriers under the MTN will lead to normal commercial access for Canadian products to export markets in these industries.

(4) Procurement Policies

36. Government procurement policy has been identified as a major source of concern in such industries as the urban transportation equipment sector, electrical generating equipment, telecommunications, and construction. This problem has several facets. The first is procurement preferences given to suppliers located in the home provinces. This has given rise to structural inefficiencies in the telecommunications and urban transportation equipment sectors. Secondly, in the electrical generating equipment sector, provinces have chosen to purchase offshore, sometimes at purportedly dumped prices, rather than showing any preference for Canadian producers located in other provinces. Finally, in the construction sector, the bunching of various government projects has contributed to cyclical instability. A strong case has been made for the co-ordination of federal and provincial procurement policies to achieve industrial benefits shared in all parts of the country.

(5) Resource and Environmental Costs

37. The cost of resource development and processing has risen steeply because of higher wages, increasing capital costs, and the regulatory and taxation initiatives of the federal and provincial governments. Lower rates of return on investment and increased risk and uncertainty have been identified as constraints to investment in the forest products, petrochemicals, and fertilizer sectors. Taxes and wood supply policies have discouraged investment in the forest industries, even though significant parts of the pulp and paper and wood industries are in great need of modernization and replacement. In the petrochemicals sector, government policy to impose higher feedstock prices could eliminate or reduce the next phase of industry expansion that could occur in the early 1980s. Furthermore, in such sectors as pulp and paper, iron and steel, and non-ferrous smelting and refining, the cost of meeting more stringent environmental standards has been identified as a significant constraint to productive investment, particularly in the Eastern provinces.

(6) Foreign Ownership

38. A number of the sector assessments have made the point that the entire gamut of problems outlined above is cast in a somewhat different light in sectors where foreign ownership is predominant. Sectors where foreign ownership has been identified as a matter of concern include automotive, electrical, electronics and machinery. Generally, it is suggested that foreign owned multinational enterprises have no special commitment to Canada, and would be less reluctant to phase out operations or at least curtail future expansion in Canada should conditions not be considered favourable. For these sectors, the economic and political climate created by government would be a key factor in future prospects. In the electrical, electronics and machinery sectors, foreign ownership of many of the major firms would likely be a significant impediment to further rationalization and specialization within the Canadian market, but may in fact be facilitative if companies can be persuaded to undertake rationalization on a Canada–U.S. basis. This level of rationalization has already taken place in the automotive sector so that scope for further changes may be more limited.

CONCLUSION

39. The foregoing analysis has shown that manufacturing has made a major contribution to Canada's economic performance and growth during the postwar period. A significant, although declining, share of total jobs in the economy has been provided by direct employment in manufacturing. In addition, many new jobs, while not directly provided by manufacturing, have been derived from the impetus a strong manufacturing sector has given to Canadian incomes and output. Manufacturing has been a major source of productivity gains which have generated about one-third of the increase in Canadian per capita incomes. Finally, a strong manufacturing performance has been essential to the maintenance of a viable balance of payments position for Canada.

40. A number of factors in the domestic and international environment have however been identified as having a negative impact on the competitiveness of the Canadian manufacturing sector. Some of these concerns — such as generally higher Canadian costs — are broader in scope but are particularly crucial to manufacturing industries facing intense international competition. There is also specific need for policies and programs aimed at improving efficiency and competitiveness in the manufacturing sector through cost reduction and productivity improvement. In some industries, much more co-ordinated programs of support will be required if we are to meet heavily subsidized and protected foreign producers on more equal terms.

41. The goal of such policies would be to strengthen performance of manufacturing exports and output and provide greater contribution to the growth of Canadian incomes.

42. It is apparent that the different industrial structures of the various regions do not lend themselves to uniform policy remedies. To supplement national policies which work at the aggregate level, regional policies are required to meet the needs and problems of the manufacturing industries dominant in each area of the country. In some cases it will be necessary to differentiate between regions when formulating policies for individual industry sectors.

Government of Canada
Gouvernement du Canada

Industry, Trade and Commerce
Industrie et Commerce