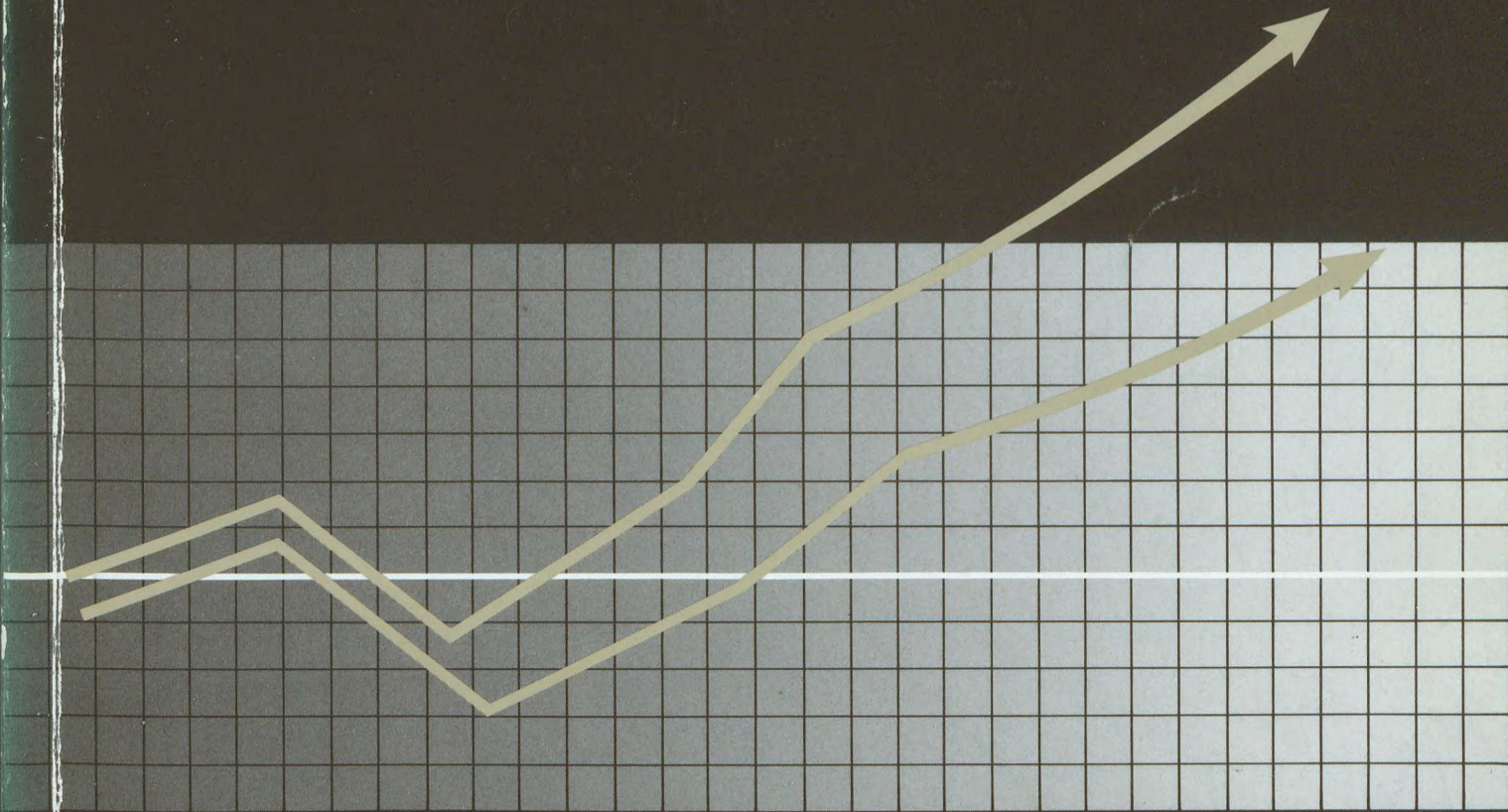


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QUEBEC ECONOMY 1986



Regional Industrial
Expansion

Expansion industrielle
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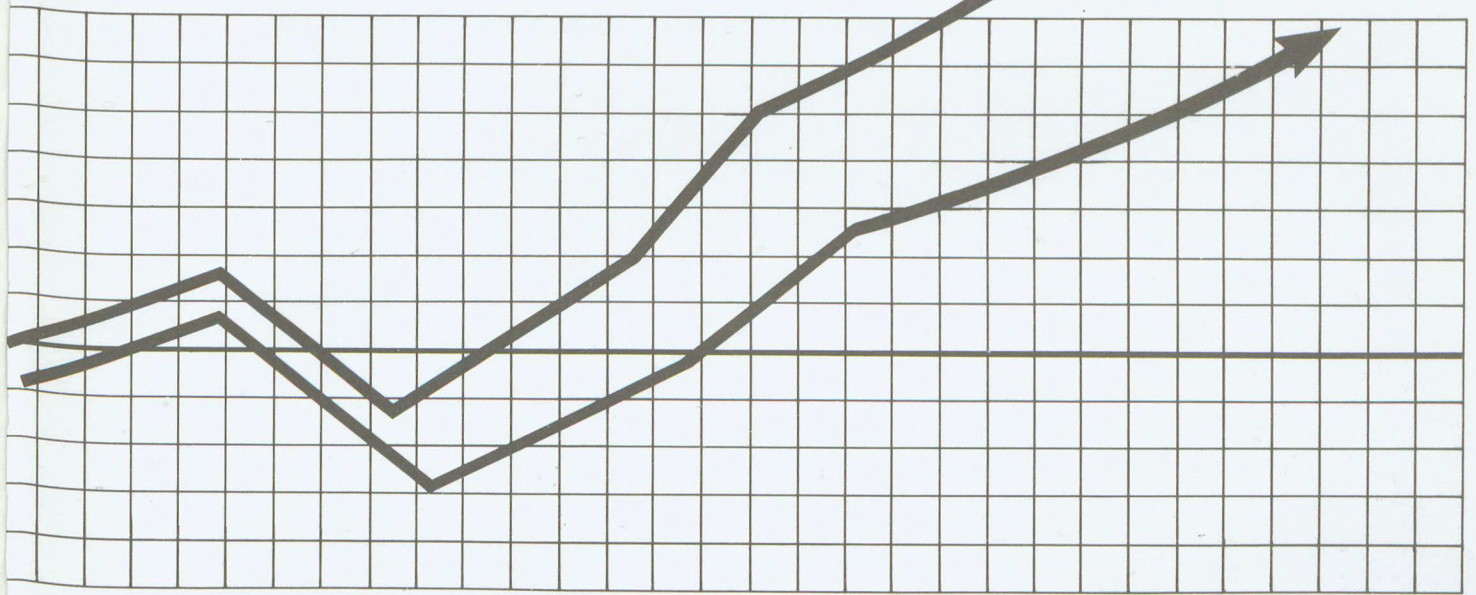


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April 1987



Regional Industrial Expansion

Expansion industrielle régionale

Canada

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québec region

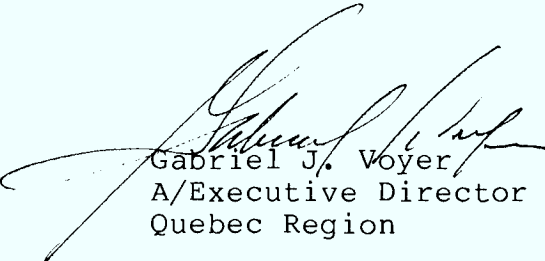
FOREWORD

The Quebec economy 1986, an analysis of recent economic trends, is produced by the Department of Regional Industrial Expansion, Quebec Region.

The study depicts recent developments in Quebec's economy and industrial base, against a national and international background. A brief overview of the economy in each region of the province is provided.

The Quebec economy 1986 differs from previous years since it offers readers short structural analyses of a number of key elements in Quebec's economic development. These are to be found in Part II of the study, and include the issue of Quebec's industrial development, the pulp and paper industry, the Montreal metropolitan area, and industrial research and development in Quebec.

The Quebec economy 1986 was drawn up by a team of economists from the Planning and Analysis Branch, of which François Gauthier is Director. Particularly worthy of mention is the work of the team of statistical analysts consisting of Léonel Plasse, Jean-Pierre Lussier assisted by Chantal Nault. The Department welcomes readers' comments.



Gabriel J. Voyer
A/Executive Director
Quebec Region

NOTE

The figures quoted in this study are those available as at February 15, 1987, and most of them are either preliminary or provisional. Should updated or fuller information become available, the analysis and conclusions of the study may have to be modified. Similarly, the information on capital projects mentioned in this study corresponds to the situation as of February 1987. The reader is asked to make allowance for developments that may have altered the situation since then.

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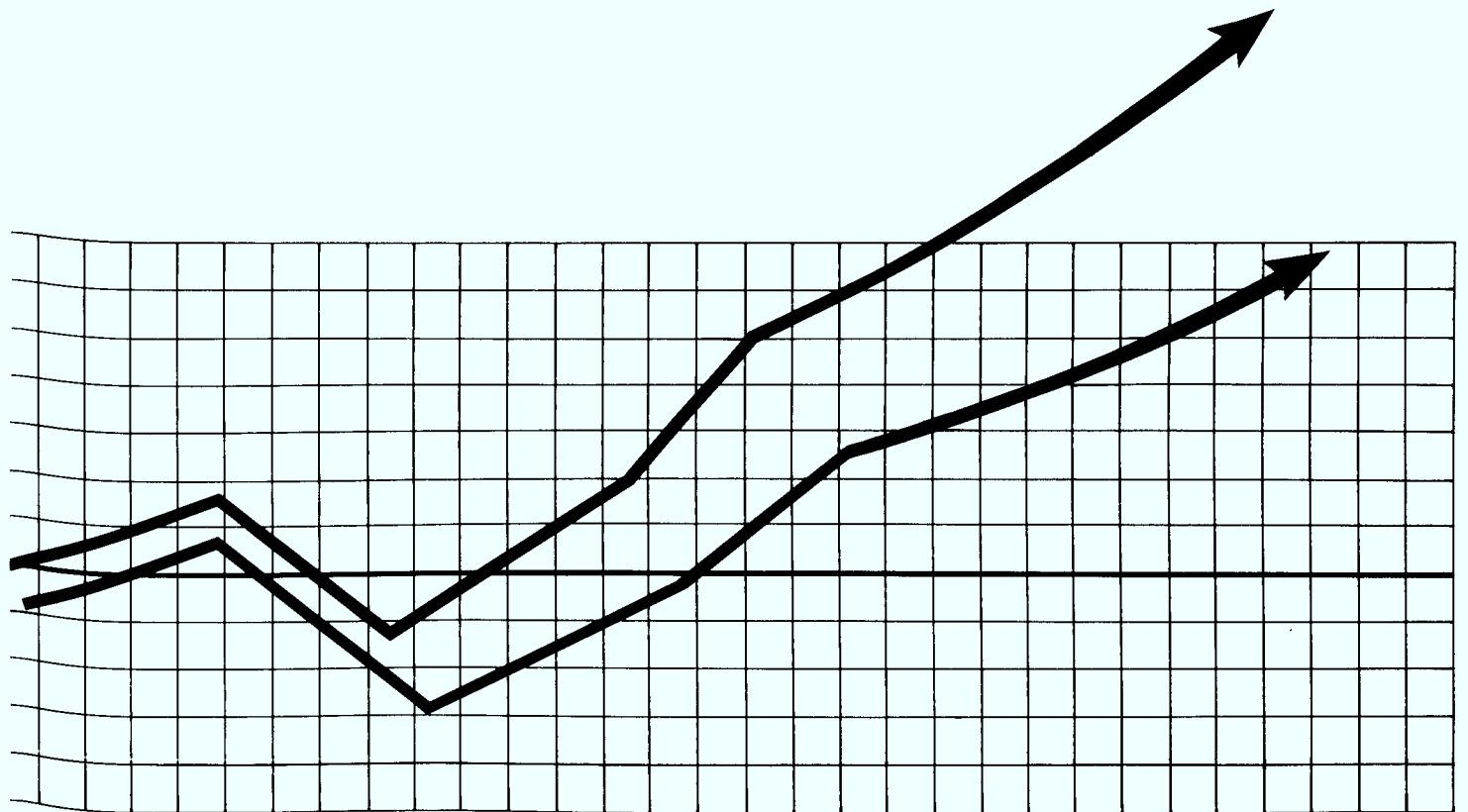
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PART I

Economic situation in 1986



INTERNATIONAL ECONOMIC SITUATION

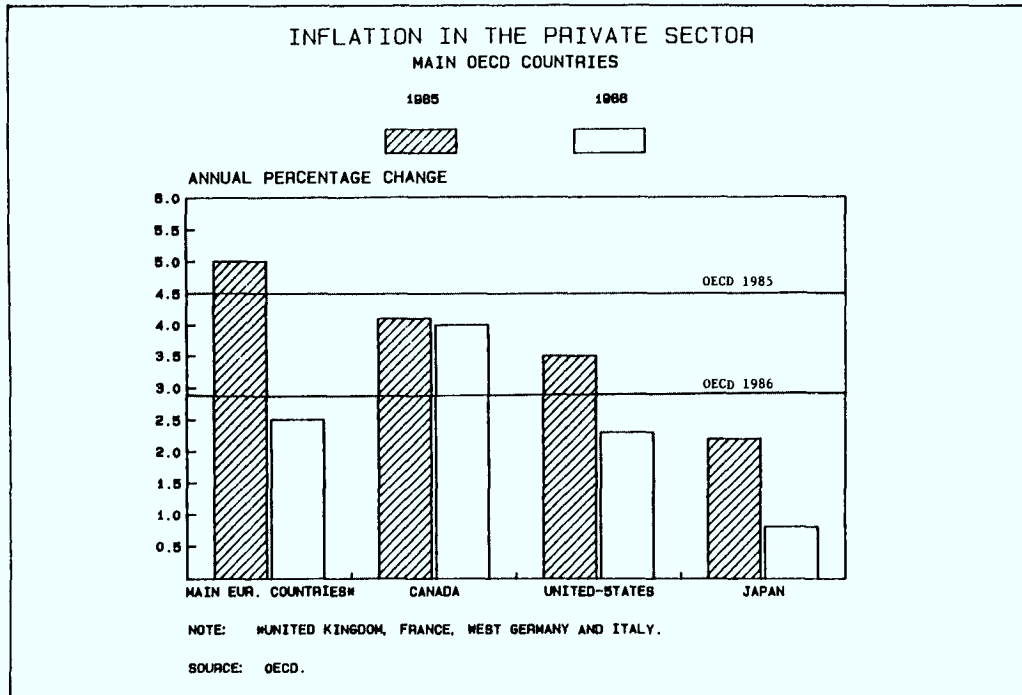
Development of the world economic situation

Despite a drop of more than 40% in the price of oil on international markets and notwithstanding declining interest rates, Organization of Economic Co-operation and Development (OECD) countries posted a somewhat disappointing economic performance in 1986. The industrialized nations actually owed their growth to increased consumer spending.

Among the seven major OECD members, gross national product (GNP) increased between 2% and 3%. The United States, which had shown signs of faltering in 1985, continued on this path in 1986. Indeed, despite considerable progress in consumer spending and notwithstanding the lower US dollar, the American economy featured a rather weak growth rate. The European OECD countries, however, managed to improve their growth rates slightly, while a major deceleration was seen in Japan.

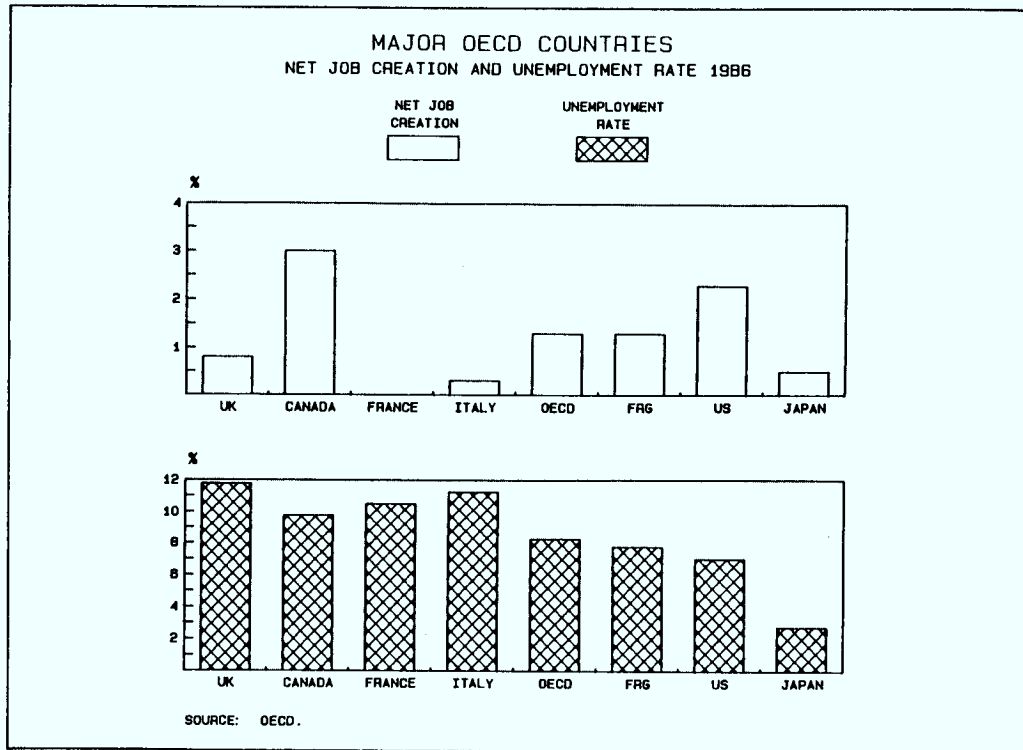
The sluggish performance in terms of economic growth was none the less mitigated by a marked drop in inflation, which in 1986 posted its lowest rise since the 1960's, owing in particular to the falling price of oil, stagnating base metal prices and moderate wage increases. Consumer price increases in the OECD as a whole were brought down to a mere 2.8%, from 4.5% in 1985.

Graph 1



Despite the slower growth, employment in OECD countries as a whole grew at the same rate as in 1985 (1.3%). There were, however, significant differences among member countries: while North America enjoyed major employment growth, this was somewhat limited in Europe and Japan. Consequently, the unemployment rate fell in North America (from 7.5% to 7.3%), rose in Japan (from 2.6% to 2.8%), and remained stable in Europe (10.2%).

Graph 2



Growth in OECD countries' international trade was impeded by the rising tide of protectionism and moderate trends in the business cycle. Moreover, the OECD current operating balance deficit, largely attributable to the United States, was substantially reduced in 1986 (1). Indeed, although the US trade deficit continued to rise, this was largely offset by the marked increase in other OECD members' surpluses. After moving beyond the \$100 billion mark for the first time in 1984, the US trade deficit, still affected by the growing penetration of imports, hit a new high of \$138 billion in 1986. The weakening of the US dollar on foreign exchange markets thus failed to have the beneficial influence expected in 1986.

(1) The current operating balance deficit includes earnings and payments from the export and import of goods and services, current transfers and transfers in the form of estates and migrants' capital.

Table 1

INTERNATIONAL ECONOMIC SITUATION						
major OECD countries annual % change						
COUNTRIES	REAL GNP		Employment		Private consumption deflators	
	1985	1986	1985	1986	1985	1986
United States	2,7	2,8	2,0	2,3	3,5	2,3
Canada	4,0	3,0	2,8	3,0	4,1	4,0
Japan	4,5	2,3	0,7	0,5	2,2	0,8
France	1,4	2,0	-0,1	0,0	5,5	2,3
Germany	2,5	2,8	0,7	1,3	2,1	-0,8
Italy	2,3	2,5	0,5	0,3	9,4	6,3
United Kingdom	3,5	2,3	1,3	0,8	5,2	4,0
Total OECD	3,0	2,5	1,2	1,3	4,5	2,8

Source: OECD.

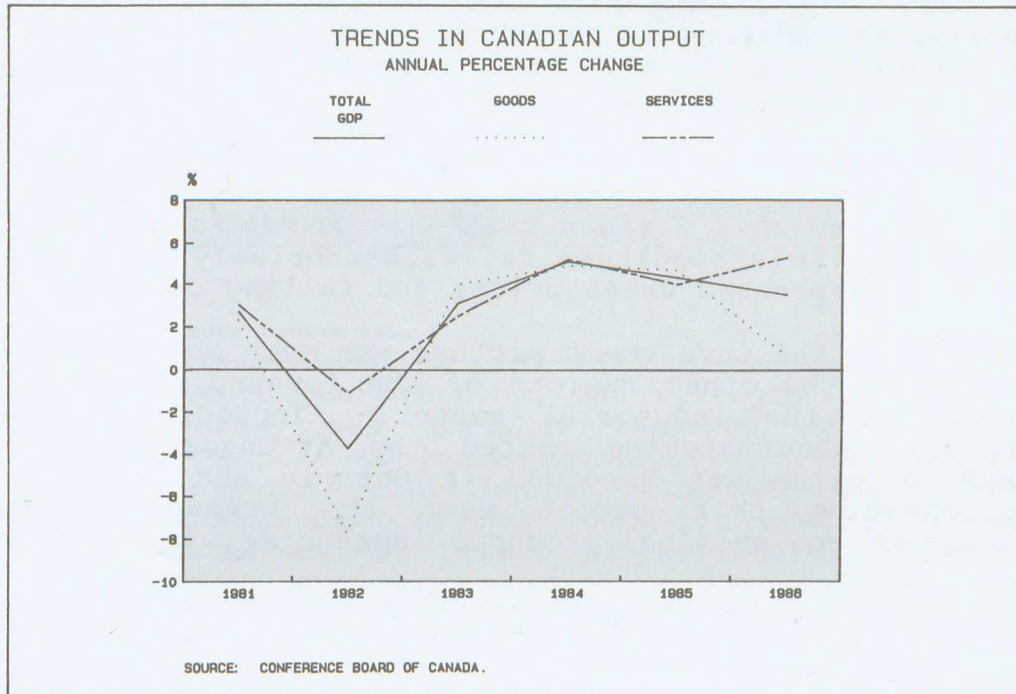
Note: The Canadian figures may differ from those quoted later.

The private consumption deflator includes all goods and services sold in the market, excluding goods and services produced and sold by governments.

CANADIAN ECONOMY

The Canadian economy, which had remained vigorous in 1985, entered a more moderate phase in 1986. Owing to the continued sluggishness of exports and the rather half-hearted contribution of business investment, real GDP growth was only 3.5% in 1986. None the less, Canada's economic growth was slightly higher than that of the other industrialized countries.

Graph 3



Consumer spending performed well again in 1986, owing to declining interest rates (after the rapid increases early in the year), strong consumer confidence and higher personal income. During this period, although consumer spending was somewhat curbed by higher personal income taxes, it nevertheless rose by 4% in real terms over the previous year. Durable goods, primarily automobiles, were responsible once again, albeit more modestly in 1986, for the good performance of consumer spending. Furniture and appliances, stimulated by a marked increase in housing starts, also showed good results.

Canada's residential construction sector performed exceptionally well in 1986. Fuelled by attractive mortgage rates, the capital gains exemption and relatively strong economic activity, the number of housing starts reached 199,785 units, a substantial increase (20.5%) over 1985.

Falling oil prices and low raw material prices contributed to limiting capital projects, particularly in the producing regions. On the other hand, a number of positive factors, such as lower interest rates, moderate inflation and the need to modernize facilities, lessened the decline in business investment.

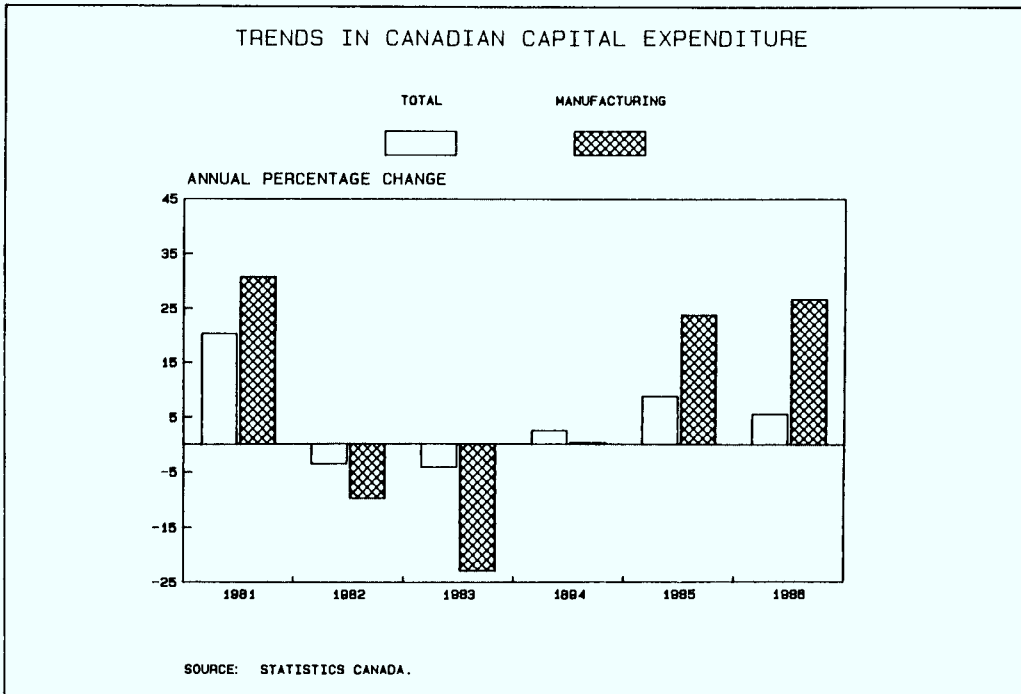
According to Statistics Canada, private business investment in this country rose by 7.0%, half as fast as in 1985. Moreover, with the low increase (1.8%) in capital expenditure in the public sector, attributable to budgetary restraint, total investment in Canada was up only 5.6% over 1985.

Western Canada was particularly hard hit by this slowdown. Indeed, investment in the energy sector recorded the most serious decline. At the same time, investment in agriculture fell substantially in 1986, owing to depressed wheat prices and falling exports.

Otherwise, the investment picture was much more encouraging in the other regions of the country, particularly for the industrial sector. Indeed, of all sectors, manufacturing posted the strongest growth (82% of which was recorded in Ontario and Quebec). Spearheading this sector were the transportation equipment and chemical products industries.

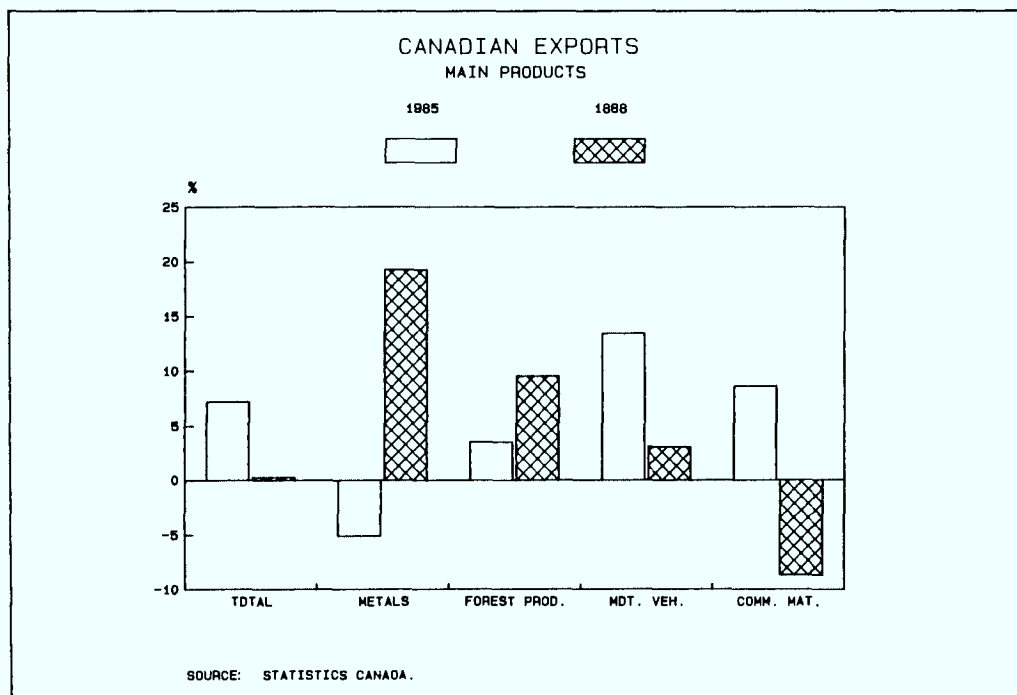
The pulp and paper industry also played an active, albeit more modest part in the good performance of the manufacturing sector as it continued its modernization drive.

Graph 4



For the second year running, the strength of the Canadian economy was somewhat lessened by flagging Canadian exports and increased imports. For 1986 as a whole, exports' contribution to growth was rather limited. Held back by weak domestic demand in the United States and by rising protectionism, Canadian export growth was very slow: in 1986, exports of goods reached \$120.5 billion, up 1.1% over the 1985 level. Lower exports of crude petroleum and its by-products, natural gas, zinc and electricity, allied with the small increase in newsprint exports, were largely responsible for the sluggishness of Canadian exports. On the other hand, increased exports of lumber, wood pulp and similar pulp, precious metals, aluminum, and passenger automobiles and chassis offset the lower exports of other products.

Graph 5



For 1986 as a whole, the Canadian trade surplus reached \$10.1 billion, significantly lower (some 40%) than in 1985. This situation is largely explained by falling exports of energy-related products allied with increased imports of consumer goods. The situation was particularly worrying in July, when Canada posted its first trade deficit since 1975.

The current account deficit, attributable to services, also grew in 1986, reaching \$8.8 billion, a disturbing increase of \$8.2 billion over 1985. The main causes of this deterioration are the marked decline in the trade surplus and increased interest and dividend payments to non-residents.

In addition, overall Canadian corporate profits, which had rebounded vigorously over the previous three years, fell considerably in 1986. Corporate pre-tax profits dropped by 4.9%, owing to the economic slowdown in the United States, which had major impact on the financial health of Canadian business, and to the continued weakness of the price of oil.

With respect to labour market conditions, however, an improvement was visible. According to the Labour Force Survey, the number of persons working grew by

323,000 in 1986, reaching 11,634,000, a significant increase of 3.0% over the previous year. Full-time jobs accounted for 83% of all new jobs, compared with 78% in 1985.

Job creation was particularly strong in the construction sector, where employment was up 6.8% over the the year as a whole, thanks to the exceptional number of housing starts. The tertiary sector also contributed to the dynamic condition of the labour market. Services and trade performed particularly well, with employment growth of 3.7% and 4.1% respectively over 1985. On the other hand, employment in manufacturing grew by only 1.7% in 1986, largely owing to weak exports. The only industries to gain significant ground in 1986 were wood, printing and publishing, transportation equipment and non-metallic mineral products. In contrast, heavy job losses were sustained in the oil industry, primary metals and furniture. Employment in the primary sector fell 0.8%, due to farmers' financial problems and low prices for several metals.

Overall, Canada's good job creation performance was reflected in its unemployment rate, which fell once again in 1986. Unemployment remains a serious concern affecting 1.24 million Canadian workers, despite the fact that the jobless rate fell to 9.6% in 1986 (for the first time since 1981) although 231 000 persons joined the labour force.

Close to 50% of new Canadian jobs in 1986 were created in Ontario, which greatly benefitted from the boom in the automobile industry and strong growth in construction, residential in particular. British Columbia, which enjoyed economic spinoffs from Expo '86, also made a substantial contribution to job creation in Canada in 1986.

Inflation in Canada followed a very encouraging path in 1986. Price increases were contained thanks to the collapse of the price of oil on world markets, the continued weakness in the price of raw materials, moderate wage agreements and the modest rise in unit labour costs. For the second straight year, the overall consumer price index (CPI) grew by only 4.1%, its best performance since the early 1970's. The transportation component, gaining the most from the drop of some 40% in the price of oil, was the key factor in this good performance. The modest rise in food prices also contributed to the disinflation process, following the decline in the price of wheat and other grain.

Table 2

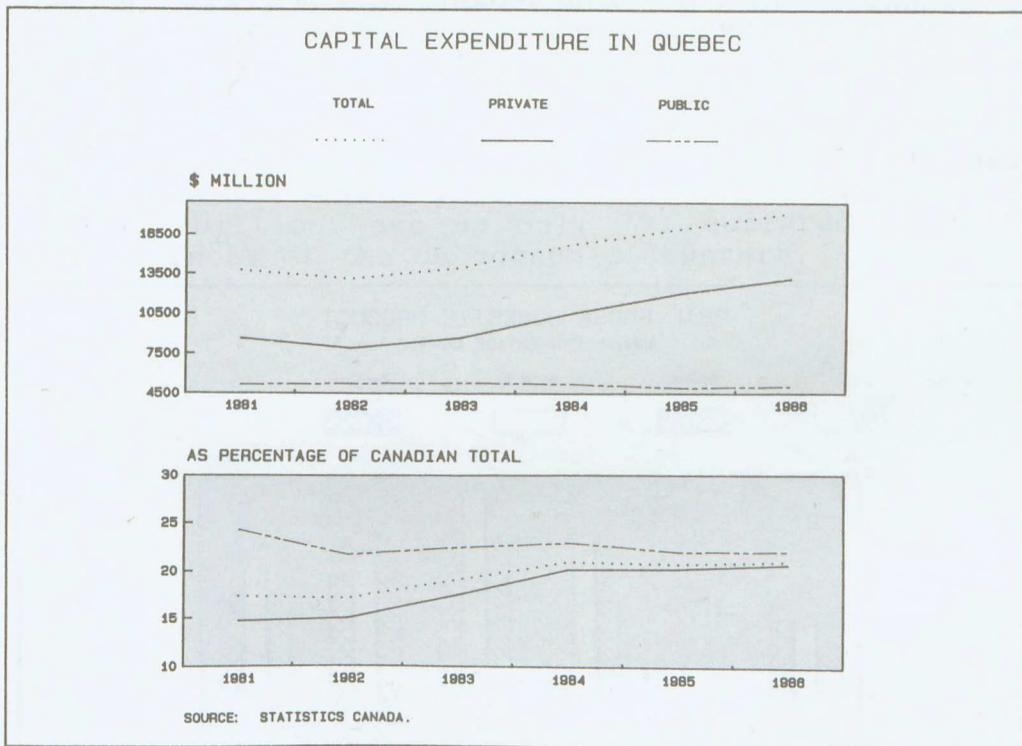
CANADIAN ECONOMY main indicators						
<u>Indicator</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
	<u>(\$ million)</u>					
Real GDP (1981 dollars)	315 278	303 492	312 782	328 748	342 833	354 828
Retail sales	94 293	97 639	106 243	116 080	129 446	139 676
Capital expenditure	79 604	76 761	73 519	75 378	82 091	86 648
Personal disposable Income	237 682	262 785	275 806	299 903	323 401	339 181
Company profits	37 654	26 477	36 660	45 430	47 528	45 193
Exports	84 432	84 560	90 702	112 218	120 258	120 631
Trade balance	7 292	17 821	17 647	20 726	17 475	10 133
Current balance	-6 131	2 906	2 942	3 362	-584	-8 805
	<u>('000)</u>					
Labour force	11 904	11 958	12 183	12 399	12 639	12 870
Employment	11 006	10 644	10 734	11 000	11 311	11 634
Housing starts	178	126	163	135	166	200
Bankruptcies	8,1	10,8	10,3	9,6	8,7	8,5
	<u>(%)</u>					
Unemployment rate	7,5	11,0	11,9	11,3	10,5	9,6
Consumer prices	12,5	10,8	5,8	4,4	4,0	4,1
Capacity utilization rate	80,4	69,5	72,0	76,0	78,0	77,7
Source: Statistics Canada, Conference Board of Canada, Consumer and Corporate Affairs Canada.						

ECONOMIC SITUATION IN QUEBEC

OVERVIEW

After four years of recovery, Quebec's economic growth remained strong in 1986. GDP grew by 3.7% in real terms over the previous year, compared with the national average of 3.5%. This result was due to the exceptional performance of residential construction, sustained consumer spending and the high level of business investment in manufacturing.

Graph 6



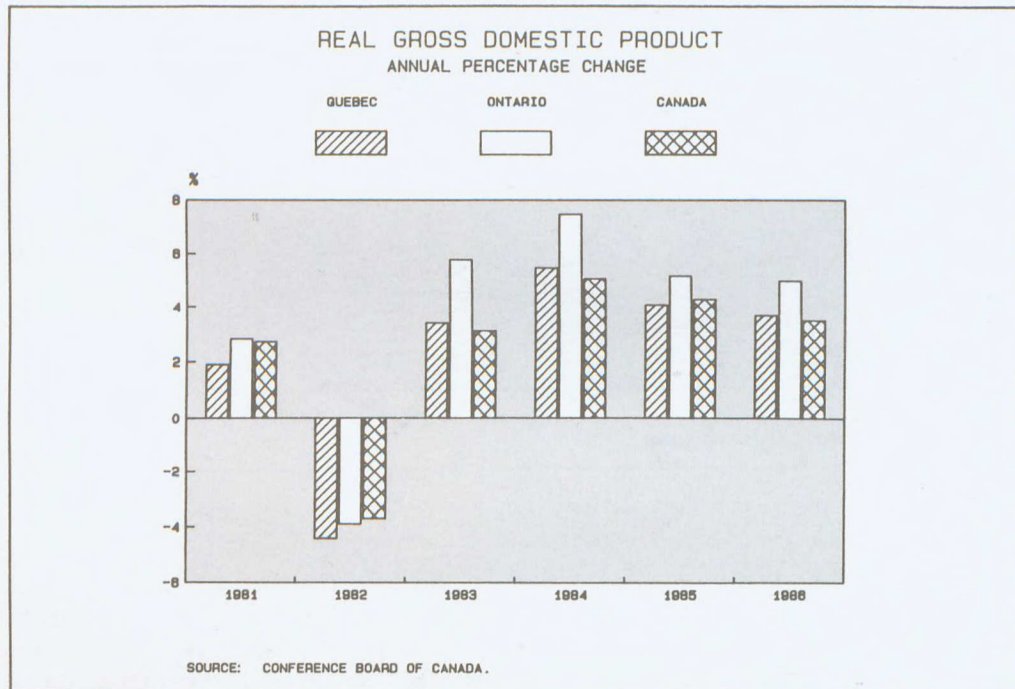
Quebec's residential construction sector was the most dynamic component of the economy in 1986 and continued to be the main stimulus for growth. While in some quarters housing starts had been expected to flatten out somewhat, or even to fall by 15% to 20%, 60 348 units were begun, boosted by low mortgage rates.

This represents an increase of 12,000 units over 1985, which had none the less been considered an exceptional

year. For the second year running, multiple dwellings were responsible for the lion's share of the growth in residential construction in Quebec, with a rise of approximately 40%. At the other extreme, construction of single-family units remained quite steady, moving up some 3%.

In 1986, Quebec had a fairly good year overall for business investment, which totalled \$18.2 billion, up 7.4% over the previous year. The private sector performed particularly well, accounting for more than 72% of total capital expenditure. This share has been growing markedly since 1984 (67%), and far exceeds the minimum recorded in 1978 (56.2%). Manufacturing posted the strongest growth, as a result of the many capital projects in pulp and paper and the chemical industry. Major gains were also enjoyed by commercial services, finance, and communications. Quebec's share of Canadian business investment rose to 21% in 1986 from 20.7% in 1985.

Graph 7



Consumer spending also contributed to Quebec's economic growth in 1986, rising to \$34 billion, which represents a considerable increase of some 10% over 1985. Retail sales benefitted from lower interest rates, growth in employment, and higher disposable personal income. New and second-hand car sales remained healthy, increasing by 14.2% and 20.3% respectively over the previous year. Sales of furniture and appliances, stimulated by strong residential construction, also rose markedly in 1986. Only sales in service stations lost ground (-5.2%) during the year, owing to lower gasoline prices.

Otherwise, despite a climate encouraging increased output, the number of businesses declaring bankruptcy remained a concern in Quebec, reaching 2,826 in 1986, compared with 2,807 the previous year. The only industries showing any improvement in this regard were in the primary sector, manufacturing and trade.

Quebec's performance was due to strong domestic demand, as exports were somewhat weak in 1986. Indeed, having been a major contributor to economic growth in 1984, and to a lesser extent in 1985, foreign demand was less intense in 1986. Exports, which at \$19.9 billion were up only 7%, suffered from the after-effects of the US economic downturn.

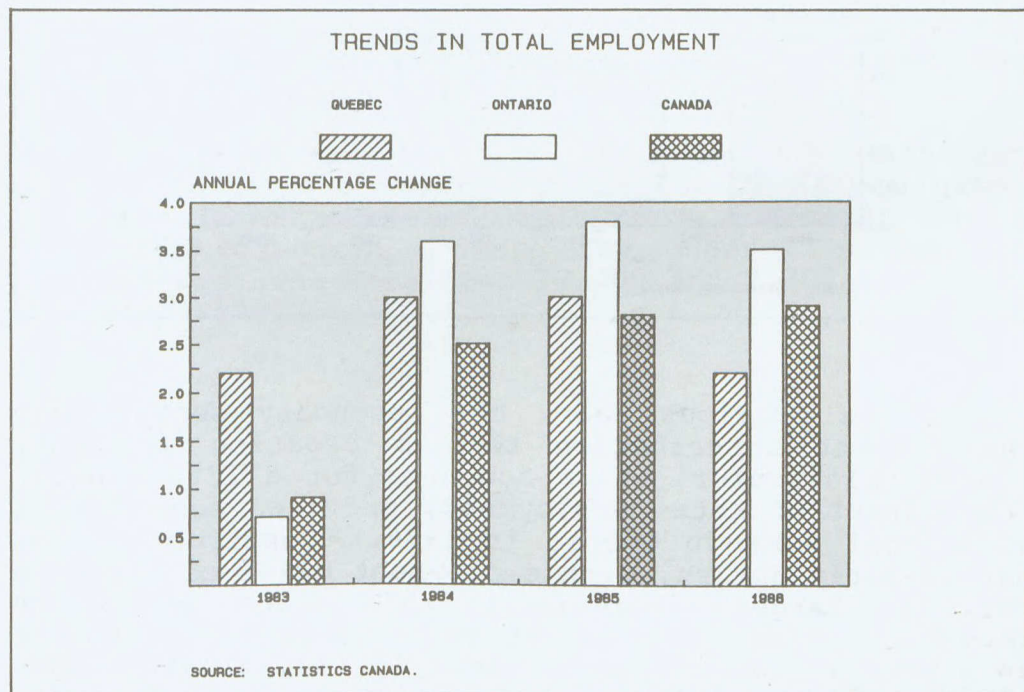
Table 3

ECONOMIC SITUATION IN QUEBEC						
main indicators						
<u>Indicators</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
	<u>(\$million)</u>					
Real GDP (1981 dollars)	69 853	66 791	69 035	72 802	75 796	78 608
Retail sales	22 671	23 497	25 784	29 006	31 782	34 684
Exports	15 065	14 400	14 961	17 356	18 611	19 929
Capital expenditure	13 739	13 098	13 947	15 747	16 980	18 230
private sector	8 616	7 898	8 689	10 544	12 072	13 209
public sector	5 123	5 200	5 257	5 204	4 908	5 022
Personal Income	73 205	80 298	83 826	91 290	97 833	104 612
Personal disposable Income	57 593	63 099	65 695	71 731	76 346	80 386
Wages and salaries	43 487	45 301	46 747	50 622	54 050	57 366
	<u>('000)</u>					
Housing starts	29,6	23,5	40,3	41,9	48,0	60,3
Bankruptcies	3,3	4,4	3,9	3,3	2,8	2,8
Person-days lost	1 790	1 278	2 385	1 180	1 134	1 920
Source: Statistics Canada, Conference Board of Canada, Quebec Bureau of Statistics, Consumer and Corporate Affairs Canada, and Quebec Department of Labour.						

LABOUR MARKET

Thanks to sustained activity in manufacturing and construction, the number of persons employed in Quebec grew by 62,000 (2.2%) in 1986. This rate is nevertheless lower than those for Canada as a whole (2.9%) and Ontario (3.5%). In Quebec, 282,000 jobs have thus been created since the recession ended, accounting for more than 28% of the country's new jobs. But this is the first year since 1983 that the job creation rate in Quebec has been lower than the national average. This is largely attributable to the weak employment growth in the tertiary sector in Quebec. Indeed, Quebec's share of total new employment in this sector in Canada was a mere 13%, whereas its share of employment in the sector was close to 25%.

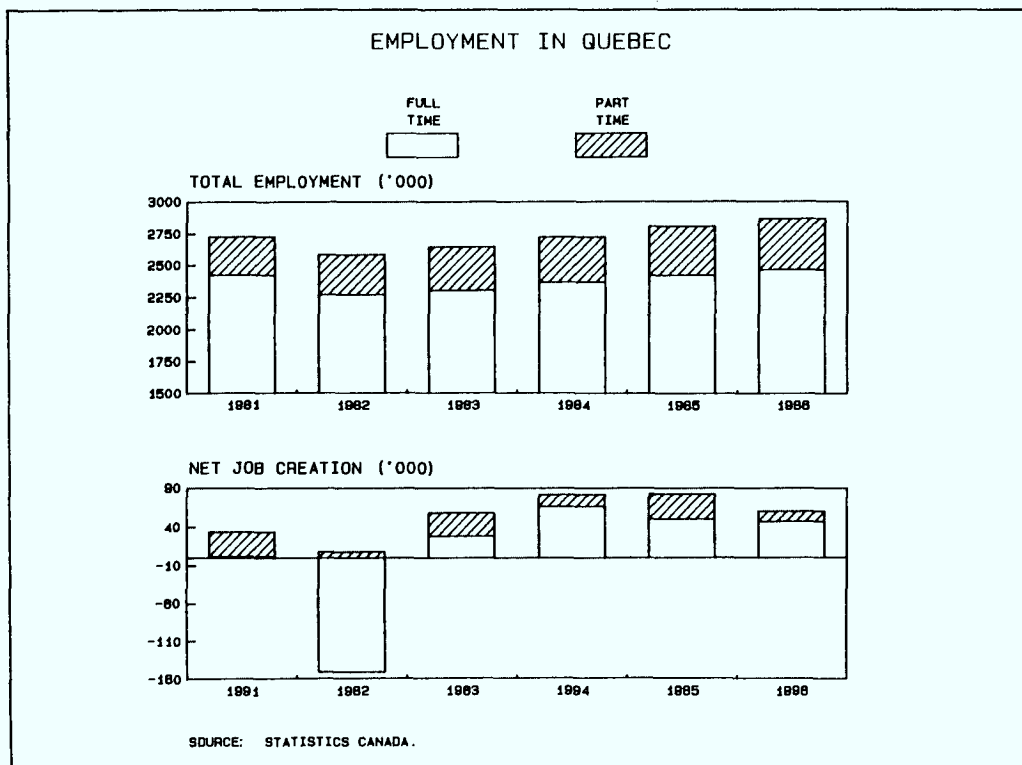
Graph 8



Significantly, some 80% of new jobs in Quebec in 1986 were full-time, compared with 60% the previous year. Full-time jobs recorded a 2% rise, with part-time jobs increasing by 3.3%. The growth rate of full-time

employment in Quebec was lower than the national average (2.8%). On the other hand, part-time employment grew at much the same rate in Quebec as it did in Canada.

Graph 9



Unlike the previous year, the secondary sector made the largest contribution to job creation in 1986. Indeed this sector, which accounts for a little under one-quarter of total employment, provided some 52% of additional jobs in Quebec in 1986. Construction was particularly active, with employment gains of close to 12%, the largest increase in this sector since the recession ended. Employment in manufacturing also put in a very impressive performance (3.1%), albeit slightly below the 1984 rate. In this area, Quebec's growth rate is almost twice that of Canada as a whole, despite the strength of the automobile industry in Ontario.

The tertiary sector was unable to maintain its growth rate in 1986. With growth of only 1.7%, it thus recorded its lowest increase of the decade, with the

exception of 1982. Following a strong performance in 1985, employment in transportation, communication and other utilities declined by 1.4% in 1986. At the same time, employment in finance, insurance and real estate moved back by 0.6%, after advancing some 7% in 1985.

Personal services and public administration posted minor job gains, while the largest increase in jobs was recorded in trade, with 24,000 additional jobs, representing a growth rate of 4.9%.

Thanks to continued employment gains and somewhat weak growth in the labour force, unemployment fell by 20,000 in 1986. The Quebec unemployment rate went down to 11%, its lowest level since 1982. While this rate is 2.9 percentage points below the 1983 high, it remains higher than in Canada and Ontario. The slow increase in labour market participation kept the gaps down, since the labour force grew in Quebec at just over one-half of Ontario's rate. Moreover, Quebec's participation rate (62.4%) remained close to its 1985 level (62.2%).

All new jobs created in 1986 were taken by the 25-44 age group, and employment grew more quickly among women (37,000) than men (28,000) in this group. Among the 15-24 and 45-and-over age groups, employment declined slightly compared with 1985.

Unemployment rates fell in 1986 in the main age groups. While the lower rate in the 25-44 age group was a result of increased employment, a smaller labour force was responsible among the under-25's and the 45-and-overs, who were down 12,000 and 7,000 respectively since 1985.

Table 4

THE LABOUR MARKET IN QUEBEC main indicators						
	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>
Population 15 years and +	4 945	4 996	5 039	5 074	5 115	5 162
15 to 24	1 240	1 212	1 177	1 139	1 103	1 067
25 to 44	1 948	2 001	2 053	2 101	2 151	2 200
45 and over	1 757	1 784	1 809	1 835	1 862	1 895
Labour force	3 040	2 998	3 069	3 123	3 181	3 221
15 to 24	774	719	717	706	697	685
25 to 44	1 501	1 514	1 574	1 642	1 709	1 768
45 and over	766	765	779	776	775	769
Employment	2 726	2 584	2 642	2 722	2 804	2 866
15 to 24	639	553	553	566	571	570
25 to 44	1 371	1 332	1 381	1 450	1 526	1 592
45 and over	716	701	708	706	707	703
Participation rate	61,5	60,0	60,9	61,5	62,2	62,4
15 to 24	62,4	59,3	60,9	62,0	63,2	64,2
25 to 44	77,1	75,7	76,7	78,2	79,5	80,3
45 and over	43,6	42,9	43,1	42,3	41,6	40,6
Unemployment rate	10,3	13,8	13,9	12,8	11,8	11,0
15 to 24	17,4	23,1	22,9	19,8	18,1	16,9
25 to 44	8,7	12,0	12,3	11,8	10,7	9,9
45 and over	6,5	8,4	9,1	9,4	9,2	8,6
Source: Statistics Canada, Labour Force Survey.						

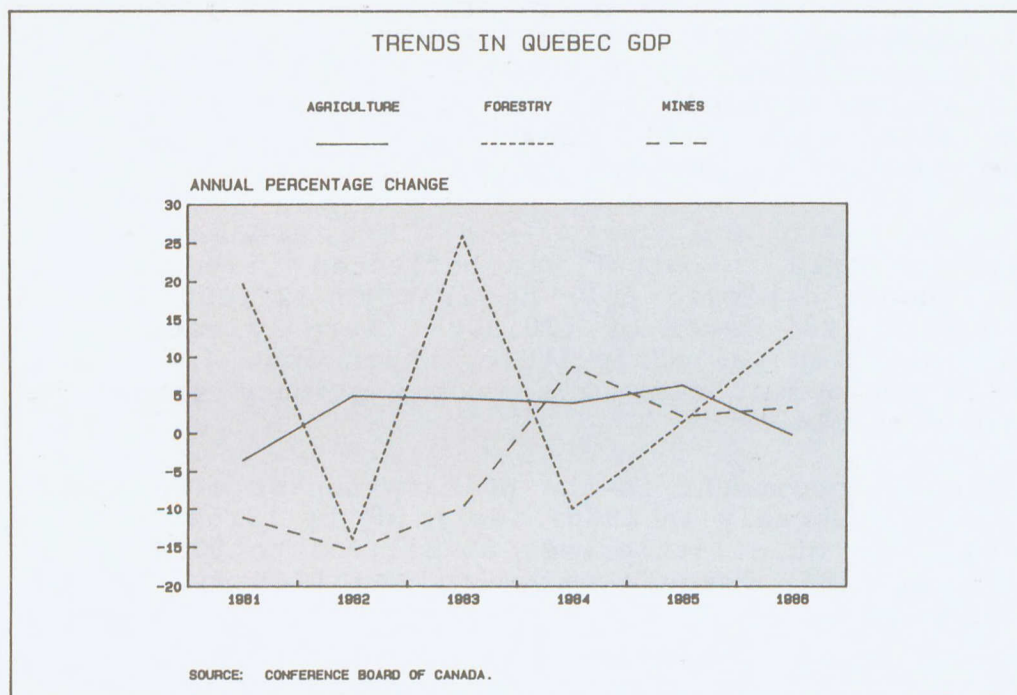
PRIMARY SECTOR

Performance in Quebec's primary sector was somewhat lethargic in 1986, owing to difficulties in the agriculture and mining sectors. In real terms, primary sector GDP, accounting for about 3.8% of Quebec's total GDP, grew by 3% during the year, representing a slowdown over 1985. Fisheries and forestry in particular contributed to this increased output by a marked turnaround in their activities in 1986. Mining, on the other hand, still hamstrung by low metal prices and the drop in asbestos shipments, remained problematic.

Feeble growth in output was reflected in employment. The number employed fell by 2.3% to 127,000 in 1986 from its 1985 level of 130,000. Largely responsible for this drop was agriculture, which lost 3,000 jobs, while employment elsewhere in the primary sector remained stable.

Business investment in the primary sector also slowed down considerably in 1986, declining by 13.6% from its 1985 level of a little over \$1 billion to \$884.6 million in 1986, largely owing to the \$140 million decrease in agriculture.

Graph 10



Agriculture

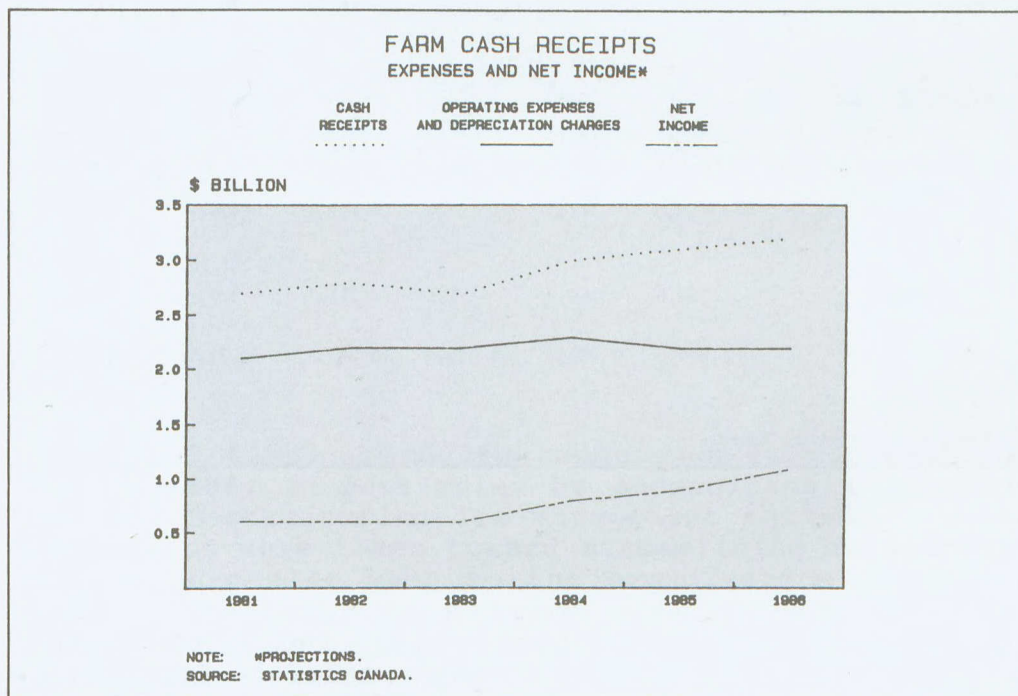
The recovery in Quebec's agricultural sector, which had begun in 1984 thanks in particular to dairy product sales, lost way in 1986. Many farmers experienced difficulty in 1986, owing to the low selling price of various farm products, the stagnant domestic market and less favourable weather conditions. In all, real GDP even lost ground, dropping by 0.2% over the previous year. The number of farm bankruptcies, down to 103 in 1986 from 124 in 1985, and increased foreign sales of most of the main products (with the exception of dairy products) were the only encouraging factors during 1986.

The number employed, which had climbed by more than 10% in 1985, was considerably affected by the sluggishness of activities in 1986. In all, 3,000 jobs were lost, a marked 3.5% decline over 1985. Since total employment in agriculture across Canada remained

quite steady, falling by a mere 0.8%, Quebec's share of persons employed in Canadian agriculture moved back from 17.4% in 1985 to 16.9% in 1986.

Farmers' earnings from product sales were up by 4.5% in 1986 at \$3.2 billion, a slight improvement over the previous year's results. The largest increases were recorded in sales of pork, dairy products and poultry. As far as crops are concerned, however, farm cash receipts fell, particularly in corn and oats, owing to inclement weather conditions.

Graph 11



The poor outlook in 1986 did little to encourage investment. In all, capital expenditure plunged 22% to \$496.3 million, representing some 16% of overall Canadian business investment in agriculture.

In response to difficulties in the agricultural sector, the federal government established a \$1 billion special assistance program for Canadian grain producers in 1986. The purpose of this program is to

provide compensation for the heavy losses caused by the falling world price of grain, wheat in particular.

Table 5

FARM CASH RECEIPTS IN QUEBEC main products (\$ million)						
	1981	1982	1983	1984	1985	1986
<u>Crops</u>	392,9	350,5	436,1	488,1	544,3	502,4
Corn	96,7	94,0	115,8	142,2	158,5	136,3
Vegetables	75,3	85,3	83,6	94,2	102,6	103,8
Potatoes	46,3	41,7	40,9	48,4	36,9	45,1
Fruits	31,7	35,7	35,1	35,3	42,9	39,7
Other crops	142,9	93,8	160,7	168,0	203,4	177,5
<u>Livestock and products</u>	2 025,5	2 232,5	2 069,9	2 249,9	2 209,7	2,380,2
Dairy products	862,7	951,3	878,3	997,4	986,4	1 012,0
Hogs	576,0	682,9	563,5	596,3	567,1	672,4
Cattle and calves	255,8	264,1	296,3	276,6	273,7	294,8
Poultry	220,7	222,9	215,9	251,7	252,9	273,4
Other livestock and products	110,3	111,3	115,9	127,9	129,6	127,6
<u>Other receipts</u>	280,6	216,4	233,5	311,1	338,9	349,6
TOTAL	2 699,0	2 799,4	2 739,5	3 049,1	3 092,9	3 232,2

Source: Statistics Canada.

Forestry

The situation of the Quebec logging industry brightened in 1986 thanks to strong activity from major downstream manufacturers, namely the wood (including sawmills) and pulp and paper industries. Indeed real GDP, which had grown by only 1.4% in 1985 due to weak demand for forestry products, advanced by 13.2% in 1986, for its best performance since 1983. This upswing in output (5.3%) affected the number of persons employed, which rose by a total of 1,000 during the year.

The logging industry, which provides the pulpwood for pulp and paper mills and logs for sawmills, enjoyed renewed demand for its products. On the one hand, felling operations benefitted greatly from the subs-

tantial increase in lumber shipments, largely attributable to the marked rise in exports to the US and the vigorous state of residential construction in Canada. On the other hand, the surge in output from the pulp and paper industry, which may be explained by steady foreign demand for newsprint and wood pulp, dynamically sustained the operations of the Quebec logging industry. This high level of activity was not affected by the increasingly widespread trend toward using wood chips from sawmills in pulp and paper mills.

The dynamic behaviour of the Quebec forestry industry was also evident in investment in 1986: expenditures totalled \$24.9 million, a noteworthy 17.5% increase over the previous year, largely attributable to increased spending on machinery and equipment, which went from \$9.8 million in 1985 to \$13.4 million in 1986.

With a view to forestalling future shortages in the supply of wood in Quebec, the provincial government announced its new forestry policy in 1986. In particular, this policy provides for the cancellation of all current forest concessions, which will be replaced over the next three years by forestry supply and development contracts.

Fishing

The Quebec fishing industry continued its reorganization in 1986, in particular by modernizing its equipment and restructuring its management methods. While major steps were taken toward streamlining activities, changes were also made to the organization of operations. Moreover, this trend should grow in 1987, owing particularly to the probable privatization of Madelipêche's huge marine complex in the Magdalen Islands, owned by the Quebec government through SOQUIA (Société québécoise d'initiatives agro-alimentaires).

Quebec's fisheries, whose real GDP leapt up 10% over the previous year, enjoyed the second highest increase in output of any sector, after logging. This growth was facilitated by the marked rise in the price of marine products.

While catches were virtually the same as the previous year, standing at approximately 87,000 tonnes, fishermen's earnings were substantially higher in 1986. The total value of catches jumped more than 30% to \$82.2 million, thanks to the large increase in the price of

shellfish and crustaceans, particularly snowcrab, shrimp and lobster.

The improved economic conditions also boosted the level of investment in the Quebec fishery sector in 1986. Modernization work translated into a substantial rise in capital expenditure, which at \$6.9 million in 1986 was some 20% higher than the previous year.

Mining

The Quebec mining industry, which has been extremely sluggish since the early 1980's, remained lethargic in 1986. This may largely be explained by continued low prices for most minerals, due to surplus world production capacity, and by increasingly keen competition from a number of developing countries. With the exception of gold mining, which managed to post acceptable results owing to the higher price of gold, the profitability of mining companies remained marginal in 1986.

Shipments of Quebec minerals were down 2% in value, from \$2.23 billion in 1985 to \$2.18 billion in 1986. The year's weak performance was largely attributable to asbestos and iron. World asbestos markets continued to suffer from weak demand and surplus production capacity. This led to a substantial decline in Quebec asbestos shipments, which dropped from \$243.8 million in 1985 to \$200 million in 1986. Despite attempts at rationalization, the sector still faces the threat of a ruling by the US Environmental Protection Agency (EPA) which could involve banning the use of asbestos in all its forms in the United States. Furthermore, the International Labour Organization (ILO) is studying similar measures for its member states.

Iron shipments, which had benefitted in 1985 from the strength of the North American automobile industry, shrank from \$450 million in 1985 to \$400 million in 1986. The decline in world steel production was largely responsible for this, since steel represents one of the main outlets for this mineral.

Copper and zinc in particular also experienced difficulties in 1986. In both cases, the continued drop in prices, due to increased world production and reduced consumption, explained the weaker activity.

On the other hand, gold shipments benefitted from the upsurge in the price of gold for the past year, attri-

butable partly to the threat of economic sanctions against South Africa, the world'd largest gold producer, and to massive purchases by the Japanese government. Gold shipments hit \$477 million in 1986, more than \$70 million higher than the previous year. Consequently, gold remained the biggest money-maker in the Quebec mining sector in 1986.

For most other minerals, particularly sand and gravel, sulphur, stone, silver and cement, the situation remained quite steady, with no significant variation over the previous year.

The stagnation of Quebec mining operations, combined with the application of new, faster and more efficient production methods, affected the level of employment in 1986, which, for the year as a whole, fell by some 2,000 from 1985 to stand at 23,000 persons employed.

Business investment also declined slightly in 1986, largely because of reduced spending on machinery and equipment, moving down 1.1% to \$356.5 million.

Expenditure on exploration, boosted by the higher price of gold and a variety of tax breaks, nevertheless continued at the same pace in 1986.

Table 6

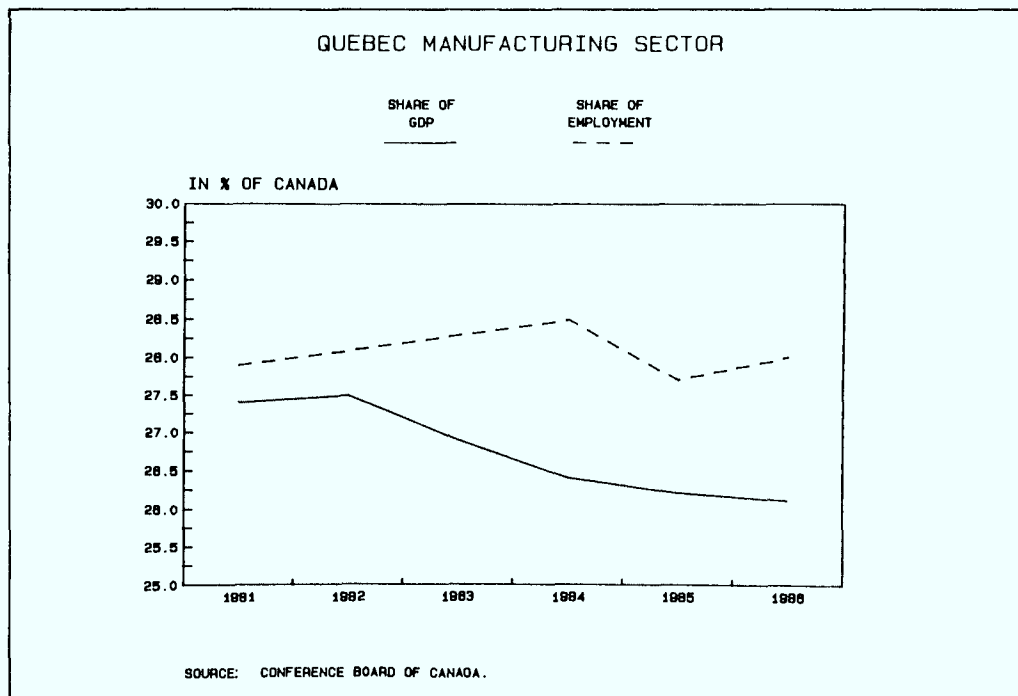
PRIMARY SECTOR IN QUEBEC main indicators						
Group	GDP (\$ million)		Employment ('000)		Capital expenditure (\$ million)	
	1985	1986	1985	1986	1985	1986
Agriculture	1 621	1 618	85	82	636	496
Forestry	439	497	19	20	21	25
Fishing and trapping	30	33	1	2	6	7
Mines	789	816	25	23	360	357
Total	2 879	2 964	130	127	1 023	885

Source: Statistics Canada, Conference Board of Canada.

Manufacturing

The manufacturing sector in Quebec recorded a marked slowdown in 1986, owing mainly to weaker US demand for several of its main exports and the collapse of activities in the oil industry. Manufacturing GDP, which had posted substantial gains of 5.6% and 4% over the previous two years, grew by a mere 0.2% in 1986. This growth rate, which was lower than for the manufacturing sector in Canada as a whole, brought Quebec's share of manufacturing output down from 26.2% in 1985 to 26.1% in 1986.

Graph 12

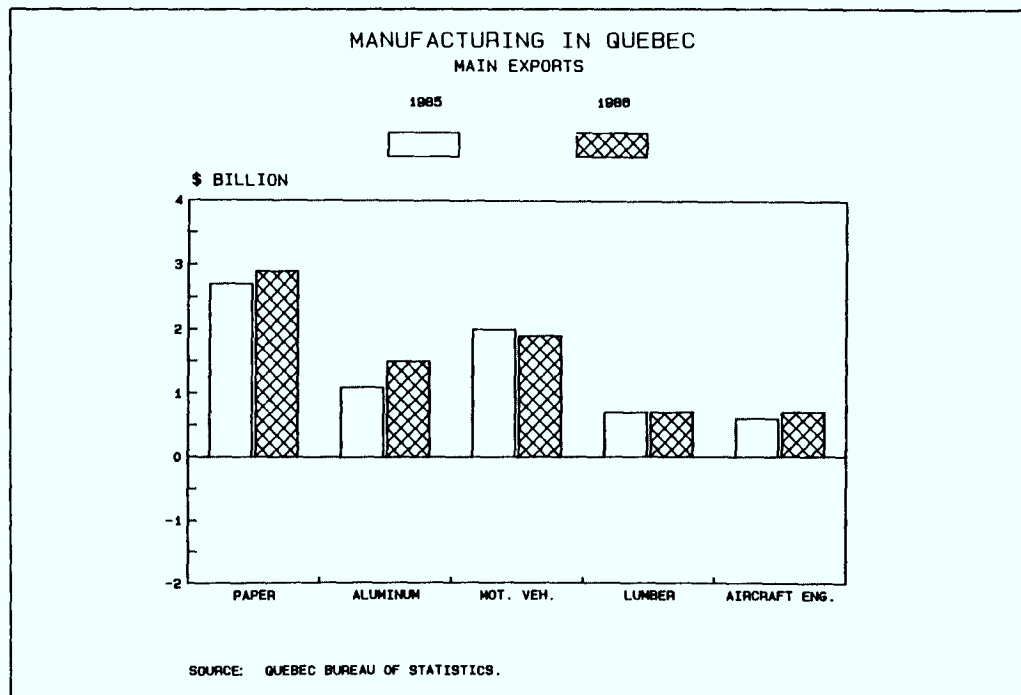


Exports to the US, which had contributed substantially to economic growth in 1984 and to a lesser extent in 1985, barely encouraged an increase in output from Quebec manufacturing in 1986. Buffeted by the economic slowdown in the United States, Quebec recorded rather modest gains in this area. In all, Quebec's worldwide export shipments reached \$19.9 million, up 7.0% over 1985. While several of the main export

products experienced lower growth, others, among them electronic tubes and semi-conductors and commercial telecommunications equipment, which had enjoyed remarkable foreign market penetration in recent years, recorded a decline in exports. A drop, albeit less marked, was also seen in exports of passenger cars.

On the other hand, marked increases were posted in the aircraft industry, particularly in the export of whole aircraft (+39%) and aircraft assemblies and parts (+24%), lumber (+8.8%) and aluminum (+40%). The turnaround in the world market, attributable to rising prices and growing consumption, had major impact on aluminum exports. Strong advances were also seen in exports of railroad rolling stock, stimulated by Bombardier's delivery of cars for the New York subway.

Graph 13

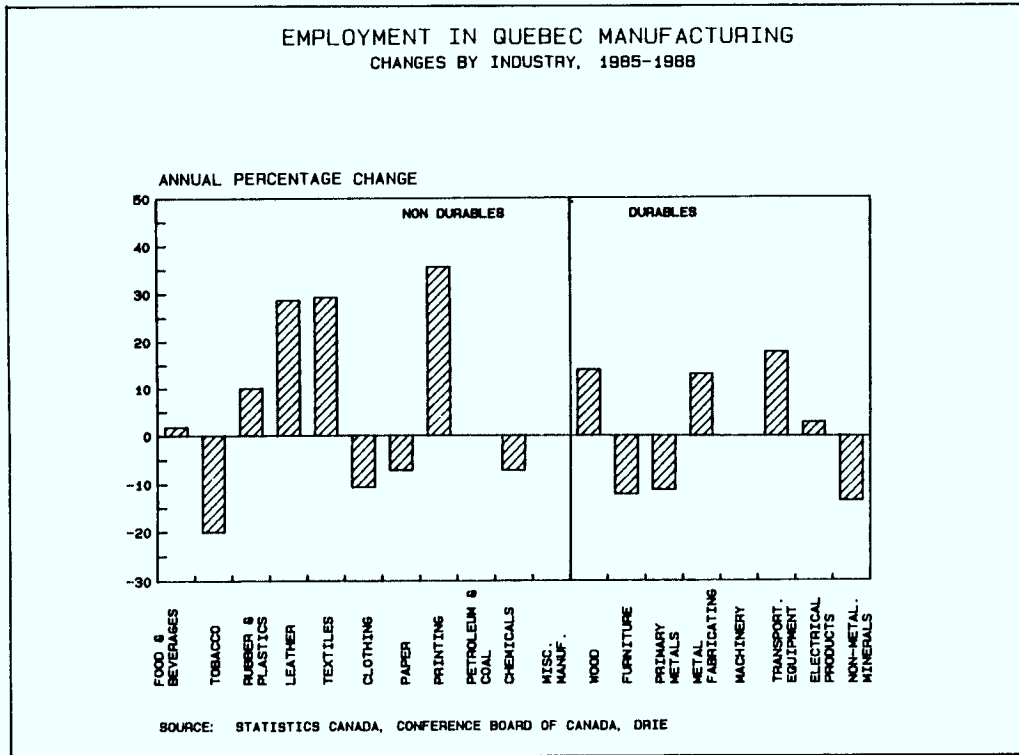


The total value of manufacturing shipments in 1986 amounted to \$60.7 billion, up 2% over the previous year. In light of the approximately 1% increase in

the selling price index for the manufacturing sector as a whole, the real growth in Quebec's manufacturing shipments was virtually nil. The sluggishness of shipments was largely attributable to the oil industry, which, hard hit by the collapse of world prices, recorded a substantial drop in shipments in 1986. Tobacco, with shipments down by 2.4%, and machinery, up by 0.8%, also experienced some difficulty. In contrast, the value of shipments in the chemical industry rose considerably thanks to increased sales of industrial chemicals and pharmaceutical products. Other industries also performed well, notably wood (+13.5%), printing (+10.2%) and textiles (+8.8%). Moreover, setting aside the drop of some 33% in shipments of oil and coal products, manufacturing shipments posted a 5.8% increase over the previous year.

Labour market conditions in manufacturing improved in 1986, and 17,000 new jobs were created, despite falling output from Quebec's manufacturing industries. The sectors contributing the most to this growth were transportation equipment, printing, textiles and wood, with a total of 29,000 additional jobs. On the other hand, clothing, furniture, paper, primary metals and non-metallic mineral products all lost jobs. The total employed stood at 565,000, compared with 548,000 the previous year. None the less, although the manufacturing sector was on the right track in 1986 with respect to job creation, it still had a significant shortfall (54,000) over pre-recession levels.

Graph 14



Business investment, which had mushroomed in 1984 and 1985, continued to grow rapidly in 1986, albeit more moderately. Investment in the paper and related products sector totalled more than \$1 billion this year, largely thanks to Domtar's construction work on a new fine paper mill at Windsor in the Eastern Townships. In addition, burgeoning expenditure in chemicals was a factor in the substantial increase in business investment in the Quebec manufacturing sector as a whole, which hit \$3.8 billion, an impressive 17% gain over the previous year.

Table 7

MANUFACTURING CAPITAL EXPENDITURE IN QUEBEC major industrial groups					
Group	\$ million			% change	
	1984	1985	1986	1985/84	1986/85
Primary metals	659	850	553	29,1	-35,0
Paper and allied products	473	683	1 140	44,4	66,8
Food and beverages	229	227	236	-0,9	3,8
Chemicals	208	226	408	8,6	80,9
Transportation equipment	80	128	161	59,2	26,4
Textiles	75	73	69	-2,8	-5,2
Printing, publishing and allied industries	84	51	62	-39,4	21,7
Other	943	1 044	1 212	10,7	16,1
TOTAL	2 751	3 282	3 841	19,3	17,0

Source: Statistics Canada.

Consumer goods industries

Food and beverages

The Quebec food and beverages industry, which has the province's highest output, performed poorly in 1986. The value of shipments rose by only 1.3%, to stand at \$10.2 billion. In real terms, this represents a decrease of 3%. This weak performance was none the less offset by a 9% rise in retail sales by food stores.

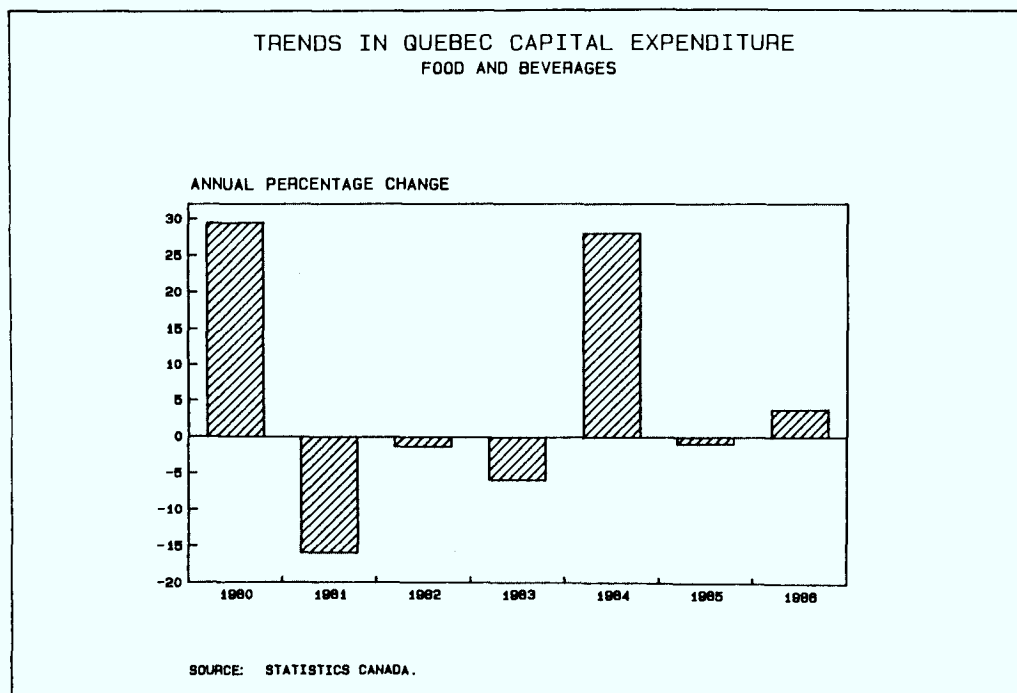
The industry's inability to penetrate new foreign markets, which absorb some 15% of Quebec output, was largely responsible for its weakening position. Exports of dairy products were forced down 20% by international competition, to \$148 million in 1986 from \$187 million the previous year. There were also declines in exports of other food products which are less important in value, such as fresh and refrigera-

ted vegetables (8.6%) and bakery products (2.6%). Only exports of refrigerated and frozen meats recorded a substantial gain of close to 20% over 1985.

Against all odds, the sector's employment level grew a little stronger in 1986. The number of employed, which had fallen by about 10,000 over the past four years owing to the rationalization and concentration effort, grew by 1,000 (1.8%) in 1986.

Business investment was quite steady in 1986, reaching \$236 million, up 4.0% over the previous year. Increased expenditure particularly in biscuits and bakery products (\$11.4 million), other food products (\$19.6 million) and beverages (\$4.4 million) was partly offset by declining investment in dairy products (\$7.7 million), fish products (\$16.4 million) and fruit and vegetables (\$2.4 million).

Graph 15



Tobacco industry

Quebec, where most of Canada's tobacco producing facilities are located, was noticeably affected by the industry's decline in 1986. Having posted substantial gains in 1985 by capturing part of Ontario's output, the tobacco industry experienced a marked slowdown in 1986. The value of shipments from Quebec, which had risen by 18% in 1985, fell by 2.3% in 1986. None the less, since shipments from the rest of Canada dropped farther, Quebec's share of Canadian shipments of tobacco products moved up to more than 50%.

Business investment, which increased by a substantial 16.2% from 1985 to stand at \$43 million in 1986, was one of the few encouraging signs during 1986.

Leather industry

Quebec's leather and allied products industries, which account for some 35% of Canadian output, experienced some difficulty in 1986. Despite growth of some 11% in retail sales by shoe stores, the position of Quebec manufacturers barely improved. Imports of shoes on the Canadian market jumped almost 34% over the year, and this caused Quebec's share of the domestic market to shrink in 1986. Moreover, during this period, the value of shipments rose by a mere 3.7%, essentially because of the 4.2% increase in selling prices.

The slowdown in the activities of the leather industry was also particularly visible in investment. For 1986 as a whole, capital expenditure plummeted more than 20% from the previous year's level, largely due to the non-replacement of machinery.

Despite the industry's sluggishness, however, Quebec manufacturers created additional jobs, unlike other Canadian producers.

Furniture and fixture industry

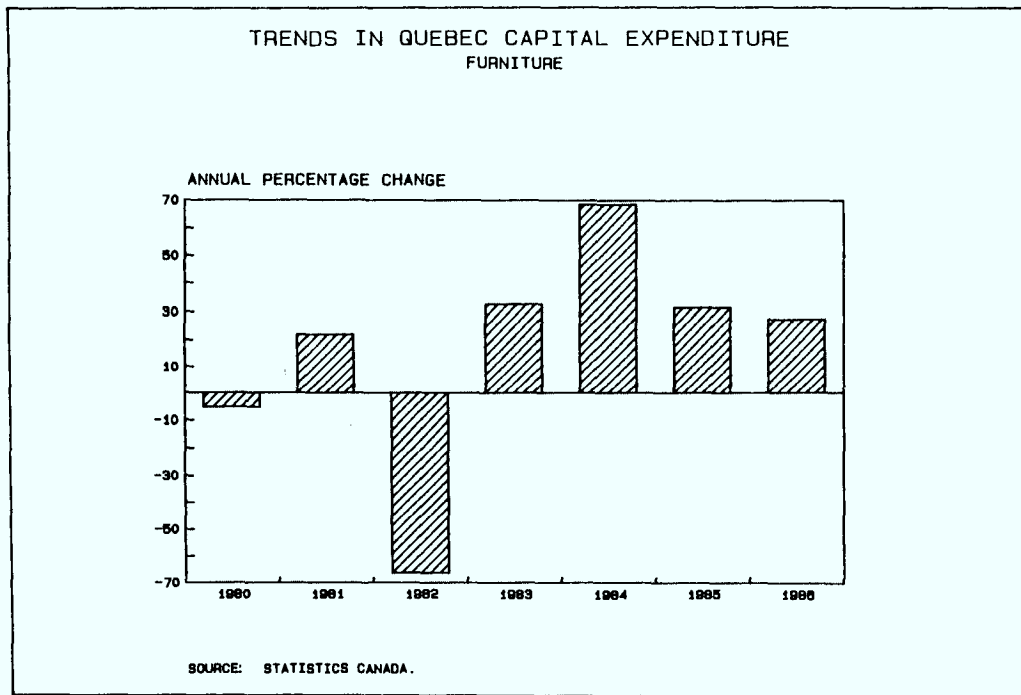
Quebec's furniture and fixture industry, which accounts for some 30% of Canadian output, somewhat levelled off in 1986, having made a spectacular jump in 1985. Shipments from Quebec furniture manufacturers were up 5.2%, compared with 14% in 1985. This deceleration occurred in spite of strong residential construction, which substantially boosted retail sales in furniture stores.

The penetration of new markets, particularly in the United States, which was responsible for the industry's good performance over the previous two years,

slowed somewhat in 1986. While exports to the US, which accounted for more than 90% of total exports, had leapt up by more than 60% and 25% in 1984 and 1985 respectively, they grew by a more modest 16% in 1986. The value of Quebec furniture exports reached \$187 million in 1986, up \$30 million over the previous year. Exports accounted for close to 16% of all shipments in 1986, compared with 12% in 1985.

The need for manufacturers to acquire new facilities and modernize equipment in order to expand their activities and be more competitive on the US market encouraged investment in 1986. Capital expenditure totalled \$16 million, a striking increase of more than 20% over the previous year.

Graph 16



Clothing industry

Quebec's clothing industry, which employs 76,000, performed quite strongly in 1986. The value of shipments from Quebec manufacturers, which accounts for more than 60% of the Canadian total, grew by 6.6%

in 1986, despite a 10% drop in employment. This growth, encouraged by less pressure from imports and by steady domestic demand, was all the more impressive, since selling prices in the industry increased by a mere 2.3%.

Clothing imports, which had usually recorded growth rates considerably above those of shipments, slowed somewhat in 1986. Thus, purchases of the main products abroad -- knitted and other outerwear, hats, gloves and mitts, other clothing, and clothing accessories -- rose by 16.3% in 1986, compared with more than 30% in 1985. Moreover, import penetration should stabilize further with the renewal in 1986 of the Multifibre Arrangement, intended to protect the industry by limiting import growth. Under this new agreement, Canadian clothing manufacturers will be certain of maintaining their market share, since clothing imports will increase at the same rate as demand. Establishment of this policy will be absolutely crucial for Quebec, and particularly for Montreal, where most of the jobs are located.

The industry's best performance in 1986 was in the area of investment. Capital expenditure hit a record \$20 million, an exceptional increase of close to 60% over the previous year. Largely responsible for this rise was investment in machinery and equipment in the menswear sector, up from \$5.2 million in 1985 to \$10.1 million in 1986.

Graph 17

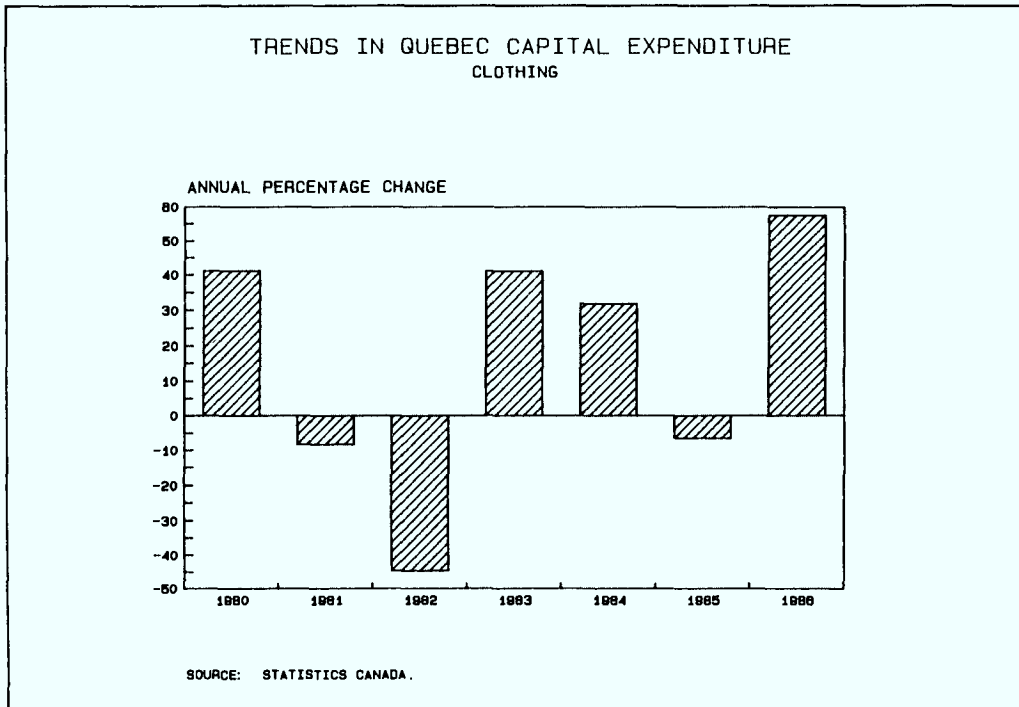


Table 8

CONSUMER GOODS INDUSTRIES
shipments, employment and capital expenditure

Group	Shipments (\$ million)		Employment ('000)		Capital expenditure (\$ million)	
	1985	1986	1985	1986	1985	1986
Food and beverages	9 749	9 899	55	56	227	236
Tobacco	813	794	5	4	37	43
Leather	452	469	7	9	4	3
Clothing*	3 306	3 524	85	76	21	34
Furniture	980	1 031	25	22	13	16
Miscellaneous industries	N.A.	N.A.	19	19	380	470

Source: Statistics Canada.

Note: *Including knitting mills.

Resource processing industries

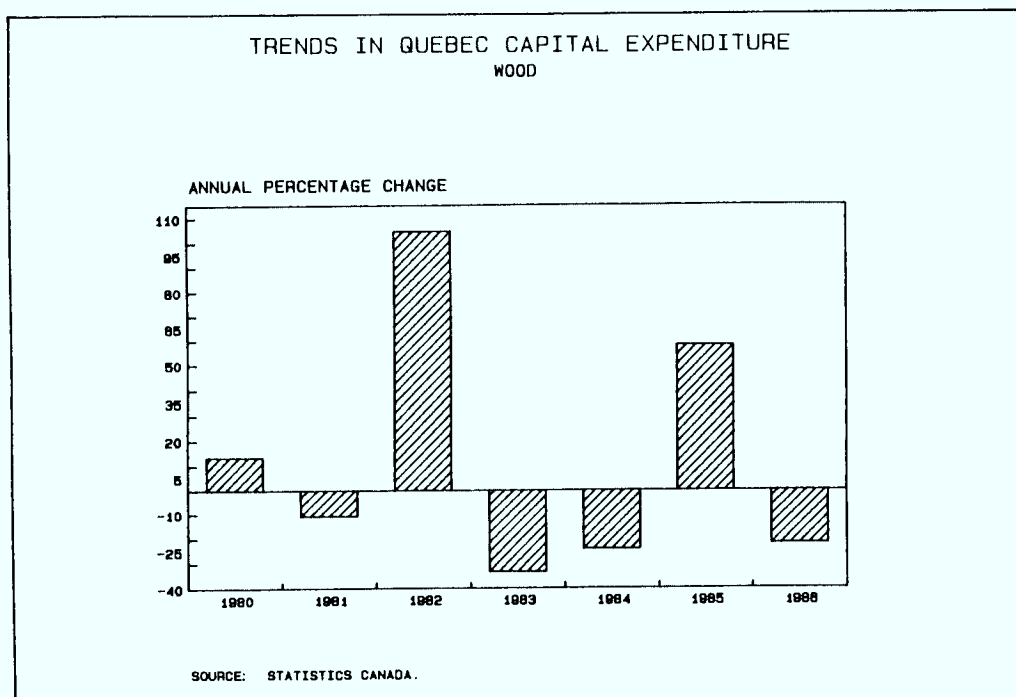
Wood industries

Quebec's wood industries, consisting largely of sawmills and sash and door manufacturers, turned in an excellent performance in 1986. The value of shipments increased by some 13% over the year, owing to strong residential construction in Quebec and steady North American demand for sawmill lumber.

Quebec's lumber exports to the United States, accounting for more than 90% of the province's total wood exports, were largely responsible for the industry's expansion during 1986. Total shipments, encouraged by the weakness of the Canadian dollar against its US counterpart, hit \$644 million, some 10% higher than the previous year's level. Moreover, the value of lumber exports, accounting for some 30% of the Quebec wood industry's output, was up by 8.8%.

This spirited performance, reflected by real growth in output of some 5%, also affected employment, which strengthened substantially. The industry employed 4,000 additional workers, bringing its workforce to 33,000, a sizable 13.8% increase over the previous year.

Graph 18



Owing to a marked decline in the capacity utilization rate, investment in the Quebec wood industry slowed considerably in 1986, after climbing back significantly in 1985. Total investment in 1986 amounted to \$63 million, down a massive 30.7% from its level of \$90 million the previous year. This drop was largely due to decreased expenditure on machinery and equipment in sawmill, planing mill and shingle mill products industries, which plummeted from \$50.4 million in 1985 to \$27.8 million in 1986.

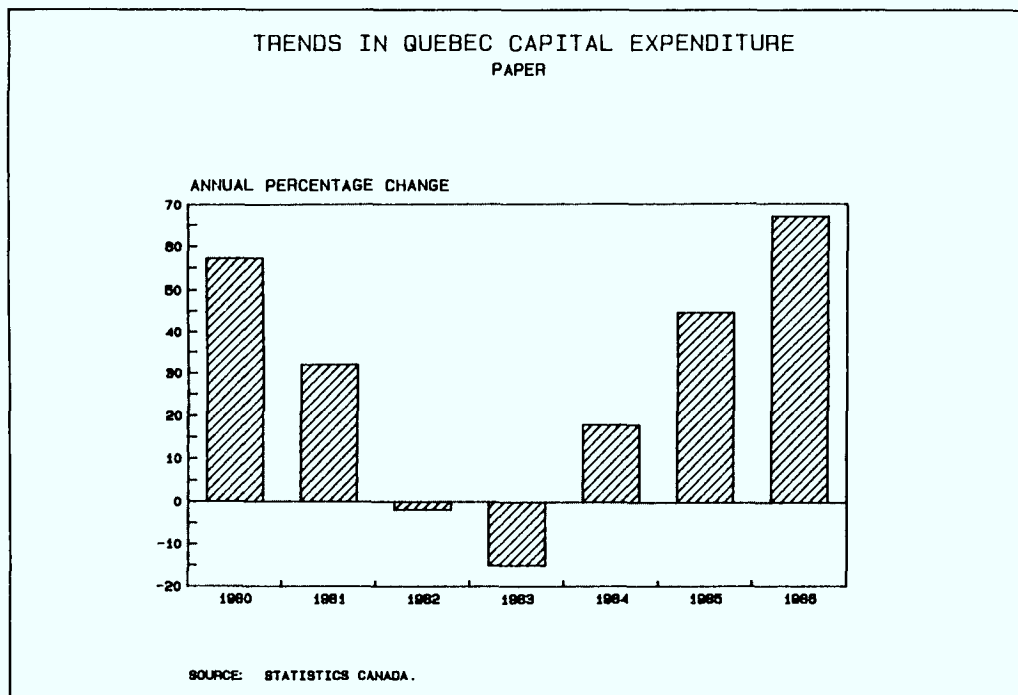
Paper industry

The paper and allied products industries, also benefiting from the weakness of the Canadian dollar against the US currency, had another good year in 1986. Most paper companies recorded substantial increases in earnings in 1986, due among other things to higher prices, particularly in wood pulp.

The value of Quebec paper industry shipments hit a new high of \$6.5 billion in 1986, 7.2% above the previous year's level, thanks to sustained foreign demand. During this period, newsprint exports, accounting for approximately one-third of the industry's shipments, remained firm with a 9.7% increase over 1985. On the other hand, wood pulp exports, which had fallen by \$50 million in 1985, picked up again, climbing by 25% in 1986 to \$400.6 million.

For the second year in a row, business investment in the industry was very heavy in 1986. Encouraged by a substantial increase in the capacity utilization rate, which reached 93%, investment rocketed from \$683 million in 1985 to \$1.14 billion in 1986, an advance of 66.8% over the previous year. The continuation of the construction at Windsor in the Eastern Townships of a new fine paper plant by Domtar, costing \$1.2 billion, contributed particularly to the industry's fine investment performance. Moreover, Quebec accounted for 52.7% of Canadian capital expenditure in this sector in 1986, a considerably larger proportion than its share of output, which stands at about 33%.

Graph 19



On the other hand, employment continued to decline in 1986, despite the industry's vigorous performance. The number of workers fell by 3,000 (7.1%) from the previous year, to stand at 39,000. This is largely explained by the massive investment carried out in recent years to acquire higher-performance machinery, the outcome of which has been to reduce labour requirements.

Non-metallic mineral products

Quebec's non-metallic mineral products industry posted a lacklustre performance in 1986. Industry shipments were up 7.3% over the previous year, largely owing to a 5.2% increase in selling prices. The strong growth in construction in Canada and a marked increase in exports to the US, accounting for approximately 16% of output, were not enough to inject more life into this industry. During this period, while exports of primary abrasives, tiles, natural stones and other non-me-

tallic mineral products increased substantially, total demand for concrete products, cement and glass was not very strong. Decelerating real growth in output also affected employment, which fell considerably (-2,000) for the second year in a row, to stand at 13,000.

In contrast, capital expenditure for the Quebec industry as a whole, which had remained quite steady in 1985 at \$46.4 million, rose significantly in 1986. Total investment was up considerably, by 35.3% over the previous year, mainly owing to increased expenditure by cement, concrete product and other non-metallic mineral product manufacturers, which shot from \$24.2 million in 1985 to \$45.1 million in 1986.

Primary metal industries

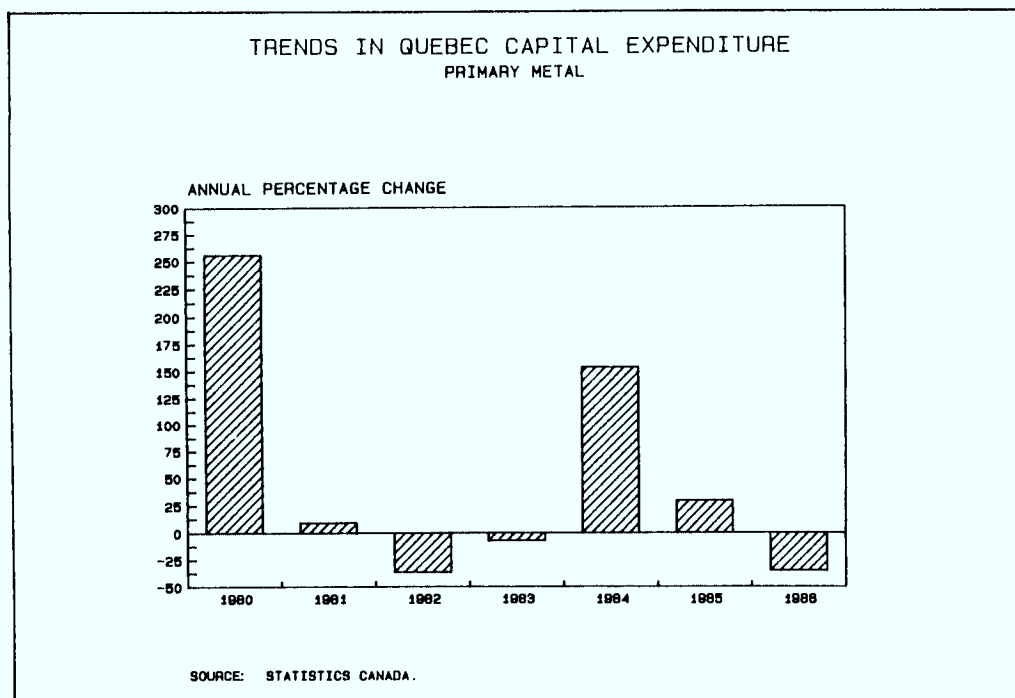
Quebec's primary metal industries, one-half of whose output comes from non-ferrous smelting and refining, strengthened somewhat in 1986. The value of shipments, which had remained quite sluggish in 1985 owing to low world demand, moved up by 5.8% in 1986 to \$4.9 billion.

The aluminum industry started the year more optimistically. The position of the aluminum market improved considerably in 1986, thanks among other things to increased consumption, an improved product line, tighter operating costs and, in particular, higher prices.

Benefitting from the sector's new energy, aluminum exports leapt up by almost 40% to \$1.5 billion. There was, however, no turnaround in conditions for the other primary metals in 1986. Exports of zinc and precious metals moved back considerably in 1986, owing to continuing low prices caused by weak world demand.

Business investment in primary metals fell substantially in 1986, mainly because of the completion of construction of P echiney's aluminum smelter in B ecancour. Capital expenditure stood at \$553 million in 1986, 35% below the previous year's record level of \$850 million. The primary metal industries were actually overtaken by the pulp and paper industry as the leading manufacturing investor in Quebec, for the first time since 1983. In addition, with the announcement of major investment of \$400 million by Norway's Norsk Hydro in a magnesium plant in B ecancour, where construction should start in Spring 1987, the outlook for investment in primary metals remains very promising.

Graph 20



Petroleum and coal products

The position of Canada's petroleum and coal products deteriorated considerably in 1986, owing to the collapse of world oil prices. While output continued to decline because of falling consumption, oil companies' net pre-tax earnings plummeted from \$3.9 billion in 1985 to a mere \$2.2 billion in 1986.

The position of petroleum and coal products in Quebec was even more worrying. After the industry lost close to one-half of its refining capacity since the early 1980's, following successive closures by British Petroleum, Texaco, Esso, and finally Gulf Canada in 1985, the value of shipments from Quebec in 1986 plunged by 33.9%, twice the rate for Canada as a whole.

Indeed, Quebec's share of Canadian shipments shrank from 20.7% in 1985 to 17% in 1986.

Following the deterioration of market conditions for oil, business investment in Quebec also fell, for the fourth straight year. In 1986 capital expenditure stood at \$77 million, some 4.5% down from the previous year's level of \$81 million.

A turnaround was nevertheless visible in Quebec's petrochemical industry, which, after facing serious difficulties in recent years, finally switched onto a better track in 1986. The petrochemical industry should in future be in a position to improve its profitability and develop new markets, thanks to the completion of the first phase of its modernization and restructuring program and to the new role of Petro-mont's Montreal East plant which will enable the firm to increase its output substantially.

Table 9

RESOURCE PROCESSING INDUSTRIES shipments, employment and capital expenditure						
Group	Shipments (\$ million)		Employment ('000)		Capital expenditure (\$ million)	
	1985	1986	1985	1986	1985	1986
Wood	2 392	2 714	29	33	91	63
Paper	6 058	6 496	42	39	683	1 140
Primary metals	4 651	4 919	36	32	850	553
Non-metallic minerals	1 390	1 490	15	13	46	63
Petroleum	5 342	3 532	5	-	81	77

Source: Statistics Canada.

Capital and industrial goods industries

Rubber and plastic products industries

Canada's rubber and plastic products industries performed well in 1986, being stimulated particularly by the strength of the North American automobile industry, which continues to be one of the fastest expanding markets for plastics, and by plastic's growing penetration of the container industry. While most companies were running at maximum capacity, the value of shipments was up 9.5% over 1985, a rate of increase double that of the previous year. Quebec's plastic

products industry also posted good results in 1986, managing to maintain their share of Canadian output by increasing the value of their shipments by 9.6%, slightly better than the rest of Canada.

In Quebec, the industry's growth was particularly visible in business investment, which leapt up more than 130% to a record \$86 million in 1986 from its 1985 level of \$37 million. This investment was considerably encouraged by the many modernization programs, favouring major expenditure on the latest equipment and the expansion of facilities in several plants.

The growth in the Quebec plastics industry was also reflected in marked employment growth in 1986. The number employed reached 22,000, a significant 10% higher than the previous year.

Textile and textile products industries

Owing to the renewal of the Multifibre Arrangement regulating the importation of textiles and clothing, 1986 promised to be crucial for Canada's textile industry and, overall, the year was very profitable for Canadian manufacturers. During this period, the net pre-tax earnings of Canadian textile companies, whose assets exceed \$10 million, totalled \$265 million (for nine months), compared with a mere \$126 million the previous year.

In Quebec, primary textile industries, which account for more than one-half of Canadian output in this sector, expanded relatively strongly. Boosted by a dynamic textile products market, the value of Quebec shipments rose by more than 6% in 1986 to reach \$2.8 billion, following a period of stagnation in 1984 and 1985 owing to the growing penetration of imports from developing countries.

The strong activity was particularly reflected in employment. Having fallen substantially in 1985 owing to numerous lay-offs because of the closure of a number of plants, Wabasso's in particular, employment in Quebec's textile industry surged forward in 1986. In fact, some 7,000 jobs were created, a considerable gain of almost 30% over the previous year,, thus recovering a large portion of the jobs lost in recent years.

Moreover, despite the turnaround in the industry, little modernization work was carried out in 1986.

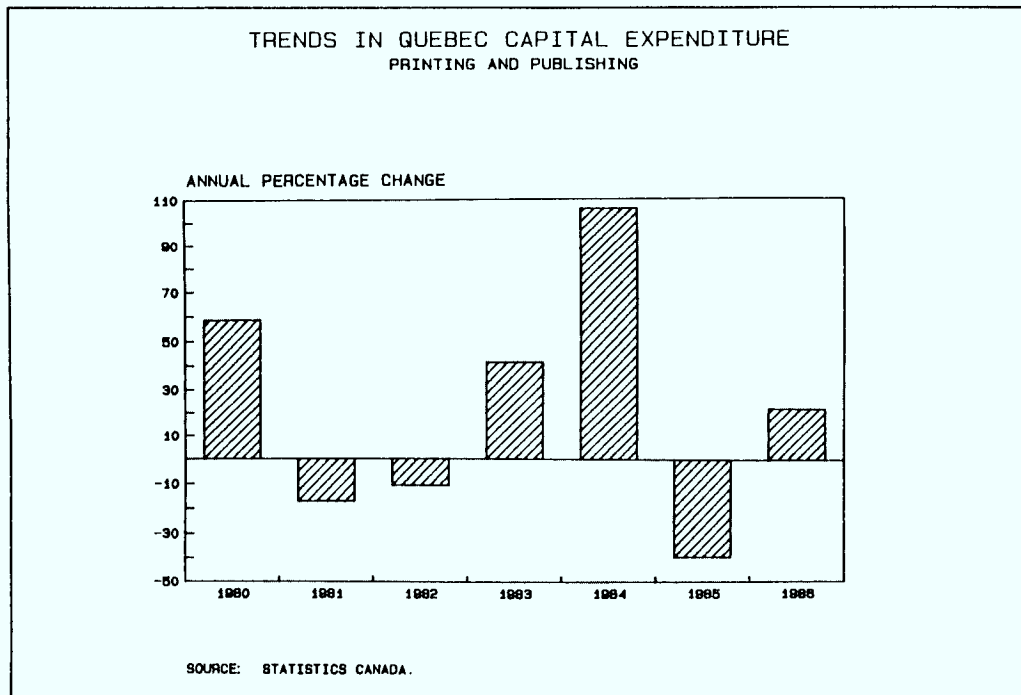
For the second year in a row, business investment in Quebec plants declined, falling some 5.2% from \$72.9 million in 1985 to \$69.1 million in 1986. Quebec's share of Canadian investment as a whole, which stood at 40% in 1984, is now down to a mere 27%, considerably lower than its share of output, which is approximately 50%. Unlike Quebec, Ontario, which specializes in the production of industrial textiles, has increased its share of investment in this industry each year since 1983.

Printing and publishing

The printing, publishing and allied industries, which have been expanding non-stop for several years, continued to grow in 1986. During this period, most businesses operated at maximum capacity, and this translated into a substantial increase in output. In Quebec, the value of shipments was up 10.2% to a new high of \$2.8 billion. Because of similar growth in Canada as a whole, Quebec's share of the total value of Canadian shipments remained quite steady (28.5%).

Efforts to concentrate and rationalize activities, which have been under way for several years, continued in 1986. While numerous acquisitions were made, improvement in plant productivity and product quality through replacement of machinery strengthened. Moreover, the results of accelerated automation were visible in rising capital expenditure. Investment totalled \$62 million, a substantial 21.7% higher than the previous year, largely because of increased spending on machinery and equipment in the commercial printing sector.

Graph 21



The sector's good sales performance also had a particular impact on employment. The number employed, which had fallen considerably in 1985, recorded an exceptional increase in 1986, soaring up by 35.5% from 31,000 to 42,000.

Metal fabricating industries

Quebec's metal fabricating industries slowed down considerably in 1986, after recording strong growth in 1985 thanks to the recovery of business investment in Canada and the marked increase in building starts. The value of shipments, which was curbed by declining investment in Western Canada, grew by a mere 1.6% in 1986, compared with 17% a year earlier. Since selling prices in the sector were up by 3.2%, real growth was negative.

On the other hand, business investment revived considerably in 1986, despite the slowdown in the industry.

At \$77.8 million, investment was 27.5% higher than the previous year. Despite this strong growth, however, Quebec's share of Canadian capital expenditure was only 11.5%, one-half of its share of output.

The sector's job creation performance was the most encouraging. Employment, which had risen little in 1985 owing to the closure of some Stelco plants in the Montreal region, posted substantial gains in 1986. The number of workers rose by 4,000 to reach 35,000, bringing the sector somewhat closer to its 1981 high of 39,000 employees in Quebec.

Machinery

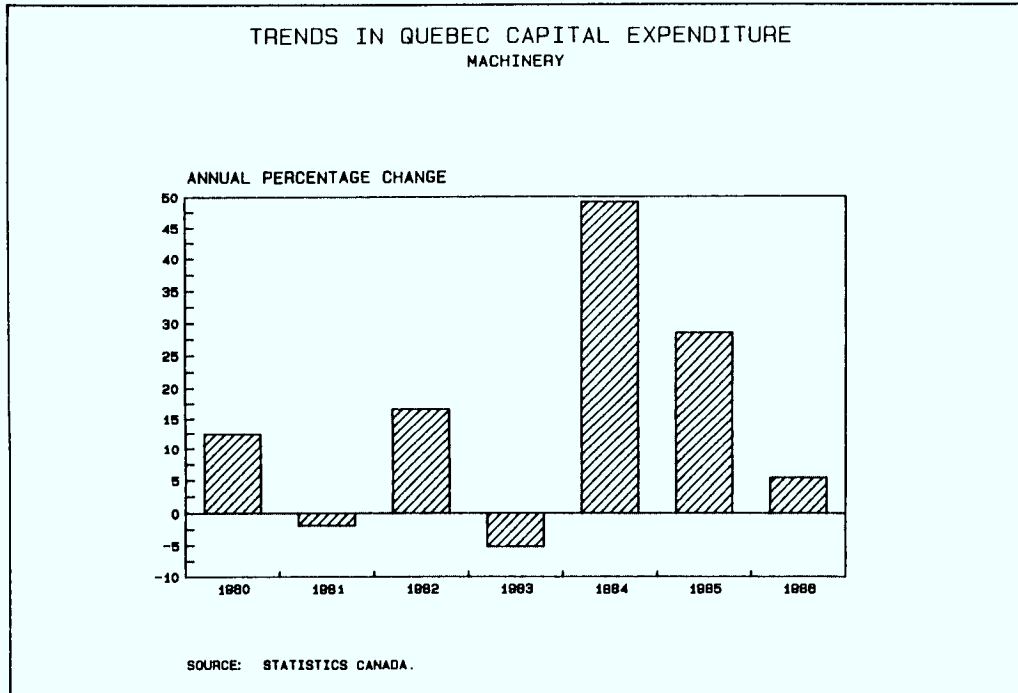
Quebec's machinery industry had quite a difficult year in 1986, owing to low foreign demand and the slight increase in investment in machinery and equipment in the province. The value of shipments, which had recorded exceptional growth of more than 20% in 1985, rose by a mere 0.8% in 1986. Since the value of shipments from the Canadian machinery industry as a whole increased by 2.6%, Quebec's share of machinery shipments faltered, moving down from 15.1% to 14.8% in 1986.

The crucial foreign market, which absorbs some 59% of output, was less dynamic in 1986. Indeed, Quebec manufacturers sold considerably less abroad. In all, the value of exports of the main products, machinery for the pulp and paper and textile industries and other machinery, dropped by almost 35% in 1986. Only exports of drilling machines for mining, oil and gas gained ground.

On the other hand, employment in this sector in Quebec remained unchanged, despite the slower activity. This performance was all the more encouraging, since employment in the Canadian machinery industry as a whole fell by 9.5%, despite the increase in output.

The investment picture also remained encouraging in 1986. Although capital expenditure slowed considerably, increasing by only 5.4%, Quebec none the less accounted for 31.5% of Canadian investment, twice its share of output.

Graph 22



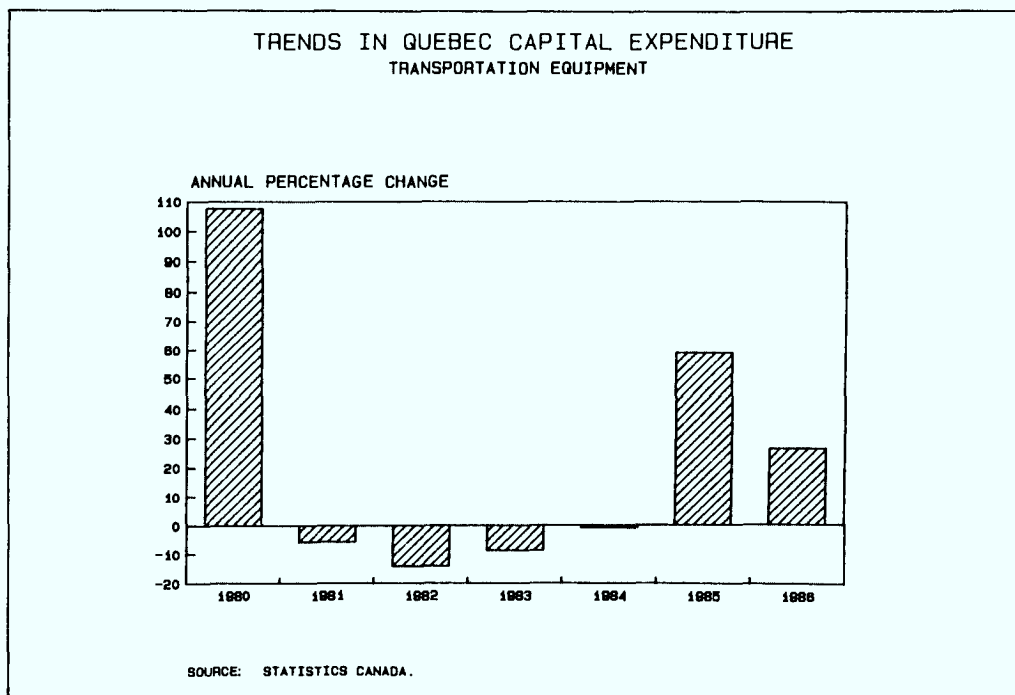
Transportation equipment

Quebec's transportation equipment industry slowed down considerably in 1986, after expanding heavily in 1984 and 1985 thanks to the sharp upswing in automobile sales in North America and the strong foreign demand for a number of its products. The value of shipments, representing 12% of overall Canadian shipments of transportation equipment, reached \$5.3 billion, an increase of 4.5% over the previous year. Since selling prices in the industry rose by 4.6%, real growth was virtually nil in 1986. In contrast, despite this marked ebb, employment behaved much as in 1985, increasing noticeably. Quebec's transportation equipment industry recorded employment growth of 7,000 in 1986, an exceptional rate of more than 17.5% over the previous year. Moreover, the injection of new workers allowed the sector to easily exceed its pre-recession employment level, for the first time. This healthy increase in employment masks, however, the many diffi-

culties encountered by shipbuilders, whose employment remained at a minimum owing to the crisis in that sector.

The industry's investment record was also extremely encouraging in 1986, although Quebec manufacturers accounted for only 7.4% of Canadian investment in transportation equipment. Quebec capital expenditure actually hit a new peak of \$161 million, 26.4% higher than the previous year. Unlike 1985, when railroad rolling stock manufacturers and shipbuilders cut back substantially on investment, only manufacturers of aircraft and parts somewhat compressed their spending in 1986.

Graph 23



The transportation equipment industry, most of whose shipments are exported, benefitted less from foreign demand in 1986. Indeed, the value of exports of the main products rose by 9.7% in 1986, compared with more than 16% in 1985. The automobile industry had the most trouble with exports: passengers cars and chas-

sis, the sector's most important export, were down 2.1% in 1986. In the aircraft industry, foreign demand was up considerably, while exports of aircraft engines and parts, complete aircraft and aircraft assemblies rose by 11%, 39% and 24% respectively. In the railroad rolling stock sector, Bombardier's delivery of cars for the New York subway had a major impact on the industry's exports, which rocketed overall from \$152.4 million in 1985 to \$408.9 million in 1986.

The year was marked by a number of events in the Quebec transportation equipment industry:

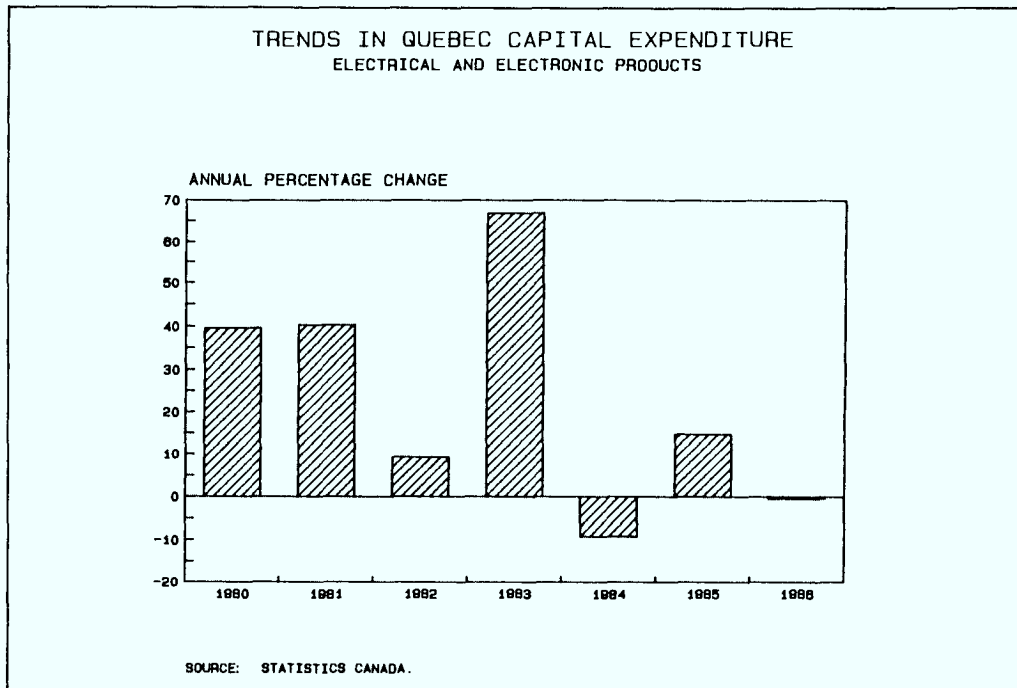
- Bombardier, the Quebec transportation equipment manufacturer, acquired Canadair, the St. Laurent aircraft firm;
- construction began in September on Hyundai's new plant in Bromont;
- the F18 maintenance contract was awarded to Canadair, thus enabling Quebec to consolidate its position in Canada's aircraft industry;
- the outlook at GM's Boisbriand plant is brighter now that a contract for production of a new model may soon be awarded.

Electrical and electronic products industries

Growth in the electrical and electronic products industries strengthened somewhat in 1986, despite difficulties encountered by Quebec exporters. Indeed, decreases of approximately 3.3% and 23.7% respectively were recorded in exports of electronic tubes and semiconductors and commercial telecommunications equipment owing to continuing problems in the North American electronics industry. The value of shipments rose by close to 6% in 1986, a slight improvement over the 5.5% recorded the previous year. This upswing affected employment, which grew by 2.8% in 1986 with the creation of some 1,000 jobs. Accounting for more than 80% of jobs in the sector, the Montreal metropolitan area gained the most from this growth.

On the other hand, despite a marked increase in the capacity utilization rate, investment remained steady in 1986, totalling \$163.4 million, or 0.4% less than in 1985. During this period, increased expenditure on industrial electrical equipment and energy wire and cable was offset by the substantial decline in investment in telecommunications equipment.

Graph 24



The year was also marked by the announcement of a \$320 million contract signed by Matrox of Dorval for the production of interactive videodisc systems with the US Army and by the start of construction on a \$30 million armaments factory in St. Jean sur Richelieu for the production of low-level air defence systems.

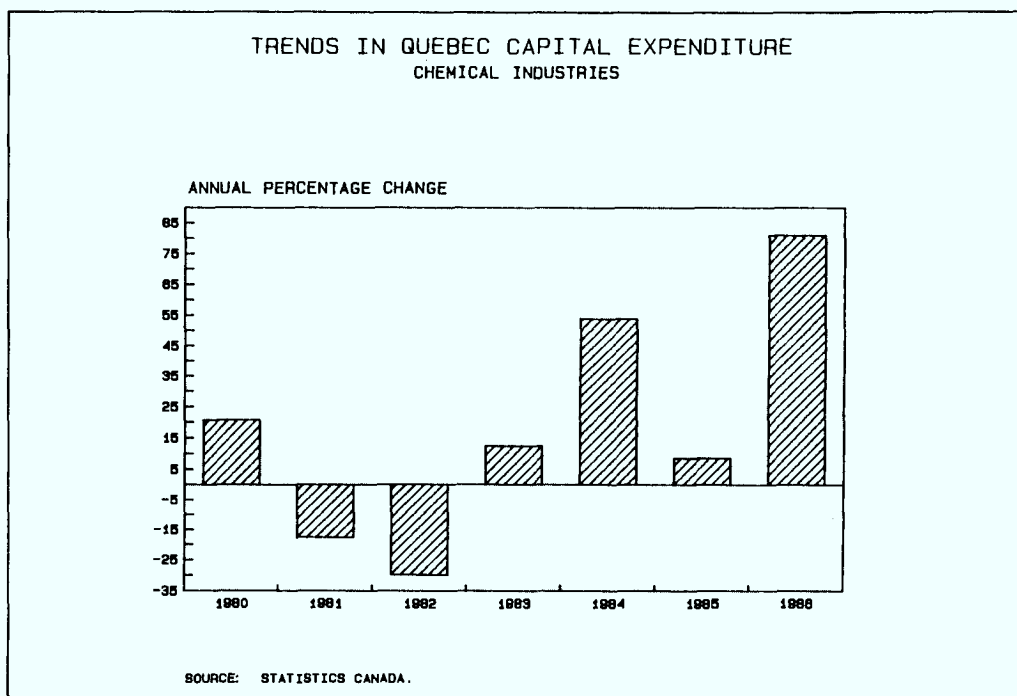
Chemical industries

Quebec's chemical industry, which had recorded somewhat slower growth in 1985 owing to the decline in exports of its major products, performed markedly better in 1986. The value of shipments was some 10% higher, compared with only 5.6% the previous year, thanks to increased sales of industrial chemicals and pharmaceutical products and to strengthening exports. This performance was all the more remarkable, since the value of overall Canadian shipments rose by only 3%, one-third the sector's rate in Quebec. None the

less, despite this new activity, employment fell by some 7% over the previous year to 26,000, owing to restructuring in the industry.

Investment best illustrated the sector's good performance in 1986. Largely owing to the steep rise in capital expenditure in industrial chemicals (\$101.3 million), plastic and synthetic resin (\$41.2 million) and the pharmaceutical and medicine industry (\$21.5 million), investment totalled a record \$408 million, a sizable gain of more than 80% over the previous year. Thanks to the many capital projects begun in 1986, among them the start of construction of a new \$30 million liquid hydrogen plant by Hydrog nal in B cancour, Merck Frosst Canada's \$120 million project in Kirkland to expand its research centre, and Laboratoires Nordic Inc's investment of \$45 million in Laval to increase R&D and expand their facility, Quebec's share of total Canadian business investment in the chemical industry was approximately one-third, substantially higher than its share of shipments, which was a mere 23%.

Graph 25



Furthermore, with the tabling of the new patents law, which would protect innovative firms by granting them exclusive rights on their new drugs for 10 years, the investment climate should improve yet further in the next few years.

Table 10

CAPITAL AND INDUSTRIAL GOODS INDUSTRIES shipments, employment and capital expenditure						
Group	Shipments (\$ million)		Employment ('000)		Capital expenditure (\$ million)	
	1985	1986	1985	1986	1985	1986
Rubber and plastics	901*	987*	20	22	37	86
Textiles	2 669	2 853	24	31	73	69
Printing	2 595	2 861	31	42	51	62
Metal fabricating	3 656	3 713	31	35	61	78
Machinery	1 115	1 124	16	16	111	117
Transportation equipment	5 066	5 296	40	47	128	161
Electrical products	2 944	3 118	36	37	164	163
Chemicals	3 872	4 250	28	26	226	408

Note: *Excluding rubber industry.

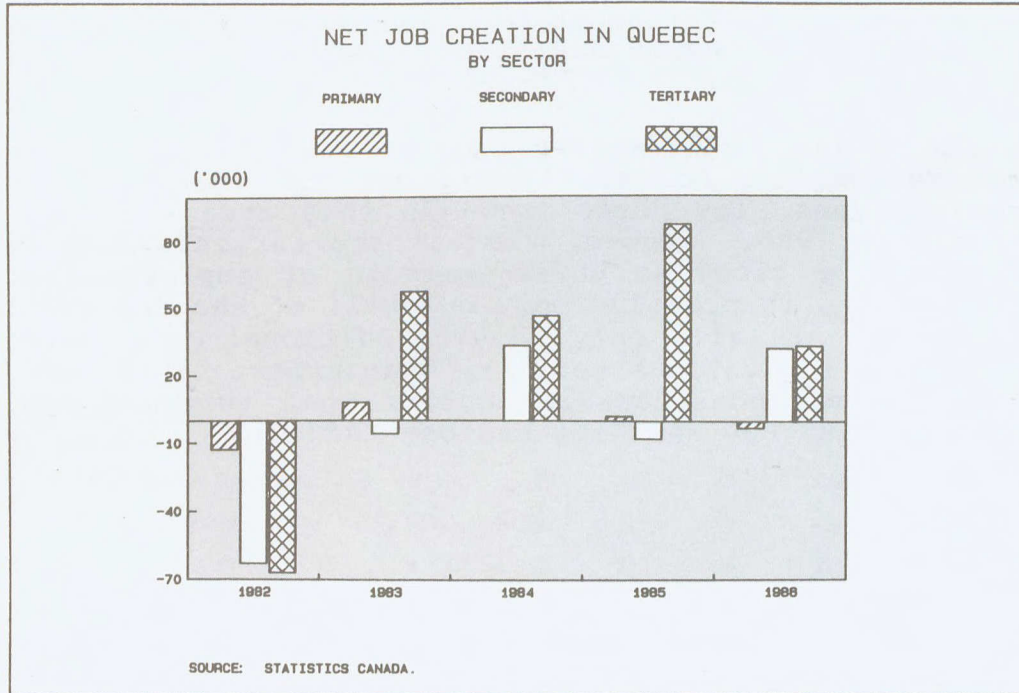
Source: Statistics Canada.

TERTIARY SECTOR

The tertiary sector is by far the most important in Quebec, with a 71% share of employment and 68% of output in the province. This sector continued to expand in Quebec in 1986, stimulated by substantially higher output in transportation and communications and increased trade volume. Real GDP rose by 5%, compared with 4.3% in 1985.

On the other hand, whereas the tertiary sector had been responsible for nearly all new job creation the previous year, its performance in this area was less dynamic in 1986. Indeed, whereas the tertiary sector accounts for close to three-quarters of employees in the economy, it provided only one-half of the new jobs available. In all, only 33,000 additional jobs were created in the various tertiary industries. This contribution was considerably smaller than the previous year, when 87,000 new jobs had been added.

Graph 26



Business investment rose by 5.2% in 1986 to \$8.94 billion, largely owing to good performance from communications, real estate operators, and the socio-cultural, business and personal services sector. During this period, expenditure on construction was the main factor behind the increased investment in the tertiary sector, which went from \$4.7 billion in 1985 to \$5.1 billion in 1986, while expenditure on machinery and equipment was quite steady.

Transportation, communications and other utilities

For the third straight year, transportation, communications and other utilities posted fairly encouraging results in 1986. Real GDP rose by 3.3% in 1986, compared with 5.8% in 1985, thanks to a good performance from transportation and communications, increased electricity exports, primarily to New England, and increased sales of natural gas. The transportation sector, which is closely tied to overall economic

trends, greatly benefitted from the expansion of domestic trade. At the same time, the communications sector, particularly cable television, had quite a prosperous year. Electric power exports also contributed to the utilities' growth, which reached \$374 million, up a substantial 9.6% over 1985.

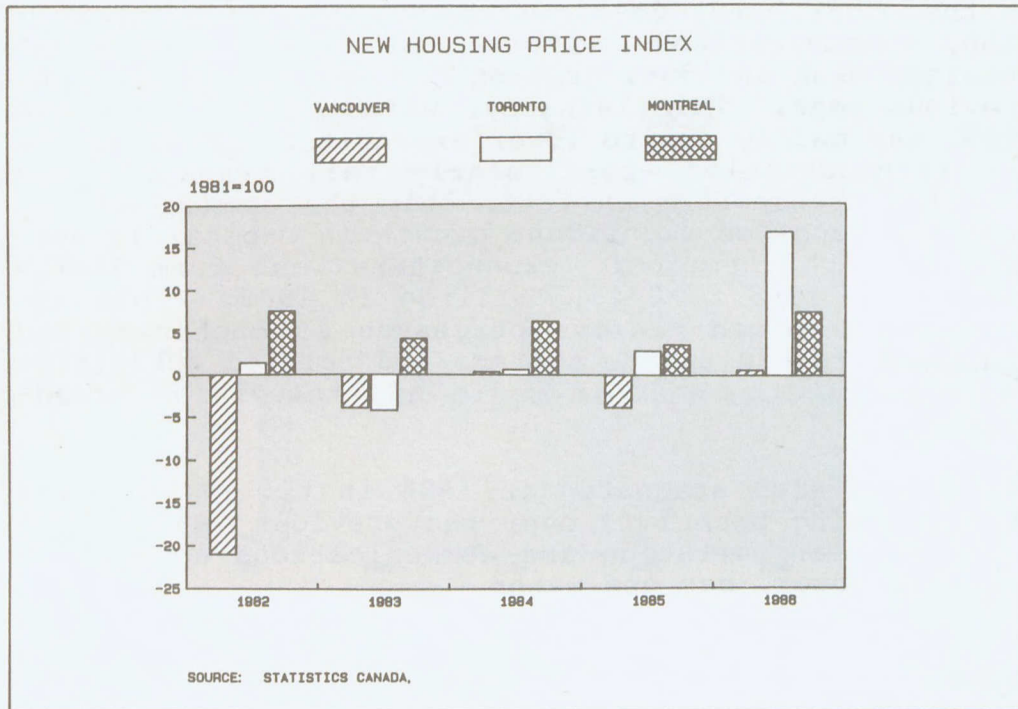
On the other hand, despite improvement in transportation, communications and other utilities, investment remained weak in 1986, growing by a mere 1.5% over the previous year. This lethargy, which has lasted since 1983, was mainly due to lower expenditure in utilities and transportation, particularly rail transport and pipeline transport. In fact, only the communications industry recorded significant growth in capital investment over this period: expenditure went from \$661.9 million in 1985 to \$745.3 million in 1986. This investment involved massive purchases of machinery and equipment for telephone systems and related activities and construction work in radio and television broadcasting.

Employment also stagnated in 1986 in the sector as a whole, moving back 1.4% over the previous year. This affected transportation and communications as well as electric power, gas and water.

Trade

Quebec's trade volume continued to grow rapidly in 1986, stimulated by steady consumer spending, attributable to lower lending rates and consumers' high level of confidence in the economic outlook. During this period, real GDP rose by 5.3% over the previous year, substantially faster than the 3.7% rate recorded by the economy as a whole.

Graph 27



The value of retail trade in Quebec in 1986 totalled \$34 billion, a marked increase of 9.1% over 1985. All types of trade recorded improvements, except for service stations, which lost some ground owing to lower prices at the pumps. Motor vehicle dealers' sales, which had been behind the good performance of consumer spending since the end of the recession, remained strong in 1986: dealers' sales climbed 14.3% above their 1985 level, thanks to lower interest rates, beneficial financing offered by some manufacturers, and the turnaround in employment.

Major gains were also recorded in furniture and appliances. These sales, strongly buoyed by the excellent performance of residential construction, also contributed substantially to soaring trade, with 18.6% and 16.3% respectively.

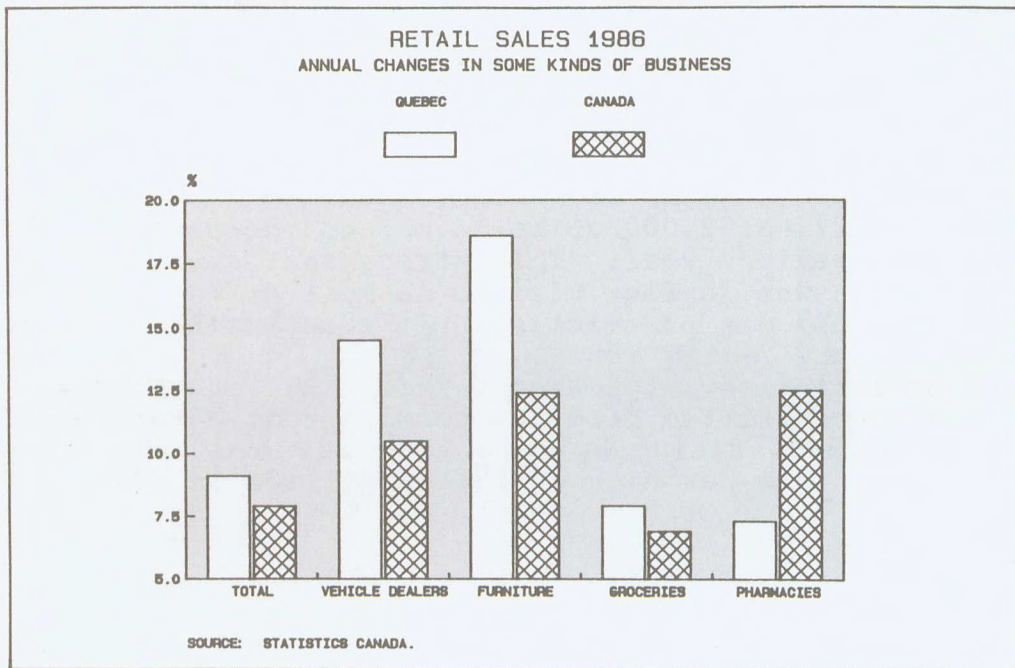
The growth in trade was most evident in the area of employment: up 5% over the previous year, trade accounted for some 40% of new jobs in the tertiary sector.

Finance, insurance and real estate

The finance, insurance and real estate sector, which in 1985 posted its best year since 1977, continued to expand rapidly, with a real GDP increase of 6.9% relative to 1985.

Resales of real estate in Quebec shattered several records in 1986, owing to the province's strong economy, low, stable mortgage rates, and a total migration gain. The capital gains tax exemption also had a positive impact on sales of revenue property. During this period, property sales, which had already performed exceptionally in 1985, increased even further in 1986, totalling 32,000 units, a marked increase of 15% over the previous year. This strong real estate activity, which was in fact visible in most of the province's regions, was paralleled by a substantial increase in prices, which rose some 8% in 1986, twice the rate of inflation. Investment from real estate operators also benefitted from the booming real estate market in Quebec, rising by more than 20% over the previous year to a new high of \$811.2 million in 1986.

Graph 28



The healthy activity in residential real estate was also indirectly advantageous to the financial institutions. Benefitting from higher demand for mortgages due to the growth in house sales, as well as for consumer and commercial loans, the financial institutions substantially increased their operating volumes in 1986. Following the trend of recent years, the departmentalization of the four major components of the financial sector (banks, trust companies, insurance companies and real estate brokers) also continued in 1986.

As it was for the real estate sector, 1986 was a good year for brokerage houses and the Montreal Stock Exchange. While the Quebec stock savings plan (QSSP) meant the MSE registered a record number of new companies and strengthened its position on Canadian markets, brokerage houses generally recorded substantial gains.

Socio-cultural, business and personal services

Socio-cultural, business and personal services posted a substantial turnaround in 1986, despite tight budgetary policies, particularly in health-care institutions and social services. During this period, the sector's real GDP grew more quickly (5.9%) than in the tertiary sector as a whole.

The service sector, which for some years had regularly been capturing a growing share of total employment in Quebec, did not pursue this trend in 1986. On the contrary, whereas the number of employed rose by 2.2% in the economy as a whole, employment growth in the services was only 1.1% over the previous year. During this period, although 12,000 additional jobs were created in accommodation and restaurants, largely because of Quebec's good tourist season, all the other sub-groups lost ground, except for business services and miscellaneous services. In all, with employment rising from 937,000 in 1985 to 947,000 in 1986, only 10,000 new jobs were created during the year, substantially fewer than in 1985, when there were 49,000 additional jobs.

The investment picture was more encouraging, with expenditure up 17.3% over 1985. This increase is largely attributable to the purchase of machinery and equipment in the other services, particularly hospitals and educational and social service institutions.

Public administration

Constricted as it was by a range of budgetary constraints, growth in Quebec's public administration sector was modest in 1986. During this period, growth in real GDP, which measures overall revenue generated by the sector, was the lowest (0.2%) of all tertiary groups. Budgetary restraint also affected investment. Capital expenditure, which had progressed at a not inconsiderable rate the previous year, was down to 2.7% in 1986, primarily because of declining machinery and equipment purchases.

On the other hand, this downward trend had no impact on employment. For 1986 as a whole, 3,000 jobs were added, and employment now stands at 198,000, 1.5% up over the previous year. Substantial gains were recorded in the federal government (partly because of the census) and local government, with employment growth of 6.7% and 3.2% respectively. Only the provincial

government, which was down 4,000 jobs, somewhat offset the sector's good job creation performance.

Table 11

TERTIARY SECTOR IN QUEBEC main indicators						
Group	GDP (\$ million)		Employment ('000)		Capital expenditure (\$ million)	
	1985	1986	1985	1986	1985	1986
Transportation, communication and other utilities	8 589	8 876	221	218	2 980	3 025
Trade	9 289	9 778	491	515	392	407
Finance, insurance and real estate	11 699	12 508	156	155	877	957
Services	16 466	17 433	937	947	1 442	1 691
Public administration	4 986	4 995	195	198	2 786*	2 862*
Total	51 029	53 590	2 000	2 033	8 476	8 942

* Including institutions.

Source: Statistics Canada, Conference Board of Canada.

TOURISM

Performance

For tourism in Quebec, 1986 will have been an exceptional year. Indeed, the results of the Canadian travel survey show that 13.9 million person-trips will have been made in Quebec during the first three quarters of the year. This should mean an increase for the entire year of 17.9% over 1984 (the Canadian travel survey is conducted every two years by Statistics Canada).

As for international tourist business, the year will also have been excellent, with 6.8% more visitors in 1986 than in 1985. This estimate includes increases of 6.1% in visitors from the US and 9.9% in visitors from elsewhere.

A comparison with tourist business for Canada as a whole is also very telling, pointing up the improvement in the performance of tourism in Quebec for 1986. Last year, Canada saw an 18% increase in visitors from abroad; but excluding British Columbia, host province of Expo '86, the rest of Canada counted 5% more foreign visitors at its border points. For the first 10 months of 1986, a slight decline was recorded in the number of Canadians returning from the United States to Canada via Quebec (-0.2%) and a large drop in the number of Canadians returning from other countries via Quebec (-10.4%).

Hotel occupancy rates (for the first 10 months of the year) will have been higher in almost all of Quebec's tourist regions; the largest increases will have been noted in the Montreal, Gaspé, Eastern Townships, Lower St. Lawrence, Abitibi-Temisaming, Charlevoix and New Quebec regions, where rates were above 60% during the tourist season.

Quebec's performance may be explained by several factors, among them the following:

- ° international political conditions, which helped encourage Canadians to stay home and foreign tourists to choose Canada, where the threat of terrorism is non-existent.
- ° the exchange rate of the Canadian dollar against its US counterpart;

- ° the deregulation of international air traffic, which contributed to a drop in the relative price of travelling;
- ° the attitude of government and the industry, encouraging a higher profile for Quebec's tourism products and especially the good performance of the Quebec economy, which has a direct impact on business tourism, a major component in the province's earnings from tourism.

OVERVIEW OF QUEBEC REGIONS IN 1986

General overview

The Quebec economy performed well in 1986: real gross domestic product (GDP) rose by 3.7%, manufacturing investment by 17%, and the employment level by 2.2%.

Labour market and manufacturing investment **performance**, however, **varied by region**. Montreal and Quebec City, the most highly populated regions, recorded employment growth rates lower than the provincial average, while the highest rates were posted by Abitibi-Temiscaming, Saguenay/Lac St. Jean and Mauricie/Bois-Francs. The unemployment rate was up from 1985 in Quebec City, the Outaouais, Lower St. Lawrence/Gaspé and the North Shore. Three of the four resource regions, as well as Mauricie/Bois-Francs, recorded lower manufacturing investment; at the other extreme, the Eastern Townships saw its manufacturing investment more than double (cf. Graphs 1 and 2 and Table 1 attached).

Montreal region

The Montreal region accounts for 60% of all the jobs in Quebec and two-thirds of the province's manufacturing base.

Its economic base is largely divided between manufacturing and the export-oriented tertiary sector, including transportation and communications, financial services, services to business, head offices and tourism, concentrated mainly in the Montreal metropolitan area. **Its economy is thus heavily weighted toward the tertiary sector (70% of jobs)**, although the great majority of service jobs are in sectors linked to regional consumption, such as trade and other consumer services.

Its manufacturing industry (one-quarter of jobs) is **distinguished by the importance of the traditional sectors:** food, tobacco, furniture and the textiles-clothing-leather (TCL) group account for more than one-third of manufacturing jobs. Montreal and its region are the country's main TCL centre, with more than one-third of Canadian jobs in these industries; TCL alone accounts for to one-quarter of manufacturing employment in the region. The decline of the traditional industries in the past decade combined with the rise of more modern sectors has meant that

more dynamic, export-oriented industries now hold a more important position in the region's manufacturing structure.

The Montreal region was hard hit by the 1982 recession largely because of the high proportion of its manufacturing that is devoted to the production of consumer goods and the declining growth in the tertiary, particularly the higher tertiary sector. It regained its pre-recession employment level only in 1985, one year later than Quebec and Canada as a whole.

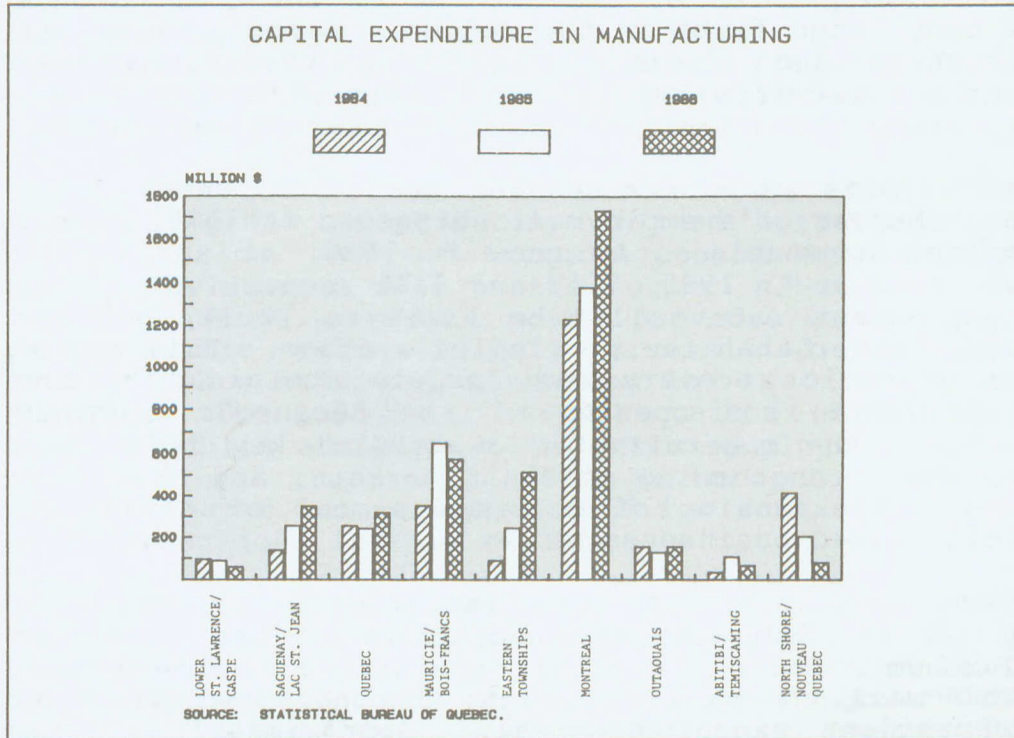
Employment continued to grow in 1986 (1.9%), but more slowly than in 1985 (2.7%), and once again more slowly than in the rest of Quebec (2.5%). Since the labour force grew less quickly in 1986, the unemployment rate fell from 11.7% to 10.5%. This rate was high, none the less, being almost double Toronto's and only 0.6% below the provincial average of 11.1%.

Unlike last year, manufacturing **investment** in the Montreal region (26%) **rose** more quickly than the provincial average (17%), doubling its 1985 rate of 12%. Of capital expenditure of \$1.7 billion, close to 45% was accounted for by the machinery and transportation equipment (up 3%) and oil and chemical products groups (51%). The other industries posting significant increases were rubber and plastics (79%), clothing (75%), paper (67%) and furniture (55%).

Most of the main projects in progress or announced in 1986 are located on the South Shore outside the Montreal metropolitan area. Among them are QIT-Fer et Titane (\$150 million) and Quebec Metal Powders (\$45 million) in Tracy, Himont Canada (\$40 million) in Varennes, Oerlikon (\$30 million) in St. Jean, and Hyundai (\$200 million) in Bromont.

Manufacturing investment in the Montreal metropolitan area, at \$874 million, rose by 10%, the same rate as in 1985. This represents merely 29% of the value of investment carried out in Toronto.

Graph 29



Central regions

Most of the remaining jobs in Quebec are located in the central regions bordering the Montreal region.

The economy of the **Mauricie/Bois-Francs** and **Eastern Townships** regions is based essentially on manufacturing, with natural resource exploitation (agriculture and forestry) in second place. The tertiary sector underlies rather than energizes the economy of these regions, with the exception of tourism, which is a major source of jobs in the Eastern Townships. The processing of farm and forest products is a major component in the manufacturing structure of the two regions, which is also conspicuous by the relative importance of furniture industries and particularly of TCL, which accounts for more than one-third of all manufacturing jobs in the Eastern Townships and more than one-quarter in Mauricie/Bois-Francs. Many communities there are heavily dependent on TCL.

Mauricie/Bois-Francs, after the Lower St. Lawrence-Gaspé, was the region hardest hit by the recession, losing 8% of its jobs during 1982 alone. Its traditional industries, in particular furniture and TCL, suffered greatly from falling demand for their products and the increase in cheap imports. The recession also pointed up the problem of the obsolescence of many large firms in the region. These problems of structure and economic conditions translated into numerous lay-offs and plant closures affecting Trois-Rivières, Victoriaville and Shawinigan in particular.

The effects of the recession were felt until 1985, when the region's employment surpassed its 1981 level. Employment continued to grow in 1986, at almost the same rate as in 1985, 7.1% and 6.7% respectively. The unemployment rate fell from 13.6% to 12.3%, but remains higher than the provincial average. This regional economic recovery was largely sustained by the construction and opening of the Bécancour aluminum smelter, the modernization of several key industries and the strengthening of their markets, and the creation and expansion of a large number of small and medium-sized businesses.

After peaking in 1985, manufacturing investment fell by 12% in 1986 with the completion of the Bécancour aluminum smelter. Capital expenditure in the region (\$574 million) remained high, though, outperforming all regions except Montreal. Approximately 70% of investment was made in the primary metal and paper industries. Other major projects are in progress: Norsk Hydro (\$600 million) and Oxychem-Hydrogénéal (\$55 million) in Bécancour, CIP (\$25 million) in Trois-Rivières, and Consolidated Bathurst (\$7.2 million) in Shawinigan. Completion of these establishment and modernization projects should help strengthen the region's economic recovery.

The **Eastern Townships** is one of the regions where the impact of the recession was the least prolonged: it regained its pre-recession employment level in 1983, one year earlier than Quebec as a whole. Regional employment remained steady in 1986, having recorded strong growth (11%) in 1985. With the number of jobless and the labour force both down, the unemployment rate went from 10.1% to 9%, the lowest rate in any Quebec region.

The strength of the Eastern Townships economy is largely attributable to the establishment and development of new high-technology activities in recent years,

particularly in electronic and medical products, and the region has begun to enjoy the spinoffs from Domtar's major modernization project for its Windsor plant (cost \$800 million; time frame 1985-1990).

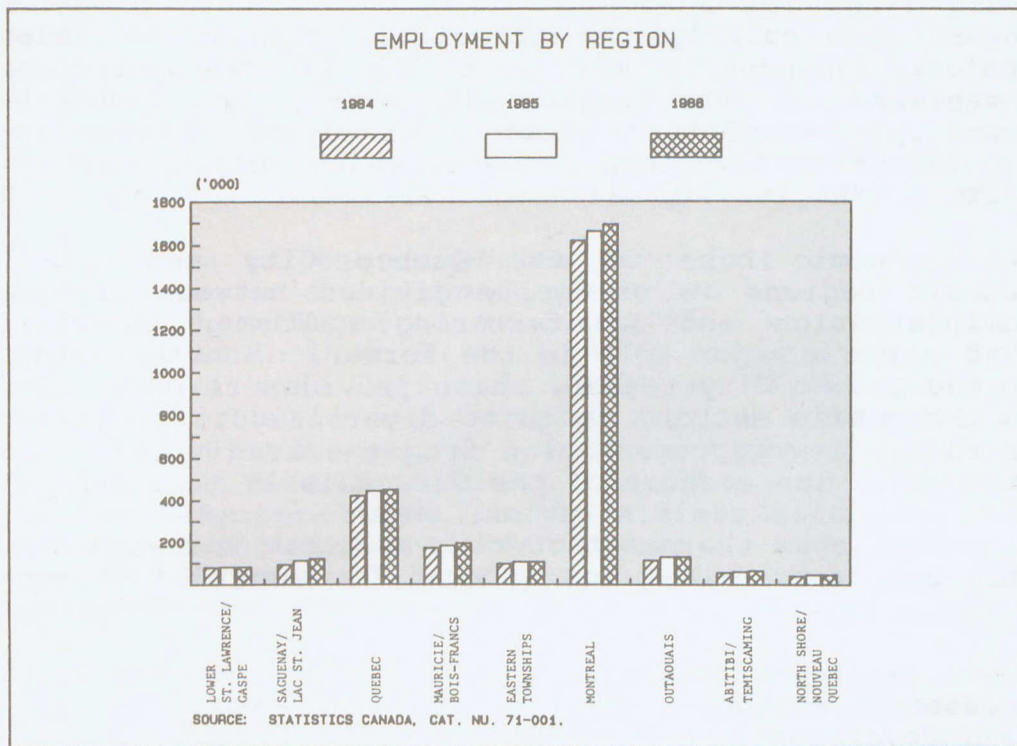
Thanks particularly to expenditure related to this project (accounting for some 75% of manufacturing investment in the region in 1986), the Eastern Townships recorded the best regional performance in manufacturing investment growth, which rocketed up by 112% in 1986 to \$513 million.

The economic base of the **Quebec City** and **Outaouais** regions is primarily divided between public administration and manufacturing, although tourism also plays a major role in the former. Manufacturing in the Quebec City region, which provides as many jobs as the public sector, is quite diversified, and there is fairly low representation from the traditional industries. The economy of the Outaouais is more dependent on public administration, which employs twice as many people as the manufacturing sector. The wood and pulp and paper industries account for some 70% of manufacturing jobs in this region.

These two regions were the least affected by the last recession, as they enjoy the stabilizing effect of having governments as major employers. None the less, they are beginning to be hit by recent government budgetary restraint: unlike last year, **employment in the Quebec City region (+1%) grew more slowly than the provincial average in 1986; and the Outaouais (-1%) is the only region where employment declined.** The unemployment rate in these two regions was up in 1986; while in the Quebec City region (9.6%) it remained below the provincial average, in the Outaouais (12.3%) it is now running higher than in Quebec as a whole.

Manufacturing investment in the Quebec City and Outaouais regions reached \$317.5 million (+33%) and \$153 million (+22%) respectively in 1986. The increase in the Quebec City region is largely due to Donohue's continued modernization in Clermont (\$170 million between 1981 and 1988) and the completion of Reed Paper's project in Quebec City (\$280 million), while the increase in the Outaouais primarily reflects CIP's modernization in Gatineau.

Graph 30



The outlying regions of **Lower St. Lawrence/Gaspé**, **Saguenay/Lac St. Jean**, **Abitibi-Temiscaming** and **North Shore/New Quebec** account for 10% of jobs in Quebec. The economy of these regions has always been largely reliant on the exploitation of natural resources (forestry, mining, fishing, hydro-electricity, etc). They include one hundred or so company towns, half of which depend exclusively on the forestry sector.

Several communities in these regions were hard hit in recent years by weakening markets for iron, copper and aluminum, and these resource regions generally record the province's highest unemployment rates and lowest participation rates. Abitibi-Temiscaming and Saguenay/Lac St. Jean, however, had good years in 1985 and 1986, largely thanks to the strengthening of markets and prices for their main products.

Saguenay/Lac St. Jean, whose economy is heavily based on forestry and aluminum, is one of the regions where the effects of the recent recession lasted the longest. Employment posted a substantial increase in

1985, with a 21% rise, the largest of any region. Employment continued to grow in 1986, but more slowly (7%), and the unemployment rate went from 15% to 13.7%.

Largely owing to Abitibi-Price's continued modernization in Jonquière (\$120 million) and the start of Alcan's projects at its la Baie and Jonquière facilities (\$62 million), manufacturing investment rose by 37% in 1986 to \$349 million.

Abitibi-Temiscaming, the only region where employment did not decline during the last recession, **also posted the best job creation performance in 1986 with an 8.5% increase.** This growth is partly attributable to increased productivity in the mining sector, the strength of mine prospecting and the paper industry, and an increase in purchases and capital expenditure by Hydro Quebec in the region. Unemployment fell from 13.8% to 11.7%, despite the rise in the participation rate from 58% to 61%.

Investment in forestry and mining (\$136 million) remained close to its 1985 level, while in the paper industry it dropped 50% to \$38 million from the record \$77 million posted in 1985.

Lower St. Lawrence/Gaspé was the region hardest hit by the recession, losing 13% of its jobs during 1982 alone. Employment recovered in 1983 and 1984, with increases of 9% and 10% respectively. Growth slowed in 1985 (2.6%), and the employment level remained steady in 1986. The region still posts the highest regional unemployment rate (18.8%) and the lowest participation rate (53.5%).

Capital expenditure in the region totalled \$448.7 million in 1986, down 9% from 1985. Manufacturing investment fell by 32% to \$58.6 million. The public sector's share of total investment in the region (42%) in 1986 was almost twice that for Quebec as a whole (22%). Among major projects in progress were the repairing of Highway 132, modernization of Gaspé wharf (\$11 million) and modernization of the Panval facility in Sayabec (\$6 million).

The **North Shore** has lost 7% of its population since 1981, largely due to the decline of the iron industry and the closure of Schefferville and Gagnon. Thanks mainly to increased activity in the important aluminum and wood industries, regional employment posted strong growth (15%) in 1985, and its level remained steady in 1986. The unemployment rate, which stood at almost 18% in 1984, drew back to 14.4%.

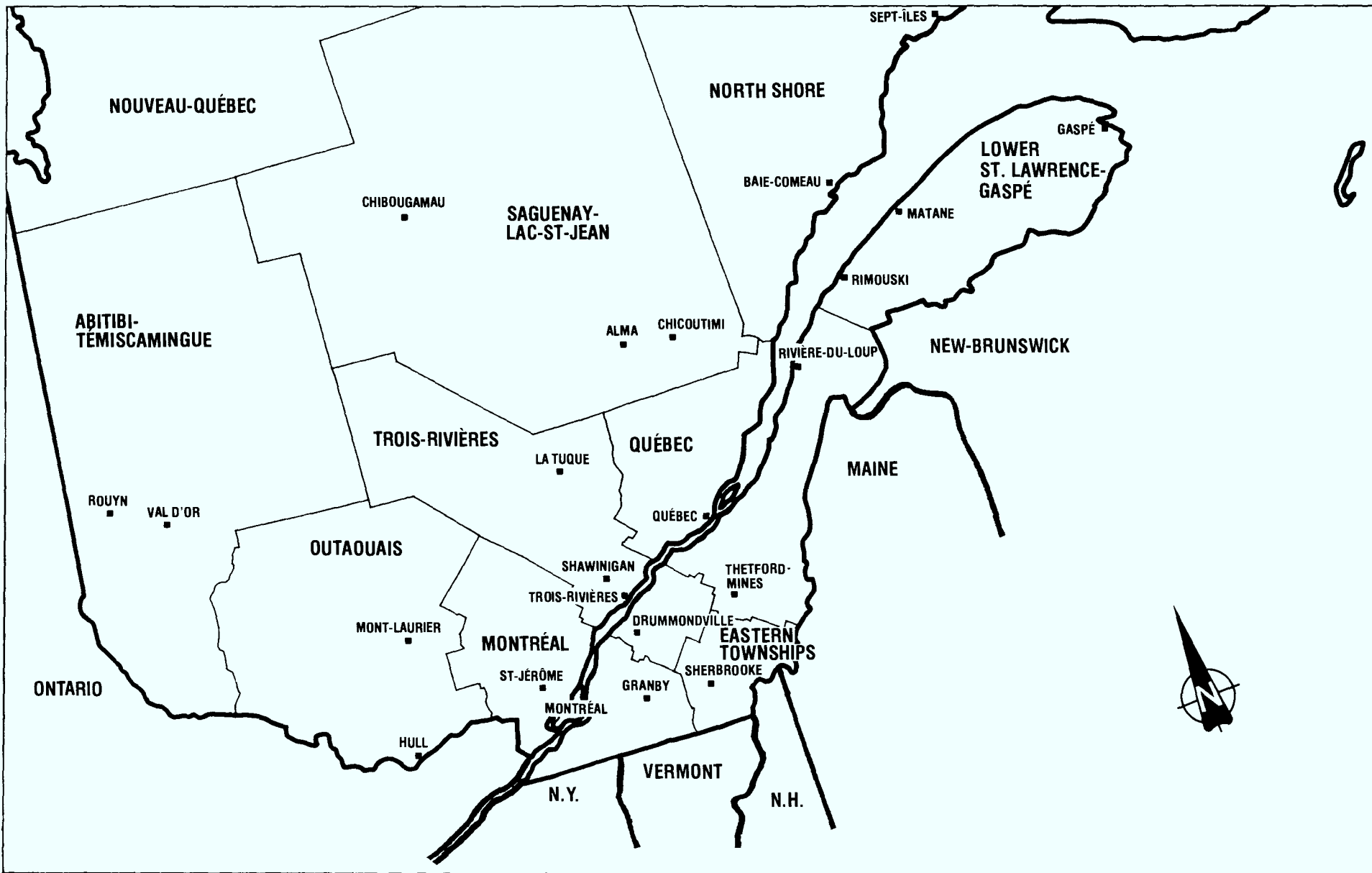
Largely owing to the completion of hydro-electric power development projects, total investment in the region fell by about 30% in both 1985 and 1986. These projects none the less accounted for one-third of capital expenditure in 1986, which totalled \$674.8 million. Investment in forestry and mining (20% of all capital expenditure) was up 9% in 1986. Manufacturing investment fell 60% with the completion of work on the Reynolds aluminum smelter in Baie Comeau (\$750 million since 1983).

Table 12

SUMMARY TABLE OF QUEBEC REGION 1985-1986													
REGIONS	POPULATION		LABOUR MARKET					INCOME		CAPITAL EXPENDITURE			
	Population 1981		Employed			Unemployment rate		PDIC*		Total		Manufacturing	
	number	% of Quebec	1985 ('000)	1986 ('000)	86/85 %	1985 %	1986 %	(Quebec=100) 1983	1986	1986 (\$'000)	86/85 %	1986 (\$'000)	86/85 %
MONTREAL REGION	3,631,500	56,4	1,663	1,659	1,9	11,7	10,5	107,8	107,4	9,758,639	11,4	1,731,023	25,6
CENTRAL REGIONS													
•Québec	1,031,700	16,0	445	450	1,1	9,3	9,6	92,7	98,8	2,479,863	9,9	317,566	32,6
•Mauricie/Bols-Francis	441,300	6,9	180	192	6,7	13,6	12,3	88,0	85,5	1,499,811	-1,7	573,964	-11,5
•Eastern Townships	239,100	3,7	104	104	0,0	10,1	9,0	86,7	87,0	952,783	18,7	513,092	112,1
•Outaouais	273,700	4,3	126	125	-0,8	10,8	12,3	95,2	100,8	976,241	6,8	153,013	22,1
RESOURCES REGIONS													
•Lower St. Lawrence/Gaspe	234,000	3,6	80	80	0,0	18,2	18,8	71,8	75,8	448,680	-8,9	58,610	-32,4
•Saguenay/Lac St. Jean	302,400	4,7	111	119	7,2	15,0	13,7	93,0	82,2	909,925	17,9	349,060	36,9
•Abitibi/Temiscaming	153,400	2,4	59	64	8,5	13,8	11,7	90,8	90,8	529,633	1,5	65,155	-38,0
•North Shore/Nouveau Québec	131,300	2,0	45	45	0,0	14,2	14,4	n.d.	89,1	674,825	-28,1	79,217	-60,7
PROVINCE OF QUEBEC	6,438,400	100,0	2,813	2,874	2,2	11,8	11,1	100,0	100,0	18,230,400	7,4	3,840,700	17,0

*RPDC: Personal disposable income per capita: Québec 1983= \$9,810; 1986= \$12,040.

Sources: Statistics Canada, Financial Post, Quebec Bureau of Statistics.



Medium-term outlook in Quebec

Medium-term outlook

The likely strengthening of oil and base metal prices should in the medium term exert upward pressure on inflation and curb economic growth following an increase in interest rates. Moreover, difficulties encountered in reducing government deficits could contribute further to this slowdown.

Quebec's position will evolve along the same lines as Canada's, but Quebec will be favoured by its access to electrical power. A large part of its growth should depend on this development, as well as on growth in its durable goods industry to the detriment of such industries as textiles, leather, clothing, and food and beverages. On the other hand, the pulp and paper industry, which has acquired a modern infrastructure, will be able to meet the competition and expand its share of output in Canada as a whole. It should also be mentioned that major medium-term contributions to Quebec's overall economic growth will be made in aircraft, electrical products, aluminum and transportation equipment.

Other industries might develop significantly, but for the moment their future is less certain. Cases in point are the chemical industry, which will have to resolve its supply problems, the auto industry, which is faced with competition from ultra-modern plants in Ontario and the United States and a market which has reached quite a high level of maturity, and the naval industry, which faces problems of profitability and lack of steady markets.

Outlook for 1987

For 1987, Quebec's economic growth will slow down somewhat from its 1986 level, with the result that real GDP growth should not exceed the 2.5% to 2.7% range. This rate would be lower than Ontario's, but higher than the Canadian average.

Consumer spending will slacken in 1987, having already visibly lost way by the end of 1986. This slackening will largely be the result of declining sales of durable goods, automobiles in particular. Quebec exports should feel the effects of American protectionist measures, except perhaps in the pulp and paper sector, where sales should continue to grow in 1987.

The outlook for investment is quite good, except in home construction, where it should decline somewhat. In the non-residential sector, expenditure should rise by approximately 7%. The continuation of work that has already begun in manufacturing (Hyundai, Domtar, QIT and Cascades-Rexfor), along with the announcement of a number of other projects, will fuel increased investment in this sector.

The service sector, setting aside public administration, should resume its traditional growth this year, encouraged by the manufacturing sector but constrained by low population growth and declining consumer spending.

Employment should grow more quickly this year than in 1986, but expansion of the labour force, which could be considerably faster than last year, would contribute to limiting the drop in the unemployment rate, which should remain above 10%.

Regional outlook

Central Quebec will continue to benefit in 1987 from investment in the major projects in progress in paper at Windsor and the automobile industry in Bromont, and to a lesser extent in Boisbriand, and aluminum shortly magnesium in Bécancour, and the pharmaceutical and petrochemical industries in Montreal. Major private corporations will thus have taken over from government in pursuing the recovery, at least for Quebec's central region.

The resource regions will have to rely more on opening foreign markets and on the vitality of their regional industry. Indeed, fluctuating investment there is also tied to the price of the raw material they exploit. By maintaining its current level against the US and other foreign currencies, the Canadian dollar will encourage continued growth. The surtax on lumber exports could place a heavy burden on the sawmill sector, which was just recovering from a severe recession. The North Shore will benefit from the \$100 million capital project currently in progress at the Port Cartier pulp and paper mill, and from the \$800 million earmarked for Manic 5's additional capacity. Abitibi-Temiscaming will benefit greatly from increased prospecting in the mining sector this year and from the resulting exploitation of mines.

The upward trend in employment in the consumer goods industries should continue in 1987, both in Central Quebec and in the outlying regions, albeit at a rate revealing a certain tailing off in consumer spending.

In the Mauricie and the Eastern Townships, as in the Montreal region, the forecast is good for employment growth in 1987 in the production of industrial goods, equipment and resource processing. Thus, in the Montreal region, the manufacture of transportation equipment and electronics products will benefit from investment in defence and aircraft equipment by Pratt and Whitney, Canadair, CAE Electronics, Paramax and others.

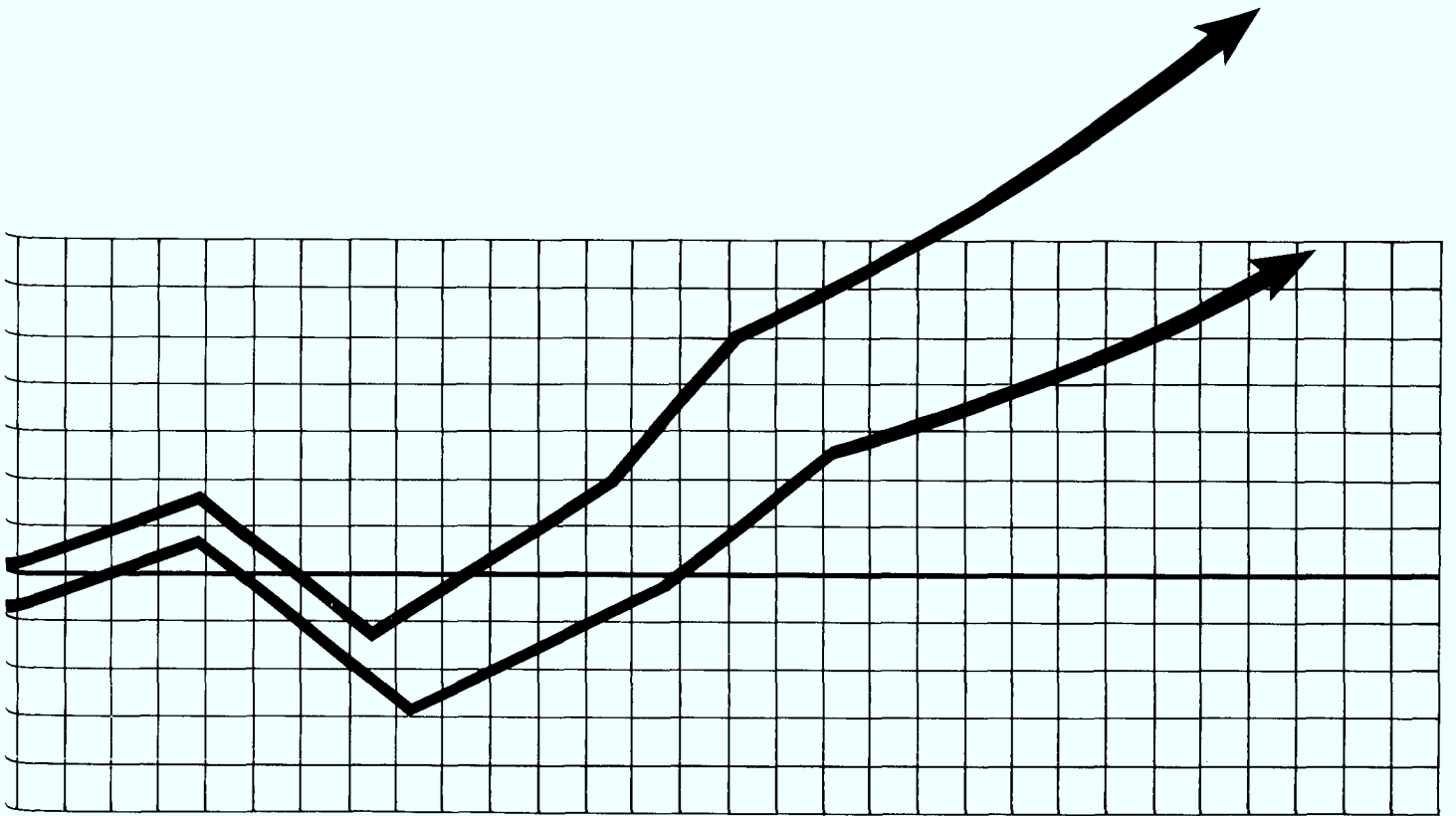
Similarly, the adoption of the pharmaceutical patents bill should generate major capital expenditure in the metropolitan area. Combined with a recovery in the petrochemical industry, this could lead to higher employment in the chemical products sector.

The rise in employment linked to major investment in the paper and automobile industries will be felt only

in 1988 or 1989, whereas the Bécancour aluminum smelter should soon be operating at full capacity.

PART II

Economic development in Quebec – Key factors





RECENT TRENDS IN QUEBEC INDUSTRY

For some years Quebec has enjoyed relatively favourable economic conditions, distinguished by good performance from private investment due mainly to a number of major projects whose completion government encouraged. None the less, the economy has not been strong enough to reduce the 2% gap between Quebec's unemployment rate (11% in 1986) and the national average.

In 1986 Quebec had some 54,000 fewer manufacturing jobs than at the beginning of the decade. Indeed, Quebec is the only province whose level of manufacturing employment in 1986 was no higher than 16 years earlier, at the start of the 1970s. The main challenge facing the Quebec economy is thus the creation of permanent, productive jobs.

Problem

The persistence of relatively high unemployment rates in Quebec is largely a reflection of the deep-rooted structural malaise affecting the Quebec economy. In fact, a substantial part of Quebec's industrial structure lies in traditional sectors:

- Textiles, clothing, footwear and other light consumer goods-producing industries actually account for more than one in every three (1/3) manufacturing jobs in Quebec; certain niches in these industries have problems competing, and their growth is generally very slow.
- Resource processing, including paper and wood, accounts for more than one in every five (1/5) manufacturing jobs in Quebec.
- On the other hand, the high technology and modern sectors are proportionally under-represented and in some cases not strong enough to actively support the industrial revival.

This relative specialization of Quebec industry in the traditional sectors is not conducive to a high level of productivity for Quebec's manufacturing. In fact, the Quebec manufacturing industry's average productivity level was 85% of Ontario's in 1984. While this ratio was certainly an improvement over the 1960s and 1970s, recent trends lead us to anticipate a degree of stabilization in this area. This productivity gap may be explained by two main factors: differences in the industrial structure of the two economies, and the

difference in the level of capital stock per worker, which is higher in Ontario in almost all manufacturing industries.

Evolution of the problem

The 1960s and 1970s were a long period of insufficient private investment in manufacturing in Quebec, particularly in Montreal, with the result that the industrial structure was very late refitting and the disparities in capital stock per worker could not be overcome. Recent trends in private investment in Quebec, however, promise a reversal of past performance in this area. Moreover, this investment thrust is combined with many other highly encouraging new factors:

- increasing Quebec entrepreneurship;
- stronger management skills;
- greater access to growth capital for medium-sized businesses;
- numerous opportunities in innovation and marketing;
- stronger industrial R&D capabilities in Quebec;
- industrializing effect of the competitive edge associated with hydro power;
- development of a critical mass of activities in aircraft and engineering consulting in particular.

A new vitality is indeed visible in Quebec entrepreneurship, along with a favourable socio-economic climate. This new rise in entrepreneurship reveals the "winning attitude" of Quebec business and certainly represents a major change in Quebec's industrial development.

Accompanying this entrepreneurial upsurge are other profound changes in economic behaviour in Quebec. Business schools are taking huge numbers of students who are likely to strengthen business management in Quebec. At the same time, an ever larger share of Quebec savings is invested in the capital stock of businesses involved in the province's economic development, in particular through the Quebec government's stock savings plan (QSSP). By agreeing to open their shareholdership to the investing public, the most attractive medium-sized businesses thus have relatively easy access to the capital required to finance their

accelerated growth. So, two of the main traditional constraints on Quebec's industrial development seem to be in the process of easing, even if small business still somewhat lacks expertise and start-up capital.

Increasing entrepreneurship, stronger management skills and greater availability of growth capital are all occurring at a time of major technological change and world-wide markets. This period is marked by rapid adjustments in the organization of industry, since new, relatively modest producers have the opportunity to penetrate markets that were traditionally the preserve of the industrial giants, by putting their money on technological innovation and the rapid adaptability characteristic of small organizations. This economic context offers a special opportunity for developing Quebec's entrepreneurial upsurge, particularly in the area of advanced technology. The establishment in recent years of new industrial R&D centres in Quebec is an asset in the fields of biotechnology, industrial materials and work automation in particular. Provided steady access to foreign markets is maintained, dynamic, high-performance businesses will moreover have the opportunity to grow more quickly by developing new outlets abroad more easily.

Opportunities and constraints

The tools required to grasp the opportunities offered by the technological revolution lie mainly in the greater Montreal area, along a line stretching toward Bromont and Sherbrooke for microelectronics, for instance, or toward Quebec City for laser optics and biomass enhancement in particular. Indeed, it is in these regions that most technological firms and most R&D in Quebec are to be found. Major constraints on these technical opportunities remain, however, among them the lack of critical masses of international calibre (except in aircraft and engineering consulting), the relative scarcity of the expertise and capital necessary to start up technological businesses, and the relatively undeveloped capabilities of most Quebec firms in terms of innovation.

In the other regions of the province, dynamic small business is often the driving force behind economic opportunities. In light of developing conditions in international competition, in some regions the increased processing of resources becomes, however, a less certain source of opportunity for new developments.

The application of new production technologies and new management practices generates many opportunities in

all the regions for strengthening the competitiveness of Quebec industries. Access to leading-edge technologies remains a challenge, one that is reduced in some cases by co-operation with foreign businessmen, and governments and universities.

Outlook

It emerges from this brief summary of the condition of Quebec industry that a number of changes in basic factors have occurred which lead us to expect an improvement in the heavy trends of the past. These changes are qualitative in nature and hard to quantify; the fact remains that most observers conclude that Quebec's industry is enjoying renewed vitality, both in Canada and abroad. In itself, this revival bodes well for the future, opening new vistas while strengthening the very foundation of Quebec's economic development. At a time when competition is intensifying and becoming world-wide, this renewed vitality will increasingly have to pit itself against considerable challenges, from which it should emerge even stronger.

PULP AND PAPER INDUSTRY

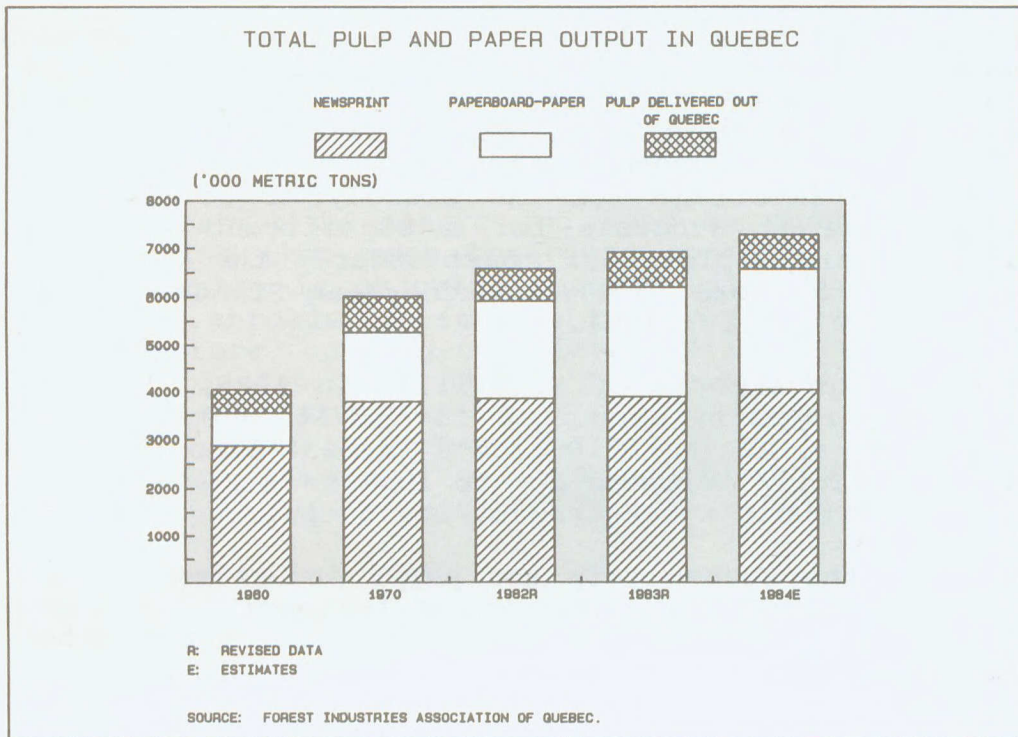
Description

The pulp and paper industry is very important for the Quebec economy. In 1985 it generated 42,000 direct jobs, or 7.7% of the Quebec total. Its output that year stood at \$6 billion, representing 10.1% of the value of manufacturing shipments. This industry is especially important for the economy of several regions where it accounts for a significant share of manufacturing employment: particularly the Outaouais (40%), North Shore (24%), Saguenay/Lac St. Jean (22%) and Trois Rivières (19%).

With foreign exports of \$3 billion in 1985, the pulp and paper industry accounted for 19.1% of manufacturing exports, making it Quebec's largest exporter. It is very heavily oriented toward foreign markets, since it exports about two-thirds of its output.

In 1984, the Quebec pulp and paper industry's output in terms of volume broke down as follows: 55% newsprint, 10% pulp, and 35% paperboard and paper other than newsprint.

Graph 31



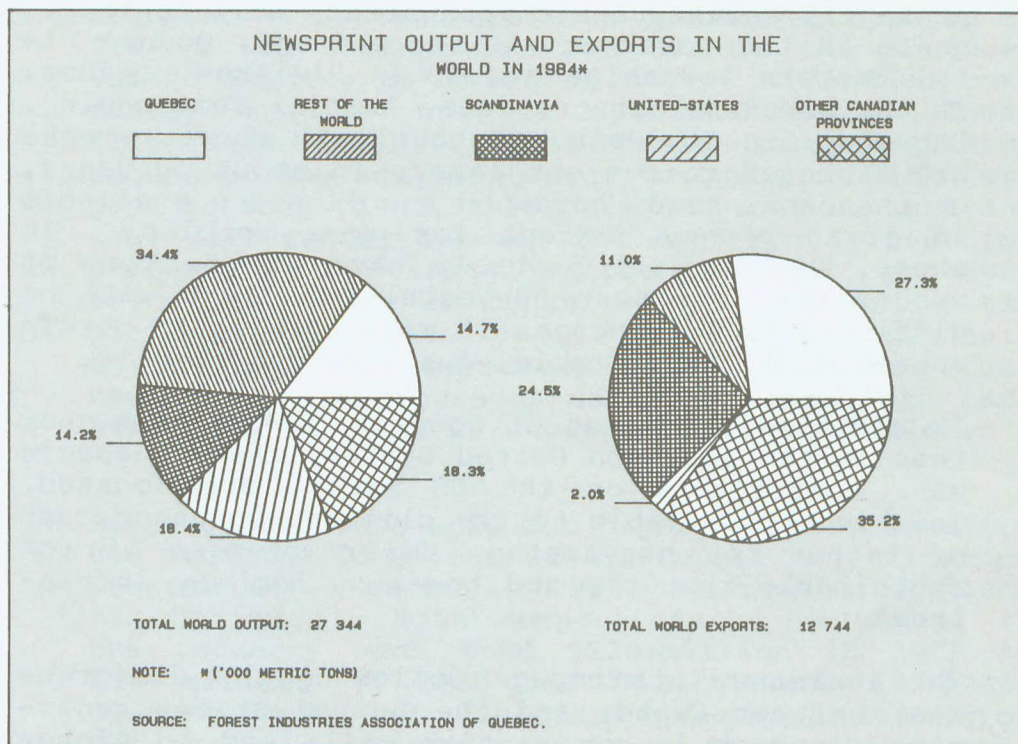
Markets

Approximately 70% by volume of Quebec's pulp and paper shipments are made outside Canada; more than half (60% in 1984) is destined for the US market, which is thus a much larger outlet than Quebec's domestic market, which absorbs only some 13% of output by volume. The second customer in order of importance is Ontario, which absorbs about 18% of shipments from Quebec. The remaining shipments are split almost equally among Europe, the other provinces and other countries.

Of course, the focus on foreign markets varies a great deal from product to product. Most of the production of paperboard, toilet paper and wrapping paper is sold on the Canadian market. On the other hand, 75% of Quebec's output of newsprint is destined for the US, most of it to the Northeastern states; other major customers are the UK, Western Europe and Asia.

Quebec is one of the world's largest exporters: it accounts for some 44% by volume of Canadian exports, which in turn represent more than 55% of world exports. The other major exporters are Finland (some 10% of world exports), Sweden (9%) and Norway (5%).

Graph 32



Of the approximately 60% of the output of commercial pulp sold outside Canada, some two-thirds goes to the United States.

The different forms of paper account for some 86% of the value of international exports of pulp and paper from Quebec, pulp represents 10%, and the rest is taken by paperboard products.

Challenges

If Quebec's pulp and paper industry is to realize its full growth potential, it will have to meet several challenges in the next few years.

(1) Cost and availability of wood

It appears that unless strong reforestation measures are taken, Quebec's forests will not be able

to cater to the industry's long-term needs. The problem lies not at the level of aggregate sources of supply, which may meet the industry's current demand and even increased cutting, so much as at the regional, sectoral (type of wood) and economic levels.

It is estimated, for instance, that within 30 years supplies of fir, spruce and grey pine, which presently satisfy basic wood needs, will be inadequate in the Lower St. Lawrence/Gaspé, Quebec City, Eastern Townships and Trois Rivières regions. In the more northern regions, Abitibi-Temiscaming, Saguenay/Lac St. Jean and the North Shore, stocks are expected to run out later, in about 40 years. On the other hand, hardwood supplies are available in great plenty, except for some species. In short, Quebec will probably have no shortage of wood within the next 30 years, but there will be difficulties inasmuch as it will be hard to obtain economically harvestable, quality wood locally.

In addition, the cost of wood in Quebec is higher than in the southern United States, where Quebec's main competitors on the US market are located. This is attributable to the climate, the high cost of labour for harvesting, the remoteness of the exploitable resource and the poor highway infrastructure.

The increase in stumpage following the disagreement between Canada and the United States regarding Canadian lumber exports will lead to higher production costs in Quebec.

(2) Production costs

Quebec's main competitors on foreign markets are the southern United States and Scandinavia. A comparison of production costs per tonne show that Quebec has a slight edge over its competitors in terms of energy costs but is at a serious disadvantage with respect to labour and transportation costs.

Quebec's advantage over its competitors in terms of energy costs may largely be attributed to power rates in the province. The energy picture in Quebec's pulp and paper mills has changed considerably in recent years following the installation of boilers fuelled by wood waste, the installation of electric boilers and the introduction of new pulp processes. While the latter do not generate sa-

vings in overall energy consumption, they replace thermal power with electrical power.

Quebec's labour costs per tonne of paper produced are higher than its main competitors'. The difference is particularly great when the comparison is made with Scandinavian producers, but this is due less to wage differences than to major differences in productivity. One tonne of newsprint requires 4.5 person-hours in Quebec, as opposed to 2.2 in the Western USA and 3.2 in the Southern United States; a number of mills in Finland currently require only 1.2 person-hours. These differences are due to the obsolescence of a large amount of the equipment used in Quebec. With respect to wood yield, there may actually be substantial differences between the different production processes. For instance, for the kraft process, 50% of the fibre is converted to pulp, while the yield is approximately 90% for the thermomechanical or chemical-thermomechanical processes. The new production processes use less labour and are more effective in terms of environmental protection.

Although Quebec's pulp and paper industry benefited from the five-year Canada-Quebec modernization program which ended in 1984, it thus still lags far behind its main competitors. Investment in the industry went from \$220 million in 1979 to \$331 million in 1980 and \$423 million in 1984. Quebec's share of Canadian investment went from 26% to 40% during this period. Other major capital projects have been, or are on the point of being, carried out since then, the first among them being Domtar's in Windsor.

The investment made by the industry in recent years has no doubt contributed to changing Quebec producers' position as regards both production capacity (through speeding up output) and the efficiency of the processes used, or even focusing on more promising niches. But Quebec had considerable ground to make up.

There are still large differences between the equipment used by Quebec producers and that of the province's main competitors. Indeed, it should not be forgotten that the main competitors have put a very great deal of effort in the last 15 years into modernizing their production apparatus. The results have been spectacular, particularly in Scandinavia, where paper output actually increased

by 60% between 1970 and 1985, and it is estimated that some 80% of production capacity involves the latest technology. In Sweden for instance, two-thirds of paper machines can produce more than 161,000 tonnes a year, whereas in Canada the corresponding figure is barely 10% and approximately one-third cannot produce half that amount. The Americans have also made substantial progress in recent years.

(3) Transportation costs

Quebec producers have to bear much higher transportation costs than their American (with respect to the Northeastern US market) and Scandinavian competitors (with respect to Europe). It is difficult to foresee any improvement in this area. The rates paid by Quebec producers on the US railway network are the outcome of agreements signed early in the century between the Canadian and US governments.

Overall, the position of Quebec producers is comparable to their US competitors', but only if the substantial exchange rate advantage is taken into account. In the same way, whether or not they compete with Scandinavian producers depends on the relative value of the currencies in question.

(4) Exports

Quebec's pulp and paper producers will have to face a number of challenges on export markets over the next few years in terms of competitiveness with respect to both price and product quality.

EEC quotas on dutyfree imports of Scandinavian newsprint were lifted completely in January 1984. At the same time, the EEC lowered the quotas applied to its other suppliers, primarily Canada.

The expected increase in demand for newsprint should be the lowest of all categories of paper. Given that no very substantial net additions are foreseen in US newsprint production capacity, there might be an increase in exports of Quebec newsprint after all, since US demand for newsprint should grow by some 5% by the end of the decade.

But exports to the US will not increase automatically. Newspaper editors, advertisers and readers have greater expectations regarding product quality: lighter sheets, more resistant and opaque, better reproduction, good ink setting, and so on.

Printing and writing paper are expected to record the strongest growth until the end of the decade, owing to the heavy demand anticipated for advertising on quality paper and for printer paper. But this is the very sector where the Scandinavians made inroads into the US market, before their currency was revalued. Significantly greater US production capacity for such paper is anticipated in the next few years. Competition for Quebec producers will thus be very tough, particularly for the higher categories of supercalendered paper.

A number of factors will favour increased shipments of commercial pulp in the next few years: heavy demand for printing and writing paper, and the high cost of building an integrated pulp and paper mill. Pulp producers will, however, have to contend with the increased use of secondary fibres. Canadian softwood pulp will no doubt have to face competition from pulp taken from southern conifers and the US and Scandinavian producers' integration strategies.

(5) Innovations

Canada's pulp and paper industry devotes only 0.3% of sales to research and development, compared with 0.8% in Finland and Japan and 1% in the USA and Sweden. This situation, if not reversed, could prevent Canadian producers from maintaining or increasing their share of a world market where customers' needs are changing and competitors' production techniques are improving.

(6) Capital costs

One of the major challenges to be met is finding the funds for the substantial investment needed to modernize production machinery and attain internationally competitive standards. It has become extremely hard to justify a new mill on the basis of return on investment standards. Whereas in the late 1960s it would have cost less than US

\$100,000 per daily tonne, today it would cost close to \$400,000, despite an increase in scale of 50%. This factor appears particularly significant when it is considered that several paper mills belong to financial holding companies who will invest the sums required to modernize them only if the return on such an investment compares favourably with what could be obtained elsewhere.

It should be noted in this regard that government assistance could become increasingly constrained by the protectionist pressures being exerted worldwide, particularly in the United States.

Conclusions

Quebec's economy is very heavily dependent on forestry operations, and on the manufacture of paper in particular. The standard of living of a substantial part of the labour force will be affected in the coming years by the extent to which the industry successfully meets the challenges facing it: wood supplies, technological competition, productivity, customers' changing needs, and heavy capital requirements. This success will depend not only on how the companies themselves act, but also on government policies. Cooperation from labour will also be needed, since in this field as in many others technological change is likely to demand major adjustments.

MONTREAL METROPOLITAN AREA

Background

The evolution of Quebec's economy is largely dependent upon that of the Montreal metropolitan area, which accounts for one-half of all jobs in the province.

The Montreal economy has undergone a relative decline in recent decades, mainly owing to the shift of activity toward the west and south of the continent, increased competition from newly industrialized nations, the oil crisis, Quebec's falling birth rate and heavy wage increases.

The region was very hard hit by the last recession and recovered from it only belatedly. The unemployment rate is almost twice as high there as in Toronto, and its economic structure has trouble renewing itself. Montreal's position is particularly worrisome, in light of its weight in the Quebec economy.

Manufacturing

Like other cities in the industrialized world, Montreal is showing a strong tendency toward tertiarization of its economy. Manufacturing, while accounting for only about one-quarter of jobs, none the less remains a major force in its development, particularly because of its multiplier effect on other industries.

Montreal's manufacturing industry has long been heavily concentrated in traditional, low-productivity, low-wage sectors that are often vulnerable to foreign competition.

Montreal accounts for close to one-third of all Canadian jobs in the textile, clothing and leather (TCL) industries and is the country's main centre for TCL activity. TCL employment, which alone represented more than one-quarter of regional employment in manufacturing in 1980, was hard hit by the recession and rising cheap imports. Despite the loss of 8,000 jobs since 1980, these industries still employ one manufacturing worker in five. Although several TCL firms have modernized over the past five years, particularly with assistance from the Canadian Industrial Renewal Board's program, these industries remain protected by a relatively high tariff structure.

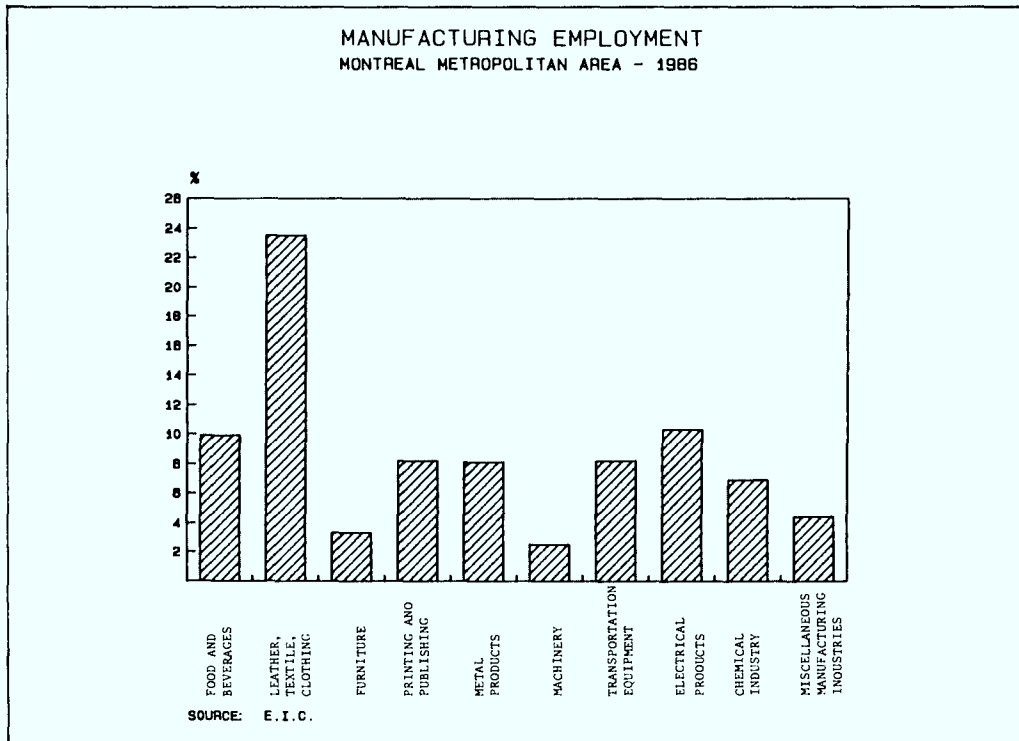
Other manufacturing sectors have also experienced serious problems in recent years, in particular the petrochemical industry, which the higher cost of supply sources has made non-competitive, and the pharmaceutical industry, which has witnessed the shift of part of its activity to the US.

The east end of the Island of Montreal was particularly hard hit by plant closures and mass redundancies. Four of its six oil refineries have closed since 1981. Among companies affected since 1984 are Welfab Steel Products (574 jobs lost), Versatile Vickers (-289), Canadian Steel Wheel (-550), Biscuits David (-437) and Camco (-400). CREEEM, a joint committee for the recovery of jobs and the economy in east-end Montreal, has just published a detailed socio-economic portrait of the east end, and the next stage of its mandate will be to develop recommendations for alleviating the problems of this part of Montreal.

The manufacturing sector has also witnessed positive structural change since the start of the decade. Overall, the modern industries, those with higher productivity, exporting more and employing an often specialized workforce, made considerable gains, in particular the electrical products, printing and rubber and plastics sectors. Adding to these industries the machinery, transportation equipment and chemical products sectors, the modern industries' share of manufacturing employment went from about 37% in 1980 to more than 40% in 1986.

The industrial redeployment which began in the 1970s is thus intensifying, but much yet remains to be done, since approximately one-third of regional manufacturing employment still depends on sectors at grips with structural problems, such as TCL, furniture, petrochemicals and shipbuilding.

Graph 33



Tertiary sector

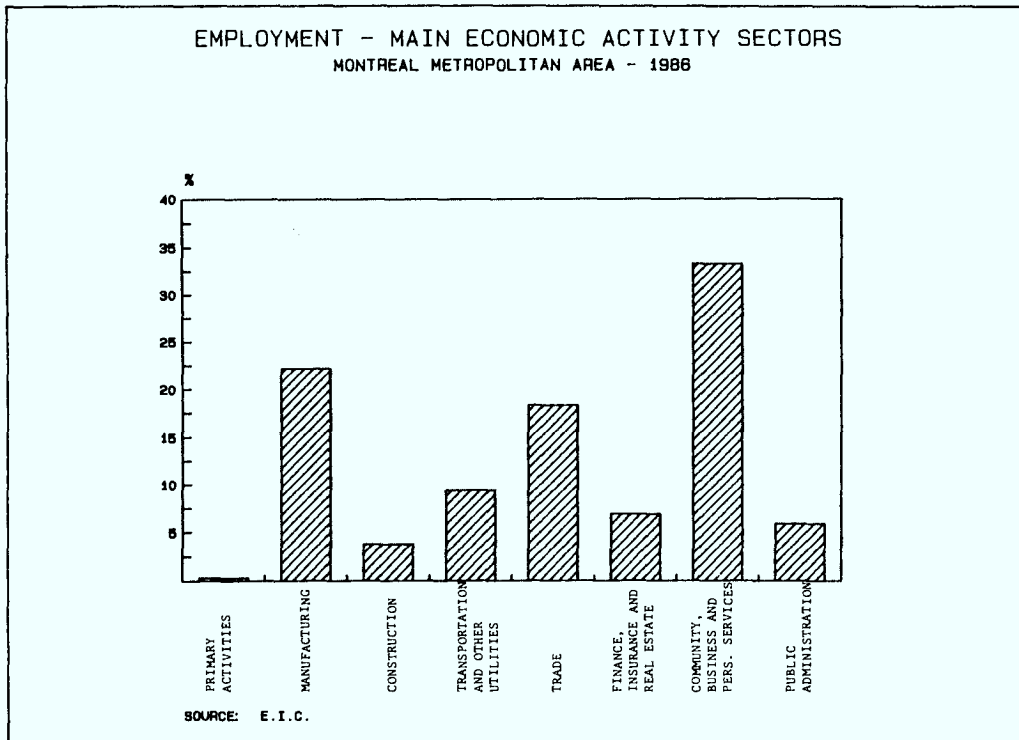
The main feature of the Montreal economy is the tertiary sector, which employs almost three-quarters of the region's workers.

The sectors linked to regional consumption, such as trade, accommodation, restaurants, entertainment and recreation, and miscellaneous services, as well as government and parapublic services, account for most tertiary employment. The growth of several of these sectors is closely tied to demographic growth, and the population of the Montreal metropolitan area grew by only 3% between 1971 and 1981, compared with 24% the previous decade. In addition, government budgetary restraint means employment in public and parapublic services is tending to fall. Finally, tourism's contribution to the regional economy is declining, since Montreal's tourist attractions have seen little renewal in recent years. The employment growth rate

in these sectors thus cannot be expected to be as great as in the past.

Services with higher exports and greater output, such as transportation and communications, financial services and real estate, and business services (data processing, advertising, miscellaneous consultants, etc.), account for less than one-third of workers in Montreal's tertiary sector. Development of these higher tertiary industries is important for a large city such as Montreal: not only do they provide support for other industries, but they are also, most importantly, agents of innovation and renewal par excellence. Montreal's dynamic tertiary has become impoverished over recent years owing to the departure of many head offices and its declining role in transportation and finance. Business services have expanded remarkably, but their development is way behind Toronto and their growth now relies largely on the Montreal and Quebec City markets.

Graph 34



Outlook

Despite the weaknesses which the last decades have brought to light, Montreal has several assets which could reinforce its recovery. Among them are:

- a sizable regional market;
- a diversified economic and industrial base;
- modern, diversified transportation and communications infrastructure;
- many recognized institutions of research and higher learning;
- a critical mass in industrial research;
- a variety of services to production;
- a new, dynamic class of local administrators;
- a bilingual environment; and
- a quality of life comparing favourably with other North American cities.

Moreover, 1986 was marked by a climate of optimism and a considerable heightening in government's awareness of Montreal's importance.

The Montreal Economic Summit of June 1986 brought together the region's main economic players. Discussion, which focussed on downtown Montreal, industrial and commercial development, and housing, yielded consensus on many different projects and thrusts. In June 1987, a follow-up committee will produce an appraisal of the commitments made.

Moreover, the advisory committee to the departmental committee on the development of the Montreal region, formed in late 1985 and consisting of Montreal figures under the chairmanship of Laurent Picard, released its report in November 1986. This committee, whose mandate was to suggest measures to the federal government for consolidating Montreal's role as a focal point for development, drew up a development plan based in particular on Montreal's assets and focussing on the following seven lines of development:

- international activities; including the attraction of international agencies;

- high technology, with priority to:
 - . telecommunications,
 - . space technologies,
 - . aircraft industry,
 - . microelectronics,
 - . information technology,
 - . biotechnology;

- finance and international trade, including the creation of an international banking centre;

- design, particularly as a means to the revitalization of traditional industries;

- cultural industries, primarily audio-visual and performing arts;

- tourism, including the expedited development of the Old Port; and

- transportation, including the enhancement of its intermodal potential.

The committee asked the private sector to assume the leadership of Montreal's revival and requested the governments to work together toward carrying out the proposed plan and encouraging participants.

Finally, a number of the committee's recommendations have already been or are in the process of being carried out, for instance the granting of the CF-18 maintenance contract to a Montreal firm, the endorsement of Montreal as an international banking centre, and the amendment of federal legislation on pharmaceutical patents.

INDUSTRIAL RESEARCH AND DEVELOPMENT IN QUEBEC

At a time when competition is becoming world-wide, the primary comparative advantage of industrialized nations depends on sustained technological effort. Technological advances generate new products, new materials and new forms of energy, thereby changing the dynamics of industrial competition. The inventors who market new goods thus have the opportunity to penetrate markets that were previously the preserve of the industrial giants. Technological advances also facilitate the modernization of production processes in all sectors. By reducing costs, they create opportunities for increasing productivity and strengthening competitiveness.

Situation

Canada lags far behind most industrialized countries in industrial research and development (R&D). Indeed, according to the OECD, Canadian expenditure on industrial R&D in 1983 accounted for approximately 0.9% of domestic industrial product, compared with 2.6% in Sweden, 2.3% in Germany and 2.2% in the United States. Most of the industrialized nations have expanded their efforts over the past 10 years, whereas Canada's have remained relatively steady.

Quebec industry spent some \$646 million on R&D in 1984, or 23% of the Canadian total. These activities took up almost 9,000 person-years in the 323 Quebec firms involved.

Table 13

	Industrial R&D Quebec and Canada, 1984		
	Quebec	Canada	Quebec/Canada
Number of firms	323	1 526	21.2
Employees assigned to R&D	8 946	37 890	23.6
Expenditure (\$ millions)	646	2 859	22.6

Source: Statistics Canada and BSQ.

Ontario accounted for 58% of expenditure and 61% of employment in R&D. The Quebec industrial base devotes comparatively less energy to industrial R&D than Ontario does. Thus, industrial R&D expenditure stood at 0.7% of Quebec GDP in 1983, compared with 1.1% in Ontario.

Industrial R&D activities in Quebec are heavily concentrated in Montreal in a small number of large corporations in a few industrial sectors.

In fact, firms with sales of more than \$100 million account for close to 80% of total spending on R&D in Quebec. The top 10 firms carrying out R&D contribute 58% of total expenditure.

In terms of sectors, the R&D expenditure of the aircraft and parts and electronic equipment industries constitutes 44% of the total. The main firms conducting R&D in these sectors are Pratt and Whitney, Spar, Canadian Marconi, Northern Telecom, Bell Canada, CAE Electronics and Canadair. Industrial R&D is generally carried out by capital-intensive companies.

Regionally speaking, 85% of industrial R&D expenditure is made in the Montreal region, largely in the highly technological industries (64%). Outside Montreal, industrial R&D spending is concentrated primarily in the resource industries.

In addition to conducting their own industrial R&D, Quebec firms have access to new technologies through outside research contracts. Thus, in 1983, Quebec industry spent some \$150 million in outside research. Approximately 80% of this went to parent companies, affiliates or subsidiaries. Industrial research institutes or associations received only 6% of the sums assigned to outside research. The significant number of multinational subsidiaries in Quebec was also to be felt, since more than one-half (55%) of expenditure on outside research was paid to foreign companies.

The disparity between Quebec's technological efforts and Ontario's is largely a reflection of the differences in industrial structure. On the one hand, Quebec's industrial base is relatively specialized in the traditional industries (wood, textiles, and food and beverages), whereas Ontario is specialized in the modern industries (machinery, transportation equipments and electronic devices) which generally use higher technology. On the other hand, Quebec industries are generally less R&D intensive than their Ontario counterparts. This lower intensity may be

explained by the fact that Quebec's corporate structure is concentrated more on small and medium-sized businesses, which have more limited innovation capability. The large number of subsidiaries of foreign firms in Quebec which prefer to concentrate industrial R&D activities at head office could also help explain the lower intensity of R&D in Quebec industry.

Financing

Analysis of sources of financing for industrial R&D in Quebec also reveals some significant features. Close to 80% of Quebec's industrial R&D is financed by the business sector. Government and non-Canadian sources contribute 15% and 7% respectively. Government finances a larger share of industrial R&D in Quebec than in Ontario. Note, however, that governments' contribution to the financing of industrial R&D, as calculated here, does not include tax reductions. For instance, consider that a total of \$194 million was claimed in investment tax credits in Canada and \$74 million in Quebec in 1983.

Table 14

	<u>Sources of financing for R&D</u>		
	1984		
	Quebec	Ontario (\$ millions)	Canada
Industry	506 (78.2)	1,335 (79.1)	2,252 (78.8)
Government	95 (14.7)	192 (11.4)	367 (12.8)
Foreign	46 (7.1)	160 (9.5)	240 (8.4)
Total	647 (100)	1,687 (100)	2,859 (100)
Source: Statistics Canada			

Foreign sources financed 9.5% of industrial R&D spending in Ontario, compared with 7.1% in Quebec. These funds come largely from affiliated companies.

Technological transfer

Technological know-how is also acquired through transfers (production licences, patents, acquisition of technological knowledge) between companies. In this respect, Quebec is a net importer of technology, with a \$70 million deficit in this area in 1983. In fact, Quebec firms paid out \$97 million to Canadian and foreign companies for the purchase of patents, licences and technical knowledge and sold \$27 million's worth to these companies.

Quebec's dealings in technology are conducted primarily with foreign parent companies or affiliates. Such dealings accounted for 75% of the deficit in 1983.

Research centres

To support industrial R&D in Quebec, the federal and provincial governments and the private sector have established various specialized research centres, among them being:

- . National Optics Institute,
- . Biotechnology Research Institute,
- . CQIP (Quebec Centre for Automated Production),
- . Industrial Materials Research Institute,
- . IREQ (Electricity Research Institute),
- . Institute for Electrochemistry,
- . Canadian Pulp and Paper Research Institute,
- . CRAA (Agri-food Research Centre),
- . CWARC (Canadian Workplace Automation Research Centre).

The establishment of these centres, combined with technical support from CRIQ (Quebec Industrial Research Centre) and the Centre for Industrial Innovation/ Montreal (CIIM) and financial support from AQUIR (Quebec Agency for the Enhancement of Industrial Research), should not only encourage industrial R&D in Quebec but above all promote the greater dissemination of new technologies in the industrial base.

In summary, there is currently much less industrial R&D in Canada, and particularly in Quebec, than in most other industrialized countries. None the less, the establishment of a public and parapublic research infrastructure bodes well for the growth of

industrial R&D in the province and the strengthening of the industrial base's competitive position. At the same time, the current explosion in technology offers relatively small new producers the opportunity to penetrate industrial giants' markets by capitalizing on the rapid adaptability characteristic of small organizations.

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