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RATE OF CAPACITY UTILIZATION

Fourth Quarter, 1988



Industry, Science and
Technology Canada

Industrie, Sciences et
Technologie Canada

Canada

RATE OF CAPACITY UTILIZATION

Fourth Quarter, 1988

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April 1989

FOREWORD

The Rates of Capacity Utilization published by Industry, Science and Technology Canada (ISTC) are based on the Wharton School method of estimating these rates, usually referred to as the "trend-through-peaks" method. Notes on the methodology used in computing these rates were included as a supplement to the First Quarter 1980 release.

Many conceptual and measurement problems surround the calculation of capacity utilization. Consequently, the utilization rates presented here should be treated as statistical estimates. These rates are more useful when they are considered in conjunction with other data related to industrial performance.

It should be pointed out that this report uses the latest available data on industrial production published by Statistics Canada.

RATE OF CAPACITY UTILIZATION - CANADA

FOURTH QUARTER 1988

The overall rate of capacity utilization in Canadian industry recorded in the fourth quarter of 1988 at 87.3 percent fell slightly below (0.4 percentage points) the rate of 87.7 percent reported for the previous quarter (Table 1). However, it is 0.4 percentage points above the level attained in the fourth quarter of 1987 and substantially higher than the average rate of 80.4 percent over the 1981-1988 period (Table 5). It is the highest rate since a low of 68.6 percent was reached in the fourth quarter of 1982 during the 1981-1982 recession (Chart 1). But, it is still below the pre-recession peak (89.3 percent) attained in the third quarter of 1979.

Three broad industry categories comprise the overall measure of industrial capacity: mining (including quarrying and oil wells), manufacturing, and electric utilities (including gas and water utilities). All three categories, on a seasonally adjusted basis, registered a decline in their operating rate between the third and fourth quarters of 1988 (Table 2).

For the mining sector, the decrease was 1.3 percentage points. Its current level of 88.9 percent is 3.3 percentage points higher than the level recorded in the fourth quarter of 1987. It is significantly above the average annual rate of 75.3 percent for the 1981-1988 period, as well as the average annual rate of 77.4 percent over the 1971-1980 period (Table 5).

Utilities, at 77.3 percent, showed a decrease of 0.7 percentage points in the fourth quarter of 1988 from the third quarter rate of 78 percent. The current rate is substantially (1.8 percentage points) below its level a year ago. It is also less than the average rate experienced over the 1981-1988 period (79.8 percent) and well below the average rate for the 1971-1980 period, 93.3 percent (Table 5).

At 88.3 percent, the fourth quarter capacity utilization rate in manufacturing showed a slight decline (0.1 percentage points) from the third quarter level of 88.4 percent (Table 1). However, it remains substantially above the average annual rate of 81.9 percent recorded over the 1981-1988 period (Table 5).

The capacity utilization rate for the non-durables segment of manufacturing recorded a slight increase (0.3 percentage points) over the third quarter level of 88.4 percent. Among the 13 industries which make up this segment of manufacturing, seven recorded a decline in their operating rates during the fourth quarter of 1988, the largest decrease being in leather products (-2.9 percentage points). Six industries recorded increases; the most significant increase (3.6 percentage points) was recorded in the clothing industry (Table 2).

The capacity utilization rate in durable manufacturing was at 87.9 percent in the fourth quarter, down 0.5 percentage points from the third quarter of 1988. Six of the nine industries belonging to this segment of manufacturing recorded lower utilization rates. Electrical products showed the largest decrease (4.0 percentage points). Transportation equipment registered the highest increase, 3.1 percentage points. The operating rate for the non-metallic minerals industry remained unchanged from the third quarter (Table 2).

Detailed comparative tables and charts are included in this report. Data for the years 1971-1981 are available upon request.

TABLES / CHARTS

Table 1

**CAPACITY UTILIZATION - CANADA
MAJOR SECTORS**

YEAR		INDUSTRIAL	MINING	MANUFACTURING			UTILITIES
				TOTAL	NON-DURABLE	DURABLE	
1982	1	75.2	64.1	77.2	81.7	73.2	82.5
	2	71.1	63.4	72.4	77.5	67.7	77.4
	3	69.4	62.1	70.6	77.7	64.2	75.6
	4	68.6	64.1	68.9	77.5	61.2	74.7
1983	1	70.2	63.4	71.2	80.1	63.2	76.1
	2	72.3	65.4	73.2	81.7	65.6	79.8
	3	75.2	70.6	75.8	83.8	68.6	80.3
	4	76.8	71.2	77.9	83.9	72.4	80.1
1984	1	77.9	73.2	79.2	83.7	75.2	77.7
	2	80.5	77.8	81.4	86.7	76.7	79.7
	3	81.3	78.4	82.3	86.7	78.4	79.5
	4	81.1	78.4	82.0	85.7	78.7	80.0
1985	1	81.6	80.4	82.1	85.1	79.4	80.5
	2	82.0	81.0	82.6	84.4	81.1	79.6
	3	82.7	79.1	84.1	84.7	83.6	80.1
	4	83.8	81.0	84.9	87.1	82.8	82.0
1986	1	82.8	79.7	84.1	86.9	81.6	79.7
	2	82.4	78.4	84.1	87.2	81.3	78.9
	3	81.4	77.1	83.0	86.7	79.7	78.0
	4	81.8	77.8	83.3	86.6	80.3	79.2
1987	1	82.8	78.4	84.5	87.3	81.0	79.0
	2	83.6	79.7	85.1	88.1	82.4	80.8
	3	85.2	83.7	86.2	88.6	84.1	80.6
	4	86.9	85.6	88.4	89.2	87.7	79.1
1988	1	87.1	86.9	88.3	89.0	87.7	79.6
	2	87.4	88.9	88.3	88.5	88.2	78.2
	3	87.7	90.2	88.4	88.4	88.4	78.0
	4	87.3	88.9	88.3	88.7	87.9	77.3

Chart 1

CAPACITY UTILIZATION
Industrial Sector (Canada)

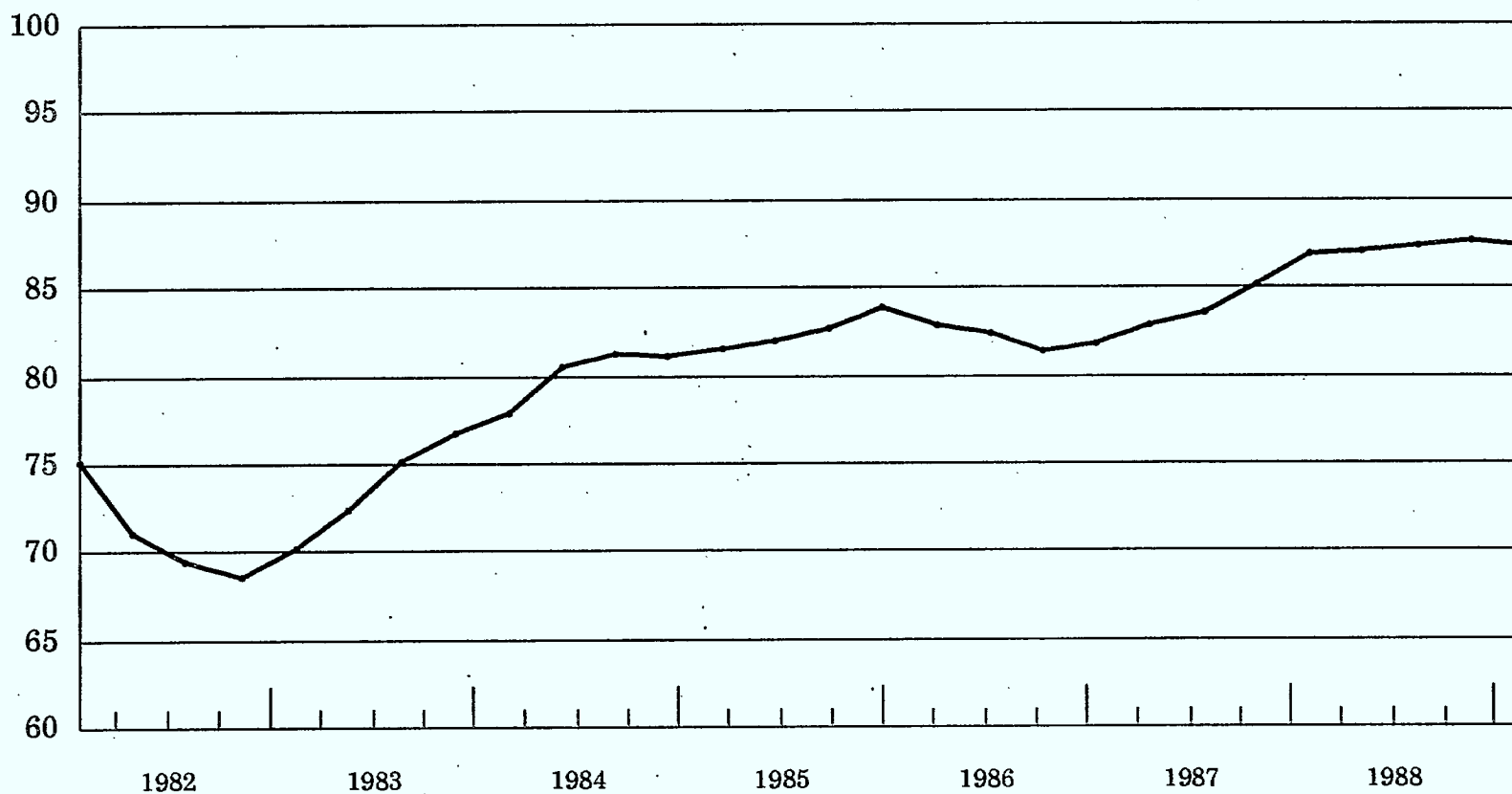


Table 2

CAPACITY UTILIZATION

		Percentage Points Changes From		
	IV Q. 1988 Level	III Q. 1988	IV Q. 1987	Last Peak
Industrial	87.3	-0.4	0.4	-10.1 (I,1974)
Mining	88.9	-1.3	3.3	-11.1 (III,1973)
Manufacturing	88.3	-0.1	-0.1	-9.9 (I,1974)
Non-Durables	88.7	0.3	-0.5	-9.2 (I,1974)
Food	91.0	1.2	0.8	-9.0 (IV,1973)
Beverage	73.0	-2.4	1.8	-27.0 (II,1974)
Tobacco	44.7	1.4	-0.7	-55.3 (IV,1977)
Rubber	79.0	-2.3	-3.8	-21.0 (IV,1984)
Plastics	92.2	-1.5	-7.8	-7.8 (IV,1987)
Leather	75.6	-2.9	-5.9	-24.4 (I,1981)
Prim. Textile	96.8	0.4	-3.2	-3.2 (IV,1987)
Textile Prod.	93.1	-0.2	-6.9	-6.9 (IV,1987)
Clothing	99.7	3.6	3.4	-0.3 (III,1987)
Paper & Allied	97.4	0.8	0.8	-2.6 (II,1974)
Printing & Publ.	92.8	-0.7	-1.9	-7.2 (II,1981)
Ref. Pet. & Coal	81.5	1.7	4.9	-18.5 (III,1983)
Chem. & Chem. Prod.	77.0	-0.7	-2.2	-23.0 (II,1973)
Durables	87.9	-0.5	0.2	-10.6 (I,1974)
Wood	92.3	-0.8	-7.7	-7.7 (IV,1987)
Furniture & Fixtures	88.8	-1.7	-3.2	-11.2 (I,1974)
Primary Metals	87.1	0.4	-0.5	-12.9 (III,1974)
Metal Fab.	96.6	-1.0	-1.5	-3.4 (I,1980)
Machinery	67.4	-1.2	-1.4	-32.6 (III,1979)
Trans. Equip.	86.5	3.1	5.0	-13.5 (I,1979)
Electrical Products	96.0	-4.0	6.2	-4.0 (III,1988)
Non-Met. Min.	99.2	0.0	-0.8	-0.8 (I,1988)
Other Mfg.	67.1	-2.4	-5.7	-32.9 (II,1979)
Utilities	77.3	-0.7	-1.8	-22.7 (III,1973)

Chart 2

CAPACITY UTILIZATION
Major Sectors (Canada)

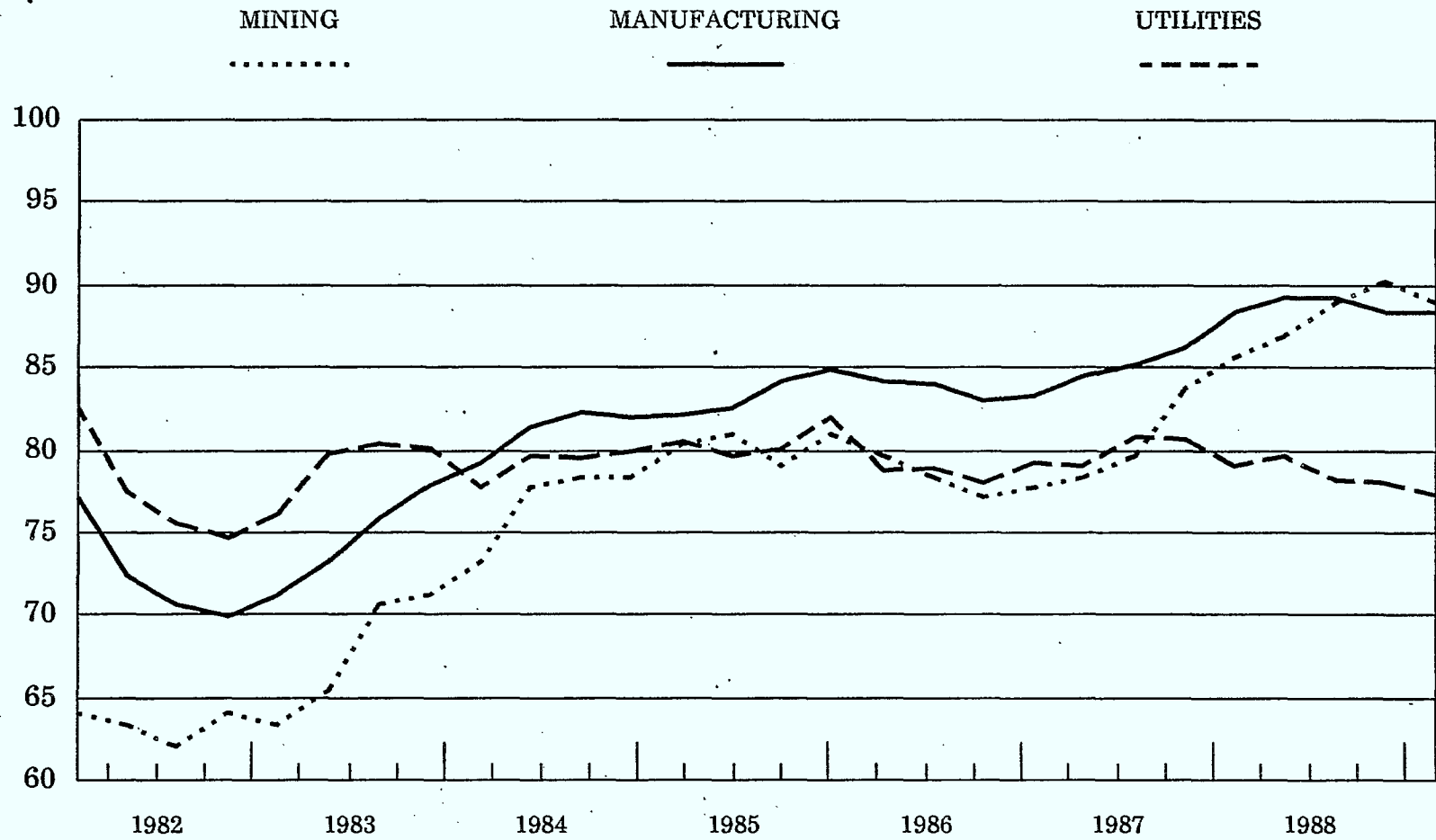


Table 3

**MANUFACTURING INDUSTRIES
CAPACITY UTILIZATION
NON-DURABLE**

YEAR	NON-DURABLE	FOOD	BEVERAGES	TOBACCO	RUBBER
1982 1	81.7	89.7	73.7	83.5	67.8
2	77.5	90.2	72.7	84.0	63.8
3	77.7	91.5	69.3	80.3	67.3
4	77.5	88.4	68.2	80.0	62.6
1983 1	80.1	88.0	67.2	78.8	70.5
2	81.7	86.6	65.4	72.7	73.3
3	83.8	85.3	68.2	69.1	75.2
4	83.9	85.8	67.2	70.5	82.3
1984 1	83.7	89.7	67.7	71.8	87.9
2	86.7	88.4	69.7	68.3	91.2
3	86.7	88.9	70.2	64.8	94.5
4	85.7	88.5	69.2	66.9	100.0
1985 1	85.1	88.9	68.9	59.4	89.5
2	84.4	90.2	68.7	59.2	94.3
3	84.7	91.4	68.4	53.4	96.1
4	87.1	93.5	69.6	51.6	93.6
1986 1	86.9	91.4	71.6	52.2	95.5
2	87.2	92.7	73.5	46.5	87.3
3	86.7	92.2	70.3	51.8	79.2
4	86.6	92.6	72.3	47.7	79.7
1987 1	87.3	92.2	69.8	48.2	78.7
2	88.1	91.8	71.0	48.1	80.6
3	88.6	91.4	70.8	47.9	83.1
4	89.2	90.2	71.2	45.4	82.8
1988 1	89.0	90.6	72.4	44.4	80.4
2	88.5	90.2	72.9	47.3	79.5
3	88.4	89.8	75.4	43.3	81.3
4	88.7	91.0	73.0	44.7	79.0

Table 3 (cont'd)

**MANUFACTURING INDUSTRIES
CAPACITY UTILIZATION
NON-DURABLE**

YEAR	NON-DURABLE	PLASTICS	LEATHER	PRIM. TEXTILE	TEXTILE PRODUCTS	CLOTHING
1982 1	81.7	81.3	89.1	75.3	74.7	86.4
2	77.5	73.4	81.5	63.3	67.2	81.7
3	77.7	74.0	82.3	63.0	70.7	82.6
4	77.5	74.6	77.5	72.6	75.0	79.7
1983 1	80.1	77.6	81.2	83.0	83.9	82.5
2	81.7	79.7	84.0	91.5	88.2	82.4
3	83.8	83.3	87.6	92.0	89.7	81.5
4	83.9	86.0	93.2	92.5	89.5	82.3
1984 1	83.7	88.7	96.9	86.9	89.3	86.0
2	86.7	91.2	97.7	88.3	91.8	90.6
3	86.7	86.4	94.8	85.3	88.0	87.7
4	85.7	88.9	89.1	84.1	86.0	89.5
1985 1	85.1	90.0	87.1	84.6	84.0	88.6
2	84.4	92.4	90.7	82.5	84.7	88.5
3	84.7	93.4	92.5	87.4	89.8	88.5
4	87.1	94.4	92.4	85.3	91.4	95.8
1986 1	86.9	91.2	93.3	85.0	90.3	94.8
2	87.2	90.8	88.5	85.5	91.8	95.7
3	86.7	92.4	91.2	86.0	88.1	96.5
4	86.6	91.4	91.1	87.3	88.8	94.7
1987 1	87.3	95.6	86.4	92.8	93.8	97.4
2	88.1	96.4	81.6	95.0	94.4	99.1
3	88.6	97.3	82.5	96.2	95.9	100.0
4	89.2	100.0	81.5	100.0	100.0	96.3
1988 1	89.0	98.9	80.5	98.0	98.0	98.1
2	88.5	96.6	79.5	95.9	94.4	96.2
3	88.4	93.7	78.5	96.4	93.3	96.1
4	88.7	92.2	75.6	96.8	93.1	99.7

Table 3 (cont'd)

**MANUFACTURING INDUSTRIES
CAPACITY UTILIZATION
NON-DURABLE**

YEAR	NON-DURABLE	PAPER & ALLIED	PRINT & PUB.	REFINED PETROL & COAL	CHEM. & CHEM. PRODUCTS
1982 1	81.7	78.4	91.7	73.4	73.6
2	77.5	73.3	87.1	61.3	68.0
3	77.7	71.6	84.5	70.2	69.6
4	77.5	71.6	82.8	94.4	69.6
1983 1	80.1	77.6	84.9	72.6	75.0
2	81.7	81.9	86.0	71.0	77.9
3	83.8	85.3	87.1	100.0	80.9
4	83.9	86.2	87.3	75.0	81.5
1984 1	83.7	78.4	89.3	78.2	79.9
2	86.7	87.9	90.3	77.4	83.4
3	86.7	88.8	91.4	72.6	85.4
4	85.7	87.1	90.6	71.0	81.7
1985 1	85.1	85.3	89.9	72.6	83.0
2	84.4	82.8	90.1	75.0	78.0
3	84.7	81.9	89.4	72.6	78.6
4	87.1	86.2	92.1	75.8	79.9
1986 1	86.9	87.9	92.2	72.6	79.8
2	87.2	90.5	92.4	73.4	77.0
3	86.7	90.5	91.7	75.8	76.3
4	86.6	90.5	90.2	72.6	76.9
1987 1	87.3	93.1	90.3	75.8	75.5
2	88.1	93.1	91.3	76.6	78.7
3	88.6	94.0	93.0	76.6	78.6
4	89.2	96.6	94.7	76.6	79.2
1988 1	89.0	95.7	94.0	79.8	78.5
2	88.5	95.7	94.9	80.6	77.8
3	88.4	96.6	93.5	79.8	77.7
4	88.7	97.4	92.8	81.5	77.0

Chart 3

CAPACITY UTILIZATION
Major Sectors (Canada)

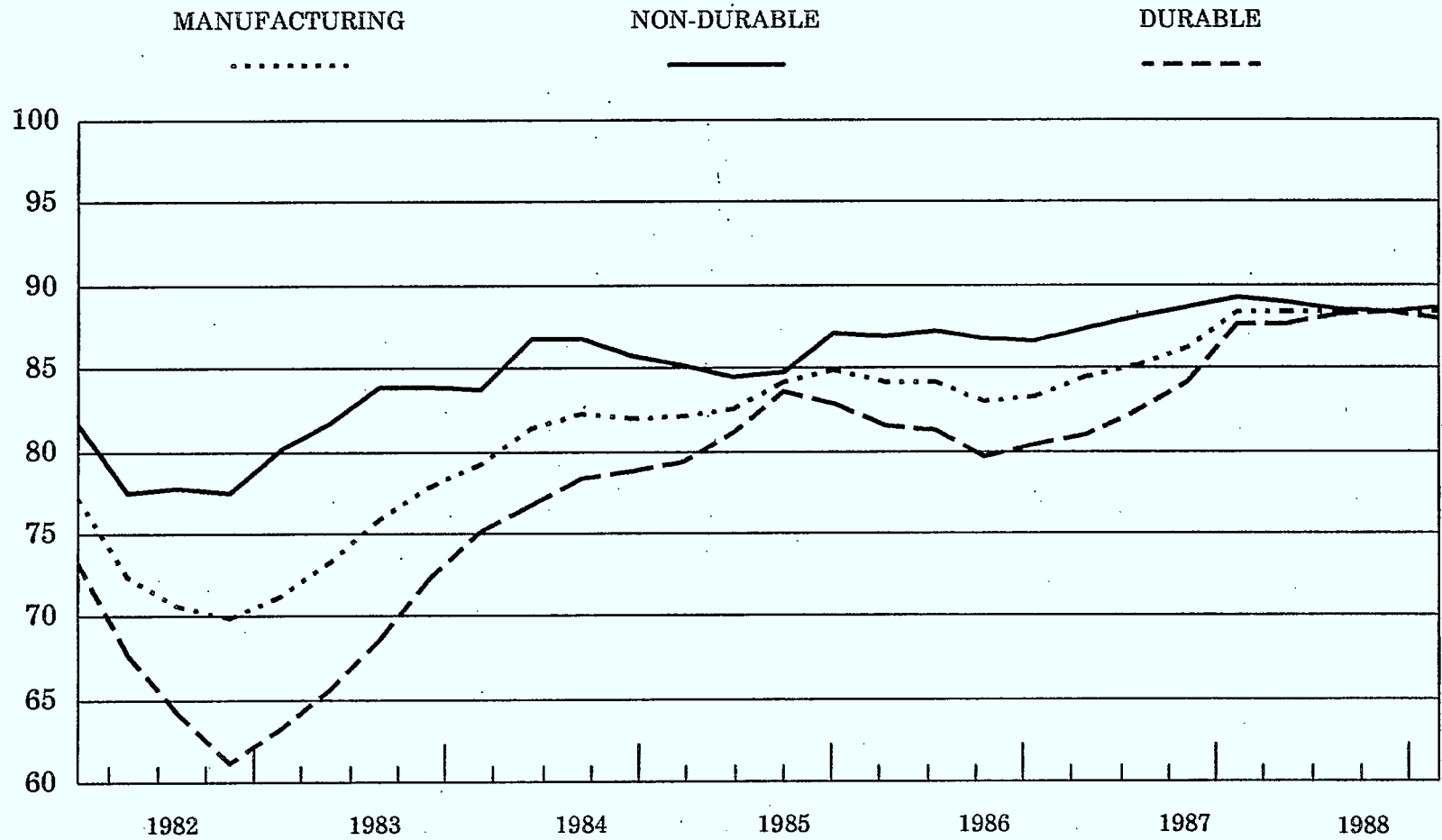


Table 4

**MANUFACTURING INDUSTRIES
CAPACITY UTILIZATION
DURABLE**

YEAR	DURABLE	WOOD	FURNITURE & FIXTURES	PRIMARY METALS	FAB. METAL	MACHINERY	
1982	1	73.2	65.9	66.6	68.5	89.4	74.3
	2	67.7	63.6	61.5	58.2	79.1	63.5
	3	64.2	62.9	59.7	50.4	75.2	58.7
	4	61.2	63.0	62.0	52.5	72.3	54.8
1983	1	63.2	71.6	65.9	54.5	72.2	51.0
	2	65.6	72.4	68.1	62.6	73.0	52.2
	3	68.6	81.5	72.0	66.9	74.8	54.2
	4	72.4	77.7	73.4	71.9	76.5	56.1
1984	1	75.2	75.5	77.2	74.6	78.2	60.4
	2	76.7	82.1	73.8	76.6	78.1	63.8
	3	78.4	84.2	72.0	78.5	78.9	63.2
	4	78.7	86.3	73.4	77.5	81.5	62.7
1985	1	79.4	84.7	75.6	77.9	85.1	61.4
	2	81.1	86.1	81.0	79.9	87.7	62.4
	3	83.6	92.3	83.1	82.5	90.3	62.6
	4	82.8	93.5	84.5	80.0	91.0	62.1
1986	1	81.6	90.6	83.5	79.7	87.3	62.3
	2	81.3	92.5	83.2	76.5	88.0	64.8
	3	79.7	83.6	84.6	76.3	88.8	62.8
	4	80.3	81.5	84.4	79.6	87.8	62.3
1987	1	81.0	92.7	84.9	81.4	91.3	61.8
	2	82.4	92.6	86.3	81.1	93.8	62.0
	3	84.1	99.6	89.1	83.0	95.5	63.7
	4	87.7	100.0	92.0	87.6	98.1	68.8
1988	1	87.7	92.8	92.5	85.9	98.8	69.6
	2	88.2	92.0	89.2	89.1	96.9	68.4
	3	88.4	93.1	90.5	86.7	97.6	68.6
	4	87.9	92.3	88.8	87.1	96.6	67.4

Table 4 (cont'd)

**MANUFACTURING INDUSTRIES
CAPACITY UTILIZATION
DURABLE**

YEAR	DURABLE	TRANS. EQUIP.	ELECT. PROD.	NON-METALLIC MINERALS	OTHER MFG.
1982 1	73.2	61.1	81.7	69.7	78.5
2	67.7	63.8	77.7	60.7	76.8
3	64.2	63.9	72.2	59.8	71.9
4	61.2	53.5	69.5	60.7	68.8
1983 1	63.2	60.1	67.6	65.6	66.4
2	65.6	63.4	65.8	69.7	67.9
3	68.6	66.7	66.3	71.3	68.7
4	72.4	78.0	70.2	71.3	70.9
1984 1	75.2	81.7	73.3	74.6	76.8
2	76.7	79.8	78.9	76.2	73.7
3	78.4	84.0	81.7	76.2	74.4
4	78.7	82.6	81.7	77.0	74.3
1985 1	79.4	81.9	83.7	77.0	76.3
2	81.1	84.2	81.8	83.6	76.9
3	83.6	90.0	80.1	86.9	76.8
4	82.8	88.1	80.2	86.1	72.6
1986 1	81.6	85.6	81.4	85.2	72.5
2	81.3	84.4	80.4	85.2	73.8
3	79.7	80.2	81.5	86.1	72.4
4	80.3	80.2	83.2	89.3	73.0
1987 1	81.0	78.9	82.2	96.7	69.1
2	82.4	76.1	85.8	95.9	69.7
3	84.1	76.6	85.8	96.7	71.6
4	87.7	81.5	89.8	100.0	72.8
1988 1	87.7	83.1	92.3	100.0	70.8
2	88.2	86.2	94.5	97.5	69.6
3	88.4	83.4	100.0	99.2	69.5
4	87.9	86.5	96.0	99.2	67.1

Table 5

CAPACITY UTILIZATION - CANADA
(Percent)

									1981-1988		1971-1980	
									Quarter			
	1981	1982	1983	1984	1985	1986	1987	1988	Avg.	Low	High	Average
Industrial	81.5	71.1	73.6	80.2	82.5	82.1	84.6	87.4	80.4	68.6	87.7	87.7
Mining	65.5	63.4	67.6	76.9	80.4	78.2	81.8	88.7	75.3	62.1	90.2	77.4
Manufacturing	85.5	72.3	74.5	81.2	83.4	83.6	86.0	88.3	81.9	68.9	88.8	89.8
Non-Durables	88.4	78.6	82.4	85.7	85.3	86.8	88.3	88.6	85.5	77.5	91.1	90.8
Food	92.0	89.9	86.4	88.9	91.0	92.2	91.4	90.4	90.3	85.3	93.5	95.3
Beverage	79.2	71.0	67.0	69.2	68.9	71.9	70.7	73.4	71.4	65.4	81.0	90.2
Tobacco	85.3	81.9	72.8	67.9	55.9	49.5	47.4	44.9	63.2	43.3	91.9	91.5
Rubber	76.0	65.4	75.3	93.4	93.4	85.4	81.3	80.0	81.3	62.6	100.0	86.4
Plastics	87.9	75.8	81.6	88.8	92.5	91.4	97.3	95.3	88.9	73.4	100.0	87.3
Leather	95.3	82.6	86.5	94.6	90.7	91.0	83.0	78.5	87.8	75.6	100.0	93.3
Prim. Textile	91.5	68.5	89.7	86.1	84.9	85.9	96.0	96.8	87.5	63.0	100.0	89.1
Textile Prod.	91.9	71.9	87.8	88.8	87.5	89.7	96.0	94.7	88.5	67.2	100.0	93.4
Clothing	92.8	82.6	82.2	88.4	90.3	95.4	98.2	97.5	90.9	79.7	100.0	94.2
Paper & Allied	86.4	73.7	82.7	85.5	84.0	89.8	94.2	96.3	86.6	71.6	97.4	85.8
Printing & Publ.	97.3	86.5	86.3	90.4	90.4	91.6	92.3	93.8	91.1	82.8	100.0	95.7
Refined Petrol & Coal	80.6	74.8	79.6	74.8	74.0	73.6	76.4	80.4	76.8	61.3	100.0	82.1
Chemicals & Chemical Products	82.4	70.2	78.8	82.6	79.9	77.5	78.0	77.7	78.4	68.0	85.5	88.5

Table 5 (cont'd)

CAPACITY UTILIZATION - CANADA
(Percent)

									1981-1988		1971-1980	
									Quarter			
	1981	1982	1983	1984	1985	1986	1987	1988	Avg.	Low	High	Average
Durables	82.9	66.6	67.4	77.2	81.7	80.7	84.0	88.0	78.6	61.2	88.4	89.0
Wood	82.7	63.8	75.8	82.0	89.1	87.0	96.2	92.5	83.7	62.9	100.0	89.7
Furniture & Fixtures	82.8	62.4	69.8	74.1	81.0	83.9	88.1	90.2	79.1	59.7	92.5	82.5
Primary Metals	77.9	57.4	64.0	76.8	80.1	78.0	83.3	87.2	75.6	50.4	89.1	86.3
Metal Fabrication	93.5	79.0	74.1	79.2	88.5	88.0	94.7	97.5	86.8	72.2	98.8	91.1
Machinery	87.7	62.8	53.4	62.5	62.1	63.0	64.1	68.5	65.5	51.0	93.2	91.2
Transportation Equipment	68.9	60.6	67.0	82.0	86.0	82.6	78.3	84.8	76.3	53.5	90.0	88.1
Electrical Products	92.4	75.3	67.5	78.9	81.4	81.6	85.9	95.9	82.4	65.8	100.0	88.2
Non-Metallic Minerals	82.2	62.7	69.5	76.0	83.4	86.4	97.3	99.0	82.1	59.8	100.0	91.6
Other Manufacturing	83.5	74.0	68.5	74.8	75.6	72.9	70.8	69.2	73.7	66.4	84.6	91.5
Utilities	84.7	77.6	79.1	79.2	80.5	79.0	79.9	78.3	79.8	74.7	85.9	93.3

DATE DUE - DATE DE RETOUR

ISTC 1551 (8/88)

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