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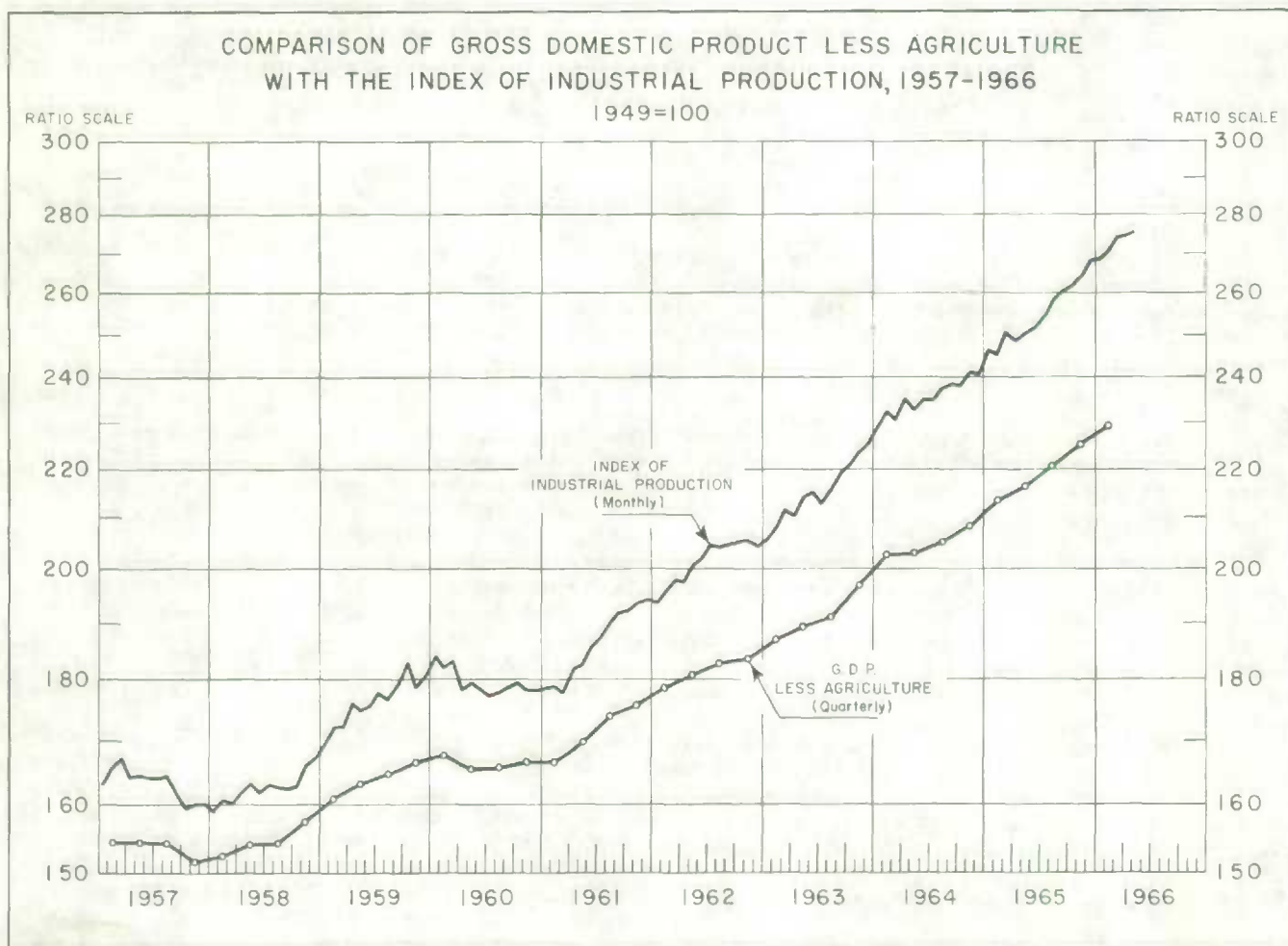
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INDEX OF INDUSTRIAL PRODUCTION (1949=100)

MAY 1966

The seasonally adjusted index of industrial production advanced by 0.4 per cent in May.



This issue contains indexes of non-agricultural real output for the latest available quarter (1st quarter 1966).

Industrial Output Section
National Accounts and Balance of Payments Division

August 1966
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DOMINION BUREAU
OF STATISTICS

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MAY INDEX OF INDUSTRIAL PRODUCTION

The seasonally adjusted Index of Industrial Production for May advanced by 0.4 % to 275.6 from the revised April figure of 274.5. Gains of better than 1 % in mining and of almost 5 % in electric power and gas utilities were partially offset by a small decline of 0.3 % in manufacturing. Within the latter, the drop was centred in durables (-0.7 %), as non-durables' output rose only marginally.

The two major groups responsible for bringing durable manufacturing lower in May were iron and steel products and transportation equipment; the former was largely due to a drop in primary iron and steel output, while in the latter, motor vehicle production declined for the third consecutive month, this time by almost 8 %. Elsewhere in durables, gains were recorded in electrical apparatus and supplies (+ 1 %), non-ferrous metal products (+ 2 %) and non-metallic mineral products (+ 4 %). Wood products showed little change in May.

In non-durable manufacturing, clothing, leather products and total foods and beverages were virtually unchanged, although there were some large but offsetting movements within the beverages component of the latter. Other declines occurred in chemicals (- 3 %), tobacco (- 4 %), rubber (- 6 %), and textile products (- 2 %), with the latter still affected by labour disturbances. The largest increases were in the newsprint - oriented groups as paper products moved higher by more than 3 % while printing and publishing gained almost 6 %.

Although metal mining stayed at about the same level in May as in April, there were some irregularly large movements within the group, as gold, copper and lead showed positive changes, with each of nickel and zinc lower by substantial amounts. The gain in total mining emanated solely from fuels, where all three components were strong.

In electric power and gas utilities, both components showed good gains.

SPECIAL NOTE

1. Users should note that all previously published figures for the Index of Industrial Production and its components have been revised, both on a seasonally unadjusted and adjusted basis, from January, 1949 to date. Tables and charts together with a fuller explanation of these changes can be found in the recently published "Annual Supplement to the Index of Industrial Production (1949=100)", DBS Catalogue No. 61-005. The revised data to the end of 1965 will be found there. Current issues of this report will provide the figures for 1966.

These changes in the post 1948 period stem from the incorporation of more recent census-based annual levels, the substitution of a few improved monthly projectors, the incorporation of revisions to the underlying data, the use of an improved method of adjusting monthly series to annual levels, and from the reseasonal adjustment of all components of the Index.

The quarterly and annual estimates of Real Domestic Product and its components usually shown in the monthly publication have also been revised through the incorporation of the revised data for the Index of Industrial Production and its components. It should be noted that only those industry groupings composed in whole or in part of the Index of Industrial Production are affected by the changes. These revised quarterly and annual estimates are shown to the end of 1965 in the above supplement and current data will be published in the April issue of the "Index of Industrial Production".

The present revisions retain the 1949 weight and reference base and constitute the first stage of a several-stage programme, which will extend over a number of years, and is aimed at improving the quality and general usefulness of the Real Domestic Product by industry of origin data, including the Index of Industrial Production. Previously, Census-based annual benchmarks had not been calculated for the Index of Industrial Production beyond the mid-1950's. A major objective of the present revision was to remedy this situation and comprehensive annual benchmarks were accordingly calculated for all industries for at least the year 1959 on a 1948 Standard Industrial Classification (S.I.C.) basis.

The next stage in this programme will consist of converting the entire Real Domestic Product system to the 1960 S.I.C. and to a 1961 weight and reference base. Thus, in regard to the Index of Industrial Production components it should be noted that all post-1959 indexes are subject to further revisions. In the industries outside the area of the Index of Industrial Production, benchmark levels will be updated to 1961. This includes the incorporation of the latest (1961) Decennial Census data and therefore the historical record from 1951 forward will be changed for such industries as agriculture and retail and wholesale trade.

2. The figures in tables 1 and 2 may not reconcile with those on the Index of Industrial Production in table 3 because of small revisions to March which have not been incorporated in the latter table.

TABLE 1. Seasonally Adjusted Index of Industrial Production
(1949=100)

Industry or industry group	1949 percentage weights	Seasonally adjusted					
		1965	1966				
			Dec.	Jan.	Feb.	Mar.	Apr.
INDEX OF INDUSTRIAL PRODUCTION	32.231	268.6	268.9	271.5	273.8	274.5	275.6
MINING	3.245	385.0	372.7	387.1	390.4	393.5	398.7
Metals	1.925	270.6	264.0	264.3	262.8	261.7	261.2
Gold	0.575	79.0	75.1	81.4	77.6	74.4	80.0
Copper	0.352	200.2	193.6	198.5	198.9	186.0	206.6
Iron ore	0.099	1,507.4	1,604.6	1,465.2	1,234.9	1,327.1	1,328.3
Nickel	0.333	212.2	207.9	193.1	217.9	203.3	182.4
Non-metals	0.268	410.3	413.0	417.4	433.1	409.6	409.9
Asbestos	0.189	281.5	290.7	294.7	319.0	292.9	293.3
Fuels	0.915	601.7	576.1	614.1	622.5	652.2	671.1
Coal	0.553	55.7	54.5	58.2	54.2	52.1	56.9
Natural gas	0.035	1,457.2	1,573.3	1,504.6	1,497.6	1,597.1	1,691.5
Petroleum	0.327	1,433.6	1,351.3	1,458.8	1,490.0	1,565.9	1,600.7
MANUFACTURING, TOTAL	27.340	242.5	243.3	244.6	246.8	247.7	247.1
NON-DURABLE MANUFACTURES	14.742	234.7	235.5	236.8	240.4	240.8	241.2
Foods and beverages	3.814	200.1	199.4	200.9	202.6	203.8	204.2
Foods	2.896	192.8	194.6	192.7	194.0	197.0	198.0
Meat products	0.523	189.0	183.6	185.9	198.8	190.2	196.2
Dairy products	0.450	200.6	200.2	202.7	202.6	196.6	195.5
Canning and processing	0.453	213.8	217.9	205.0	209.4	228.5	222.7
Grain mill products	0.322	205.6	212.5	207.6	195.7	208.1	203.0
Bakery products	0.558	151.3	150.4	152.6	154.8	154.6	154.7
Miscellaneous foods	0.590	206.5	214.2	211.4	207.6	212.9	220.5
Beverages	0.918	223.1	214.6	226.7	229.8	225.6	224.0
Carbonated beverages	0.231	199.7	187.9	225.6	200.6	209.4	217.8
Breweries	0.463	188.5	202.4	200.6	193.2	202.3	186.4
Distilleries	0.203	326.5	275.2	290.3	349.8	300.1	321.2
Tobacco and tobacco products ..	0.248	250.0	265.5	270.5	267.5	261.8	252.6
Rubber products	0.430	261.5	265.2	260.3	263.4	265.4	250.3
Leather products	0.508	138.5	135.2	135.1	137.2	138.0	138.7
Boots and shoes	0.307	139.3	134.2	131.9	134.0	136.9	138.7
Textiles	1.623	235.4	235.3	229.0	231.6	228.8	224.1
Cotton goods	0.507	161.3	162.3	147.8	148.2	128.0	121.7
Woollen goods	0.300	91.6	88.2	91.4	94.9	93.8	
Synthetic Textiles and Silk	0.429	424.4	427.9	412.9	419.2	433.7	421.9
Clothing	1.801	179.9	173.5	174.1	179.9	181.5	180.4
Paper products.....	2.649	204.6	212.5	217.5	217.9	214.7	222.1
Pulp and paper	2.108	197.8	206.9	213.7	213.9	208.6	216.2

TABLE 1. Seasonally Adjusted Index of Industrial Production - Concluded
(1949=100)

Industry or industry group	1949 percentage weights	Seasonally adjusted					
		1965	1966				
		Dec.	Jan.	Feb.	Mar.	Apr.	May
NON-DURABLE MANUFACTURES -							
Concluded:							
Printing,publishing and allied industries	1.273	238.0	236.8	234.2	243.4	234.2	247.1
Products of petroleum and coal	0.513	348.1	339.5	356.9	367.2	386.2	394.4
Petroleum products	0.454	378.0	368.1	387.2	399.5	420.7	
Chemicals and allied products	1.359	370.5	373.0	374.8	379.8	389.2	377.9
Acids, alkalies, salts and fertilizers	0.346	534.0	516.5	506.1	503.8	532.8	537.9
Miscellaneous manufactures	0.524	418.0	426.9	429.9	439.0	440.0	436.9
DURABLE MANUFACTURES	12.598	251.6	252.5	253.7	254.3	255.7	253.9
Wood products	2.108	196.0	186.6	184.2	188.4	191.5	191.8
Saw and planing mills	1.444	199.7	185.3	180.2	186.2	189.7	189.9
Veneers and plywoods	0.122	425.2	459.2	434.4	435.6	433.4	449.5
Sawmills	0.994	198.4	174.3	171.4	179.5	184.7	182.8
Furniture	0.460	226.4	229.9	234.8	234.5	237.2	238.8
Iron and steel products	4.026	250.1	257.4	258.0	256.2	257.5	253.5
Machinery	0.851	262.0	269.1	273.0	273.0	274.4	278.8
Iron castings	0.387	262.8	259.8	233.3	188.2	212.6	215.0
Primary iron and steel	0.845	324.5	335.2	341.6	349.1	342.3	325.0
Sheet metal products	0.359	280.1	286.4	293.2	296.1	294.3	294.0
Transportation equipment	2.651	271.4	273.0	278.5	275.8	273.4	263.6
Aircraft and parts	0.203	348.7	365.4	383.7	396.8	407.8	404.3
Motor vehicles	1.035	373.3	383.1	392.5	383.9	371.9	343.4
Motor vehicle parts	0.462	364.1	344.9	343.7	340.2	348.6	356.5
Railway rolling stock	0.621	62.9	62.7	62.9	61.6	61.8	63.9
Shipbuilding and repairs	0.261	169.3	167.1	172.2	178.9	178.9	173.7
Non-ferrous metal products	1.601	193.0	195.8	192.5	194.5	196.2	200.0
Brass and copper products ...	0.241	183.2	178.5	175.6	182.6	185.5	185.7
Smelting and refining	1.028	189.2	194.4	189.3	190.8	192.2	197.5
Electrical apparatus and supplies	1.418	342.0	333.0	340.2	341.1	355.8	358.4
Heavy electrical machinery ..	0.489	255.4	260.4	266.4	265.3	266.4	273.3
Telecommunication equipment	0.142	1,006.4	814.0	839.1	871.5	965.1	964.5
Refrigerators and appliances	0.227	313.3	347.5	345.1	332.2	355.7	351.8
Non-metallic mineral products	0.794	298.3	304.2	302.5	314.6	299.6	310.9
Concrete products	0.098	905.3	912.2	977.0	987.4	878.0	915.6
Hydraulic cement	0.117	306.1	323.1	323.8	389.5	337.4	313.7
Domestic clay products	0.083	153.9	163.4	152.9	145.6	141.5	225.4
ELECTRIC POWER AND GAS UTILITIES	1.646	471.6	488.9	490.7	492.3	485.5	507.6
Electric power	1.480	429.4	452.4	449.2	455.6	448.4	465.3
Gas	0.166	847.4	813.9	860.5	819.6	816.3	885.0

TABLE 2. Index of Industrial Production, without Seasonal Adjustment
(1949=100)

Industry or industry group	Annual averages		Without seasonal adjustment					
			1965			1966		
	1964	1965	Mar.	Apr.	May	Mar.	Apr.	May
INDEX OF INDUSTRIAL PRODUCTION	235.3	254.9	250.7	247.8	253.6	274.0	274.7	277.8
MINING	346.4	365.6	351.8	344.4	354.5	378.1	386.8	399.6
Metals	245.7	249.5	236.8	236.4	258.3	244.7	257.5	276.6
Gold	85.9	80.6	79.7	87.5	79.6	75.8	78.5	79.5
Copper	187.8	195.6	185.5	189.7	212.9	191.3	178.6	203.5
Iron ore	1,185.3	1,236.8	921.7	1,045.1	1,371.9	938.5	1,142.6	1,594.0
Nickel	181.0	209.9	219.2	221.0	215.9	223.6	216.7	193.7
Non-metals	312.8	377.2	343.1	360.0	370.8	413.4	410.9	422.6
Asbestos	259.9	269.4	269.4	281.3	268.6	314.9	305.8	297.1
Fuels	557.7	592.8	604.5	565.1	530.8	652.2	651.3	630.5
Coal	55.1	56.3	62.2	55.6	49.4	56.5	49.5	50.9
Natural gas	1,382.3	1,476.4	1,619.1	1,476.5	1,391.4	1,651.9	1,614.7	1,590.0
Petroleum	1,319.2	1,405.5	1,413.2	1,329.2	1,252.9	1,552.6	1,565.9	1,507.9
MANUFACTURING, TOTAL	211.9	230.1	225.0	223.6	232.2	245.7	247.2	251.3
NON-DURABLE MANUFACTURES	211.2	224.1	215.6	214.5	223.2	236.8	237.4	241.7
Foods and beverages	185.6	193.1	169.6	173.4	188.0	180.2	186.9	200.9
Foods	180.6	187.4	165.3	168.2	180.8	172.4	177.1	190.0
Meat products	182.6	192.3	188.4	187.4	186.4	194.8	190.6	191.3
Dairy products	189.6	196.0	178.2	190.4	215.0	186.2	193.1	218.0
Canning and processing	190.0	197.2	112.7	118.8	165.7	118.1	135.0	180.8
Grain mill products	184.1	189.3	183.2	179.6	180.7	201.2	201.9	196.2
Bakery products	151.3	151.7	144.5	144.8	149.0	146.7	147.3	151.5
Miscellaneous foods	190.6	201.9	185.2	188.2	191.5	192.2	200.0	207.5
Beverages	201.3	211.0	183.4	189.5	210.8	204.7	217.7	235.3
Carbonated beverages	181.0	186.2	143.1	155.9	199.1	155.1	190.1	229.1
Breweries	185.7	191.1	192.8	195.4	225.7	193.2	213.4	214.9
Distilleries	262.1	284.8	212.7	219.8	196.1	293.8	267.1	298.1
Tobacco and tobacco products	232.1	243.4	243.7	236.9	255.6	272.9	258.7	263.2
Rubber products	232.8	237.4	236.0	232.6	256.1	272.6	275.0	256.8
Leather products	137.3	135.2	147.4	138.1	130.4	149.2	141.8	136.3
Boots and shoes	136.9	134.3	153.2	140.7	128.8	153.7	145.2	136.9
Textiles	203.3	220.6	215.4	208.2	223.4	239.0	233.4	228.0
Cotton goods	141.2	149.7	161.2	137.1	150.3	155.6	134.9	122.9
Woollen goods	91.2	89.6	85.7	78.2	91.7	91.0	92.4	
Synthetic textiles and silk	338.4	391.3	367.6	369.8	401.1	444.4	444.5	432.9
Clothing	163.4	171.2	173.8	166.4	165.0	184.0	179.9	176.8
Paper products	186.3	198.3	197.6	192.7	197.8	219.1	213.9	221.5
Pulp and paper	182.0	192.8	195.7	188.4	193.7	217.1	209.0	216.2

TABLE 2. Index of Industrial Production, without Seasonal Adjustment - Concluded
(1949=100)

Industry or industry group	Annual averages		Without seasonal adjustment					
			1965			1966		
	1964	1965	Mar.	Apr.	May	Mar.	Apr.	May
NON-DURABLE MANUFACTURES -								
Concluded:								
Printing, publishing and allied industries	207.4	223.3	217.8	229.5	230.9	243.7	246.4	261.0
Products of petroleum and coal	330.1	345.9	336.8	308.2	328.4	362.7	353.9	367.8
Petroleum products	357.9	375.5	365.1	332.7	355.2	394.3	384.1	
Chemicals and allied products	312.7	344.7	335.9	346.0	355.7	385.6	401.2	392.1
Acids, alkalies, salts and fertilizers	416.5	469.0	463.2	469.2	477.3	531.0	560.0	560.0
Miscellaneous manufactures	386.5	407.3	385.6	389.3	390.8	424.5	425.0	424.2
DURABLE MANUFACTURES	212.7	237.2	236.0	234.3	242.6	256.3	258.7	262.6
Wood products	174.3	181.7	183.7	171.1	176.9	195.2	183.9	189.6
Saw and planing mills	180.0	182.8	189.3	169.5	177.7	198.7	181.0	187.9
Veneers and plywoods	397.7	403.8	420.0	412.2	375.9	466.1	455.9	436.0
Sawmills	172.8	177.1	186.8	159.9	175.7	195.5	171.8	183.9
Furniture	192.6	216.3	206.7	209.8	210.8	227.7	230.6	235.0
Iron and steel products	215.2	239.1	230.8	234.3	243.0	253.7	257.6	261.3
Machinery	213.1	248.1	233.7	238.0	240.7	267.8	271.1	276.3
Iron castings	199.3	218.9	234.2	225.2	229.7	200.2	225.4	238.6
Primary iron and steel	291.2	320.0	310.6	322.0	342.7	346.3	349.1	348.1
Sheet metal products	248.1	274.2	249.6	262.1	274.0	279.2	284.9	293.7
Transportation equipment	210.5	250.0	277.2	271.8	280.0	302.3	306.2	297.8
Aircraft and parts	336.3	319.3	334.4	299.4	289.0	400.4	399.6	400.3
Motor vehicles	274.2	347.6	417.2	406.2	427.9	445.7	450.0	422.0
Motor vehicle parts	262.2	317.2	312.3	314.3	320.6	353.8	362.2	374.3
Railway rolling stock	58.9	62.6	61.7	62.9	61.7	60.9	61.4	63.0
Shipbuilding and repairs	148.7	161.9	163.6	170.7	168.2	179.3	185.0	182.0
Non-ferrous metal products	174.2	186.9	187.9	188.3	183.7	197.6	200.4	200.1
Brass and copper products ...	155.6	162.7	163.1	159.9	148.4	186.3	184.4	183.7
Smelting and refining	176.5	188.9	194.9	195.0	189.8	196.3	200.1	198.9
Electrical apparatus and supplies	279.1	319.2	307.3	305.1	310.3	334.6	348.1	349.0
Heavy electrical machinery ..	213.0	241.6	228.8	234.3	237.7	260.8	264.0	272.2
Telecommunication equipment	744.5	895.1	838.0	792.4	812.0	828.8	897.5	877.7
Refrigerators and appliances	274.9	301.9	316.6	309.9	323.6	341.2	368.1	362.4
Non-metallic mineral products	268.2	286.9	232.9	242.7	287.9	256.1	261.6	316.4
Concrete products	814.1	858.0	612.0	692.7	895.0	710.9	727.0	961.4
Hydraulic cement	277.5	298.8	220.2	250.0	336.3	271.9	283.4	354.8
Domestic clay products	138.3	142.8	119.6	136.7	146.8	123.2	137.8	241.0
ELECTRIC POWER AND GAS UTILITIES	405.7	448.3	478.9	459.7	411.4	537.9	510.4	478.7
Electric power	371.5	408.8	417.6	399.7	382.9	477.5	452.9	447.6
Gas	711.0	800.6	1,025.1	994.8	665.5	1,076.2	1,022.8	755.8

Real Domestic Product less Agriculture

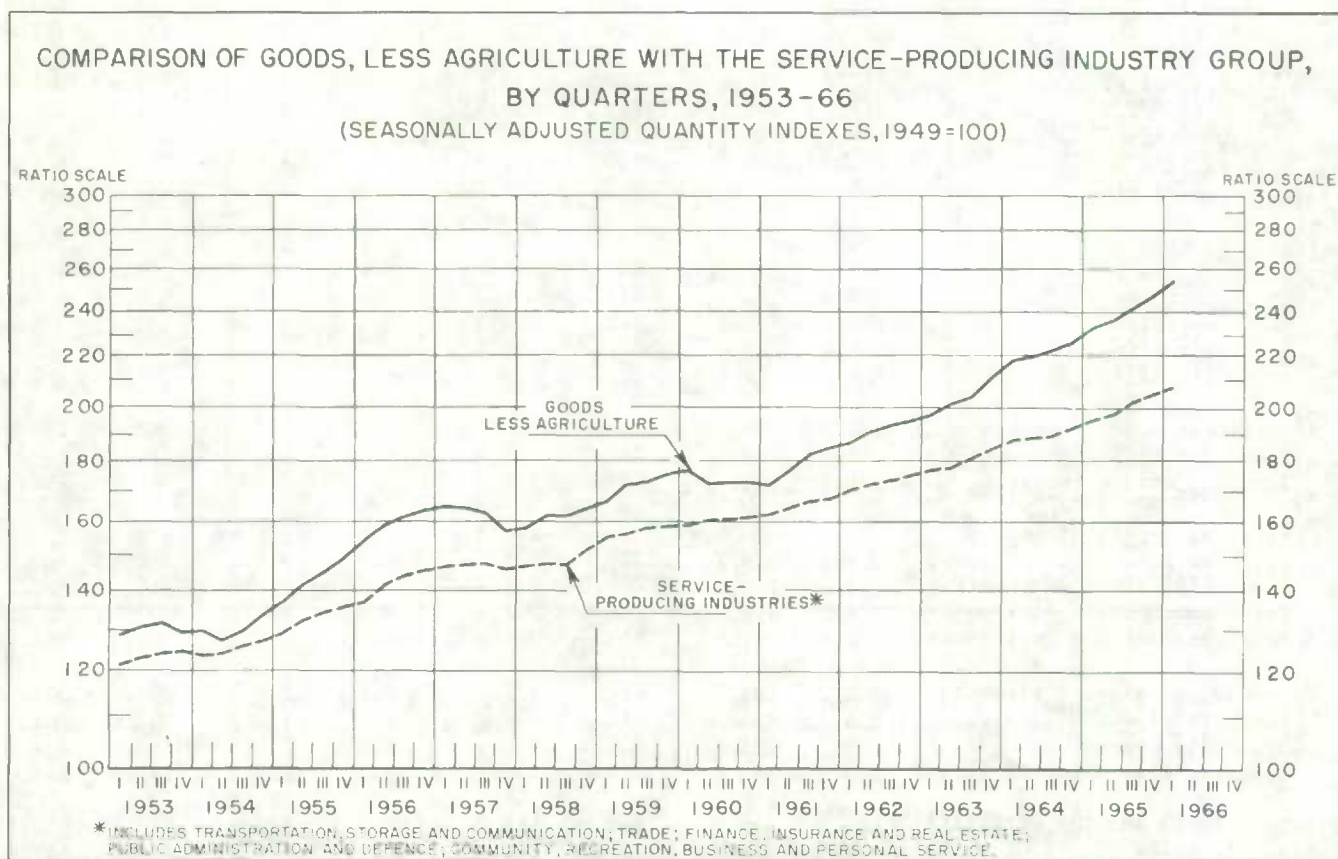
Note to Users

The indexes of real domestic product at factor cost (the sum of the unduplicated output of all industries located in Canada) are an extension of the "Index of Industrial Production" to cover the whole range of domestic industries. In addition to mining, manufacturing and electric power and gas utilities, total domestic product includes the following industry groups: agriculture; forestry; fishing and trapping; construction; transportation, storage and communication; trade; finance, insurance and real estate; public administration and defence; and community, recreation, business and personal service.

The real domestic product indexes are also an elaboration of the supply side of the National Accounts. Total domestic product differs conceptually from constant dollar expenditure on Gross National Product by (1) the inclusion of income paid to non-residents (2) the exclusion of income received from non-residents, and (3) the exclusion of "indirect taxes less subsidies". In addition, of course, statistical differences may exist between these two measures of aggregate production.

The real output indexes in Table 3 serve to bring up to date the historical record of production in Canada published in the 1966 Annual Supplement to the Index of Industrial Production publication. For a detailed description of concepts and methods used as well as other relevant material, see D.B.S. Occasional Paper 61-505, "Indexes of Real Domestic Product by Industry of Origin, 1935-61".

Quarterly indexes for agriculture and for aggregate domestic production will not be available, except on a once-a-year basis; they will appear in the annual supplement to this report each spring.



REAL DOMESTIC PRODUCT LESS AGRICULTURE, FIRST QUARTER, 1966

At an index level of 229.9(1) for the first quarter of 1966, seasonally adjusted Real Domestic Product, less agriculture, was 2 per cent higher than in the preceding quarter.

Table(A) shows the percentage increases of the major industry groupings and their contributions, over the past four quarters, to the 37.9 per cent advance in non-agricultural real output from the first quarter, 1961, cyclical low. During the 1957-60 and the 1954-56 expansions, non-agricultural real output had increased by 10.5 per cent and 23.1 per cent, respectively, as measured from the trough to the peak of the cycle in aggregate production (see Table B). The current expansion has been of considerably longer duration than the preceding two, having now lasted for five years. Thus the rate of expansion has been lower than during the 1954-56 upturn. When measured from peak to peak the gain achieved so far during the current cycle was 37.1 per cent, which is almost twice the increase over the 1953-56 cycle. This yields a rate of increase over the cycle as a whole only marginally lower than that for the 1953-56 cycle.

TABLE A

	IQ'61 - IIQ'65		IQ'61 - IIIQ'65		IQ'61 - IVQ'65		IQ'61 - IQ'66	
	% △	Effect on GDP less Agri- culture	% △	Effect on GDP less Agri- culture	% △	Effect on GDP less Agri- culture	% △	Effect on GDP less Agri- culture
Gross domestic product								
less agriculture	29.8	29.8	32.4	32.4	35.2	35.2	37.9	37.9
Forestry	35.0	.6	20.2	.4	22.0	.4	30.2	.6
Fishing and trapping ..	- 17.5	- .1	- 17.7	- .1	- 12.9	- .1	- 15.6	- .1
Mining	32.0	1.9	38.4	2.3	39.2	2.3	42.3	2.5
Manufacturing	41.5	12.2	45.3	13.3	49.3	14.5	53.0	15.6
Non-durable	31.3	5.2	34.8	5.8	37.9	6.3	41.5	6.9
Durable	54.7	7.0	58.9	7.5	64.2	8.2	67.9	8.7
Construction	31.0	2.1	33.7	2.3	38.5	2.6	42.8	2.9
Electric power and gas								
utilities	43.3	1.5	47.3	1.6	55.5	1.9	61.1	2.0
Other goods, n.e.c. ...	14.5	.1	14.9	.2	15.2	.2	15.6	.2
Transportation, storage								
and communication ...	31.2	3.0	34.8	3.3	37.9	3.6	39.6	3.8
Transportation	33.3	2.3	37.4	2.6	40.4	2.8	42.9	3.0
Trade	26.2	4.0	28.7	4.3	31.4	4.8	33.7	5.1
Wholesale	38.0	2.0	41.0	2.1	45.2	2.3	43.4	2.3
Retail	20.0	2.0	22.3	2.2	24.3	2.4	28.6	2.8
Finance, insurance and								
real estate	22.1	2.4	23.3	2.5	23.8	2.5	26.2	2.8
Public administration								
and defence	4.1	.2	4.4	.3	5.1	.3	4.1	.2
Community, recreation,								
business and personal								
service	19.5	2.0	20.8	2.1	22.2	2.3	23.6	2.4

Note: The columns may not add to the total due to rounding.

The goods-producing industry group (less agriculture) advanced by 2.7 per cent in the first quarter and accounted for about 70 per cent of the gain in non-agricultural real output. The service-producing industry group showed a more moderate increase of 1.3 per cent.

Manufacturing was the largest single contributor to the first quarter gain in non-agricultural real output, accounting for almost 40 per cent of this increase. The next largest contributors were trade, construction and the finance, insurance and real estate group, which jointly accounted for

(1) See special note on page 2.

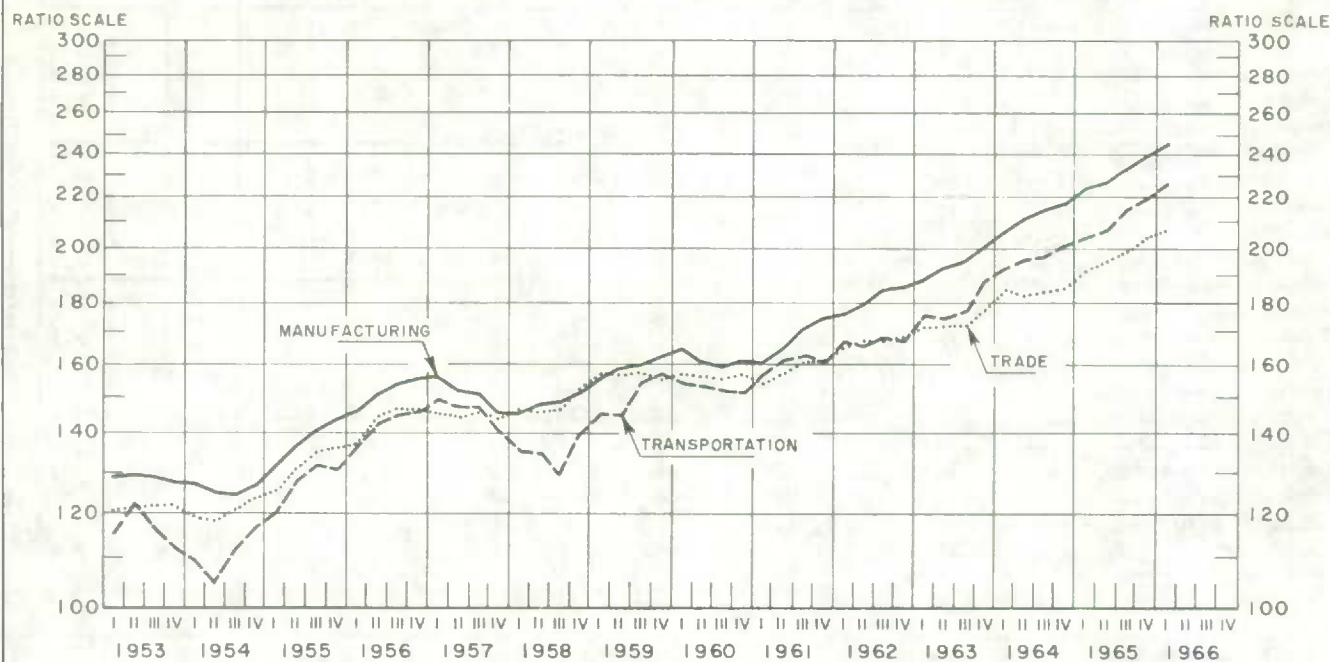
another 32 per cent of the gain in real domestic product, less agriculture. Most of the other major industry groupings also showed advances in output from their fourth quarter levels, the exceptions being public administration and defence and fishing and trapping.

Manufacturing advanced by 2.5 per cent in the first quarter, with the non-durable manufacturing component accounting for over one-half of this gain. Within non-durables, which increased by 2.6 per cent, most major groups showed increases in the first quarter, ranging from one per cent in textiles to almost 8 per cent in tobacco products. The 6.6 per cent gain in paper products and the 3 per cent advance in the output of chemicals accounted for about 55 per cent of the first quarter gain in non-durables. Paper products advanced largely as a result of the sharp increase in pulp and paper production. The food products group, rubber products and petroleum products showed increases in excess of 2 per cent. The only two industry groups to show a decline were leather products and clothing, both of which declined by about one per cent.

Within durable manufacturing, which was up by 2.3 per cent, over three-quarters of the increase came from iron and steel products and transportation equipment which increased by 3.9 and 2.4 per cent, respectively. Primary iron and steel and the machinery and machine shops group were the largest contributors to the first quarter gain. The 2.7 per cent increase in motor vehicle output and the sharp gain in aircraft and parts production accounted for most of the advance in the output of the transportation equipment group. Non-metallic mineral products increased by 4.6 per cent, because of strong gains in the output of cement and concrete products. Electrical apparatus and supplies and non-ferrous metal products showed increases of 2.3 and 0.7 per cent in the first quarter, the latter largely as a result of a small increase in smelting and refining. The only major industry group to decline was wood products, down 2 per cent, because of a sharp drop in the output of sawmills.

COMPARISON OF MANUFACTURING WITH TRADE AND TRANSPORTATION, BY QUARTERS, 1953-66

(SEASONALLY ADJUSTED QUANTITY INDEXES, 1949=100)



The next largest contributions to the first quarter gain in non-agricultural real output came from trade, which was up by 1.7 per cent, construction, up by 3.1 per cent, and finance, insurance and real estate which increased by 1.9 per cent. Within trade, the retail component showed a gain of 3.5 per cent, while wholesale trade declined moderately. Department stores, furniture and appliance stores, lumber and building material dealers, farm implement dealers and farm feed stores were among the retail trades to show large gains. Sales of motor vehicle dealers showed little change from the levels achieved in the previous quarter, although sales for the month of March were quite high. Among the components of wholesale trade to show strong gains in the first quarter were farm machinery, construction material and supply dealers, hardware dealers, wholesalers of meat and dairy products and

clothing products. Sales of commercial, institutional and service equipment and industrial and transportation equipment and supplies also increased sharply. These gains, however, were more than offset by declines in many of the other components of wholesale trade.

First quarter gains among other major industry groupings ranged from about one to about 7 per cent. Transportation, storage and communication showed an increase of 1.3 per cent, with most of the gain coming from the transportation industries. Storage declined by 4 per cent. Within transportation, which advanced by 1.8 per cent, the strong gains in railway and water transport were considerably dampened by the decline in the output of the strike-affected trucking industry. Mining increased by 2.2 per cent in the first quarter, largely as a result of the 3 per cent advance in metal mining. Within metal mining gains were widespread, with zinc, lead and copper production showing the largest gains. Non-metal mining was up by 4.9 per cent. The community, recreation, business and personal services group advanced by 1.2 per cent, with the business service component accounting for most of this gain. Electric power and gas utilities and forestry increased by 3.6 and 6.7 per cent, respectively, the latter largely as a result of strong increases in pulp-wood production.

TABLE B

	Per cent changes in major industry groupings over recent cycles in production					
	Peak to peak			Trough to peak		
	3Q'53 - 4Q'56	4Q'56 - 1Q'60	1Q'60 - 1Q'66(1)	2Q'54 - 4Q'56	4Q'57 - 1Q'60	1Q'61 - 1Q'66(1)
Real domestic product less						
agriculture	21.4	9.0	37.1	23.1	10.5	37.9
Forestry	19.0	1.3	16.2	17.9	33.7	30.2
Fishing and trapping	1.8	- 18.4	38.3	3.9	- 7.4	- 15.6
Mining	55.5	24.7	34.9	48.6	16.2	42.3
Manufacturing	20.1	6.1	48.9	24.4	12.8	53.0
Non-durable	19.3	12.9	42.4	19.4	14.6	41.5
Durable	21.1	- 1.2	56.8	30.1	10.9	67.9
Construction	27.8	- 0.9	34.7	34.0	- 3.9	42.8
Electric power and gas						
utilities	44.4	38.1	66.9	33.9	28.9	61.1
Other goods industries, n.e.c.	9.7	- 4.1	15.5	21.2	1.5	15.6
Transportation, storage and						
communication	26.4	7.9	42.8	34.6	9.7	39.6
Transportation	25.7	4.7	45.4	40.1	9.0	42.9
Trade	20.7	6.9	31.7	24.5	9.7	33.7
Wholesale	20.8	11.0	33.5	31.9	16.8	43.4
Retail	20.6	4.7	30.7	20.8	6.1	28.6
Finance, insurance and real						
estate	16.9	15.5	30.6	12.0	9.6	26.2
Public administration and						
defence	10.4	9.1	8.9	7.0	5.1	4.1
Community, recreation, business						
and personal service	12.0	12.2	26.4	10.6	11.1	23.6

(1) At the end of the first quarter of 1966, production was still expanding.

TABLE 3. Indexes of Real Domestic Product, less Agriculture
1949=100

[illegible]

TABLE 3. Indexes of Real Domestic Product, less Agriculture - Continued
1949=100

	Manufacturing							
	Non-durable manufacturing							
	Foods and beverages	Tobacco and tobacco products	Rubber products	Leather products	Textiles	Clothing	Paper products	Printing, publishing and allied industries
1949 Weights ...	3.814	0.248	0.430	0.508	1.623	1.801	2.649	1.273
	Seasonally adjusted							
1963 - 1	169.8	232.7	205.2	131.9	177.0	146.1	163.0	190.7
2	171.3	228.5	206.1	131.4	182.8	149.5	168.7	193.0
3	172.7	218.1	206.3	130.2	187.6	151.4	172.0	198.7
4	175.6	221.5	212.3	134.4	196.4	154.3	176.4	198.7
1964 - 1	182.3	214.0	225.7	135.3	197.5	159.9	182.2	202.6
2	184.2	230.2	234.6	138.3	204.3	163.0	184.1	214.1
3	184.7	240.2	229.0	138.7	205.0	164.3	187.4	201.7
4	190.9	241.1	235.3	137.1	206.4	166.8	192.0	209.8
1965 - 1	192.4	241.3	230.2	135.5	211.1	167.0	194.5	216.8
2	189.6	240.8	227.4	132.9	213.5	168.9	196.1	219.2
3	195.2	238.9	234.9	134.9	228.3	172.1	199.9	223.4
4	197.6	248.1	253.3	137.5	229.3	177.2	202.7	233.9
1966 - 1	201.2	267.8	263.0	136.0	232.0	175.4	216.0	237.9
2								
3								
4								
	Without seasonal adjustment							
1963	172.2	225.3	207.4	132.1	186.0	150.3	170.1	195.2
1964	185.6	232.1	232.8	137.3	203.3	163.4	186.3	207.4
1965	193.1	243.4	237.4	135.2	220.6	171.2	198.3	223.3
1966								
1963 - 1	145.6	231.2	209.5	141.1	181.3	150.6	158.3	187.8
2	170.9	243.5	218.6	132.5	187.9	146.8	170.2	197.9
3	191.9	204.9	183.6	121.4	173.9	155.2	173.0	191.5
4	180.2	221.7	217.9	133.5	200.7	148.6	178.8	203.8
1964 - 1	158.5	212.1	235.0	144.7	201.8	164.7	176.8	198.8
2	183.3	245.7	250.9	139.1	210.1	160.2	185.2	221.4
3	205.0	228.9	203.1	128.8	189.6	167.7	188.2	194.4
4	195.6	241.7	242.2	136.6	211.5	161.0	194.9	215.2
1965 - 1	166.5	239.3	238.9	144.5	216.1	171.9	189.7	212.3
2	188.1	257.3	243.0	133.4	220.1	165.9	196.8	227.6
3	214.8	228.2	206.3	126.0	211.4	175.2	200.6	213.7
4	203.0	248.9	261.4	137.0	234.9	171.9	206.2	239.7
1966 - 1	176.0	267.8	276.4	145.0	239.0	180.3	210.1	233.2
2								
3								
4								

TABLE 3. Indexes of Real Domestic Product, less Agriculture - Continued
1949=100

	Manufacturing							
	Non-durable manufacturing			Durable manufacturing				
	Products of petroleum and coal	Chemicals and allied products	Miscellaneous manufacturing	Total	Wood products	Iron and steel products	Transportation equipment	Non-ferrous metal products
1949 Weights	0.513	1.359	0.524	12.598	2.108	4.026	2.651	1.601
Seasonally adjusted								
1963 - 1	307.7	273.4	333.5	186.7	163.2	186.9	179.9	157.1
2	310.9	280.6	352.4	190.2	166.4	189.7	182.6	158.3
3	325.8	286.5	359.8	192.7	167.5	190.4	186.2	161.7
4	327.6	290.2	364.9	201.2	171.7	197.0	211.1	162.0
1964 - 1	327.3	306.7	376.5	209.0	175.8	206.7	218.1	168.4
2	329.8	303.6	383.8	211.2	171.4	212.2	215.0	173.9
3	327.7	313.4	391.0	217.4	174.4	216.0	229.5	174.0
4	335.3	328.7	393.9	215.6	175.9	226.5	191.2	180.3
1965 - 1	342.1	326.5	397.0	228.0	177.0	229.6	234.3	182.4
2	344.8	339.9	403.7	233.7	180.1	236.0	243.3	183.8
3	350.6	346.9	411.7	240.1	180.0	243.5	256.2	188.1
4	345.7	364.7	415.9	248.1	190.6	247.6	269.8	192.8
1966 - 1	354.5	375.7	430.8	253.7	186.7	257.2	276.2	194.2
2								
3								
4								
Without seasonal adjustment								
1963	318.0	282.5	353.0	192.9	167.3	191.0	190.2	159.8
1964	330.1	312.7	386.5	212.7	174.3	215.2	210.5	174.2
1965	345.9	344.7	407.3	237.2	181.7	239.1	250.0	186.9
1966								
1963 - 1	312.0	273.8	322.1	183.9	163.8	180.9	190.8	156.9
2	297.1	292.5	344.7	198.3	167.5	196.2	211.3	159.6
3	332.5	277.0	365.8	185.8	176.2	191.6	138.2	158.7
4	330.5	286.8	379.4	203.5	161.6	195.5	220.7	164.0
1964 - 1	333.3	305.9	363.3	206.7	177.1	199.9	233.6	168.3
2	314.0	314.9	375.2	220.1	171.3	219.6	248.1	175.5
3	333.9	304.5	398.8	206.0	182.5	216.1	161.9	170.2
4	339.1	325.4	408.7	217.9	166.4	225.1	198.2	182.7
1965 - 1	349.4	326.1	382.6	226.2	178.5	222.3	254.7	182.5
2	327.5	352.2	394.6	243.2	179.9	244.0	278.7	185.7
3	356.3	336.0	420.7	227.4	187.9	243.3	184.3	183.5
4	350.2	364.5	431.3	251.9	180.6	246.6	282.3	195.8
1966 - 1	362.4	376.0	414.8	252.2	188.6	249.0	300.6	194.9
2								
3								
4								

TABLE 3. Indexes of Real Domestic Product, less Agriculture - Continued
1949=100

[illegible]

TABLE 3. Indexes of Real Domestic Product, less Agriculture - Concluded
1949=100

	Trade	Finance, in- surance and real estate	Public adminis- tration and defence	Com- munity, recre- ation, business and personal service	Special Industry Indexes				
	Retail				Goods less agri- culture	Service- pro- ducing indus- tries(2)	Commercial indus- tries, less agri- culture	Non- com- mercial indus- tries(3)	Index of In- dustrial Pro- duction
1949 Weight	9.567	9.127	4.666	10.202	42.366	46.920	81.015	8.271	32.231
Seasonally adjusted									
1963 - 1	165.4	190.1	186.6	162.7	197.4	177.6	186.9	187.5	208.5
2	166.7	192.9	187.7	164.4	201.0	178.6	189.2	189.4	213.2
3	168.2	195.9	189.2	165.6	203.0	180.1	191.0	191.2	216.2
4	173.3	198.9	189.2	167.0	210.7	184.7	197.5	192.3	223.4
1964 - 1	176.7	200.6	190.3	168.4	218.8	188.3	203.7	193.9	230.8
2	174.8	201.6	190.0	170.2	219.0	188.8	204.0	194.9	234.4
3	177.8	203.7	189.3	171.9	222.0	190.4	206.4	195.5	237.0
4	179.2	206.4	189.5	173.3	226.3	192.4	209.7	196.1	240.0
1965 - 1	180.6	208.1	190.4	175.0	233.2	195.5	215.0	197.1	247.5
2	186.0	211.4	189.9	178.0	236.0	198.7	218.3	197.7	250.2
3	189.6	213.4	190.6	180.0	241.4	201.9	222.9	199.1	257.8
4	192.6	214.3	191.8	182.1	248.1	204.9	227.9	200.5	264.7
1966 - 1	199.3	218.4	189.9	184.2	254.7	207.5	232.9	200.9	271.5
2									
3									
4									
Without seasonal adjustment									
1963	168.8	194.5	188.1	165.0	202.9	180.4	191.3	188.7	215.3
1964	176.8	203.0	189.8	171.0	221.4	189.9	205.8	195.1	235.3
1965	187.5	211.9	190.7	178.8	238.8	200.5	220.7	198.6	254.9
1966									
1963 - 1	143.6	186.5	181.0	158.3	184.6	167.6	175.0	182.8	206.5
2	171.4	194.4	188.0	164.4	203.5	181.8	192.5	188.3	216.6
3	164.5	199.3	196.0	170.0	208.7	182.9	195.3	193.9	212.5
4	195.6	197.7	187.5	167.1	214.9	189.1	202.6	189.7	225.8
1964 - 1	153.1	196.9	183.8	164.1	205.3	178.2	191.2	189.8	228.9
2	179.1	202.8	190.3	170.3	221.9	191.8	207.2	195.2	238.2
3	172.5	206.9	197.1	176.3	226.7	192.5	209.6	200.2	231.3
4	202.5	205.2	187.9	173.5	231.5	197.1	215.3	195.1	243.0
1965 - 1	157.2	204.4	183.7	170.5	220.2	185.7	203.0	192.9	245.9
2	190.6	212.5	190.6	178.1	237.2	202.3	221.0	198.3	254.0
3	183.8	216.7	198.6	184.5	244.0	203.7	224.8	204.0	250.7
4	218.2	214.0	189.8	182.1	253.7	210.1	234.0	199.2	268.9
1966 - 1	172.8	214.5	183.6	179.3	241.8	196.6	220.2	196.8	270.1
2									
3									
4									

(2) Includes transportation, storage and communication; trade; finance, insurance and real estate; public administration and defence; community, recreation, business and personal service.

(3) Includes public administration and defence; hospitals; education; welfare, religion and other community service, n.e.c. and domestic service.



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Least Squares of Logarithms Growth Rates, 1946-65

	Annual growth rate %		Annual growth rate %
Index of Industrial Production	5.61	Durable manufactures - Concluded	
Mining	9.10	Iron and steel products	4.77
Metals	7.17	Machinery	4.42
Gold	N.A.	Iron castings	4.35
Copper	4.98	Primary iron and steel	6.79
Iron ore	N.A.	Sheet metal products	5.92
Nickel	4.58	Transportation equipment	4.10
Non-metals	5.97	Aircraft and parts	7.42
Asbestos	4.66	Motor vehicles	6.21
Fuels	12.60	Motor vehicle parts	5.36
Coal	- 3.98	Railway rolling stock	- 3.26
Natural gas	17.88	Shipbuilding and repairs	0.32
Petroleum	21.37	Non-ferrous metal products	3.83
		Brass and copper products	2.27
Manufacturing	4.78	Smelting and refining	4.15
		Electrical apparatus and supplies	7.02
Non-durable manufactures	4.82	Heavy electrical machinery	4.92
Foods and beverages	3.88	Telecommunication equipment	13.11
Foods	3.55	Refrigerators and appliances	8.89
Meat products	3.06	Non-metallic mineral products	6.91
Dairy products	4.64	Concrete products	15.76
Canning and processing	3.54	Hydraulic cement	7.80
Grain mill products	2.83	Domestic clay products	2.38
Bakery products	2.49		
Miscellaneous foods	4.61	Electric power and gas utilities	9.58
Beverages	4.95	Electric power	9.04
Carbonated beverages	5.62	Gas utilities	13.19
Breweries	4.35	Agriculture	1.54
Distilleries	5.64	Forestry	1.68
Tobacco and tobacco products	6.11	Fishing and trapping	1.75
Rubber products	4.22	Construction	5.10
Leather products	1.63	Transportation, storage and communication	4.64
Boots and shoes	1.97	Transportation	4.06
Textiles	4.22	Storage	5.66
Cotton goods	1.71	Trade	4.05
Wool goods	- 1.14	Wholesale	4.44
Synthetic textiles and silk	8.19	Retail	3.84
Clothing	2.98		
Paper products	4.12	Finance, insurance and real estate	4.96
Pulp and paper	3.95	Public administration and defence	3.96
Printing and publishing and allied		Community, recreation, business and	
industries	5.33	personal service	3.64
Products of petroleum and coal	8.60	Goods	4.56
Petroleum products	9.22	Goods less agriculture	5.25
Chemicals and allied products	7.64	Service-producing industries	4.24
Acids, alkalies, salts and		Real Domestic Product, less agriculture	4.73
fertilizers	9.81	Real Domestic Product	4.41
Miscellaneous manufactures	9.07		
Durable manufactures	4.73		
Wood products	3.42		
Saw and planing mills	3.55		
Veneers and plywoods	8.40		
Saw mills	3.08		
Furniture	4.32		