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The seasonally adjusted index of industrial production advanced by ${ }^{2}{ }^{5}$ ofer THE cent in November.
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NOTE: This issue includes indexes of non-agricultural real output for the latest avallable quarter (3rd qtr. 1964).

Industrial Output Section
National Accounts and Balance of Payments Division
January 1965
2205-502

The seasonally adjusted index of industrial production in November advanced by $2.5 \%$, recording its largest monthly gain in 1964. This left the index at the record level of 219.6 in the month, exceeding the previous peak in April, 1964 by $2.3 \%$.

In November, the bulk of the gain in the total index originated in manufacturing, where output was up by $2.7 \%$, although the gain in mining of $4.5 \%$ also contributed heavily. These gains were offset to a very small extent by a $1.9 \%$ drop in electric power and gas utilities.

A gain of $3.7 \%$ in durables accounted for almost two-thirds of the strength in manufacturing in November. In turn, about half of the advance in durables came from transportation equiprent. It should be remembered that the motor vehicles industries were much less affected by labour disputes in November than in October, and in spite of the gain in November, the production level was still well below those prior to the dispute. Further, the December level will be even lower than October. Aside from the above element, a major influence in November was strength in the construction materials-producing industries; non-metallic mineral products increased by almost $6 \%$ and wood products by $2 \%$, presumably in part at least due to the imposition of the last stage of the sales tax at the end of the year. There was also a large gain in iron and steel products of more than $3 \%$, with almost all components moving higher. Elsewhere, non-ferrous metal products and electrical apparatus and supplies showed little change.

The $1.9 \%$ increase in non-durables was similarly diffused among its components, with gains of $2 \%$ in paper products and textiles, $3 \%$ in clothing and foods and beverages, $4 \%$ in chemicals and $8 \%$ in rubber products. Declines were recorded in tobacco, printing and publishing and petroleum refining. The most significant highlights among the non-durable detailed components were large gains in pulp and paper and brewery production.

The output of virtually every mineral was higher in November with the result that fuels advanced by $6 \%$, metals by $3 \%$, and non-metals by $4 \%$.

## NOTES

1. For a detailed description of concepts, sources and methods, see D.B.S. Catalogue No. 61-502, "Revised Index of Industrial Production". For a complete and continuous record of total industrial production along with component industry indexes on both a seasonally unadjusted and adjusted basis use D.B.S. Reference Paper 61-502 for the period 1935 to 1956 inclusive, the March 1963 supplement to this report for the period 1919 to 1934 , the March 1964 supplement for the period 1957 to 1963 inclusive and the regular monthly reports thereafter.
2. An explanation of the discontinuity in the total Clothing index is contained in the March 1964 issue of this report, page 2 , note 2
3. It should be noted that the 1949 weights shown in Table 1 have been re-expressed as proportions of total Gross Domestic Product rather than of Industrial Production alone. Thus, the Index of Industrial Production represents $32.231 \%$ of total real output.
4. 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 in September which have not been incorporated in the latter table.

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

| Industry or industry group | $\begin{aligned} & 1949 \\ & \text { weights } \end{aligned}$ | MCD | Seasonally adjusted |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1964 |  |  |  |  |  |
|  |  |  | June | July | Aug. | Sept. | Oct. | Nov. |
| INDEX OF INDUSTRIAL PRODUCTION | 32.231 | 1 | 211.3 | 210.9 | 214.3 | 213.5 | 214.2 | 219.6 |
| MINING, | 3.245 | 2 | 329.5 | 316.0 | 313.7 | 308.1 | 319.9 | 334.2 |
| Metals | 1.925 | 2 | 212.9 | 200.0 | 206.0 | 201.2 | 211.3 | 217.9 |
| Gold | 0.624 | 5 | 89.3 | 93.4 | 95.2 | 91.5 | 90.1 | 94.9 |
| Copper . | 0.356 | 4 | 184.6 | 186.5 | 191.7 | 173.6 | 191.8 | 193.2 |
| Iron ore | 0.099 | 3 | 810.0 | 815.3 | 833.6 | 825.9 | 904.7 | 958.7 |
| Nickel | 0.337 | 4 | 187.3 | 172.6 | 165.9 | 156.6 | 187.6 | 190.6 |
| Non-metals | 0.268 | 5 | 244.8 | 261.9 | 243.9 | 234.9 | 249.3 | 260.3 |
| Asbestos | 0.214 | 5 | 258.3 | 275.3 | 253.3 | 246.4 | 264.9 | 273.3 |
| Fuels | 0.915 | 3 | 584.7 | 559.1 | 547.6 | 540.3 | 553.0 | 585.7 |
| Coal | 0.553 | 6 | 63.9 | 51.5 | 59.7 | 55.0 | 53.3 | 51.9 |
| Natural gas | 0.035 | 2 | 1,457.7 | 1,518.9 | 1,492.1 | 1,380.3 | 1,400.4 | 1,449.6 |
| Petroleum. | 0.327 | 3 | 1,370.4 | 1,313.1 | 1,270.1 | 1,269.7 | 1,305.8 | 1,394.5 |
| MANUFACTURING, TOTAL . | 27.340 | 3 | 185.7 | 186.3 | 191.1 | 190.1 | 188.9 | 194.0 |
| NON-DURABLE MANUFACTURES .... | 14.742 | 3 | 183.3 | 181.4 | 184.9 | 184.7 | 186.6 | 190.1 |
| Foods and beverages | 3.814 | 4 | 169.9 | 170.8 | 173.1 | 170.0 | 174.2 | 179.2 |
| Foods | 2.896 | 4 | 166.3 | 166.4 | 169.2 | 167.2 | 171.2 | 173.3 |
| Meat products | 0.523 | 4 | 179.4 | 178.7 | 187.3 | 184.8 | 183.7 | 183.9 |
| Dairy products | 0.450 | 3 | 163.5 | 165.6 | 167.7 | 164.4 | 166.0 | 178.6 |
| Canning and processing | 0.453 | 4 | 177.2 | 172.6 | 160.9 | 167.4 | 177.7 | 176.0 |
| Grain mill products . | 0.322 | 4 | 180.1 | 173.6 | 186.1 | 177.4 | 183.9 | 184.0 |
| Bakery products | 0.558 | 3 | 142.8 | 146.7 | 144.6 | 145.3 | 147.1 | 147.1 |
| Miscellaneous foods | 0.590 | 4 | 163.0 | 166.2 | 174.6 | 168.5 | 175.2 | 176.6 |
| Beverages | 0.918 | 6 | 181.3 | 184.8 | 185.3 | 178.9 | 183.6 | 197.9 |
| Carbonated beverages | 0.231 | 6 | 168.3 | 186.6 | 176.3 | 177.5 | 181.2 | 196.2 |
| Breweries ... | 0.463 | 6 | 166.0 | 162.6 | 169.9 | 155.6 | 158.6 | 180.4 |
| Distilleries | 0.203 | 6 | 235.7 | 235.3 | 234.9 | 237.9 | 251.3 | 243.4 |
| Tobacco and tobacco products | 0.248 | 6 | 216.9 | 211.1 | 232.4 | 227.5 | 227.8 | 221.4 |
| Rubber products ........... | 0.430 | 3 | 217.7 | 198.2 | 210.4 | 215.5 | 204.4 | 220.3 |
| Leather products. | 0.508 | 2 | 129.6 | 129.4 | $134.2$ | $130.5$ | $130.8$ | 131.1 |
| Boots and shoes. | 0.307 | 4 | 137.8 | 135.3 | 144.4 | 137.3 | $139.6$ |  |
| Textiles | 1.623 | 3 | 170.4 | 169.5 | 174.4 | 174.2 | 172.8 | 176.9 |
| Cotton goods | 0.507 | 4 | 120.7 | 121.2 | 130.9 | 121.2 | 118.2 | 122.4 |
| Wool goods ... | 0.300 | 3 | 81.7 | 88.5 | 83.5 | 83.5 | 88.6 | 83.2 |
| Synthetic Textiles and Silk | 0.429 | 3 | 304.9 | 297.6 | 308.0 | 316.5 | 313.3 | 327.6 |
| Clothing . . . . . . . . . . . . . . . | 1.801 | 3 | 135.8 | 139.1 | 136.7 | 138.8 | 136.5 | 140.5 |
| Paper products | 2.649 | 3 | 174.5 | 177.1 | 181.2 | 179.2 | 182.6 | 186.7 |
| Pulp and paper .......... | 2.108 | 3 | 175.8 | 179.6 | 184.1 | 180.1 | 183.3 | 188.1 |

$(1949=100)$

| Industry or industry group | $\begin{aligned} & 1949 \\ & \text { weights } \end{aligned}$ | MCD | Seasonally adjusted |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1964 |  |  |  |  |  |
|  |  |  | June | July | Aug. | Sept. | Oct. | Nov. |
| NON-DURABLE MANUFACTURES Concluded: |  |  |  |  |  |  |  |  |
| Printing, publishing and allied industries ................... | 1.273 | 4 | 169.0 | 158.9 | 154.3 | 163.1 | 169.4 | 166.4 |
| Products of petroleum and coal | 0.513 | 3 | 322.2 | 308.7 | 307.7 | 292.5 | 298.5 | 288.2 |
| Petroleum products . | 0.454 | 3 | 349.5 | 334.7 | 333.2 | 315.7 | 322.0 | 310.0 |
| Chemicals and allied products Acids, alkalles, salts and fertilizers .............. | 1.359 | 2 | 276.2 | 266.8 | 281.9 | 287.6 | 290.1 | 300.4 |
|  | 0.346 | 2 | 333.2 | 320.5 | 336.5 | 365.9 | 354.0 | 364.8 |
| Miscellaneous manufactures ... | 0.524 | 1 | 263.9 | 264.6 | 266.8 | 267.1 | 265.0 | 263.8 |
| DURABLE MANUFACTURES ............ | 12.598 | 3 | 188.6 | 192.1 | 198.4 | 196.4 | 191.5 | 198.6 |
| Wood products | 2.108 | 2 | 154.4 | 160.1 | 169.5 | 163.6 | 169.4 | 172.1 |
| Saw and planing mills ...... | 1.444 | 3 | 163.8 | 172.8 | 186.5 | 177.7 | 185.4 | 188.4 |
| Veneers and plywoods | 0.122 | 3 | 374.1 | 389.1 | 423.3 | 380.5 | 412.3 | 420.5 |
|  | 0.994 | 4 | 149.4 | 161.4 | 177.6 | 170.1 | 177.1 | 179.8 |
| Furniture | 0.460 | 2 | 157.4 | 155.3 | 155.0 | 155.0 | 157.0 | 159.7 |
| Iron and steel products | 4.026 | 2 | 176.4 | 180.4 | 183.5 | 180.6 | 186.2 | 191.9 |
| Machinery .................... | 0.851 | 1 | 179.3 | 182.3 | 183.2 | 181.9 | 183.2 | 185.4 |
|  | 0.387 | 3 | 178.7 | 199.4 | 193.5 | 174.3 | 170.8 | 183.8 |
| Primary iron and steel..... | 0.845 | 2 | 236.9 | 239.3 | 245.6 | 240.8 | 252.6 | 255.0 |
| Sheet metal products ....... | 0.359 | 1 | 162.5 | 157.6 | 159.9 | 161.4 | 168.1 | 173.3 |
| Transportation equipment | 2.651 | 4 | 203.3 | 210.0 | 221.7 | 220.2 | 177.3 | 194.3 |
| Aircraft and parts .......... | 0.203 | 1 | 275.9 | 282.1 | 281.9 | 274.9 | 271.7 | 279.3 |
| Motor vehicles ............. | 1.035 | 4 | 287.9 | 293.4 | 323.8 | 321.4 | 218.8 | 255.5 |
| Motor vehicle parts ........ | 0.462 | 2 | 216.4 | 239.5 | 238.9 | 238.2 | 217.1 | 222.2 |
| Railway rolling stock | 0.621 | 1 | 47.6 | 47.7 | 47.6 | 46.6 | 47.8 | 49.5 |
| Shipbuilding and repairs .... | 0.261 | 1 | 187.1 | 188.6 | 185.2 | 184.4 | 190.5 | 196.7 |
| Non-ferrous metal products .... <br> Brass and copper products ... <br> Smelting and refining ....... | 1.601 | 3 | 164.7 | 161.0 | 156.6 | 159.3 | 166.1 | 165.7 |
|  | 0.241 | 1 | 151.8 | 147.6 | 144.5 | 146.7 | 151.1 | 153.7 |
|  | 1.028 | 3 | 179.6 | 175.5 | 169.4 | 172.5 | 183.4 | 181.7 |
| Electrical apparatus and |  |  |  |  |  |  |  |  |
| supplles ..................... | 1.418 | 2 | 232.6 | 234.9 | 244.0 | 242.9 | 246.2 | 248.5 |
| Heavy electrical machinery .. Telecommunication equipment | 0.489 | 1 | 160.2 | 158.9 | 159.9 | 161.4 | 162.2 | 162.6 |
|  | 0.142 | 3 | 532.1 | 539.1 | 596.4 | 585.2 | 609.6 | 623.3 |
| Refrigerators and appliances | 0.227 | 3 | 227.1 | 236.8 | 249.2 | 246.9 | 253.9 | 248.3 |
| Non-metallic mineral products | 0.794 | 2 | 261.7 | 262.4 | 275.3 | 276.3 | 278.3 | 294.7 |
|  | 0.098 | 4 | 781.1 | 781.9 | 855.5 | 832.4 | 829.2 | 926.4 |
| Concrete products ............ <br> Hydraulic cement | 0.117 | 5 | 252.5 | 262.2 | 260.9 | 269.5 | 285.9 | 304.9 |
| Domestic clay products | 0.083 | 3 | 138.6 | 142.0 | 148.5 | 140.2 | 145.3 | 156.3 |
| ELECTRIC POWER AND GAS UTILITIES | 1.646 | 2 | 403.5 | 412.2 | 403.7 | 416.1 | 426.9 | 418.7 |
| Electric power | 1.480 | 2 | 360.1 | 373.0 | 367.8 | 378.2 | 383.6 | 385.3 |
| Gas .......... | 0.166 | 3 | 792.9 | 763.4 | 725.4 | 756.4 | 815.0 | 717.9 |

$(1949=100)$

| Industry or industry group | Annual averages |  | Without seasonal adjustment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1963 |  |  | 1964 |  |  |
|  | 1962 | 1963 | Sept. | Oct. | Nov. | Sept. | Oct. | Nov. |
| INDEX OF INDUSTRIAL PRODUCTION | 186.0 | 195.9 | 204.8 | 207.6 | 210.8 | 220.0 | 221.7 | 226.7 |
| MINING, | 287.4 | 294.4 | 318.4 | 311.4 | 306.7 | 327.5 | 331.6 | 332.0 |
| Metals | 197.7 | 193.8 | 219.5 | 206.7 | 201.7 | 220.7 | 221.3 | 210.2 |
| Gold | 100.1 | 95.5 | 98.3 | 97.0 | 96.5 | 89.7 | 91.3 | 98.2 |
| Copper . | 176.7 | 174.0 | 193.6 | 190.1 | 195.9 | 178.8 | 189.9 | 211.6 |
| Iron ore | 632.5 | 670.8 | 1,034.2 | 807.1 | 663.3 | 1,156.2 | 1,040.4 | 719.0 |
| Nickel | 184.2 | 171.0 | 173.2 | 170.5 | 170.2 | 161.3 | 185.9 | 201.8 |
| Non-metals | 222.5 | 228.1 | 251.7 | 256.4 | 274.4 | 252.8 | 272.2 | 286.2 |
| Asbestos | 234.1 | 239.1 | 264.1 | 264.3 | 288.6 | 259.7 | 281.9 | 297.6 |
| Fuels | 480.8 | 513.6 | 513.5 | 518.1 | 522.1 | 539.8 | 544.8 | 580.3 |
| Coal | 48.8 | 52.0 | 53.8 | 58.4 | 61.9 | 57.7 | 62.4 | 66.4 |
| Natural gas | 1,005.7 | 1,179.8 | 1,087.9 | 1,145.2 | 1,330.6 | 1,228.5 | 1,288.4 | 1,520.6 |
| Petroleum | I,154.0 | 1,221.6 | 1,228.1 | 1,227.1 | 1,212.5 | 1,279.9 | 1,279.7 | 1,347.1 |
| MANUFACTURING, TOTAL | 164.9 | 173.9 | 183.3 | 186.1 | 187.6 | 197.9 | 197.9 | 201.7 |
| NON-DURABLE MANUFACTURES | 164.8 | 172.2 | 185.0 | 187.1 | 184.2 | 196.8 | 198.4 | 199.0 |
| Foods and beverages | 158.9 | 162.1 | 180.4 | 184.1 | 178.3 | 189.9 | 195.6 | 192.2 |
| Foods | 154.8 | 157.2 | 178.2 | 183.4 | 169.6 | 188.7 | 194.5 | 183.2 |
| Meat products | 159.2 | 163.6 | 171.4 | 178.6 | 190.6 | 190.2 | 196.0 | 207.4 |
| Dairy products | 159.3 | 163.5 | 181.1 | 159.8 | 143.2 | 182.5 | 162.7 | 155.9 |
| Canning and processing .... | 164.7 | 165.4 | 259.7 | 266.2 | 179.4 | 271.1 | 270.4 | 188.7 |
| Grain mill products ....... | 137.5 | 145.9 | 149.8 | 157.9 | 167.2 | 180.3 | 187.3 | 193.3 |
| Bakery products. | 145.4 | 138.8 | 143.7 | 141.4 | 139.8 | 150.9 | 152.9 | 152.1 |
| Miscellaneous foods | 158.3 | 164.3 | 167.5 | 195.7 | 193.0 | 169.3 | 202.8 | 202.5 |
| Beverages | 171.9 | 177.6 | 187.4 | 186.4 | 205.8 | 193.6 | 198.7 | 220.4 |
| Carbonated beverages | 173.0 | 178.7 | 182.3 | 150.2 | 180.6 | 192.6 | 154.0 | 180.5 |
| Breweries | 156.3 | 159.9 | 155.9 | 146.3 | 170.2 | 147.2 | 152.3 | 185.4 |
| Distilleries | 210.0 | 220.3 | 251.4 | 315.5 | 323.6 | 287.9 | 358.1 | 352.9 |
| Tobacco and tobacco products | 203.7 | 207.7 | 192.3 | 205.4 | 219.4 | 236.6 | 233.3 | 236.2 |
| Rubber products ............. | 167.6 | 190.5 | 200.0 | 201.1 | 211.4 | 237.0 | 216.3 | 240.4 |
| Leather products | 126.7 | 127.0 | 132.5 | 129.8 | 135.1 | 135.5 | 131.6 | 134.8 |
| Boots and shoes | 137.7 | 136.9 | 144.1 | 138.5 | 144.2 | 143.1 | 136.7 |  |
| Textiles | 146.6 | 159.5 | 170.9 | 173.3 | 172.3 | 180.3 | 179.4 | 184.8 |
| Cotton goods | 105.3 | 109.6 | 120.9 | 124.0 | 124.0 | 128.1 | 128.8 | 130.7 |
| Wool goods .................. | 84.9 | 89.8 | 97.4 | 106.1 | 98.9 | 92.1 | 97.4 | 89.9 |
| Synthetic textiles and silk | 243.6 | 281.0 | 301.9 | 298.9 | 298.6 | 323.8 | 314.6 | 336.8 |
| Clothing ................... | 111.0 | 137.0(1) | 160.0 | 168.9 | 142.8 | 163.5 | 162.6 | 154.6 |
| Paper products. | 159.1 | 164.3 | 172.3 | 173.0 | 176.9 | 185.1 | 188.6 | 194.1 |
| Pulp and paper.. | 158.6 | 163.8 | 171.0 | 172.4 | 178.5 | 185.0 | 189.2 | 197.3 |

[^0]TABLE 2. Index of Industrial Production - Concluded
$(1949=100)$


## Note tu 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 DBS Occassional Paper 61-505, "Indexes of Real Domestic Product by Industry of Origin, 1935-61". This reference paper contains a detailed description of concepts and methods used as well as other relevant material.

The monthly "Index of Industrial Production" publication 61-005 will henceforth contain quarterly indexes of real domestic product, less agriculture, with component industry detail. Quarterly indexes for agriculture and for aggregate domestic production will not be avallable, except on a once-a-year basis; they will appear in the annual supplement to this report each spring.

COMPARISON OF MANUFACTURING WITH TRANSPORTATION BY QUARTERS, 1956-64
(SEASONALLY ADJUSTED QUANTITY INDEXES, $1949=100$ )


## REAL DOMESTIC PRODUCT LESS AGRICULTURE, THIRD QUARTER, 1964

Seasonally adjusted non-agricultural real output for the third quarter of 1964 was almost 1 per cent higher than in the preceding quarter. (1) This increase, which followed a 1 per cent decline in the second quarter and sharp gains in the six month period ending in March, 1964, brought the nonagricultural output aggregate to a level almost 21 per cent above its first quarter, 1961, cyclical low.

|  | 1Q'61-Year 1963 |  | 1Q'61-10'64 |  | 1Q'61-II Q'64 |  | 1Q'61 - III Q'64 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \% \\ \Delta \end{gathered}$ | ```Effect on GDP less Agri- culture``` | $\begin{aligned} & \% \\ & \Delta \end{aligned}$ | ```Effect on GDP less Agri- culture``` | $\begin{gathered} \% \\ \Delta \end{gathered}$ | ```Effect on GDP less Agri- culture``` | $\begin{aligned} & \% \\ & \Delta \end{aligned}$ | ```Effect on GDP less Agri- culture``` |
| Gross domestic product |  |  |  |  |  |  |  |  |
| less agriculture ... | $+13.5$ | + 13.5 | $+21.0$ | $+21.0$ | $+19.9$ | + 19.9 | $+20.8$ | + 20.8 |
| Forestry | $+15.9$ | + . 3 | + 29.6 | + . 5 | + 18.2 | + . 3 | + 29.6 | + . 6 |
| Fishing and trapping | - 11.8 | . 1 | - 6.1 | -- | - 18.1 | . 1 | - 13.2 | . 1 |
| Mining ...... | + 17.3 | + 1.0 | + 29.9 | + 1.7 | $+29.1$ | $+1.6$ | $+24.6$ | + 1.4 |
| Manufacturing | + 17.7 | + 5.0 | + 26.4 | + 7.4 | $+26.7$ | + 7.4 | $+28.0$ | + 7.8 |
| Non-durable | + 12.3 | + 1.9 | $+18.3$ | + 2.9 | $+19.5$ | + 3.0 | $+19.8$ | + 3.1 |
| Durable ............ | + 24.5 | + 3.0 | + 36.6 | + 4.5 | + 35.8 | + 4.4 | $+38.4$ | + 4.7 |
| Construction .......... $+9.5+.7+24.2+1.7+10.9+.8+9.9+8$Electric power and gas |  |  |  |  |  |  |  |  |
| Electric power and gas utilities ........... | + 20.8 | + . 7 | + 28.4 | + 1.0 | + 31.2 | + 1.1 | + 35.1 | + 1.2 |
| Transportation, storage |  |  |  |  |  |  |  | $+\quad 2.4$ $+\quad 18$ |
| Transportation ...... | +14.6 +11.8 | +1.0 $+\quad 1.8$ | +24.1 +20.3 | +1.7 $+\quad 3.2$ | +25.8 $+\quad 17.9$ | $+\quad 1.8$ $+\quad 28$ | +26.0 $+\quad 19$. | $+\quad 1.8$ $+\quad 3$ |
| Wholesale | +11.8 +17.3 | $+\quad .8$ $+\quad .9$ | +20.3 +30.5 | $+\quad 3.2$ $+\quad 1.6$ |  | $+\quad 2.8$ $+\quad 1.4$ | + 19.2 +26.4 | $+\quad 3.0$ $+\quad 1.4$ |
| Retail ............. | + 8.9 | + .9 | + 15.0 | + 1.5 | +13.2 | + 1.4 | +15.5 | + 1.6 |
| Finance, insurance and real estate ......... | + 12.4 | + 1.4 | + 15.9 | + 1.7 | + 16.4 | + 1.8 | + 17.7 | + 1.9 |
| Public administration and defence ......... | + 3.1 | + . 2 | $+4.3$ | + 3 | $+4.4$ | + . 3 | $+4.2$ | + . 2 |
| Community, recreation, business and personal service ............. | $+10.7$ | + 1.1 | + 12.8 | + 1.3 | + 13.7 | + 1.4 | $+14.8$ | + 1.6 |

The above table shows per cent changes for the major industry groupings from the cyclical trough early in 1961 to the levels attained in each of the first three quarters of 1964 and to the level for the year 1963. The table also shows, for the same periods, the effect of the changes in the components on total non-agricultural output. As can be seen, the largest contributor to the expansion was manufacturing which increased by 28 per cent; this would have raised non-agricultural output by 7.8 per cent, if the output of all the other industries in the third quarter of 1964 had remained at the same level as in the first quarter of 1961 . The next largest contributor to the expansion was trade, followed by the transportation, storage and commnication group. The above three industry groups constitute that part of the economy which has been most sensitive to cyclical fluctuations during the post-war period, and together they account for more than one half of total production. However, trade, particularly retail trade, has increased more slowly during the current expansion than either transportation or manufacturing. The 38 per cent gain in durable manufacturing exceeded the increases in most of the other components, $a 8$ well as its own very substantial gains achieved during the $1954-56$ expansion. Sustalned growth in motor vehicle production (a 126 per cent increase from the first quarter of 1961 to the third quarter of 1964) was the most important single factor contributing to this growth in the output of durables. The less cyclically sensitive industries such as the finance, insurance and real estate and the comunity, recreation, business and personal service groups continued to expand throughout the period and to exert a steadying influence on the economy, increasing or decreasing their share of the cotal gain in each period, depending on the fortunes of the other industries.
(1) For the first nine months of 1964, compared with the same period of 1963 , non-agricultural output was 7 per cent higher. Up to the end of October, the monthly Index of Industrial Production, which covers more than one third of the non-agricultural economy, was about 9 per cent higher than in the first ten months of 1963.

The longer term significance of the gains made by each industry during the current expansion are best assessed by comparing the increases in its output (measured from the preceding cyclical peak in aggregate production) with those achieved by the same industries over the course of other cycles. The following table sets out these comparisons for the three most recent upswings. It should be kept in mind, however, that the first two cycles are measured from peak to peak, that is, both had run their full course during the 13 quarter span being measured, while currently, eighteen quarters after the last cyclical peak, non-agricultural real output was still expanding. As indicated in the table, expansion was particularly strong in transportation and durable manufacturing, which gained new ground following a slowdown in growth during the 1957-61 period. The finance, insurance and real estate and the commnity, recreation, business and personal services groups were the only other industries to have made larger gains during the current expansion than over the 1953-56 period.


Turning to developments in the third quarter of 1964 , it is interesting to note that gains were fairly widespread, in contrast to the rather exceptional influences at work during the first and second quarters of this year, when construction and related industries accounted for the bulk of the change.

Manufacturing, which increased by 1 per cent, was the largest single contributor to the third quarter gain in non-agricultural output. This was almost entirely the result of an increase of about 2 per cent in durables. Quarterly gains of this or greater magnitude have been recorded in durables in 9 out of 14 quarters of this expansion, but a 2 per cent rate is well above the average rate of growth for the post-war period.

Within durables, transportation equipment showed the largest gain, over 7 per cent, with all components contributing. However, motor vehicles ( $+8 \%$ ) and motor vehicle parts ( $+12 \%$ ) accounted for the major portion of the gain. Thus motor vehicle production in the third quarter was almost 2 per cent above its first quarter level, following a decline in the second quarter. Gains were also recorded in the electrical apparatus and supplies group ( $+2 \%$ ), and the non-metallic mineral products group $(+2 \%)$, largely as a result of a 5 per cent increase in the output of the refrigerator and appliances industry in the former group and substantial gains in the production of gypsum, lime and concrete products in the latter group. The iron and steel products group showed a fractional gain in the quarter, as declines in primary iron and steel ( $-1 \%$ ) and some other components were offaet by a 3 per cent increase in machinery and some gains elsewhere.

Non-durable manufacturing increased only fractionally. The largest contributions to this increase came from the 6 per cent gain in clothing and the 3 per cent gain in chemicals. Tobacco products and some components of paper products, such as pulp and paper and roofing paper also increased. These gains were counteracted by declines, ranging from 1 to 8 per cent which occurred in foods and beverages, rubber products, petroleum products and printing and publishing. The last industry was affected by labour disputes during the quarter.

Within trade, a slight decline in wholesale trade was more than offset by a 2 per cent gain at the retail level, resulting in a one per cent expansion in total trade output. At the retail level, motor vehicle dealers, clothing stores and department stores, with increases of up to 6 per cent, accounted for most of the gain.

Further increases occurred in finance, insurance and real estate ( $+1 \%$ ), the community, business, recreation and personal service group ( $+1 \%$ ) and electric power and gas utilities ( $+3 \%$ ), which jointly contributed as much to the gain in non-agricultural output as did manufacturing. Forestry, with an increase of nearly 10 per cent, returned to its first quarter level following a decline in the second quarter. Transportation, storage and comminication increased fractionally, as a result of gains in the communication and transportation components, while storage of grain showed a small decline. Within transportation, increases in the output of the ofl and gas pipelines and air transport industries counteracted the decline in water transportation, which represented a drop from high levels of output earlier in the year when the shipping industry was engaged in moving exceptionally large quantities of grain for export. Railway transport increased fractionally.

Small decreases in output occurred in public administration and defence and in construction which returned to the output levels it had more or less maintained since 1961, except for the sharp gains during the winter months of 1963-64. Mining declined by almost 4 per cent, with all three components showing decreases in the third quarter. However, the major portion of the drop in mining can be accounted for by a decline in the "other" component of metal mining, which reflected curtailments in uranium mining operations.

For the first nine months of 1964 resl domestic product less agriculture was 7 per cent higher than in the corresponding period of 1963. However, because of the pattern of non-agricultural production during 1963 and 1964, an annual comparison might differ significantly from a 9 month comparison. For example, if it is assumed that the fourth quarter of 1964 remains at the same level, seasonally adjusted, as the third quarter, then the year 1964 would be up by 6.2 per cent; if the fourth quarter is up one per cent, the year would be up 6.5 per cent; if down one per cent, the year would be up 6 per cent.

About one third of the aggregate increase in the first three quarters of 1964 was accounted for by a 9 per cent gain in manufacturing. Durable manufacturing, in particular, expanded rapidly during this period ( $+11 \%$ ), largely as a result of the gains in iron and steel production and in the output of the motor vehicles and parts industries, both of which increased by more than 20 per cent. Other industry groups registering incresses of about 11 per cent were transportation, storage, electric power and gas utilities and forestry. Mining and wholesale trade increased by about 10 per cent, while non-durable manufacturing and retall trade showed gains of 7 and 6 per cent, respectively. Construction, which expanded sharply in the first quarter, showed a 5 per cent increase in the nine month comparison, as the initial gains were offset by declines in the second and third quarters.

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

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{} \& \multirow[b]{3}{*}{\begin{tabular}{l}
Gross \\
Domestic \\
Product, \\
less agriculture
\end{tabular}} \& \multirow{3}{*}{Forestry} \& \multirow{3}{*}{\[
\begin{aligned}
\& \text { Fishing } \\
\& \text { and } \\
\& \text { trapping }
\end{aligned}
\]} \& \multicolumn{4}{|c|}{Mining} \& \multicolumn{2}{|l|}{Manufacturing} \\
\hline \& \& \& \& Total \& Metals \& Nonmetals \& Fuels \& Total \& \[
\begin{gathered}
\text { Non-durable } \\
\text { manu- } \\
\text { facturing } \\
\hline
\end{gathered}
\] \\
\hline \& \& \& \& \& \& \& \& \& Total \\
\hline \multirow[t]{2}{*}{1949 Weights} \& 89.286 \& 2.108 \& 0.540 \& 3.245 \& 1.925 \& 0.268 \& 0.915 \& 27.340 \& 14.742 \\
\hline \& \multicolumn{9}{|c|}{Seasonally adjusted} \\
\hline \multirow[t]{4}{*}{1961-1 \(\begin{array}{r}1 \\ 2 \\ 3 \\ 4\end{array}\)} \& 162.2 \& 128.9 \& 141.9 \& 250.9 \& 195.4 \& 210.2 \& 369.2 \& 147.7 \& 153.3 \\
\hline \& 165.3 \& 130.4 \& 109.0 \& 262.6 \& 185.2 \& 208.4 \& 431.8 \& 150.8 \& 155.9 \\
\hline \& 169.2 \& 134.7 \& 109.5 \& 271.9 \& 191.7 \& 210.3 \& 447.4 \& 155.4 \& 158.6 \\
\hline \& 170.8 \& 130.4 \& 120.2 \& 279.6 \& 195.2 \& 214.0 \& 465.9 \& 158.8 \& 161.2 \\
\hline \multirow[t]{4}{*}{\(1962-1\)
2
3
4} \& 173.5 \& 146.9 \& 144.1 \& 280.4 \& 194.2 \& 221.8 \& 471.8 \& 160.5 \& 162.8 \\
\hline \& 175.5 \& 141.7 \& 123.6 \& 287.7 \& 205.3 \& 224.1 \& 463.0 \& 164.1 \& 165.3 \\
\hline \& 176.8 \& 140.4 \& 131.4 \& 291.1 \& 199.6 \& 227.4 \& 488.3 \& 166.5 \& 165.4 \\
\hline \& 178.0 \& 143.6 \& 130.0 \& 290.6 \& 192.0 \& 213.7 \& 505.0 \& 168.5 \& 165.9 \\
\hline \multirow[t]{4}{*}{1963-1} \& 180.9 \& 148.8 \& 122.4 \& 290.3 \& 194.6 \& 215.4 \& 503.7 \& 170.3 \& 168.8 \\
\hline \& 182.4 \& 137.8 \& 134.6 \& 293.0 \& 198.2 \& 219.8 \& 502.3 \& 172.6 \& 171.7 \\
\hline \& 183.3 \& 149.4 \& 130.0 \& 290.6 \& 188.2 \& 233.1 \& 512.0 \& 173.1 \& 172.5 \\
\hline \& 190.0 \& 161.4 \& 121.1 \& 306.6 \& 199.3 \& 240.5 \& 539.2 \& 180.4 \& 177.1 \\
\hline \multirow[t]{4}{*}{\(1964-1\)
2
3} \& 196.2 \& 167.0 \& 133.3 \& \& 222.4 \& \& \& \& \\
\hline \& 194.5 \& 152.4 \& 116.2 \& 323.9 \& 216.8 \& \[
253.0
\] \& 556.7 \& 187.2 \& \[
183.2
\] \\
\hline \& 196.0 \& 167.0 \& 123.1 \& 312.6 \& 202.4 \& 246.9 \& 549.0 \& 189.1 \& 183.6 \\
\hline \& \multicolumn{9}{|c|}{Without seasonal adjustment} \\
\hline \multirow[t]{3}{*}{\[
\begin{aligned}
\& 1961 \\
\& 1962 \\
\& 1963
\end{aligned}
\]} \& 166.8 \& 130.8 \& 115.7 \& 266.9 \& 191.7 \& 211.7 \& 430.7 \& 153.0 \& 157.0 \\
\hline \& 175.8 \& 140.5 \& 130.4 \& 287.4 \& 197.7 \& 222.5 \& 480.8 \& 164.9 \& 164.8 \\
\hline \& 184.1 \& 149.4 \& 125.2 \& 294.4 \& 193.8 \& 228.1 \& 513.6 \& 173.9 \& 172.2 \\
\hline \multirow[t]{4}{*}{\(1961-1\)

3
4} \& 150.8 \& 104.5 \& 77.2 \& 246.0 \& 181.1 \& 194.5 \& 408.0 \& 143.3 \& 146.8 <br>
\hline \& 167.6 \& 120.5 \& 112.9 \& 260.3 \& 186.3 \& 212.3 \& 416.0 \& 153.9 \& 156.7 <br>
\hline \& 174.3 \& 154.3 \& 155.5 \& 281.8 \& 204.9 \& 212.5 \& 436.1 \& 155.1 \& 161.0 <br>
\hline \& 174.7 \& 143.8 \& 117.1 \& 279.7 \& 194.4 \& 227.6 \& 462.8 \& 159.7 \& 163.4 <br>
\hline \multirow[t]{4}{*}{$1962-1$
2
3
4} \& 161.7 \& 117.2 \& 74.9 \& 277.5 \& 180.6 \& 210.4 \& 515.4 \& 155.7 \& 156.6 <br>
\hline \& 177.9 \& 126.4 \& 127.8 \& 283.7 \& 204.9 \& 228.7 \& 444.3 \& 168.0 \& 166.1 <br>
\hline \& 181.8 \& 163.8 \& 189.6 \& 300.8 \& 214.2 \& 227.5 \& 472.1 \& 166.0 \& 167.8 <br>
\hline \& 181.9 \& 154.5 \& 129.4 \& 287.6 \& 191.3 \& 223.6 \& 491.4 \& 169.7 \& 168.7 <br>
\hline \multirow[t]{4}{*}{$1963-1$
2
3
4} \& 169.2 \& 123.7 \& 78.0 \& 283.6 \& 175.6 \& 204.7 \& 547.3 \& 164.6 \& 161.6 <br>
\hline \& 184.9 \& 129.1 \& 136.9 \& 290.9 \& 202.4 \& 224.5 \& 479.5 \& 176.4 \& 171.8 <br>
\hline \& 188.0 \& 175.8 \& 168.4 \& 298.0 \& 199.9 \& 232.3 \& 493.8 \& 172.3 \& 175.4 <br>
\hline \& 194.1 \& 169.0 \& 117.5 \& 304.9 \& 197.4 \& 250.9 \& 533.8 \& 182.4 \& 180.2 <br>
\hline \multirow[t]{3}{*}{$1964-1$
2
3} \& 183.4 \& 140.4 \& 78.8 \& 312.5 \& 197.5 \& 218.7 \& 588.3 \& 181.0 \& 174.4 <br>
\hline \& 197.2 \& 138.9 \& 118.3 \& 322.0 \& 224.3 \& 257.4 \& 526.9 \& 191.7 \& 184.0 <br>
\hline \& 199.5 \& 197.5 \& 168.2 \& 319.8 \& 214.7 \& 246.9 \& 527.4 \& 186.0 \& 186.2 <br>
\hline
\end{tabular}

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 |  |  |  |  |  |  |  |
| 1961-1 | 153.4 | 189.2 | 128.7 | 118.3 | 126.6 | 107.9 | 149.6 | 147.0 |
| 2 | 152.4 | 194.5 | 143.9 | 123.9 | 132.2 | 106.7 | 152.7 | 145.5 |
| 3 | 155.3 | 195.2 | 152.7 | 125.0 | 136.6 | 107.9 | 155.1 | 148.5 |
| 4 | 156.3 | 198.7 | 159.1 | 128.6 | 142.4 | 112.0 | 156.1 | 152.4 |
| 1962-1 | 159.3 | 205.1 | 154.0 | 128.6 | 142.3 | 106.2 | 157.7 | 152.1 |
| 2 | 162.1 | 201.2 | 167.7 | 126.2 | 145.1 | 111.6 | 158.1 | 155.0 |
| 3 | 157.5 | 203.3 | 169.9 | 126.4 | 150.5 | 112.9 | 161.0 | 154.5 |
| 4 | 158.3 | 206.2 | 176.7 | 125.4 | 150.6 | 114.0 | 159.6 | 152.9 |
| 1963-1. | 164.0 | 213.6 | 190.8 | 127.2 | 151.4 | 134.8 | 157.4 | 152.9 |
| 2. | 161.6 | 211.8 | 189.8 | 125.8 | 157.0 | 136.9 | 162.7 | 157.1 |
| 3 | 161.2 | 202.9 | 185.2 | 124.1 | 161.2 | 135.5 | 165.7 | 158.4 |
| 4 | 165.5 | 203.9 | 195.4 | 129.7 | 167.9 | 141.8 | 169.8 | 157.7 |
| $\begin{array}{r} 1964-\begin{array}{r} 1 \\ 2 \\ 3 \end{array} \end{array}$ |  | 195.8 | 212.2 | 127.5 | 167.9 | 133.0 | 175.2 | 160.6 |
|  | 172.3 | 213.3 | 218.9 | 131.9 | 173.7 | 129.2 | 176.4 | 172.1 |
|  | 171.2 | 223.7 | 208.0 | 131.3 | 172.7 | 138.2 | 179.2 | 158.8 |
|  | Without seasonal adjustment |  |  |  |  |  |  |  |
| $\begin{aligned} & 1961 \\ & 1962 \\ & 1963 \end{aligned}$ | 154.2 | 193.6 | 145.7 | 123.8 | 134.6 | 107.1 | 153.4 | 148.2 |
|  | 158.9 | 203.7 | 167.6 | 126.7 | 146.6 | 111.0 | 159.1 | 154.0 |
|  | 162.1 | 207.7 | 190.5 | 127.0 | 159.5 | 137.0 | 164.3 | 156.7 |
| $1961-1$234 | 128.4 | 185.8 | 131.9 | 126.4 | 131.1 | 111.7 | 145.9 | 146.2 |
|  | 152.0 | 207.4 | 149.3 | 125.5 | 135.3 | 102.3 | 155.0 | 147.0 |
|  | 173.2 | 183.6 | 137.9 | 116.6 | 127.4 | 107.8 | 154.8 | 144.5 |
|  | 163.1 | 197.6 | 163.7 | 126.5 | 144.5 | 106.4 | 157.8 | 155.0 |
| $1962-\frac{1}{2}$34 | 134.3 | 202.3 | 157.5 | 137.2 | 147.7 | 111.3 | 153.5 |  |
|  | 160.9 | 215.2 | 173.9 | 128.6 | 148.6 | 106.9 | 160.5 | 156.4 |
|  | 176.0 | 191.8 | 156.6 | 117.3 | 136.4 | 112.9 | 161.3 | 150.0 |
|  | 164.6 | 205.6 | 182.4 | 123.7 | 153.5 | 113.0 | 161.1 | 158.1 |
| $1963-1$234 | 138.0 | 213.1 | 192.5 | 136.5 | 156.6 | 135.4 | 153.4 | 151.6 |
|  | 161.5 | 224.4 | 200.7 | 127.5 | 161.7 | 124.3 | 164.3 | 158.7 |
|  | 177.1 | 188.8 | 168.6 | 116.2 | 148.3 | 145.2 | 167.0 | 153.8 |
|  | 172.0 | 204.3 | 200.2 | 127.7 | 171.5 | 143.2 | 172.4 | 162.7 |
| 1964-1 $\begin{array}{r}1 \\ 2 \\ 3\end{array}$ | 148.7 | 195.6 | 215.8 | 137.3 | 172.1 | 133.6 | 170.0 | 158.5 |
|  | 171.9 | 226.6 | 230.4 | 133.4 | 178.9 | 117.2 | 178.1 | 174.7 |
|  | 187.9 | 211.1 | 186.5 | 122.2 | 159.6 | 148.2 | 180.8 | 155.5 |

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


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


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

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



[^0]:    (1) See page 2 footnote (2).

