

products, and a few industries find the same difficulty in reporting their major products. In such cases the raw materials used or the wage-earners employed were considered in the construction of the index. A third important difficulty results from the fact that, even where there is continuity in the kind of commodities produced and where such commodities are reported quantitatively, there are changes which are not capable of statistical measurement in the quality of the commodities produced. For instance, the motor vehicle of to-day is a very different thing from that of ten or even five years ago. The improvement has entailed increases in plant equipment and workmanship and a generally greater manufacturing effort per unit produced. It is quite obvious that a true index of the volume of production should represent changes in quality as well as quantity. Since this is not possible, and since the trend of modern manufacturing is toward a more elaborate fabrication of materials with consequent improvement in quality and workmanship, it is essential to recognize that an index of volume is likely to understate rather than overstate the growth of manufacturing processes. In spite of these difficulties it is believed that the index in Table 5 on p. 416 is reasonably reliable for the broad groups of industries and may justifiably be used in making generalizations.

The central electric stations were excluded from general manufactures in making the index, since this industry is in a class by itself in the peculiar function of its product, and is also unique in the magnitude of its capital investment and the smallness of its labour force in proportion to its net production. The index is based on the quantities of manufactured products reported and includes 71.1 p.c. of the total value of the production in 1926, exclusive of central electric stations. It is weighted according to the values added in the manufactures of 1926. A complete description of the manner in which the index is constructed will be found in the publication referred to in the footnote on p. 412.

The physical volume of manufacturing production, exclusive of central electric stations, increased 50.2 p.c. from 1923 to 1929. When it is recalled that the population of Canada is estimated to have increased only 11.3 p.c. during the same period, the growth of manufacturing production is indeed remarkable. Of this advance, the part resulting from an increase in the domestic demand due to growth of population would be about 11.3 p.c. Exports of partly and fully manufactured goods increased from \$591,830,000 in the fiscal year ended Mar. 31, 1924, to \$690,904,000 in the fiscal year 1930, the increase in exports representing about 3.6 p.c. of the 1923 production. The remainder of the increase in production by 1929, or a margin equal to roughly 35 p.c. of the volume of manufactures of 1923, was therefore apparently absorbed by the rise in the standard of living of the population of Canada.

The index of the volume of production dropped from 150.2 in 1929 to 136.2 in 1930, a decrease of 9.3 p.c. This decrease is very significant when compared with the decreases in the net value of production and number of wage-earners employed