

grants in support of research projects undertaken by university staff members but a significant part of the total program is the assistance given to graduate students working for higher degrees. Funds are also made available to defray associated expenditures, such as those incurred in the publication of research journals and the holding of conferences.

The activities of the Defence Research Board in support of university research consist mainly in the provision of funds for projects in basic sciences that are relevant to the defence of the nation. Funds administered by the Department of National Health and Welfare and the Medical Research Council go chiefly to support research in the medical and para-medical sciences. The National Research Council confines its support to the physical and earth sciences, architecture and engineering, and the life sciences. The total amount of funds disbursed by these and the other Federal Government agencies in 1966-67 was over \$42,000,000, not including more than \$7,000,000 in scholarships and bursaries paid to students.

The major source of funds for the promotion of the arts, humanities and social sciences, including research in these fields, is the Canada Council (see p. 395). It is rather difficult to define and categorize the various aspects of the Council's support of university research. Broadly speaking, however, three main categories can be identified; assistance to individual postgraduate students and research fellows; grants-in-aid of particular research projects; and assistance with ancillary research activities such as the compilation of indexes and bibliographies, purchases for libraries, publication costs and travel expenses.

In addition, some Federal Government agencies such as the Defence Research Board and the Departments of Manpower and Immigration, Labour, and Indian Affairs and Northern Development operate programs of university grants and contracts for research in economics, anthropology, sociology and related disciplines, but the total amount made available under these programs is not large.

Subsection 4.—Industrial Research and Development

Canadian firms are becoming increasingly involved in research and development. The need to develop new or improved products to serve expanding domestic and foreign markets, to meet competition from other Canadian and foreign firms and to efficiently exploit the country's natural resources has required industry to form and expand competent research and development units. This development of research and development facilities has been encouraged by the growth in markets, production facilities, financial resources and supplies of technically skilled manpower.

The Federal Government recognizes the need for industrial research and development and has inaugurated several programs of direct assistance. The Department of Industry administers two: the Defence Development Sharing Programme and the Programme for the Advancement of Industrial Technology. The National Research Council and the Defence Research Board both make grants in support of industrial research projects. In addition, the Industrial Research and Development Incentives Act authorizes the Department of Industry to make substantial grants to firms expanding their research and development programs.

Industrial Research and Development Expenditures.—The latest biennial DBS survey of expenditures on industrial research and development in Canada was carried out in 1966 and provided estimates for 1963 to 1966. These are summarized in the following tables; details are contained in the DBS publication *Industrial Research and Development Expenditures in Canada, 1965*.