

other sectors. Thirty-six different departments and agencies devote resources to research in the human sciences, 11 of them having research expenditures of over \$3 million (Table 9.8).

Tables 9.9 and 9.10 show the extramural payments for research and related activities in the human sciences by federal department or agency. Personnel engaged in intramural research amounted to the equivalent of 2,113 man-years in 1974 (Table 9.11).

9.4.2 Provincial expenditures

Eight provinces have established research councils or foundations, each having the primary role of assisting firms with technical problems and of aiding the development of provincial natural resources. In 1972 these organizations spent \$19.6 million on scientific activities distributed as follows: scientific research 38%; experimental development 19%; resource surveys 9%; industrial engineering 9%; analysis and testing 7%; capital (buildings and equipment) 7%; library and technical information 5%; feasibility studies 4%; and other activities 2%.

These activities are financed largely by provincial governments (68%) but Canadian industry and the federal government are also important sources of funds (17% and 11%, respectively). The councils and foundations reported over 1,000 employees at the end of 1972. There were over 380 scientists and engineers and almost 330 technicians and technologists. The remaining personnel consisted of management, administrative and other support staff.

9.4.3 Industrial expenditures

In recent years industrial research and development has shown no real growth in Canada. Expenditures shown in Tables 9.12 and 9.13 are in current dollars (a constant dollar series might show an actual decrease). In 1972, approximately 68% was company-financed, 15% federal government-financed, with the remaining funds supplied by other Canadian companies, foreign governments and firms. The funding distribution varied between industry groups: companies in the chemical-based group funded 86% of their own R&D whereas the contributions of companies in the machinery and transportation equipment group and the electrical group amounted to 52% and 61% of the respective totals. These last two groups received greater financial assistance from the federal government than did firms in other groups.

Sources

9.1 Information Services, Ministry of State for Science and Technology.

9.2 - 9.3 Supplied by the respective departments and agencies.

9.4 Education, Science and Culture Division, Institutional and Public Finance Branch, Statistics Canada.