

on help from abroad. In making this point I will be the first to admit that Canadian industry and Canadian research workers are confronted with many problems that are not easily solved. Many of our industries are small-scale and do not have the means to do the necessary research and laboratory work individually and independently. Where branch plants are involved, served by the research organization of their parent companies, insufficient attention is frequently given to specific Canadian needs. Many of our scientists are finding that employment opportunities for persons with their abilities are unsatisfactory at home and so prefer to move on to greener fields. The government may not have done enough to encourage more industrial research in Canada. If that is the case, what should be done? But it might be more constructive to find answers to such specific problems rather than to continue bemoaning our dependence on foreign research and development work.

### Economic Research and Market Analysis

Now I have dealt largely with research in the physical and natural sciences. I shall be brief in talking about economic investigations and market research, for I dealt with part of this subject when I spoke to you last two years ago.

Scientific discoveries by themselves have little economic value. It is only through their application to meet human wants that scientific discoveries achieve economic significance. Economic research and market analysis then are designed to explore benefits that might accrue to an individual, a business firm or the nation from the adoption of new production techniques, the use of new materials, and the expansion of markets for existing commodities.

There has been a growing recognition in the last three decades or so that economic analysis and market investigations can make a significant contribution to industrial expansion. The shock of the depression of the 'thirties' made people ask: "Why is this happening to us and what can we do about it?" Almost overnight, people started seeking the advice of economists, statisticians and other business analysts.

The Second World War posed new problems of maximizing our resources while at the same time minimizing the dislocations which were the inevitable consequence of large-scale military operations. The task led to the Federal Government's employing the largest number of economists ever assembled in the public service. The end of the War saw an exodus of many of these men, some going back to universities, some joining international organizations but most taking up positions with business. This move was facilitated by the growing realization of industry that running a modern business in an efficient and far-sighted manner was getting to be a more and more complex operation requiring more than engineering skill and a sixth sense that makes for business success. What was needed was professional people who could interpret to business the state of the economy, its problems and its course. Frequently a businessman might not accept professional advice, preferring to trust his sixth sense. But often he would find that by discussing problems with his professional adviser he was better able to make up his own mind on the course to take. As with physical and natural scientists, only large firms in Canada are able to employ professional economists and market analysts. But many firms have been able to get easy access to professional advice through either their trade association or business organization or from firms providing a professional service or through governments.