

commitment to research and development. There is no future for our young scientists in Canada.

The withdrawal of the Established Programs Financing to the provinces and the regions is only going to exacerbate the regionalization and the disparities we see in research taking place in Canada.

Before the 1984 election, the Prime Minister promised—I always run for cover when the Prime Minister promises—

An hon. member: That is right. You should.

Mr. MacWilliam: I know what is going to come next. The Prime Minister promised to increase research and development spending to 2.5 per cent of the Gross Domestic Product from the 1984 level of 1.38 per cent. In essence, he would double it. Where are we since that 1984 promise of almost doubling the commitment to research and development?

• (1830)

We are below where we were in 1984. We are now down to 1.3 per cent of the Gross Domestic Product in terms of Canada's commitment to research and development. Canada is the lowest of eight of the industrialized nations.

Sweden, for example, is at 2.76 per cent of the GDP. France is at 2.5 per cent. United States is at 2.6 per cent. Germany at 2.79 per cent, while Japan is at 2.87 per cent. But Canada, 1.3 per cent. It is appalling. It is inexcusable. I submit that it is internationally embarrassing what is happening to science and scientific research in Canada. We have come through a decade of reasonably good economic growth and yet when we look at our global science and tech indicators in terms of where we have gone from there, we have not improved in any of them.

The government blames the industry for not picking up its share of the load. The Minister for Science says that Canadian industry invests only about .75 per cent of the GDP on research and development. He is right. It does.

In Japan, West Germany, the United States and Sweden, spending by the industry in terms of its share of the commitment is about 2 per cent of the Gross Domestic Product. But the problem here is very simple. It is that 37 per cent of our economy is foreign-owned. I want to say that when you are in a branch plant economy, you do not get the research and development commit-

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ment from those industries, the head offices of which are thousands of miles away. They are not located in our own country.

As we become more and more foreign-dominated, and as the free trade agreement opens up this country to foreign investment, we are going to witness a decline in the percentage of investment that the corporate sector provides for research and development in this country, simply because the branch plants here in Canada will not do the research. That will take place in other areas.

Mr. Duhamel: That is what Harvie Andre said.

Mr. MacWilliam: You are absolutely right, he did. I cannot remember exactly when he did, but I do recall the quotation. I am sure that my hon. friend, as time permits, will provide more details on it.

Mr. Harb: March 9, 1989. It is in the *Computer Dealer News*.

Mr. MacWilliam: Absolutely. Thank you for that clarification.

Here is another reason why we cannot rely on industry-based research and development. That has to do with the type of research that industry is involved with. Industry is concerned with commercial development of a scientific product. That is known as applied research. There is nothing wrong with it. There is reason for it and there is space for it in terms of the over-all commitment to research.

But applied research is conducted particularly for commercial purposes. If Canada is to become a leader in innovation and in research and development, it also requires a commitment to pure research which really is a commitment to extend and expand our frontiers of knowledge, not for commercial purposes necessarily, but that kind of frontiersman research that takes place in the laboratories and in the academic institutions of our country. It does not necessarily have a commercial application, but it is from that research that acts as a springboard for further technological, and I might add, commercial development, that the real essence of science is found.

Pure research is the essence of discovery. It is the vehicle that can provide for Canada a place on the world stage of technological advancement. It is that type of research, I submit, that is being severely hampered by a