EDITORIAL

Researchers in academia as well as industry along with granting agencies consistently agree on the need for more R&D funds. They argue that R&D funds should be rightfully considered as investment rather than expenditure. In either case it is necessary to account for the outlays on R&D in terms of its economic and/or social benefits. It is essential to look critically at the cost/benefit ratio for R&D funds in general and provide appropriate justification for such expenditures or investments. This is more readily – not necessarily easily or reliably – achieved in the business or industrial world. When public funds are used for R&D – a major source for most nations – it is a much more difficult task.

There is much scholarly literature on the economic returns on publicly funded basic research (e.g., A.J. Salter and Ben R. Martin, Research Policy, Vol. 30, 2001, pp. 509-532). As these authors point out research output may be information or knowledge that can be used to economic advantage; they postulate that much of the publicly funded R&D output is of informational nature and the knowledge created is "non-rival" and "non-excludable." Non-rival knowledge is defined as that which others can use "without detracting from the knowledge of the producers." Non-excludable implies that no one can be stopped from using this knowledge – even competitors have free access to it although they did not pay for it directly. This is also the nature of information and knowledge disseminated by journals such as Drying Technology.

Utilization of "free" informational knowledge requires significant investment to understand and use it to advantage. Thus, scientific knowledge is really not available "freely" but only to those who have the necessary expertise to access it. An OECD Report (1996) states: "Knowledge and information abound; it is the capacity to use it that is scarce." Information is available to all but only those with the right capabilities can convert it to knowledge and use it to innovate.

I propose that the rate of technological innovation depends directly on the rate of generation of informational knowledge and the effectiveness in its utilization; the latter is a measure of the ability to assimilate or exploit the knowledge. Efficient dissemination of knowledge is important but it is equally important to develop the ability to utilize it. Academic institutions are responsible for developing such ability. If they can also make a valuable contribution to generation of new knowledge as well then they are very effective in enhancing the rate of innovation, which drives economic growth of nations.

Even at the risk of stating the obvious, clearly there is a strong case to be made for support of academic institutions worldwide.

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