

Canada can become a location of choice from which to supply these services to a global market.

Research and Development (R&D)

Research and Development (R&D) is one of the most sought-after activities. Innovation is the only method by which a country can achieve higher standards of living for its citizens over the long run. While it is possible, to put more people to work, have them work longer hours or give them more machinery to work with, that can only take a country so far. It is only through finding new methods of working, making improvements to machinery and human knowledge and by making breakthroughs in everything from home electronics, to life-saving drugs and environmental technologies that a society can continuously improve its living standards.

Furthermore, jobs in R&D are seen as being relatively well paid, employing highly skilled people and having spill-overs to the surrounding community encouraging even more R&D to take place. Ottawa, for example, not only benefits from the government research facilities and large companies that have chosen to locate their R&D there, but

also all of the small, and not-so-small, companies that have been fostered by that initial investment. According to Research Infosource, 27 of the Top 100 corporate R&D spenders in Canada are based in Ottawa and 27 per cent of the total R&D expenditures from those top 100 companies is spent in Ottawa. Also, by undertaking R&D and creating new products or services, a company has greater pricing power allowing them to return profits to the local economy rather than simply competing on price. This issue will become increasingly important as ever more activities are commoditized.

All countries are recognizing the importance of conducting R&D for maintaining and growing their standards of living. It is therefore not surprising that countries are increasingly in competition to attract R&D activities. And like many activities, emerging markets are increasingly participating as well.

But just as other stages of the value chain are becoming increasingly footloose, so to are R&D activities. While once these functions would be located in close proximity to the corporate headquarters due to the complex and tactile nature of R&D and the need for researchers to have face-to-face contact, this is becoming less necessary. This has happened for a variety of reasons, some of which are the same factors that are affecting other functions, such as technological improvements that make it easier to communicate over distances and at lower costs. The Internet after all was first adopted by researchers to communicate and coordinate their work. Standardized software allows an engineer to read and modify a file produced by a colleague on the other side of the planet, potentially allowing for 24 hour R&D. Even seemingly unrelated advances, such as more liberalized air travel resulting in more direct flights and at lower costs, again facilitate communication and control. But also as firms face greater competition they must look at methods for improving efficiency and value in all of their functions, including R&D, driving them to consider

R&D Spending and Standards of Living

