

in turn, maintained a 1.2 percent annual growth rate in the share of services in the production of services during that same period.

Data are also available concerning the determinants of growth in services output between 1980-1990 among OECD countries. Canada and the US have a similar pattern of distribution of services used as intermediates and in final demand. During that period, almost 75% of the growth in services for these two countries were used for final consumption compared with about 50% on average for other OECD countries. These results contradict the results for other OECD developed countries where the largest share of growth in services output came from an increase in the use of service intermediates rather than for final consumption.

2.1.3 R&D in services⁵⁸

R&D, technology and growth in productivity are closely linked with developments in some service sectors. Those sectors are mainly computer services and communication. Investment in R&D is a central element of most services activities and has had a significant impact on productivity growth in these R&D intensive sectors.⁵⁹

Overall, service firms in OECD countries performed up to 40% of all R&D, with the highest level in Canada and the US. Between 1991-1995, Canada's average annual growth in gross domestic expenditures on R&D (GERD) was 3.7% which was the highest among G-7 countries. In 1995, Canada's average annual growth of GERD was 1.3% compared to 3.7% in 1994. Since the beginning of the nineties, there has been a decrease in both the GERD and GERD as a percentage of GDP for most OECD countries.

2.1.4 Investment in information and communication technologies⁶⁰

Many services such as banking, telecommunication, retail trade and others are dependent on the accumulation of equipment for information and communication technologies (ICT) to grow. It is through the imports of services and manufacturing products intensive in ICT that businesses improve their products and their productivity. Investment in ICT in percentage of total investment for services and goods producing industries provide an indicator of the importance these two sectors give to the accumulation of information technologies. Investment in ICT as a percentage of total investment in the service sector in OECD countries has increased between 1980 and 1990, in particular in Canada and in the US. In Canada, the ratio of ICT on total investment in services increased from 13% to 15% while that same ratio for goods remain stable at about 3.5% between 1980-1990.

⁵⁸ It should be noted that there are serious limitations on R&D data which can not allow for a good assessment of the role of R&D in services industries.

⁵⁹ One of the best channel to obtain financial support to perform R&D is through trade with foreign affiliates.

⁶⁰ It is defined as the gross fix capital formation in information technologies and communication.