



services in India being provided by an Indian company rather than a Canadian one, we would expect to see payments for services from the Canadian headquarters to the contractor in India and we would not see any FDI flows between Canada and India.

It can therefore be extremely difficult to measure global value chains on a global level, but even more difficult to assess where (or how well) a country fits into these chains. It is therefore useful to employ a number of measures to capture the importance of global value chains to the economy. Where Canada fits into these global value chains and how Canada is fairing in terms each value chain activity will be discussed in more detail in later chapters.

The first chart employs a number of measures to illustrate the rising importance of global value chains world-wide. Taking global GDP growth as the basis – anything that is growing faster than GDP is, in effect, becoming more important to

the economy over time. Between 1982 and 2005, world-wide GDP grew by 310%; by contrast global exports grew by 553% and trade in commercial services increased by 779% – more than twice as fast as global GDP.<sup>6</sup> Outward FDI stocks expanded at an astonishing 5.4 times the rate of GDP. A variety of measures of the output of foreign affiliates also increased at much faster pace than GDP showing the growing importance of foreign affiliates for the global economy and royalties & licence fees, a proxy for the internationalization of R&D and knowledge, grew by more than four times the rate of growth of GDP.<sup>7</sup>

Globally there were 37,000 multinational enterprises (MNEs) with at least 170,000 foreign affiliates in operation in 1990. In 2004, only 14 years later, the number of MNEs had nearly doubled to 70,000 and the number of foreign affiliates expanded four-fold to 690,000. Furthermore, more than one-quarter of parents and almost half of affiliates are now located in developing countries.

Similar indicators for Canada reveal that global value chains are increasingly important for Canada as well, with all indicators, except for the operations of foreign affiliates abroad, growing faster than Canadian nominal GDP. Goods exports, for example grew one and a half times as fast as GDP and services twice as fast while outward FDI stocks grew three times as fast as GDP. Consistently, however, global growth in these same indicators grew even faster, suggesting that while Canada is participating in global value chains, it is not participating to the same extent as other countries.

Even these measures do not fully capture the rise of global value chains. FDI can be both tariff-jumping branch plants or resources extraction as well as specialized plants integrated into a global production system. Trade can be both traditional; production in one country for sale to consumers in another, as

6 All figures in nominal US\$

7 Note that GDP growth figures are indexed independently for each factor to adjust for differences in years covered by each factor.