

## The time-series pattern of trade costs

### *Transport costs*

Table C-1 reports *ad valorem* transport rates incurred in Canada's merchandise exports over four decades. The data show that transport costs for differentiated products were far lower than that for homogeneous products. Further, overall transport costs for Canada's merchandise exports declined to 4.1 per cent in the 1990s from 6.7 per cent in the 1960s, a decrease of 38.3 per cent over the past four decades.

**Table C-1. Average transport costs in Canada's merchandise exports by product type (per cent)**

	Homogeneous	Referenced	Differentiated	Total
1965-69	6.9	10.4	3.2	6.7
1970-79	6.4	9.5	2.9	5.7
1980-89	7.1	8.3	2.5	5.3
1990-97	6.1	6.9	2.0	4.1
Growth (60s-90s)	-11.7	-33.2	-38.2	-38.3

Across products, *ad valorem* transport rates for homogeneous products fluctuated in a range of 6-7 per cent over the decades under review; only in the 1990s did they start to show a clear declining trend. Decreases in transport costs for referenced products are evident; *ad valorem* transport rates for that category of products declined steadily from 10.4 per cent in the 1960s to 6.9 per cent in the 1990s. *Ad valorem* transport rates for differentiated products experienced the most significant drop — 38.2 per cent — over the same period, suggesting that improvements in transportation technologies and related institutional innovations over the past decades had more significant cost-saving effects on transporting differentiated products than on the two other categories of products.

### *Distribution Costs (wholesale)*

In the contemporary distribution system, there are two essential characteristics that have a profound impact on international merchandise trade. First, there is services variety. One can identify at least five broad categories of output of distribution services: accessibility of location, breadth and depth of assortment, assurance of product delivery at the desired time and in the desired form, information, and ambiance. Second, there has been increased backward vertical integration in the distribution sector, shifting the wholesale functions from manufacturers to wholesalers to achieve a better division of labour between them. These developments led to an increase in the share of wholesale costs in merchandise exports. On the other hand, efficiency enhancement in wholesale services arising from investment in information technologies, the adoption of new inventory control methods, and increased competition, tended to drive down wholesale costs in merchandise exports.

Table C-2 indicates that wholesale services attached to Canada's merchandise exports amounted to \$11.7 billion in 1997. The role of wholesale services in facilitating Canada's merchandise exports was thus rising: the share of wholesale costs in the value of merchandise exports increased to 4.1 per cent in the 1990s from 2.7 per cent during 1960s and 1970s; this pattern was consistent across different categories of products. The rising share of wholesale costs in the value of exports suggests that although labour productivity in the wholesale sector grew at a respectable pace of 2.5 per cent annually over the past four decades, the forces representing services variety and cost shifting overwhelmed the cost-saving effect in the wholesale sector.