

expanding slightly to 11.0 percent. The value of imports from the EU increased by \$5.9 billion, ending the year at \$61.1 billion.

The narrowing of the trade deficit by \$8.6 billion was primarily due to the increasing surplus with the United States. Faster growth of exports over imports translated into an \$11.2-billion improvement in trade balance with the United States, for a surplus of \$32.5 billion. The trade balance with the EU changed little in 2011, showing a small

improvement of \$0.3 billion, while the trade balance with Japan improved significantly—from a deficit of \$0.6 billion to a surplus of \$1.8 billion. These improvements were partly offset by the worsening trade deficit with the ROW, which increased by \$5.4 billion in 2011 and stood at \$51.7 billion at the end of the year. Overall, last year marked the first improvement to the overall trade balance since the 2009 crisis, shaving over a quarter off Canada's atypical trade deficit.

### Trade, Output and Jobs in Canada

The ratio of exports to gross domestic product (GDP) is often used to gauge economic health, the rationale being that exports creates jobs and increases income by expanding the market for domestically produced goods and services. In this regard, the economic environment of the 1990s was quite favourable for Canadian exporters: the share of exports in GDP grew substantially over the 1990s, peaking at 45.6 percent in 2000, up from only 25.1 percent in 1991, and then declining to 31 percent in 2011.

However, comparing exports to GDP is misleading because GDP is a measure of the value-added content of output whereas exports are the equivalent of gross sales, regardless of where the intermediate inputs were produced. In order to assess the domestic content of exports, the import content of the exports should be removed.

Statistics Canada has produced a number of studies that use Input-Output (I/O) tables to show the extent to which imports and employment are embodied in exports. The I/O tables provide a com-

prehensive accounting of the purchases made by all industries in producing their products. By subtracting purchases from other industries from gross production, the value added and imports by industry can be derived. This then can be used to estimate the import intensity of an industry and to remove the import content of production.

These studies have shown that as the share of exports in GDP climbed over the 1990s, Canadian firms also increasingly used imports to produce exports (Cameron [1999], Ghanem and Cross [2003]): the overall import content of Canada's exports peaked at roughly one-third in 1999 (Ghanem and Cross [2003]) before falling to 27.1 percent in 2003 (Ghanem and Cross [2008]). Removing the import content of exports, the share of value-added exports in GDP has declined, from 31.4 percent in 2000 to 27.9 percent in 2004 (Ghanem and Cross [2008]). However, these Statistics Canada studies have been largely silent on the number of jobs embodied in exports, with one exception: