

74 percent), particularly to East Asian countries such as China and Indonesia, and to Africa (by 47 percent) (Tables 4 and 5). Trade with East Asia is more than double expected, generating over-exports of over \$6 billion. This raises the share of this region in our exports from the expected 2.0 percent to 3.4 percent and largely balances our under-exports to the advanced economies. Other regional results are of interest as well. There is substantial over-exporting to the Middle East (by 36 percent), and under-exporting to Emerging Europe by 22 percent (all due to Eastern Europe, as CIS actually shows modest over-exports). Both South Asia and Latin America are characterized by small under-exports (6 to 9 percent). Note that these estimates take into account the emerging market effect discussed in the previous section, and any over/under-exports are in addition to that effect.

A detailed country analysis shows severe under-exports to the Western European economies such as Germany and France (and the U.K. to a lesser degree). Among BRIC countries, Brazil and India are the two top under-export destinations in the emerging world—with -24 and -31 percent respectively. Conversely, exports to China are more than double expected, and exports to Algeria and Indonesia are triple the expected amounts.

These results are not easily accounted for on the aggregate level;<sup>18</sup> considerable differences exist between countries in our sample that are unaccounted for by the simple model. The theory of international trade provides for several types of trade, depending on the incentive: trade in differentiated goods driven by monopolistic competition, trade driven by factor abundance, and trade driven by unit-labour requirements (comparative advantage). As an example, Canada's reasons to trade with the United States differ from its reasons to trade with South Africa (i.e., intra-industry, intra-firm,

differentiated goods flows versus resource exports). This leads to a divergence of South Africa coefficients from the predictions of the model. Export mix matters, and so does Canadian comparative advantage in areas of specific interest to specific countries. Thus our understanding of the drivers of Canadian exports is enhanced with a regional analysis by sector, undertaken below.

In interpreting the above results, some consideration must be given to the peaking commodity prices, particularly for food and metals, which are the primary Canadian exports to some countries in the sample. However, the appropriate robustness checks showed that excluding 2007 from the sample actually slightly *increases* the over-exporting factor to the emerging markets—i.e., this factor is completely unrelated to the 2007 events. Moreover, while over-exporting to some countries in 2007 can be attributed to higher commodity prices, there are many cases of over-exporting that are not commodity-driven. Overall, despite the scale of these price shocks, they are not found to be the principal driver for the reported results.

### **Patterns of Canadian Competitive Performance: An Examination of Canada's Comparative Advantage in Emerging Markets**

The aim of the analysis that follows is to develop a framework for a detailed analysis of Canada's trade with individual countries of interest. To answer questions about Canada's performance, an analysis of trade by sector is necessary, and we employed the **comparative advantage** approach to identify the patterns of Canada's competitiveness in a given market. We then compared these with the broad sectoral patterns of Canada's competitiveness in the world market as a whole. Supplemented by an analysis of local circumstances, sectors that perform relatively better in a particular market than

<sup>18</sup> Analysis of trade flows by sector could shed more light on the issue, allowing for the separation of commodities and advanced industrial products which likely follow different trade patterns.