

adjusted, resulting in a gap between the sum of the regional totals and the model's world total.

Further, the world total and regional totals for merchandise exports might not necessarily match those data published elsewhere because exports come from direct output, government sales of goods and services, withdrawals from inventories and other direct leakages. In constructing the tables used in this Paper, direct output from the business sector was the sole source of exports.

#### 4.3 The Treatment of Services

Although the I-O model was shocked only with merchandise exports, it measures the direct and indirect effects on both goods and services industries.<sup>11</sup> The direct effects on services industries were included in the world total run of the model, but, for technical reasons concerning data availability, they were not included in the individual regional runs. The services industries that are not included in the regional tables are Finance & Real Estate, Insurance, Educational Services, Health Services and Personal & Household Services. Individually, none of these support industries account for more than 0.7% of the value of total merchandise export to the world.

For the world total, the model is capable of breaking down export commodities normally associated with merchandise exports into a number of services. At its most detailed level, the model provides data on the direct and indirect effects of goods exports on about 30 service commodities. Those effects are assigned to individual service industries, as reported in the derived tables.

There might be some objections to including services in such a way, since the trade data used in the model are normally associated with merchandise trade. However, as noted above, the I-O approach makes a number of adjustments to BoP estimates of exports. One of the results of those adjustments is a decrease the goods portion and an increase the services portion of the total exports of goods and services from the Balance of Payments.

A more fundamental objection to the inclusion of service industries in this project is that the promotion of goods exports and the promotion of services exports

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<sup>11</sup> As an example of the contribution that both goods and services industries make to an exported commodity, consider a finished manufactured product. Goods industries are involved in its actual manufacture, and service industries provide transportation, computer support, accounting services and others that are an integral part of the production and export processes.