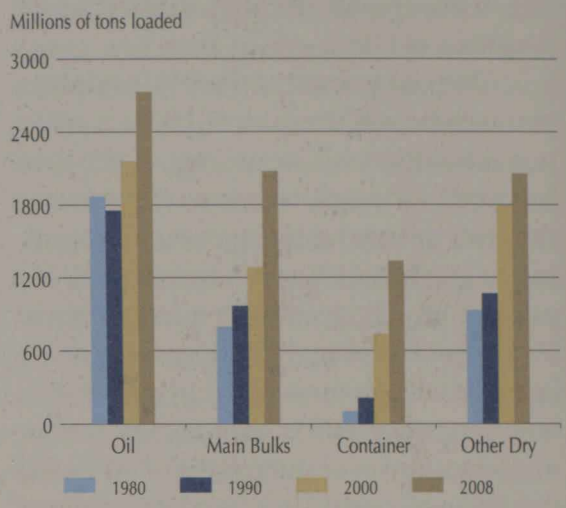
on transportation by the 2007 share of the relevant transportation sector's use of fuels, we see that oil prices account for an extremely small share of the total cost of inputs for most goods.

These estimates derive from statistics for Canada's domestic and international trade combined. The share of transport in total costs can be much larger for international trade as one would expect given that the distance travelled would be much larger on average and may involve more modes of transportation which adds to the cost. For the United States, transportation costs as a percentage of total input costs for international trade were found to be about 4 percent in 2004 (Hummels, 2007). If fuel costs account for between one fifth to one quarter of total transportation costs, fuel costs will account for only about one percent of the cost of the final good.[9] This should not be interpreted, however, to mean that oil prices do not have an impact on international trade or on GVCs. Higher oil prices could indeed have a large impact on certain sectors and markets. Those items with the highest shipping cost-to-value ratio, and the most distant markets, would likely be the most impacted. As noted earlier, rising oil prices have likely already had an impact on choice of transportation modes. Significantly higher oil prices may not stop the growth of GVCs, but it could affect their configuration and operation.

Declining costs of transportation, and of sea transport as a result of containerization specifically, has been suggested as a potential driver for the rise of GVCs. The growing volume of goods shipped by container internationally appears to coincide with the rise of the GVC, which is why the two are often associated. From 1990 to 2008, the volume of goods shipped by container increased

International Seaborne Trade



Data: UNCTAD, Review of Maritime Transport, 2010.

from just over 200 million tons to 1.3 billion tons, a more than six-fold increase. The volume shipped by other means also increased but not by nearly as much. The volume share of goods shipped by container increased from 5 percent in 1990 (and from almost nothing in 1970) to 16 percent in 2008.

But, the fact that containerized shipping emerged at the same time as GVCs, does not, in and of itself imply causation. An important element of the argument linking containerization to the rise of GVCs is a decline in sea freight costs. Detailed work by Hummels (2007) finds only a modest decline in sea freight transport costs due to containerization after the mid 1980s, after having risen sharply from the late 1970s. This modest decline in costs does not appear to be sufficient to explain the rapid rise of trade and of GVCs. However, Hummels does find that the largest impact of the innovation in containerized shipping may not have been reduced costs in the traditional sense, but rather a reduction in international shipping times. Regardless of whether or not cost savings are expressed in conventional terms,

9 Based on 2007 near-peak fuel costs. Long-term elevated fuel prices could drive technological innovations or other adaptations aimed at saving fuel and lowering costs, e.g. reducing speed or decommissioning older vessels.