## "The Evolution of Manufacturing Employment in Canada: the Labour Productivity Channel, the Real Output Channel, and the Role of Outsourcing"

## **Evan Capeluck (Centre for the Study of Living Standards)**

The objective of the papert is to examine the reasons for the decline in manufacturing's employment share in Canada, with particular attention paid to the roles of labour productivity growth, real output growth, and outsourcing. The results of the report suggest that above-average labour productivity growth in manufacturing explains most of the decline in manufacturing's share of total employment between 1961 and 2000. In contrast, labour productivity in manufacturing advanced at the same pace as the all-industry average after 2000, indicating that below-average real output growth explains most of the decline in the manufacturing employment share after 2000. The slowdown in real output growth after 2000 reflects the sector's poor export performance which is related to many factors, including: a loss in cost competitiveness linked to an appreciation of the Canadian dollar; increased competition in the U.S. import market; and a slowdown in domestic demand growth in the United States. However, the story becomes more complicated when manufacturing employment is broken down into its various components. In particular, the evolution of manufacturing employment was, in different periods, largely driven by the fortunes of specific industries.

In a separate analysis, the report also shows that outsourcing accounts for a small but significant part of the decline in the manufacturing employment share over the 1976-2008 period. Two approaches are used to determine the contribution of outsourcing to the evolution in manufacturing's employment share in the report. The first approach uses input-output (I-O) analysis to estimate the impact of changes in the I-O structure of the economy on employment shares by industry. The second approach uses aggregate industry-by-occupation employment data to decompose changes in employment shares by industry in various ways.