port are more productive than those that do not export [the seminal paper is Bernard and Jensen (1995); recent surveys include Greenaway and Kneller (2007) and Wagner (2007)]. Two hypotheses have been suggested account for this. The first is self-selection. Referring to Figure 1, only the most productive firms can afford to pay the fixed costs of becoming an exporter. The second possibility is that firms become more productive because they export—they are exposed to more competition, new ideas, and new technologies; all of which leads to an increase in productivity. Sometimes this is referred to as the "learning by exporting" hypothesis. This is intriguing to many because it suggests that an increase in exporting can yield dynamic benefits to the economy via its effects on productivity. However, as I discuss below, this does not provide a market failure-based argument for export promotion policies.

Many studies find evidence supporting self-selection—firms that export tend to be more productive than non-exporters prior to the point at which they begin exporting [see reviews by Greenaway and Kneller (2007) and Wagner (2007)]. However, the evidence on the "learning by exporting" hypothesis is mixed. Some studies, such as Bernard and Jensen (1999) have found that productivity growth does not significantly differ between exporters and non-exporters. Others have found evidence of increases in productivity among exporters. Greenaway and Kneller (2007) note that slightly more studies find support for the learning hypothesis than those that do not. Results vary with methodology, but also across countries. A difficulty with work in this area is that if the self-selection hypothesis is correct, then those firms which export are more productive and innovative to begin with. Even if we observe that firms increase their productivity after they begin exporting at a faster rate than firms that do not export, it may not be exporting that is responsible. It may just be that some firms have attributes that make them more innovative, and this is what causes them to be successful in both domestic and export markets.

Baldwin and Gu (2003) use firm-level panel data and find evidence that exporting improves productivity for Canadian