

# **The Determinants of Vertical Integration in Export Processing: Theory and Evidence from China**

**Ana Fernandes**  
University of Sussex

and

**Heiwai Tang**  
Tufts University  
Centro Studi Luca d'Agliano  
Hong Kong Institute for Monetary Research

March 2010

## **Summary**

Export processing has been an important part of China's economic development. It accounted for more than half of its exports in recent years. Export-processing plants in China have been governed under two regulatory regimes since the early 1980s, which are referred to as pure-assembly and import-and-assembly, respectively. The main difference between the two regimes lies in the allocation of control rights and ownership of the imported inputs. Specifically, under the pure-assembly regime, a foreign firm owns and supplies components to a Chinese plant that processes them into finished products. Under the import-and-assembly regime, an assembly plant in China imports components of its own accord, and reserves the option of using the imported components with other foreign clients.

This paper uses detailed product-level export data for China to investigate the sectoral determinants of integration versus outsourcing, by exploiting the coexistence of the two regulatory trade regimes for export-processing in China. We present an extension of the Antràs and Helpman (2004) model to incorporate component search for assembling. Our empirical results show that under import-and-assembly, the export share of foreign-affiliated plants is increasing in the intensity of headquarter inputs (measured by skill and equipment capital intensity) across industries, and is decreasing in the contractibility of inputs. No such patterns are found for pure-assembly exports. Moreover, we find that larger productivity dispersion across firms within an industry is associated with a larger export share of foreign-affiliated plants under pure-assembly, but not under import-and-assembly. These results are consistent with our model's predictions.