Innovation and Productivity in Chinese Firms: a Micro Study of Four Manufacturing Sectors

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This paper investigates relations of innovation input, innovation output and production performance in China for four major manufacturing sectors: Textile, Wearing Apparel, Transport Equipment and Electronic Equipment, by using a large sample of firm level micro data and a structural model in estimation. A wave from 2005 to 2006 is estimated and results of all the sectors proves positive effects from innovation input to output, then to firm performance. Market share, export, subsidy, firm size, capital category and other characters of firms are involved in the estimation, which explains significant difference in engaging in innovation and production. In all the sectors, market share improves R&D input, continuous R&D input and export improve new products output. Subsidy sustains R&D input, but not in innovation output. Comparing with private firms, overseas capital based firms tend to input less and output less in innovation, but they do have higher productivity, which might face challenge after the common tax reduction policy was totally abrogated in 2010.

Key Words: R&D, New Product, Performance, Micro Data