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Do out-in M&As bring higher TFP to Japan? An empirical analysis based on micro-data on Japanese manufacturing firms

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This paper compares the performance of foreign-owned and domestically-owned firms, using micro-data on Japanese firms in the manufacturing sector for the period 1994–2000. The overall comparison between foreign-owned and Japanese companies shows that foreign-owned companies enjoyed 5% higher TFP as well as higher earnings and returns on capital. They also displayed a higher capital–labor ratio and higher R&D intensity. Reflecting their higher TFP and labor-saving production patterns, foreign-owned companies showed higher labor productivity and wage rates as well. By estimating probit models, we found that foreign firms acquire Japanese firms with higher TFP levels and higher profit rates. In contrast, in-in M&As seem to have the characteristics of rescue missions. Small firms with a higher total liability/total asset ratio tend to be chosen as targets of in-in M&As. We also estimated the dynamic effects of M&As on target firms. The results indicate that out-in M&As improve target firms' TFP level and current profit/sales ratio. Compared with in-in M&As, out-in M&As bring a larger and quicker improvement in TFP and the profit rate but no increase in target firms' employment two years after the acquisition. *J. Japanese Int. Economies* **19** (2) (2005) 272–301. Institute of Economic Research, Hitotsubashi University; Research Institute of Economy, Trade and Industry; Senshu University.

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1. Introduction

Though the Japanese economy finally seems to be recovering after having stagnated since the early 1990s, many of the underlying problems remain. In order to accelerate structural adjustment and achieve a full-scale recovery, the Japanese government has launched a number of policy packages, including the promotion of inward foreign direct investment (FDI). Conceptually, FDI is a form of long-term international capital movement that is accompanied by investors' intangible assets (such as accumulated technological knowledge through R&D or marketing know-how based on past advertising activity), and it is expected that the recipient country will benefit from such inflows.[1] Although FDI traditionally has not been considered economically important for Japan because it is the world's largest trade-surplus country, the potential benefits of FDI and the contribution it can make to Japan's economy in employment, demand, capital investment, and productivity have recently gained attention. In his general policy speech to the Diet on January 31, 2003, Prime Minister Junichiro Koizumi promised to increase efforts to attract inward FDI with the aim of doubling the cumulative amount within the next five years. Although FDI in Japan has increased rapidly in the past few years, the FDI stock is still very small when compared with other developed economies.

Despite its importance, reliable statistics on and analyses of inward FDI in Japan are very limited. Moreover, in the absence of any meaningful empirical studies on the subject, some observers have argued that Japan does not need more FDI (Werner, 2003; Nihon Keizai Shinbun, 2003). Like FDI in other developed economies, the largest part of recent inflows to Japan has taken the form of mergers and acquisitions (M&As). The critics fear that inward M&As are dominated by "vulture" funds seeking to reap quick profits by taking advantage of troubled firms (Nihon Keizai Shinbun, 2003). Another concern is that some inward M&As are aimed at acquiring advanced technologies (Werner, 2003) rather than transferring and employing intangible assets in Japan. However, according to quantitative studies on corporate performance in Japan, such as Fukao and Murakami (2003), Kimura and Kiyota (2003), and Murakami and Fukao (2003), foreign-owned firms tend to show higher productivity than domestically-owned firms in Japan. If foreign-owned firms are performing better than domestic firms, one would expect that the Japanese economy overall will benefit from more inward FDI. Foreign firms' financial resources and know-how could help struggling Japanese firms out of financial and management difficulties; and domestically-owned firms' economic performance may be improved by technological spillovers from foreign-owned firms and/or intensified competition in the market.

This paper examines whether concerns about a "technological drain" have any foundation or whether Japan does indeed benefit from the transfer of foreign firms' intangible assets. To this end, we compare the performance of foreign-owned and domestically-owned

[1] See, for example, Caves (1996) and Dunning (1988) on the standard theory of FDI.