Why did manufacturing firms increase their non-regular workers in the 2000s?: Does international trade matter?*

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Abstract

This paper examines whether there is any link between export openness and the temporary worker ratio at a firm. First, we investigate the effect of export openness on sales volatility using Japanese firm-level data. Next, we examine whether firms will increase their temporary workers as the volatility of their sales changes. Finally, we calculate to what extent changes in the temporary worker ratio are attributable to the sales volatility that is caused by exporting. We find statistically significant evidence that a foreign demand shock through exports affects the sales volatility at the firm level and that increases in the sales volatility induce the extensive use of temporary workers. Indeed, we find that those firms that incur a higher employment-fixed cost make extensive use of temporary workers when the sales growth volatility rises. However, based on a quantitative evaluation of the effects of exporting on the temporary worker ratio, the magnitude of these effects is quite small. We conclude that the impacts of a firm's exporting status and its export share on the temporary worker ratio are statistically significant but economically negligible in size. Thus, it is not appropriate to attribute the cause of increases in the temporary worker ratio to increased foreign shocks that occur because of exporting.

Key words: Export; Uncertainty; Temporary worker, Firm-level data

JEL classification: J2, J3, F1, F6

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