

# Multi-Product Firms and Price Behavior in Danish Manufacturing<sup>1</sup>

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VERY PRELIMINARY – COMMENTS WELCOME

## Abstract

In this paper, we document and use a rich product-firm-level dataset providing both revenue and quantities for a large panel of Danish manufacturing firms over the period 1998-2005 to better understand the evolution of prices. We start from a macro-perspective linking prices to firm specific variables such as product level market share or total output, controlling for product fixed effect. We then look at the effect of variables such as TFP and size. In line with Foster, Haltiwanger and Syverson (2008), we find that prices are positively related to TFPR (total factor productivity using revenue deflated by a producer price index as output measure) but negatively related to TFPQ (total factor productivity using quantities instead of revenue as a measure of output, or deflated with firm specific deflator for multi-product firms). We also find that prices are on average negatively correlated with firm size. However, once we run the regression by product, we also find that the relationship is negative for homogenous goods but positive for differentiated goods, as suggested by Kugler and Verhoogen (2008). Altogether, the paper contributes to the debate regarding the endogeneity of prices and the consequences for the proper measurement of productivity. We also discuss how we adapt our analysis to the multi-product nature of production for most firms in our sample and relate it to the recent theoretical literature (Bernard et al., 2008; Mayer, Melitz and Ottaviano, 2009; Nocke and Yeaple, 2009; Eckel and Neary, 2009).

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