

**Specialization and Productivity Performance
In Low-, Medium-, and High-Tech Manufacturing Industries**

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Abstract. This study makes use of the OECD Structural Analysis industrial database (STAN) to investigate patterns of industry specialization as measured by a country's share of total industry production for 14 OECD countries over the period 1970 to 1993. I find that these industrialized countries tended to specialize manufacturing production in very different industries, and most countries retained their specialization over the period from 1970 to 1993. There is also very little correlation between industries in which the countries are strong in terms of labor productivity. Regression analysis shows that improvement in relative labor productivity is a powerful predictor of a rising market share. The rate of capital formation also plays an important role in the determination of market share for low-tech industries but is less significant for medium-tech industries and not significant for high-tech ones. The results also show that relatively higher labor costs generally reduces competitiveness in a particular industry and hence market share but, somewhat surprisingly, that this effect is statistically significant only among low-tech industries and only in the 1970s.

JEL Codes: O30, O47, O57.

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