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Production transfer within multinational enterprises and American wages

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Abstract

This paper tests whether the transfer of production stages within US-headquartered multinational enterprises (MNEs) from US parents to foreign affiliates has contributed to within-industry shifts in US relative labor demand toward the more-skilled. There are two main empirical results. First, there is evidence of MNE transfer during the past 20 years. Second, regression analysis does not support the MNE hypothesis. MNE transfer tends to have small, imprecisely estimated effects on US relative labor demand. This finding is inconsistent with models of MNEs in which affiliate activities substitute for parent unskilled-labor-intensive activities.

Keywords: Multinational enterprises; Skill upgrading; Wage inequality

JEL classification: F21; F23; J31

1. Introduction

The wages of more-skilled Americans relative to those of their less-skilled counterparts have been rising sharply since the late 1970s.[1] Many economists

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[1]Several economists have documented this fall in terms of education, experience, and job classification. Bound and Johnson (1992) find that between 1979 and 1988, the ratio of the average wage of a college graduate to the average wage of a high school graduate rose by 15 percent. Davis (1992) finds that between 1979 and 1987, the ratio of weekly earnings of males in their forties to weekly earnings of males in their twenties rose by 25 percent. Finally, Lawrence and Slaughter (1993) find that in manufacturing between 1979 and 1989, the ratio of average annual wages of non-production workers to average annual wages of production workers rose by nearly 10 percent, from 1.52 to 1.65.

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studying this wage divergence have concluded that its primary cause was a within-industry shift in relative labor demand toward the more-skilled.[2] Despite this consensus, there is still disagreement about what caused the within-industry demand shifts. These shifts are consistent with skill-biased technological change, as many researchers have pointed out. However, they are also consistent with explanations related to international trade. For example, Feenstra and Hanson (1996a), (1996b) find outsourcing to be correlated with skill upgrading.

In this paper I test a different hypothesis for what caused the within-industry relative-demand shifts: the transfer of production stages within US-headquartered multinational enterprises (MNEs) from their US parents to their foreign affiliates. Like skill-biased technological change (SBTC) and outsourcing, MNE transfer can generate within-industry skill upgrading. There are at least two important reasons to test the empirical importance of MNE transfer.

One is that little is known about it. In his survey of research on trade, FDI, and labor markets Baldwin (1995) (p. 55) finds that 'there do not seem to be any studies of how the shifts in the pattern of US direct investment and direct foreign investment in the United States have affected relative wages'. This lack of knowledge matters because US parents account for the majority of total US manufacturing value added – 60% in 1989 and 59% in 1994. It also matters because MNE transfer differs from outsourcing in two important ways. First, MNE transfer considers only within-firm activity and excludes any arm's-length transactions between US and foreign firms. The Feenstra and Hanson (1996a), (1996b) outsourcing encompasses both within-firm and arm's-length transactions. Second, MNE transfer does not require output to be sent back to the United States. Outsourcing defined as imported intermediate inputs captures only transferred production stages which return to the United States for further processing. MNE transfer encompasses foreign production either sold in that host market or exported to some third market.

A second reason to study MNE transfer is policy. If outsourcing causes skill upgrading then trade barriers are a possible (albeit inefficient) policy option. If MNE transfer matters, however, then limits on outward foreign direct investment (FDI) are a policy option as well.

To analyze MNE transfer I combine two data sources covering 1977 through 1994: publicly available data from the Bureau of Economic Analysis (BEA, 1977–1994) on US manufacturing MNEs, and data for all US manufacturing from the National Bureau of Economic Research's (NBER) manufacturing productivity database. The BEA data start in 1977, about when wage inequality within US

[2]Looking at just the manufacturing sector, Berman et al. (1994) and Lawrence and Slaughter (1993) find that even though the relative wage of more-skilled workers has been rising, within most industries firms have been employing relatively more of these workers. This evidence strongly suggests within-industry demand shifts towards more-skilled workers.