Impact of Offshoring on Firm Average Wage: 
Analyzing Rent Sharing and Composition Effect

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Abstract

Offshoring firms are found to pay higher average wages than purely domestic firms. We provide a unifying empirical approach by capturing the different channels through which offshoring might explain this wage difference, namely: (i) skill composition effect (ii) rent sharing effect, and explain how much each contributes towards higher average wage in offshoring firms. A skill composition effect increases average wages when firms offshore low skilled jobs. Rent sharing pushes up wages if firms share offshoring induced increase in profits/revenue with workers through wage bargaining. Unlike previous studies in the offshoring literature we consider both effects jointly and disentangle the impact of each on firm level average wage.

We use rich Danish employer-employee data to disentangle the two effects. Using China’s accession to the WTO in December 2001 as a positive exogenous shock to the incentive of offshoring to China, we estimate the causal effect of offshoring on average wages through the two channels. We find that both effects explain the gain in average wages between 2002-2005, for firms offshoring to China in 2002. Furthermore, distinguishing among firms depending on when they offshore to China provide interesting results when comparing the increase in wages in 2002-2005 with an earlier period, 1999-2001. We find that the differential rise in average wage was highest for firms offshoring to China in 2002 but not in 1999, and is explained only by rent sharing; whereas for firms offshoring to China in both 1999 and 2002 the differential wage increase is explained more by skill composition effect. Moreover, these patterns are not discernable using measures of skill composition and rent sharing available in typical firm level datasets – like ratio of educated to uneducated workers and sales per employee.

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