

# **Skill Sorting and Production Chains: Evidence from India**

Yoko Asuyama <sup>a</sup>

<sup>a</sup> Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO), Wakaba 3-2-2, Mihamaku, Chiba, 261-8545, Japan. E-mail: Yoko\_Asuyama@ide.go.jp.

## **Abstract**

This study proposes a new factor, namely, inter-industry variation in the length of production chains, that explains skill-sorting patterns and skill wage differentials across industries. A simple simultaneous production model shows that when the quality of intermediate inputs deteriorates rapidly along the production chains, high-skilled individuals choose to work in industries with shorter production chains because of higher returns to skill. I empirically confirm this theoretical prediction in India, where the quality of intermediate inputs is likely to degrade rapidly because of the high number of unskilled laborers, poor infrastructure, and less-advantaged technology. The results remain robust even when considering selection bias, alternative reasons for inter-industry skill wage differentials, and a different period. The proposed skill-sorting mechanism may partly explain countries' development patterns, such as India's service-led growth.

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