

Matching Workers' Skills and Firms' Technologies: From Bundling to Unbundling*

Philippe Choné[†] and Francis Kramarz^{†*}

[†] *CREST-ENSAE, Institut Polytechnique de Paris, France*

^{*} *Department of Economics, Uppsala University, Sweden*

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Abstract

How are workers matched to their employing firms when workers have multi-dimensional skills and firms differ in the importance of each such skill for their production function?

When workers' skills cannot be unpacked and sold separately on skill-specific markets, the implicit price of each skill varies across firms. The wage function is shown to be log-additive in worker's quality and a firm-specific effect that reflects the firm's chosen aggregate mix of skills and the associated equilibrium matching.

When individual skills can be purchased thanks to new technologies and increasing access to outsourcing, temp agencies and other pro-market institutions, firms reinforce their hires of skills in which they have a comparative advantage yielding a more polarized matching equilibrium. Generalist workers – endowed with a balanced set of skills – are shown to benefit whereas specialists are negatively affected by markets opening. We also examine the case when workers or firms pay a fee to an unbundling platform. Then we discuss the empirical content of our model and present some empirical evidence based on this content, using Swedish data sources on workers' skills and their employing firm and occupation. We conclude by pointing connections between our contribution and various literatures.

JEL Codes: D20, D40, D51, J20, J24, J30

Keywords: bundling; multidimensional skills; matching; sorting; heterogeneous firms; polarization

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