TASK SPECIALIZATION IN U.S. CITIES FROM 1880–2000

Guy Michaels  
London School of Economics  

Ferdinand Rauch  
University of Oxford  

Stephen J. Redding  
Princeton University and NBER

Abstract  
We develop a new methodology for quantifying the tasks undertaken within occupations using over 3,000 verbs from more than 12,000 occupational descriptions in the Dictionary of Occupational Titles (DOTs). Using micro-data from the United States from 1880–2000, we find an increase in the employment share of interactive occupations within sectors over time that is larger in metro areas than non-metro areas. We interpret these findings using a model in which reductions in transport and communication costs induce urban areas to specialize according to their comparative advantage in interactive tasks. We present suggestive evidence relating increases in employment in interactive occupations to improvements in transport and communication technologies. Our findings highlight a change in the nature of agglomeration over time towards an increased emphasis on human interaction. (JEL: N92, O18, R12)