



SPECIAL JACOBS CENTER RESEARCH SEMINAR

PROF. DR. DAVID DEMING

Harvard Kennedy School
Harvard Graduate School of
Education, USA

STEM CAREERS AND TECHNOLOGICAL CHANGE

Science, Technology, Engineering, and Math (STEM) jobs are a key contributor to economic growth and national competitiveness. Yet STEM workers are perceived to be in short supply. This paper shows that the “STEM shortage” phenomenon is explained by technological change, which introduces new job tasks and makes old ones obsolete. We find that the initially high economic return to applied STEM degrees declines by more than 50 percent in the first decade of working life. This coincides with a rapid exit of college graduates from STEM occupations. Using detailed job vacancy data, we show that STEM jobs changed especially quickly over the last decade, leading to flatter age-earnings profiles as the skills of older cohorts became obsolete. Our findings highlight the importance of technology-specific skills in explaining life-cycle returns to education, and show that STEM jobs are the leading edge of technology diffusion in the labor market.

Tuesday, September 25, 2018, 12:15 – 13:30 h

At the Department of Economics, University of Zurich
Schöberggasse 1, SOF-G21, 8001 Zürich