ECONOMICS OF DIGITIZATION TUTORIAL APPLICATION

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DESCRIPTION OF GRADUATE STUDIES

2018 – present — Doctoral Program in Economics
University of Maryland at College Park (Maryland, US)
Major: Labor Economics; Minor: Industrial Organizations
Coms exams: Completed in 2019
Course work: Micro analysis, macro analysis, econometrics, computational economics, empirical microeconomics, empirical industrial organizations, population economics, public economics

2014 – 2017 — M.S. in Economic and Social Sciences
Bocconi University (Italy)

2010 – 2014 — B.A. Economics and International Studies
Kenyon College (Ohio, US)

RESEARCH INTERESTS

The impact of technology on different aspects of the labor market is the one element that links together my interests in two strands of research: the returns to skills and diversity. My work in returns to skills started in 2016 while at the OECD, where I co-authored a paper aiming at shedding light on the extent to which different types of skills are rewarded with wage premiums as industries go digital. This work furthered my interest in understanding the effects of digitalization across a wider spectrum of the population. As a consequence, during the second year of my doctoral program, I focused on analyzing the dynamic heterogeneous returns to skills across different career stages and occupational levels in the UK. Regarding the latter strand of research, I am interested in whether a diverse workforce can foster innovation while accounting for the level of digitalization in different industries. Diversity, in particular, has become one of my areas of interest through a joint paper. This work aims at evaluating the impact of the 2008 recession on health at birth of immigrant newborns and the wider effect on immigrant communities in Italy. Among others, an important mechanism underlying the heavier negative impact of the recession on immigrants is the tendency of clustering in the most affected industry among immigrant communities. Building upon my previous research, I aim at focusing my future research on the effects that 2020 will have on digitalization across industries and the way in which we will seek and perform jobs going forward.

PROJECTS

P. Bertoli, V. Grembi and J. Nguyen, 2020. "Birth in Hard Times When You Belong To Minorities", conditionally accepted.

We assess the impact of the 2008 recession on health at birth of immigrants using unique administrative data from Italian municipalities. Using a difference in difference approach to capture the spread of the crisis intensity through about 4,500 municipalities, we show that health at birth (e.g. being low weight) of immigrant newborns deteriorated more than health at birth of Italian newborns. These effects were harsher for ethnicities employed in the economic sectors most affected by the crisis and for ethnicities with less outside options in the labor market. Yet, the effects were milder in municipalities with more registered immigrant associations, or closer to an immigrant association, even controlling for municipalities fixed effects. The characteristics of ethnic groups and their organization at the municipality level do not explain heterogeneous effects in the group of Italian newborns, pointing to network rather than neighborhood effects. We show that, in the aftermath of the recession, there was a change in the composition of immigrant communities, with the healthiest ethnic groups moving to municipalities with more associations, where there were lower levels of in-utero selection.

Robert Grundke & Luca Marcolin & The Linh Bao Nguyen & Mariagrazia Squicciarini, 2018. "Which skills for the digital era?: Returns to skills analysis," OECD Science, Technology and Industry Working Papers 2018/09, OECD Publishing.

This paper sheds light on the extent to which different types of skills are rewarded as industries go digital. It relies on information from the OECD Survey of Adult Skills on labour market participation and workers' skills for 31 countries as well as on a novel OECD index on the digital penetration of industries. It investigates how cognitive and non-cognitive skills are rewarded in digital vs. less digital intensive industries and assesses the extent to which skills bundles matter. The results indicate that digital intensive industries especially reward workers having relatively higher levels of self-organisation and advanced numeracy skills. Moreover, for workers in digital intensive industries, bundles of skills are particularly important: workers endowed with a high level of numeracy skills receive an additional wage premium, if they also show high levels of self-organisation or managing and communication skills.

"What Are Skills Used For? The Dynamic Heterogeneous Returns To Skills", work in progress.

This paper analyzes the dynamic heterogeneous returns to cognitive and social skills in a task-based framework, accounting for self-selection into occupations across different career stages. To identify the parameters of interest, I estimate an empirical model which exploits the variations in observed wages and occupation choices across individuals at each period and within each individual across periods. Given the assumptions in the individual's occupation decision process, these variations are exogenous conditional on the observed characteristics and importantly the latent skill factors. I find that at the early as well as the latter career stages, the static returns to skills vary substantially across task-based occupations. Together with the results from the task-based occupation premiums, the static heterogeneity in the skills returns shows that rather than being the general productive inputs, the market values of skills are task-specific. Moreover, at the latter career stage, the task-specific values of skills constitute a form of on-the-job investment in the skills efficiency rate that generates cumulative returns to skills only for individuals who stay in the same occupations. Whereas, due to such task-specific values, individuals who move to a different occupation face a trade-off between improving their skill-task mapping and depriving their cumulative skills returns.