Title: Qualification mismatch and educational activities among older workers.

Authors
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Abstract
In Germany 15% of full and part-time workers are formally overqualified (Reichelt & Vicari, 2015). Thus, the formal qualifications of these employees acquired in the system of education do not correspond with the formal qualifications which are needed to do their job (Hotz-Hart & Rohner, 2014). In this case there is a qualification-mismatch that may end up in an overload or underload leading to negative individual and overall economic consequences like losses in income and productivity of workers (Rohrbach-Schmidt & Tiemann, 2010), lower job satisfaction (Quintini, 2011), early retirement and substantial costs for enterprises (Güpner & Seebacher, 2014). Especially in face of the demographic change and the fast progression of technological developments, enterprises are pressured to stay innovative and competitive. In this context an adequate fit between the formal qualification level of employees on the one hand and formal qualification requirements of the work on the other hand becomes increasingly important.

As there are hardly any studies analysing the effects of formal qualifications mismatch on the participation in adult education and adults' basic skills (reading, calculating, problem solving) in Germany, this research project addresses following questions using reanalyses of the national PIAAC data:
- Are there any differences between overqualified, underqualified and adequately qualified workers regarding their basic skills?
- Do under- and overqualification have an effect on the participation in non-formal adult education?

For the analysis, a variable that represented information about an overqualification,
underqualification or adequate qualification was created by matching the highest formal qualification level (coded with ISCED-97) and the variable of the required formal qualification level for doing the job (coded with ISCED-97). Logistic and linear regressions show that, when controlling for the variables of age, gender and level of education, a qualification mismatch has significant effects on all three basic skills of workers and on their participation in adult education. Underqualified workers participate significantly more and overqualified workers significantly less in adult education than adequately qualified workers. Moreover, workers with a qualification mismatch achieve in all three basic skills lower means than adequately qualified ones.

Title: MisMatch in human capital accumulation.

Authors
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Abstract
As noted by the OECD, skill mismatch is one of the main challenges faced by economies. Empirical evidence shows that, in far too many cases, workers are not well-matched with their current jobs. Productive efficiency requires the matching of high ability people to appropriate education and eventually to productive jobs. Inefficiencies arise in a couple of ways. First, the sorting of individuals to education opportunities may be distorted. Second, frictions in labor markets may prevent the matching of individuals, distinguished by ability and education, with appropriate jobs. This paper studies the first part of the matching process: the allocation of heterogeneous agents to levels of educational attainment. To the extent high ability individuals have low educational attainment and thus low skill jobs, these forms of mismatch are related. As we see using the PIAAC data across 21 countries, observed educational outcomes are often at odds with the stark predictions of assortative matching: i.e. mismatch occurs when high ability agents are not always the most educated and some low ability agents have high educational attainment. Our primary goal of the paper is to understand the magnitudes, sources and consequences of this mismatch, both in theory and in the data. The paper presents evidence of substantial mismatch between ability and educational attainment across 21 OECD countries, with a main focus on Germany, Italy, Japan and the US. In the model, mismatch could originate from: (i) taste shocks, (ii) binding borrowing constraints and (iii) noisy measures of ability in test scores. The model is estimated using a simulated method of moments approach. The main empirical finding is that measured mismatch arises largely from noise in test scores and does not reflect borrowing constraints. Taste shocks play a minor role in explaining mismatch. Further, the estimation allows us to decompose the college wage premium, isolating cross-country differences in selection effects from the return to education.

Title: Occupational mismatch in Singapore: Extent and determinants

Authors
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Abstract
Occupational mismatch can have important labour market consequences for individuals, employers, and society. Understanding the extent and determinants of mismatch are therefore critical. Most research on occupational mismatch focus on qualification rather than skill mismatch due to the lack of (a) data to measure the latter and (b) universal agreement on how to measure the latter. However, even for qualification mismatch, not much is known
about the extent of non-time-related qualification mismatch in countries like Singapore. From a public policy perspective, the question of qualification mismatch is relevant, given the substantial investment on post-secondary institutions and the role devoted to human capital in economic development. Using data from the Programme for the International Assessment of Adult Competencies, this paper examines the extent of both types of mismatches in Singapore and factors associated with qualification mismatch among workers who are well-matched in skills. Our results suggest that qualification and skill mismatch represent different aspects of occupational mismatch, where the majority of adults who are mismatched in qualifications are not mismatched in skills. The extent of qualification mismatch is larger for adults with certain sociodemographic characteristics (e.g., adults in industries with high proportion of rank and file workers), whereas, the extent of skill mismatch is larger for adults with other socio-demographic characteristics (e.g., adults in the associate professionals and technicians occupational group). Our study also found that high levels of learning strategies and reading in everyday life have statistically significant associations with under-qualification among adults who are well-matched in literacy proficiency, suggesting that these factors could compensate for the lack of qualifications in order to match the level of literacy proficiency required by a job. By contrast, the type of institutions adults graduated from and their working arrangement in jobs are significantly associated with over-qualification among adults who are well-matched in literacy skills. This possibly suggests: (a) inherent differences between adults who graduated from different types of institutions; (b) differences in the quality of education they received; and/or (c) perception of how society views qualifications from different institutions.