The impact of education and mismatch on wages:
Germany, 1984 – 1998

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ABSTRACT
In analysing the impact of education on wage differentials and wage growth, Besides personal characteristics (e.g. education) we also use job characteristics (e.g. skills required) to explain wages – cf. Muysken and Ruholl (2001) and Muysken et al. (2002). The analysis is in line with the assignment or allocation literature, which stresses the interaction between demand and supply when explaining earning differentials. This literature recognises that, since individuals are characterised by complexity, there may be comparative advantages in assigning particular individuals to particular jobs, which will be exploited by an efficient labour market – cf. Hartog (1992) and Sattinger (1993). The latter provide a theoretical motivation to include job-related variables in the widely used Mincer (1974) earnings function.

We estimate wage equations on individual data for Germany (1984-1998), using GSOEP data. It turns out that the personal characteristics as education and experience explain only part of the variation in wages. The impact of job characteristics also explains an important part. While an increase in educational attainment is observed, its impact on wages is countered by increasing level of required skills on the one hand, and over schooling on the other. One conclusion of this finding then is that increases in education contribute less to productivity growth than is usually thought.

Similar results can be found in the equivalent papers for the Netherlands using OSA data (Muysken and Ruholl 2001) and for the US using CPS data (Muysken et al. 2002). We compare the results for Germany with the other papers. The implied comparison of Europe vs. the US shows that, while the overall skills level is higher in Europe, the skills premium is lower in Europe, especially on the university level. In Germany, a concentration of medium skilled workers can be observed, due to the vocationalistic organisation of the educational system.

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