The Contribution of Degree Subject to the Gender Wage Gap for Graduates
A Comparison of Britain, France and Germany

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It is a fact that women earn less than men. However, there is less consensus why this is the case. In this project, we focus on university graduates and show that subject of degree as well as higher education institution matter for the gender wage gap. We draw on person-level data from Britain, France and Germany and observe wages and subject of degree for a large number of graduates. The data sets we use are the labour force surveys of Britain (UK LFS), France (Enquête de l'Emploi) and Germany (Volkszählung 1970, Mikrozensus, 1985-2000). For Britain, we also use the General Household Survey (GHS) and a graduate cohort survey (GRAD). In France, we also use the survey Formation et Qualification Professionnelle (FQP). Several of these data sets do not only give information on the subject of study of a person, but also on the type of institution attended (e.g. Universität versus Fachhochschule in Germany, grande école versus université in France or old university versus former polytechnic in Britain).

Wages differ by subject of degree and women on average study different subjects of degree than men. A stylised picture would characterise men as predominant in engineering and related fields whereas women are predominant in education and language studies. This is true in all three major European economies. Because men concentrate more on financially rewarding subjects than women, subject of degree can explain a significant share of the gender wage gap among graduates in all investigated countries. The importance of subject of degree to the explained gap in wages ranges from 13 to 36 percent in our preferred specifications.

The findings that we report show that the subject studied in higher education matters for future labour market outcomes. At a given point in time in all three countries a sizable portion of the wage differences between male and female graduates can be explained by subject of degree. The cross-country pattern is less consistent when looking at changes through time. In Britain it seems that women have made much more headway into studying degrees that pay off more in the labour market than has occurred in France or Germany. Thus there has been a narrowing of the wage gap between male and female graduates in Britain, part of which can be attributed to convergence in male/female degree subjects, which has not occurred in the other two countries.

Changes in the gender distributions across levels of higher education institutions (e.g. Universität versus Fachhochschule) played a minor role in explaining changes of the gender wage gap, except in Britain and France: Women moved up the institutional ladder in Britain and France, but not in Germany. Within institutions, women tended to move to more lucrative subjects of degree in Britain, but the opposite is true in France. In Germany the effects are in opposite directions in the upper (Universität) and lower (Fachhochschule) levels of higher education.
The findings of this project should be of interest to a number of parties. This includes academics from various social science disciplines with an interest in gender, education and the labour market. The results should also be of interest to policymakers concerned with gender equity and how gender-specific disparities originate. Finally, employers whose labour demand has been increasingly shifting towards graduates over time, together with workers’ representatives, may well be interested in the way in which different degree subjects are rewarded in the labour market and how this contributes to different wages of men and women.