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### **Occupational segregation of men and women between 1996 and 2005 – An analysis at the establishment level**

The occupational segregation of men and women is considered to be one of the most important determinants for the gender-specific wage differential. In this paper we show how the horizontal occupational segregation of men and women in German establishments developed between 1996 and 2005. We focus on occupational segregation within establishments, which has been explored only little so far. Intra-firm segregation may differ from aggregate segregation on the labour market because a more equal overall distribution of men and women across jobs does not necessarily lead to comparable job opportunities and promotion prospects for men and women within each establishment. Firm-specific measures of segregation allow us to gain new insights into the degree and structure of firm heterogeneity. For this purpose we use the Linked-Employer-Employee Data from the IAB (LIAB). It links employees from the IAB employment statistics of the German Federal Employment Services to the enterprises of the IAB establishment panel. Our data base contains establishments with a minimum of 20 employees that participated in the IAB establishment panel in 1996, 2000 or 2005. On the part of the employees we include all employees subject to social security who were employed in these enterprises on the appointed dates 30.06.1996, 30.06.2000 and 30.06.2005. Our analysis is intended to answer the following questions: (1) Did occupational segregation in Germany change during the observation period? (2) Do segregation and its development differ in eastern and western Germany? (3) How do establishments with exceptionally high segregation measures differ from those where they are exceptionally low? (4) What factors are responsible for changes in segregation over time? Do, for instance, changes in the occupational pattern play a larger part or the sex composition within existing occupations?

Analysing the proportion of women in the most prevalent 30 occupations of the German labour market shows that only administrative or care occupations exhibit a large female share: the proportion of women among cleaning staff, kindergarten teachers and office workers exceeds 90 percent. In contrast, even in the 2000s, male employees remain as dominant as ever in the manufacturing and processing industries. In this respect, the German labour market segregation does not differ from the typical pattern of segregation into so-called “male” and “female” occupations that can be observed in many other EU countries.

Based on common segregation measures, the horizontal occupational segregation of women and men in German enterprises changed only slightly between 1996 and 2005. Both the dissimilarity index and the standardized dissimilarity index – which weights all occupations equally regardless of their actual quantitative importance – indicate only a slight decrease in segregation. A separate analysis by region and industry sector reveals merely minor differences in the development of firm-specific segregation between the examined subgroups. The segregation index turns out to be slightly higher in eastern Germany, which is in line with the findings of former studies. The simple dissimilarity index yields the strongest regional difference with about 2 percentage points. In contrast, all firm-specific segregation measures vary substantially between sectors. The dissimilarity index turns out to be particularly small in the banking and insurance sector. A comparison with the standardized index suggests, however, that the equal distribution of men and women in these establishments applies only to very few – but numerically large – occupational groups. In most occupations within this sector we still find a strong occupational segregation of men and women.

Establishments with a strongly segregated workforce differ notably from weakly segregated establishments with respect to their employment structure. In line with the empirical literature we find enterprises with high segregation indexes to be smaller on average than those in which men and women hold similar occupations. However, this correlation is partly driven by the positive correlation between the average number

of employees within the same occupation and the total size of the workforce within establishments. Furthermore, both the female share and the share of part-time employees are considerably larger in less segregated establishments. The latter also tend to employ more highly educated workers. In eastern Germany, a low index of dissimilarity goes along with a larger share of unskilled workers.

A decomposition of the change in labour market segregation over time reveals that the small decrease in the dissimilarity index is mainly driven by an overall shift towards less segregated occupations. Changes in the gender composition within occupations explain only a quarter of the observed reduction in segregation. Separate analyses by region reveal strong differences between eastern and western Germany. Based solely on the change in the gender ratio by occupation, the dissimilarity index in eastern Germany would even have increased. However, in both regions the decline of strongly segregated occupations led to a decrease in overall gender-specific segregation in the labour market.