

## Gender Segregation in the Polish Labour Market: A Cluster Analysis of Sectoral Differences\*

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### Abstract

The study aims to identify the level and characteristics of horizontal gender segregation in the Polish labour market, considering the influence of socio-cultural factors. The relevance is due to the insufficient empirical analysis of cross-sectoral differences in the gender composition of employees in Central and Eastern European countries. The scientific literature lacks comprehensive studies that combine statistical segregation indices with cluster grouping of economic sectors based on gender imbalance. The research methodology is based on the use of official statistical data of the Central Statistical Office of Poland (GUS) on the employment of women and men in a sectoral context. The analysis uses clustering and calculation of the disparity index (D) and the Carmel–McLachlan index (CMI), which allow for a quantitative assessment of the level of segregation both between sectors and within them.

The study results demonstrate the presence of five clearly defined clusters of industries with different gender components, in particular, a significant concentration of women in education, healthcare, and social services, and men in industry, transport, technical, and construction specialties. The overall disparity index is 0.344, indicating a high horizontal segregation level in the employment structure. The internal heterogeneity of the gender composition within the clusters was also analysed, emphasizing the complexity and multi-level nature of segregation processes. The data obtained confirms the hypothesis of the influence of gender stereotypes on professional choice and the continuation of the traditional division of labour model. The study has practical significance for forming gender-sensitive educational and market policies aimed at reducing structural barriers and supporting a more balanced participation of women and men in various sectors of the economy.

**Keywords:** gender segregation, gender stereotypes, labour market, horizontal segregation, cluster analysis