

PRESS RELEASE

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Job level changes account for 50 percent of wage growth – EPOS economists report

- **EPOS research analyzes career paths of workers in the U.S. and Germany**

Bonn, Mannheim, Germany, 13.07.2023 – **Moving to higher job levels is an integral part of climbing the career ladder and accounts for 50 percent of workers’ wage growth in the course of a professional life. The job level encompasses the complexity of tasks, the autonomy in performing it, and the responsibilities associated with it. This novel perspective on what determines wage structures is published in the Discussion Paper “Job levels and Wages” by EPOS economic research center at the Universities of Bonn and Mannheim.**

“Based on a large set of administrative data from the United States and Germany, we find that job levels have a striking explanatory power for wages in the labor market,” the authors say. “This means, even if workers have the same occupation and perform similar tasks their wages can differ according to their job level.”

In both the U.S. and Germany, a significant share of workers with the same occupation belong to three different job levels. “According to our results, what workers in the labor market are paid for is to do jobs that involve more complex task execution as well as responsibility and that require more autonomy, i.e., how closely rules have to be followed,” the economists say.

Example: two bakers on different job levels

The job level distinctions can be explained by the example of two bakers: One baker follows recipes and rules for mixing and baking dough, and the other baker also mixes ingredients and bakes dough, but additionally develops new recipes. Both perform the occupational tasks of bakers, but their autonomy and responsibility in executing the tasks differ, and thus their job levels.

Moving up the career ladder: role of education

The EPOS researchers find that most career ladder moves occur while staying with the same employer. Better-educated workers will be promoted more quickly to higher job levels. The data show a return to college education of 54 percent. This does not mean that workers get paid more because they have a college degree but having a college degree opens up the opportunity to reach higher job levels that involve more complex task execution.

New perspective on the gender wage gap

Latest EPOS research also shows that the gender wage gap largely stems from a gender promotion gap and differences in career ladder dynamics. Female workers start falling behind their male counterparts in terms of career progression around the age of 30. While male workers still climb the career ladder for the next ten to fifteen years, the careers of women stall.

In Germany, it is typically women who reduce hours worked in their mid-career by going on maternity leave, working part-time, or changing to jobs with more family-friendly work requirements. “In a model of career ladder dynamics where we interpret part-time work as lower investment in careers, this will lead to a dynamically rising gender promotion gap that materializes in a gender wage gap in the later part of working life,” the authors say. “The gender wage gap has its roots early in working life when the the gap might still be small. Yet, differences in career progression will leave their long shadow on the future of female careers.”

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The data used

So far, the lack of data on job-level information had prevented a systematic analysis of the relationship between job levels and wages. EPoS economic researchers use administrative matched employer-employee data. They analysed the Structure of Earnings Survey 2006-2018 for Germany and the BIBB/BAuA Employment Survey, a survey of 20,000 gainfully employed people. For the U.S., the authors used data from the National Compensation Survey (NCS) conducted by the Bureau of Labor Statistics (BLS).

The presented discussion paper is a publication without peer review of the Collaborative Research Center Transregio 224 EPoS. Access the full discussion paper [here](#). Find the list of all discussion papers of the CRC [here](#).

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The Collaborative Research Center (CRC) Transregio 224 EPoS

Established in 2018, [the Collaborative Research Center Transregio 224 EPoS](#), a cooperation of the universities Bonn and Mannheim, is a long-term research institution funded by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG). EPoS addresses three key societal challenges: how to promote equality of opportunity; how to regulate markets in light of the internationalization and digitalization of economic activity; and how to safeguard the stability of the financial system.

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