# Gender equity among IT freelancers – preliminary study on selected European countries

**Authors:** Dariusz Dymek (*Krakow University of Economics*)
Tetiana A. Vakaliuk (*Zhytomyr Polytechnic State University*)
Paweł Konkol (*Krakow University of Economics*)
Mariusz Grabowski (*Krakow University of Economics*)
Vladan Ivanovic (*University of Kragujevac*)
Jakub Kanclerz (*Krakow University of Economics*)
Bartłomiej Balsamski (*Krakow University of Economics*)

## MOTIVES

The growth of freelancing is reshaping the labor market, particularly in the IT sector, where remote and contract-based work is widespread. US and EU data show that, despite its flexibility, freelancing still exhibits significant gender gaps in pay and participation. In the EU, women are underrepresented among the self-employed and earn on average 12% less per hour than men. In the IT sector, the pay gap is even wider, reaching 26%. Studies indicate that women often set lower rates despite similar qualifications, suggesting structural barriers. This research aims to quantify pay inequalities across freelancing sectors and assess whether they are universal or sector-specific.

## AIM

Our preliminary study explores and compares pay inequalities in freelancing across different sectors, with a particular focus on the IT industry. It aims to identify the scale and patterns of gender-based disparities and assess whether these inequalities are universal or sector-specific, laying the groundwork for more comprehensive future research.

**Research Query:**

1. What are the levels of payment inequalities in the various freelancing sectors?
2. Are these inequalities common for all sectors in freelancing?

## METHODOLOGY

Our preliminary study is based on data collected from one of the largest freelance job platforms. The data was collected using a non-invasive scraping method designed to ensure ethical research practices (collecting only publicly available data, avoiding server overload by using off-peak hours). After downloading the data, a data transformation process was applied, consisting of (1) processing, (2) cleaning, and (3) schema design. The schema included three main elements:

- Project listing (unique identifier, category, budget, geography, engagement metrics),
- Skill (standardized ID, name, category, frequency),
- Client (anonymized ID, historical metrics, geography, industry).

Descriptive statistical methods were then used to enable cross-sector comparisons of freelancer characteristics and categories, focusing on gender differences in pay and participation.

## RESULTS

The study covers 16524 (10385 males and 6139 females) freelancers from Poland, Romania, Serbia, Spain, and Ukraine, working in three sectors: IT-related (ITR), Writing-related (WR), and Accounting & Consulting-related (ACR). Men dominate in ITR (77%), while WR is female-dominated (62%), and ACR shows a balanced structure with a slight female majority (54%). Hourly rates generally rise with experience, yet significant gender gaps persist. In ITR, women earn on average 21% less than men, while in ACR the gap reaches 24%. By contrast, in WR there is no notable inequality, and women slightly out-earn men (+4%). The division into four experience levels (BE, PP, AP, EX) is crucial, as it reveals how gender gaps shift across career stages, showing men monetizing early experience more effectively while women catch up mid-career, before men regain an advantage at the top level.

| Market sector: | ITR | | | WR | | | ACR | | |
|---|---|---|---|---|---|---|---|---|---|
| Gender | M | F | Diff | M | F | Diff | M | F | Diff |
| EX | 104% | 83% | 21% | 99% | 101% | -2% | 112% | 87% | 25% |
| AP | 105% | 90% | 14% | 92% | 105% | -13% | 106% | 92% | 14% |
| PP | 104% | 82% | 22% | 94% | 103% | -8% | 112% | 89% | 23% |
| BE | 105% | 86% | 19% | 98% | 101% | -3% | 110% | 92% | 18% |

Table 1.
Average hourly rates for women (F) and men (M) in percentage terms, broken down by professional experience with activity time in platform
(EX - experienced, AP - active practitioners, PP – passive practitioners, BE - beginners)

## ACKNOWLEDGEMENTS

Co-funded by the European Union (Project no 2024-1-PL01-KA220-HED-000248152) and by the subsidy granted to Krakow University of Economics, Poland. Views and opinions expressed are however those of the author or authors only and do not necessarily reflect those of the EU or the Foundation for the Development of the Education System. Neither the EU nor the entity providing the grant can be held responsible for them.