

Non-technical summary: The Evolution of Productivity-Wage Gaps Following the Transition in Hungary – Evidence from Linked Employer-Employee Data

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The authors calculate the relative productivities and relative wages of various worker groups (based on gender, education, and age), and the gap between them using data from Hungary between 1986 and 2005, in order to assess their evolution over time. Since Hungary underwent its economic transition during this time, theory suggests that firms should have become more efficient in setting wages, so we expect to see relative productivities and wages converging over time. The estimation is carried out over four time periods, for the full sample of firms, by industrial categories, and by firm age, and also controlling for firm level selection.

Women:

- in the OLS specification, female workers are paid more than their productivity merits, though there is large heterogeneity in the results by separate industries.
- Controlling for firm level selection bias, in the FE specification, both relative productivities and relative wages are around 1, implying no significant wage – productivity gap.

College graduates:

- workers with diploma are underpaid compared to workers without higher education in most specifications.
- between firms, in the OLS specification, their productivity is on average double, while their wages are 50 percent more than of employees without diploma, implying a significant negative wage – productivity gap.
- within firms, in the FE specification, both relative productivities and relative wages decrease, and the wage – productivity gap is slightly negative or insignificant in some cases.

Workers over 40:

- more experienced workers are paid more than their productivity in most cases.

- in the OLS specification, their productivity is on average half of the less experienced employees, while relative wages are slightly below 1, implying a significant positive wage – productivity gap.
- within firms, both relative productivities and wages are close to 1, and the gap is slightly negative or insignificant.

Our results indicate that firm segregation play an important role in determining the productivity and wage gaps between groups, as women and older workers tend to work in low productivity and low wage firms, while workers with diploma are mostly employed by high productivity, high wage firms. Comparing the evolution of the wage – productivity gap over time, the authors did not find strong evidence of a closing gap on average, but significant heterogeneity was found by industry. Firms that existed only after the transition were found to have more efficient wage setting practices than firms that existed prior to transition.