## **EDWARD CONARD**



## **Macro Roundup Artcile**

**Headline:** Automation and Rent Dissipation: Implications for Wages, Inequality, and Productivity

Article Link: <a href="https://www.nber.org/papers/w32536">https://www.nber.org/papers/w32536</a>

| Author(s)        | Daron Acemoglu and Pascual Restrepo  |
|------------------|--------------------------------------|
| Publication      | National Bureau of Economic Research |
| Publication Date | June 14, 2024                        |

**Tweet:** Between 1980-2016, automation targeted tasks where workers earned an average wage that was 35% higher than their next best job opportunity. Automation accounted for 52% of the increase in between-group US inequality over the period. @DAcemogluMIT

**Summary:** Rents - wages above opportunity cost [in some sectors] distort employment decisions - the VMPL [Value Marginal Product of Labor] in tasks with high rents exceeds the VMPL in lower-rent tasks. Firms inefficiently automate tasks because the wage they face exceeds the opportunity cost of workers [due to] the difference in rents that firms would have paid workers in automated tasks and the rents earned by workers elsewhere in the economy. New automation technologies can have a net negative effect on productivity, average real wages, and aggregate consumption when [they] are adopted in tasks where workers earn high rents despite the fact that these technologies generate small cost savings. Estimates imply that workers used to earn an average rent of 35% in jobs automated between 1980 and 2016. The impact of automation on group-level wages is amplified because it targets higher-rent tasks and thus reduces worker rents. Automation worsens allocative efficiency because it tends to target higher-rent jobs, which are the ones that were undersupplied before automation ([as] these are the tasks where the value marginal product of labor is typically greater). As labor is eliminated from higher-rent tasks, productivity suffers. Consequently, automation may reduce TFP. Figure 8 plots the change in average wages for 500 demographic groups. The vertical axis is for the change in wages during 1980–2016 due to new automation technologies. The horizontal axes in all panels sort groups according to their average hourly wages in 1980. The panels of Figure 8 show the (cumulative) implications of different economic forces.

**Related Articles:** Learning From Ricardo and Thompson: Machinery and Labor in the Early Industrial Revolution, and in the Age of Al and Perspectives on the Labor Share and Navigating the Future of Work

Primary Topic: Wages/Income

**Topics:** Academic paper, Database, Investment, Productivity, Wages/Income, Weekly, Workforce

**PDF File URL:** <u>'https://www.edwardconard.com/wp-content/uploads/2024/06/AUTOMATION-AN D-RENT-DISSIPATION.pdf</u>

**Permalink:** <a href="https://www.edwardconard.com/macro-roundup/between-1980-2016-automation-targeted-tasks-where-workers-earned-an-average-wage-that-was-35-higher-than-their-next-best-job-opportunity-automation-accounted-for-52-of-the-increase-in-between-group?view=detail">https://www.edwardconard.com/macro-roundup/between-1980-2016-automation-targeted-tasks-where-workers-earned-an-average-wage-that-was-35-higher-than-their-next-best-job-opportunity-automation-accounted-for-52-of-the-increase-in-between-group?view=detail</a>

## **EDWARD CONARD**



**Featured Image Link:** https://www.edwardconard.com/wp-content/uploads/2024/06/21299-aut omation-and-rent-dissipation-implications-for-wages-inequality-and-productivity-featured-thumbnail-image.png