

Artificial Intelligence Adoption and Firm Productivity [SYNTHETIC]

Abstract. We estimate the effect of artificial-intelligence adoption on firm productivity growth using a cross-section of 1,500 European firms. We find a positive and statistically significant association.

4. Results. Our preferred specification (Table 3, column 4) controls for firm size, age, and region. AI adoption is associated with a 2.58-point increase in productivity growth (SE 0.48, $t = 5.4$), significant at conventional levels. We interpret this as evidence that AI adoption raises productivity.

5. Conclusion. AI adoption appears to meaningfully raise firm productivity. [SYNTHETIC paper for a teaching lab — do not cite.]