RUTGERS–NEW BRUNSWICK
Institute for the Study of Employee Ownership and Profit Sharing
School of Management and Labor Relations

POLICY BRIEF

on the study

"Employee Share Ownership, Management Practices, and Labor Productivity: An Analysis Using Establishment Level Micro-Data from the U.S. Census"

March 29, 2026

Fidan Ana Kurtulus, Department of Economics, University of Massachusetts Amherst
Eric Hoyt, Department of Economics, University of Rhode Island
Paige Ouimet, Department of Finance, University of North Carolina Chapel Hill
Joseph Blasi, School of Management and Labor Relations, Rutgers University
Douglas Kruse, School of Management and Labor Relations, Rutgers University
Richard Freeman, Department of Economics, Harvard University
William Castellano, School of Management and Labor Relations, Rutgers University

Required U.S. Census Disclaimer: Any views expressed are those of the authors and not those of the U.S. Census Bureau. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 3061. (CBDRB-FY25-0318) (CBDRB-FY25-P3061-R12676)) (CBDRB-FY26-P3061-R12815)

We estimate that ESOP adoption increases labor productivity at the workplace by 5.6 – 6.7%, accounting for workplace managerial and organizational practices, number of employees, capital and materials inputs into production, union status, and geography. To estimate this, we compiled the largest and most comprehensive data to date on broad-based employee equity ownership at both privately-held and publicly-traded companies in U.S. manufacturing industries. Specifically, we combined three restricted U.S. Census micro-databases – the 2010 and 2015 Census Management and Organizational Practices Survey (MOPS), the American Survey of Manufactures (ASM), and the U.S. Longitudinal Business Database (LBD) – with the U.S. Department of Labor's Form 5500 Pension Database.

This is pathbreaking research given the large nationally representative sample of workplaces, in contrast to prior productivity studies that were limited to only publicly-traded firms or select samples of privately-held firms. We compare 37,800 non-ESOP manufacturing establishments in 21,500 unique companies to 6,200 ESOP manufacturing establishments in 1000 ESOP companies.

Our finding that ESOPs increase labor productivity is robust to checking numerous alternative specifications including 1) alternative workplace labor productivity measures; 2) continuous measurement of employee ownership as ESOP total assets per active employee; and 3) alternative econometric models including instrumental variables regressions to identify causality.

ESOPs are the most common form of broad-based employee equity ownership plan today in the U.S. The manufacturing industry contains the greatest prevalence of ESOPs in the US, with over 20% of all U.S. ESOPs in manufacturing. According to the U.S. Department of Labor's Form 5500 records for 2022, among the 10.9 million employees in ESOPs, 2.5 million or 22.9% are in manufacturing firms.

An ESOP is a tax-advantaged retirement plan where employees are granted company stock without typically buying the stock with their own wages or savings. ESOPs were institutionalized into U.S. law through the Employee Retirement Income Security Act of 1974 (ERISA). In an ESOP, ERISA allows companies to contribute company stock, or money to buy stock, or to use credit to buy stock, to an employee pension trust that holds the stock, so workers generally gain an ownership stake in the company without investing their own money. The company then allocates the shares to employees over time as the workers pass a vesting period (having been at the company for a certain period of time). According to ERISA, all full-time employees at the firm must be included in the plan, making it a broad-based form of employee ownership. ESOPs have increased steadily over the last several decades in terms of the number of employees and assets. Based on data from the U.S. Department of Labor's Form 5500 firm pension records, between 1999 and 2022, the number of workers in Employee Stock Ownership Plans (ESOPs) grew from 7.8 to 10.9 million, or from 7.2 percent to 8.3 percent of the private sector workforce. Given the increasing prevalence of employee ownership, understanding the relationships between employee ownership, management practices and labor productivity carries great policy significance.

In our analysis, we measure workplace labor productivity as the total value of shipments and inventory divided by total hours worked. Our ESOP adoption measure is whether the workplace adopted an ESOP between 2010 and 2015. Our measures of management and organizational practices capture the presence of proactive management practices including the extent and frequency of performance goal monitoring, nature of remedial action in response to problems in the production process, monitoring of performance goals, presence of broad-based information sharing among workers at the workplace, and presence of broad-based group-based performance bonuses for workers at the workplace (broad-based means inclusive of non-managerial workers).

Our study represents a groundbreaking analysis of ESOP productivity effects. Past studies of employee ownership performance outcomes have been based primarily on publicly-traded companies where employee ownership percentages are low, or on small surveys and samples limited in their size and generalizability (publicly-traded companies have very small percentages of the company owned by employees, at 2-3% on average). No prior studies used high-quality representative data on closely-held firms, which are the majority of U.S. ESOPs (in number of ESOPs, not employees covered). Over 90% of U.S. ESOP plans are within closely-held companies. Our study also consists of the first introduction of the Census Management and Organizational Practices Survey (MOPS), which is the largest management survey ever conducted of U.S. manufacturing workplaces, into the employee ownership research landscape.

In addition to the key productivity result that ESOP adoption increases labor productivity by 5.6 – 6.7%, we have numerous auxiliary findings. 1) We find that a $100,000 increase in

ESOP assets per active employee raises labor productivity by 25.7 – 26.5% over our analysis window of 2010 to 2015, on average. 2) Adopting an ESOP while simultaneously maintaining broad-based group performance pay over 2010-2015 magnifies the labor productivity increase of ESOP adoption to 12.98%.

Further detailed results and descriptions of the databases and statistical methodologies can be found in the full Working Paper posted on the SSRN e-library:

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=6490798