Testimony of Dr. Joseph R. Blasi, J. Robert Beyster Distinguished Professor and Director Emeritus, Rutgers University Institute for the Study of Employee Ownership and Profit Sharing, New Brunswick, N.J. before the Senate (HELP) Committee, July 24, 2025, 10 a.m.

Good morning, Chairman, Senator Cassidy, Ranking Member, Senator Sanders, and members of the Committee. Thank you for inviting me. At 76 years old, I have been researching ESOPs on a bipartisan basis for 50 years across many administrations. The Rutgers Institute for the Study of Employee Ownership and Profit Sharing is the foremost institute studying these issues.

[https://smlr.rutgers.edu/EmployeeOwnershipInstitute and https://www.aspeninstitute.org/events/employee-ownership-ideas-forum-2025/]

First, let's understand the scale of ESOPs in America. The most recent 2022 DOL data finds about 15 million participants in ESOPs, 11 million active employees in about 6300 ESOP corporations with $1.8 trillion in total assets. Of these, *for our specific purposes today*, about 5,800 ESOPs are in closely-held corporations not traded on public stock markets with about 2.4 million active employee participants, about 1 million retirees still receiving benefits. Closely-held ESOPs have about $477 billion in total plan assets, $232 billion in company stock, and an average wealth per worker of about $164,000 and are often 51%-100% employee-owned.

Average wealth at age 55 or with more than ten years of service based on the U.S. General Social Survey is estimated at $320,000 per ESOP worker. Our research also shows that smaller ESOPs in larger corporations can also produce such significant wealth. [see https://www.aspeninstitute.org/wp-content/uploads/2025/05/Employee-Ownership-and-ESOPs-What-We-Know-from-Recent-Research.pdf] The non-profit National Center for Employee Ownership separately analyzes the DOL data and broadly tracks our conclusions also reporting that all ESOP contributions by corporations in 2022 were $108 billion and all ESOP

benefits paid out that year were $158 billion. [https://www.nceo.org/research/employee-ownership-by-the-numbers]

We have seen after fifty years of research that ESOPs provide better retirement benefits, are safer workplaces, and are more likely to involve workers in participation in solving company problems.

Second, our analysis of the U.S. Health and Retirement Study of workers over 50 years age from 2008-2018 indicates that ESOP participants have about double the retirement wealth in old age compared to non-ESOP participants and this is true in every decile of the income distribution and even when taking account of pre-retirement earnings. The National Center for Employee Ownership also found that median ESOP account balances significantly outpace non-ESOP account balances in every income group and age group.
[https://www.nceo.org/research/the-retirement-savings-crisis-and-the-role-of-esops#esops ; https://www.nceo.org/hubfs/ESCA%20Report.final.pdf]

Third, ESOPs are safer workplaces. Using the Occupational Health and Safety Administration (OSHA's) injury tracking population data from 2016 to 2019 ESOPs have a 9-13% decrease in workplace safety incidents, using a before and after ESOP analysis.
https://smlr.rutgers.edu/sites/default/files/Documents/Centers/Institute_Employee_Ownership/ResearchBriefs/January2024_RB_ESOPs_Retiree_Wealth.pdf]

Fourth, initial results from a recent Institute study found a 20% increase in labor productivity when researchers compare thousands of ESOP manufacturing establishments to tens of thousands non-ESOP manufacturing establishments.

Fifth, ESOPs appear to not replace diversified 401k plans and defined benefit pension plans based on our analysis of General Social Survey data and ten years of recent DOL 401k data.

Sixth, our analysis of the 2022 General Social Survey indicates that 0% of ESOP workers report being laid off in the previous year compared to 7% of non-ESOP workers, that 70% of ESOP workers have company-based training compared to 44% of non-ESOP workers, that 38% of ESOP workers participate in employee involvement teams to solve company problems compared to 26% of non-ESOP workers, and that 71% of ESOP workers have annual cash profit sharing compared to 34% of non-ESOP workers. [see https://www.aspeninstitute.org/wp-content/uploads/2025/05/Employee-Ownership-and-ESOPs-What-We-Know-from-Recent-Research.pdf For a replication of this finding by examining hundreds of thousands of employee surveys in hundreds of companies per year that apply for Fortune Magazine's 100 Best Company to Work For in America competition see https://onlinelibrary.wiley.com/doi/abs/10.1111/bjir.12135]

Seventh, ESOP growth among the closely-held ESOP corporations has been pretty flat with an average of 221 new ESOPs and 30,000 new ESOP employees a year, mostly in closely-held corporations. While the number of plans has gone down, the number of employee participants and plan assets has gone up a lot. Dr. Corey Rosen, of the National Center for Employee Ownership recently found that ESOPs are acquiring other ESOPs which makes it look like the number of ESOPs is declining when in fact the total assets and plans are growing. [https://www.nceo.org/employee-ownership-blog/new-data-on-esop-companies-acquiring-non-esop-companies-1]

Using recent US Census data, an Institute study found that 52% of business owners are close to retirement and with realistic assumptions, a recent Institute study estimates that 137,000 businesses with 33 million employees and $14.7 trillion in sales and $2.4 trillion in payroll are potentially ESOP-able. [see https://www.aspeninstitute.org/wp-content/uploads/2025/05/How-Many-Firms-Are-Good-Candidates-for-Employee-Ownership-Estimates-from-US-Census-Data-on-American-Businesses.pdf] **Why this huge gap between ESOP potential and ESOP adoption?** We have concluded that lack of awareness of the ESOP possibility, lack of clarity about DOL enforcement regarding valuations on ESOPs, the inability of a retiring business owners to borrow sufficient funds from a private bank to effectuate a 100% ESOP buyout, and the lack of recognition that small percentage ESOPs can lead to large wealth accumulation all jointly represent the largest barriers to ESOP adoption and growth.

My personal policy analysis suggests that legislation that makes it easier to finance ESOPs across all Cabinet departments of the Federal Government such as the proposed Employee Ownership Financing Act and the American Ownership Resilience Act, aspects of the WORK Act and other proposals that remove DOL barriers to ESOP share price valuations, all efforts to increase ESOP awareness throughout DOL and the rest of the Federal Government, the potential emerging Expanding ESOPs initiative, and specific measures that delink the 401k contribution limit from the ESOP contribution limit, proposals to have more ESOP representation on the ERISA Advisory Council, can all address this huge gap. Thank you very much for the honor of speaking with you today. THE END

Appendixes Below.

Employee Ownership and ESOPs

What We Know from Recent Research

Joseph Blasi and Douglas Kruse, April 2025

Introduction

Employee share ownership has a long and important tradition in the US. As of 2022, approximately 18% of employees or about 25 million workers across our nation have some form of ownership stake in the company where they work and 8% of employees have employee stock options. Employees participating in ownership in the US do so through a variety of means, including employee stock ownership plans (ESOPs), equity compensation programs, worker-owned cooperatives, and employee-owned trusts. About 11 million active employees participate in ESOPs, while another 4.2 million additional retired ESOP employees are still receiving ESOP benefits from their ownership. An estimated 14 million employees participate in different other combinations of equity compensation plans, including grants of restricted stock, employee stock options, and employee stock purchase plans. Estimates show that approximately 10,000 workers are employed in between 900 and 1,000 worker-owned cooperatives, with a growing number of employees in Employee Ownership Trusts (EOTs).

In this short brief, we provide some updated statistics and analysis regarding workers' involvement in employee share ownership plans and the wealth and job quality benefits those workers realize from their participation. ESOPs are the most common form of broad-based employee share ownership in the US, and, likely for that reason, there are more robust data related to ESOPs. For these reasons, this brief focuses primarily on workers who participate in ESOPs.

What Is an ESOP?

An ESOP is a retirement plan where employees typically receive grants of company stock without buying the stock with their wages or savings. Typically, when an ESOP is used to buy out a retiring business owner, a company sets up an ESOP, and credit is used to finance the buyout of shares of the retiring business owner with tax incentives. The company (typically, not the individual employees) provides collateral and promises to repay the loan out of the income generated by all employees through company operations over several years. As the loan is repaid, shares are granted to individual employee accounts in the ESOP. Employees earn their shares in ESOPs through their work. Employees then receive market value for the shares upon retirement or departure from the firm. Sometimes cash contributions to an ESOP to buy company stock over a multiyear period are used to increase the percentage of employee ownership in these plans. ESOPs are retirement plans regulated under the Employee Retirement Income Security Act of 1974 (ERISA) to be fair and to generally include all employees. That is not true for non-ESOP equity compensation plans.

ESOPs, Equity Compensation Plans, and Employee Wealth Creation

An important benefit of employee share ownership is the potential to help employees build wealth. Data for ESOPs and equity compensation plans show:

- The 10.8 million employees in the 6,257 corporations with ESOPs have total overall assets of $1.8 trillion.
- ESOPs are large and represent significant ownership among closely held corporations. About 2.4 million employees participating in ESOP plans are employed in 5,854 closely held or private corporations. These ESOPs taken together have $477 billion in total assets, or an average of $164,000 in wealth per employee. About 3,400 of these closely held or private companies are estimated to be majority or 100% ESOP owned.
- ESOPs in publicly traded firms typically only own less than 2% of the shares outstanding. Approximately 8.5 million active employees in ESOPs are employed in 403 publicly traded corporations with $1.3 trillion in total assets. In 304 of these 403, the ESOPs are integrated with 401(k) plans and called KSOPs. The average assets per employee overall are about $134,000 with average employer stock and property per employee of $18,000 in KSOPs. However, 99 of these 403 ESOPs are stand-alone ESOPs that have 196,000 employees with substantial ownership stakes worth $32 billion in assets, or an average of $125,000 per employee in assets.
- According to a national survey, employees who are 55 years or older, or who have been with their ESOP employer 10 years or longer, have an average of about $315,000 in wealth through their ESOP.
- All equity compensation plans (that are not ESOPs) have an average employee share ownership value of about $91,000. These plans, however, are much less likely to include all workers and offer broad-based ownership. They are also not obliged to abide by federal fairness standards, which are required by ERISA for ESOPs.

The Job Quality of Employees in ESOP Companies

In addition to wealth building opportunities, employee-owned companies often have better employee outcomes than non-employee-owned companies on a range of measures related to employees' job quality.

- In a nationally representative survey of employees in ESOP companies, over two-thirds of ESOP employees reported that their wages are equal to the market wage or higher than the market wage for their job in their area of the country.
- Using data from a 2008-2018 federal survey, there is no evidence that ESOP employees are paid less than their comparable peer employees.
- Using data from a 2008-2018 federal survey, ESOP participants have about double the retirement wealth of otherwise similar non-ESOP individuals, even after taking into account pre-retirement earnings and their demographic characteristics. The ESOP individuals have greater wealth in every ten percent grouping of the US population, and that wealth is more equally distributed among ESOP versus non-ESOP employees.

- Data from the Occupational Safety and Health Administration (OSHA) indicates that establishments which already have an ESOP tend to have fewer workplace safety incidents – across industry, size, unionization status. Establishments which adopt an ESOP show statistically significant reduction in workplace injuries and illnesses around two years after the adoption of an ESOP.
- In a survey of S corporation ESOP companies, researchers found a majority of companies offered other benefits in addition to the ESOP. All the companies surveyed reported that they provided medical insurance, and 97% provided dental benefits. Of the responding companies, 87% provided on-the-job training, 77% offered an additional 401(k) plan, 74% offered tuition reimbursement, 59% provided flexible work schedules, and 56% had paid maternity or paternity leave.
- A study following 5,000 women and men from birth to 2013, when they were 28-34 years old, found those working in employee-owned companies had significantly higher wages, more household wealth, higher job tenure, and a greater incidence of healthcare, education, and other benefits.
- 71% of ESOP employees report that they receive profit sharing, compared to 34% of non-ESOP employees in the economy.
- 53% of ESOP employees report that they receive gain-sharing, compared to 26% of non-ESOP employees, twice as likely.
- 62% of all ESOP companies have a diversified 401(k) retirement plan in addition to the ESOP.
- 46% of ESOP employees report that they have a defined benefit pension plan in addition to the ESOP, compared to 29% of non-ESOP employees.
- 70% of ESOP employees report receiving training in the last year, compared to 47% of non-ESOP employees in the economy.
- 38% of ESOP employees report having employee involvement teams, compared to 27% of employees without any employee share ownership in the economy.
- 0% of ESOP employees report being laid off in the past year compared to 6% of non-ESOP employees, suggesting that ESOP employees have greater job security.

Employee Ownership and the Impact of Workplace Culture

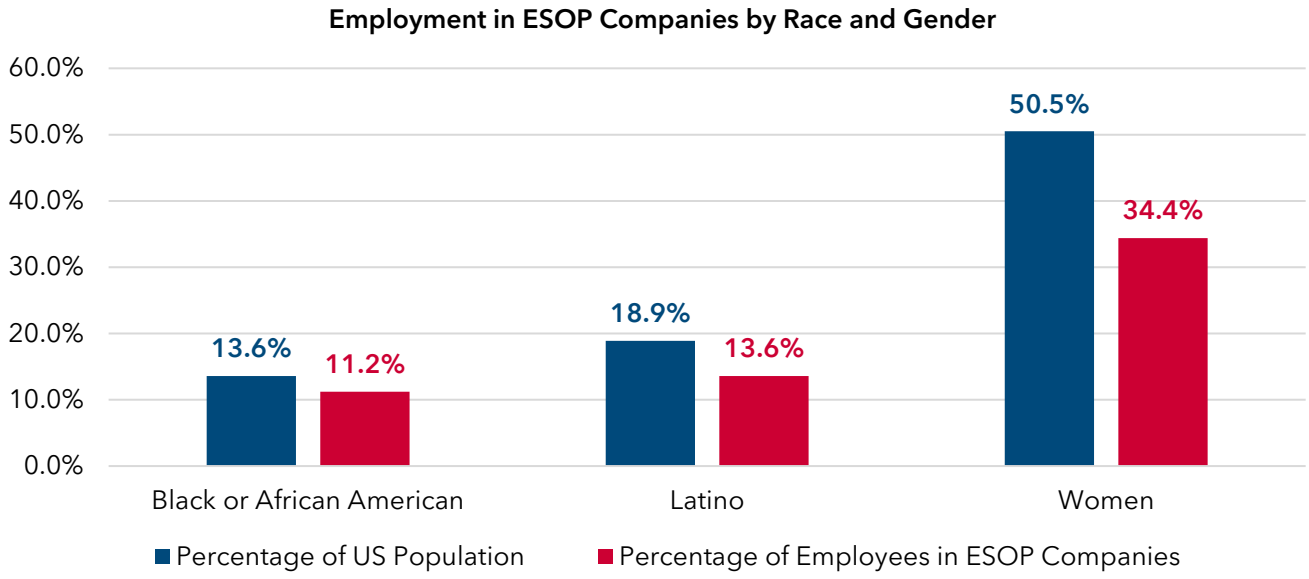
Employee ownership firms are known for having workplaces and organizational cultures that foster high levels of employee engagement. Studies show several benefits when these cultures are combined with employee share ownership, including:

- Cooperation among employees is higher in companies when broad-based employee ownership is combined with a supportive culture (as indicated by factors such as employee training, job security, and structures for employee participation).
- Turnover is substantially lower in companies that combine broad-based employee ownership with a supportive and empowering culture. Annual voluntary employee turnover decreases from about 13% per year to about 2% per year when these two strategies are implemented together.

ESOPs and Race and Gender Diversity

The job quality and wealth-building opportunities provided through employee share ownership have potential to help to provide more wealth to a larger group of middle-class workers. For example, a study sponsored by the W.K. Kellogg Foundation found that ESOPs significantly improved Black wealth as a result of ESOPs. Recent estimates, however, show that both women and Hispanic workers are significantly underrepresented among employers with an ESOP compared to their role in the US population.

Lower representation of women in ESOPs may be reflective of the industry mix and larger challenges that have limited women's employment in industries in which ESOPs are concentrated, such as manufacturing, construction, professional services, and wholesale trade.



Acknowledgments

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Joseph Blasi is the J. Robert Beyster Distinguished Professor at Rutgers' School of Management and Labor Relations, and he is the director of the Rutgers Institute for the Study of Employee Ownership and Profit Sharing.

Douglas Kruse is a Distinguished Professor at Rutgers' School of Management and Labor Relations, and also Research Director of the Rutgers Institute for the Study of Employee Ownership and Profit Sharing. He has been appointed the J. Robert Beyster Distinguished Professor effective on July 1, 2025.

Learn More

We are pleased to present this brief as part of the Employee Ownership Ideas Forum, a two-day convening bringing together leading policymakers, practitioners, experts, and the media for a robust discussion on how we can grow employee ownership for the shared benefit of American workers and businesses. The Forum is co-hosted by the Aspen Institute Economic Opportunities Program and the Institute for the Study of Employee Ownership and Profit Sharing at Rutgers University. Learn more at as.pn/eoforum25.

EMPLOYEE OWNERSHIP IDEAS FORUM

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The Institute for the Study of Employee Ownership and Profit Sharing is at: https://smlr.rutgers.edu/EmployeeOwnershipInstitute

The Employee Ownership Ideas Forum is made possible through the generous support of the Ford Foundation, JPMorgan Chase & Co. and Prudential Financial. Rutgers University also appreciates the support of the Sorenson Impact Foundation for its support of this convening and other events in 2025.

Sources

Introduction

The overall number of employees owning stock based is on the 2022 General Social Survey (GSS), National Opinion Research Center, University of Chicago, with analysis by Rutgers University's Institute for the Study of Employee Ownership and Profit Sharing in June 2023. The 2022 data collection on employee share ownership questions was made possible by Google.org. The GSS has been mainly funded by the US National Science Foundation. Data collection for employee share ownership questions was made possible by Google.org in 2022 and by the Employee Ownership Foundation for 2014 and 2018.

The number of ESOPs is based on the 2022 retirement plan filings of the US Department of Labor (Form 5500), with analysis by the Institute for the Study of Employee Ownership and Profit Sharing of Rutgers University in March of 2025. The analysis of stock market companies is by Douglas Kruse of Rutgers University, who matched COMPUSTAT to the US Department of Labor's Form 5500 to identify stock market corporations. The percentage of ESOPs that are majority- or 100%- owned is a joint estimate by NCEO's Founder, Dr. Corey Rosen and Research Director, Dr. Nancy Wiefek. The estimate is that 20% of C Corp ESOPs and 80% of S Corp ESOPs are majority – or 100%- owned by the ESOP. For a similar general overview of ESOPs by the numbers, see NCEO's data at https://www.nceo.org/research/employee-ownership-by-the-numbers

The average employee share ownership dollar value numbers for equity compensation plans are based on the combined 2014, 2018, and 2022 General Social Survey, National Opinion Research Center, University of Chicago, with analysis by Rutgers University's Institute for the Study of Employee Ownership and Profit Sharing in June 2023.

The estimates on worker cooperatives are provided through analysis by the Democracy at Work Institute. Verified worked-owned cooperatives can be found at the 2021 *Worker Cooperative State of the Sector Report* at https://institute.coop/resources/2021-worker-cooperative-state-sector-report.

The numbers for employee ownership trusts (EOTs) are from *Purpose Trusts in the United States* and were assembled by Rutgers Institute Fellow Mark Hand of the Dedman College Interdisciplinary Institute at Southern Methodist University. Data are available at: https://dataverse.harvard.edu/file.xhtml?fileId=6697043&version=3.0.

ESOPs, Equity Compensation Plans and Employee Wealth Creation

Average ESOP dollar values are based on the 2022 retirement plan filings of the US Department of Labor (Form 5500) and the computation of the averages by Douglas Kruse and Joseph Blasi of Rutgers in March 2025.

The average for ESOP employees over 55 years of age or with 10 years of tenure is based on a combined ESOP samples from the 2014, 2018, and 2022 General Social Survey, as noted above.

For equity compensation plans dollar values, average and median dollar values are based on the 2014, 2018, and 2022 General Social Survey.

The Job Quality of Employees in ESOP Companies

The results on comparative retiree wealth are from a Rutgers Institute study of 2008-2018 data, "ESOPs and Retiree Wealth: Evidence from the Health and Retirement Study," available at: https://smlr.rutgers.edu/sites/default/files/Documents/Centers/Institute_Employee_Ownership/ResearchBriefs/January2024_RB_ESOPs_Retiree_Wealth.pdf

The results comparing the wages of ESOP versus non-ESOP workers are from "Do ESOPs Substitute for Cash Compensation? Preliminary Evidence from the 2008-2020 Federal Health and Retirement Study," by Matt Mazewski available at: https://smlr.rutgers.edu/sites/default/files/Documents/Centers/Institute_Employee_Ownership/ResearchBriefs/October2024_Research_Brief_Wage_Substitution_Mazewski.pdf

The results on safety are from OSHA's Injury Tracking Application, an annual reporting requirement for nearly 250,000 establishments across the United States of America. Injury and illness data were matched to ESOP data from the U.S. Department of Labor's Form 5500 Research Files for the years 2016 thru 2019. The report by Austin Palin and Douglas Kruse is available at: https://smlr.rutgers.edu/sites/default/files/Documents/Centers/Institute_Employee_Ownership/ResearchBriefs/January2024_RB_ESOPs_Workplace_Safety.pdf

The results for ESOP employees compared to other employees in the economy regarding wages, training, employee involvement teams, profit sharing, defined benefit plans, and layoffs are based on a combined ESOP sample from the 2014, 2018, and 2022 General Social Survey. The layoff results are based on three years of data in 2013, 2017, and 2021. The percentage of ESOPs with 401k retirement plans is from the 2020 Department of Labor's Form 5500 annual report, analyzed by Douglas Kruse of Rutgers University. If 401k plans where an ESOP is also used to provide mostly matching shares in the 401k, then 77% of all ESOPs have a 401k plan, namely, 75% of closely-held company ESOPs and 93% of publicly-traded company ESOPs. For data on benefits other than the ESOP, see *S Corporation ESOPs and Retirement Security* by Nancy Wiefek and Nathan Nicholson (Oakland, Ca.: National Center for Employee Ownership, March 2018, p. 12), available at https://www.nceo.org/assets/pdf/articles/NCEO-S-ESOPs-Retirement-2018.pdf. The impact of ESOPs on young people is based on *Employee Ownership and Economic Well-Being: Household Wealth, Job Stability, and Employment Quality among Employee-Owners Age 28 to 34* by Dr. Nancy Wiefek. (Oakland, Ca.: National Center for Employee Ownership, May 15, 2017) and is available at https://www.ownershipeconomy.org/. See the 2018 update at https://www.ownershipeconomy.org/research/2018-update/.

Employee Ownership and the Impact of Workplace Culture

The research on mutual cooperation is based on employee surveys of over 40,000 employees in 14 companies of the National Bureau for Economic Research (NBER) Shared Capitalism Research Project funded by the Rockefeller Foundation and the Russell Sage Foundation and co-directed by Richard Freeman of Harvard University and Douglas Kruse and Joseph Blasi of Rutgers University.

NBER working papers summarizing the results were first published by NBER at https://www.nber.org/search?page=1&perPage=50&q=shared%20capitalism. The final book published by the University of Chicago Press and NBER was in 2010. A copy of the entire book on the NBER website is at https://www.nber.org/books-and-chapters/shared-capitalism-work-employee-ownership-profit-and-gain-sharing-and-broad-based-stock-options. The book is available from the University of Chicago Press at https://press.uchicago.edu/ucp/books/book/chicago/S/bo8056093.htmlA national control group with comparison data for the NBER research was made possible by the Employee Ownership Foundation's support of the General Social Survey in 2002 and 2006.

For a recent summary of the history of employee share ownership and research, see Chapters 1 and 4 in *The Citizen's Share* by Joseph Blasi, Richard Freeman, and Douglas Kruse (New Haven: Yale University Press, 2014).

The research on turnover is based on the analysis of 230,465 employee surveys in 780 companies with six million employees who applied to the 100 Best Company to Work For competition of Fortune magazine from 2005 and 2007. The Great Place to Work Institute did a random survey of their employees, and the Institute for the Study of Employee Ownership and Profit Sharing at Rutgers analyzed some of the data under a confidentiality agreement. This was published as: "Do Broad-based Employee Ownership, Profit Sharing and Stock Options Help the Best Firms Do Even Better?," Joseph Blasi, Richard Freeman, and Douglas Kruse, *British Journal of Industrial Relations*, Volume 54, Issue 1, March 2016, 55-82.

ESOPs and Race and Gender

For the W.K. Kellogg Foundation study, carried out by Rutgers University, see: https://smlr.rutgers.edu/news-events/news-releases/study-employee-ownership-narrows-gender-and-racial-wealth-gaps & https://smlr.rutgers.edu/sites/default/files/Documents/Centers/Institute_Employee_Ownership/rutgerskelloggreport_april2019.pdf

The proportion of different ethnic groups in the US population in 2021 is from the US Census at https://www.census.gov/quickfacts/fact/table/US/PST045222.

The proportion of employees who are of different ethnic groups among ESOP versus non-ESOP employees is from the 2014, 2018, and 2022 combined General Social Survey. These are preliminary estimates because of smaller sample sizes. For industries where ESOPs are concentrated, see https://www.nceo.org/articles/employee-ownership-by-the-numbers, Figure 1: Industries of Privately Held ESOP Companies.

Challenges to Growing and Diversifying ESOPs

For the annual growth of closely held ESOPs in recent years, see the National Center for Employee Ownership at https://www.nceo.org/articles/employee-ownership-by-the-numbers. The statistics for 2015-2021 are from the Rutgers Institute for the Study of Employee Ownership and Profit Sharing's analysis of DOL Form 5500 Data in March of 2024.

RESEARCH BRIEF

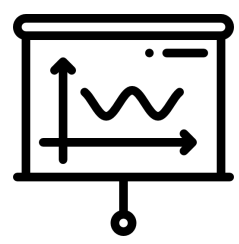
Institute for the Study of
Employee Ownership and Profit Sharing

ESOPs and Retiree Wealth: Evidence from the Health and Retirement Study

Questions: What impact do ESOPs have on wealth in retirement? In particular, what is the relationship between prior ESOP participation and the average wealth of worker-owners once they retire? And what effect (if any) do ESOPs have on wealth *inequality* among retirees?

Summary: Using data from the 2008-2018 waves of the Health and Retirement Study, a large biennial survey of Americans over the age of 50, we find that **retirees who, in their past work lives, ever reported participating in an ESOP have significantly greater wealth in retirement than non-ESOP retirees, even after taking into account their pre-retirement earnings and demographic characteristics.**

While not evidence of cause and effect *per se*, our study is, to our knowledge, the first to estimate the impact of ESOP participation on retiree wealth using a federally-funded dataset that follows ESOP participants from work into retirement. Though wealth also appears to be more equally distributed among ESOP retirees, more research is needed to fully understand the impact that boosting ESOP participation would have on overall inequality in retirement.



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EMPLOYEE OWNERSHIP FOUNDATION

Background on ESOPs in the Health and Retirement Study (HRS)

- The Health and Retirement Study (HRS) is a biennial panel survey of Americans over age 50 conducted by the Institute for Social Research at the University of Michigan with support from the U.S. federal government through the National Institute on Aging and Social Security Administration.[1]
- Since 1992, each wave of the HRS has interviewed around 20,000 respondents, making it **the largest and most comprehensive dataset on the health and economic well-being of older Americans of the government.**
- Starting in 2008, the HRS began asking detailed questions about characteristics of individuals' pension plans, including whether they participate in an Employee Stock Ownership Plan (ESOP).
- Respondents are able to provide information on up to four pension plans per survey wave, and our analysis includes data from six waves covering the period 2008-2018.[2]
- The table below shows a breakdown by type of all plans reported by surveyed workers during this period; ESOPs amount to 1.3% of the total.[3]

Percentage of Reported Pensions in the HRS by Plan Type (2008-2018)

Plan Type	% of Reported Plans
ESOP	1.3%
401(k)	49.7%
Supplemental Retirement Account	4.9%
Defined Benefit Plan	13.8%
401(a)/403(b)/457	8.9%
Thrift Savings Plan (TSP)	2.2%
Combination Plan	0.3%
IRA/Keough	0.1%
Other Defined Contribution Plan	18.8%
TOTAL	100.0%

Effect of Prior ESOP Participation on the Average Wealth of ESOP vs Non-ESOP Retirees

- The HRS features several different measures of household wealth.
- We can assess the relationship between reported ESOP participation during the working lifetime and wealth in retirement using advanced statistical techniques.
- This allows us to take into account the effect of other relevant variables, such as whether an individual has ever had a pension (of any type), earnings prior to retirement, and survey year.
- We also account for demographic characteristics such as household size, age, gender, race, education, and most frequent region/industry of employment.
- Depending on the wealth measure considered, the estimates suggest that **ESOP participants have about double the retirement wealth of otherwise similar non-ESOP individuals.**
- Importantly, results are of comparable magnitude for three different wealth measures, and are statistically significant.

Average Retirement Wealth of ESOP vs. Non-ESOP Retirees

ESOP Wealth Effects by Retiree Age Compared to Non-ESOP Retirees

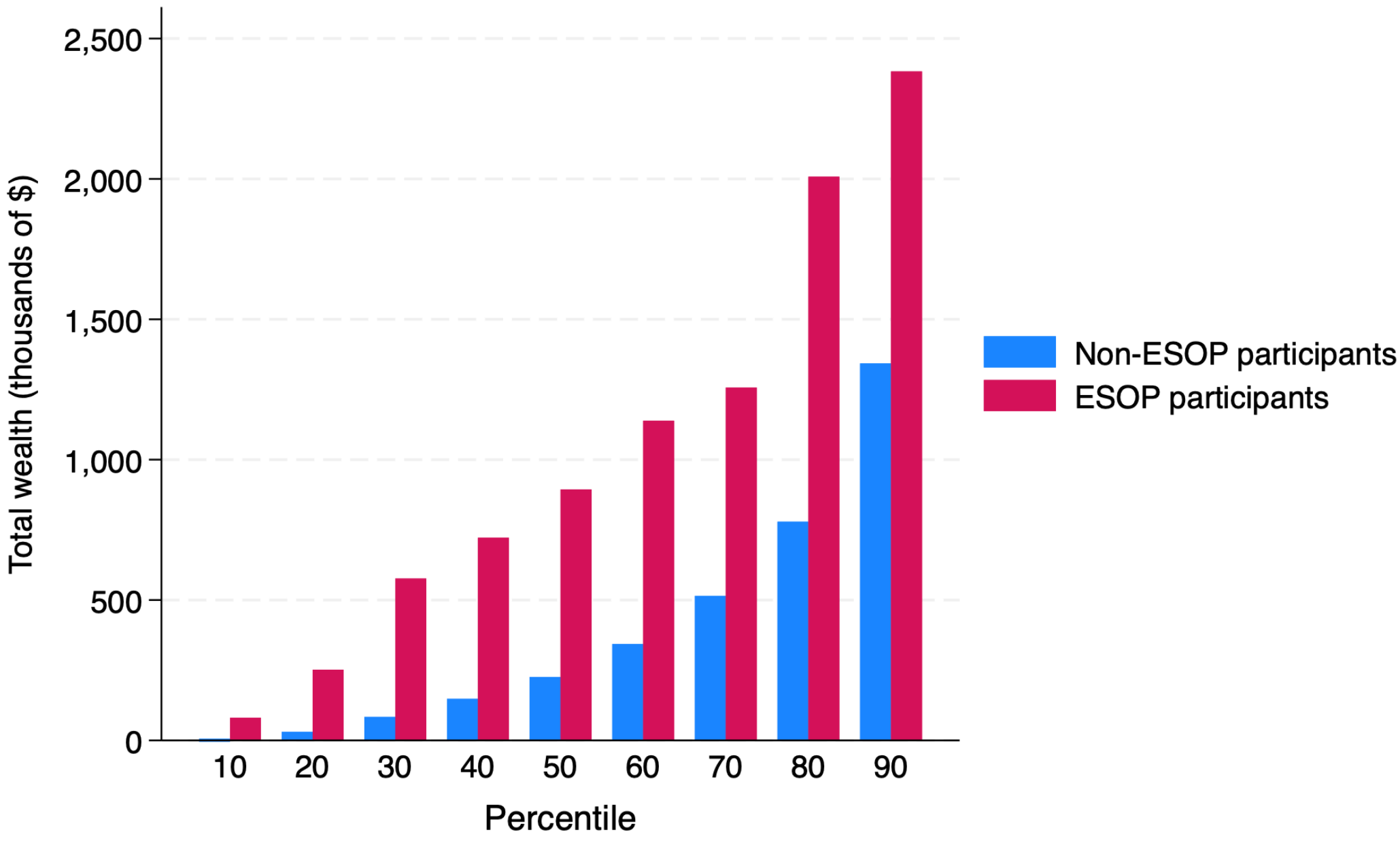
- These results are broadly similar even when we subdivide the sample by retiree age.
- The figure below shows our estimates of the effects on total wealth for five different subgroups of retired ESOP workers:
  - 60-64 years old
  - 65-69 years old
  - 70-74 years old
  - 75-79 years old
  - 80+ years old
- The magnitude of the effects are close to that found in the full sample of all retirees.
- When these separate age groups are examined, some of the estimates are no longer statistically significant. However, this is likely due at least in part to smaller sample sizes for each of the age subgroups, especially the aged 80+ group.
- To summarize, the chart below estimates how many times larger are retiree wealth holdings among ESOP vs. non-ESOP individuals.

Average Retirement Wealth of ESOP vs. Non-ESOP Retirees by Age

Distribution of Wealth Among ESOP vs. Non-ESOP Retirees

- In addition to considering effects on *average* wealth, we can also examine how the *distribution* of wealth differs between ESOP and non-ESOP participants.
- The figure below shows deciles of the total wealth distributions among retirees age 60 and over who do and do not report having been ESOP participants at some point during their working lives.
- While wealth in retirement is higher for ESOP retirees at every decile, it does not appear to be more unequally distributed.
- In fact, the ratio of wealth at the 90th percentile to that at the 50th percentile – a common measure of inequality – is actually *lower* for ESOP participants (2.7) than for non-ESOP participants (5.9).
- Moreover, at the 90th percentile the total wealth of ESOP individuals is just under twice that of non-ESOP individuals, while at the 50th percentile it is nearly four times as large.
- However, this is simply a comparison of the *existing* wealth distributions for these two groups; additional analyses would be needed to make predictions about the impact that increasing ESOP participation would have on overall wealth inequality.

Deciles of the Total Wealth Distribution for ESOP vs. Non-ESOP Retirees



Conclusions

- Using data from the Health and Retirement Study (HRS), a long-running survey of older Americans supported by the U.S. government, we offer what we believe to be the **first estimates of the impact of ESOPs on wealth in old age that are based on following ESOP versus non-ESOP participants from work into retirement.**

- One of our key findings is that **ESOP participants have about double the retirement wealth of otherwise similar non-ESOP individuals**, even after taking into account pre-retirement earnings and demographic characteristics

- We also find that ESOP individuals have greater wealth in every decile of the distribution, and that **wealth seems to be somewhat more equally distributed among ESOP versus non-ESOP participants**.

- However, further research is needed to clarify the likely impact that increasing ESOP participation among all workers would have on overall wealth inequality among retirees and to **ensure that the benefits of worker ownership are broadly shared**.

Endnotes

1. University of Michigan Institute for Social Research, "Health and Retirement Study (HRS)." https://hrs.isr.umich.edu/about For our analysis we rely on formatted HRS data files prepared by the RAND Corporation and made available for download at https://www.rand.org/well-being/social-and-behavioral-policy/centers/aging/dataprod.html

2. While HRS data have been released through 2020, the 2018 wave is the most recent for which the RAND files contain the sampling weights needed for our analysis.

3. This figure for ESOPs may appear somewhat lower than other estimates of the extent of ESOP participation in the economy, but this can likely be explained by the fact that many HRS respondents report plans that are actually ESOP's as unspecified defined contribution plans instead. See, for example, Joseph Blasi and Douglas Kruse (June 2023), "Employee Ownership and ESOPs: What We Know From Recent Research." Available at https://www.aspeninstitute.org/wp-content/uploads/2023/08/Employee-Ownership-and-ESOPs-%E2%80%94-What-We-Know-from-Recent-Research.pdf

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EMPLOYEE OWNERSHIP FOUNDATION

Measuring the Impact of Ownership Structure on Resiliency in Crisis

Results from a study by the National Center for Employee Ownership (NCEO) on behalf of Employee-Owned S Corporations of America (ESCA)

December 2021

NCEO | NATIONAL CENTER FOR EMPLOYEE OWNERSHIP

Introduction

The pandemic and shutdowns provide an opportunity to examine how businesses dealt with a once-in-a-generation economic shock. Depending on their industry, businesses struggled with weathering the storm or, conversely, with having the capacity to capitalize on new opportunities.

Given the nature and purpose of ESOPs and the forward-looking company culture that often accompanies them, there is strong reason to believe that having an ESOP in place prior to the worst of the crisis helped businesses not just survive but for many take the best advantage of growth opportunities more so than their conventional counterpoints.

Recent survey findings from Zogby on behalf of ESCA provided evidence that employee ownership was a strong buffer for workers during the pandemic.

This first-of-its kind project draws on a comprehensive analysis of more than 300,000 plan filings, covering more than 43 million employees. This includes a longitudinal analysis connecting the same plans across the period in December 2019 when the pandemic had not yet begun, to December 2020 while the U.S. economy remained in its grip.

Summary of Findings

- Overall, we find measurable evidence of this resiliency in **greater financial security for employees heading into and during the pandemic, and job retention at the firm level compared to comparable conventional firms.**
- Before the pandemic, the average ESOP account balance at an S ESOP was more than **double** compared to the average account balance at a comparable conventional firm ($132k vs. 64k). See slide 9.
- Controlling for company size, industry, and region, the ESOP advantage is an **estimated $67,000** more assets in the average account balance. See slide 12.
    - This is remarkable given the context that **just over half (50.5) of American families have a retirement account at all.** Among those that do, the median account value was $65,000 (Survey of Consumer Finances, 2019)

Summary of Findings

- The average yearly **employer** contribution to the ESOP was **2.6 times** that of companies offering a 401(k) ($6,567 vs. $2,507). See slide 13.

- **94%** of total contributions to ESOPs came from the employer, compared to **31%** for 401(k) plans. See slide 14.

- Using active participants as a proxy for employment, and controlling for company size, industry, and region, being an ESOP is associated with retaining or adding an additional **6 employees** from 2019 to 2020, compared to non-ESOP employers. See slide 18.

Data

Every business with a qualified retirement plan is required to file a form with details about the plan with the federal government.

The data from these filings is objective and covers all businesses instead of just a sample of them.

The data also enables researchers to control for factors such as company industry and size, meaning observed differences between ESOPs and non-ESOPs are not merely outgrowths of ESOPs being more or less prevalent in certain types of companies.

Our data source is the Department of Labor's Form 5500 and Form 5500-SF EFAST filing data, accessed September - November 2021. https://www.dol.gov/agencies/ebsa/about-ebsa/our-activities/public-disclosure/foia/form-5500-datasets

Measuring Resiliency

- **Workers financial cushion during the pandemic**: Average account balances as of December 2019 and December 2020;

- **Workers financial security**: Amount and percent of retirement contributions that came from the **employer** as of December 2019 and 2020;

- **The ability of firms to survive and thrive during the pandemic and shutdowns**: The change in active plan participants between 2019 and 2020 as a number and a percent. *Active participants* are defined as any individuals who are currently in employment covered by the plan and who are earning or retaining credited service under the plan.

Measuring Resiliency

- For each of these measures, we compare **all S ESOPs with all comparable 401(k)s during the same time period.**

    - In the multivariate regression analysis, we control for:
        - *Industry (2-digit NAICS)*
        - *Geography (Census division)*
        - *Size (number of active participants in largest 2019 401(k) plan)*

Methodology

Plans included in the analysis:

- Calendar-year filings (to keep time window constant)
- Privately held, for-profit U.S. employers
  - Excludes plans that do not identify as S corporation ESOPs and are presumably C corporations.
- At least 10 up to 25,000 active participants.
- Largest plan in terms of active participants, if company has multiple plans

	S ESOPs*	Comparison 401k plans	Total Participants
Filings for plan year ending December 2019	2,861	307,413	44,201,165
Filings for same plan for 2020*	2,513	265,223	41,229,512

*As of November 2021

Retirement Assets Heading Into the Pandemic

The average account balance at an S ESOP was dramatically higher compared to non-ESOP companies with a 401(k) plan.

Of course, there are many factors that go into explaining the variation in average account balances, particularly at the worker level. **Still, the data show a substantial additional financial cushion available to S ESOP employees heading into 2020.**

	2019
Average ESOP account balance	$132,362
Average 401(k) account balance	$63,925

*Average assets are calculated by dividing total plan assets by the total number of participants covered by the plan.

Retirement Assets Heading Into the Pandemic

Across the board, workers at ESOPs were in a better position on average compared to those at traditional companies.

	Average per participant assets in S ESOPs	Average per participant assets in comparable 401ks	Percent difference
Mean	$132,362	$63,918	69.7%
10th percentile	$9,776	$4,268	78.4%
25th percentile	$28,037	$13,958	67.1%
50th percentile	$71,449	$36,853	63.9%
75th percentile	$151,064	$80,370	61.1%
90th percentile	$296,563	$150,221	65.5%
Number of plans (N)	**2,861**	**307,413**	

*Average assets are calculated by dividing total plan assets by the total number of participants covered by each plan.

Additional retirement assets for ESOP participants

Nearly 80% of S corporation ESOPs also offer a 401(k) plan, either separate from or combined with the ESOP. The data do not allow for summing each individual account to ascertain with accuracy the t*otal* retirement account balance for ESOP participants with an additional plan.

	Average per participant assets in separate 401k
Mean	$75,246
10th percentile	$16,897
25th percentile	$32,768
50th percentile	$58,951
75th percentile	$99,764
90th percentile	$150,606
Number of plans (N)	**1,938**

*Average assets are calculated by dividing total plan assets by the total number of participants covered by each plan.

The ESOP advantage in retirement assets is not merely a function of ESOPs being more or less prevalent in certain types of companies.

Multivariate regression analysis controlling simultaneously for industry, geography, and size shows that being an ESOP is associated with **$67,616** (p =.00) more in retirement assets on average compared to a comparable traditional business.

Employer Contributions in 2019

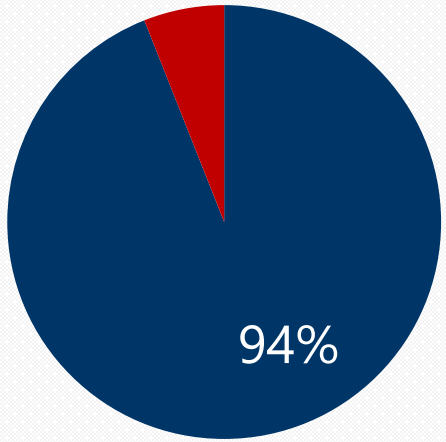
An important piece of the discussion of worker financial security is the challenge of being able to save at all. Here is we see that on average ESOP **employers** are contributing 2.6 times more than comparable conventional businesses.

	2019
Average employer contributions to ESOP per participant	$6,567 (n=2,861)
Average employer contribution to 401(k) per participant	$2,507 (n=286,899)

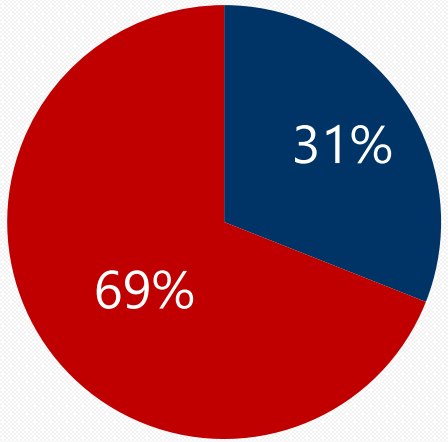
Percentage of total contributions

The charts below illustrate the stark difference in how ESOPs can help workers build wealth.

S ESOPs



Non-ESOP 401(k)s



From employer

From participant

Employer Contributions in 2020

Looking at average employer contributions again at the end of 2020, among those plans that have filed, we continue to see the advantage of S ESOPs for workers during a rough economic period. It is also indirect evidence of the likely advantage this conveys in terms of ESOP firms being able to retain employees during this time.

	2020
Average employer contributions to ESOP per participant	$7786 (n=2,513)
Average employer contribution to 401(k) per participant	$2808 (n=265,223)

Employment Changes

Clearly, the period from 2019 to 2020 was tumultuous for all types of firms.

	Net change in active plan participants from December 2019 to December 2020	
	S ESOPs	401(k)s
Mean	-3.6	-4.6
10th percentile	-18	-5
25th percentile	-4	-4
50th percentile	0	0
75th percentile	6	3
90th percentile	20	9
Number of plans (N)	**2,801**	**294,111**

Employment Changes

Looking at the same data in terms of the percent change shows a somewhat similar pattern between the two groups overall.

	Net percent change in active plan participants from December 2019 to December 2020	
	S ESOPs	401(k)s
Mean	-.01	-.02
10th percentile	-17	-.27
25th percentile	-.06	-.11
50th percentile	.00	.00
75th percentile	.08	.09
90th percentile	.17	.22
Number of plans (N)	**2,801**	**294,111**

Being an ESOP is associated with a measurable resiliency.

Multivariate regression analysis controlling simultaneously for industry, geography, and size shows the coefficient for being an ESOP is 6.1 (p=.03) compared to a comparable traditional business. This translates into ESOPs retaining or adding 6 participants on average to their plan.

Of course, active participants is not a perfect proxy for employment and our modeling cannot include performance measures like revenue.

Separate analysis shows that changes in active participants from 2019-2020 for each industry do correlate fairly closely with changes in total employment for that industry from BLS data (r^2 = 0.65).

RESEARCH BRIEF

Institute for the Study of
Employee Ownership and Profit Sharing

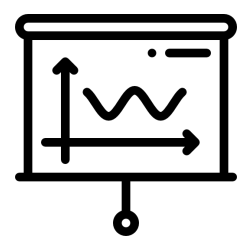
Establishments Which Adopt ESOPs Generally Become Safer Over Time

Preliminary evidence from a 2023 research project indicates two major results:

1. Establishments which already have an ESOP tend to have fewer workplace safety incidents – across industry, size, unionization, and sector

2. Establishments which adopt an ESOP show statistically significant reduction in workplace injuries and illnesses around two years post adoption.

The data supporting these results come from OSHA's Injury Tracking Application, an annual reporting requirement for nearly 250,000 establishments across the United States of America. Injury and illness data were matched to ESOP data from the U.S. Department of Labor's Form 5500 Research Files for the years 2016 thru 2019.



Austin Palis
Research Assistant, Federal Reserve Board of Governors, Washington DC

Douglas Kruse, PhD
Distinguished Professor and Associate Director for the Institute for the Study of Employee Ownership and Profit Sharing

Institute for the Study of Employee Ownership and Profit Sharing

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EMPLOYEE OWNERSHIP FOUNDATION

How is workplace injury and illness measured?

This study uses the standard calculation from the Bureau of Labor Statistics of the injury rate per 100 full time employees per year. It is calculated for each establishment as:

$$\frac{\text{(total annual injuries and illnesses) X (100 workers) X (40 hours/week) X (50 weeks)}}{\text{total hours worked by all employees for the year}}$$

This measurement is very sensitive to establishments with few employees – in fact, it is biased upward – so the following two sample restrictions were applied to reduce statistical noise and bias by excluding:

- Establishments with less than 8 employees
- Establishments where the average hours worked per week was either less than 20 hours per week or greater than 100 hours per week

Who does the study's sample represent?

Out of the approximately 6,400 ESOP firms filed annually using the Form 5500, researchers included 3,166 ESOP firms after applying the sample restrictions. These firms included 40,889 ESOP establishments, which were compared to 212,044 non-ESOP establishments over the four-year study period.

Two industries held the bulk (77%) of ESOP establishments:

- Manufacturing (7,345)
- Retail trade (24,081)
- Utilities (2,338) & wholesale trade (2,344) – combined 11.4% of the sample

Five large, public firms hold ESOP filings, which are overrepresented in the sample: Target, Lowes, Publix, Wal-Mart, and Costco . Combined, they comprise 44% of the ESOP establishments in the sample, and 74% of the ESOPs in the retail trade industry.

Key Learning #1

How much safer is an ESOP establishment compared to a traditionally owned one?

An ESOP is only one of many factors which determine an establishment's healthy & safety outcomes. Accordingly, this study controls for:

- ❑ Industry
- ❑ Union status
- ❑ Public/private ownership
- ❑ Firm size
- ❑ Weekly hours worked per employee
- ❑ Average # of employees for the year

After these controls are applied to the sample, the researchers' models estimate that **an establishment with an ESOP is statistically associated with between -0.439 and -0.655 as many workplace safety incidents per 100 full time workers compared to an establishment with similar characteristics.**

Is the size of this effect economically significant?

These estimated effects represent a 9-13% decrease in workplace safety incidents relative to the overall mean of 4.87 per year.

Over 3.5 million workplace injuries and illnesses occur every year in the United States of America. These estimates point to a **reduction of between 315,000 and 455,000 workplace safety incidents** if all firms were to have ESOPs. The cost of these incidents looms larger than the combined cost of treating all forms of cancer. At the nation-wide level, any reduction in this figure is a welcomed one.

In terms of magnitude, the estimate effect cited above is comparable to the estimate of a union's effect on workplace safety outcomes – who are known to advocate for safer working conditions.

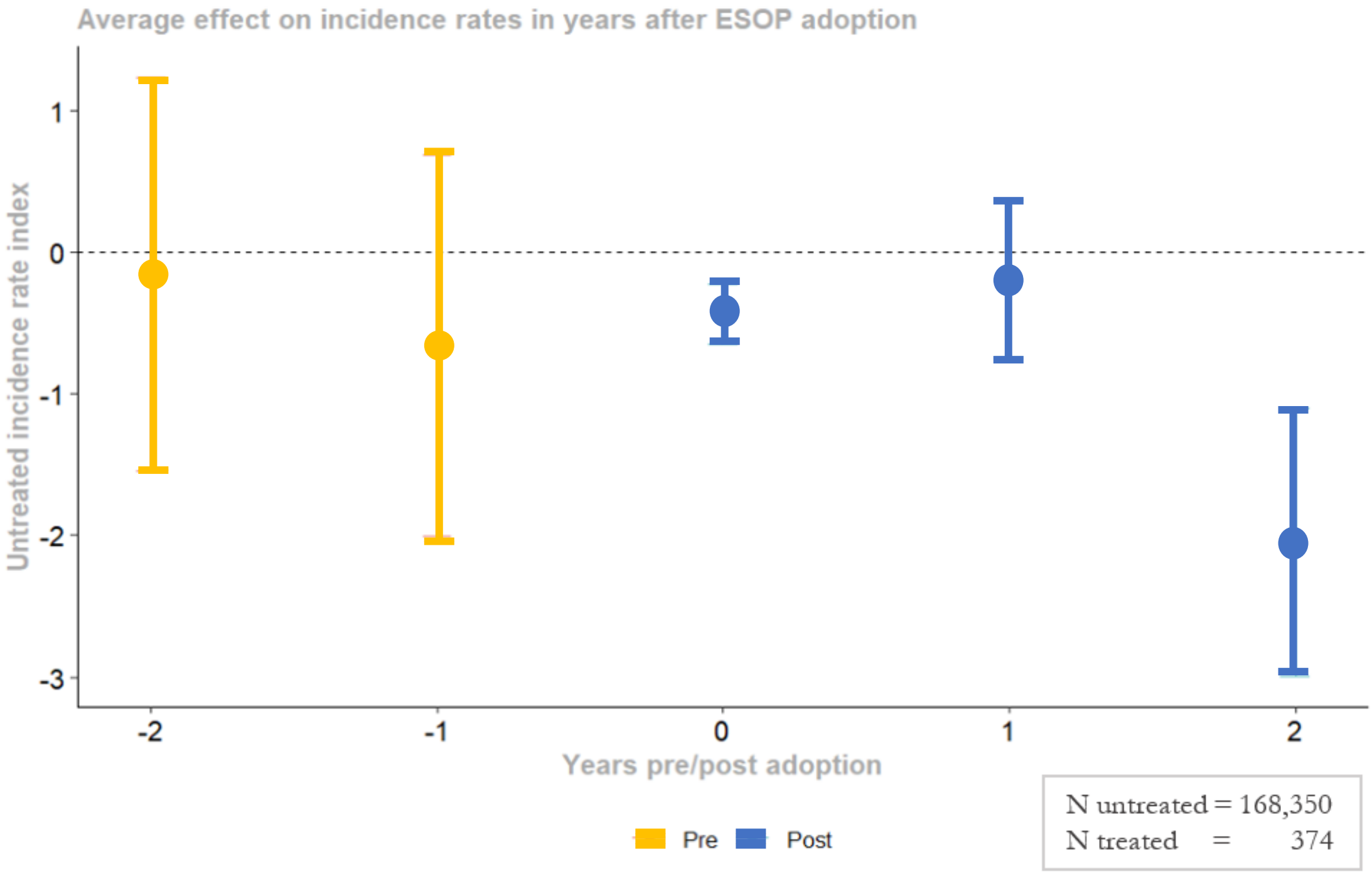
A natural question is whether these estimates show that ESOPs actually cause increased safety, or perhaps just indicate that safer firms are more likely to adopt ESOPs. The pre/post comparisons on the next page help answer this question.

Key Learning #2

Does the adoption of an ESOP cause an establishment to become safer?

To answer this question, the researchers reduced the sample to establishments that appeared in the data for at least two out of the four years. Then, by measuring the average incidence rates of companies before and after the adoption of an ESOP, they could estimate whether – and when - there was a reduction in the incidence rate after the ESOP's adoption. We base this on 374 companies that adopted an ESOP between 2016 and 2019.

Looking at the image below, there is a **significant reduction in the incidence rates in the second year after adoption of an ESOP.** The bar for each year represents the range of uncertainty around an estimate, and the finding that the bar is fully below zero in the second year after adoption means we are highly confident that workplace safety is increasing in that year.



Conclusion

In general, establishments who have adopted an ESOP have fewer workplace related injuries and illnesses compared to establishments with similar characteristics. Further, establishments which adopt an ESOP generally become safer over time.

These findings may be explained by improved employee turnover, alignment of employer/employee incentives, and/or increased involvement of employees in managerial decision making.

These results, taken in combination with other employee ownership research that shows higher performance, job stability, and job quality in ESOP firms, suggest that ESOPs may offer a multi-dimensional solution to several contemporary economic challenges.

How Many Firms Are Good Candidates for Employee Ownership?

Estimates from US Census Data on American Businesses

By Matt Mazewski, Ph.D.
April 2025

Questions

What fraction of privately-held firms in the US are "good candidates" for conversion to employee ownership through an employee stock ownership plan (ESOP) or worker cooperative, as judged by workforce size, annual revenues, and the likelihood of undergoing an ownership transition in the near future? How many workers could become employee-owners if such conversions were to actually take place?

Summary

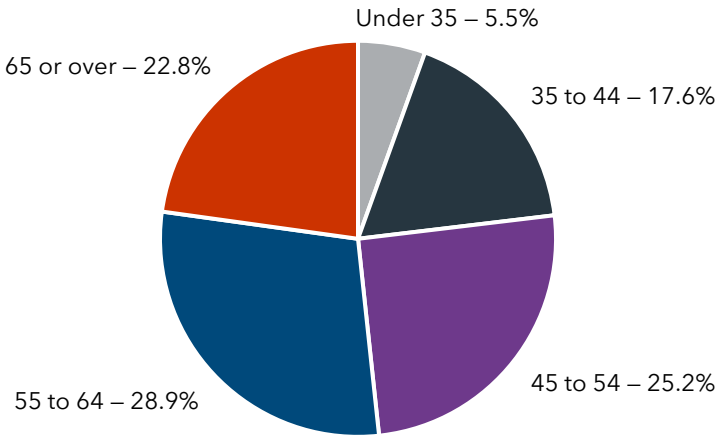
In this research brief, we provide back-of-the-envelope calculations showing that, **as of 2022, about 140,000 firms employing around 33 million workers would have been suitable candidates for ESOP employee buyouts, and nearly 1.1 million firms employing over 25 million workers suitable candidates for cooperative employee buyouts**. Collectively, these firms accounted for roughly $25 trillion in total revenues (in 2024 dollars). The data used in this exercise were drawn from several different sources, including the US Census Bureau's Annual Business Survey, County Business Patterns, and Economic Census.

Notably, we find that even under alternative modeling assumptions the resulting estimates would still point to substantial scope for expansion of employee ownership in the US today.

Defining "Good Candidates" for Employee Ownership

- In order to ascertain the extent to which employee ownership (EO) could be expanded in the US today, we need to begin by identifying **which privately-held firms would be "good candidates" for EO conversions**.[1]
- EO can take different forms, including ***ESOPs***, which allow employees to own equity through a qualified defined contribution retirement plan, as well as ***worker cooperatives (or "coops")*** that are democratically managed on a one-worker-one-vote basis.
- **Size is an important factor in determining suitability for EO**: experts tend to agree that ESOPs are most workable in companies with at least 40-50 employees.[2]
- Coops, however, can be much smaller: according to the Democracy at Work Institute and U.S. Federation of Worker Cooperatives, **the median coop as of 2023 had six worker owners**,[3] although worker cooperatives are possible at much larger-sized enterprises.
- Moreover, not all businesses are equally likely to become employee-owned. Those that have **an owner at or near retirement age are among the most likely to consider EO transitions** given their need for succession planning.[4]
- According to the US Census Bureau's 2022 **Annual Business Survey,[5] just over half (51.7%) of individuals who owned at least a 10% stake in a private business were age 55 or older** (see chart). This suggests that a sizable number of owners could be exploring a sale or transition in the near term.

Percentages of Privately-Held Business Owners by Age Group (2022)



Source: US Census Bureau 2022 Annual Business Survey, Characteristics of Business Owners

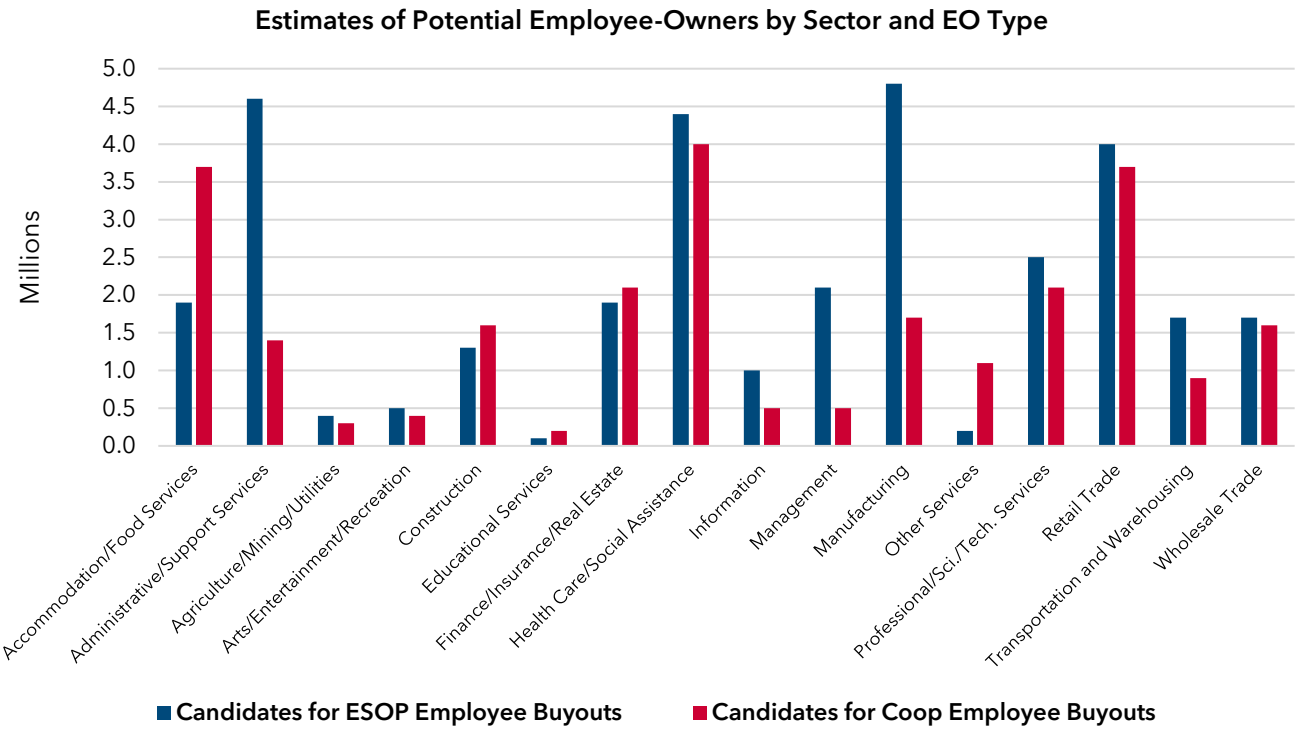
ESOP and Cooperative Candidate Firms: Topline Estimates

- For our purposes, we therefore define ***candidates for ESOP employee buyouts*** to be those privately-held firms with (a) 50 or more employees, and (b) an owner aged 55 or older who is not likely to hand on the business to a relative (we assume that 10% of retiring owners will ultimately have a family member take over for them).[6]
- Likewise, we define ***candidates for coop employee buyouts*** to be those privately-held firms with (a) *at least five but fewer than 50 employees*, and (b) an owner who meets the same other criteria as above.
- Drawing on additional data from the Census and elsewhere, **we can estimate how many firms fall into each of these categories, as well as the corresponding number of workers, total revenues, and total payroll** (see table).
- We make use of the 2022 releases of the **County Business Patterns**,[7] which reports numbers of US firms and their associated employment by industry, workforce size, and legal form of organization, and the **Economic Census**,[8] which similarly reports total annual revenues and payroll for different types of businesses.
- We then compute the shares of firms meeting our size criteria that are likely to be owned by individuals nearing retirement who could conceivably be open to exploring EO transitions.
- Importantly, **we also account for the fact that some fraction of privately-held firms are already employee-owned** and adjust our figures accordingly.[9]

	Candidates for ESOP Employee Buyouts	Candidates for Coop Employee Buyouts
Number of Firms	137,000	1,080,000
Employment	33.0 million	25.6 million
Revenues (in 2024 dollars)	$14.7 trillion	$9.8 trillion
Payroll (in 2024 dollars)	$2.4 trillion	$1.5 trillion

Estimates of Employment in ESOP and Cooperative Candidate Firms by Industry

- We can also estimate how the potential for expansion of employee ownership differs by industry. The chart below presents **estimates of total employment in ESOP and cooperative candidate firms by sector**.[10]
- The **largest concentration of would-be ESOP participants is in manufacturing**, where **around 4.8 million workers** are employed in firms that are good candidates for employee buyouts.
- Other industries that seem particularly ripe for EO conversions, whether through ESOPs or cooperatives, **include accommodation/food services, administrative/support services, health care/social assistance, and retail trade**.
- Together, **the top five sectors by number of potential employee-owners account for around 34 million workers**, or over half of the total employed by candidate firms.



Conclusions

- Analysis of recent data from the US Census Bureau and other sources clearly indicates that there is **significant scope for expansion of employee ownership in the US**, even when positing that firms must meet certain key criteria to be considered "good" candidates for EO transitions.
- In particular, we find that, **as of 2022, about 140,000 firms employing around 33 million workers would have been suitable candidates for ESOP employee buyouts, and nearly 1.1 million firms employing over 25 million workers suitable candidates for cooperative employee buyouts**.
- In 2024 dollars, **ESOP candidate firms accounted for approximately $14.7 trillion in revenues and $2.4 trillion in payroll**; while the same figures for **cooperative candidate firms were $9.8 trillion and $1.5 trillion, respectively**.
- Importantly, **even changing some of our key assumptions would still result in similarly large estimates**. For example, supposing that as many as 30% of business owners near retirement age would not consider an EO transition because they intend to hand over control of their business to family members, we would still find that nearly one million firms employing around 46 million workers in total would be good candidates for EO adoption.
- Breaking down our estimates by sector, we see that **industries such as accommodation/food services, administrative/support services, health care and social assistance, manufacturing, and retail trade are among those that have the greatest potential for expansion of EO**.
- **Additional research is needed to identify other characteristics of privately-held firms and/or their owners that make them most suitable for EO and/or most likely to consider conversion to a cooperative or ESOP model**. Such work could have important policy implications insofar as it provides greater insight into how targeted interventions or incentives could be more efficiently designed to boost uptake of EO.

Endnotes

[1] While ESOPs can and do exist in publicly-traded firms, these plans tend to own a small percentage of outstanding equity. Given the inherent limit on how much of a public company can be owned by employees through an ESOP, we choose to focus on privately-held firms where there is a greater potential for workers to own a significant fraction of the business.

[2] See, for example, Jessica Elliott, "4 Ways to Give Employees Part Ownership in Your Company," CO by U.S. Chamber of Commerce. Available at https://www.uschamber.com/co/run/human-resources/how-to-give-employees-part-ownership. Accessed 29 March 2025.

[3] Democracy at Work Institute and U.S. Federation of Worker Cooperatives, "State of the Sector 2023: Worker Cooperatives & Democratic Workplaces in the U.S." Available at https://www.usworker.coop/census/. Accessed 29 March 2025.

[4] National Center for Employee Ownership (NCEO), "What Is Employee Ownership? An Introduction." Available at https://www.nceo.org/what-is-employee-ownership. Accessed 29 March 2025.

[5] U.S. Census Bureau. "ABS - Characteristics of Business Owners: 2022 Tables (Employer Businesses)." Available at https://www.census.gov/data/tables/2022/econ/abs/2022-abs-characteristics-of-owners.html. Accessed 29 March 2025. As of the time of writing, this was the most recent version of the data available.

[6] This assumption is based on conversations between Institute researchers and professional ESOP advisors, who have indicated that 10% is a reasonable estimate for the fraction of closely-held businesses that will be handed on to family members.

[7] U.S. Census Bureau. "County Business Patterns: 2022." Available at https://www.census.gov/data/datasets/2022/econ/cbp/2022-cbp.html. Accessed 29 March 2025. As of the time of writing, this was the most recent version of the data available.

[8] U.S. Census Bureau. "Economic Census Data." Available at https://www.census.gov/programs-surveys/economic-census/data.html. Accessed 29 March 2025. As of the time of writing, this was the most recent version of the data available.

[9] Data on privately-held ESOPs were taken from an analysis of Department of Labor Form 5500 filings for 2021 by Rutgers' Douglas L. Kruse. Data on cooperatives were taken from the above-cited State of the Sector 2023 report from the Democracy at Work Institute and U.S. Federation of Worker Cooperatives.

[10] Sector definitions are based on two-digit North American Industry Classification System (NAICS) codes, with select sectors combined for ease of presentation.

About the Author

Matt Mazewski, Ph.D., is a research associate and Louis O. Kelso Fellow with the Institute for the Study of Employee Ownership and Profit Sharing, part of the Rutgers University School of Management and Labor Relations.

Learn More

We are pleased to present this brief as part of the Employee Ownership Ideas Forum, a two-day convening bringing together leading policymakers, practitioners, experts, and the media for a robust discussion on how we can grow employee ownership for the shared benefit of American workers and businesses. The Forum is co-hosted by the Aspen Institute Economic Opportunities Program and the Institute for the Study of Employee Ownership and Profit Sharing at Rutgers University. Learn more at as.pn/eoforum25.

EMPLOYEE OWNERSHIP IDEAS FORUM

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The Institute for the Study of Employee Ownership and Profit Sharing is at: https://smlr.rutgers.edu/EmployeeOwnershipInstitute

The Employee Ownership Ideas Forum is made possible through the generous support of the Ford Foundation, JPMorgan Chase & Co. and Prudential Financial. Rutgers University also appreciates the support of the Sorenson Impact Foundation for its support of this convening and other events in 2025.

New Data on ESOP Companies Acquiring Non-ESOP Companies

The National Center for Employee Ownership (NCEO) has completed the most comprehensive review to date of publicly available information about ESOP companies purchasing non-ESOP companies. The review is consistent with anecdotal reports that buying other companies has become an important source of growth for closely held ESOP companies.

Since 2001, the NCEO has monitored press releases and a Google Alert news feed to maintain a database of mergers and acquisitions transactions in which an ESOP company buys another business. The database includes each acquiring company's name and industry, as well as the target company's name, industry (if different), and the size of its workforce. The number of acquisitions reported in the public sources we tracked has roughly doubled in the last several years compared to the previous period.

In 2024, we did a comprehensive company-by-company search for acquisitions by ESOP companies from 2020 through 2024, looking at company websites as well as news sites and searching for information about any acquisitions the company might have done. We looked at every one of the largest 1,000 companies (as defined by the number of active participants reported in the acquiring company's ESOP) and a random sample of 20% of the next 3,000 largest.

We identified 827 acquisitions by the largest 1,000 companies from 2020 to 2024. Those acquisitions amounted to approximately 72,000 new employees who became employees of the ESOP acquirer. In addition, we identified 112 acquisitions among the 20% random sample from the 3,000 next-largest ESOP companies. Those acquisitions represented 4,800 employees, so if we assume that the 20% sample accurately represents the other companies in that size category, we estimate that these companies made 560 acquisitions representing 24,000 employees. We used this same estimating technique for all the numbers in this study. Although not all employees in the acquired companies may meet the plan eligibility rules, generally, the large majority will.

This study does not attempt to generate a complete review of all acquisitions by ESOP companies. Some acquisitions are never reported on any publicly available site. We cannot estimate just how many of these transactions we are missing. Our review also excluded public companies, banks, and ESOP companies with less than 50 active participants. Public company ESOPs tend to own a small percentage of their company's stock. Most banks are also publicly traded, albeit sometimes very thinly. Private company bank ESOPs tend to own less than 25% of the shares, although there are a handful of exceptions. Because these companies are usually very different from the mostly 100% ESOP-owned

companies doing the acquisitions, it seemed appropriate to exclude them. We do not claim that this analysis represents all acquisitions, but we are confident that these acquisitions represent the minimum boundary for the number of acquisitions by ESOP companies.

In short, we were able to specifically identify or estimate 1,387 acquisitions (827 + 560) that represent 96,000 employees (72,000 + 24,000) over a five-year period by the 4,000 largest ESOP companies. On an annual basis, that is an average of 277 acquisitions representing 19,200 employees per year. These are confirmed or conservatively estimated acquisitions only. There are undoubtedly other acquisitions our analysis could not find, although larger acquisitions tend to be reported.

Over a five-year period (from 2018 to 2022), the data collected by the Department of Labor on Form 5500 indicates that an annual average of 284 companies adopted new ESOPs, and those companies had an average of 40,195 active participants.

In other words, the acquisitions we were able to identify through public sources represent a significant percentage of the growth in the number of active ESOP participants. The number of new ESOP company employees (the large majority of whom are likely to become active participants in the plan) resulting from the acquisitions we identified equaled 48% of the number of plan participants created by newly formed ESOP companies.

If we assume the actual number of acquisitions and employees is somewhat higher, acquisitions currently add almost as many new employees to ESOPs as do new ESOPs each year. There are also at least somewhat more companies being purchased every year than new ESOPs are being created.

The tables below show the key characteristics of the acquisitions we reviewed. A few companies, most notably Integrity Marketing (an insurance marketing company that has grown to about 10,000 employees, largely through acquisitions), Terracon (engineering), Davey Tree (tree services), Higginbotham (insurance), Union Risk (insurance), and KCI (engineering) were all especially active acquirers.

Most active acquirers		
Company	Number of acquisitions	Industry
Integrity Marketing	71	Insurance
Davey Tree	24	Tree service
Higginbotham Insurance	18	Insurance

Terracon	14	Engineering
Union Risk	14	Insurance
KCI	12	Engineering

Most common industries of the acquirers we reviewed	
Engineering only	192
Insurance	138
Holding companies	52
Construction	49
Architecture/engineering	29
Supermarkets	26
Tree service	26

Size of acquisitions	
Mean number of employees in targets acquired by the largest 1,000 acquirers	67
Mean number of employees in targets acquired by the next 3,000 acquirers	41
Median number of employees in targets acquired by the largest 1,000 acquirers	30
Median number of employees in targets acquired by the next 3,000 acquirers	30
Number of acquisitions with more than 1,000 employees	9
Number of acquisitions with 100 or more employees	160

Why ESOP Companies Make Acquisitions

The establishment of S corporation ESOPs starting in 1997 created the opportunity for 100% ESOP-owned S corporations not to owe any federal corporate income taxes. In addition, ESOP companies tend to perform better than other companies, adding an

additional source of capital. Once these S corporation ESOPs repaid their acquisition debt, many found they had significant cash reserves.

On the other hand, many business owners who want to sell their company find the opportunity to sell to an ESOP company highly attractive. They get a competitive price in most cases, they may get tax benefits, and their employees become owners of the acquiring company. That is a much more gratifying story for the sellers and the employees than what often happens in sales to competitors (and especially in sales to private equity firms).

The NCEO has a book on using ESOPs for acquisitions, *Acquisition Strategies for ESOP Companies*. The NCEO's Being Acquired by an ESOP Company toolkit will expand significantly in the coming months. We also have also created an opportunity for NCEO member companies to add themselves to a database indicating their interest in making acquisitions, and we will work with exit planners to make them aware of this opportunity.

The NCEO is a nonprofit, membership-supported organization. The 2025 NCEO Annual Conference will be held April 14–17 in Salt Lake City. Membership in the NCEO makes our work possible while also providing a wide array of member benefits, including a document library, a monthly communication tool, weekly free webinars, advice from staff experts, and much more. Learn more about us at www.nceo.org.

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Do Broad-based Employee Ownership, Profit Sharing and Stock Options Help the Best Firms Do Even Better?

Joseph Blasi, Richard Freeman and Douglas Kruse

Abstract

This article analyses the linkages among group incentive methods of compensation (broad-based employee ownership, profit sharing and stock options), labour practices, worker assessments of workplace culture, turnover and firm performance in firms that applied to the '100 Best Companies to Work For in America' competition from 2005 to 2007. Although employers with good labour practices self-select into the 100 Best Companies firms sample, which should bias the analysis against finding strong associations among modes of compensation, labour policies and outcomes, we find that employees in the firms that use group incentive pay more extensively participate more in decisions, have greater information sharing, trust supervisors more and report a more positive workplace culture than in other companies. The combination of group incentive pay with policies that empower employees and create a positive workplace culture reduces voluntary turnover and increases employee intent to stay and raises return on equity.

1. Introduction

This article examines how employee compensation and managerial personnel practices affect employee well-being and firm performance among a special group of firms – those that applied to the Great Place to Work® Institute competition to be labelled one of the '100 Best Companies to Work For in America' that Fortune magazine publishes each year. In contrast to earlier studies of companies on the 100 Best list (Edmans 2011; Faleye and Trahan 2011) our data include firms that made the list and those that applied but did not make the list, and uses both the firm and employee surveys that are part

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of the application process. Because applicants to the '100 Best' list view their workplace policies and practices as exemplary, estimates of the link between those practices and worker and firm outcomes in this data set are likely to be biased downward compared to estimates that one would obtain from a random sample of firms. Thus, the data provide a high hurdle for claims that particular compensation policies and practices improve outcomes.

Our Great Place to Work (GPW) data set contains information on the 780 firms that applied for the 100 Best list in 2005–2007. The firms tend to be large ones, and about half are public firms. In 2007 they employed about 6 million workers or around 5 percent of the private sector workforce. Information on the firm's compensation policies and turnover rates comes from the firm's application. Information about work practices and workplace culture come from a survey of 200–300 randomly chosen workers that the Great Place to Work® Institute conducts at every firm. We obtain additional data for the economic performance of public companies from Standard and Poor's Compustat file.

The GPW data set allows us to examine the link between three forms of compensation that tie employee earnings to the performance of the firm – employee stock ownership, profit and gain sharing, and broad-based stock options, which has been labelled elsewhere as shared capitalist compensation (Kruse *et al.* 2010) – and worker reports on managerial practices and workplace culture; and to estimate the link from shared capitalist compensation, work practices, and workplace culture to worker and firm outcomes.

We find that:

(1) There is great variation among the applicants to the '100 Best Companies to Work For' list in their use of group incentive systems of pay, in workplace practices, and in worker assessment of workplace culture.
(2) The firms that use shared capitalist modes of compensation have policies that allow greater employee participation in decisions and greater information sharing than other firms, and have a more positive workplace culture than those in other firms.
(3) The combination of group incentive pay and policies that empower employees and create a positive workplace culture increases employee intent to stay with a firm, lowers voluntary turnover, and raises return on equity.

The results are consistent with prior work on positive complementarities among high-performance work practices in affecting workplace performance, and show that group incentive pay is a key element in those complementarities. While prior results may be biased by unobserved firm heterogeneity, the reduced heterogeneity in this select sample strengthens the likelihood that the results reflect a causal impact of policies on employee well-being and firm performance.

The next section places our study in the context of the large extant body of literature on group incentive pay and worker and firm performance. We then describe the GPW sample and show that there are substantial differences in the use of shared capitalist modes of pay and work practices even among these self-selected good employers. The following sections present our estimates of the linkages between modes of compensation and work practices and workplace culture and our estimates of the impact of these factors on economic outcomes. The final section concludes with a summary of results and discussion of outstanding issues.

2. The study of 'shared capitalist' compensation and practices

Almost half of US private sector workers participate in some form of group incentive plan through employee ownership, profit sharing, stock options, and gainsharing (Kruse *et al.* 2010), and the proportion of European Union firms with employee ownership or profit sharing has been growing since 2000 (Hashi and Hashani 2013). Over 100 studies have been conducted across many countries on the relation between group incentive pay and related personnel practices and firm and worker performance. Most of the studies compare firm performance of firms with and without these forms of pay in cross-section data[1] but some studies examine firms before and after their adoption of a group incentive compensation scheme, or control in other ways for selection bias.[2] Meta-analyses analysing the combined results of studies show statistically significant positive associations of employee ownership and profit-sharing with firm performance.[3]

There is also a wide dispersion in the magnitude of estimated effects within and across studies. Many analysts and practitioners interpret this dispersion as indicating that the context in which management establishes a group compensation system affects its success. Firms cannot simply institute a program that links worker pay to the firm performance and expect the firm to do better as if the method of pay was a technological fix to some engineering problem.[4] 'To get the productivity-enhancing effects, something more may be needed – something akin to developing a corporate culture that emphasizes company spirit, promotes group cooperation, encourages social enforcement mechanisms, and so forth' (Weitzman and Kruse 1990: 100). 'Bundling equity and profit sharing with financial information and participation in decision making can enhance worker contributions to the firm by creating employment relationships based on congruent psychological contracts. Such a bundle can form the basis of trust and aligned interests between workers and employer' (Rousseau and Shperling 2003: 564–5).

One likely reason why a group incentive system needs support from other practices to improve outcomes is that it must overcome the free rider or $1/N$ problem that plagues all forms of collective action. In an incentive plan with N workers, the payoff to the individual from his or her effort is diluted because each individual receives only $1/N$th of the reward from their work. It

is narrowly rational to free ride on the effort of others, but if most workers do that, the group incentive system fails. In theory, workers can solve the free rider problem by establishing and enforcing work norms for high effort (Axelrod 1984; Fudenberg and Maskin 1986) but neither theory nor empirical studies specify what it takes to overcome the $1/N$ problem in different settings.[5] On the employers' side, one interpretation of successful programs is that they work like a 'gift exchange' (Akerlof 1982) from the employer to employees in which the plans draw on feelings of reciprocity that help establish norms for greater effort and cooperation. On the workers' side, some workers may step up and monitor fellow employee efforts to enforce the work norm. Proportionately more workers in establishments with group incentive systems than workers in establishments without such incentives report that they would intervene with fellow employees to improve performance (Freeman *et al.* 2010). This demonstrates that worker self-monitoring is a real channel for policing a group incentive system. But it pushes the free rider question back a stage rather than eliminating it, for it raises the free rider question of why some workers undertake the monitoring activity rather than 'letting Joe do it'.

The idea that group incentives need complementary policies to work well is consistent with theory (e.g. Ben-Ner and Jones 1995) and with the literature finding positive productivity effects of complementary HR practices (see meta-analysis in Combs *et al.* 2006). There is also some empirical support for complementarity between employee ownership and participation in decision-making (Bryson and Freeman 2010; Pendleton and Robinson 2010) although there is also evidence that group incentives may affect performance independently of participation in decisions (Kruse 1993; Conyon and Freeman 2004; Pendleton and Robinson 2010).

The GPW data set provides a new way to illuminate the effects of group incentive compensation systems and accompanying policies and practices on economic outcomes, and to assess the complementarity among shared capitalist forms of compensation and particular ways of operating a firm. To our knowledge it is the largest sample of firms and workers that contains data on shared compensation practices, workplace practices, worker attitudes and responses to policies, and measures of firm performance. But it is a highly non-representative sample. Only firms that view themselves as having sufficiently good labour practices to make the 100 Best list are likely to take the time and resources to apply to the Great Place to Work® Institute for consideration in the competition.

It is usual to regard a non-representative sample as inferior to a representative sample, but in this case the fact that the sample comes from the upper tail of those with good labour practices is a strength. One weakness of most studies that link shared capitalist pay and practices to output is that there is always the potential that some unobservable characteristic of the employer, workplace, or situation of the firm overcomes the $1/N$ problem so that the group incentive pay system succeeds. If firms debating whether or not to introduce these modes of compensation cannot replicate that unique attribute or find their own way to overcome the $1/N$ problem, they are unlikely to have

the same success with group incentive pay as firms that have succeeded by adopting those forms of pay and practices. Having a sample of firms that view their labour practices as exemplary allows us to sign the likely selection bias as a downward bias.

To see this, consider a comparison of two applicants to the 100 Best competition under the assumption that firms apply only if their workplaces exceed some level of good practice, P^*. Firm A has a group incentive compensation policy (and/or other shared capitalist modes of operating) so that it produces a workplace with good practice Pa, with $Pa > P^*$. Firm B does not have such a policy but has other attributes that leads it to view its workplace practices Pb as making it exemplary, $Pb > P^*$. Firm B's positive unobservable characteristic/policy makes it comparable to firm A with its shared capitalist mode of pay. If good workplace practices or firm B's unobservable characteristics produce better economic outcomes, comparisons of A and B would yield smaller differences in outcomes than would comparisons of A with some randomly drawn firm from the population of firms.

Apart from self-selection of firms, it is of course possible that there is self-selection of workers. It may be that firms with group incentive plans or other high-performance workplace practices have higher-quality workers in general, and that high performance is mistakenly attributed to the policies rather than to worker quality. The evidence does not, however, indicate that the estimated effects of high-performance policies are likely to be biased by omission of information on worker quality. Pre/post-evidence from two studies indicates that average worker quality did not change as compensation was changed from individual to group incentives (initially high- and low-productivity workers were equally likely to leave), while average worker performance improved under the group incentives (Weiss 1987; Hansen 1997). In addition, administrative information on employees' prior absences, and work and earnings histories, made little difference in the estimated effects of high involvement practices on current measures of absence (Bockerman *et al.* 2012). Apart from explicitly controlling for prior employee performance, one field experiment implemented random assignment of profit sharing at 3 of 21 establishments within a firm, finding that the performance of those establishments improved relative to the control group (Peterson and Luthans 2006); also, laboratory evidence using a true experiment found higher productivity among subjects organized into employee-owned 'firms' (Frohlich *et al.* 1998). These studies indicate that while the 'best firms' may attract higher-quality employees in general, there is no evidence that this is systematically related to group incentives, so that employee self-selection is unlikely to represent a serious bias in estimating the effects of group incentive plans on employee behaviours and firm performance.

The empirical task for the rest of this study is twofold: (1) to see whether there are substantial differences in the use of group incentive modes of pay and related personnel policies and practices within the select group of GPW firms; and (2) to estimate whether within this group those modes of pay work

separately or in combination with other practices to affect worker and firm outcomes.

3. The '100 Best Companies to Work For' applicant data set

The data come from two surveys collected by the Great Place to Work® Institute: (1) the 'Culture Audit' survey of workplace practices that representatives of companies fill out when they apply for selection to the 100 Best list, and (2) the employee survey that the Institute gives to 200–300 representative employees in each company, to measure employee attitudes and perceptions of the company. The Institute gave us access to the surveys for the firms that made the 100 Best list and those that applied and did not make the list under a confidentiality agreement which allowed us to link the data to other data sources and to analyse it on an Institute server.

The Institute developed the Culture Audit from intensive field work with corporations over the last 15 years. It contains information on the availability of shared capitalism plans, and other work practices and performance outcomes. About 400 companies supply Culture Audit and employee survey data each year as part of their application to be considered to be one of the '100 Best Companies to Work For in America.' Our sample contains 780 companies over the three-year span 2005–2007. It has 1,312 company-year observations (reflecting applications in multiple years by some of the companies). Three hundred seventy five of the companies are public, which allowed us to add measures of their economic performance from Standard & Poors' Compustat to the data set. The remaining firms are privately held, for which we do not have information on performance. The publicly owned companies are large companies traded on the NYSE and the NASDAQ. Based on Compustat data, our public company sample captures a substantial proportion of US public company activity: 10 percent of total sales, 10 percent of total employment, and 20 percent of the market value of all publicly traded corporations in 2007.

The employee surveys provide information on 230,465 employees with complete data for our regression specifications, or an average of 222 surveys per company-year. While firms can be tracked over time, individual employees cannot be tracked over time. The response rate for the employee survey is close to 60 percent (Edmans 2012), and there is no reason to believe that response rate is related to the variables of interest in this study.

Our data are multilevel. Some are at the firm level. Some are at the individual level within firms, which can be aggregated to firm level. Data on compensation policies and turnover come from management responses on the culture audit. Data on firms' financial performance, which is limited to public companies, come from the linked Compustat data file. These two sources of data allow us to examine the effect of firm practices on firm outcomes in a different way than the two studies that have used the publicly available list of '100 best places to work' firms to assess the effects of good labour practices

on firm performance. Edmans (2011) and Faleye and Trahan (2011) compare the stock market returns of firms that make the '100 Best list' to the returns of industry and size-matched firms that are not on the list. They both find that companies on the 100 Best list have higher shareholder returns, at least over some time periods.[6] We complement their studies by comparing performance among applicant firms with different human resource management policies with a more detailed analysis of these policies.

Information on employee empowerment and workplace culture comes from the employee responses to the randomly distributed surveys administered by the Institute. In some calculations we average individual reports to the company level, which allows us to test the potential mediating effects of employee reported patterns on the relation between modes of compensation and policy on firm outcomes. The individual responses also allow us to examine the relationship of worker reported measures of employee empowerment and workplace culture to individual-level outcomes, such as the intent to stay with the firm, and to link those outcomes to firm-level compensation policies.

Having data from both employees and managers and objective measures about firm performance avoids the problem of common method bias that often plagues studies with data from a single source or respondent, be it workers or managers With only a single source, there is a danger of spurious covariance in variables due to the respondent's report on different attributes having a common base. The manager may report positively on practices that he or she believes are being implemented and view the firm's performance positively, while workers may have a different view on how the firm actually operates on the ground, and company financial data may give yet a different picture of how the firm is performing. Having information from three sources allows us to examine whether patterns found with one type of data hold in others. For example, workers who report high trust in management may also report that they are more likely to stay with the firm, producing a strong relation among individuals, but if high trust workers are randomly distributed among establishments there may be no relation between trust and likelihood of staying at the establishment level. In the case of turnover, we have manager-reported data on company voluntary turnover as well as employee reports of their intent to stay at the firm that provides an independent check on the impact of modes of compensation and forms of operating a firm on outcomes.

Table 1 provides detail on the group incentive compensation systems used by firms in our data set over all company-years. The table demonstrates one key fact – that there is substantial variation in the compensation systems among firms in the GPW data. Approximately one-sixth of firms (17.6 percent) report that they have an Employee Stock Ownership Plan (ESOP), 18.1 percent report cash profit/gain-sharing plans and 22.3 percent report deferred profit sharing plans. Given the widespread use of stock options to reward executives, the most common form of group incentive pay is granting stock options, which 44.5 percent of firms report. While most publicly traded firms give stock options to some subset of their employees, this lower incidence in the sample

TABLE 1
Group Incentive Compensation Plans in GPW Database, 2005–2007 Combining all Company-Years ($n = 1{,}312$)

Plan and characteristics	*Percentage of firms with plan*	*Percentage of firms with attribute if they have compensation form (S.D. in parenthesis)*
Employee Stock Ownership Plan	**17.6**	
Of those with, mean % of company owned by plan		17.4 (26.9)
Median % of company owned by plan		5.9
Percentage with >50% of company owned		9.1
Cash profit/gain sharing plan	**18.1**	
Of those with, mean payout as % of pay		7.2 (10.5)
Median payout as % of pay		4.7
Deferred profit-sharing plan	**22.3**	
Of those with, mean contribution as % of pay		6.5 (8.7)
Median contribution as % of pay		3.9
Stock options granted in past year	**44.5**	
Of those with, mean % of employees granted		20.6 (29.1)
Median % of employees granted		6.5
Percentage <25% of employees granted		74.5
Percentage >50% of employees granted		16.4

reflects the large segment of the sample made up of closely-held firms which do not use employee stock options to the same extent.

There is also substantial variation in the attributes of the group incentive plans among firms that use these modes of pay. Of the companies with an ESOP, the mean proportion of shares held by the ESOP is 17.4 percent. The median proportion is a much lower 5.9 percent – a divergence due to the fact that 9.1 percent of the firms are majority employee owned with over 50 percent of the shares held by the ESOP. Of the companies with profit or gain sharing plans, the average *cash* plan provided to an employee is 7.2 percent of annual pay while the average *deferred* profit sharing plan provided a contribution equalling 6.5 percent of employee pay. In both cases the distribution is concentrated below the mean so that the median payout or contribution is notably smaller than the mean. Finally, of the companies with stock options, the average percent of employees granted stock options was 20.6 percent while the median was 6.5 percent. Three quarters of the firms gave options to less than 25 percent of employees while 16.4 percent of the companies were broad-based in that they granted stock options to more than half of their employees.

The heavy representation of ESOPs in this sample is noteworthy. There were only 7,041 ESOPs in the entire economy in 2007, representing only 1 percent of all firms with 20 or more employees; these ESOPs had 10.1 million participants who represented 9 percent of private sector workers.[7] Among publicly-held companies in the 2005–2007 period, 7.5 percent had ESOPs.[8] Therefore the 17.6 percent figure in Table 1 shows that GPW firms are more likely than other firms to have ESOPs, indicating that ESOPs may be seen by the 'best firms' as a useful method of helping create good work

TABLE 2
Summary Index of the Extent of 'Shared Capitalist' Modes of Compensation

Distribution of Company-Year observations (n = 1,089)	*Percentage of firms*
0	52.3
1	20.9
2	20.4
3	4.0
4	2.0
5	0.4
Mean and standard deviation	0.835 (1.05)

Note: Index defined as in text, with one point for (1) an Employee Stock Ownership Plan (ESOP), (2) an ESOP owning 50% or more of the company, (3) a stock option plan covering 25% or more of employees, (4) a stock option plan covering 50% or more employees, (5) a cash profit/gainsharing plan, (6) a cash profit/gainsharing plan paying more than the median percent of pay, (7) a deferred profit sharing plan and (8) a deferred profit sharing with a contribution above the median percent of pay.

environments. This high prevalence is good for research purposes since it provides a substantial base of ESOP companies for analysis.

In sum, the table shows a wide variation among firms in both the presence of different modes of group incentive pay and in the extent of such pay. This variation is necessary for us to make any inferences about the effects of shared capitalist modes of pay and accompanying practices on outcomes from the GPW sample.

Because the Culture Audit provides information on the details of compensation systems that reflect the extent to which the systems offer incentives to representative groups of workers, which creates a host of variables, for ease of analysis we combine the compensation measures into a single statistic. This is a thermometer-style *index focusing on the extent of shared capitalist forms of pay,* where *w*e give high scores to firms whose compensation system rewards more workers through group incentive pay and/or where incentive pay is a potentially larger share of worker earnings. The index is a summated rating of eight items that accord one point each for (1) Having an Employee Stock Ownership Plan (ESOP), (2) Having an ESOP owning 50 percent or more of the company, (3) Having a stock option plan that covers 25 percent or more of employees, (4) Having a stock option plan that covers 50 percent or more employees, (5) Having a cash profit/gain-sharing plan, (6) Having a cash profit/gainsharing plan paying more than the median percent of pay, (7) Having a deferred profit sharing plan and (8) Having a deferred profit sharing plan with a contribution above the median percent of pay. With 8 items the range of the scale is 0–8.

Table 2 gives the distribution of firms by this measure and some summary statistics for this 'shared capitalist compensation index'. Over half of the firm-year observations meet none of the eight criteria and thus have a score of zero. In these cases, the firms have no shared capitalism in the specified years. They are effectively the firm B 'control group' for inferring the effects of shared

capitalist modes of incentive pay on outcomes within the GPW sample. Six percent of the observations have scores of 3 or more, with a maximum score of 5. They are effectively the firm A 'treatment group' for inferring the effects of shared capitalist pay. In the ensuing analysis we relate the index to work practices and measures of workplace culture and economic outcomes and report in the appendices on the link between the components of the index and relevant outcomes.

This index is based on a similar index used in a number of studies in Kruse *et al.* (2010). It does not measure a unitary concept as is done by several psychological measures (e.g. perceived organizational support or leader-member exchange). Rather, it is intended to capture a range of policies that may substitute for one another but nonetheless reflect a commitment to directly share economic rewards with workers. Because the different policies may have different effects, we present results breaking down the different forms of shared capitalism in Appendix.

4. Other policies and practices

Table 3 provides descriptive statistics on the measures of workplaces practices and workplace culture on which we focus.

With respect to workplace practices, we examine three variables that theory and prior research suggest are complementary to shared capitalism: high-trust supervision, high participation in decisions, and high information sharing.[9] These are highly correlated variables that we averaged to form a single index which we label 'employee empowerment' (alpha = 0.890). For workplace culture we use six measures: workers assessments of team or family feeling, employee cooperation, employee willingness to give extra to their work, the feeling that one receives a fair share of company profits, the Great Place to Work Trust Index©, and the perception that 'This is a great place to work.' The Institute developed the Trust Index© as a summary measure of employee perceptions of the company. It includes all items from the employee survey, grouped into five dimensions and averaged across the dimensions.[10] It provides a broad measure of company culture.

Table 3 also presents descriptive statistics for our individual-level measure of intent to stay, and company-level performance measures of voluntary turnover, and return on equity (ROE).

Turnover is one of the most important measures of worker satisfaction with how a firm operates, and has a strong effect on organizational performance (Park and Shaw 2013). The ubiquitous finding from studies of job satisfaction is that low satisfaction is associated with high quits, which makes up most voluntary separation (retirement being the other part of voluntary separation). The question to workers on intent to stay with the firm is forward-looking and subjective while the company-level measure of voluntary turnover is backward-looking and objective. Aggregating the worker reports on intent to stay gives us a firm-level measure that we have correlated with the

TABLE 3
Measures of Employee Empowerment, Workplace Culture, and Firm Performance

Var. name	*Variable definition/ survey statement*[a]	*Mean*	*(S.D.)*	*Distribution of responses* 1	2	3	4	5	*Sample size*
Employee empowerment									
High-trust supervision	Management trusts people to do a good job without watching over their shoulders.	4.262	(0.96)	2%	4%	11%	31%	52%	230,465
Participation in decisions	Management involves people in decisions that affect their jobs or work environment.	3.841	(1.08)	4%	7%	21%	35%	32%	230,465
Info sharing	Management keeps me informed about important issues and changes.	4.044	(1.02)	3%	6%	17%	34%	41%	230,465
Culture									
Team	There is a 'family' or 'team' feeling here.	4.232	(0.99)	2%	4%	13%	28%	52%	230,465
Cooperation	You can count on people to cooperate.	4.129	(0.87)	1%	3%	17%	40%	39%	230,465
Give extra	People here are willing to give extra to get the job done.	4.230	(0.88)	1%	3%	14%	36%	46%	230,465
Fair share	I feel I receive a fair share of the profits made by this organization.	3.691	(1.20)	7%	10%	21%	31%	31%	230,465
Trust index	Great Places to Work Trust Index	4.194	(0.72)	[b]	[b]	[b]	[b]	[b]	230,465
Great place	Taking everything into account, I would say this is a great place to work.	4.366	(0.95)	2%	3%	11%	23%	60%	230,465
Intent to stay	I want to work here for a long time.	4.272	(1.04)	3%	4%	13%	23%	57%	230,465
Company performance									
Voluntary turnover	Voluntary separations (excluding retirements) of full-time employees as proportion of full-time employment.	0.140	(0.12)	[b]	[b]	[b]	[b]	[b]	1,011
ROE	Return on equity (from S&P Compustat).	0.167	(0.15)	[b]	[b]	[b]	[b]	[b]	399
ROE adjusted	Return on equity relative to year-industry mean (upper and lower 1% trimmed).	0.039	(0.15)	[b]	[b]	[b]	[b]	[b]	399

Note: Survey statements are protected by copyright by Great Place to Work® Institute.
[a]All employee survey items scored on 1–5 scale (1 = 'almost always untrue', 5 = ' almost always true').
[b]Continuous variable.

firm-level measure of turnover. To the extent that the practices or conditions that produce high or low turnover are stable over the period, the two measures should be negatively related. Their correlation is a strongly significant –0.245. The size of this correlation is reduced by factors that are not stable over time (e.g. the current employees may have different characteristics and behaviours than the quitting employees) and by differences between measured intentions and actual turnover (e.g. employees may be intending to stay but be forced to quit for unforeseen family-related reasons).

Turning to firm outcomes, the most widely used financial measure of the performance of firms is return on equity (ROE), which reflects the value of the firm to shareholders. But ROE varies across industries depending on riskiness and other factors. We have 'adjusted' ROE from a robust regression of ROE on forty industry dummies and firm size, separately by year, for the entire Standard and Poor's Compustat data set. With this method we have effectively controlled for industry-specific risk factors that may vary over time. The resulting value represents the company's performance relative to public companies of the same size in the same industry in the same year. There were some extreme values in ROE among the GPW companies after this adjustment, so we ran all regressions both with and without trimming the upper and lower 1 percent of ROE within the GPW sample. The basic results were similar; here we present the results using the trimmed measure. The mean value of 0.039 for adjusted ROE indicates that the applicants had an average ROE that was 3.9 percentage points higher than the industry-year average for firms of the same size, consistent with the idea that these are better-performing firms in general.[11]

5. Shared capitalist compensation and complementary workplace practices

As noted, a key issue in the analysis of group incentive systems is the extent to which they are accompanied by other work practices and a supportive workplace culture, presumably due to the complementarity of the pay and workplace operations. Table 4 summarizes the results of analysing the relation between group incentive modes of pay and workplace practices and culture in the GPW data set. It records the coefficients from regression of workers' reports on each of the measures of workplace empowerment and culture on the shared capitalist index variable.

The regressions show that employees in companies with higher values on the shared capitalist index are more likely to report high-trust supervision, participation in decisions, information sharing, and more favourable outcomes on all of the culture measures. While the measures are not identical to those used in prior research, the coefficient magnitudes are consistent with prior results using similar measures; for example, a one-standard-deviation increase in the shared capitalism index is linked to a 0.023 standard deviation increase in the 'give extra' measure, and is similarly linked to a 0.023 standard deviation increase in a measure of 'At your workplace, how hard

TABLE 4
Summary of Regressing Workplace Practices and Culture on Shared Capitalist Modes of Pay Coefficients and *t*-Statistics from Random-Effects Maximum Likelihood Multilevel Model Estimates

	Coefficient, t statistic in parenthesis	*Wald chi-square (38)*	*N*	*Compensation with most significant impact, followed by compensation with 2nd most significant*
Workplace Practice				
High trust supervision	0.020 (3.17)***	3629.7	230,465	ESOP, Deferred profit sharing
Participation in work decisions	0.020 (2.45)**	6971.6	230,465	ESOP, Deferred profit-sharing
Management shares information	0.016 (2.21)**	6128.3	230,465	ESOP, Deferred profit-sharing
Workplace Culture/Attitudes				
Team	0.015 (2.15)**	6329.0	230,465	ESOP, Deferred profit-sharing
Cooperation	0.013 (2.24)**	4846.8	230,465	ESOP, Deferred profit-sharing
Give extra	0.020 (3.28)***	6830.2	230,465	ESOP, Deferred profit-sharing
Fair share	0.017 (2.13)***	12075.0	230,465	ESOP, Deferred profit-sharing
Trust index	0.014 (2.40)**	9298.7	230,465	ESOP, Deferred profit-sharing
Great place	0.023 (3.18)***	4643.7	230,465	ESOP, Deferred profit-sharing

Note: Each row represents results from one regression. See Appendix for fuller results and control variables.
**$p < 0.05$ ***$p < 0.01$. The *t*-statistics in parentheses, based on robust standard errors.

would you say that people work?' from Kruse *et al.* (2010). The calculations in Appendix, which replace the index with its underlying components – dummy variables for presence or absence of particular forms of pay and continuous variable measures of its extent – show that ESOP variables are most consistently significantly positively related to the practices and attitudes, with deferred profit-sharing as the second most significantly related.

6. Model specifications and results

Standard regression analysis is an appropriate tool to estimate the links from the compensation and workplace practice variables on outcomes in each of the three years of our data set taken independently. But because many firms apply to the Great Place To Work competition in more than one year, we can do better than simple OLS in an analysis that pools the data over the three years: the existence of the same firm in 2 or 3 of the years allows us to take account of firm-specific factors. In the 2005–2007 GPW data set, 480 companies applied

to the competition once in this period, 168 applied twice, and 182 applied three times, which creates a distinct structure to the error terms associated with an individual establishment. To exploit this pattern, we use a random effects specification of the model that uses both within-firm and between-firm variation to estimate the parameters linking variables.

First we examine the overall relationship of shared capitalism to the other outcomes using the following equations:

$$Y1_{ijt} = a + b1 * SC_{jt} + b2 * X1_{ijt} + b3 * X2_{jt} + b4 * R_j + e_{ijt} \quad (1)$$

$$Y2_{ijt} = a + b1 * SC_{jt} + b2 * X1_{ijt} + b3 * X2_{jt} + b4 * R_j + e_{ijt} \quad (2)$$

$$Y3_{jt} = a + b1 * SC_{jt} + b2 * X2_{jt} + b3 * R_j + e_{jt} \quad (3)$$

where
$Y1_{ijt}$ = perception of empowerment and culture for individual i, firm j, year t
$Y2_{ijt}$ = intent to stay for individual i, firm j, year t
$Y3_{jt}$ = firm performance measure for firm j, year t
SC_{jt} = shared capitalism measure(s) for firm j, year t
$X1_{ijt}$ = employee-level controls for individual i, firm j, year t
$X2_{jt}$ = company-level controls for firm j, year t
R_j = firm-level random effect for firm j
e_{ijt} = error term for individual i, firm j, year t
e_{jt} = error term for firm j, year t.

The X1 controls include individual-level employee demographic information (gender dummy, full-time dummy, six dummies for race/ethnicity, five dummies for age category, seven dummies for occupation, six dummies for tenure category) and the X2 controls include company-level characteristics (defined benefit pension plan dummy, natural logarithm of total employment, unionized percent of workforce, whether publicly held, age of company, dummies for services and manufacturing, and natural logarithms of average hourly pay for largest hourly paid group and average salary for largest salaried group).

In the next stage of analysis we examine the potential moderating effects of empowerment and culture by using interactions with shared capitalism.

$$Y2_{ijt} = a + b1 * Y1_{ijt} + b2 * SC_{jt} + b3 * (Y1_{ijt} * SC_{jt}) + b4 * X_{jt} + b5 * R_j + e_{ijt} \quad (4)$$

$$Y3_{jt} = a + b1 * \bar{Y}1_{jt} + b2 * SC_{jt} + b3 * (\bar{Y}1_{jt} * SC_{jt}) + b4 * X_{jt} + b5 * R_j + e_{jt} \quad (5)$$

where
$\bar{Y}1_{jt}$ = mean of Y1 variable across individuals in firm j, year t.

The b3 coefficients will indicate whether empowerment and culture moderate the effects of shared capitalism.

The individual-level variables are based on 1–5 scales as shown in Table 3. We tested ordered probit models that allow for a natural ordering of the values without requiring that the estimated effects remain constant across values. The pattern of results from ordered probits was extremely similar to that obtained using the above specifications; here we present the standard regression coefficients since they are easier to interpret.

An important issue is unobserved firm-level variables, such as managerial quality or other HR policies. For research purposes, the panel data unfortunately provide little within-firm variation that allows one to automatically control for such variables using fixed-effect specifications. For example, among the 780 firms represented in this data set, only one changed ESOP status during this period. Only 47 of the firms had any change in the shared capitalism index, and some of this measured change undoubtedly reflects measurement error (e.g. from different people filling out the survey in different years) which represents a serious problem in fixed-effects estimates and biases coefficients toward zero. There is a further issue of timing: while the company and employee surveys were done in the same calendar year, it is not always evident which was done first, and whether any changes in shared capitalism policies would be expected to immediately cause changes in attitudes. Perhaps as a result of these issues, most of our fixed-effect estimates did not show the same significant pattern of results as the random-effects mixed model estimates. We will return to this issue of unobserved variables in discussing the findings.

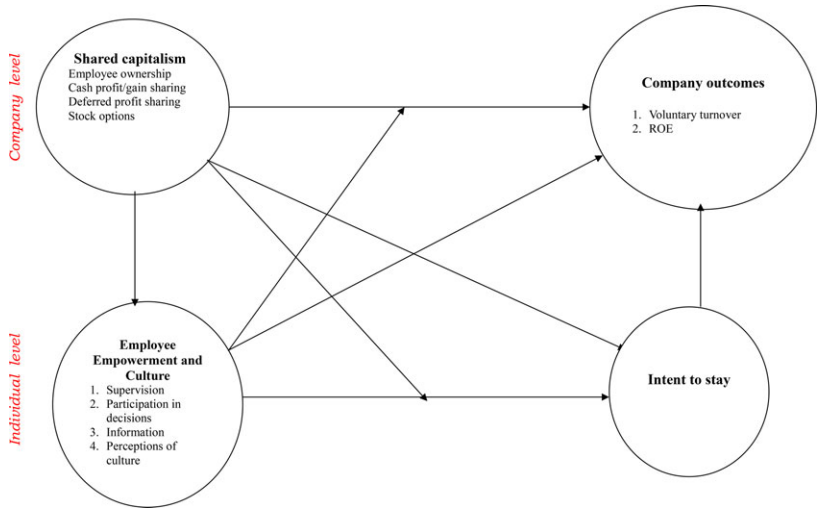
Our model for the avenues through which shared capitalism may affect worker and firm outcomes is presented in Figure 1.[12]

7. Effects on turnover

We next examine the links among intent to stay, voluntary turnover, the shared capitalist index of rewards, and the complementary work practices and workplace culture.

Panel A of Table 5 summarizes calculations of the effect of shared capitalist compensation and the empowerment measure of workplace practices and the Trust Index©, introduced separately and interactively with the shared capitalist index on the worker level turnover measure of intent to stay. The figures in line 1 show that the index of shared capitalist pay by itself is moderately related to turnover behaviour: it raises intent to stay. But its impact is dwarfed by either the employee empowerment measure of work place practices in line 2 or the Trust Index© measure in line 4. At the individual level these factors have an overwhelming impact on turnover. This is due in part to the 'common source' bias that individuals who are personally well-treated or have trust in the firm are more likely to stay with it whereas workers who feel the opposite at the same workplace are less likely to stay. What is critical to

FIGURE 1
Overall Model.



the complementarity story is that the shared capitalism interaction terms are also positive and very significant, meaning that the combination of shared capitalism with workplace practices/culture has a stronger impact than when these are used separately. This is consistent with prior results showing that shared capitalism interacts positively with high-performance work practices in decreasing turnover intentions (Kruse *et al.* 2010: 155).

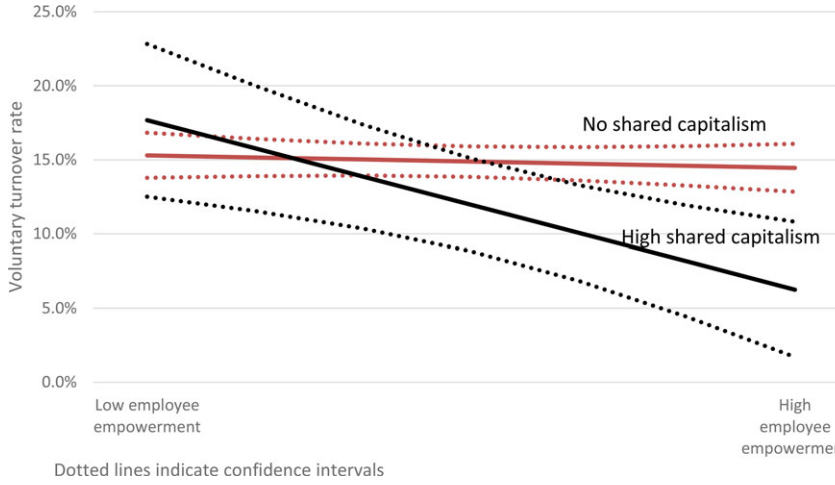
The more relevant level of analysis for assessing firm personnel practices is the level of the firm. Panel B of Table 5 summarizes calculations of the effect of shared capitalist compensation and the firm-level averages of the empowerment measure of workplace practices and the Trust Index© on the firm-level measure of voluntary turnover. At this level, the shared capitalist variable obtains a negative coefficient by itself that remains substantial with the addition of the empowerment measure in line 7 and the Trust Index© in line 9. The shared capitalism coefficient of –0.008 on line 6 is very consistent with an estimate from prior research using similar controls that workers with performance-related pay had a –0.007 lower probability of quitting (O'Halloran 2012, Table III, column 3), while another study using the same data finds that white men with profit sharing had a –0.027 lower probability of quitting (Azfar and Danninger 2001: 625). The shared capitalism coefficient is economically as well as statistically significant, indicating that a one-standard-deviation increase in the shared capitalism index is linked to 6 percent lower turnover, while an increase from the minimum to maximum value of shared capitalism is linked to 30 percent lower turnover.[13] The empowerment and Trust Index© variables have significant effects on turnover but they do not 'dominate' the calculations as they did in panel A. In the firm-level analysis the interaction terms show the powerful moderating impact of the empowerment

TABLE 5
Summary of Regressing Turnover Behaviour on Workplace Practices, Culture and Shared Capitalist Modes of Pay

	Shared Capitalism Index	*Employee empowerment index in lines 2 and 3; Trust Index in lines 4 and 5*	*Interaction*	*N*
	Panel A: Worker level 'intent to stay at company'			
1	0.013 (1.87)*			230,465
2	–0.001 (0.17)	0.741 (387.38)***		230,465
3	–0.026 (3.19)***	0.736 (299.47)***	0.007 (3.76)***	230,465
4	–0.003 (0.97)	1.118 (558.69)***		230,465
5	–0.043 (5.12)***	1.110 (432.17)***	0.010 (5.16)***	230,465
	Panel B: Employer level, voluntary turnover rate for firm			
	Shared Capitalism Index	*Employee empowerment index in lines 7 and 8; Trust Index in lines 9 and 10*	*Interaction*	*N*
6	–0.008 (2.22)**			1,011
7	–0.007 (1.95)*	–0.044 (2.68)**		1,011
8	0.137 (2.44)**	–0.016 (0.81)	–0.036 (2.57)***	1,011
9	–0.007 (1.94)*	–0.054 (2.83)**		1,011
10	0.153 (2.35)**	–0.023 (1.00)	–0.039 (2.46)**	1,011
	Panel C: Employer level, aggregated worker "intent to stay at firm"			
	Shared Capitalism Index	*Employee empowerment index in lines 12 and 13; Trust Index in lines 14 and 15*	*Interaction*	*N*
11	0.014 (1.98)**			1,011
12	–0.001 (0.19)	0.808 (40.94)***		1,011
13	–0.123 (1.81)*	0.784 (33.10)***	0.030 (1.80)**	1,011
14	–0.002 (0.63)	1.010 (42.10)***		1,011
15	–0.142 (2.13)*	0.983 (42.26)***	0.034(2.10)**	1,011

Note: In Panel A, all regressions are run using a random-effects maximum likelihood multilevel model, with random effects both at the company-year level and the company level. Company-level control variables include defined benefit pension, ln(total employment), ln(avg. hourly pay), ln(avg. salaried pay), company age, whether publicly held, manufacturing, services, and percent of employees who are unionized. Individual-level control variables include gender, race/ethnicity (seven dummies), age (five dummies), tenure (seven dummies), and occupation (seven dummies). In Panels B and C, all regressions use random effects with correction for autogression. Control variables include defined benefit pension, ln(total employment), ln(avg. hourly pay), ln(avg. salaried pay), company age, whether publicly-held, manufacturing, services, and percent of employees who are female, black, Hispanic, Asian, other race, age 26–34, age 35–44, age 45–54, age 55+, and unionized.
*$p < 0.10$ **$p < 0.05$ ***$p < 0.01$. The *t*-statistics in parentheses, based on robust standard errors.

FIGURE 2
Shared Capitalism, Empowerment and Voluntary Turnover.



measure and the Trust Index© on behaviour. The interactions are sufficiently strong as to flip the sign on the shared capitalism measure so that it is associated with high voluntary turnover at low levels of worker empowerment or trust, and low turnover at high levels of empowerment or trust.

These results are illustrated in Figure 2, which is based on regression 8 in Table 5.[14] 'Low' empowerment is here defined as the empowerment score for the firm at the 10th percentile, while 'high' empowerment is the score at the 90th percentile. In a firm without any shared capitalism, voluntary turnover is predicted to drop slightly from 15.3 percent to 14.5 percent as a firm moves from low to high empowerment. In a firm with high shared capitalism (the maximum observed score of 5 on the index), voluntary turnover is predicted to drop from 17.7 percent to 6.3 percent as a firm moves from low to high empowerment. Our interpretation is that employees may react badly to shared capitalism when they are closely supervised and not given the tools to improve performance ('we want you to be inspired by the shared rewards, but we're still going to keep a close eye on you'); in this case the shared capitalism may be seen primarily as shifting financial risk onto employees. Kruse *et al.* (2010) found similar results for the interaction of supervision and high-performance practices.

Finally, we present panel C that uses the employee-reported intent to stay aggregated to the firm level. The results match the pattern in panels A and B, indicating that shared capitalist pay interacts with the empowerment and trust measures to decrease turnover whether turnover is measured at the employee or firm level, or with a forward-looking or backward-looking measure.

As discussed above with regard to Table 3, the results from these random-effects specifications may primarily reflect between-firm rather than within-firm variation, raising the possibility that unobserved firm-level variables are responsible for the results. In contrast to the results presented in Table 3,

TABLE 6
Summary of Regressing Adjusted Return on Equity on Workplace Practices and Culture, and Shared Capitalist Modes of Pay

	Shared Capitalism Index	*Employee empowerment index in lines 4 and 5; Trust Index in lines 8 and 9*	*Interaction*	*Wald chi-sq*
1	0.019 (2.31)**			26.1
2	0.018 (2.27)**	0.112 (2.73)***		34.5
3	–0.146 (1.15)	0.067 (1.25)	0.041(1.30)	36.2
4	0.017 (2.17)**	0.161 (3.42)***		39.1
5	–0.214 (1.49)	0.101 (1.68)*	0.056 (1.61)	41.7

Note: Coefficients and *T*-Statistics from random-effects maximum likelihood multilevel model estimates. Each row represents results from one regression. All regressions use random effects with correction for autoregression. Control variables include defined benefit pension, ln(total employment), ln(avg. hourly pay), ln(avg. salaried pay), company age, whether publicly-held, manufacturing, services, and percent of employees who are female, black, Hispanic, Asian, other race, age 26–34, age 35–44, age 45–54, age 55+, and unionized.
$^{*}p < 0.10$ $^{**}p < 0.05$ $^{***}p < 0.01$. The *t*-statistics in parentheses, based on robust standard errors.

the pattern and significance of the results in Panel A of Table 4 are strongly maintained when using fixed-effects specifications, indicating that there is an important interaction between shared capitalism and firm policies in affecting intent to stay. The pattern of results in Panels B and C persists when using fixed-effects specifications, but the statistical significance disappears, indicating either that unobserved firm-level variables are responsible or that within-firm variation is dominated by measurement error.

7. Effects on company financial performance

Table 6 examines the effect of shared capitalist compensation and the empowerment measure of workplace practices and the Trust Index©, introduced separately and interactively with the shared capitalist index, on the adjusted return on equity measure that reflects the value to shareholders of these modes of operation. Edmans (2011) found that the firms on the 100 Best list had returns on the order of 2 percentage points higher than comparable firms, while Faleye and Trajan (2011) found that 'companies selected for the list subsequently outperform comparable firms in terms of long-run stock returns'.[15] The calculation in line 1 shows that in a sample that includes not only the firms that made the list but those that did not make the list, shared capitalist forms of pay produced significantly higher ROE as well.[16] The relationship is economically as well as statistically significant, with a one-standard deviation increase in the shared capitalism index linked to a 12 percent increase in ROE.[17] Addition of the employee empowerment index in line 2 and of the Trust Index© in line 4 show that those measures of workplace practices and culture are also associated with higher returns, while barely impacting the estimated coefficient on shared capitalist compensation index. These indices are also economically significant; for example, a

one-standard-deviation increase in the Trust Index© predicts a 69 percent increase in ROE. But again, the key finding is that it is the interactive effects of the variables that matter. At low levels of employee empowerment, shared capitalist modes of pay reduce ROE whereas at high levels of empowerment, shared capitalist modes of pay raise ROE. Similarly, at low levels of trust shared capitalist modes of pay reduce ROE whereas at high levels of trust, they raise it. We find similar results when empowerment and trust are broken into four dummy variables, allowing non-linearities (results available on request). Shared capitalism affects ROE most strongly among firms with values in the top quarter of the Trust Index©. As reflected in some of the above results, the statistical significance disappears when we use fixed-effects specifications, indicating the role of unobserved firm-level variables or measurement error that plays a strong role when examining within-firm variation.

8. Conclusion

Our analysis of the GPW data set finds that shared capitalist forms of pay are associated with high-trust supervision, participation in decisions, and information sharing, and with a variety of positive perceptions of company culture. At the firm level, shared capitalist forms of pay are associated with lower voluntary turnover and higher ROE. But it is the interaction between the mode of compensation and work practices and workplace culture that dominates the impact of shared capitalist pay on turnover and ROE. These results confirm the overall findings from prior studies (including the results indicating that firm and worker self-selection does not play a substantial role) and point to the value of further research on how shared rewards interact with other workplace policies, particularly policies that give workers the means to make a difference in the workplace and help engender a climate of cooperation, as offering the best explanation for the dispersion of results around positive average effects in the literature.

As is true of all results in this field, there are caveats for the findings. The random-effects estimates mainly reflect comparisons between rather than within firms, raising the possibility that there are unobserved firm characteristics (e.g. managerial quality) that help account for the findings. We do find that the interaction effect of shared capitalism with employee empowerment and the Trust Index© on intent to stay is maintained, but our other results are no longer statistically significant, when using fixed effects; this indicates either the role of either unobserved firm-level variables and/or measurement error that plays a large role when examining within-firm variation. The lack of substantial within-firm variation may indicate that these firms aspiring to be 'best firms' have found optimal combinations of policies and no longer feel the need to do extensive experimentation. An additional caveat is that our shared capitalism index has been used before (Kruse *et al.* 2010), but it has not been extensively tested and validated, which is why we also present results breaking down the different forms of shared capitalism.

In further research it would be valuable to test other comprehensive measures of shared capitalism.

These findings have implications both for policy and research. For managers, these results indicate that group incentives are likely to have positive effects if implemented in the appropriate way – with supportive HR policies rather than on their own. For policymakers, these results indicate that public policy supporting group incentives, which may be motivated by a concern to increase middle class incomes and share the rewards of economic performance more broadly, is unlikely to harm and may even improve economic performance (Freeman *et al.* 2011; Blasi *et al.* 2014). For researchers, the results point to the value of further research on the causes and consequences of group incentives. It would be valuable to probe these findings with innovative strategies that provide stronger controls for worker quality and firm heterogeneity, shedding light on the causal role of group incentives on employee turnover and firm performance.

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Notes

1. For reviews of the employee ownership literature, see Blasi (1988), Doucouliagos (1995), Kruse and Blasi (1997), Kaarsemaker (2006), Freeman (2007), Oxera (2007) and Kruse *et al.* (2010). For a review of the broad-based stock option literature, see Blasi *et al.* (2003). For reviews of the profit sharing and gain-sharing literatures, see Weitzman and Kruse (1990), Bullock and Tubbs (1990), Kruse (1993), OECD (1995), Doucialiagos (1995) and Welbourne and Mejia (1995).
2. One field study implemented random assignment of profit sharing at 3 of 21 establishments within a firm, finding that the performance of those establishments improved relative to the control group (Peterson and Luthans, 2006). A laboratory experiment among subjects organized into employee-owned 'firms' found higher productivity (Frohlich *et al.* 1998). A study using an employee survey before and after the introduction of a profit sharing plan found an increase of anti-shirking behaviours (Freeman *et al.* 2010: 31). Two studies find that average worker quality base on observables did not change as compensation changed from individual

to group incentives, while average worker performance improved (Weiss 1987; Hansen 1997).

3. See Doucialiagos (1995), Kruse and Blasi (1997) and Weitzman and Kruse (1990).
4. An analysis of two nationally representative surveys and over 41,000 employee surveys in shared capitalism companies found that these plans have the most positive effects on performance-related attitudes and behaviours when they are combined with high-trust supervision (trusting employees to work well without close supervision), base wages at or above market, and high-performance policies (job security, training, and employee involvement in decisions) (Kruse *et al.*, 2010). Without these policies these plans can have no or negative effects, indicating that the dispersion in results across the 100+ studies we have reviewed may be explained in part by the types of policies that do or do not accompany shared capitalism. Other recent studies finding evidence of complementarities between shared capitalism and workplace policies include Jones *et al.* (2010) and Pendleton and Robinson (2010).
5. Laboratory experiments show that cooperation occurs more often than predicted by models of self-interest, and is more likely when participants form a group identity by talking with each other before making their choices (Dawes and Thaler 1988; Kahneman *et al.* 1991). Empathy with co-workers through communication can help develop and enforce norms that support higher performance (Kandel and Lazear 1992; Lazear 1992).
6. Using only those corporations designated as the Best Companies, the Edmans study constructs both a value-weighted and an equal-weighted portfolio from 1984 to 2009, both of which have better long-run stock returns above the risk-free rate with the findings robust to controls for industries and outliers. The study hypothesizes that 'employee satisfaction', as determined by a firm's appearance on the Best Company list, plays a key role in this linkage, noting that two-thirds of the ranking for the list is based on the random employee surveys of employees. The Faleye and Trahan study also examines only the companies designated Best Companies from 1998 to 2005 and finds a statistically significant average abnormal stock price reaction to the announcement of the Fortune list. In addition, the Best Companies outperform comparable firms on measures on employee productivity, firm-level total productivity, profitability and firm value with highly robust results. The study hypothesizes that 'labour-friendly' policies play a key role in this linkage.
7. Based on ESOP data from http://www.dol.gov/ebsa/pdf/2007pensionplanbulletin.pdf, page 56, and firm size data from the 2007 Survey of Business Owners at American FactFinder.
8. Based on analysis by authors of CompuStat data matched to Form 5500 data.
9. See, for example, Dube and Freeman (2010); Conyon and Freeman (2004).
10. The five dimensions are labelled camaraderie (10 items, alpha = .94), credibility (13 items, alpha = 0.96), fairness (12 items, alpha = 0.93), pride (8 items, alpha = 0.93) and respect (13 items, alpha = 0.94). The Trust Index© that averages these five dimensions has an alpha of .970. We exclude the "intent to stay" item since we examine the relationship between the Trust Index© and intent to stay in Table 7.
11. This is higher than Edmans' (2011) estimate of an excess return of 2.1% annually over the 1984–2009 period for a portfolio made up of Best Company winners relative to a portfolio of same-industry firms.
12. The model in Figure 1 allows for the effects of shared capitalism on worker and firm outcomes to be both mediated and moderated by employee empowerment and culture. We have also tested mediation (results available on request), and the

results point toward a richer story of moderation in analysing the effects of shared capitalism.

13. This is calculated by multiplying the −0.008 coefficient by the 1.05 standard deviation from Table 2, and dividing by the mean turnover of 0.14 from Table 3.
14. A very similar figure is created when empowerment is replaced with the Trust Index© (not shown but available).
15. See Edmans (2011: 628) and Faleye and Trahan (2010: 33).
16. Prior research found US employee ownership was not significantly linked to ROE in 1990, but was linked to higher ROE growth from 1980 to 1990 (Blasi *et al.* 1996), while employee ownership in France was linked to higher ROE in 2000 (Trebucq 2004). Those studies were not able to measure complementarities with company practices and culture as we do here.
17. Calculated by multiplying the 0.019 coefficient by the 1.05 standard deviation from Table 2, and dividing by the 0.167 ROE mean from Table 3.

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Appendix

TABLE A1
Predicting Workplace Practices, Culture and Intent to Stay under Shared Capitalism

	Workplace practices			*Culture*	
Dependent variable	*High-trust supervision* (1)	*Part. in decisions* (2)	*Info sharing* (3)	*Team* (4)	*Cooperation* (5)
Shared capitalism index	0.020 (3.17)***	0.020 (2.45)**	0.016 (2.21)**	0.015 (2.15)**	0.013 (2.24)**
n	230465	230465	230465	230465	230465
Wald chi-sq. (38)	3629.7	6971.6	6128.3	6329	4846.8
Elements of index					
Stock options 1–25%	−0.004 (0.24)	−0.015 (0.67)	−0.024 (1.10)	−0.024 (1.17)	−0.004 (0.26)
Stock options 25–49%	0.031 (1.10)	0.036 (1.00)	0.015 (0.43)	0.014 (0.42)	0.027 (1.01)
Stock options 50%+	0.042 (0.64)	0.011 (0.29)	−0.024 (0.69)	−0.018 (0.53)	0.013 (0.48)
ESOP 1–49% of co.	0.076 (3.35)***	0.067 (2.33)**	0.072 (1.71)*	0.068 (2.63)***	0.040 (1.90)*
ESOP 50%+ of co.	0.145 (2.62)***	0.125 (1.78)*	0.108 (1.65)	0.142 (2.23)**	0.108 (2.11)**
Def. PS <4% of pay	0.052 (2.12)**	0.031 (1.02)	0.041 (1.46)	0.035 (1.27)	0.037 (1.63)
Def. PS 4%+ of pay	0.085 (3.64)***	0.086 (2.91)***	0.063 (2.31)**	0.050 (1.90)*	0.064 (2.99)***
Cash PS/GS <5% of pay	−0.006 (0.32)	−0.002 (0.07)	−0.004 (0.17)	−0.002 (0.09)	−0.011 (0.59)
Cash PS/GS 5%+ of pay	−0.015 (0.70)	−0.014 (0.52)	0.007 (0.27)	0.007 (0.29)	−0.016 (0.77)
n	230465	230465	230465	230465	230465
Wald chi-sq. (45)	3654.4	6984.4	6140.9	6341.6	4861.9
Continuous variables					
Any stock options	−0.005 (0.25)	−0.019 (0.80)	−0.025 (1.15)	−0.027 (1.29)	−0.007 (0.42)
% of ees. given options	0.000 (0.89)	0.001 (1.36)	0.000 (0.63)	0.000 (0.99)	0.000 (1.37)
ESOP	0.067 (2.73)***	0.061 (1.97)**	0.066 (2.29)**	0.060 (2.15)**	0.034 (1.50)
% of co. owned by ESOP	0.001 (1.61)	0.001 (1.04)	0.001 (0.86)	0.001 (1.36)	0.001 (1.50)
Deferred PS plan	0.050 (2.19)**	0.039 (1.34)	0.033 (1.26)	0.025 (0.94)	0.027 (1.29)
Def. PS as % of pay	0.276 (1.45)	0.331 (1.36)	0.300 (1.34)	0.290 (1.32)	0.375 (2.13)**
Cash PS/GS plan	−0.004 (0.23)	−0.008 (0.38)	−0.003 (0.16)	0.003 (0.16)	−0.012 (0.78)
Cash PS/GS as % of pay	−0.001	0.000 (0.08)	0.000 (0.38)	0.000 (0.26)	0.000 (0.15)
n	230465	230465	230465	230465	230465
Wald chi-sq. (46)	3656.5	6983.6	6141.8	6343.4	4866.9

Dependent variable	Culture				Intent to stay
	Give extra (6)	Fair share (7)	Trust Index© (8)	Great place (9)	(10)
Shared capitalism index	0.020 (3.28)***	0.017 (2.83)***	0.014 (2.40) **	0.023 (3.18)***	0.013 (1.87)*
n	230465	230465	230465	230465	230465
Wald chi-sq. (38)	6830.2	12075	9298.7	4643.7	7643
Elements of index					
Stock options 25–49%	0.047 (1.77)*	0.070 (1.39)	0.032 (1.25)	0.051 (1.61)	0.044 (1.40)
Stock options 50%+	0.071 (2.59)***	0.078 (1.49)	0.008 (0.30)	0.003 (0.09)	-0.015 (0.45)
ESOP 1–49% of co.	0.042 (1.93)*	0.161 (3.85)***	0.055 (2.58)***	0.071 (2.67)***	0.062 (2.41)**
ESOP 50%+ of co.	0.089 (1.70)*	0.296 (2.93)***	0.115 (2.24)**	0.162 (2.55)**	0.181 (2.92)***
Def. PS <4% of pay	0.043 (1.86)*	0.089 (1.99)**	0.033 (1.44)	0.023 (0.81)	0.013 (0.48)
Def. PS 4%+ of pay	0.074 (3.31)***	0.222 (5.17)***	0.063 (2.89)***	0.085 (3.12)***	0.059 (2.26)**
Cash PS/GS <5% of pay	−0.021 (1.16)	0.009 (0.27)	−0.017 (0.95)	−0.022 (0.98)	−0.024 (1.12)
Cash PS/GS 5%+ of pay	−0.016 (0.77)	0.099 (2.48)**	−0.007 (0.34)	0.028 (1.10)	0.006 (0.23)
n	230465	230465	230465	230465	230465
Wald chi-sq. (45)	6851.8	8713.3	9315.9	4661.3	7662.7
Continuous variables					
Any stock options	−0.008 (0.48)	0.015 (0.45)	−0.007 (0.40)	−0.006 (0.30)	0.005 (0.22)
% of ees. given options	0.001 (3.60)***	0.001 (1.66)	0.000 (1.18)	0.000 (1.00)	0.000 (0.05)
ESOP	0.038 (1.64)	0.136 (3.04)***	0.049 (2.12)**	0.059 (2.08)**	0.048 (1.73)*
% of co. owned by ESOP	0.001 (1.12)	0.002 (1.94)*	0.001 (1.36)	0.001 (1.65)	0.001 (2.11)**
Deferred PS plan	0.033 (1.45)	0.111 (2.60)***	0.033 (1.52)	0.023 (0.84)	0.022 (0.84)
Def. PS as % of pay	0.434 (2.39)**	0.766 (2.16)**	0.247 (1.37)	0.504 (2.27)**	0.237 (1.10)
Cash PS/GS plan	−0.024 (1.52)	0.031 (1.03)	−0.013 (0.81)	−0.002 (0.09)	−0.010 (0.51)
Cash PS/GS as % of pay	0.000 (0.60)	0.002 (1.21)	0.000 (0.20)	0.000 (0.12)	0.000 (0.38)
n	230465	230465	230465	230465	230465
Wald chi-sq. (46)	6861.8	8712	9315.8	4657.4	7658.5

Notes: Each column has three regressions: (1) with the shared capitalism index, (2) breaking out the elements of the shared capitalism index, and (3) using the continuous variables underlying the shared capitalism index. All regressions are run using a random-effects maximum likelihood multilevel model, with random effects both at the company-year level and the company level. Company-level control variables include defined benefit pension, ln(total employment), ln (avg. hourly pay), ln (avg. salaried pay), company age, whether publicly-held, manufacturing, services, percent of employees who are unionized, and (just for Panel B) a dummy indicating stock options for 1–25% of employees. Individual- level control variables include gender, race/ethnicity (7 dummies), age (5 dummies), tenure (7 dummies), and occupation (7 dummies). Regressions were run using Stata's xtmixed command.
$^{*}p < 0.10$ $^{**}p < 0.05$ $^{***}p < 0.01$. The *t*-statistics in parentheses, based on robust standard errors.

TABLE A2
Predicting Firm-level Outcomes with Shared Capitalism

Dependent variable	*Voluntary turnover, full-time workers (1)*	*Return on equity (2)*
Shared capitalism index	−0.008 (0.004)**	0.0185 (2.310)*
R-squared	0.34	0.107
N	1011	399
Elements of index		
Stock options 1–25%	0.004 (0.38)	−0.007 (0.31)
Stock options 25–49%	−0.025 (1.41)	0.001
Stock options 50%+	−0.012 (0.69)	−0.013 (0.39)
ESOP 1–49% of co.	−0.015 (1.26)	0.036 (1.48)
ESOP 50%+ of co.	0.036 (1.07)	na
Def. PS <4% of pay	0.029 (2.23)**	0.003 (0.09)
Def. PS 4%+ of pay	−0.018 (1.42)	0.074 (2.18)
Cash PS/GS <5% of pay	−0.013 (1.17)	0.052 (1.48)
Cash PS/GS 5%+ of pay	−0.023 (1.84)*	0.049 (1.65)
R-squared	0.353	0.09
n	1011	399
Continuous variables		
Any stock options	0.003 (0.29)	−0.009 (0.38)
% of ees. given options	0.000 (1.12)	0.000 (0.65)
ESOP	−0.020 (1.47)	0.035 (1.25)
% of co. owned by ESOP	0.001 (1.41)	0.000 (0.02)
Deferred PS plan	0.019 (1.56)	0.005 (0.15)
Def. PS as % of pay	−0.225 (2.06)**	0.669 (1.10)
Cash PS/GS plan	−0.015 (1.50)	0.056 (1.64)
Cash PS/GS as % of pay	0.000 (0.41)	−0.001 (0.30)
R-squared	0.343	0.093
n	1011	399

*$p < 0.10$ **$p < 0.05$ ***$p < 0.01$. *T*-statistics in parentheses, based on robust standard errors. All regressions use random effects with correction for autogression. Control variables include defined benefit pension, ln(total employment), ln(avg. hourly pay), ln(avg. salaried pay), company age, whether publicly held, manufacturing, services and percent of employees who are female, black, Hispanic, Asian, other race, age 26–34, age 35–44, age 45–54, age 55+, unionized and (just for Panel B) a dummy indicating stock options for 1–25% of employees.

Employee Ownership & Economic Well-Being

Household Wealth, Job Stability, and Employment Quality among Employee-Owners Age 28 to 34

MAY 15, 2017



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The W.K. Kellogg Foundation (WKKF), founded in 1930 as an independent, private foundation by breakfast cereal pioneer, Will Keith Kellogg, is among the largest philanthropic foundations in the United States. Guided by the belief that all children should have an equal opportunity to thrive, WKKF works with communities to create conditions for vulnerable children so they can realize their full potential in school, work and life.

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The National Center for Employee Ownership (NCEO) is the owner of this book. The NCEO is a nonprofit organization established in 1981 and based in Oakland, California. Its mission is to provide practical resources and objective, reliable information about employee ownership to businesses, employees, and the public. See the inside back cover for more about the NCEO.

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Employee Ownership

—employees owning stock in the companies where they work—is a major aspect of the U.S. economy. But until now, little research has explored its impact on individual workers.

This report presents some of the first in-depth analysis of the relationship between employee ownership and workers' economic well-being. The findings of this research, based on analysis of survey data of younger workers from the Bureau of Labor Statistics, are remarkable.

Among the sampled workers, all ages 28 to 34, workers who are employee-owners have

- 92% higher median household wealth
- 33% higher income from wages
- 53% longer median job tenure

relative to workers who are not employee-owners.

The striking relationships between employee ownership and improved economic outcomes for workers persist over time and when controlling for demographic factors.

Summary

Observers from the political left and right agree that the U.S. economy no longer provides the upward mobility for which it was once known. Both sides also agree that the causes of these difficulties are complex and interrelated, but they disagree about policy approaches. Some focus on wealth inequality, which is large and increasing—recent data shows the top 10% of families holding 76% of total wealth.[1] Others point to the role of the government in regulation and corporate taxes, while still others focus on deep economic trends, such as globalization, the disconnection between productivity and wage growth, and shifts in production and information technology.

One policy solution that appeals to the core values of liberals, moderates, and conservatives is encouraging employee ownership.[2] Employee ownership is a market-friendly, anti-inequality policy that improves outcomes for companies and provides workers with higher wages, more generous benefits, and greater job stability.

Though often overlooked, employee ownership is a highly scalable tool that has immense untapped potential.



The primary form of employee ownership in the United States is the employee stock ownership plan, or ESOP. Congress designed ESOPs in the 1970s to encourage owners of private companies to transfer ownership to employees at no cost to the employees themselves; instead, the owners are paid the full value of their shares by the ESOP, which borrows the money if necessary and repays the loan from company earnings.

Today, at 6,500 American companies, 10.5 million workers partially or wholly own their employers through this mechanism. Quantitative and qualitative research at the company level has shown that ESOP companies tend to grow faster and provide greater job stability than similar non-ESOP companies,[3] making ESOPs an effective tool to create and save jobs in vulnerable communities. Because workers at ESOP companies share in the success of their companies, ESOPs should directly address the crises of mobility, wealth inequality, and stagnating wages.

Until now, however, there was little data that allowed for directly testing this hypothesis. This report describes the first quantitative and robust evidence of the association between employee ownership and positive outcomes at the level of individual workers. The underlying data source is large and credible. It is designed with a sample that allows for examining young workers, along with smaller groups such as workers of color, families with young children, and people with low income.



The results, covered in more depth in the research report starting on page 7, span a range of measures and demographic groups:

- Median household net wealth among respondents is 92% higher for employee-owners than for non-employee-owners. This disparity holds true for the great majority of subgroups analyzed, including single women, parents raising young children, non-college graduates, and workers of color.

- Employee-owners in this dataset have 33% higher median income from wages overall. This holds true at all wage levels, ranging from a difference of $3,160 in annual wages for the lowest-paid employee-owners to an extra $5,000 for higher-wage workers.

- Employee-owners are much more likely to have access to an array of benefits at work, including flexible work schedules, retirement plans, parental leave, and tuition reimbursement. For example, 23% of employee-owners have access to childcare benefits, compared to 5% of non-employee-owners.

- Employee-owners in this dataset have substantially more job stability than non-employee-owners: their median tenure with their current employer is 5.2 years, compared to 3.4 years for the non-employee-owners.

- In 2013, the median employee-owner had household income equal to 378% of the poverty line, compared with 293% of the poverty line for non-employee-owners. Most of this difference emerged over a period of years—the two groups had nearly the same median income-to-poverty ratios in 1997.

- For families with children ages 0 to 8 in their household, the employee-ownership advantage translates into median household net worth nearly twice that of those without employee ownership, nearly one full year of increased job stability, and $10,000 more in annual wages.

- Employee-owners of color in this data have 30% higher income from wages, 79% greater net household wealth, and median tenure in their current job 36% over non-employee-owners of color.



These relationships persist across demographic groups and over time, and in statistical models that control for other demographic factors. Over-time analysis demonstrates that the two groups start out at the same modest level of wealth. Multivariate regression analysis shows that employee ownership is significantly related to higher wages after controlling for other strong predictors, including education, race, gender, and marital status. Employee ownership is strongly predictive of longer job tenure controlling for these factors and wages. Longer job tenure is in turn strongly predictive of household wealth.[4]

The research report, which follows, describes the data source, methods, and results in detail, showing specific results for many different groups of young workers in tables, figures, and text.

REFERENCES

[1] See, for example, *Trends in Family Wealth, 1989 to 2013* (Congressional Budget Office, August 2016), https://www.cbo.gov/publication/51846

[2] A 2016 paper by Jared Bernstein, former chief economist for former Vice President Joseph Biden, finds strong reason to believe that more ESOPs could translate into less inequality both in wealth and wages. See Jared Bernstein, "Employee Ownership, ESOPs, Wealth, and Wages" January 2016 (http://esca.us/wp-content/uploads/2016/01/ESOP-Study-Final.pdf). From the other side of the spectrum, Alex Brill, a research fellow at the American Enterprise Institute, concludes that increased rates of owners selling to ESOPs would benefit the economy. See Alex Brill, "Employee Stock Ownership Plans as an Exit Strategy for Private Business Owners," March 2017 (http://esca.us/wp-content/uploads/2017/03/ESCA_ExitStrategy_Final.pdf).

[3] For policy-oriented research, see *Economic Growth Through Employee Ownership,* the National Center for Employee Ownership and Employee-Owned S Corporations of America, September 1, 2016 (www.nceo.org/assets/pdf/Economic_Growth_Through_EO.pdf). For recent academic work, see Kurtulus, Fidan Ana and Douglas L. Kruse, 2017, *How Did Employee Ownership Firms Weather the Last Two Recessions?: Employee Ownership, Employment Stability, and Firm Survival in the United States: 1999-2011,* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. http://dx.doi.org/10.17848/9780880995276. For an overview, see NCEO, *Research on Employee Ownership, Corporate Performance, and Employee Compensation*, https://www.nceo.org/articles/research-employee-ownership-corporate-performance.

[4] Regression analysis SPSS output is in the appendix. Details on the analysis will be in a forthcoming publication and are available from the NCEO.

RESEARCH REPORT: Employee Ownership & Economic Well-Being

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Research Report Contents

TABLES AND FIGURES

Data and Methods

The National Longitudinal Surveys (NLS), sponsored by the U.S. Bureau of Labor Statistics, are nationally representative surveys that follow the same sample of individuals from specific birth cohorts over time. The content of the survey covers nearly every aspect of the labor market experience of workers, including wages, income, wealth, and benefits. The data are described in more detail in the appendix.[1]

This report uses data from a sample of 5,504 women and men, including an oversample of African Americans and Latinos, first interviewed in 1997. All the respondents were ages 28 to 34 when interviewed most recently in 2013. See Table 15 in the appendix for details about the characteristics of the sample.

The analysis examines the characteristics of workers with employee ownership at their workplace (employee-owners) compared to workers without such benefits (non-employee-owners). Most of the analysis focuses on currently employed people. The main method is to compare outcomes across comparable groups. For example, Table 6 shows that the median household net wealth of single women who are employee-owners is $9,089, while the median household net wealth of single women who are not employee-owners is $6,000.

Definition of "Employee-Owners"

In this report, employee-owners are defined by their response to one question in a battery of items about the benefits made available by their employers. Employee-owners are those who said that "Employee Stock Ownership Plan(s)" is a benefit available to them. Non-employee-owners did not select that benefit as available to them. The full question is included in Table 16 in the appendix.

Because this is self-reported data, it is possible that some non-ESOP participants misinterpreted the question.[2] The number of non-ESOP participants identified in this study as employee-owners is likely to be small, both because the question wording asks specifically about "employee stock ownership plans" and because the other types of plans are not retirement plans, and the question is part of a question battery that includes "retirement benefits" as a separate category.

In sum, the definition of employee-owner is unlikely to be perfect, but it is also unlikely to be vulnerable to substantial error.

Limitations of the Data

The data provide detailed insight into the association of employee ownership with measures of quality of life, but the data do have some limitations of which readers should be aware.

First, as with any data collected outside of a controlled experiment, these results are not proof of a causal relationship. These two groups were not randomly assigned. Still, we employ many methods for testing whether associations are robust and not simply coincidental. This includes the very powerful panel nature of the survey, which allows for tracking the same respondent from year to year.

Second, the data at this point do not represent the entire work force. Instead they focus on young people. Since ESOPs are retirement plans, their impact is expected to be largest among those approaching retirement. This analysis may underestimate the impact of employee ownership on the entire age-range of the work force.

Third, as with any survey data, the data is self-reported. Although there is no reason to expect that people would misrepresent their status as an employee-owner, it is possible. It is also possible that they misrepresent their actual conditions on questions about income, wealth, benefits, and other issues.

An alternate hypothesis that would also explain the apparent employee-ownership advantage is that employee-ownership does not actually create the beneficial outcomes, but instead, employee-owned companies have an advantage in hiring people who are more likely to succeed for unrelated reasons, such as the region of the country or the individual's education,

[1] Thank you to Charles R. Pierret, Senior Research Economist at the Bureau of Labor Statistics, and Rosella Gardecki at the Center for Human Resource Research at the Ohio State University for their help and guidance with these data.

[2] Some of these respondents may actually participate in a plan that is not an ESOP, such as a similar sounding employee stock purchase plan (ESPP) or some kind of equity grant, such as a stock option grant or a grant of restricted stock. It is reasonable to categorize these respondents as employee-owners because these plans are likely to be broad-based rather than just available to a company managers or executives. It is also possible that some respondents actually participate in a 401(k) plan, since 401(k) plans may allow for purchasing employer stock.

parental status, or marital status. The two tables at right indicate this is unlikely to be the case, because employee-owners and non-employee-owners are very similar on the characteristics the NLS measures.

Those with employee ownership are nearly identical in broad regional terms compared to the group without such benefit. The factor in these two tables most likely to explain some of the difference in outcome is that employee-owners are more likely to live in urban settings, possibly giving them an employability advantage.

There are substantial differences in the rate of employee ownership from industry to industry as shown in Table 3. This sample of workers ages 28 to 34 tends to work in education, health, and social services (predominantly within elementary and secondary schools). This is not the case for the employee ownership group of workers, who are more likely to be working in retail trade.

This difference in distribution across industries does not entirely explain the employee ownership advantage, however. Tables 5 and 7 include a breakdown of income and household wealth by industry, showing that the employee-owners fare better economically in nearly all industries.

TABLE 1

DEMOGRAPHIC PROFILE	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
% college graduate	33%	31%
% parent(s) college graduate	32%	31%
% married	46%	42%
% with any biological children	58%	61%
% with 0-8 child in household	56%	49%
Median household size	3	3
Median age	31	31

TABLE 2

REGION	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
Northeast	14%	16%
North Central	22%	21%
South	41%	40%
West	23%	22%
Rural	13%	16%
Urban	87%	83%

TABLE 3

INDUSTRY OF EMPLOYERS	ALL	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
Educational, health, and social services	24%	9%	27%
Professional and related services	11%	10%	11%
Retail trade	10%	18%	8%
Entertainment, accommodations, and food services	9%	5%	10%
Manufacturing	7%	12%	6%
Finance insurance and real estate	6%	13%	5%
Construction	5%	2%	6%
Public administration	5%	2%	5%
Transportation and warehousing	4%	6%	3%
Other services, e.g., car repair and nail salons	4%	1%	4%
Wholesale trade	2%	3%	2%
Information and communication	2%	5%	2%
Agriculture forestry and fisheries	1%	0%	1%
Mining	1%	1%	1%
Utilities	1%	2%	1%
Missing/uncodable	9%	13%	9%

Wages

Across the board, having employee ownership at work is associated with higher wages. The median employee-owner in this sample has income of $40,000, compared with $30,000 for the median non-employee-owner. Controlling for gender, race, and education, employee ownership is associated with higher income from wages (see appendix for multivariate regression models).

TABLE 4

MEDIAN WAGES FROM INCOME	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
Overall	$40,000	$30,000
Single women	$31,000	$25,000
Single women of color	$28,000	$24,000
Workers of color	$35,000	$27,000
Child 0-8 in household	$40,000	$30,000
Families of color with young child	$35,000	$26,000
All parents	$39,000	$30,000
All single parents	$33,000	$23,000
Single mothers	$28,000	$21,000
Non-college graduates	$35,000	$25,000
Under 50k income from wages	$30,000	$25,000
Under 30k income from wages	$22,000	$18,000
Under 25k income from wages	$17,160	$14,000

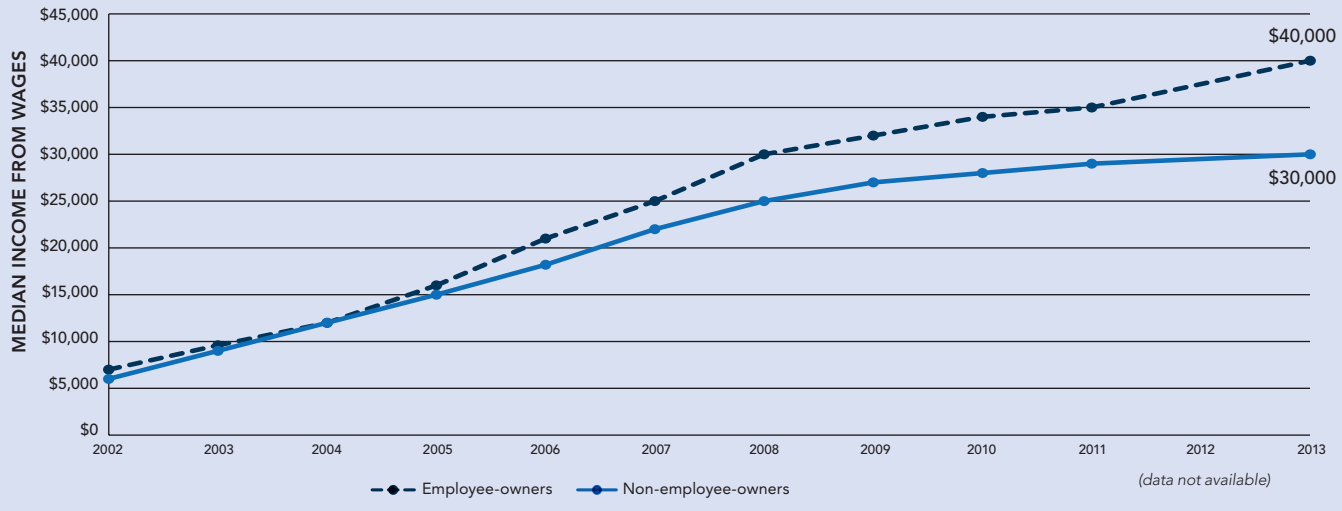
Notably, the two groups of workers start out at the same modest wages. In other words, the differences between employee-owners and non-employee-owners are not entirely the result of employee-owned companies hiring workers who can demand a higher wage. Instead, the difference emerges as workers continue to work for employee-owned companies.

TABLE 5

MEDIAN WAGES BY INDUSTRY	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
Agriculture, forestry, and fisheries	--	$36,000
Mining	--	$65,000
Utilities	$43,000	$40,500
Construction	$37,500	$35,000
Manufacturing	$48,000	$32,000
Wholesale trade	$47,000	$30,000
Retail trade	$28,000	$23,000
Transportation and warehousing	$40,000	$33,000
Information and communication	$39,500	$40,000
Finance, insurance, and real estate	$43,500	$38,000
Professional and related services	$50,000	$32,000
Educational, health, and social services	$40,000	$32,000
Entertainment, accommodations, and food services	$34,000	$20,000
Other services, e.g., car repair and nail salons	--	$27,000
Public administration	$46,000	$44,000
Missing/uncodable	$43,500	$32,000

FIGURE 1

EMPLOYEE OWNERSHIP AND WAGE INCOME OVER TIME



Household Wealth

More to the point, these data provide clear evidence that working for a company with employee ownership matters to workers' financial fortunes. The household wealth of the median employee-owner in the sample is 92% higher than the household wealth for the median non-employee-owner ($28,500 versus $14,831). With the exception of single mothers, employee ownership at work is associated with higher household wealth.[3]

TABLE 6

MEDIAN HOUSEHOLD NET WORTH	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
Overall	$28,500	$14,831
Single women	$9,089	$6,000
Single women of color	$7,000	$5,000
Workers of color	$16,450	$9,175
Child 0-8 in household	$33,450	$17,500
Families of color with young child	$20,650	$10,250
All parents	$28,650	$15,300
All single parents	$10,500	$7,500
Single mothers	$4,520	$5,900
Non-college graduates	$22,450	$12,250
More than 50k income from wages	$73,100	$55,500
Under 50k income from wages	$16,250	$11,000
Under 30k income from wages	$8,750	$7,500

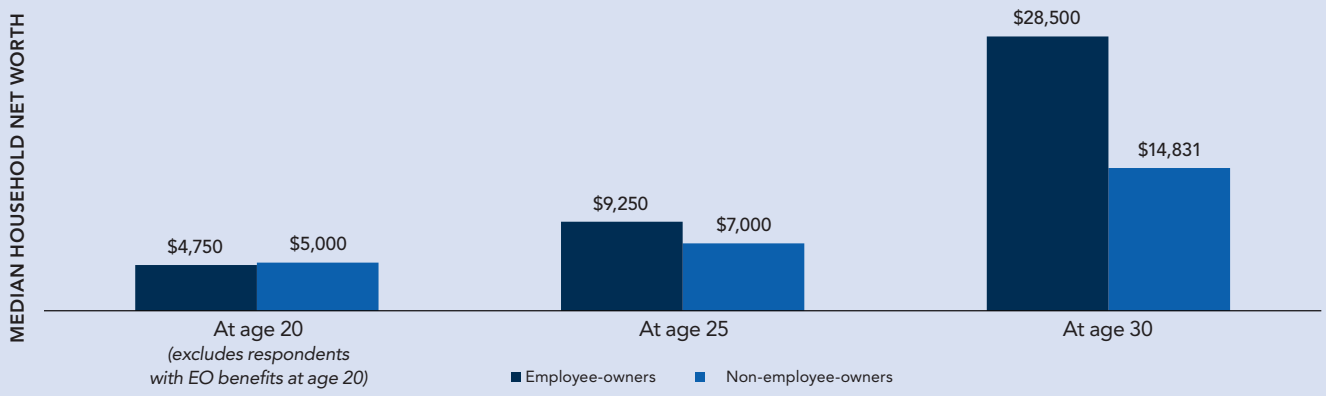
TABLE 7

MEDIAN HOUSEHOLD WEALTH BY INDUSTRY	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
Agriculture forestry and fisheries	--	$32,000
Mining	--	$37,700
Utilities	$43,935	$29,000
Construction	$89,000	$20,350
Manufacturing	$41,250	$14,076
Wholesale trade	$52,500	$19,500
Retail trade	$17,850	$13,500
Transportation and warehousing	$33,000	$12,500
Information and communication	$36,250	$18,000
Finance insurance and real estate	$30,120	$36,500
Professional and related services	$48,410	$17,244
Educational, health, and social services	$14,000	$15,500
Entertainment, accommodations, and food services	$12,900	$7,550
Other services, e.g., car repair and nail salons	--	$15,000
Public administration	--	$25,472
Missing/uncodable	$47,500	$12,144

Figure 2 shows that there are no large pre-existing differences in wealth. As with income, the employee ownership advantage with household wealth emerges over time.

FIGURE 2

MEDIAN HOUSEHOLD NET WORTH OVER TIME



[3] Household wealth is respondent's asset holdings (real estate, businesses, vehicles, etc.) and amount of debt owed to create a net worth amount. This amount does not include any assets in a retirement plan.

Benefits

Looking beyond cash compensation, employee ownership is associated with a much greater incidence of benefits at work, from flexible work schedules to medical, dental, and life insurance.

TABLE 8

BENEFITS AT WORK	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
A flexible work schedule	52%	34%
Medical, surgical or hospitalization insurance which covers injuries or major illnesses off the job	97%	67%
Life insurance that would cover your death for reasons not connected with your job	86%	50%
Dental benefits	94%	60%
Paid maternity or paternity leave	65%	31%
Unpaid maternity or paternity leave which would allow you to return to the same job, or one similar to it	56%	30%
A retirement plan other than Social Security	89%	53%
Tuition reimbursement for certain types of schooling	62%	24%
Company provided or subsidized childcare	23%	5%
Employee Stock Ownership Plan(s)[4]	100%	0%
n	975	3,931

[4] For those respondents with ESOPs available at their employers, enrollment is automatic.

Importantly, looking at the comparison among just those workers with lower-wage jobs shows this pattern is not entirely a function of higher wages at companies offering employee ownership. The table below highlights that low-wage workers and families with young children with employee ownership are much more likely to receive tuition reimbursement that could provide them with vital, long-lasting job skills.

TABLE 9

BENEFITS BY WAGES AND CHILDREN IN HOUSEHOLD	BELOW $30K FROM WAGES		AT LEAST ONE CHILD 0-8 IN HOUSEHOLD	
	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
A flexible work schedule	46%	32%	50%	33%
Medical, surgical, or hospitalization insurance which covers injuries or major illnesses off the job	96%	53%	97%	68%
Life insurance that would cover your death for reasons not connected with your job	80%	34%	86%	52%
Dental benefits	91%	45%	94%	60%
Paid maternity or paternity leave	58%	21%	64%	33%
Unpaid maternity or paternity leave which would allow you to return to the same job, or one similar to it	50%	21%	60%	34%
A retirement plan other than Social Security	83%	34%	90%	53%
Tuition reimbursement for certain types of schooling	50%	14%	62%	26%
Company provided or subsidized childcare	19%	4%	22%	6%
Employee Stock Ownership Plan(s)	100%	0%	100%	0%
n	268	1,454	471	1,961

Job Tenure

One key link between employee ownership and economic security is job stability. Before this study, there had been scant evidence at the individual level to demonstrate findings from other research at the company level: employee-owned companies (predominantly ESOPs) are less likely to lay off workers and are more successful more broadly. The data below reporting on how long respondents have been working at their current jobs provide strong support for the role of job stability. Further, in a model controlling for wages, longer job tenure is still associated with higher household wealth (see appendix for analysis).

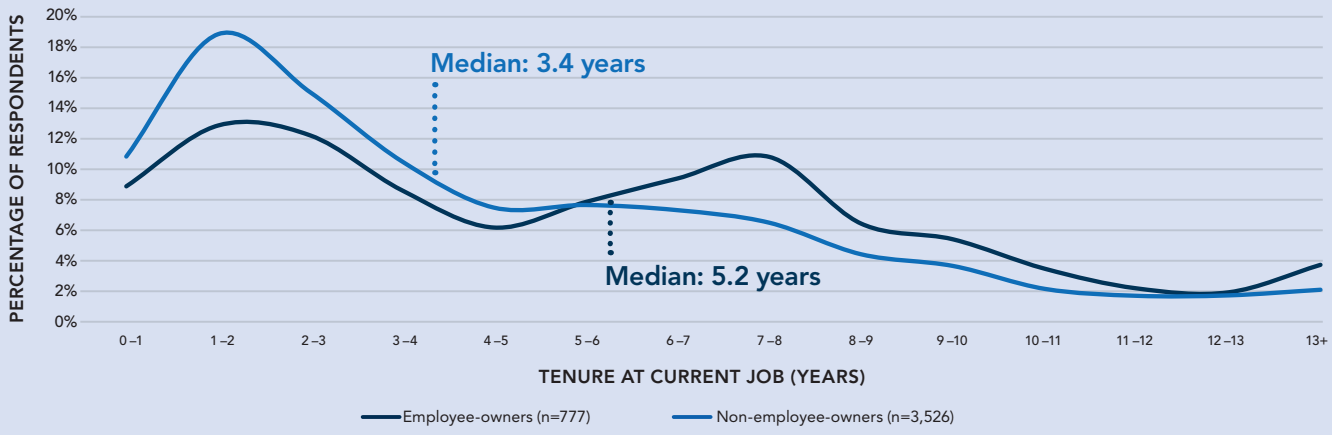
The difference between a median job tenure of 5.2 years for employee ownership workers and 3.4 years for those in the comparison group is remarkable. This is particularly notable since these are all workers ages 28 to 34. This financial foothold at the start of their careers has the potential for long-lasting impacts throughout their lives.

TABLE 10

JOB TENURE IN YEARS BY PERCENTILES	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
Average	5.4	4.5
10th percentile	1.1	1.0
25th percentile	2.3	1.7
Median	5.2	3.4
75th percentile	7.8	6.6
90th percentile	10.4	9.3
n	777	3,526

FIGURE 3

JOB TENURE AT CURRENT JOB IN YEARS



Across the board, workers with employee ownership have steadier employment compared to similar workers without such benefit, including the most vulnerable groups of workers. In a regression analysis controlling for wages, employee ownership remains associated with longer job tenure (see appendix for model).

TABLE 11

JOB TENURE AT CURRENT JOB IN YEARS BY DEMOGRAPHIC CHARACTERISTICS	EMPLOYEE-OWNERS		NON-EMPLOYEE-OWNERS	
	AVERAGE	MEDIAN	AVERAGE	MEDIAN
Overall	5.5	5.2	4.5	3.42
Single women	5.0	4.4	4.0	3.09
Single women of color	4.8	4.2	4.0	3.1
Workers of color	5.2	4.5	4.3	3.3
Young child (0-8) in household	5.4	5.2	4.6	3.6
Families of color with young child	5.1	4.2	4.2	3.2
All parents	5.5	5.2	4.5	3.4
All single parents	4.9	3.4	3.9	2.7
Single mothers	4.6	3.3	3.8	2.8
Single mothers of color	4.6	3.7	3.7	2.7
Non-college graduates	5.5	4.7	4.5	3.3
Under 50k income from wages	5.1	4.4	4.4	3.3
Under 30k income from wages	4.3	3.1	3.8	2.8
Under 25k income from wages	4.0	2.8	3.5	2.3

Note: All respondents are ages 28 to 34.

Poverty

The Census Bureau expresses depth of poverty in an income-to-poverty ratio, which measures how close a family's or individual's income is to their poverty threshold. The ratio compares household income to the federal poverty level, accounting for household size. Table 12 presents these ratios broken out by demographic categories and comparing employee ownership workers to those without.

For example, single mothers who are employee-owners have a median ratio of 2.40 times their poverty threshold in 2013. This represents a sizable improvement compared to their circumstances when the survey started in 1997: they were just 1.71 times the threshold at that time. Single mothers in the non-employee-ownership comparison group slid slightly downward during that same time period.

TABLE 12

MEDIAN HOUSEHOLD POVERTY RATIOS OVER TIME	EMPLOYEE-OWNERS		NON-EMPLOYEE-OWNERS	
	1997	2013	1997	2013
Overall	2.49	3.78	2.32	2.93
Single women	2.16	3.14	1.94	2.13
Single women of color	1.67	2.69	1.37	1.72
Workers of color	1.71	3.16	1.43	2.31
Young child (0-8) in household	2.29	3.25	2.18	2.54
Families of color with young child	1.67	2.52	1.34	2.00
All parents	2.23	3.25	2.04	2.46
All single parents	1.78	2.77	1.59	1.70
Single mothers (any biological children)	1.71	2.40	1.55	1.50
Single mothers of color	1.45	2.10	1.14	1.34
Non-college graduates	1.98	3.22	1.87	2.34
Under 50k income from wages	2.20	2.95	2.16	2.51
Under 30k income from wages	1.76	2.26	1.87	1.79
Under 25k income from wages	1.93	1.93	1.82	1.53

Families with Young Children

In Table 13, the characteristics of families in the sample that have children up to 8 years old are fairly similar, although the non-employee-owners are more likely to be female and slightly more likely to be unmarried.

Table 14 presents a summary of the positive impacts associated with employee ownership as measured in this survey on families with young children.

TABLE 13

DEMOGRAPHIC PROFILE OF HOUSEHOLDS WITH AT LEAST ONE CHILD 0-8 YEARS OLD	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
% female	47%	59%
% single	37%	42%
% of color	49%	51%
% college graduate	30%	26%
% parent(s) college graduate	29%	26%
Median household size	4	4
Median age	31	31
% with at least one child 0-8 in household	100%	100%
n	471	2,222

TABLE 14

SUMMARY OF FINDINGS FOR HOUSEHOLDS WITH CHILDREN	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
Median gross family income	$75,240	$60,000
Median income from wages	$40,000	$30,000
Median poverty ratio in 2013	3.25	2.54
Median household net worth	$33,450	$17,500
% with childcare benefits	22%	6%
Median job tenure in years	5.38	4.63
n	471	2,222

Conclusion

The National Longitudinal Surveys (NLS) provide a rich and diverse source of panel data to follow young workers through their life changes and labor market experiences. These data have limitations, outlined above, and there is work to be done to refine and expand upon the research. Still, the findings make a strong case for a positive link between employee ownership and workers' financial well-being. The number of ESOPs in the U.S. has not nearly reached its upward bound. Their potential as a vehicle for positive change for workers, including vulnerable groups of workers, deserves a place in the economic policy discussion.

Appendix

The National Longitudinal Surveys (NLS), sponsored by the U.S. Bureau of Labor Statistics, consists of a number of cohorts. The "NLSY97" cohort is comprised of 8,984 individuals who were ages 13 to 17 when they were initially interviewed in round 1 (1997). They were re-interviewed annually, with the latest interview in 2013. Almost 80 percent (7,141) of the round 1 sample were interviewed in round 16. It is composed of two subsamples:

- A cross-sectional sample of 6,748 respondents designed to be representative of people living in the United States during the initial survey round and born between January 1, 1980, and December 31, 1984.
- A supplemental sample of 2,236 respondents designed to oversample Hispanic or Latino and African American people living in the United States during the initial survey round and born during the same period as the cross-sectional sample. Oversampling involves selecting more people from a subgroup than would be done if everyone in the sample had an equal chance of being selected.

Both the cross-sectional and supplemental samples were selected by standard area probability sampling methods.

Government agencies and academic institutions regularly use the NLS data and findings of these longitudinal surveys in their recommendations to and testimony before Congress. Most recently, researchers from the Urban Institute and Brookings Institutions used the NLS to study how policy interventions affect inequality across the life course of children born into poverty.[5] A 2016 Center for American Progress report used the NLS to track the child care cost burden for low-wage families and its impact on their wages over time.[6]

The NLS is an ideal and underused data source because of its design and content. It is a large sample of men and women. Its oversample of people of color makes it a unique source for examining a population that is rarely large enough to study in most nationally representative samples. Because longitudinal surveys, such as the NLSY, track the same individuals over time, the NLSY gives a more in-depth and complete picture of the labor market and provides unique, important insight into the experiences of adolescents as they enter the job market for the first time and follow them as they enter or leave a job with employee ownership.

Characteristics of the Respondents

The table below describes the characteristics of the respondents analyzed with these data. The table demonstrates the ability of these data to allow for breaking out groups in a way that is rarely possible with nationally representative samples.

TABLE 15

NUMBER OF RESPONDENTS	EMPLOYEE-OWNERS	NON-EMPLOYEE-OWNERS
Total	975	4,529
Men	544	2,229
Women	431	2,300
African Americans	255	1,190
Latinos	216	961
All workers of color	476	2,195
Women of color	222	1,151
FAMILY STATUS		
Children 0-8 in household	471	2,222
All parents	565	2,745
Single parents	234	1,323
Single mothers	121	762
Single women	242	1,302
Single women of color	155	786
Single mothers of color	92	530
EDUCATION		
Non-college graduates	647	3,106
Non-college men	380	1,659
Non-college women	267	1,447
INCOME		
Below 50k income from wages	553	2,925
Below 30k income from wages	268	1,742
Below 25k income from wages	173	1,330

[5] Acs, Gregory P., Steven Martin, Jonathan A. Schwabish and Isabel V. Sawhill. "The Social Genome Model: Estimating How Policies Affect Outcomes, Mobility and Inequality across the Life Course." *Journal of Social Issues* 72,4 (December 2016): 656-675.

[6] Madowitz, Peter, Alex Rowell and Katie Hamm. "Calculating the Hidden Cost of Interrupting a Career for Child Care." Report, Center for American Progress, June 21, 2016.

TABLE 16

SURVEY WORDING
I'm going to refer to a list of benefits which employers sometimes make available to their employees. [At this time/At the time you left], which of the benefits on this list would it [be/have been] possible for you to receive as part of your [{job_assignment}] [as/with] [employer name]([(loop)])? (SELECT ALL THAT APPLY.)
UNIVERSE: R >= 14 has valid employer; not military; employer stopdate >= 16; job last 13+ weeks; job last 2+ weeks since DLI; not self-employed
RESPONSE CHOICES: ☐ A flexible work schedule ☐ Medical, surgical or hospitalization insurance which covers injuries or major illnesses off the job ☐ Life insurance that would cover your death for reasons not connected with your job ☐ Dental benefits ☐ Paid maternity or paternity leave ☐ Unpaid maternity or paternity leave which would allow you to return to the same job, or one similar to it ☐ A retirement plan other than Social Security ☐ Tuition reimbursement for certain types of schooling ☐ Company provided or subsidized childcare ☐ Employee Stock Ownership Plan(s)

There are many factors at play simultaneously shaping the financial well-being of workers. The next several tables lay out statistical models designed to check the robustness of the strong findings presented above. There will be more of this analysis to follow in parsing out these complex relationships with this and future cohorts.

Table 17 shows the results of an OLS regression model predicting income from wages measured as a continuous variable (mean=$38,579). This model holds constant factors commonly associated with wages with a series of dummy variables. As expected, all of the demographic variables are strongly associated with wages, particularly education. Still, the dummy variable coded 1 if the respondent has an ESOP at work remains positively associated with wages controlling for these other factors.

TABLE 17

REGRESSION MODEL PREDICTING INCOME FROM WAGES	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS		
	B	STD. ERROR	BETA	T-VALUE	P-VALUE
(Constant)	$18,570	$796.94		23.302	0.000
Sex (male=1, female=0)	$11,400	$790.60	0.193	14.42	0.000
Race (white=1, of color=0)	$3,860	$814.85	0.065	4.738	0.000
Marital status (married=1, unmarried=0)	$8,419	$803.35	0.142	10.48	0.000
Education (college graduate=1, non-college=0)	$19,426	$856.84	0.31	22.671	0.000
Employee-owner (has ESOP =1, does not=0)	$9,634	$1,003.38	0.127	9.602	0.000

Adj. R^2 = .185

n = 4,659

Job stability is a key piece of being able to build wealth. Table 18 presents a model predicting respondents' length of time at their current job in years (average = 4.23 years). These respondents are all between the ages of 28 and 34. Employee ownership remains significantly linked to longer job tenure after controlling for demographic factors associated with job quality, although more factors will be controlled for in future models. The negative relationship between being a college graduate and job tenure is likely due to the age of the respondents in this sample.

TABLE 18

REGRESSION MODEL PREDICTING LENGTH OF JOB TENURE IN YEARS	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS		
	B	STD. ERROR	BETA	T-VALUE	P-VALUE
(Constant)	3.196	0.108		29.701	0.000
Sex (male=1, female=0)	-0.361	0.103	-0.052	-3.496	0.000
Race (white=1, of color=0)	0.111	0.104	0.016	1.061	0.289
Marital status (married=1, unmarried=0)	0.650	0.104	0.093	6.258	0.000
Education (college graduate=1, non-college=0)	-0.556	0.115	-0.075	-4.820	0.000
Income from wages	0.000	0.000	0.207	13.086	0.000
Employee-owner (has ESOP =1, does not=0)	0.538	0.129	0.060	4.161	0.000

Adj. R^2 = .058
n = 4,608

Finally, the table below turns to household wealth (average =$50,699). As expected, job tenure is positively associated with wealth after controlling for other demographic factors. Employee ownership seems to be working through job tenure since it drops from the model once tenure is included. This will be explored in future modeling.

TABLE 19

REGRESSION MODEL PREDICTING HOUSEHOLD WEALTH	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS		
	B	STD. ERROR	BETA	T-VALUE	P-VALUE
(Constant)	-$25,891.52	$4,864.79		-5.322	0.000
Sex (male=1, female=0)	-$1,396.75	$4,339.28	-0.005	-0.322	0.748
Race (white=1, of color=0)	$20,782.15	$4,357.70	0.077	4.769	0.000
Marital status (married=1, unmarried=0)	$32,157.08	$4,364.69	0.119	7.368	0.000
Education (college graduate=1, non-college=0)	$5,488.52	$4,881.49	0.019	1.124	0.261
Income from wages	$1.02	$0.08	0.235	13.447	0.000
Job tenure in years	$2,317.77	$594.15	0.062	3.901	0.000

Adj. R^2 = .110
n = 3,680

About the NCEO

The NCEO is a nonprofit membership and research organization, established in 1981, whose mission is to provide practical resources and objective, reliable information about employee ownership to businesses, employees, and the public. Today, we have over 3,000 members, ranging from employee ownership companies to consultants to academics.

We are the main publisher in the field, with over 50 titles ranging from issue briefs to lengthy books. We conduct weekly webinars and hold in-person meetings around the U.S., plus a large annual conference. We provide training, speaking, and introductory consulting, conduct surveys and other research, and have extensive contacts with the press, where we are regularly quoted.

We are primarily supported through membership fees and our activities.

We maintain extensive public information on our main website, www.nceo.org, and a companion website with more generally accessible information, such as infographics, interactive maps, and videos, at www.esopinfo.org.

This document is available at www.ownershipeconomy.org, which also has stories of some individuals behind these statistics. As further phases of this project produce results, we will make them available on that site as well.

National Center for Employee Ownership
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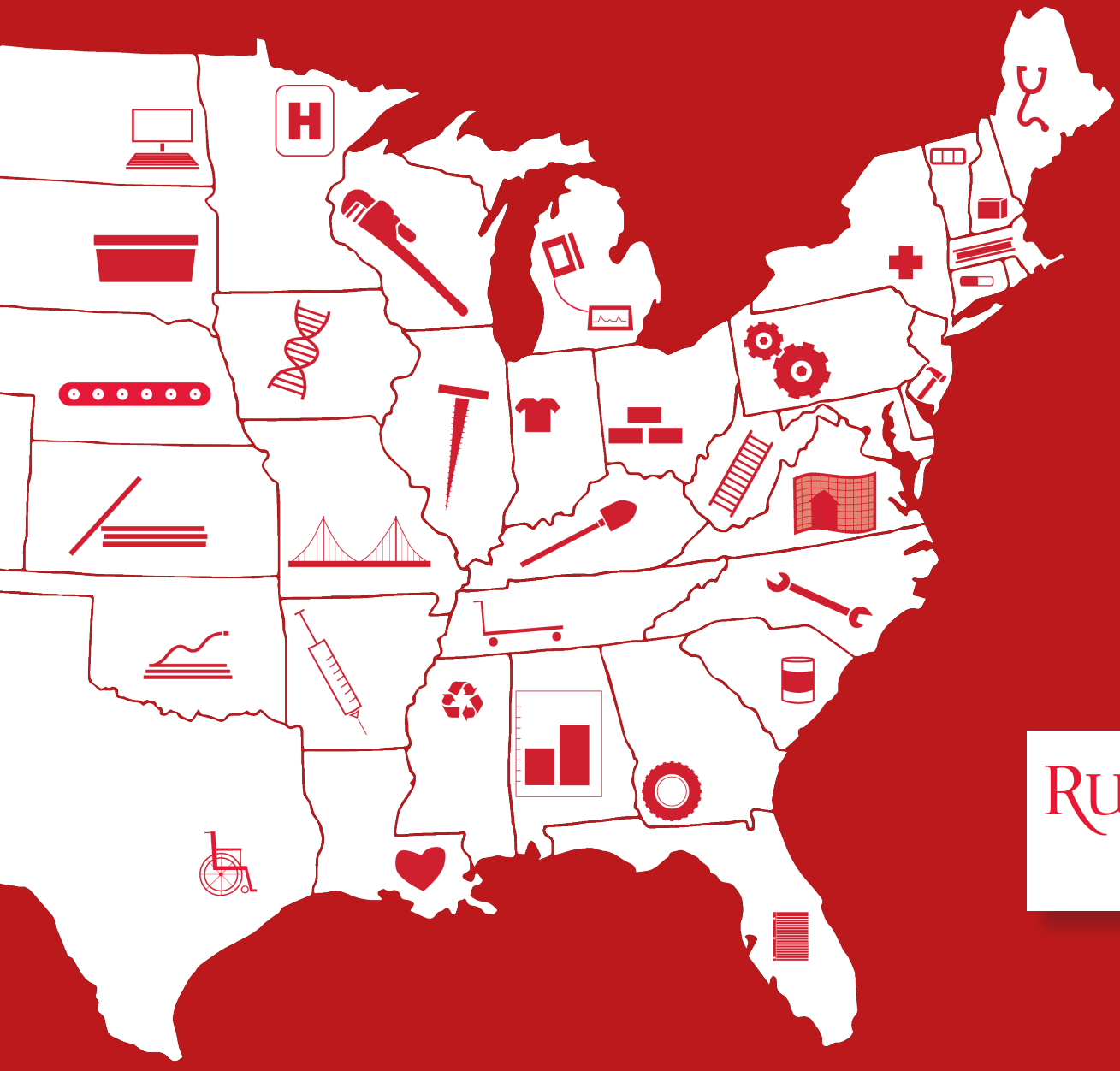
NCEO | NATIONAL CENTER FOR EMPLOYEE OWNERSHIP

www.nceo.org

This paper, related stories, and other resources are at www.ownershipeconomy.org

Building the Assets of Low and Moderate Income Workers and their Families

The Role of Employee Ownership



RUTGERS
School of Management and Labor Relations

Institute for the Study of Employee Ownership and Profit Sharing

March 2019

Table of Contents

Figures and Tables

At the Institute for the Study of Employee Ownership and Profit Sharing, we are dedicated to understanding how new public policies and business practices can enable employees to be fully engaged, fully employed, and share in the rewards of their work. With growing wealth inequality in the U.S. and a fragmented relationship to the workplace driven by contingent or contract work, we know it is timely and critically important for individuals, families, and communities that the rewards of work take center stage.

This study has been a successful proof of concept. It has demonstrated that each of the key stakeholders – employees through education and investment, managers through organizational practices at the site of work, and the private and public sector through policy that affects investments and performance-together can produce productive and efficient workplaces while simultaneously building the asset wealth of low and moderate-income earners.

New questions have been raised through this work that warrant further examination and greater visibility if we are to strengthen communities and residents' ties to work, opportunity, and wellbeing.

We wish to express our deepest appreciation to our Program Officer Jeanne Wardford and the W.K. Kellogg Foundation for their interest and support in pursuing new strategies and structures that build equity and assets of all those who work – across issues of race, gender, ethnicity, class and geography. It is through these kinds of investments that we can make visible and pursue the strategies that ensure economic and social stability, and greater opportunities and wellbeing for families and communities.

Joseph Blasi
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The Institute for the Study of Employee Ownership and Profit Sharing conducts and supports research to examine existing and emerging models of employee share ownership and profit sharing in the corporation and society within the United States and around the world. It studies approaches that broaden financial participation and inclusion in the economy and business organizations, and allow employees to be fully engaged and share in the rewards of their work. Scholarship is supported through the J. Robert Beyster Professorship and a national competitive Fellowship Program, and by convening the two largest annual scholarly conferences in the nation on these issues. The Institute develops and disseminates educational materials to encourage graduate and undergraduate education at Rutgers and other colleges through the Curriculum Library for Employee Ownership. The Institute also provides policy and data analysis to government.

For more information of the Institute please see our website:
smlr.rutgers.edu/content/institute-study-employee-ownership-and-profit-sharing

Acknowledgments

This research was supported entirely by the W.K. Kellogg Foundation. We are grateful to the W.K. Kellogg Foundation for the opportunity to support new directions in family economic stability and security through this research.

Participating Employees and Company Leadership: We are indebted to all of those who made this project possible: those who collected data for us at the company sites and those who we interviewed - for their time, self-reflection, and contributions to improving knowledge and strategies about the benefits of employee ownership for low- and moderate-income employees and their families. THANK YOU!

Project Support: We are very grateful to the following for their assistance in identifying companies for us, introducing us to companies, and encouraging participation in this project.

We would also like to thank the Employee Ownership Foundation for outstanding efforts to introduce the team to employee-owned firms and for support of the Institute's conferences and the Louis O. Kelso Research Fellowships.

J. Michael Keeling, Former President, Employee Stock Ownership Plan (ESOP) Association.
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I. Purpose of the Study

In 2015, the W.K. Kellogg Foundation engaged the Institute for the Study of Employee Ownership and Profit Sharing, at the Rutgers University School of Management and Labor Relations, to conduct a qualitative study examining the asset building impacts of employee ownership for low- and moderate-income employees and their families. Its purpose was to provide insight into the role of employee ownership in supporting employees' asset/wealth accumulation, and related issues of financial security, economic mobility, and family impact. The research team conducted interviews with long-tenured employees having low-to moderate-incomes at companies with ESOPs (Employee Stock Ownership Plans), or having started at their firms with low incomes. This is the largest qualitative, individual interview-based study of this employee population ever conducted in the United States. An ESOP is a retirement plan that invests in stock in the company where the employee works. Typically, companies use credit to purchase stock on behalf of employees with the company repaying the loan and without employees' purchase of the stock with their wages, savings, or retirement assets. We sought to find employee examples across race, gender, ethnicity, age, sector and geography in the United States. Quantitative data from the U.S. General Social Survey and prior studies were reviewed. This report provides a summary of the overall project and preliminary findings related to the core research question, "Can ESOPs contribute to building the assets of low- and moderate-income employees and if so, how?"

Why Ask the Question? Why is Asset Building Important?

The reality and lived experience of expanding wealth inequality in the United States has been well documented [1,2,3,4]. Assets are an alternative term for wealth or the collective set of resources held, in their many forms, which can be leveraged or invested for economic stability, security and wellbeing. Wealth is not built through income alone. It is the product of equity built through home ownership. It is cash savings from earnings, gifts, or inheritances, and holdings of stocks and bonds. It is ownership of vehicles, retirement accounts, and businesses. It is education, job skills and experience, and access to opportunity. It is the product of good health and healthcare, social networks and support, and more. Wealth consists of more than simply cash, income, or stocks; thus we refer to all of these components of wealth as assets. The combination of resources that constitute a household's assets enable individuals and families to move from just making ends meet, to managing life's challenges and still being able to plan and invest in their future [5,6,7].

Today, the top 10 percent of households own more wealth than the bottom 90 percent combined[8,9]. In fact, wealth inequality is growing faster than income inequality, making a focus on wealth increasingly important[10]. Additionally, the relationship of that bottom 90 percent to a stable workplace is fragmenting, with a large and growing number of workers, across all sectors, working variously as contingent workers who are still tied to a worksite, as contract labor for third-party employers, as independent workers who are often misclassified, or as self-employed[11]. This loosening of workplace attachments and work relationships puts low- and middle-income earners' wealth building at risk. For many who experience this fissuring, they lose access to benefits such as retirement accounts, paid sick or vacation days, on the job learning, tuition support, mentorship, profit sharing and other forms of shared ownership[12]. Examining the role of employee ownership as a structure to bring greater returns from the business to the workforce, as a strategy to stabilize and secure attachments to a workplace, and as a mechanism for building the asset wealth of low- and moderate-income employees is timely in an era of expanding wealth inequality and employment precarity.

Too little is known about the ways in which employee ownership can help build the asset wealth of low- and moderate-income employees. Because wealth inequality in this nation is growing, particularly for women and people of color, efforts are underway nationally to understand how to reverse these trends. This research begins to fill an important gap in our understanding of the potentially broad benefits of employee ownership. Most of the employee ownership research has focused on improving the business bottom line through more invested workforce participation and ownership, and how this in turn produces "quality" or "good" jobs [13,14], as well as employee wealth. What we do not know from prior studies is if and how employee ownership benefits the least skilled, or undervalued earners. The insights from this study may help inform strategic investments through public policy, philanthropy and the private sector designed to reduce the growing wealth inequality and ensure adequate wealth building opportunities for all families.

Assets Enable People to:

- Remain stable through financial emergencies[15]
- Have housing security[16]
- Pursue a path to prosperity and upward mobility[17]
- Advance through higher education for themselves or their children[18]
- Take risks that result in a better job or starting a business[19]
- Retire securely[20]
- Pass on opportunity through inter-generational wealth building[21]

Asset Insecurity in the United States

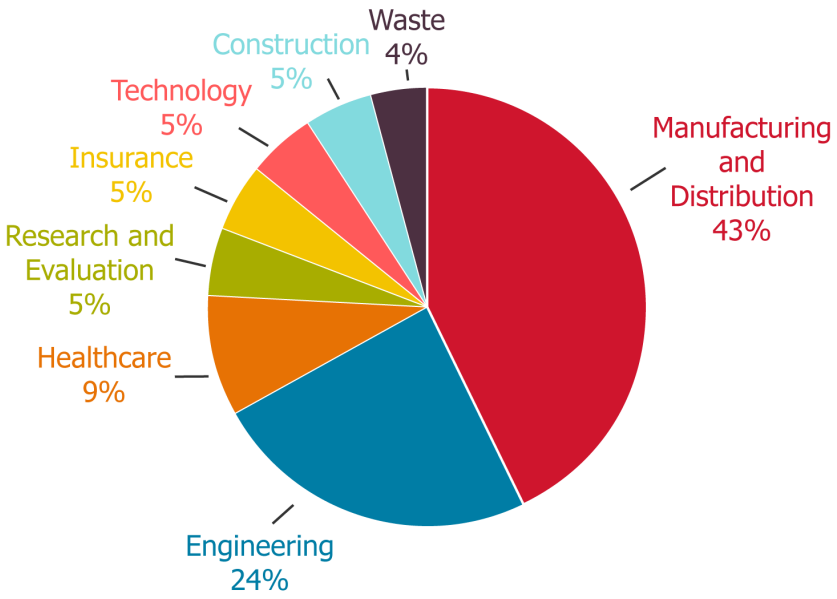
- Only 7% of workers in low-income families own employer stock, compared to 20% in moderate-income and 30% in high-income families[22].
- 43.5% of all families and 60.6% of families of color are asset poor. They do not have sufficient liquid financial assets to sustain their households at or above the poverty level for three months if they lose their income[23].
- Four in 10 adults, if faced with an unexpected expense of $400, would either not be able to cover it or would cover it by selling something or borrowing money[24].
- 28% of senior citizens in the United States retiring between 51 and 61 had zero or negative financial assets when they die and 36% had less than $50,000 in financial assets[25].
- 54% of all households lack sufficient financial assets to invest in opportunities that increase financial mobility, such as buying a home, creating a business, or investing in their children's education[26].
- Disparities in wealth holding are great. Women hold 68% less wealth than men[27]. In 2016, white family wealth was seven times greater than black family wealth and five times greater than Hispanic family wealth[28].

II. Project Methodology

The research team completed interviews at 21 companies across the United States that offer ESOPs, representing 16 states and 8 discrete sectors, ranging in size from 75 to 18,000 employees (See Figure 1). Some but not all of the companies had variations of formalized asset building opportunities beyond the ESOP, including union representation, profit sharing, 401(k) plans, and others. Many of the companies in our sample were the result of retiring founders selling their companies to the employees through an ESOP. Outreach efforts were conducted through ESOP industry organizations and consultants. It is important to note that this was not designed to be a representative sample of ESOP companies. Rather, we sought to find companies across a range of industry types and geographies enabling us to compare the experiences and asset wealth building trajectories of low- and moderate-income workers with at least 15 years' longevity of employment with the firm. Additionally, within this group, we sought out firms that had representation of women and people of color who were the primary but not the exclusive focus of the interviews. In some cases we found that we had to reduce the number of years of employment to 8 or more years in order to fulfill this last criterion, an issue that will be discussed further in the findings.

Figure 1

Industry Representation



Industry and Company Profile

- 21 Companies
- Located in 16 states:
- Size range: 75-18,000 employees
  - 50-250 employees: 7
  - 251-500: 4
  - 501-750: 2
  - 751-1,000: 3
  - 1,001-1,500: 1
  - 3,001-5,000: 2
  - 10,000-18,000: 2

Interviews were conducted from June 2015 through August 2018. The goal was to interview approximately 10+ employees at each firm. In most cases management sent out a notice to the employees who fit the criteria and asked for their participation. All of the interviews were conducted on company time, and the interviews themselves were held confidential. Respondents were provided a $25 gift card of appreciation. This study was designed to serve as a "proof of concept." The intent was to learn if employee ownership can contribute to asset building, and if so, to identify the key mechanisms and best practices for structuring ESOPs as an asset building strategy for low- and moderate-income employees.

Interviews were completed with 195 employee owners. Approximately 20 were senior managers, including some CEOs, CFOs, and HR managers who participated in interviews to share insights and history about the company's transition to employee ownership, how employee ownership is structured at their firm, and if and how they believe employee ownership contributes to asset building among the firm's mid-to low-level earners. In addition, 13 lower level managers who were above the study's income target were interviewed to include their perspectives. These contributed to the development of several company profiles which were made available to the project funder.

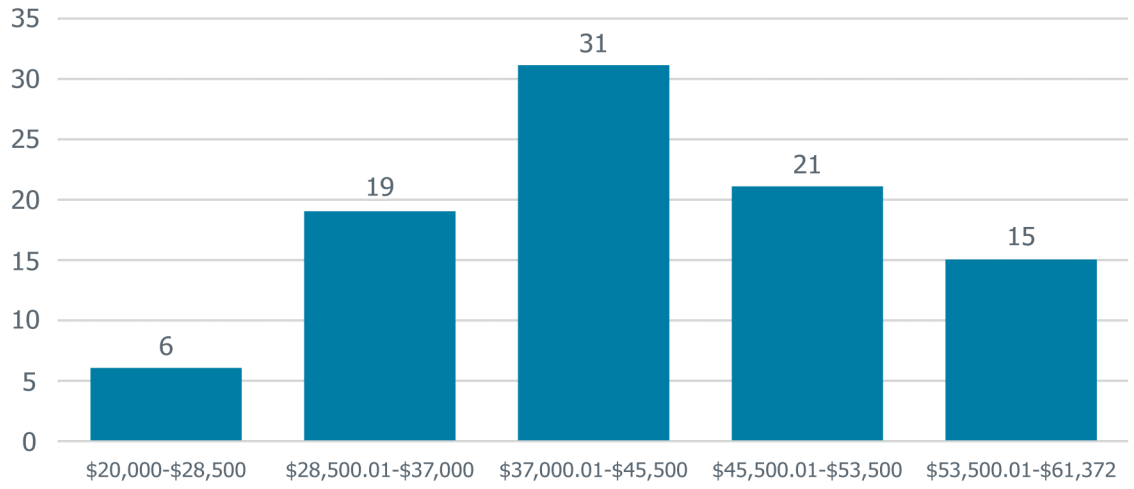
In total, 141 of those interviewed were willing to share their income information. Of these, a total of 92 employee owners interviewed earned less than the 2017 national household median of $61,372[29]. At or below this median is the threshold the study uses to define low- to moderate-income. It is important to note that there are some missing data. Interviewees were not always willing or able to report their ESOP and 401(k) account values, or reveal the values of their household assets and debts. Of the 92 interviewees who provided their income information and were below the national household income median, four did not provide their ESOP account values and 32 did not provide their 401(k) values (either because they did not know the value or because they did not participate in the 401(k) plan). Table 1 indicates the income range of the target population interviewed. We have completed the analysis of 92 employee interviews of those who earn less than the national median of $61,372 and 27 who make above the median, and we will continue to analyze more interviews. Please note that the names of participants quoted in this report have been changed to ensure confidentiality and no companies are directly identified.

Among the 92 low-to moderate-income employees interviewed:

- 72% had been at their company for at least 15 years
- 62% were women
- 48% were people of color
- 26% were women of color
- 8% had not graduated high school, 50% had graduated high school or received a GED, 32% had some college, vocational school, or an Associate's degree, 8% had a Bachelor's degree
- ESOP account values ranged from a $15,000 to $6,000,000

Table 1

Annual Earnings Distribution of Interviewees Under the National Household Median (<$61.372)



III. Research Findings

While the analysis of these rich data will continue, three important categories of impact are emerging from the work. First, we find personal and family impacts from ESOP resources as they create real and perceived economic stability and security. The role of ownership in asset building and work stability is the second big impact, as ownership seems to shape employees' actions and perceptions related to participation, inclusion, value, trust, equity and fairness. Finally, the ESOP drives development of an opportunity structure built through skill, knowledge, leadership development, mentorship and advancement. Of course, these are not discrete impacts. They are the product of a range of mechanisms that stem from the ESOP opportunity. This section introduces some emerging findings that shed light on the myriad ways that asset and family wellbeing effects are produced through ESOPs for employees in this data set. Thus, this section provides high level findings from the data that inform the study question posed, "Can ESOPs contribute to building the assets of low- and moderate-income employees and if so, how?"

What we Know from National Data

The analysis of the General Social Survey (GSS), which is a nationally representative social survey, shows that an average of 18.7% of total private sector employees held stock in their company in the 2002-2014 period. This figure is slightly higher, 19.5% or 22.9 million workers, when looking just at the most recent available data from 2014. These figures represent not just ESOPs (which are not broken out by the GSS), but include all forms of employee ownership through other types of plans, such as Employee Stock Purchase Plans, restricted stock plans, and pension plans. When we break down the prevalence of employee ownership among individuals, the data show

that workers with low family income (in the bottom quarter of the income distribution) are least likely to be employee owners. 7.1% of the workers from low income families were employee owners while more than 30% of the workers with high family incomes (in the upper quarter of the income distribution) were employee owners. In terms of other demographic characteristics, males, those with "other" ethnicity (primarily Asian-Americans), and those between 35 and 54 years old were most likely to be employee owners.

Even when only 7.1% of the individuals with low family incomes are employee owners, the size of ownership stake they have can make a significant difference. As seen in Table 2, columns (2) through (5), the size of the employee ownership stake is more than half (56.3%) of family income on average. The median stake is 11.9%, meaning that for half of the employee owners with low family income, their ownership stake is about 12% or more of their annual family income. This shows the potential of employee ownership as the source of significant additional wealth for low- and moderate-income employees.

Table 2

National Distribution of Employee Ownership among Individuals and the Size of Ownership Stake

	Percent of private sector employees with EO	If have EO, size of stake			
		Dollar value of all forms of employee ownership		As percent of family income	
		Mean	Median	Mean	Median
	(1)	(2)	(3)	(4)	(5)
Overall	18.7%	$50,182	$11,743	47.1%	14.7%
Family income					
Low (<$34,848 in 2014 dollars)	7.1%	$7,994	$1,500	56.3%	11.9%
Middle (>$34,848 and <$99,047 in 2014 dollars)	20.0%	$33,426	$10,000	47.1%	13.5%
High (> $99,047 in 2014 dollars)	30.4%	$83,617	$30,000	45.0%	20.3%
Gender					
Female	16.7%	$39,747	$11,743	35.1%	14.7%
Male	20.5%	$57,942	$13,159	56.0%	16.4%
Race and ethnicity					
White non-Hispanic	20.1%	$52,306	$12,000	45.2%	15.0%
Black	17.1%	$35,062	$6,580	60.3%	13.5%
Hispanic	10.6%	$29,847	$9,869	34.2%	10.8%
Other	23.2%	$84,567	$35,229	71.3%	34.4%
Age					
Age 18-34	12.4%	$23,934	$4,697	24.7%	8.1%
Age 35-54	23.7%	$51,259	$12,000	45.2%	12.4%
Age 55+	19.4%	$86,801	$35,229	88.4%	30.7%

The numbers in Table 3 are based on a different survey (the Federal Reserve's Survey of Consumer Finances), which looks at families rather than individual employees. Like Table 2, these data include not just ESOPs but all forms of employee ownership (although the definition is more limited than in the GSS and likely excludes Employee Stock Purchase Plans and restricted stock). The big advantage of the Survey of Consumer Finances is that it has strong and detailed measures of all forms of wealth. In total, 9.5% of families in this particular survey had primary or secondary earners with employee ownership. The difference in employee ownership by family wealth is more distinct than by individual income, such that only 3.5% of the families with low family wealth had access to employee ownership whereas 16.9% of the families with high family wealth had access to employee ownership. Nationally, families with single family heads of household were less likely to have access to employee ownership.

Table 3

National Distribution of Employee Ownership among Families and the Size of Ownership Stake

	Percent of families with EO	If have employee ownership, size of stake			
		Dollar value of all forms of EO		As percent of family wealth	
		Mean	Median	Mean	Median
	(1)	(2)	(3)	(4)	(5)
All families	9.5%	$89,509	$6,000	9.9%	2.6%
Family wealth					
Low (<$8,800)	3.5%	$1,991	$344	26.5%	4.8%
Middle (>$8,800 and <$316,840)	8.8%	$10,005	$2,160	10.1%	3.2%
High (> $316,840)	16.9%	$190,627	$25,000	8.5%	2.5%
Householder status					
Married couple or partnership	12.8%	$109,095	$6,500	9.5%	2.5%
Single female head	5.3%	$19,093	$5,200	10.9%	4.6%
Single male head	5.0%	$37,900	$3,225	11.6%	2.9%
Race and ethnicity of householder					
White non-Hispanic	20.1%	$111,820	$7,800	9.3%	2.6%
Black	17.1%	$7,802	$1,200	11.2%	2.8%
Hispanic	10.6%	$20,605	$2,000	12.3%	3.1%
Other	23.2%	$56,928	$18,000	12.7%	3.9%
Age of householder					
Age 18-34	12.4%	$10,866	$1,000	11.4%	2.6%
Age 35-54	23.7%	$79,213	$7,800	11.5%	3.3%
Age 55+	19.4%	$154,965	$10,000	6.5%	2.2%

The size of employee ownership as a percent of family wealth is greater for families with low wealth. For families with low wealth, the median ownership stake is almost 5% of their total wealth, whereas an ownership stake occupies about 2.5% of the total family wealth for the median high-wealth family. The households headed by single women have lower dollar values of employee ownership than do households headed by couples, but their ownership stake is a higher percent of median family wealth than for households headed by couples or single males. As seen from the data in Table 3, employee ownership can provide a significant wealth accumulation effect for all, and in particular for low income individuals and families.

In general, employee ownership wealth does not substitute for lower wages or other forms of wealth. The most recent important research on this issue comes from the National Center for Employee Ownership's study of the U.S. National Longitudinal Survey. This work provides evidence that young ESOP workers have 92% higher median wealth than their non-ESOP working peers. Importantly, it finds the ratio of household income to poverty levels is higher for young ESOP workers both overall and among single women, single women of color, those with children age 8 or under, and those with less than $25,000 in wages. Young ESOP workers also tended to have separate additional diversified 401(k) retirement plans[30]. And, as Table 4 indicates, it also demonstrates that the median wage income of low-income workers in employee owned companies in their study was higher than that of non-employee owners.

Table 4

Wage Income of Young Employee Owners from National Data

Subgroup	Employee-owners	Non-employee-owners	% diff
Workers of color	$35,000	$27,000	30%
All women	$34,000	$29,000	17%
Low-income women*	$21,000	$17,000	24%
Single women of color	$28,000	$24,000	17%
Single women	$31,000	$25,000	24%
Single parents	$33,000	$23,000	43%

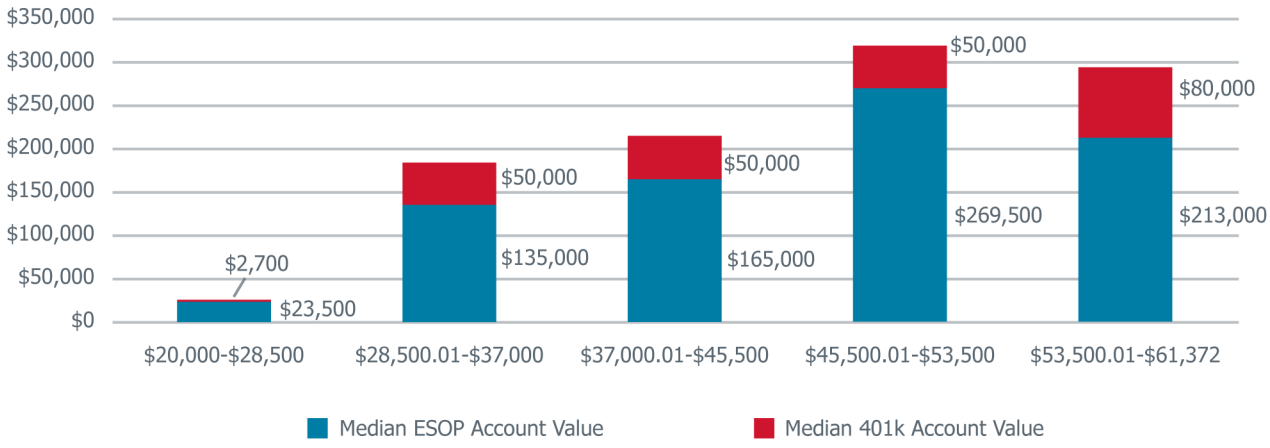
* For this table, "low income" means less than $30,000 in annual income from wages.
(From Wiefek, 2017, Table 2) https://www.nceo.org/articles/esops-preferred-status-certification

The Survey of Consumer Finances also indicates that employee ownership is tied to much higher wealth with no evidence of substitution[31], and wages did not go down as ESOPs were adopted over 1980-2001[32]. In addition to the positive impact on wealth, employee ownership is also found to be generally linked to better job outcomes for workers. Employee owners are more likely to benefit from job training, enjoy greater job security, and show lower turnover intentions among workers from all income levels[33,34]. The data indicate that employee ownership may be an underutilized tool for low- and moderate-income workers, and that it would be useful to identify and overcome any barriers for their entry into ESOPs.

Even with relatively low profit margins in a few firms, employees in our study had full time steady work, often with overtime. They had regular annual incomes, often had additional bonuses or profit sharing, and enjoyed ESOP account growth. These findings held across geographies of rural, urban, and suburban-based firms. Employees are more asset secure than if they did not have an ESOP, given the national comparisons. From a financial economic security perspective, women in particular have greater security. For example, "Rena", a Latina woman in her 50's who is married with adult children, has a middle school education with $160,000 in the ESOP. "Jocina" is an African American woman in her 30's who is a single mother of two, earning $16.81/hour with $120,000 in the ESOP, and is working on her BA. Both women have steady work they can count on, and wealth and opportunities for advancement. Yet, because all of the ESOP firms we encountered tied ESOP shares to income, the internal firm wealth disparities remained large as Table 5 demonstrates.

Table 5

Median Assets of Interviewees in Each Income Bracket



How Employee Ownership Helps Build the Assets of Low- to Moderate-Income Employees

It is not sufficient to report here that employee ownership can build the assets of employees. It is important to understand both how assets are built and for whom. Do all low- and moderate-income employees benefit equally within these firms across positions, income, race, ethnicity, age and gender? Analysis from this study suggests that employee owned firms stitch together five specific elements that work in tandem to enable workforce asset building. These include: 1) Building ESOP account equity and financial knowledge; 2) Expanding workforce capabilities through on the job training, external education, and internal mentoring; 3) Enabling asset preservation and personal investments; 4) Increasing access and inclusion by gender, race and ethnicity; and 5) Improving health and well-being through quality of work life experience and balance. Drawing on the qualitative interviews, we discuss how these elements work together to build employee wealth.

1. Building ESOP Account Equity and Financial Knowledge

ESOP Accounts: We begin with ESOP accounts, the automatic savings opportunity. As noted earlier, unlike 401(k)s, Roth IRAs, or most other saving structures, ESOPs require no reduction in family budgets to be started or to grow. Typically, employees do not purchase the stock in an ESOP with their wages or savings or retirement assets. Companies use credit to fund the ESOPs purchase of company shares and the company pays back the loan. As the loan is repaid the company distributes the shares to all employees, who hold the shares in their ESOP accounts. 401(k) plans, of course, require payroll deductions and are typically funded with employee contributions. This ability to build an asset without depleting resources from a family budget is critical for low- and moderate-income households. The importance of this non-family budget savings mechanism is critical for women like "Marta," who is in her 50s, divorced with adult children, still working as a heavy equipment operator, who explains:

> *"It [the ESOP] changed my life. And, it's a really big help because sometimes we, the employees, can't save for retirement or save money in general because they can't afford to. So the company helps us to be able to save up our money. It's like winning the lottery."*

Another good example is provided by "Joe", who is an African American man with a high school diploma and three young children. He has been at the company for 11 years, earns $25/hr., and has $180,000 ESOP value and $40,000 in the 401(k). He says:

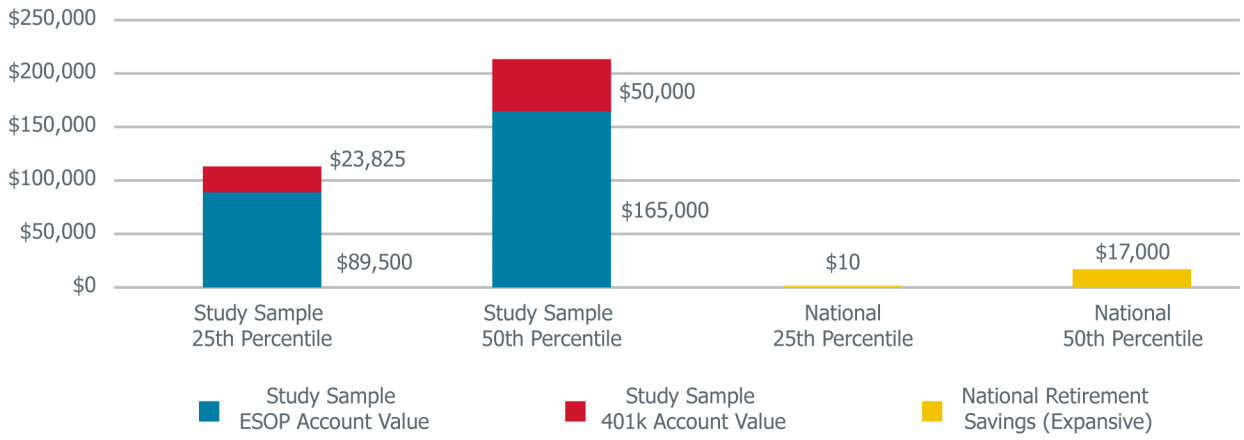
> *"When I started here I didn't have much at all. I guess you can call it, I was a poor man. By today's standards. I think I'm pretty well off right now, considering. I've come a long way. And ESOP has done good by me."*

Additionally, ESOP account values are not taxed while the employee is earning, nor are they considered in asset or income eligibility for federal or state tax or public benefits programs such as the tax credits (EITC), housing (Section 8), food (SNAP) and energy assistance (LIHEAP)[35]. This enables access to more opportunities to preserve and build wealth and a more secure future.

The employees in our study have built extensive assets beyond nationally comparable employees. National data, taken from the 2016 Federal Reserve Survey of Consumer Finances and compiled by "Don't Quit Your Day Job" (dqydj.com), uses an expansive definition of retirement savings, which includes traditional retirement vehicles, such as 401(k) and pension plans, as well as stocks, bonds, investment funds, savings accounts, and more. The national 25th percentile of savings was only $10, while the 25th percentile of the low- to moderate-income employees in our sample with ESOPs was $113,325* . The national median savings† of the total population was $17,000, while that of our sample of low-to moderate-income employees in ESOPs was $215,000 (Table 6). This puts the median of our sample in the 82nd percentile of national workers[36]. The study sample, when compared to the national trends, provides evidence that employee ownership enhances the wealth of low- and moderate-income workers.

Table 6

ESOP and 401(k) Account Values of Interviewees Compared to National Data



Retirement Security: All of the ESOP companies in the study offered 401(k) plans in addition to the ESOP. Some of these firms provided an employer match to the employee contribution, and some did not, which is the norm nationally.

Because they have an ESOP, many employees at the lower income levels can consider retirement, a concept not familiar to many from their own upbringing. As "Rosa", a 30 year old Latina woman says, "Retirement. I never really heard of it too much at home."

* Note, the 25th percentile is defined as the value that exceeds 25% of all values in the sample, and is less than 75% of the values in the sample

† Representing the worker in the exact middle of the values in the sample

Yet she reports that what she learned about retirement planning due to her ESOP helped her raise the issue among her own siblings, and created a desire for retirement savings across her extended family. Several employees who had been at her company for 15 or fewer years indicated that they had never worked for a company that provided any option to build retirement savings. The ESOP plus the 401(k) opportunity helped them "catch up" to their peers who had some of these options available earlier in their careers.

The ESOP account, in particular, reportedly made many of the women interviewed more economically secure for retirement. Across all companies studied, women who had never been married, were divorced or widowed, or did not have a second earner with retirement accounts report that the ESOP provided a way to gain greater future stability. "Kathy", a white single mother in her 40's who works as an executive assistant, says: "If I didn't have the ESOP, I don't know how much I would really have aside. I think I'd be more concerned about retiring." Similarly, "Susan", a divorced white woman in her 60's who lives with her 95-year old mother, says:"The ESOP has made a difference for me. When I went through my divorce, I was very selfish and was like, 'You don't get any of my ESOP. I earned that.' I earned it, I worked hard for it. It does make a difference because I'm counting on it when I retire." "Laura" is also divorced, and is in her early 50's. She has one son and no education past high school. She started as a clerical worker and is now a sales manager. For her, the ESOP means that she will have greater freedom after retirement: "I think it makes me look at the future different …. I just noticed a few conversations lately that people are saying, 'Wow, when I retire I'm not going to be able to travel,' and I'm thinking, 'Wow, I'm going to be doing some cool stuff.'"

In every age range, the ESOP employees we studied earning less than the national household median income had greater wealth for retirement than did their counterparts in the nation, even when using an expansive definition of savings (Table 7)[37]. The greatest difference can be seen in those who are closer to retirement in the 60-64 age range. The ESOP workers we interviewed in this income range have over 10 times the median savings of employees nationally.

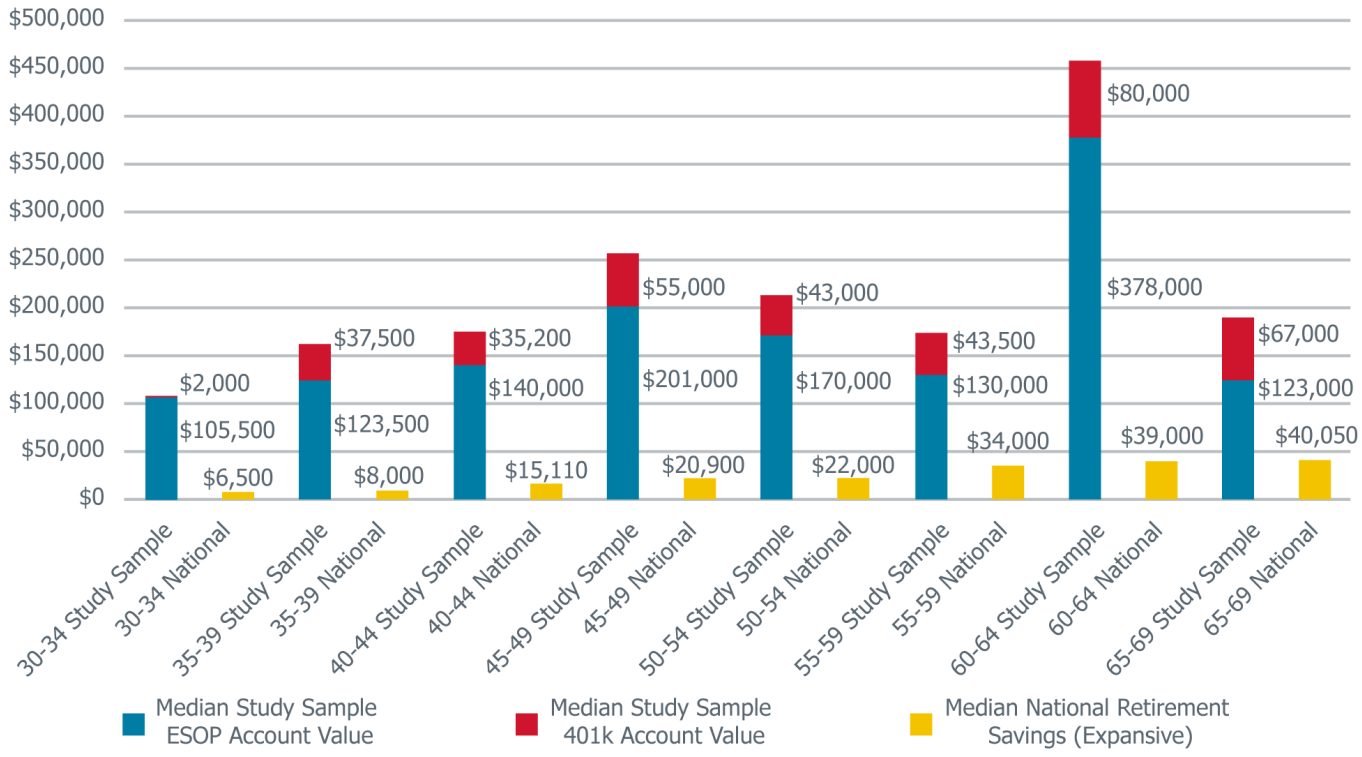
Income and Profit Sharing: Overall, the employees interviewed believe that their incomes are competitive with local market rates. Wages are not seen as a benefit of the ESOP per se, although there seems to be awareness that many of the firms do a regular local market check to make sure they maintain market rate earnings for positions. In some cases, employees feel that longevity with the firm should have provided them with above market rate wages for lower skilled work, and on occasion they pressed for such wage increases with limited success. Some of the ESOPs also offer a profit sharing plan, delivered quarterly for some and annually for others. Employees report that they cannot count on the amount of their profit share, so they do not think of it as part of their base income. If and when it comes, it is simply considered an "extra", although it is taxed as income, and they often have a bonus check that is based on profit sharing that comes at the end of the fiscal year. In the end, they have used these various forms of profit sharing for family outings, gifts, or to build cash savings accounts. For example, "Ramon", a 50-year-old Latino machine operator with three children, says that

"Most of the money of the profit sharing goes to the . .college saving account . . When [my children] go to college, it was just a little money to pay, not much."

Two particularly important findings emerge here about how financial assets are built and preserved. First, family budgets and resources are protected while raising children when ESOP values build without requiring income based contributions. ESOP accounts are not taxed, and do not count against any asset limits for social services for low-income employees who may be eligible. The second finding is that financial skills are learned due to individual employees investing time to understand the ESOP structure and participating in company information sharing, as well as working in a company that makes the information transparent and helps with financial literacy. This can improve opportunities for informed family financial planning and investments.

Table 7

ESOP and 401(k) Account Values of Interviewees Compared to National Data, by Age



2. Expanding Workforce Capabilities

For many of those interviewed, being invested in the company broadened their capabilities in leadership, communications, skill and education, and more. These built their personal assets which could be leveraged for greater wealth, security, and stability.

Leadership Development and Communication Skills: The possibility of some participatory management driven through the ESOP model can help foster self-advocacy and advancement in the workplace. Leadership development can take a number of forms, but its overall asset building impact occurs when that training translates into asset building action and opportunities. "Loretta," who has worked at the firm for over 20 years, describes herself as quiet when she first came to the firm. Through leadership and communications training she feels she has built confidence and a "voice." She says, "I started here as a very shy person, would never really stand up for myself or anything like that. I think, working here, probably had a lot to do with helping me open up." Loretta reports that at her firm, ownership requires participation in leadership training and leading meetings, and attendance at ESOP conferences as a representative from her company. These opportunities to be heard helped build her skills to express her views and advocate for herself, which she says have helped her at work and outside of work. We will return to Loretta when we discuss how this helped her advance. These leadership skills transferred to other employees' personal lives as well. "Henry" participated in similar leadership training and learned public speaking by taking on different roles as an employee representative. He reflects on the broad impacts beyond the workplace. "I learned a lot that made it easier for me to participate outside of work: I felt more comfortable talking to my kids' teachers, coaching for my kids' baseball team and dealing with the other parents, and just being more comfortable in my neighborhood."

Internal Mentorship and Career Coaching: Apart from formal degrees or certifications, the employees report that the ESOP helps develop skills and income through advancement on the job without cutting into family time. We heard repeatedly about three forms of workforce support. First, there is mentorship for building the skills that can lead to advancement, or simply when doing a job well is incentivized by a desire for everyone to be at the top of their game in the workplace in order to increase company performance and value. Second, advancement is frequently based on the development of skills, rather than on credentials. Many of the people we interviewed had advanced to higher income positions with greater responsibility without higher education. Being tied to a firm that takes a long view means greater attention to internal promotions. Finally, with changing external requirements in certain areas for employees with particular certifications or degrees, some firms made a commitment to advance employees in these areas in order to retain a dedicated workforce. The ownership component is important to note here. If employees leave the firm, they take their ESOP funds with them. Unplanned premature, pre-retirement payout of these resources can pose a financial challenge for companies. It is not loyalty to the employee, but rather a good business investment to keep employees with the firm.

Tuition for Formal Education and Training: Tuition that is paid for upfront, not through reimbursement, preserves family resources. "Loretta" says she regularly trained and mentored new employees, yet when a position was posted for a job she knew how to do, she was not eligible because she did not have a BA. She learned there were new

credentialing criteria for remaining competitive in the marketplace. However, the need was for quality assurance training, not a BA. As noted earlier, she felt she had a "voice" and could advocate for herself in this environment. In response to her advocacy, the firm offered a quality assurance certification program, and paid for that, the books and the exam. "Loretta" says:

> *" If there's another quality job that opens up later on, which they're thinking that there should be because we're growing so fast here, then I can go for it and have a good chance of getting it. . . They arranged for the class for us. They're paying for it. That, to me ... It's like, 'All right, well, they're doing their part for me, so it's up to me to do my part for them.' I think it's a give and take here. I think you give, but they give too."*

She says that without the earlier training, she never would have spoken up for this opportunity which will provide her with more income and increase her ESOP contribution value. It is also important here to note the language used. While it is an employee owned company, it is not a cooperative or a collective. There is a clear management structure, and employees in most of the firms we studied talk about management as "them" rather than as "us." That said, job security appears quite strong, enabling this kind of internal staff advocacy and responsiveness.

Financial Education and Firm Financial Transparency: Education about finances, debt and balance sheets, savings, investments, returns, and profits (open book management at differing levels) all contribute to employees' understanding of their companies, and how some of these issues translate into their own personal financial management. Various forms of open book management and financial training build skills and knowledge that are transferable to personal financial management, improving overall asset health. Employees learn about developing a balance sheet, which is useful for workplace advancement.

This knowledge helped many of them plan their own personal assets. Unlike the rest of the labor market which is trending in the opposite direction, these ESOP firms seem to be structured to promote longevity, investment, and future orientation. "Duane" reports, for example, that knowledge about the firm's finances and planning provided information and a level of confidence about his own job security. This has helped him to make informed and sound investment decisions for himself and his family. He explains:

> *"Because we get financial information every month I had a pretty good idea all the time if my job was secure, because we had layoffs. But I always knew pretty much what was going on, and that made a big difference for the choices I was making for my family – you know, could we go on that vacation or did we have to save the money because I was gonna be out of a job? It made it so we could do more as a family with less worry"*

Many interviewees say they thought more about personal financial planning because of the ESOP and their financial knowledge of firm resources, and this led them to talk to their children and extended families about financial planning, perhaps more than their peers would. However, a few say that the ESOP account value itself was something that they feel they cannot count on firmly, so it does not impact their current expenditures. Its impact on family lives was minimal until employees were at an age where they could begin to draw or borrow from it, or when they were approaching retirement age and began to feel secure about accessing their accounts. Several employees cite the ESOP and firm training efforts as stimulating their interest in financial planning and providing the tools to help them ensure a sound foundation for their families in their future. We heard from "Rosa", who works in accounting, earlier. She had said that retirement was never discussed in her family. The information she gained through her firm helped her make the connection for herself and she was able to share it with her extended family. She says:

> *"There is six of us, two girls and three boys after me, so one of the things I have been telling my brothers is really invest in a 401(k). Not just that but if you do have an ESOP understand what that is … And the good thing is that we've all talked about it and so we've all gotten the same where we want a retirement plan."*

3. Enabling Asset Preservation and Investments

ESOPs offer the opportunity for making intergenerational investments, creating opportunities for parents to help their children while still living, as well as potentially through inheritance of ESOP values if some resources remain after death. They are also a form of life insurance, as a few noted. If they should die before they retire, the ESOP value is transferred to their families. Several mentioned the sense of security this provided them. ESOP accounts can also be drawn upon to reduce debt or cover unexpected economic shocks, resources which are not income dependent.

Intergenerational Transfers of Asset Wealth: Among employees who reached the age or years of tenure at the firm when they became eligible to either borrow or draw upon their ESOP accounts, a number say this enabled them to spend on their families while still retaining resources for retirement security. They used ESOP accounts to pay for children's college tuition, weddings, and down payments on a home. Others say that they are planning, once retired, to use the ESOP for these purposes. Many report that they will be secure in retirement and will not have to draw on their children's resources for security and wellbeing, a financial situation many of them experienced with their own parents as they aged. Several of the interviewees talk about their hope that they will have some resources to pass on to their children or grandchildren when they die, a legacy of sorts. Parental ESOP wealth transfers to children while living increase young and adult children's security, investments and next-generation opportunities. One such example is provided by "Janna", a divorced 64-year-old African-American woman whose ESOP is valued at about $1.3 million.

"I pulled money out [of the ESOP] over recent periods of time. Bought family land… that will be of assistance to [my family] when I retire. I used … my ESOP helping family and as investments. My daughter became disabled and not able to work. The ESOP has helped me provide assistance to help her and my grandson."

Since many of the ESOPs also have profit sharing as a way to share the company's wealth prior to retirement, profit sharing can be an important element of the ESOP model. While a number of people used ESOP accounts to help their children through college, others used profit sharing in a strategic way. For example, "Donny" is a Latino male who gets profit sharing from his firm every three months, plus a December bonus. He describes their impact:

" I started saving to send my kids to college. They're at the college now. Most of the money of the profit sharing goes to the…college saving account in [Bank xx], I put most. When they go the college, it was just a little money to pay, not much. When they finish college they don't have to pay much, just a little. Just a little… for the oldest, I had $17,000. For the second one was about $11,000. I still have profit sharing for her [third child], we're building up the profit sharing for her. She's a freshman in the high school now, and she got only $5,000. I'm not too worried about her because she's so good, maybe is not going to need that money but she has it. You know what besides, it helped me a lot for the Quinceañera."

ESOPs Help Employees Avoid Debt: A number of the ESOPs work to keep their employees as stable and productive as possible because they understand that stability improves performance and profits. As a result, some companies enable employees to borrow against their ESOP accounts after a period of employment, and others develop no-interest loan opportunities to help with economic challenges, and at times life investments such as education or home ownership. For "Louise", a 57 -year-old African-American woman who has been at her company for 29 years and has very limited savings, being able to draw from her ESOP account provides a crucial safety net in case of emergencies: "I always like to have some emergency money. It's scary to be living paycheck to paycheck. You're always wondering what if something happens, like the car breaks down, you need something, you've gotta have some plumbing, anything can happen. So that's what I had it for." Stability is also critical for "Linda," a white woman in her 50's with a high school degree who has been in the ESOP for 24 years, earning $22/hour with a $266,000 ESOP account:

" My company was here for me and for others when there were hard times. Like when my mother was sick and I had to go to the hospital a lot and had some big extra expenses, they made me a small no-interest loan, and then it got paid back out of my paycheck. That really helped my family keep from going in debt with credit cards and all that. And, I borrowed from my account to help my daughter with college, so still paying back into that."

Similarly, many of the ESOP companies had a wellness committee and pay explicit attention to the safety of the workforce. Employees report that accident rates overall are low and healthy employees were seen to reduce health insurance costs, sick leave work breaks, and improve the firm's bottom line. At the same time, the health and wellbeing of the employees overall reduced their own costs for medical debt or income loss from absences. The risk of ESOP values dropping, or of an employee leaving and starting to withdraw funds, seems to encourage greater support of the employee and thus helps them avoid debt and support investment in their future. The absence of debt means that households can use their resources to leverage opportunity and maintain economic stability and security for themselves and their families.

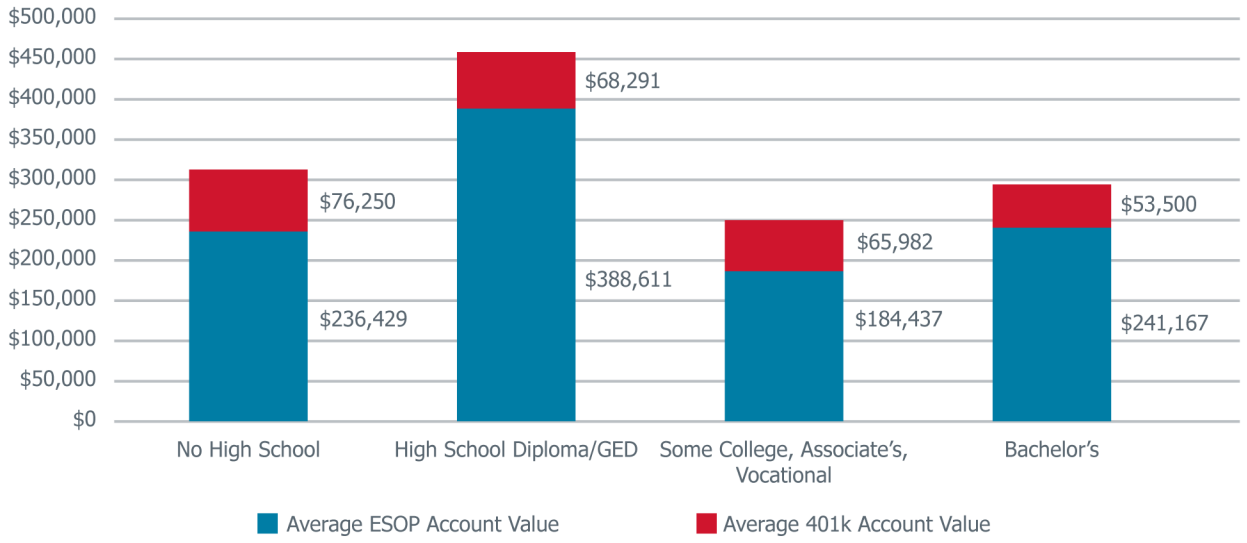
Education and Training Lead to Advancement: The education and training on multiple levels led to opportunities for advancement. There is limited room for occupational advancement in many of the firms/ sectors where we interviewed, in part because there is significant employment stability and new employment opportunities often arise only with expansion or employee retirement. The ESOP companies often support education and training that employees, on occasion, leverage by seeking job opportunities elsewhere, trading off ESOP growth for income and position advancement. Some who left for new opportunities did return to the company when openings arose. Higher education, however, was not the only pathway to advancement. For "Joe", a 42-year-old HS graduate with $400,000 in his ESOP account, his 23 years at the ESOP company have seen him advance through 4 positions. Currently training for a management position, the opportunities for advancement are extensive, as he says: "It's basically like an apprenticeship here… This job helped me to buy my first house and it increased in value and helped me to buy my second house." Similarly, "Delia," a 64-year-old African American woman, with 29 years tenure at the company is a good example of this. She moved within the firm from Clerk Typist to Administrative Assistant to Executive Assistant to Billing Manager to Senior Project Analyst. She finished her Associate's degree and obtained a Bachelor's degree, all while working at the company and with its support. Delia says:

> *" I have more focus and loyalty and really put a lot of effort into the work that I do here. I understand that the better I am…the better we will do at the end of the day, and that will translate into me having more stock, or having something to walk away with when it's all said and done."*

Joe, Delia, and others interviewed were able to preserve their own personal asset wealth by having education and training paid for by the company, and were able to invest in themselves to enable advancements in income and skill that could be leveraged within or outside of the firm. When employees did not seek higher education, they were still able to see their ESOP value grow and could contribute to 401(k) accounts, building significant wealth (Table 8). In fact, those low-to moderate-earners in our study who have a high-school diploma or GED and those with no high-school diploma have saved more in their combined ESOP and 401(k) accounts than have those with Bachelor and Associate degrees.

Table 8

Average Assets of Interviewees by Education



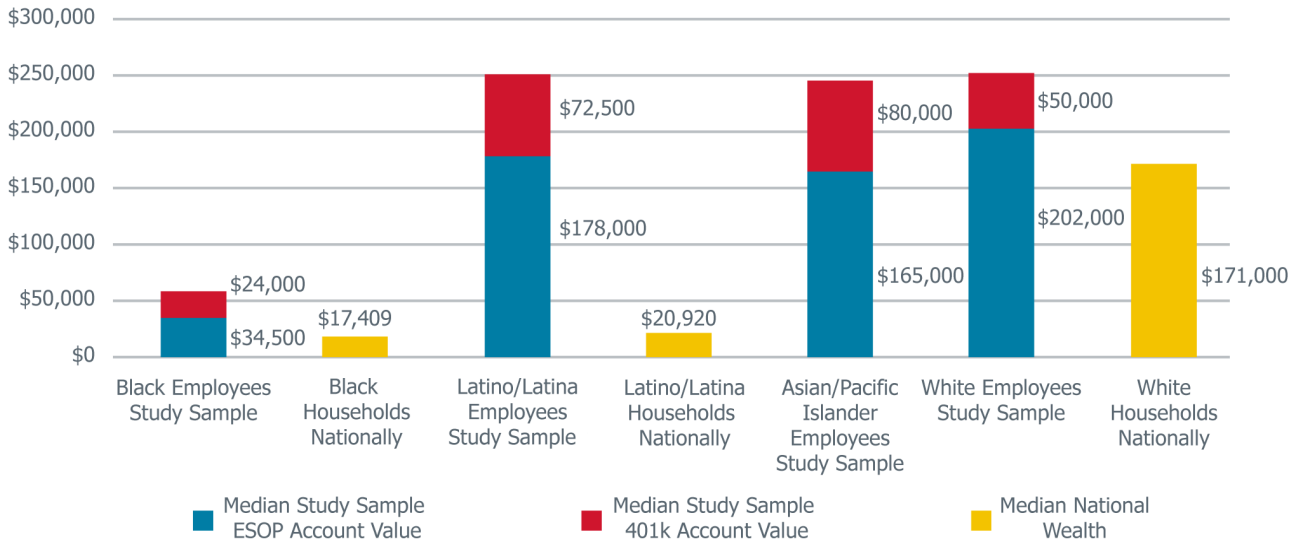
4. Increasing Access and Inclusion by Gender, Race, and Ethnicity

Two key drivers of differences in wealth ownership by gender and race are occupational segregation and wage gaps. About 40% of women workers are employed in female dominated jobs (jobs in which at least 75% of workers are women), and this is mirrored for male workers[38]. Male-dominated occupations overwhelmingly pay more than female-dominated ones[39]. On top of this, white men are overrepresented in jobs with the highest levels of authority, earnings, and job training[40] while black and Latina women are often concentrated in low-wage, low-prestige jobs that lack benefits[41]. Those who earn less have reduced capacity to save in general. For retirement savings specifically, even though women who are eligible for retirement accounts make contributions as often as men do, women accumulate less wealth due to their lower earnings[42,43]. Against this backdrop of wage inequality and occupational segregation, the gendered wealth gap is further driven by the financial burdens of caregiving responsibilities and changes in household composition falling disproportionately on women[44].

Women and people of color in the ESOPs studied here are faring much better than women and people of color nationally in building wealth. This suggests that employee ownership is an important policy strategy that can reverse some of the national wealth gaps. While wealth gaps still exist among the employees in our sample, they are far less pronounced than in the general population (Table 9). In fact, the individual workers of color who we interviewed have savings that are much higher than that of households of color nationally. For example, the median wealth of Latinx ESOP employees in our sample is nearly 12 times the wealth of the national median for Latinx households. Black ESOP employees have approximately 3 times the wealth of Black households nationally (national data are unavailable for Asian/Pacific Islander households)[45].

Table 9

ESOP and 401(k) Account Values of Interviewees Earning Less Than the National Median Compared to National Wealth Data by Race and Ethnicity



Overall, black ESOP employees we interviewed have less tenure than their counterparts, and thus have not yet built large ESOP accounts and 401(k)s when compared to the white workforce. Additionally, the majority of the black women we interviewed work in medical service positions that do not offer high wage compensation, exacerbating this gap. This is symbolic of occupational segregation nationally, where low-to medium-skilled people of color are less likely to secure jobs in higher-income fields. Gender and racial diversity is relatively new within the ESOP companies where we interviewed. We found that this diversity has been expanding, mainly within the past 12 years. While it appears that racial, ethnic, and gender barriers to entry have lessened, questions about advancement remain. Nonetheless, we still saw significantly larger assets among the workers of color we interviewed when compared to national data. Two examples are noted here.

"Janay" is an African-American woman in her 50's who has been with the company for 31 years, and with its conversion to ESOP 15 years ago she became an employee owner. She started at $3.45/hour and is now a medical records scheduler at $16.01/hour and feels her wage is "about right" for the rural area where she lives, despite wishing it were more. She has one child with no other earners in the family, has $36,000 in her ESOP account, and also has a 401(k) but is not sure about its value. She owns a mobile home and has no mortgage. She owns a car with about $700 debt for repairs, but has no other debt. She looks forward to being able to help her child with college expenses by using some of her ESOP funds.

Overall, we found that employees of color do not experience overt ethnic or racial disparities in the environment. "Jorge" is a Latino man who has less than a high school education, and has been at the company for 24 years. He makes $23/hour and is married. He has approximately $450,000 in his ESOP and does not know his 401(k) value. He feels he is very much part of the company and has a voice, despite differences that he acknowledges of education, ethnicity and race among his co-workers. The ownership factor gives him a more equal footing in the workplace. He says,

> *"Nobody here is gonna say we go home every night happy and dancing… It's not like that. We still have our struggles here, we still have differences of opinions, I mean, it's gonna happen. But at least in a job like this you're allowed to speak your mind, say what you think, give them suggestions as to how to get through it…"*

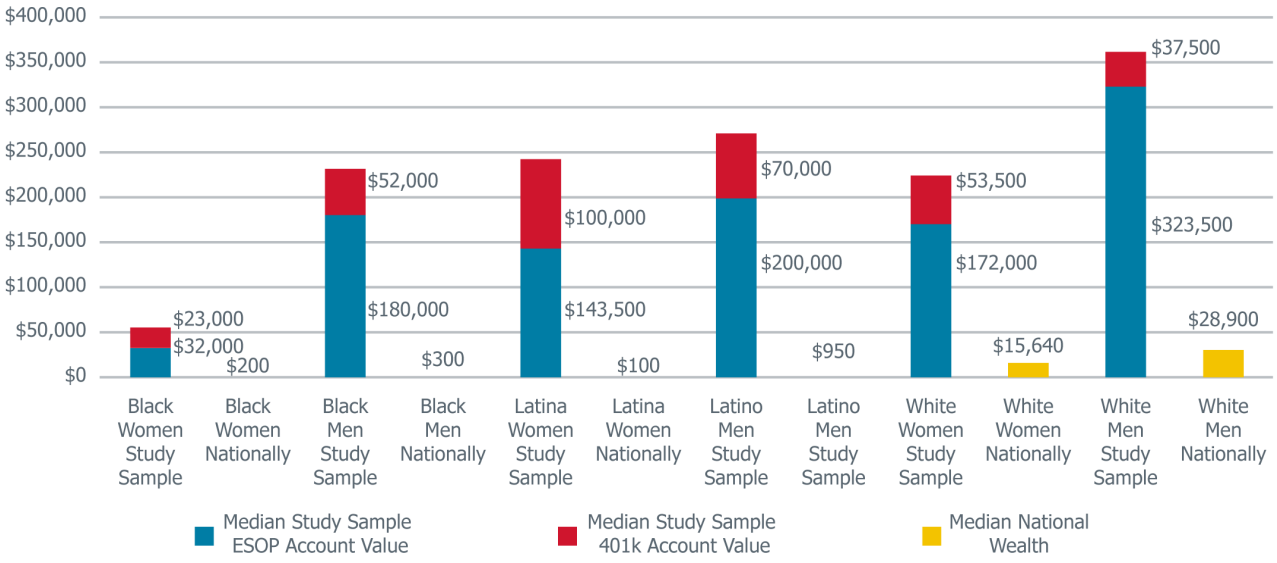
Yet others did say that while the ESOP account growth was structured in an equitable way among employees, issues of racial or ethnic barriers to advancement do exist in some of their companies. This suggests that the asset building effects of the ESOP account are important for those who secure jobs in employee owned companies, but the ownership structure is not, in itself, sufficient to ensure internal mobility opportunities or even job entry. This reflects national patterns in occupational segregation and discrimination.

It is clear that both racial and gender disparities contribute to the wealth gaps experienced by the women of color we interviewed. We compared the wealth of the individual workers in our sample with that of the wealth of single women. This is an appropriate comparison because the data from our study are about individual workers' 401(k) and ESOP accounts, thus comparing individual workers with individual workers.

As shown in Table 10, the individual earners we studied (who were not necessarily single) have much more wealth than single male and single female workers' total wealth nationally. For instance, black women in our study had an average of over 275 times the wealth of black single women nationally[46]. Still, in our study sample of ESOPs, black women have about one-fourth the average wealth of black men, white women, and Latinx employees. All of these groups of employees have lower assets than do white men in our low- to moderate-income sample when considering both ESOP and 401(k) accounts, although they have higher average assets than single white men in the national sample.

Table 10

ESOP and 401(k) Account Values of Interviewees Compared to National Wealth Data by Race, Ethnicity, and Gender



5. Improving Health and Well-being through Quality of Work Life and Balance

The overall impression from the study is that the combination of employee stock ownership, and the commitment that brings to the employees to make sure everyone is fit and able to do their best in the workplace, produces more emotionally and physically healthy employees. Many of the firms visited have health and wellness committees that have significant employee input and participation. A focus on good health can be considered an important asset building mechanism. Research shows that workplace experiences, especially those that cause stress, can directly affect employee and family health[47, 48]. A number of interviewees explained how ESOP ownership decreased their stress, and how their company enhances their quality of work life and work-life balance. As described earlier, "Linda" says the company greatly relieved her stress when her mother was in the hospital by providing a no-interest loan to help with medical expenses, which kept her family from going into debt with credit cards. "Carol", a machine operator who is married with grown children, describes how her job at the ESOP company is less stressful than her friends' jobs at other companies:

> *"A lot of my friends spend their whole weekend complaining about work: It's such a waste of time, a drain. [Being at an ESOP company] -It makes me a happier person in the house and with my family and friends. I just don't have to have the same stress as others. I feel more secure with my job and can talk to them at work if there are problems."*

She says this security carried over to making her family "feel" and "be" more secure especially when she was raising her children.

Similarly, “Donna”, a divorced woman with adult children who is in her early 60s, says: “I feel more secure at an employee-owned company. [I] also feel that there is less conflict between employees…Management and co-workers care about me, not just as an employee, but as a person.” “Claire”, a divorced hospital aide with children in her early 40s, says that that the ESOP led to better workplace relations:

> *“Things changed when the company became employee-owned. There is more of a sense of community….People are hearing about the ESOP and choosing to come here because of it. I am much more secure than my family was when I was growing up, and I have tried to communicate to my kids the importance of finding security.”*

Several employees emphasize that their companies are committed to promoting work-life balance. “Lainy”, a married white woman with children in her early 40s who works as a machine operator, says: “I didn’t expect to be here this long, you know what I’m saying?… Being here actually fit into my lifestyle….They work more with your family like if you need time off. They’re more flexible than some companies…”. “Rosa”, a Latina woman in her 40s who is married with two sons, directly says that she is a better parent because of her experience with employee ownership:“[The ESOP makes a difference] in thinking of my children, and how I think about my job, as opposed to how others think about their jobs…when I think of my sons, I know I am a bit better of a role model because of being an employee-owner.”

All of these positive quality of work life experiences translate into asset building in subtle but real ways. Assets of knowledge, modeling, and parental time and focus all contribute to the employee’s health and are a form of intergenerational wealth transfer to the next generation. Good health enables asset building by enabling focus, resources for investment, and the ability to sustain steady participation in work- thus securing a regular income and potential income increases over time and reducing the risk of debt.

In sum, the data from our study show that ESOPs can support the asset building of low- and moderate-income employees:

- Increasing retirement security when compared to national figures.
- Supporting development of leadership, mentoring, formal education, training, and financial skills.
- Leading to intergenerational wealth transfers, as income resources are spent on and invested in families while still building resources for retirement and possibly for inheritances.
- Reducing, although not eliminating, gender and race wealth inequality.
- Enhancing quality of work life and work-family balance, and lowering levels of stress, that can affect employee and family health and wellbeing.
- Improving overall economic and social stability and security.

IV. Translating Findings into Action for Asset Building: Stakeholder Roles

Assets are important because they increase economic security and enable new opportunities. For those workers in this study, ESOPs provide an opportunity to build wealth not available through income alone. The employment characteristics that build the assets of low- and moderate-income workers through ESOPs are not unlike those that support "good" or "quality" jobs, but with one important exception. Growing the financial wealth of employees through ownership is an essential ingredient to actual rather than potential asset building through work. Ownership ties together wealth building with business success, motivating employees to do well by ensuring the firm and the workforce do well.

This research demonstrates that employee ownership can be a wealth building tool that brings economic security, builds opportunities for intergenerational wealth transfers, and provides real asset returns from work which are not dependent on income gains alone. Structured employee ownership, delivered through an ESOP, is the source of asset building beyond what is generally characterized as good or quality jobs. While many of the opportunities that support asset building through ESOPs reflect the high standards of good or quality job practice[49,50], this research suggests asset building without the strategic and substantive tie to the ESOP account does not have the same transformative effects.

To be clear, across the businesses where we conducted interviews, there are substantial variations in the level of employee engagement in place due to the ESOP. Those with a high level of participation provide a good proof of concept. However, we also found that in many companies, employees are not particularly engaged in a wide range of activities even when available, nor do they always learn or understand fully the corporate financial information that is presented to them. Even in these less participatory firms, or in firms where significant numbers of employees do not actively engage in all that is available, there is sufficient evidence to conclude that ESOP ownership provides low- and moderate-income employees with significant opportunity to build financial asset wealth.

We learned a lot about strategies to increase the opportunity for ESOP companies to build assets of the workforce, and there is more to learn. A summary of key insights and possible suggestions follows, drawn from discussions about how to enhance the opportunities from ESOPs from the point of view of different stakeholders.

ESOP Structure

- Structure and opportunities for leadership and communication development: Encourage rotating ESOP committee activity, and include this in creation of job descriptions, hiring interviews, and new employee mentorship. Hold "town halls" and rotate employees helping to facilitate the meetings. This builds the confidence to grow and lead in jobs and to seek out new employment opportunities within and external to the firm.
- Structure opportunities for informal and formal feedback about improving business operations and management: Every other year consider inviting employees to submit a review of their direct management, senior leadership, and general management of the company. Incorporate findings into strategic plans to encourage direct contributions to the company's core processes. On a more regular basis, encourage team and individual feedback discussions about work in order to make real-time adjustments. This ensures employees feel they have a stake in operations sufficient to make changes that affect the firm's bottom line- improving their overall asset wealth.
- Provide tuition support for both degree and non-degree courses: Pay for these upfront and provide mentoring and support for success through the workplace. When needed, allow flexible scheduling to take classes or prepare for exams. This saves personal budget assets and builds human capital.
- Consider creating a more progressive ESOP share structure so that lowest paid employees receive a larger percentage of income share of ESOP value each year consistent with pension law: This is a way to overcome some of the wealth inequality gap that continues even with ESOPs when share value is tied to income or earnings.
- Teach about the financial resources and planning of the firm and make linkages to personal family budgets: This helps inform employees about the company while helping transfer the skills and knowledge to other contexts that may help with personal asset development.

Public Policies

A variety of federal, state, and local policies have been designed to encourage employee ownership.

- The Main Street Employee Ownership Act with bipartisan support was incorporated into the defense authorization bill signed into law in August 2018. This bill directs the Small Business Administration to support employee ownership in a variety of ways including loans, loan guarantees, and technical assistance. The bill was passed with an eye toward the large number of retiring "baby boomer" business owners who, over the next decade, may be interested in selling their companies to their employees[51].
- Preferred status certification would allow women-owned, veteran-owned, minority-owned ESOP companies to not lose their preferred status certification because they are majority owned by an ESOP trust. Instead of viewing the trust as a legal entity and disqualifying an ESOP-owned company, certifying agencies could instead consider the identities of the ESOP participants in whose interest the trust owns those shares[52].
- State Centers focused on advancing employee ownership should exist in each state. These are local, financially sustainable agencies that teach business owners about the value of employee ownership based on the model of the Pennsylvania Center for Employee Ownership, the Ohio Center for Employee Ownership, the Vermont Center for Employee Ownership, the Rutgers New Jersey/New York Center for Employee Ownership, and a growing list of other state centers. State centers provide resources and technical assistance to firms considering or adopting employee ownership. At the local level support for employee owned businesses targets job retention, enhancing community stability and local employee purchasing power[53].
- Qualified Opportunity Zones' fund investments could finance ESOP conversion opportunities as an inclusive economic development strategy. The Zone provisions, included in the Tax Cuts and Jobs Act of 2017, are designed to address place-based economic inequality by enabling investors to defer and reduce capital gains, but the law needs to be amended to make ESOPs possible[54].

Stakeholder Roles: Philanthropy, Academia, Private Investors, Organized Labor, and Communities

- Philanthropy: Large national, as well as local family and community philanthropies can play an important role in three ways. First, they can spread knowledge about ESOPs to employers and community players. They can make opportunities for ESOPs more broadly visible and understood within communities where there remain existing privately held companies, particularly in those communities where the firms employ significant numbers of women and/or people of color. Second, these groups might consider the development of an ESOP investment fund through

a combination of philanthropic actors, or through a program-related investment model of one sole philanthropy. The goal is to increase the ease and accessibility of ESOP conversions from retiring business owners that will improve the asset building opportunities of low- and moderate-income employees. Third, foundations can contribute to an education and training fund to help ESOPs structure the transition of their organizations in participatory ways, accelerating the asset building opportunities of the workforce[55].

- Academia: Both undergraduate and graduate business schools and MBA programs, and other academic programs and departments, could include courses and experiences related to shared capital practices of all kinds: ESOPs, Worker Cooperatives, Worker Trusts, and Profit Sharing plans. The Curriculum Library on Employee Ownership (cleo.rutgers.edu) has a wide range of resources designed to assist professors and instructors in teaching about employee ownership.
- Private/ Social Impact Investors: Private investors are vital to the creation of employee owned business. Investors and financial markets need to learn about the various types of employee ownership structures, including tax and legal rules that are significantly different from those of conventional corporate structures, in order to lower the costs of employee ownership transitions. Impact investors have a particularly important role to play in piloting employee ownership transactions to establish underwriting data and prove the viability of employee ownership transactions and investments to conventional investors. By being the first to jump in, impact investors can pave the way for significant growth in employee owned businesses by normalizing ESOP conversions. Financial service firms might consider creating ESOP bonds for investors to buy. The bonds could help provide capital to develop more ESOPs. A range of discussion in this arena is emerging[56]. The Rutgers Institute for the Study of Employee Ownership and Profit Sharing sponsors an annual conference on Private Equity Transactions and Employee Share Ownership to document cases where private equity firms include employees in sharing the wealth.
- Organized Labor: Unions have traditionally been skeptical of employee ownership since it blurs the lines between management and workers, but a number of unions have become interested recently in the potential for employee ownership to enhance worker power and job security[57]. The Rutgers Institute for the Study of Employee Ownership and Profit Sharing sponsors an annual conference on Unions and Worker Ownership.
- Community Advocates: Increasingly community players are involved in finding ways to stem the tide of industry loss in communities. The more they proactively approach business owners and educate residents about the opportunity ESOPs present, the more likely that asset building opportunities will be retained or grow in their community[58].

V. Next Steps and Key Questions

This work raises new questions that warrant further examination and greater visibility if we are to pursue new strategies and structures that build equity and the assets of all those who work – reducing racial, ethnic, gender, class and geographic wealth disparities. There is a depth of additional insights from these data yet to be mined. We will continue to analyze the interviews in order to examine some of the following questions:

- What more can we learn about how employee ownership benefits children in low-income families?
- Does employee ownership provide insight into ways that ownership improves wealth and opportunity for women overall and women of color in particular?
- What does employee ownership demonstrate about the importance of ownership in the pursuit of good quality decent jobs?
- How, if at all, do men of color benefit from employee ownership in ways that are unique?
- Does employee ownership have an impact on occupational segregation and discrimination and is it a mechanism to shift these social barriers?
- What can we learn from employee ownership about workforce education, training, and advancement for low-income earners?
- Are there any lessons about how the firms transitioned to becoming ESOP companies that are important to understanding the asset building opportunities for the employees and/or the productivity gains for the firm?
- In what ways does employee ownership benefit low- and moderate-income workers who are close to retirement?

It is our hope that by continuing to investigate these questions we can identify and specify business practices, stakeholder roles, and public policy investments that will elevate opportunities for work-based asset building. New structures of work and relations to the workplace do not preclude the opportunity for everyone to build wealth through work. Work should and can ensure economic and social stability, and greater opportunities and wellbeing for families, communities, states and the nation. We hope further research from this study about the role of ESOPs, along with the important work of others in these efforts, will serve to elevate and widely embed these findings into policies and practices, increasing the wealth and security of all those who work.

Research Dissemination – To Date

Presentations

Schur, L. (Rutgers University) Does Employee Ownership Benefit Low- and Moderate-Income Workers? IAFEP, University of Ljubljana, July 2018

Boguslaw, J. (Brandeis University) Employee Ownership and Child Well-Being: Preliminary Findings. Beyster Symposium, La Jolla CA June 2018

Boguslaw, J. "Shared Capital and Workforce Development: Revisiting Levers of Opportunity." Session: Low- Wage and Low-Skilled Workers: Conceptualizing New Organizational Structures and Practices for Workforce Development and Wealth Building. Labor and Employment Relations Association (LERA) Annual Meeting, Baltimore, MD. June 2018

Boguslaw, J. Impacts of Employee Ownership for Women and their Families: Findings from the W.K. Kellogg Foundation Rutgers Study. 69th Annual Conference: Jobs, Opportunity, and Equality in the New World of Work. Labor and Employment Relations Association, Anaheim, CA. June 2017

Boguslaw, J. Do Shared Capital Workplaces Benefit Vulnerable Children? The Beyster Symposium, La Jolla, CA. June 2018. Available on youtube.com.

Kellogg Research Team. Impact of Employee Ownership on Modest Income Workers and Their Families. The Beyster Symposium. Beyster Foundation, Employee Ownership Foundation, Rutgers University School of Management and Labor Relations, La Jolla, CA. June 2017

Kellogg Research Team. The W.K. Kellogg Foundation Rutgers' Study on the Working Middle Class and Employee Stock Ownership: Can Families Build Significant Asset Wealth? Kelso Symposium. New Brunswick, NJ. January 2017

Publications

Boguslaw, J. (2018) "Valuing Workers through Shared Capital Investments" Part 2 Chapter 7 (103-114) Vol. 2 Investing in Work in Investing in America's Workforce: Improving Outcomes for Workers and Employers. S.Anderson, et. al. W.E. Upjohn Institute. Kalamazoo, MI . November

Berry, D. (2018) Employee "Ownership and Skill Development for Modest Income Workers and Women" Part 2 Chapter 10 (147-162). Vol. 2 Investing in Work in Investing in America's Workforce: Improving Outcomes for Workers and Employers S.Anderson, et. al. W.E. Upjohn Institute. Kalamazoo, MI . November

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The Institute for the Study of Employee Ownership and Profit Sharing examines existing and emerging models of employee ownership and profit sharing in the corporation and society within the United States and around the world. The Institute studies approaches that broaden financial participation and inclusion in the economy and business organizations, and allow employees to be fully engaged and share in the rewards of their work. For more information of the Institute please see our website:

https://smlr.rutgers.edu/content/institute-study-employee-ownership-and-profit-sharing

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Data on ESOPs, 401k savings, and pay

Douglas Kruse

I have assembled data on ESOP employer contributions and plan income per year relative to industry pay averages, with comparisons to other defined contribution (DC) plans where employers make contributions (primarily 401k's). This study uses the U.S. Department of Labor's Form 5500 research files with data on all pension plans over the 2010-2018 period, matched to yearly industry average pay data from 482 industries in the U.S. Bureau of Labor Statistics Current Employment Statistics database. The study answers the question: How does the average employee come out when the employer contributions of ESOPs are compared to the employer contributions of other DC plans? The study looks at the experience of individual workers when the company takes responsibility for their retirement savings.

Note: This is comparing apples to apples, namely, ESOP companies with only employer contributions to other DC companies with only employer contributions, to understand the relative wealth of individual employees when the employee is not asked to pay for her or his retirement. Plans without any employer contributions over the 2010-2018 period are excluded from the study. Also note that all data are weighted by number of active plan participants, so these figures reflect outcomes for the average employee as opposed to the average plan.

The findings are represented in five tables in this memo, illustrated by six figures. The key findings are:

1. Looking at all Federal records for 2010-2018, the dollar value of ESOP contributions plus plan income per employee is substantially higher for ESOP employees than for all other DC plan employees on average and at the median. See Table 1 and Figure 1.

2. This is also true as a percent of industry base pay on average and at the median. See Table 1 and Figure 1.

3. ESOP employees have higher industry average base pay compared to the employees of all other DC plans. See Table 1 and Figure 1.

4. Analyzing the data by year across the 2010-2018 period, the dollar value of ESOP contributions plus plan income per employee is higher for ESOP employees compared to the employees in other DC plans in every year, on average and at the median. See Table 2 and Figure 2.

5. Analyzing the data by industry, the dollar value of ESOP contributions plus plan income per employee is higher for ESOP employees than for the employees of other DC plans in

every industry, on average and at the median. The combined industry base pay, employer contributions, and plan income are higher for ESOP participants than for other DC participants in each industry except retail and information. See Table 3 and Figure 3. (Note: Agriculture and mining are not included where ESOPs are not common and the sample size is too small.)

6. Analyzing the data by whether and what type of other pension plans are in the company, the dollar value of contributions plus plan income per employee is higher for ESOP employees where there is no other plan (i.e., standalone ESOPs) than for other DC employees where there is no other plan (i.e., standalone other DC plans), on average and at the median. This is also true as a percent of industry base pay on average and at the median. See Table 4 and Figure 4.

7. When an ESOP is combined with other DC plans and defined benefit plans, the dollar value of ESOP contributions plus plan income per employee always increases in cases where it is combined with other DC plans. See Table 4 and Figure 4.

8. The dollar value of ESOP contributions plus plan income per employee is always higher than that value in other DC plans in every possible combination of ESOPs and DC plans. See Table 4 and Figure 4.

9. The total assets per participating employee in ESOPs is always higher than the total assets per participating employee in other DC plans across all years and in each individual year, on average and at the median, and as a percent of base pay. See Table 5 and Figure 5.

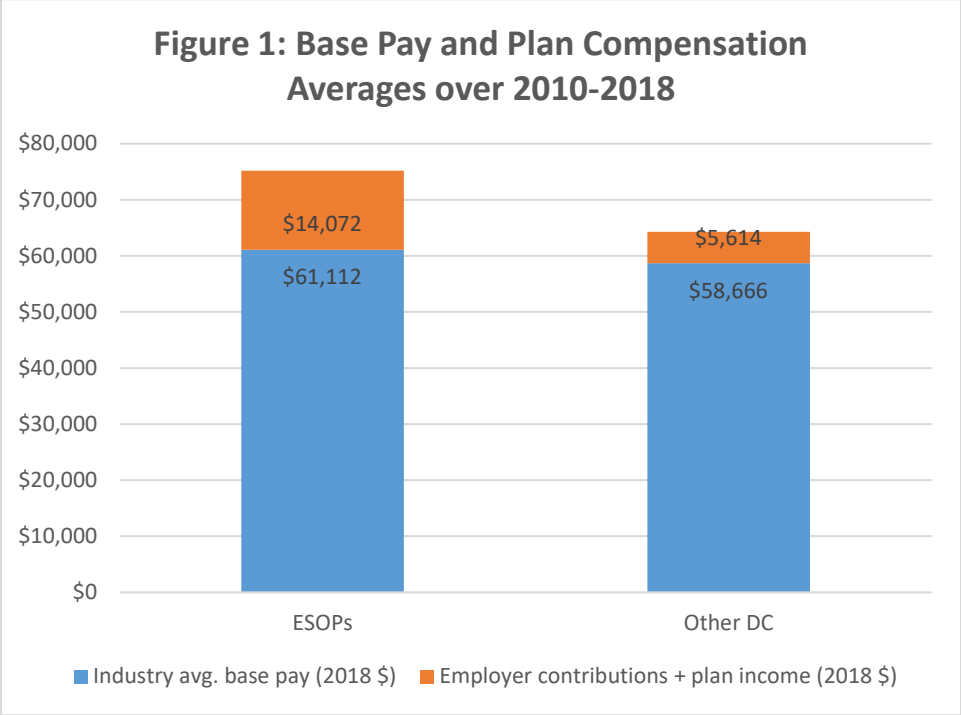
10. The annual rate of return on assets within ESOPs (counting just investment returns and excluding contributions and distributions) has a slightly higher mean and median among ESOPs than among other DC plans across the 2010-2018 period. See Table 5. The comparison, however, varies by year. As shown in Figure 6, the average annual rate of return among all ESOPs is less variable across years than among other DC plans. The overall yearly pattern matches the pattern of stock market returns over this period (Years of Stock Market Returns (thebalance.com).

I hope this is useful and am glad to answer questions about these data and findings.

Table 1: Base Pay and Plan Compensation for ESOPs and Other DC Plans, 2010-2018

	Industry avg. base pay (2018 $)	Employer contribution + plan income per participant				# of plan-year obs
		Dollar value (2018 $)		Percent of base pay		
		Mean	Median	Mean	Median	
	(1)	(2)	(3)	(4)	(5)	(6)
ESOPs	$61,112	$14,072	$8,371	23.0%	12.9%	45,909
Other DC	$58,666	$5,614	$2,386	9.0%	4.4%	4,465,740

Based on U.S. Department of Labor's Form 5500 Research Files matched to U.S. Bureau of Labor Statistics Current Employment Statistics data.
Restricted to plans with any employer contributions over 2010-2018
All dollar values adjusted to 2018 values
Mean values have been winsorized at upper and lower 1%
All values weighted by number of active plan participants



RUTGERS

Table 2: Base Pay and Plan Compensation by Year

	Industry avg. base pay (2018 $)	Employer contribution + plan income per participant				# of obs
		Dollar value (2018 $)		Percent of base pay		
		Mean	Median	Mean	Median	
	(1)	(2)	(3)	(4)	(5)	(6)
ESOPs						
2010	$60,990	$16,001	$9,839	25.7%	17.0%	4,947
2011	$60,280	$6,563	$1,726	11.7%	4.4%	5,018
2012	$59,728	$15,047	$12,853	24.9%	19.0%	5,073
2013	$59,850	$21,788	$18,823	34.5%	25.6%	5,083
2014	$60,412	$14,625	$10,835	24.7%	18.2%	5,123
2015	$59,451	$7,651	$3,232	13.9%	4.8%	5,141
2016	$61,661	$16,111	$12,337	25.5%	18.0%	5,156
2017	$63,249	$23,654	$18,617	35.6%	28.0%	5,211
2018	$64,269	$5,508	-$175	11.4%	-0.5%	5,157
Other DC						
2010	$57,834	$7,275	$4,261	11.8%	7.6%	478,658
2011	$57,207	$1,729	$544	2.8%	1.0%	482,872
2012	$57,258	$6,960	$3,985	11.3%	7.2%	486,712
2013	$58,177	$10,589	$6,070	17.1%	11.0%	490,283
2014	$58,233	$5,676	$3,204	9.1%	5.7%	464,953
2015	$59,176	$1,939	$885	3.1%	1.6%	504,676
2016	$59,511	$6,078	$3,468	9.5%	6.0%	512,309
2017	$60,017	$11,493	$6,636	17.9%	11.5%	519,771
2018	$59,926	-$796	-$555	-1.2%	-1.1%	525,506

Based on U.S. Department of Labor's Form 5500 Research Files matched to U.S. Bureau of Labor Statistics Current Employment Statistics data.

Restricted to plans with any employer contributions over 2010-2018

All dollar values adjusted to 2018 values

Mean values have been winsorized at upper and lower 1%

All values weighted by number of active plan participants

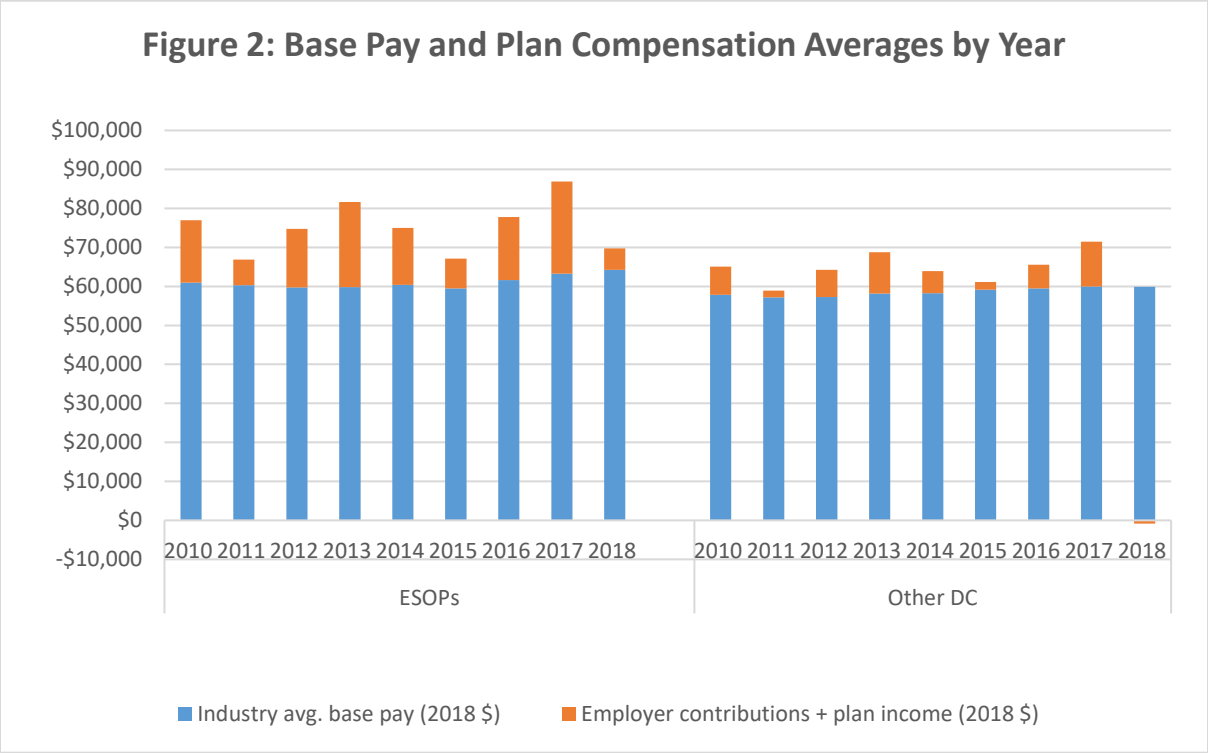


Figure 2: Base Pay and Plan Compensation Averages by Year
$100,000
$90,000
$80,000
$70,000
$60,000
$50,000
$40,000
$30,000
$20,000
$10,000
$0
-$10,000
2010 2011 2012 2013 2014 2015 2016 2017 2018
ESOPs
2010 2011 2012 2013 2014 2015 2016 2017 2018
Other DC
Industry avg. base pay (2018 $)
Employer contributions + plan income (2018 $)

Table 3: Base Pay and Plan Compensation by Industry, 2010-2018

	Industry avg. base pay (2018 $)	Employer contribution + plan income per participant				# of plan-year obs
		Dollar value (2018 $)		Percent of base pay		
		Mean	Median	Mean	Median	
	(1)	(2)	(3)	(4)	(5)	(6)
Construction						
ESOPs	$60,597	$17,844	$10,393	29.6%	17.3%	5,544
Other DC	$59,980	$6,101	$3,518	10.1%	5.9%	368,174
Manufacturing						
ESOPs	$58,413	$21,662	$13,709	36.6%	23.4%	9,658
Other DC	$54,494	$7,260	$3,873	12.9%	7.4%	475,175
Wholesale						
ESOPs	$57,849	$22,731	$11,999	38.6%	21.6%	4,372
Other DC	$56,965	$5,952	$3,611	10.5%	6.4%	247,288
Retail						
ESOPs	$32,096	$5,653	$1,726	18.1%	6.1%	2,657
Other DC	$38,673	$2,556	$1,368	6.6%	3.7%	269,245
Transportation						
ESOPs	$47,465	$8,992	$3,876	18.5%	8.7%	957
Other DC	$48,904	$3,359	$1,296	6.5%	2.6%	87,408
Information						
ESOPs	$68,370	$7,884	$8,104	11.5%	11.9%	769
Other DC	$70,640	$6,887	$3,770	10.1%	5.4%	72,918
Finance						
ESOPs	$71,119	$13,920	$11,129	19.9%	18.7%	7,458
Other DC	$74,584	$7,952	$4,121	10.7%	5.9%	415,995
Prof./tech. svcs.						
ESOPs	$81,020	$14,249	$9,920	17.5%	11.9%	9,145
Other DC	$77,860	$8,024	$3,124	10.1%	4.1%	957,081
Other svcs.						
ESOPs	$57,559	$8,260	$1,866	12.8%	3.9%	4,418
Other DC	$54,082	$4,051	$1,535	6.6%	3.2%	1,481,051

Based on U.S. Department of Labor's Form 5500 Research Files matched to U.S. Bureau of Labor Statistics Current Employment Statistics data.

Restricted to plans with any employer contributions over 2010-2018

All dollar values adjusted to 2018 values

Mean values have been winsorized at upper and lower 1%

All values weighted by number of active plan participants

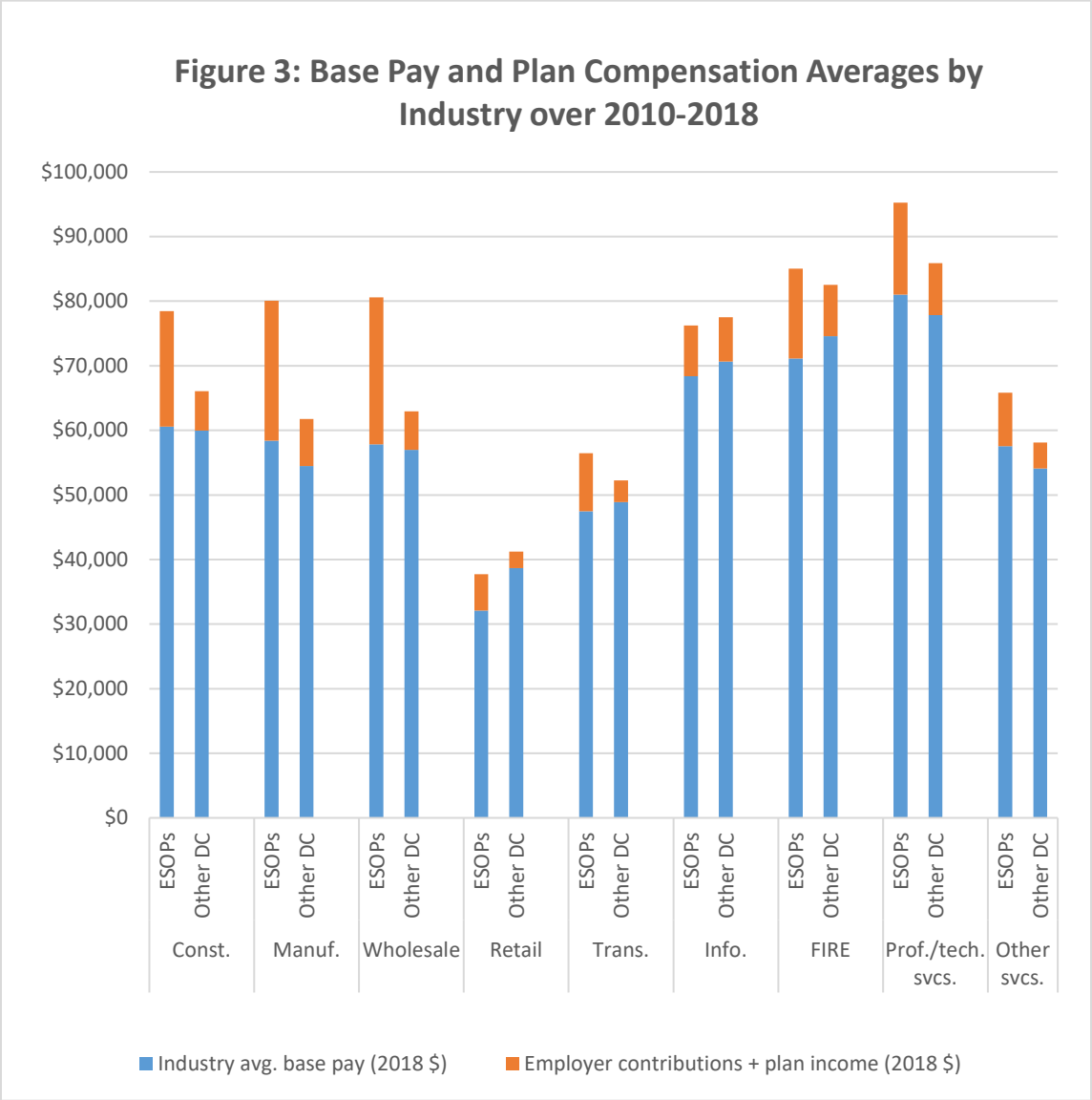


Figure 3: Base Pay and Plan Compensation Averages by Industry over 2010-2018
$100,000
$90,000
$80,000
$70,000
$60,000
$50,000
$40,000
$30,000
$20,000
$10,000
$0
ESOPs
Other DC
Const.
Manuf.
Wholesale
Retail
Trans.
Info.
FIRE
Prof./tech. svcs.
Other svcs.
Industry avg. base pay (2018 $)
Employer contributions + plan income (2018 $)

Table 4: Base Pay and Plan Compensation by Presence of Other Company Plans, 2010-2018

	Industry avg. base pay	Employer contribution + plan income per participant				# of plan-year obs
		Dollar value		Percent of base pay		
		Mean	Median	Mean	Median	
	(1)	(2)	(3)	(4)	(5)	(6)
ESOP values if:						
Standalone ESOP	$56,959	$11,333	$6,046	19.9%	11.4%	20,625
Co. also has other DC	$56,900	$13,527	$6,072	23.9%	11.0%	23,441
Co. also has DB	$72,963	$18,355	$13,882	25.7%	19.0%	807
Co. also has other DC & DB	$58,546	$16,635	$10,465	28.0%	15.9%	1,036
Other DC values if:						
Standalone other DC	$57,443	$4,970	$2,029	8.1%	3.8%	4,211,288
Co. also has ESOP	$55,306	$4,627	$2,225	7.8%	5.2%	23,774
Co. also has DB	$63,347	$8,018	$4,196	12.3%	7.0%	229,447
Co. also has ESOP & DB	$61,495	$8,551	$5,146	13.4%	7.7%	1,231

The first four rows describe values for ESOPs broken down by what other plans exist in the company. The last four rows describe values for other DC plans broken down by what other plans are in the company.

Based on U.S. Department of Labor's Form 5500 Research Files matched to U.S. Bureau of Labor Statistics Current Employment Statistics data.

Restricted to plans with any employer contributions over 2010-2018

All dollar values adjusted to 2018 values

Mean values have been winsorized at upper and lower 1%

All values weighted by number of active plan participants

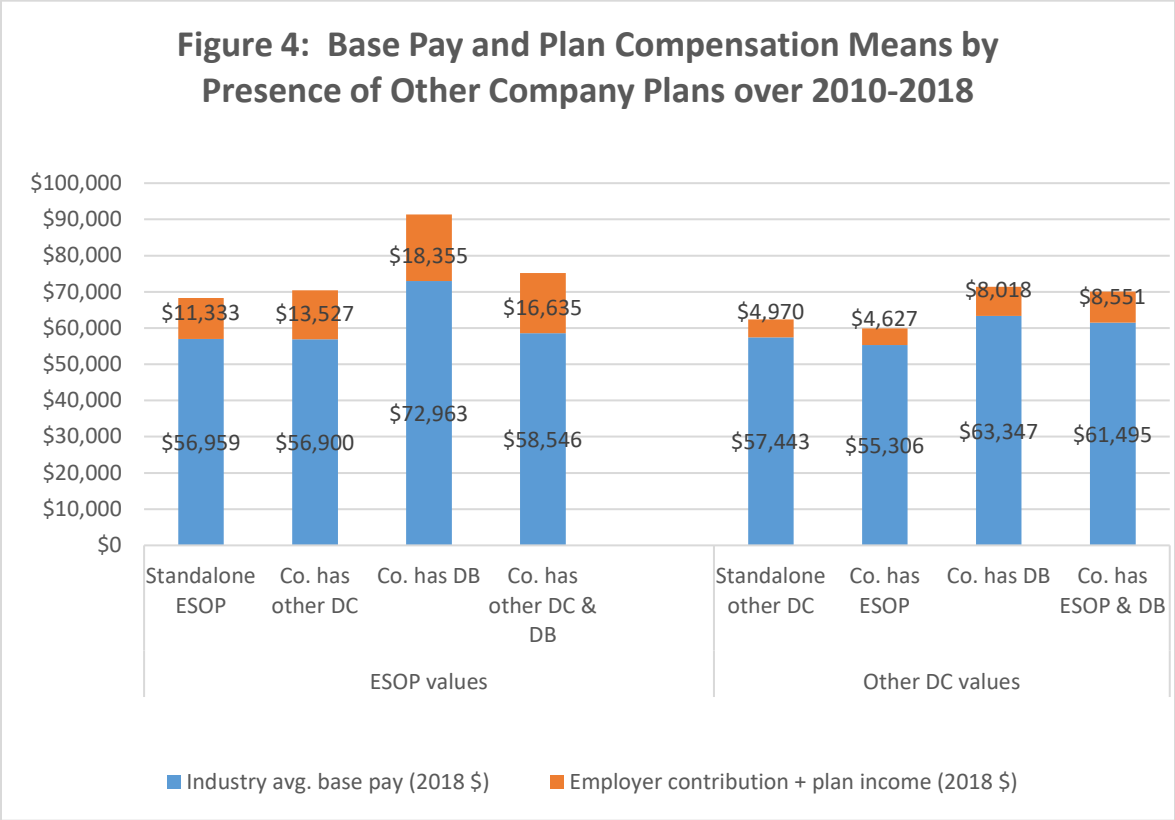


Figure 4: Base Pay and Plan Compensation Means by Presence of Other Company Plans over 2010-2018
$100,000
$90,000
$80,000
$70,000
$60,000
$50,000
$40,000
$30,000
$20,000
$10,000
$0
$11,333
$13,527
$18,355
$16,635
$4,970
$4,627
$8,018
$8,551
$56,959
$56,900
$72,963
$58,546
$57,443
$55,306
$63,347
$61,495
Standalone ESOP
Co. has other DC
Co. has DB
Co. has other DC & DB
Standalone other DC
Co. has ESOP
Co. has DB
Co. has ESOP & DB
ESOP values
Other DC values
Industry avg. base pay (2018 $)
Employer contribution + plan income (2018 $)

Table 5: Plan Assets and Rates of Return, 2010-2018

	Total assets per participant				Annual rate of return on plan assets	
	Dollar value		Percent of base pay			
	Mean (1)	Median (2)	Mean (3)	Median (4)	Mean (5)	Median (6)
ESOPs						
All years	$135,095	$100,474	217.8%	154.1%	8.3%	8.3%
2010	$117,146	$89,295	188.7%	154.9%	11.6%	10.9%
2011	$115,118	$82,677	191.2%	143.2%	2.6%	1.2%
2012	$120,864	$92,671	202.1%	149.3%	9.9%	11.4%
2013	$134,941	$107,819	222.1%	158.2%	14.1%	17.5%
2014	$141,460	$113,181	232.3%	174.9%	8.8%	7.2%
2015	$131,760	$104,112	214.7%	143.2%	3.5%	0.9%
2016	$143,846	$116,442	227.9%	163.2%	8.7%	8.3%
2017	$155,735	$123,209	241.0%	178.7%	14.1%	16.4%
2018	$155,105	$118,748	241.2%	186.6%	1.6%	-4.0%
Other DC						
All years	$60,399	$35,100	96.5%	62.2%	6.8%	7.1%
2010	$52,611	$31,289	85.4%	56.3%	11.7%	11.6%
2011	$50,147	$29,429	82.4%	54.0%	-0.5%	-1.3%
2012	$53,708	$31,776	87.9%	57.5%	10.6%	11.2%
2013	$60,491	$36,137	98.5%	64.6%	17.0%	17.5%
2014	$63,254	$36,953	102.1%	66.5%	6.2%	5.9%
2015	$61,231	$35,906	97.1%	62.8%	-0.4%	-0.5%
2016	$63,587	$37,085	99.9%	64.0%	6.9%	7.1%
2017	$70,609	$40,570	110.4%	70.9%	15.5%	15.9%
2018	$64,363	$36,798	100.4%	64.9%	-4.8%	-5.5%

Based on U.S. Department of Labor's Form 5500 Research Files matched to U.S. Bureau of Labor Statistics Current Employment Statistics data.

Restricted to plans with any employer contributions over 2010-2018

All dollar values adjusted to 2018 values

Mean values have been winsorized at upper and lower 1%

All values weighted by number of active plan participants

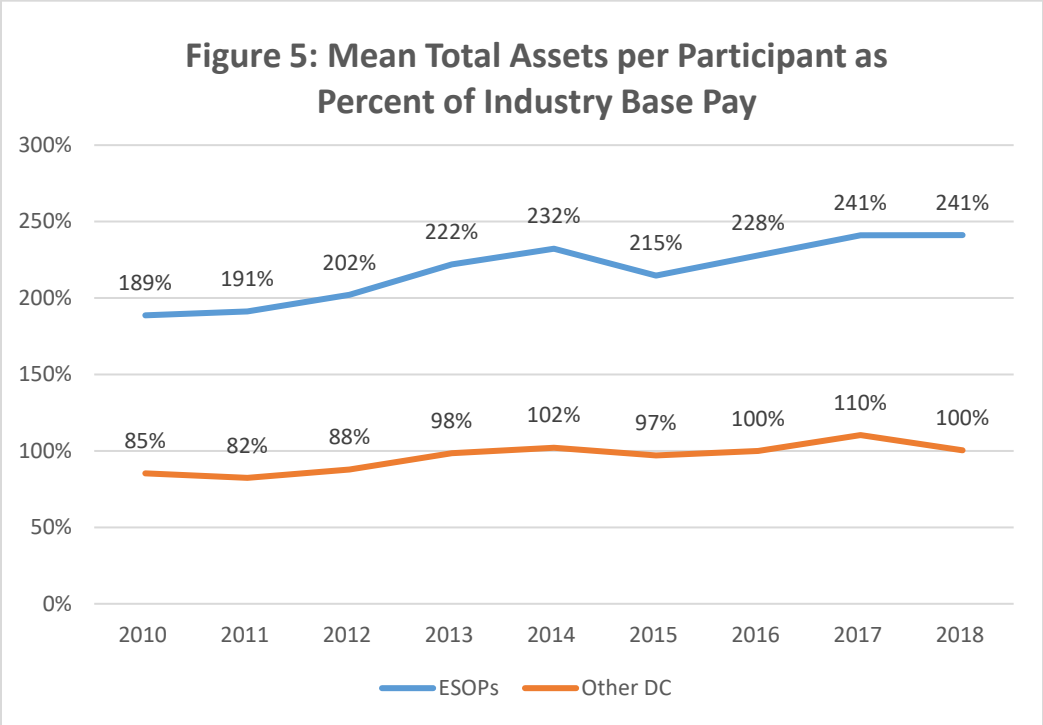


Figure 5: Mean Total Assets per Participant as Percent of Industry Base Pay
300%
250%
200%
150%
100%
50%
0%
189%
191%
202%
222%
232%
215%
228%
241%
241%
85%
82%
88%
98%
102%
97%
100%
110%
100%
2010
2011
2012
2013
2014
2015
2016
2017
2018
ESOPs
Other DC

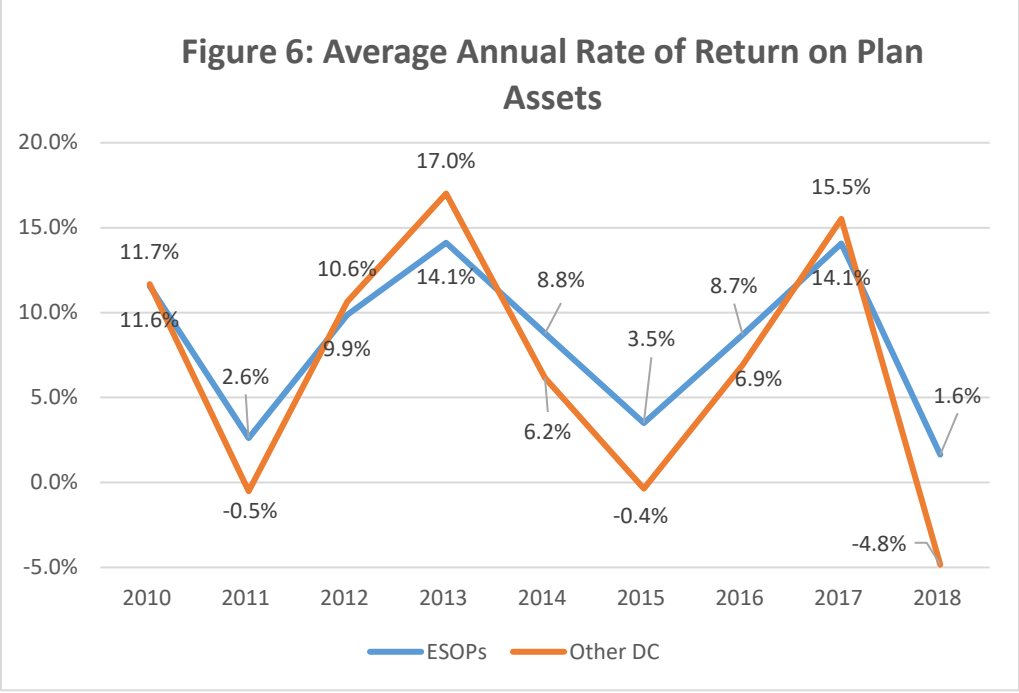


Figure 6: Average Annual Rate of Return on Plan Assets
20.0%
15.0%
10.0%
5.0%
0.0%
-5.0%
11.7%
11.6%
2.6%
-0.5%
10.6%
9.9%
17.0%
14.1%
8.8%
6.2%
3.5%
-0.4%
8.7%
6.9%
15.5%
14.1%
1.6%
-4.8%
2010
2011
2012
2013
2014
2015
2016
2017
2018
ESOPs
Other DC

The Retirement Savings Crisis and the Role of ESOPs

In the last 50 years American workers have been experiencing an erosion in their ability to adequately save and plan for retirement.

According to the National Retirement Risk Index, half of U.S. households will not be able to maintain their standard of living when they retire even if they were to work up until age 65 and annuitize all financial assets.[1]

Page Contents

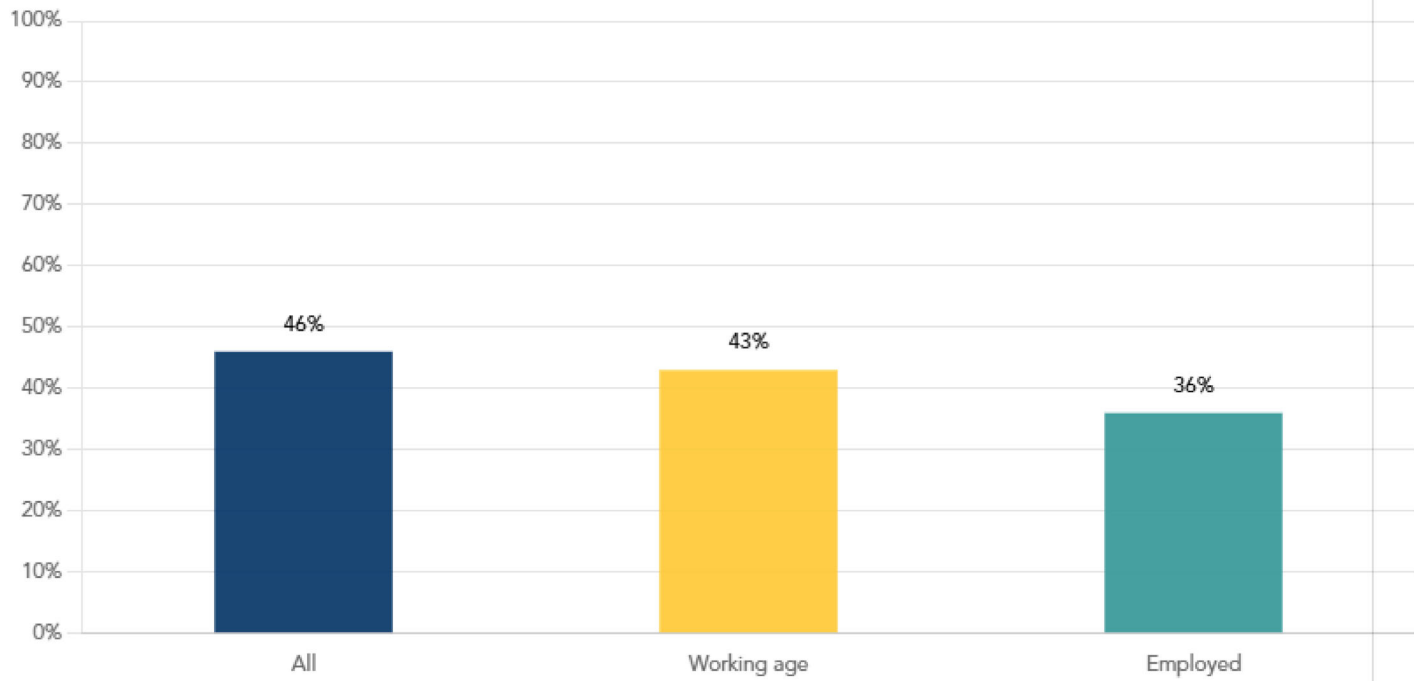
A 2023 study by The Pew Charitable Trusts reported that America's retirement savings crisis could cost federal and state governments an estimated $1.3 trillion by 2040. Income shortfalls for elderly households will add to the demand for Medicaid, Supplemental Security Income (SSI), and other senior assistance programs.[2]

In the data below we will document the current retirement savings situation and present evidence of the potential of ESOPs as one way to help address it.

The Current Picture

The most recent data from the Survey of Consumer Finances (SCF) on account holdings show that 46% of Americans have no retirement savings.[3]

Figure 1: Percentages with Zero Retirement Savings by Group

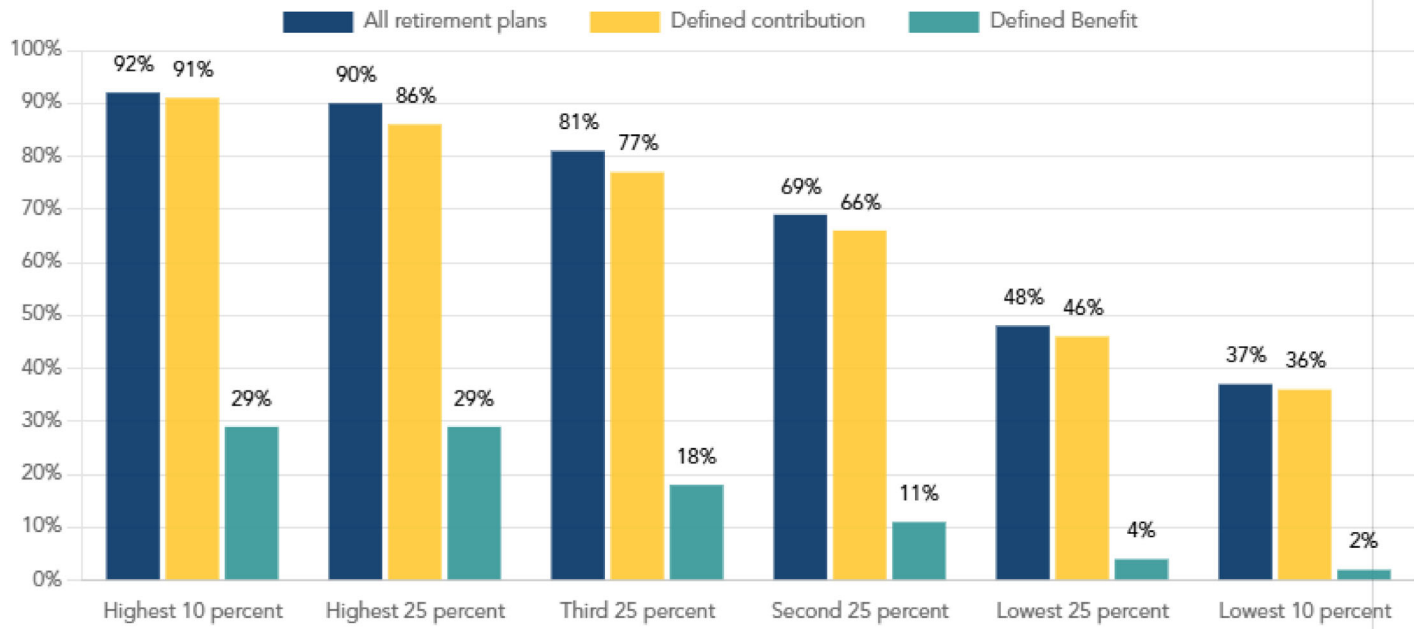


Source: NCEO analysis of SCF 2022 for all Americans, working age adults (18-64), and those currently employed (at least part-time).

The US Bureau of Labor Statistics reports that only 53% of private industry workers participated in any sort of plan that provides retirement benefits.[4]

Access to retirement plans is strongly correlated to wages.

Figure 2: Access rate to retirement plans for private industry workers by wage category



Source: U.S. Bureau of Labor Statistics. Spotlight on Statistics, 1974 – 2024: Celebrating 50 Years of Protected Retirement Plans. https://www.bls.gov/spotlight/2024/celebrating-50-years-of-protected-retirement-plans/

According to the SCF just 27% of working age adults are or have been in a defined benefit plan and are eligible to receive those benefits; 44% report a balance in a 401(k), and 27% report a balance in an IRA. There is overlap in these categories.

Left out of this equation are the 43% of working age adults who have no retirement savings at all (40.3 million Americans—see figure 1 above).

Table 1 breaks out these adults by age groups. Since half of the group have no retirement savings, the median reported account balance is just $5,000 and zero for the youngest group.

Table 1: Percentage of those who reported zero savings across age categories and their median account balances

	Less than 35	35-44	45-54	55-64	All working age adults
Percentage of those who reported 0 savings within the age group	50%	38%	38%	43%	43%
Median account balance	$0	$9,600	$20,000	$16,000	$5,000

	Less than 35	35-44	45-54	55-64	All working age adults
Weighted N	26,304,751	22,281,987	21,543,907	24,220,034	94,350,679

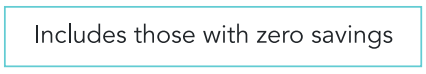
Table 2 breaks out working age adults by wage groups and demonstrates the strong correlation between savings and wages.

Table 2: Percentage of those who reported zero savings across wage categories and their median account balances

	Less than $0.99	$1-$14,999	$15,000-$29,000	$30,000-$49,999	$50,000-$74,999	$75,000-$99,999	$100,000-$149,999	Over $150,000	All working age adults
Percentage of those who reported 0 savings within the wage group	76%	87%	77%	59%	43%	26%	17%	7%	43%
Median account balance	$0	$0	$0	$0	$5,700	$15,200	$45,000	$258,000	$5,000
Weighted N	13,044,148	5,215,409	7,699,098	13,411,314	13,487,779	10,533,785	14,145,820	16,813,326	94,350,679

Figures 3 and 4 below demonstrate the difference in the picture comparing data reporting the balances of *all* Americans (figure 3) versus data that just includes those that have at least some savings (figure 4). The large gap between the means and medians below reflects the uneven distributions of account balances. Individuals with very large account balances increase the means, while the median represents the middle (50% have more savings and 50% have less).

Figure 3: Mean and Median Retirement Account Balances[5]



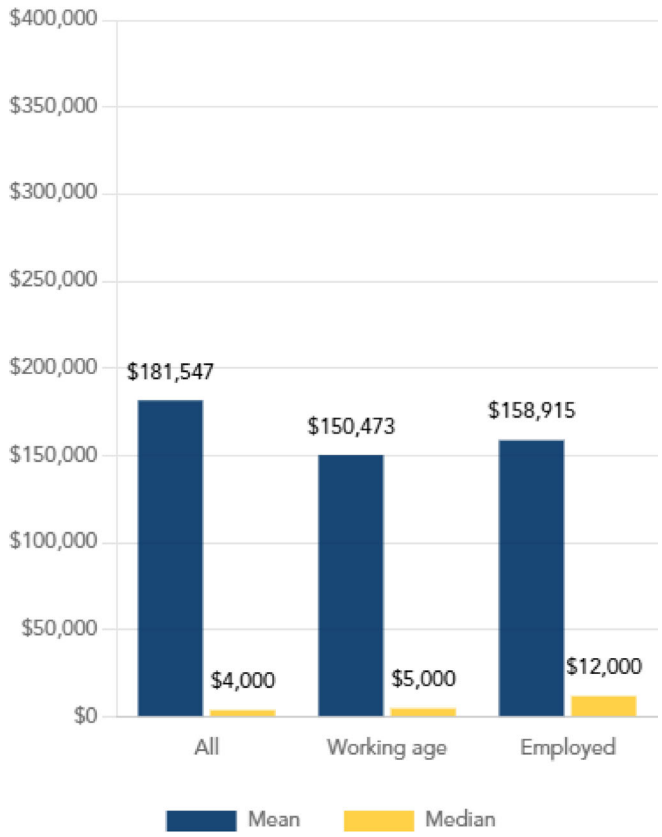
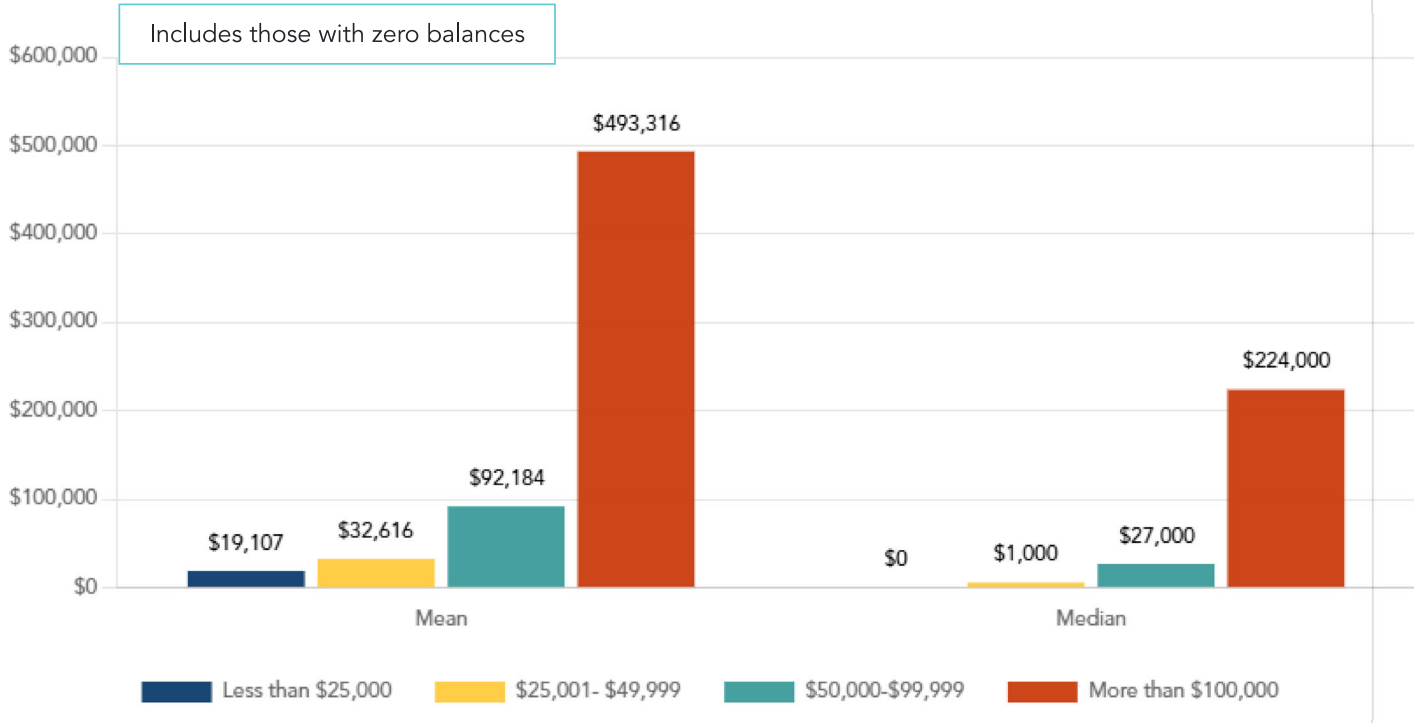


Figure 4: Mean and Median Retirement Account Balances[5]

Both mean and median retirement savings reflect an income advantage.

Figure 5: Mean and Median Retirement Account Balances for Currently Employed by Income Quartiles

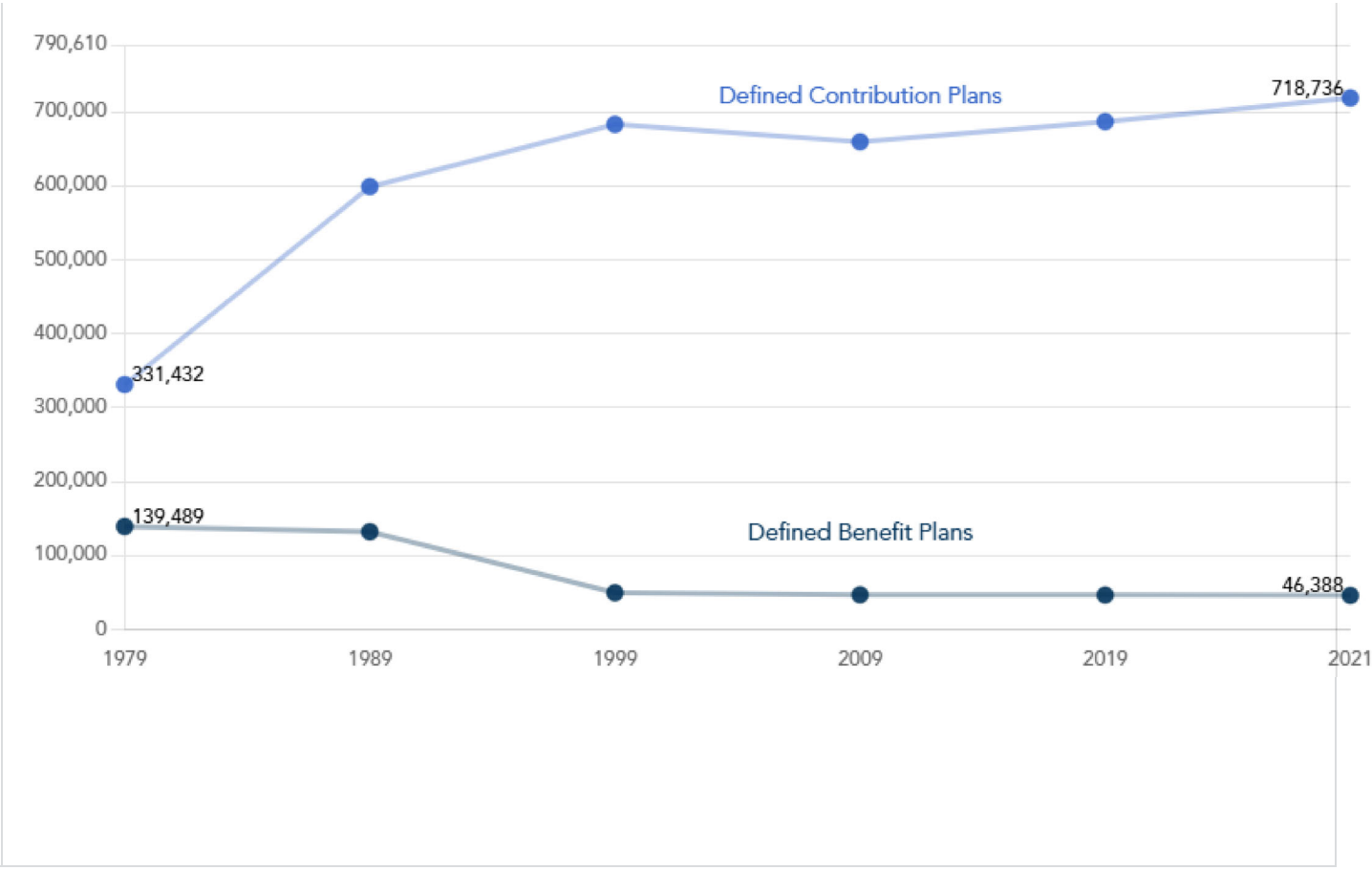


Source: NCEO Analysis of SCF 2022 for currently employed (at least part-time).

Underlying Trends

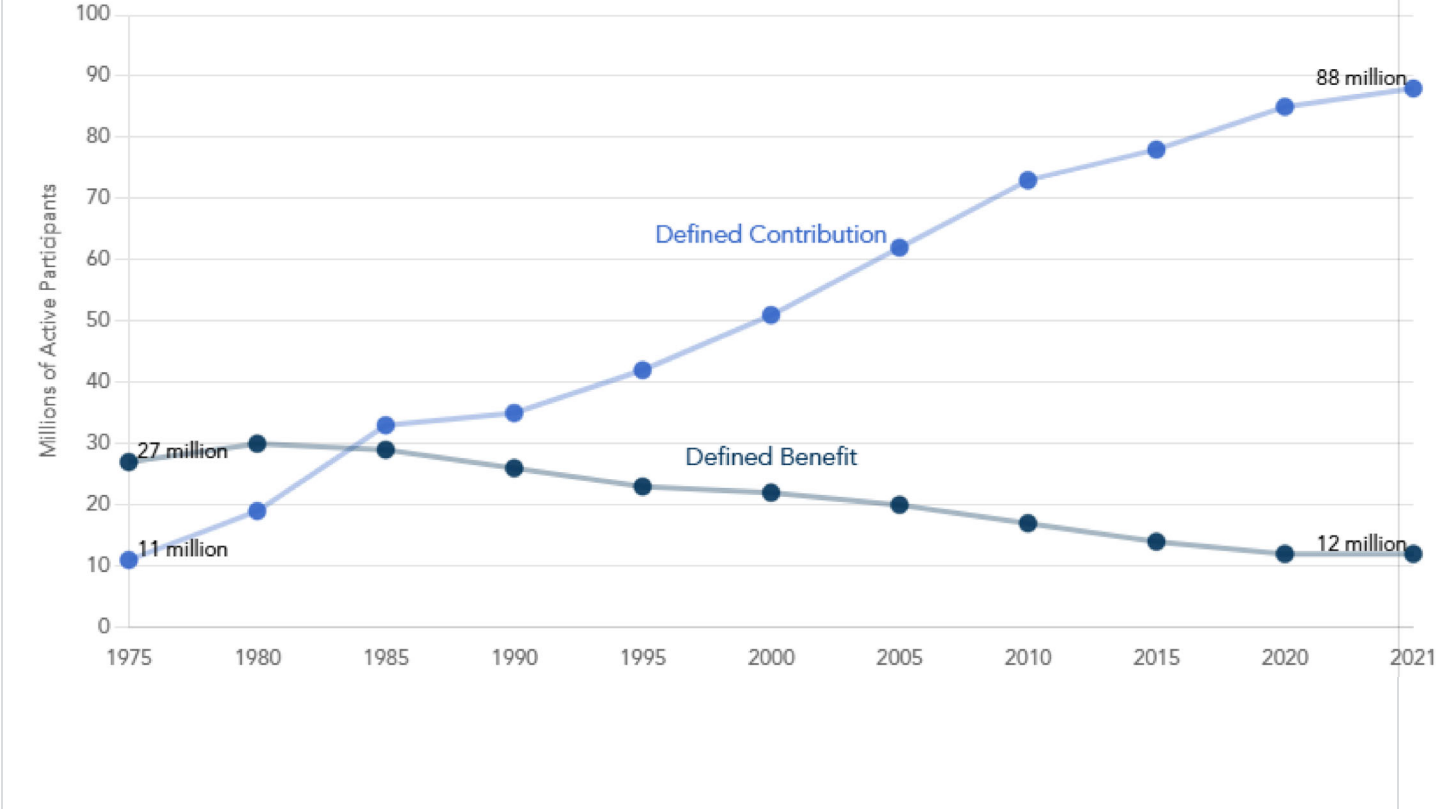
Since the 1980s, private pension benefits have slowly eroded as employers have shifted from traditional defined benefit (DB) plans that generally provide set monthly payments for life, to defined contribution (DC) account-based plans, like 401(k) plans that leave retired workers increasingly responsible for covering the costs of economic security in retirement.[6]

Figure 6: Changes in the number of Defined Benefit and Defined Contribution Plans, 1979-2021



DC plans can provide meaningful retirement security for many, especially higher earners, while lower earners appear more prone to having little or no savings in their DC accounts.[7]

Figure 7: Number of Active Participants in Pension Plans by Type of Plan, 1975-2021

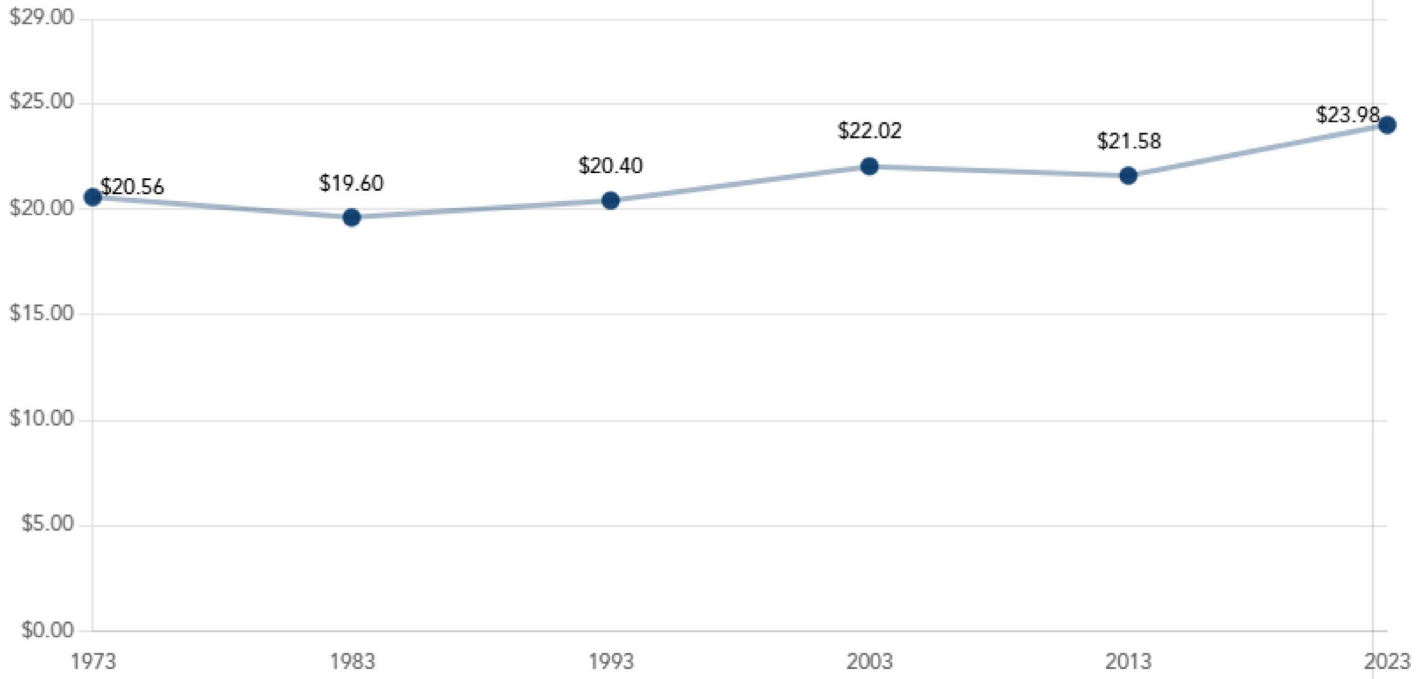


Source: Private Pension Plan Bulletin Historical Tables and Graphs 1975-2021. Employee Benefits Security Administration, Department of Labor.

The impact is currently most vivid among Gen Xers, ages 44 through 59, who entered the workforce as the shift from defined benefit (DB) pensions to defined contribution (DC) plans in the private sector began in earnest.[8]

The trend of stagnating wages can make it increasingly difficult for many individuals to save for retirement.

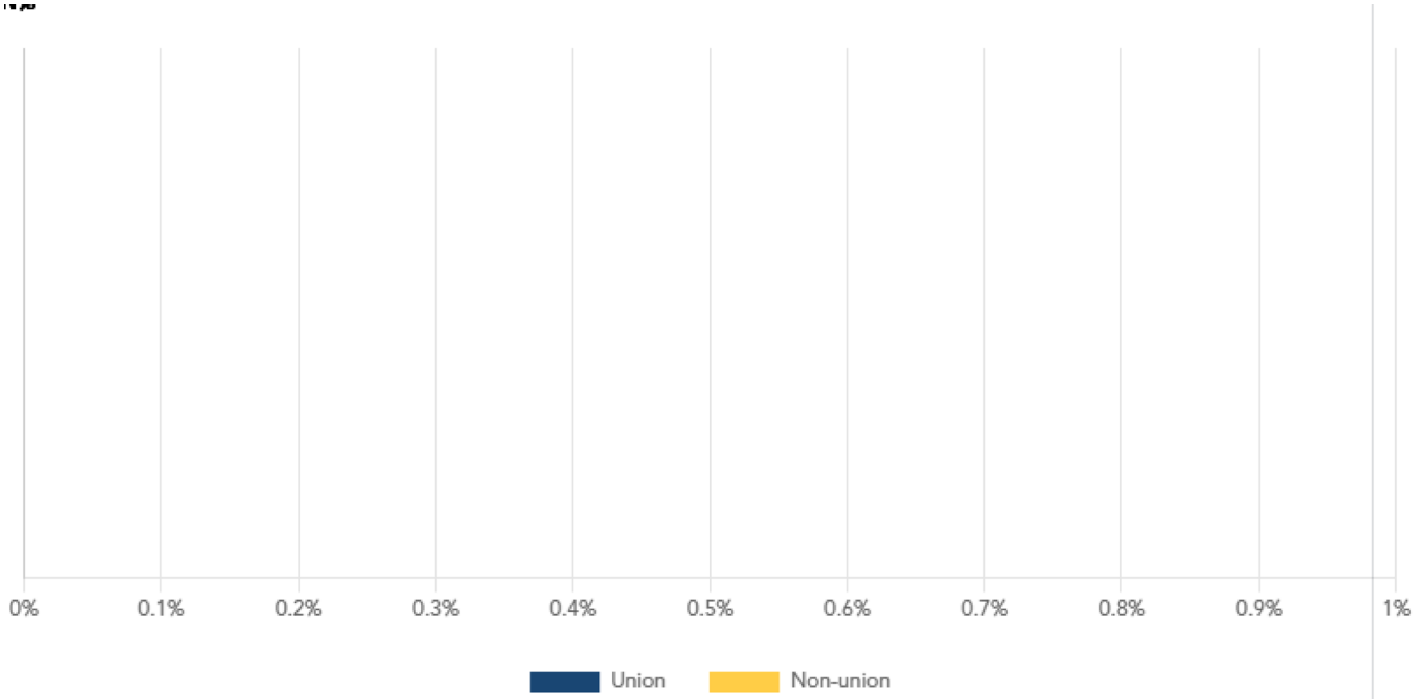
Figure 8: Change in Median Wage for All Workers 1973-2023, inflation adjusted



Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata, 2024.

Union members are much more likely to have traditional pensions. These same trends saw a decrease in unionization from 20.1% in 1983 to 10.0% as of 2023.[9]

Figure 9: Access and Participation of Private Industry Workers in Retirement Benefits by Bargaining Status, 2022



Source: U.S. Bureau of Labor Statistics, Union Membership, Activity, and Compensation in 2022.

ESOPs and Retirement Security

Employee stock ownership plans (ESOPs) by their very structure are positioned to address the related issues of wealth inequality and retirement security. An ESOP is a type of defined contribution retirement plan governed by ERISA that by law must be broad-based and must include all workers who meet federally determined, non-discriminatory criteria. See our ESOP Nuts and Bolts for a simple explanation.

ESOPs tend to create wealth for a broader set of employees than 401(k) plans because they generally do not require employee contributions to the plans, allowing more people to participate–especially those unable to afford deferrals from their paychecks. ESOPs also tend to serve two purposes–to be an employee benefit and to facilitate a transfer of ownership–which results in them have a larger annual company contribution than 401(k) plans.

Currently there are 6,533 ESOPs in the US, covering 10.7 million participants. ESOPs hold total assets of over $2.1 trillion and paid out over $175 billion dollars to participants. See our Employee Ownership by the Numbers for counts and statistics on all ESOPs in the US.

There is a strong body of research showing the benefits to business owners, companies, and communities when these companies become ESOP-owned. See our summary of all the research

findings.

In terms of retirement security, the average ESOP account balance was found to be more than double the average account balance at a comparable conventional firm ($132,000 vs. $64,000). Further, nearly 80% of S corporation ESOPs also offer a 401(k) plan, either separate from or combined with the ESOP.[10]

Data published by the DOL on all qualified retirement plans allows us to filter out ESOPs and report on all of their plan characteristics. Because the data is aggregated at the company level, we are unable to use the DOL data to parse out the median account balances or look within groups of workers.

Data on ESOPs

The data from Blue Ridge includes ESOP account balances from more than 265,000 workers with active ESOP accounts as of 2024, stripped of all identifying information. Blue Ridge also calculated median account balances by age and wage groups. While not designed to be comprehensive or representative, this allowed us to create a unique and large dataset of individual-level account balances. Most of these ESOP participants will also have 401(k) account balances–many of them quite large and diversified because the ESOP contributions by the company allow them to be able to do so.

For the purposes of this comparison, we focus on the 401(k) balances only of American workers. They may also have other sources of retirement savings such as IRAs.

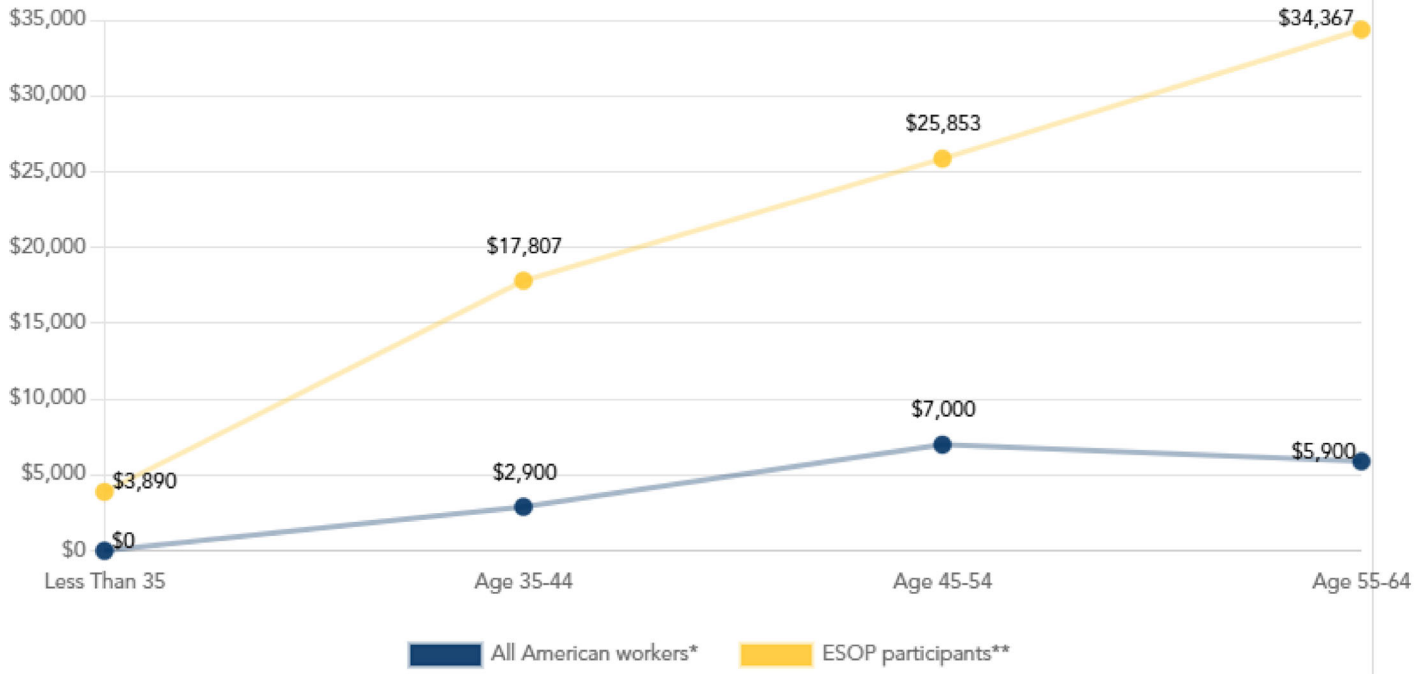
Table 3 shows that we are able to look at large groups of active ESOP participants across age groups compared to nationally representative working Americans in those same age groups. Figure 10 illustrates the ESOP benefit across age groups.

Table 3: Median balances for employed workers by age group[11]

Data From	Less than 35	Age 35-44	Age 45-54	Age 55-64	Total N
401(k) balances only All American workers*	$0	$2,900	$7,000	$5,900	
N	17,525,801	14,110,924	11,586,781	8,898,916	52,122,422

Data From	Less than 35	Age 35-44	Age 45-54	Age 55-64	Total N
ESOP account balances only ESOP participants**	$3,890	$17,807	$25,853	$34,367	
N	84,048	57,707	53,463	51,671	246,889

Figure 10: Median balances for employed workers by age group[11]



*SCF data is weighted to reflect a nationally representative sample
**Blue Ridge active participants

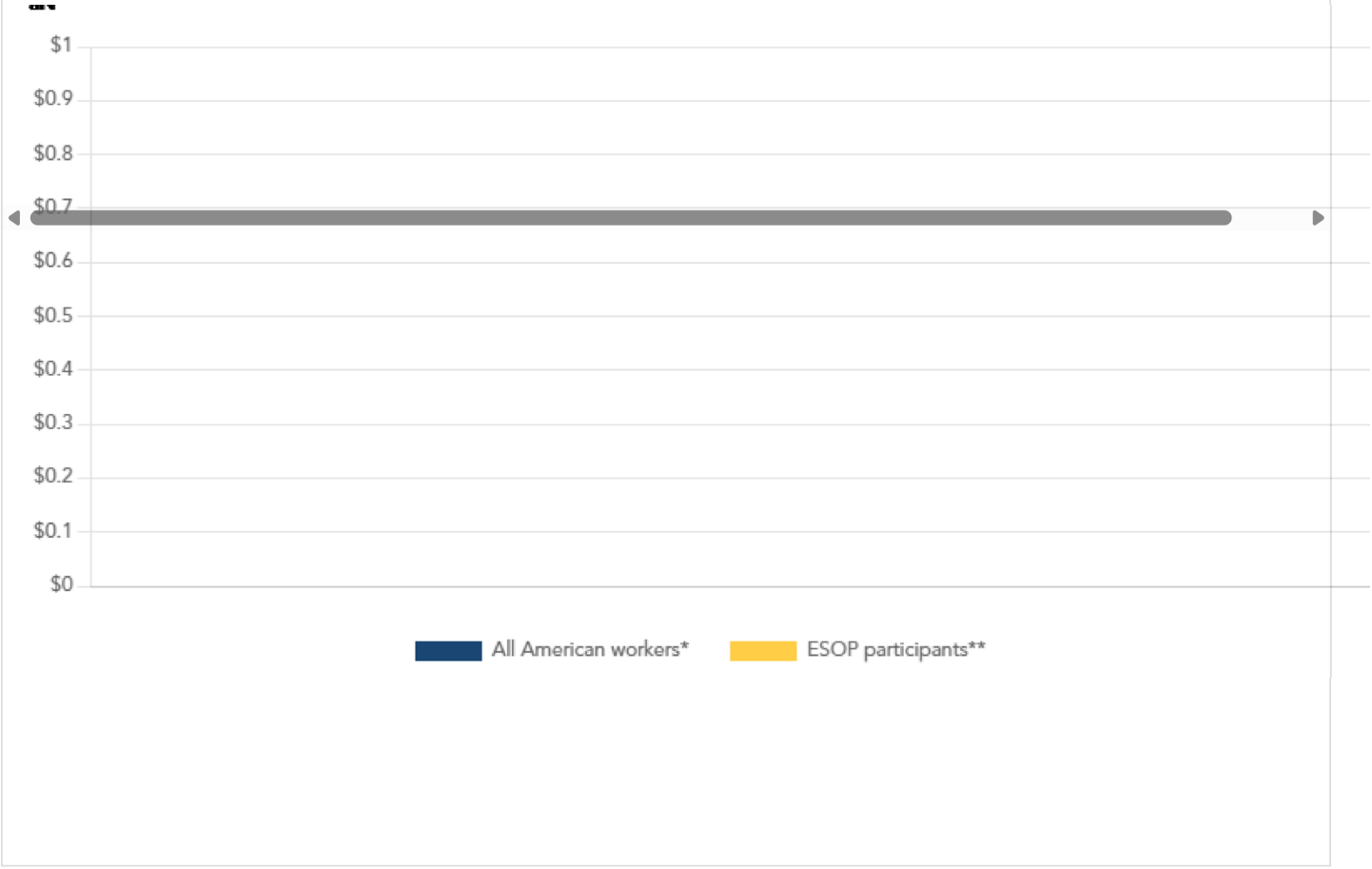
Similarly, table 4 shows the breakdown we are able to do by income groups. Figure 11 shows the sizable ESOP benefit for lower and middle income workers.

Table 4: Median retirement balances for employed workers by annual income from work[11]

Data from	$1-$14,999	$15,000-$29,999	$30,000-$49,999	$50,000-$74,999	$75,000-$99,999	$100,000-$149,999	Over $150,000	Tot
401(k) balances only All American workers*	$0	$0	$0	$0	$4,900	$27,000	$139,000	

Data from	$1-$14,999	$15,000-$29,999	$30,000-$49,999	$50,000-$74,999	$75,000-$99,999	$100,000-$149,999	Over $150,000	Tot
N	2,812,393	5,555,309	10,691,449	9,889,542	6,855,301	8,144,057	10,075,011	55,64
ESOP account balances only ESOP participants**	$0	$2,646	$5,819	$13,642	$21,778	$36,124	$85,446	
N	26,896	28,619	50,567	50,049	32,086	29,467	23,079	265

Figure 11: Median retirement balances for employed workers by annual income from work[11]



* SCF data is weighted to reflect a nationally representative sample
**Blue Ridge active participants

Conclusion

Our summary of the current retirement savings situation facing this country shows that ESOPs have the potential to help Americans save for retirement.

Endnotes

1. Y. Yin, A. Chen, and A. Munnell, 2023 (May), The National Retirement Risk Index: Version 2.0, Boston College Center for Retirement Research, Chestnut Hill, MA. https://crr.bc.edu/the-national-retirement-risk-index-version-2-0/

2. The Pew Charitable Trusts and Econsult Solutions, 2023 (May), State and Federal Impacts of Insufficient Retirement Savings https://www.ncsl.org/labor-and-employment/state-and-federal-impacts-of-insufficient-retirement-savings

3. The Survey of Consumer Finances is a triennial cross-sectional survey of U.S. families sponsored by the Federal Reserve Board in cooperation with the Department of the Treasury conducted by the NORC at the University of Chicago. The next round of data will be available in late 2026.

4. U.S. Bureau of Labor Statistics, 2023 National Compensation Survey: Employee Benefits in the United States. https://www.bls.gov/news.release/archives/ebs2_09212023.pdf

5. NCEO analysis of SCF 2022 for all Americans, working age adults (18-64), and those currently employed (at least part-time).

6. Polivka, L., and Luo, B. (2015). The neoliberal political economy and erosion of retirement security. The Gerontologist, 55(2), 183-190. https://claudepeppercenter.fsu.edu/wp-content/uploads/2015/04/The-Neoliberal-Political-Economy-and-Erosion-of-Retirement-Security-2015.pdf

7. U.S. Government Accountability Office, 2019, The Nation's Retirement System: A Comprehensive Re-evaluation Needed to Better Promote Future Retirement Security. https://www.gao.gov/products/gao-19-342t

8. See The Forgotten Generation: Generation X Approaches Retirement by Celia Ringland Joelle Saad-Lessler Tyler Bond from the National Institute on Retirement Security, July 2023. https://www.nirsonline.org/2023/07/new-report-finds-alarming-retirement-outlook-for-generation-x-3/

9. U.S. Bureau of Labor Statistics, 2025 (January), Union Members 2024, https://www.bls.gov/news.release/pdf/union2.pdf

10. A 2021 study conducted by the NCEO with the support of Employee-Owned S Corporations of America (ESCA) compared account balances between S corporation ESOPs and comparable firms offering a 401(k) plan. https://www.nceo.org/hubfs/ESCA%20Report.final.pdf

11. The SCF data on income and retirement savings is self-reported and the Blue Ridge data on both is directly from administrative records. Since it is all workers, the SCF data includes those who report no retirement savings.