The Impact of Employee Ownership and ESOPs on Layoffs and the Costs of Unemployment to the Federal Government

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Employee-owners—people who own stock in the companies where they work—are far less likely to lose their jobs than non-employee-owners. Data from the 2015 General Social Survey (GSS) shows that in 2014, 9.5% of all working adults in the private sector, not in employee ownership plans, report having been laid off in the last year, compared to just 1.3% of those respondents who say they own stock in their company through some kind of company-sponsored employee ownership plan.

Unemployment is expensive for the federal government, particularly in terms of federal expenses for unemployment benefits and forgone taxes. This paper estimates the cost to the federal government per unemployed worker. Based on that estimate, we believe that the lower job losses among employee-owners saved the federal government approximately $17 billion in 2014. Looking just at employee stock ownership plans (ESOPs), we estimate the federal government's savings at approximately $8 billion. For 2010, a recession year, the numbers were $37 billion for all plans and $15 billion for ESOPs alone. In the non-recessionary period of 2002 and 2006, the average annual savings were $16 billion for all plans and $6 billion per year for ESOPs alone for the 2002-2010 period.

These numbers are necessarily estimates based on numerous assumptions. We do not claim that they are anything other than broad estimates, although we believe they are very reasonable estimates. We also have been conservative in our approach and have not counted federal costs for unemployment related programs such as retraining. Even if our numbers were as much as one-third too high, which is unlikely, they still would show that the saved costs and tax revenues to the federal government are a multiple of the annual tax costs of ESOPs.

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Unemployment has been the central economic issue for the last decade in the U.S. Major federal programs and expenditures have been created to reduce it, tax rates have been cut, and unemployment insurance benefits extended, among other steps. There has been little or no discussion, however, about how the form of business ownership affects unemployment. That is unfortunate, because it turns out that people who work for companies with employee ownership plans are vastly less likely to be laid off than those who do not. Data from the General Social Survey, widely regarded as the single best national survey data on social trends, shows that in 2014, for instance, 9.5% of all working adults in the private sector not in employee ownership plans, report having been laid off in the last year, compared to just 1.3% of those respondents who say they own stock in their company through some kind of company-sponsored employee ownership plan.

It might at first blush seem that these differences are an artifact of the fact that to be in an employee ownership plan, employees generally have to have one or more years of tenure. So if they have been laid off in the last year, they may have been less likely to qualify and be in the plan at the time of the survey. That would only be true, however, to the extent their layoffs were not temporary and they were able to return to their jobs.

Fortunately, the data allow us to address this concern directly, and the dramatic differences still hold up. If we look at employees with one year or more of tenure, employee-owners are about five times less likely to have been laid off as non-employee-owners with one year or more of tenure, a very similar ratio to those with less than one year of tenure. It is extremely unlikely, therefore, that tenure explains the differences.

The data from this report come from the General Social Survey, a nationally representative in-person probability survey conducted annually or biannually since 1972. The General Social Survey (GSS) is a project of NORC at the University of Chicago, with principal funding from the National Science Foundation. The 1972-2014 cumulative dataset has 5,597 variables, time-trends for 2,479 variables, and 363 trends having 20+ data points. Among these data points are questions about layoffs and whether a working adult is in an employee ownership plan, which could include owning company stock in a 401(k) plan, buying shares (almost always at a significant discount) in an employee stock purchase plan, or, most commonly, participating in an employee stock ownership plan (ESOP), a specific statutory broad-based plan regulated by the federal government (see below for details).

The differences in 2014 were not a fluke occurrence. In fact, the same magnitude of difference occurs in each of the prior GSS surveys going back to 2002, the first time questions about employee ownership were asked.

The table below provides details:

Table 1
Percent reporting laid off in the past year by employee ownership since 2002

		All private sector			
		2002	2006	2010	2014
Employee ownership	Yes	3.0%	2.3%	2.6%	1.3%
	No	9.3%	8.6%	12.1%	9.5%
		One year or more of job tenure			
Employee ownership	Yes	2.7%	1.9%	1.4%	1.6%
	No	6.3%	3.9%	7.1%	4.6%

This differential layoff experience has major implications for federal government costs. This paper tries to estimate the magnitude of those costs. We report both the data on the whole sample as well as the more conservative sub-sample of employees with one year or more of tenure.

The 2010 data are especially important given the high levels of unemployment that year, but note that the large differences remain for 2002, 2006, and 2014, all non-recession years. The total number of people laid off is less in 2002, 2006, and 2014 was much less than in 2010, but the employee ownership retention advantage across the years is still three to seven times the rate for the non-employee-owners.

Varieties of Employee Ownership Plans

There are a variety of ways employees might become owners through stock plans in their company. The GSS data reported here look at whether employees say they own company stock through a company stock ownership plan. The ownership plans would include employee stock ownership plans (ESOPs), a plan typically funded by company contributions to a trust that holds shares for employees meeting basic eligibility requirements (generally one year of full-time service), stock bonus plans (very similar to ESOPs), and 401(k) plans with company stock as one of the investments. There are about 11 million ESOP participants nationally (we include stock bonus plans in this calculation). Precise data on how many employees own company stock in 401(k) plans are not available, but probably is in the range of about four million. Employees can also be owners by buying stock through discounted employee stock purchase plans or can be given stock options or similar grants. Nationally, we estimate that about another 15 million people are covered by one or more of these plans, but there is some overlap with ESOPs.

The GSS data break out ownership by all categories of plans and specifically options and similar grants (the "own company stock" category includes any form or ownership), as reported below:

Table 2: Employee Ownership Data 2002-2014

	% of all private sector employees				% of employees in for-profit companies	% of employees in companies with stock
	2002	2006	2010	2014	2014	
Own company stock (%)*	20.1%	17.1%	17.8%	19.5%	21.8%	34.9%
Own company stock (millions of employees)	21.9	19.6	19.2	22.9	n/a	n/a
Number of responses in the GSS	1261	1172	795	885	701	441

*Includes ESOPs, 401(k) plans, and ESPPs.

The data suggest that there are 22.9 million participants in ESOPs, stock bonus, 401(k) and ESPP plans. We know that ESOP and stock bonus plan participation accounts for conservatively about 11 million participants, or about 48% of the total. Note, however, that there is some overlap in these categories.

Impact of Employee Ownership Participation on the Total Number of Unemployed

In calculating the impact of employee ownership on unemployment, we will assume that ESOP participants would be no more or less likely to have been laid off than people who own stock in other ways. The GSS data do not allow us to break out the data by ESOPs, so we cannot assess this precisely. We do know from existing research on employee ownership and corporate performance, however, that ESOPs appear to have a much more significant impact on corporate performance than other kinds of plans. There are a variety of reasons for this that are beyond the scope of this paper, but readers can consult the summary of research on this topic, Research on Employee Ownership, Corporate Performance, and Employee Compensation, on the NCEO website. Consequently, our analysis of the specific impact of ESOPs on federal costs for unemployment should be viewed as very conservative.

The table below projects how many more workers would have been laid off if they were not employee-owners. It calculates the actual number of laid off workers in employee ownership plans compared to how many would have been laid off if those employee-owners had the same rates of layoffs as non-employee-owners. We look at 2014 and the mean data for the prior three surveys. The data assume a total private sector workforce over this time of 118 million employees.

Table 3: Actual and Projected Private Sector Layoff Rates by Employee Ownership Status

	Layoff rate, employee-owners/non-employee-owners	Number of employee-owners	Number of projected laid-off workers using rates for employee-owners	Number of projected laid-off workers if they had the same rates as non-owners	Total number of private sector workers laid off using GSS projections (% reporting being laid off x total)
2014	1.3%/9.5%	22.9 million	297,000	2,175,000	11,115,000
Mean for all four years	2.55%/9.9%	20.3 million*	517,650	2,04,237	11,114,400

*This is an estimate based on different numbers for the total sector work force over this period and the different rates of plan participation.

In what follows, we estimate how large the impact of the lower rate of layoffs for employee-owners, including ESOP participants, is to the federal government.

Elements of Costs of Unemployment

Calculating just how much revenue the federal government foregoes as a result of the difference in unemployment between those in employee ownership plans and those who are not requires a number of assumptions. To make a more precise estimate, we would need data for each survey respondent on at least their length of unemployment, their annual compensation subject to tax, and whether their state is one that qualifies for extended unemployment benefits paid for by the federal government. We do not have that kind of detail, however. We only know whether people report having been laid off. In our estimates, therefore, we calculate layoff durations of 15 weeks (for 2002 and 2006), 30 weeks (for 2010), and 34 weeks (for 2014).

Recognizing that a precise measure is not possible, we can at least suggest reasonable estimates for the costs. While the real number may be off significantly from our estimate, we believe that by relying on typical rates of unemployment duration, taxation, and unemployment contributions from the federal government, we can derive an estimate that is in the ballpark of the actual costs. The significant finding of this report is that the money the federal government saves in what would otherwise be foregone

taxes and what it spends on extended unemployment benefits is several times higher than the estimated tax costs of ESOPs.

Base Assumptions

Using data from the Bureau of Labor Statistics, the Social Security Administration, and the Census Bureau, we can construct the relevant numbers for our analysis. Where relevant, we use both the median and mean numbers, but because the federal cost per unemployed worker is the sum of all costs divided by the number of out of work people, means are generally more appropriate than medians. The one area where we believe using means overstates the case is in calculating foregone federal taxes. Instead of using the one-year cost of federal unemployment insurance payments, we use the average of the current year (2014 costs for 2014) for instance plus the prior two years. The purpose of this is to even out year to year variations that occur in these payments, which can vary widely based on a number of factors. We believe this provides an estimate less subject to random variation, although an argument could be made just to use the single year.

Table 4: Base Data Used for Calculations*

Average length of unemployment 2014	34 weeks
Average length of unemployment 2010	30 weeks
Average length of unemployment 2002-2006	16 weeks
Federal cost annual costs of private sector unemployment, 2011-2014	$25 billion
Federal cost annual costs of private sector unemployment, 2008-2010	$82 billion
Federal annual cost of unemployment, 2005-2007	$25 billion
Average wage 2014	$47,230
Median wage 2014	$28,700
FICA/FUTA tax rate, 2014	7.65%
Median federal income tax rate paid by married couples	5.6%
Average federal income tax rate by married couples	11.8%
Number of private sector workers 2010	118 million

*To avoid making this table too complex, we have omitted data on median and average wages and tax rates for prior years, but these were each calculated and used as the basis for prior calculations.

It is important to understand the components of these costs and how they vary from year to year. For example, 2014 saw the lowest unemployment in many years, while 2010 was at the height of the recession. The average length of unemployment was also much different in these two periods. Looking farther back to the 2002-2008 period, the average length of unemployment was almost twice as long as in non-recession years. We have calculated costs on 2014 data alone, the 2010 data alone, and the mean annual rates for the 2002-2006 period.

The federal costs of unemployment are even more variable. Normally, unemployment is handled by the states. The federal government becomes involved only to the extent of paying certain administrative costs and loaning money to states whose unemployment reserve funds have run out. The Extended Benefits (EB) program typically provides an additional 13 or 20 weeks of compensation to jobless workers who have exhausted their regular benefits in states where the unemployment situation has worsened dramatically. This program exists regardless of the country's economic situation. The 2009 American Recovery and Reinvestment Act authorized temporary full federal funding, which remains in effect as of this report, dramatically increasing federal costs.

It should be noted that there are several federal programs related to unemployment we have not added into our estimate, such as the Trade Adjustment Assistance Act and various training programs. It would be difficult to parse out just how these relate to unemployment rates or duration, so we have left them out, even though they represent a real cost.

Of course, not all of the unemployed were in the private sector which is the focus of this study. Data are not broken out on unemployment costs by sector, so we have applied the ratio of the private sector workforce to the total workforce to reduce the total costs of unemployment benefits to an estimated private sector only cost.

The median and average wage data we report may seem surprisingly low, but the number that most people see when income levels are reported is from total household income, not total wage income.

For 2014, the combined FICA and FUTA tax rate is 7.65%. Both the employer and employee pay these taxes, so the normal combined rate is 15.3%. However, because a very small number of employees will reach their maximum taxable limit for FICA, we have used a more conservative total foregone revenue estimate of one percentage point lower (14.3%). Census data estimate that the sum total of employee income exceeding $118,500 is about 11% of all employee income, so this adjustment appears reasonably reliable.

A family of four in the exact middle of the income spectrum pays about 5.3% of its income in taxes. The average income tax rate was about 11.8% for a family of four. (These numbers vary slightly year by year and need to be calculated based on other tax tables published by the IRS, but these numbers represent a typical range). We assume these rates for this study, although the actual rates would vary by filing status. We calculate foregone taxes on mean rates because the total government layoff costs is a function of that number, but it could be that layoff rates differ by income level, so there may be some skewing of the results from this in a way we cannot estimate.

Finally, we base the data on the private sector workforce only (118 million).

Results

In the table below, we show the estimated federal foregone revenues from layoff differences for employee-owners overall and for ESOP and stock bonus plan participants. The core assumption here is that, as reported in Table 1, employee-owners are almost four times less likely to have been laid off than

non-employee-owners. In the table below, we look at what the total estimated costs of layoffs per employee would be for the estimated layoffs over the survey period.

The table uses the percentage of total costs attributable to each group based on their percentage of total laid off workers as per the data reported at the outset of this paper. Because total costs to the government are based on total wages, we use the means to calculate the costs, but we also report the median wage data as an information point. For the 2002-2006 period, we used the 2010 mean wage as a proxy for calculating the costs in current dollars. We use the actual numbers for 2010 and 2014.

Table 5: Estimated Federal Costs for Unemployment per Worker Laid Off

Measure		**Costs per worker laid off any time in the last year based on GSS data**
Federal cost annual costs of private sector unemployment, 2012-2014*	$25 billion	$2,294
Federal cost annual costs of private sector unemployment, 2008-2010*	$82 billion	$7,056
Average wage 2014	$47,230	
Median wage 2014**	$28,700	
Average wage 2010	$39,959	
Median wage 2010	$26,363	
Foregone FICA/FUTA taxes, recession year (2014) at mean annual wage of $47,230 and 34 weeks of unemployment	14.3%	$4,416
Foregone FICA/FUTA taxes, recession year (2010) at mean annual wage of $39,959 and 30 weeks of unemployment	14.3%	$3,296
Foregone federal income taxes based on rate paid by median income married couple, 34 weeks of unemployment, 2014	5.6%	$1,730
Foregone federal income taxes based on rate paid by mean income married couple, 34 weeks of unemployment 2014	11.8%	$2,214
Total cost per worker, non-recessionary period based on mean wage data, 2014		
Total cost per worker, non-recessionary periods based on mean wage data, 2014		**$8,924**
Total cost per worker, recessionary periods based on mean wage data, 2010		**$13,014**

***Only some laid off employees receive federal unemployment benefits. This calculation is based on the total dollar amount paid divided by the total number of people laid off during the year, not the total number actually receiving benefits.**

****The 2014 data is an estimate based on the 2013 data, adjusted for inflation. 2014 data have not been released as of this writing.**

Based on these estimates, we can construct how much the federal government saves among workers in the employee ownership sector. For instance, if we assume that employee-owners were laid off at the same rate as non-employee-owners (9.5% in 2014), then 2.175 million employee-owners would be laid off based on the GSS data. But the actual rate for employee-owners was 1.3%, yielding an actual GSS-based estimate of 297,700 workers. Similar calculations are made for the prior three surveys in the table below. Assuming a private sector workforce of 118 million in 2014, the resulting costs would be as described in the table below:

Table 6: Implied Savings in Unemployment Costs to the Federal Government from Lower Rates of Layoffs in Companies with Employee Ownership Plans

	Costs Per Worker	Number of Laid Off Employees if Employee Ownership Rates Were the Same as for Non-Employee-owners	Total Estimated Costs if Layoff Rates Were the Same	Number of Estimated Actual Layoffs for Employee-owners	Total Actual Estimated Costs for Actual Employee-owner Layoff Rates (in thousands)
2014	**$8,924**	2,175,500	$19,414,162,000	297,700	$2,656,6745
2010	**$13,014**	3,410,000	$44,377,740,000	488,000	$6,350,832
Mean, 2002-2010	**$9,122**	2,971,000	$27,101,462,000	535,600	$4,887,742
Savings from Employee Ownership, 2014					$16,757,487
Savings from Employee Ownership, 2010					$37,426,000
Savings from Employee Ownership, 2002/2006/2010					$16,126,000
ESOP/stock bonus plan savings alone (48% of total) 2014					$8,043,594
ESOP/stock bonus plan savings alone (39% of total) 2010					$14,596,000

ESOP/stock bonus plan savings alone (39% of total) 2002/2006/2010					$6,289,000

Conclusion

Table 6 above indicates that in 2014, the implied federal savings from the lower layoff rates for employee-owners is approximately $17 billion for all employee-owners and approximately $8 billion for ESOP participants alone. For 2010, a recession period, the numbers were $37 billion and $16 billion for the annual mean of 2002 and 2006. ESOP alone savings for 2010 were approximately $15 billion and $6 billion per year for the 2002-2006 period mean data.

These savings need to be compared to the estimated tax costs to the federal government for ESOP-specific incentives, which was $2.1 billion in 2014, making it clear that ESOPs have been an excellent investment for the taxpayer.