S Corp ESOP Legislation Benefits and Costs: Public Policy and Tax Analysis

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Working Paper #08-07

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Abstract
Samuel Zell's acquisition of the Tribune Company in December 2007 using an S corporation employee stock ownership plan (S ESOP) brought S ESOPs to national attention. An S ESOP is a trust that holds shares of an S corporation (a closely held corporation whose shareholders are taxed on a pass-through basis similarly to partners in a partnership) for the benefit of the corporation's employees. S ESOPs, which have only existed since 1998 are not as well known as C ESOPs, an ESOP that holds shares of a C corporation (a separately taxed corporation). Enron, Polaroid and United Airlines, all of which had ESOPs when they went bankrupt, were C corporations.

Perhaps because they have only existed for ten years, little academic attention has focused on S ESOPs. In this paper we draw on the extensive existing employee ownership literature to describe the benefits and costs to employees, to firms and to society at large from the legislation that authorizes S ESOPs, and, where possible, we quantify these costs and benefits. We estimate that annual contributions to S ESOPs on behalf of employees total $14 billion, which represent additional compensation that would not have been paid without an ESOP. Annual gains attributable to increased job stability also save employees approximately $3 billion annually. Accumulated stakes, which are essentially forced savings and usually do not displace other savings, lead to additional annual accruals of $34 billion. Employers pay for ESOP contributions out of firm-level productivity and sales gains of $33 billion annually attributable to employee ownership. We estimate that one quarter of the annual gain, $8 billion ultimately goes to the federal treasury, which thereby also benefits from the adoption of S ESOPs.

Keywords
Employee Ownership, ESOPs, S corporations, Chicago Tribune

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Key words / Subject Areas: Employee Ownership, ESOPs, S corporations, Chicago Tribune
S Corp ESOP Legislation Benefits and Costs: Public Policy and Tax Analysis

By Steve Freeman and Michael Knoll1
July 29, 2008

In December 2007, real estate magnate Sam Zell purchased the right to acquire 40 percent of the Tribune Company2 – the owner of numerous high-profile assets, including the Chicago Tribune, the L.A. Times, Wrigley Field and the Chicago Cubs – for $8.2 billion while laying out only $315 million in cash.3 The mechanism Zell employed to effect this highly leveraged transaction4 was an S corporation Employee Stock Ownership Plan (S ESOPs).

The Zell purchase shined an unusually bright light on ESOPs and may have led some policy-makers to wonder whether the tax code ought to be used to facilitate such transactions. We would go further and argue that good public policy requires a periodic examination of tax legislation. Any time a firm or group of firms receive special, favorable tax treatment, the cost of which is borne by correspondingly higher taxes or reduced government spending, such treatment needs to be justified. Thirty-four years of experience with ESOPs and 10 years with S ESOPs provide much of the data that we use to conduct such an analysis for S ESOPs.

The History of ESOPs and S ESOPs

ESOPs were conceived out of a dual concern for capital expansion and economic equality. Many of the early proponents of ESOPs believed that capitalism’s viability depended upon continued growth, and that there was no better way for economies to grow than by distributing the benefits of that growth to the workforce. ESOPs’ most vigorous advocates were Louis Kelso, a San Francisco attorney and investment-banker,5 and Senator Russell Long of Louisiana, the long time Chairman of the Senate Finance Committee. Kelso and Long claimed that employee ownership builds commitment, which leads to improved productivity and increased profits. They argued that legislation facilitating broader-based employee ownership would not only increase corporate performance, but also ease workplace tensions, reduce disparities of wealth, and help build a better society.

ESOP legislation first passed amidst questions over the future solvency of Social Security. When Congress adopted the Employee Retirement Income Security Act of 1974 (ERISA), it established ESOPs as a supplement to Social Security.6 As ESOP legislation has evolved, Congress has provided specific and targeted tax benefits to business owners and employees who participate in these plans. Since 1974 there have been over 20 pieces of

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2 The strike price of Zell’s option increases over time from $500 million to $590 million.

3 Zell took control upon making a $250 million investment in the Tribune. In the second stage, his original investment was redeemed and he made an investment of $315 million.

4 The new entity emerged with a staggering $13 billion of debt (Forbes Dec 20, 2007), $250 million of which was borrowed through the ESOP.

5 In 1956, Kelso implemented for a San Francisco newspaper the first ownership transfer to employees by means of what later became known as The Kelso Plan. In 1958 he collaborated with the philosopher Mortimer Adler to write The Capitalist Manifesto outlining the economic, social and political benefits that would ensue from broad-based employee ownership.

6 When the Social Security Act was signed by President Roosevelt in 1935, one out of 70 Americans were eligible for Social Security benefits. In 1939, Social Security was expanded to cover dependents and survivors. A 1967 comprehensive study revealed that one out of 17 Americans were then eligible for Social Security benefits, but that by the year 2000 one out of every three Americans would be eligible and that by the year 2010 it would be one out of two. For a perspective from that period, see Myers (1976).
legislation, the general trend of which has been to encourage ESOP adoptions by providing firms and their owners with incentives to implement ESOPs and to share equity with employees (Appendix A).

Prior to 1998, S corporations or S-corps could not sponsor ESOPs nor were ESOPs permissible holders of S-corp stock. S-corps are nonpublic corporations that are taxed as pass-through entities and subject to a wide range of restrictions, including limits on the number and identity of shareholders. If the corporation violates any of those restrictions, the corporation will be taxed as a C corporation and corporate income will be subject to two levels of taxation – the entity and the shareholder. As part of a broad reform of the laws regulating S-corps, ESOPs first became eligible to own S-corp shares effective January 1, 1998 and that law change ushered in the current era of S-corp ESOP participation.7

An NCEO (2008) survey counts 9,774 ESOPs with total assets in excess of $928 billion as of February 2008. Those ESOPs covered 11.2 million employees – one out of every 12 private sector employees in the United States. As of late 2007, 40% of all ESOPs were S corporations (Owners at Work 2007); such companies come in all sizes and represent some of the smallest and some of the largest ESOPs. Numbers and size of S ESOP firms and plans must be inferred from general ESOP surveys, but in Table 1, we provide our estimates about their overall extent and attributes. We somewhat conservatively assume that S ESOPs represent only one third of the overall plan assets and participants5 which would mean that they are, on average, about 35% smaller than C ESOPs. (In Appendix B, we provide a sensitivity analysis of our estimates, i.e., the sensitivity of our conclusions with regard to lower and higher estimates of unknown variables.)

### Table 1: Attributes and Extent of S ESOPs and C ESOPs

<table>
<thead>
<tr>
<th></th>
<th>All ESOPs</th>
<th>S ESOP % of total</th>
<th>S ESOPs</th>
<th>C ESOPs</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Plans / firms</td>
<td>9,225</td>
<td>40%</td>
<td>3,690</td>
<td>5,535</td>
</tr>
<tr>
<td># of Participants ( Millions)</td>
<td>11.2</td>
<td>33% (est.)</td>
<td>3.7</td>
<td>7.5</td>
</tr>
<tr>
<td>Value of Plan Assets ($ Billions)</td>
<td>$928</td>
<td>33% (est.)</td>
<td>306</td>
<td>622</td>
</tr>
<tr>
<td>Participants / plan</td>
<td>1,214</td>
<td>33% (est.)</td>
<td>1,002</td>
<td>1,356</td>
</tr>
<tr>
<td>Mean Individual Ownership Stake</td>
<td>$82,857</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Methodology

The academic literature on ESOPs is, at once, both extensive in terms of number of studies, and quite limited in terms of the range, scope, and wider impact of these studies (Freeman 2007). The theoretical literature has long been divided on the desirability of ESOPs. Supporters argue that ESOPs align owners’ and workers’ incentives, leading to less fractious and hence more productive industries, which redounds to the benefit of employees, the firms themselves, and society at large. Critics argue that ESOPs hamper diversification by employees unnecessarily increasing risk and interfere with the efficient management of firms to the detriment of all involved. In this paper, wherever possible, we cite the empirical literature in an effort to draw out what is known about the effects of ESOP adoption (very few studies focus exclusively on S ESOPs).

The rest of this paper looks at the costs and benefits of S ESOPs in two steps. In order to estimate the non-tax consequences of S ESOPs, we rely on extant empirical work on ESOPs. Much of that analysis is drawn from Freeman (2007), but we go further here in trying to quantify these benefits (and costs) as they apply specifically to S ESOPs. We divide the non-tax consequences into three sections: the benefits (and costs) to individual employee-

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7 The original 1996 Act would not have lead to the establishment of many S ESOPs because of a glitch that imposed the unrelated business tax on such an ESOP. In the following year, Congress removed that glitch and exempted from tax ESOPs holding shares of S corporation stock. That technical change, which became effective January 1, 1998, conformed the tax treatment of S ESOPs with traditional C ESOPs.

8 One reason we assume C ESOPs are, on average, larger, is that the 5% of ESOPs that are public companies (all of whom are C corps) have a mean of 13,984 employees compared to a mean of 1,460 for private companies. On the other hand, contributions, and therefore assets, are larger at private firms – 8-10% of payroll – compared to 4-6% of payroll at public companies, so there may be less of a difference – or no difference at all – in plan asset size.
owners, to firms, and to society at large. We analyze the tax consequences of S ESOPs as part of the consequences to society. That analysis does not rely on preexisting empirical research (we are not aware of any relevant research), nor do we conduct any empirical research ourselves, but instead we analyze the tax laws that apply to ESOPs. Much of that analysis is drawn from Knoll (2008). Once again, we go further. Knoll (2008) examines the tax consequences of S ESOPs assuming that the adoption of an S ESOP has no effect on productivity and total pay. In contrast, we examine the tax consequences of adoption of an S ESOP in light of our conclusions about the impact of ESOP adoption on productivity and on the division of that increase.

**Benefits and Costs to Employees from ESOP Adoption**

Of all the benefits ascribed to ESOPs, overall compensation gain for individual employees is the most unequivocal. Not only do workers gain a windfall of company equity, but Blasi, et al (1996); Kardas, et al (1998); and Scharf & Mackin (2000) all found that the overall average pay excluding ESOP ownership stakes of workers in firms with ESOPs is at least as high as – and may be higher than – that of comparable workers in non-employee owned firms. Therefore all ESOP contributions are a clear benefit to employees.

**S-Corp ESOP contributions**

Estimates of average annual ESOP contributions range from $2,510 to over $6,0009, with most studies indicating average contributions in private firms between 8%-10% of pay (NCEO 2008; “Basic Characteristics of ESOPs”). Contributions corresponding to 9% of pay would average $3,73510 per participant and aggregate to $14 billion. Given that these contributions come on top of, rather than as a substitute for, other income, S ESOPs provide U.S. employee-owners with a total of $14 billion more than they otherwise would have earned.

Moreover, from a long term societal perspective it is perhaps the best possible gain: a forced retirement plan. The original motivation for enacting ESOP legislation in 1974 was concern over the solvency of Social Security, a key concern again today as baby-boomers reach retirement age.

**Accruals on equity stakes in company stock**

Evidence about general under-savings rates among US working people suggests that employees’ ESOP contributions do not replace other savings. Because of the structure of the plans, these contributions are savings that are invested for many years. Average existing ownership stakes in ESOPs are nearly $83,000. Assuming an average annual stock market return of 11%11 – and indications are that ESOPs outperform the market – that amounts to an annual gain of $9,100 per participant and an aggregate annual gain of $34 billion.

Nonetheless, although this is money that U.S. employees would not otherwise have today, we do not include this sum in our calculation of the welfare benefits from S ESOPs. That is because the convention in economics for measuring annual welfare consequences is to measure those consequences as they arise, not years later after saving and reinvestment.

**Employee ownership is associated with greater employment stability**

Blair et al. (2000) found increased job stability in U.S. public companies with broad-based employee ownership plans as compared to otherwise similar firms in their industries. Craig & Pencavel (1992, 1993, 1995) likewise found that U.S. plywood cooperatives in the Pacific Northwest tended to adjust pay rather than

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9 An ESOP association (2005) member survey indicates 13% of overall compensation, which would amount to over $6,000 per participant and almost 16% of pay; we believe this is implausibly high as an average, and use 13% of pay as a high estimate. An NCEO (2007) analysis of Form 5500 retirement plan filings filed by ESOP companies finds average contributions of $2,510, which would correspond to about 6% of pay. The authors of the NCEO study note that the “Form 5500 data are prone to considerable reporting and transcription error and should be used with caution.” One of the NCEO authors, Loren Rodgers, suggests that the NCEO figure would represent a low mark because Form 5500 may not include all contributions.

10 The figure in the text is based on the mean civilian salary for all workers of $41,231, a figure which comes from the National Compensation Survey: Occupational Wages in the United States, June 2006 (U.S. Department of Labor U.S. Bureau of Labor Statistics June 2007). The average salary for employee-owners is likely higher both because this figure includes many marginal jobs and jobs in marginal firms that would not include ESOPs, and because many lower paid new and probationary workers are usually not included in plans.

employment as plywood demand changed.

Even aside from financial costs associated with job instability, costs of unemployment are terrible. Studies find that job loss and moving are the second and third greatest stressors in life, behind only loss of a spouse. These stressors cumulatively result in increased disease and loss of life expectancy. And there are few threats greater to a community than mass job loss.

But there are financial benefits as well: if ESOPs result in a 1% reduced likelihood in job loss, or that 37,000 of the nation’s 3.7 million S ESOP employees do not have to change jobs in any given year because of increased job stability, that results in an enormous savings. Average job loss results in 10 months of unemployment plus 2 months of job-related expenses – an average cost of about $50,000 – or a total of $1.8 billion annually. Moreover, if half of those who would have lost their jobs would have had to relocate, that’s another $1.1 billion saved annually given average relocation costs of $60,000. Thus, aside from the savings of life, health and community, the financial savings due to increased differential job stability attributable to employee ownership represents something on the order of $3 billion.

**Employee ownership is associated with (mildly) increased job satisfaction and increased organizational commitment, identification, motivation, and workplace participation**

Research identified in Blasi and Kruse (2003) indicate a positive relationship between employee ownership and organizational commitment and identification (12 studies), motivation (6 studies), and participation and influence in decisions (11 studies). These effects are understood primarily as instrumental goods that improve performance for the firm, but findings in positive psychology and positive organizational scholarship suggest they are also a direct benefit to the employees themselves – that attachment to and identification with work makes for a life of meaning and long-term satisfaction. It would be difficult to justify any specific monetary value for these benefits, but it’s clear that there is at least a positive link between employee ownership and work satisfaction and greater meaning in work.

**ESOPs and financial risk**

The most important threat that ESOPs pose to employee well-being is risk from lack of diversification. That risk has been highlighted in news stories about collapses at Polaroid, Enron, and United Airlines. Any time a firm goes bankrupt, nearly all equity is lost, so when firms with substantial employee ownership become insolvent workers can lose not only their jobs and careers, but their retirement stakes as well.

12 Traditionally, economists and many managers have suspected that job stability comes at a cost to organizations. However, as that stability has declined over the past generation, researchers have been identifying benefits of job stability not only for the employees themselves, but also for the investors who provide capital to such organizations (e.g., Pfeffer 2005). Blair, et al (2000) and Craig & Pencavel (1995) corroborate this thesis; the employee-owned firms with higher job stability also had higher productivity and better stock market performance than comparable non-employee-owned firms.

13 Mean civilian salary for all workers is 41,231 (note 10). Value of benefits is estimated at 20% above that.


15 In 2001, six thousand Polaroid workers, lost not only retirement health care severance packages and in many cases their jobs, but also a $300 million ESOP investment. Beginning in 1988, workers at the Waltham, Mass. instant camera manufacturer gave up 8% of their salary to underwrite an ESOP, created to thwart a corporate takeover. Unfortunately, Polaroid was slow to react to the digital revolution and began to lose money in the 1990s. From 1995 to 1998, the company racked up $359 million in losses. As its balance sheet deteriorated, so did the value of its stock, including shares in the ESOP. In October 2001, Polaroid sought bankruptcy protection from creditors. A company-appointed trustee sold the employee stake for 9¢ per share, having plummeted from $60 in 1997.

16 At Enron, ESOP employee losses were further exacerbated by the precipitous decline of the Enron 401(k), 58% of which was invested in Enron stock, one of many discredited techniques employed by management to (artificially) prop up share price.

17 Lamberg, et al (2003) argued that lack of central authority caused suboptimal strategic stakeholder negotiation at United Airlines, causing the firm to fall into bankruptcy (and employees to lose their investment). The empirical generalizability of the United Airlines case is questionable because it is an ESOP that many proponents considered ill-advised, and most considered badly structured. On the other hand, economists are inclined to see United Airlines’ problems as an acute example of a common problem. Ronald Coase won a Nobel Prize in Economics for identifying internal negotiations and suboptimization as a general economic problem for which his “Theory of the Firm,” that is to say the conventionally governed firm, is a solution.

18 Kruse (1996) suggests that employee owners generally have superior retirement provisions even excepting their ESOP stake because their firms are far more likely than their industry counterparts to maintain defined benefit pension plans. But of course, if a company goes bankrupt, defined benefit pensions are lost too. More research is needed on the extent of this risk and whether ESOPs result in too many eggs in one basket, or if, in fact, the eggs best belong right there with the hens that make them.
Despite these notorious examples, aggregate empirical evidence suggests these are isolated instances. We cited above the extensive evidence showing that ESOP contributions come not at the expense of other forms of compensation, but rather, in addition to such compensation. By extension, these data would suggest that ESOPs do not replace but, rather, supplement other retirement plans. In the one aggregate empirical study we could find addressing this issue, Kruse (1996) found that employee owners generally had superior retirement provisions even excepting their ESOP stake. Thus, the (admittedly limited) evidence suggests that although the typical ESOP participant has a larger portion of his financial wealth tied up in the sponsoring company, the typical participant also has a larger financial cushion independent of his employer.

### Table 2: Annual S ESOP Employee-Owner Benefits (and Costs)

<table>
<thead>
<tr>
<th></th>
<th>Annual Individual Gains</th>
<th>Aggregate Gain for all S ESOP Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average annual S ESOP firm contribution</td>
<td>$3,700</td>
<td>$14 Billion</td>
</tr>
<tr>
<td>Savings attributable to job stability</td>
<td>$800</td>
<td>$3 Billion</td>
</tr>
<tr>
<td>Annual Social Welfare Benefit</td>
<td>$4,500</td>
<td>$17 Billion</td>
</tr>
<tr>
<td>Average annual accrual equity stake ($82,900)</td>
<td>$9,100</td>
<td>$34 Billion</td>
</tr>
<tr>
<td>Annual Gains for S ESOP Employee Owners</td>
<td>$13,600</td>
<td>$51 Billion</td>
</tr>
<tr>
<td>Increased Work Satisfaction</td>
<td>Positive, but difficult to quantify</td>
<td></td>
</tr>
<tr>
<td>Risk from (Lack of) Diversification</td>
<td>Employees generally protected against possible risks</td>
<td></td>
</tr>
</tbody>
</table>

Moreover since the Enron collapse, however, changes both in norms and understood fiduciary responsibilities seem to have made investing large portions of retirement stakes in company stock an unacceptable practice.

**Benefits and Costs to Firms and from ESOP Adoption**

In order for the gains to employees from adoption of an S ESOP to properly be treated as a social gain, those gains must not simply be a transfer from others, but rather must come from wealth created by the ESOP. Accordingly, in this section, we look at the benefits and costs to firms of S ESOPs.

**• Shareholder return is higher for employee owned firms than for comparable firms**

Economists and finance scholars have been skeptical of the possibility of efficient decision making and supervision in employee-owned firms, and research has shown that firms which used ESOPs in the 1980s as a takeover defense subsequently performed poorly. Nonetheless, the overwhelming majority of empirical studies have concluded that employee ownership leads to markedly improved performance: ESOP firms outperform matched non-ESOP firms, the same firm performs better post-adoption compared to pre-adoption (or after termination of employee ownership) and employee-owners within a given firm outperform employees who do not share ownership rights.

A survey by Blasi, et al (2003) of all 70 empirical employee ownership studies that had been conducted up until that point indicates large average gains obtained from employee ownership (Table 1). The authors write:

> … the studies show that on average, companies and their investors made a profit … over and above any ownership they dished out to employees. They gave workers an 8 percent ownership stake, and in return enjoyed an average of a 2 percentage point higher return on the diluted shares they still held.

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19 Mainstream economic theory predicts employee ownership will lead to underinvestment, inefficient decision-making, inadequate supervision, or some combination of these (see Bonin, Jones, & Puttermann, 1993, for a review).

20 Pugh et al (1999, 2000), Beatty (1995), Scholes & Wolfson (1990) and Pugh, et al. (forthcoming) document that ESOPs have been used by corporations as part of a takeover defense and that these ESOPs under-perform the market. Gamble (2000) documents that as ESOP stock concentration increases, R&D spending declines.
The meta-study indicates that even after giving up an average of 8% of their shares to employees, pre-existing owners are able to increase their return by 2% annually. This improved return comes from both reduced costs and increased revenues.

**Employee ownership leads to increased productivity and profitability**

Most of these increased profits are attributable to increased productivity. Kruse & Blasi (1997: 134-136) summarize 11 empirical studies on the relationship between employee ownership and firm performance. Meta-analysis of these studies indicate employee ownership correlates with productivity gains of 4%. Productivity gains go straight to the bottom line; depending on exactly how productivity is measured and a firm’s profit margins, adopting an ESOP would allow an S corp that had been earning 8% profits to increase profit margins to between 10% and 12%. Assuming average (mean) firm size of $250 million and an average cost basis of 70% of revenues, this amounts to approximately $7 million increased average profits per firm and aggregates to a savings for all S ESOPs of approximately $25 billion (for range calculations see Appendix B).

**Employee ownership leads to increased sales and employment growth**

Increased returns are also attributable to increased sales. Kumbhakar & Dunbar (1993) found significantly higher sales growth among 123 U.S. public firms that adopted ESOPs or profit-sharing plans between the years 1982-1987. Rosen and Quarrey (1987) found that a sample of ESOP firms outperformed a non-ESOP control group in terms of sales and employment growth and that the sales growth of the sample of ESOP firms significantly improved after ESOP adoption. Rosen (1989) found similar results with a smaller sample of 20 ESOP firms.

Quarrey & Rosen (1993) and Winther & Mares (1997) compared companies before and after the adoption of ESOPs, and found faster employment growth after ESOP adoption, particularly among firms that had greater levels of employee participation in decision-making. In a study of Ohio firms, Logue & Yates (2001) also found that ESOPs grew faster than their industry counterparts did.

In the largest and most significant study to date of the performance of ESOPs in closely held companies, Kruse & Blasi (2002) compared Dun and Bradstreet files of all ESOP companies that adopted plans between 1988 and 1994 with matched non-ESOP companies of comparable size, industry, and region. These seven studies all consistently showed nearly two-and-a-half percentage points greater annual sales and employment growth among ESOPs as compared to conventional counterpart firms. Depending on gross and net margins, these increased sales could be worth anywhere from $600,000 to more than $3 million annually in profits. Assuming average firm size of $250 million and average gross margins of 30% of revenues, a 2.5% increase in sales yields increased average profits of $1.9 M per firm and aggregates to gains for all S ESOPs of approximately $7 billion (for range calculations see Appendix B).

**Employee-owned firms survive longer than comparable firms**

Several large-scale studies show that employee-owned firms are significantly less likely than their counterparts to go bankrupt or disappear for any reason at all. Conte (1995) found that fewer than one in 100 ESOPs were terminated in the 1980s because of bankruptcy. Both Park, et al (2004) and Blair et al (2000) found that U.S. public companies with employee ownership were at least 20% more likely than their industry counterparts to survive over a given time frame. Kruse & Blasi (2005) tracked all privately held companies with ESOPs in 1988, and found they had similarly higher survival rates. From 1988-1999, 70% of ESOPs survived, compared to only 55% of comparable non-ESOPs.

21 Sometimes productivity is measured as a function of all inputs, capital, labor, materials; other times simply as a function of labor. Even if we had consistency in definitions, savings would vary depending on cost structures and profit margins. See Appendix B for sensitivity analysis depending on certain assumptions about these cost structures.

22 We don’t actually have average revenues, but we do have an estimate of plan participants per firm – slightly over 1,000. Assuming revenues per employee between $200,000 and $250,000 (US average: $210,000 according to Dun & Bradstreet Million Dollar Directory, 2002 edition), and that there may be P/T, probationary or temporary employees who are not plan participants, this works out to about $250 million in revenues per firm.
Economists have traditionally been dubious about the benefits of enhanced organizational survival. 23 Schumpeter coined the term “creative destruction,” of firms dying a timely death, but in our rapidly changing times, we can increasingly appreciate the value of organizational stability even aside from the benefits to individuals with ownership stakes: it can take decades to develop a robust organizational model. Premature organizational collapse leads to squandered resources, and intellectual capital disintegrates as teams disperse – it takes years to redeploy people. Thus, although we won’t try to quantify here the benefits of organizational stability, we believe it highly likely that it represents a boon rather than a bane for individuals, firms and society.

<table>
<thead>
<tr>
<th>Table 3: Annual S ESOP Firm Benefits (and Costs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits of ESOP to a $250M S Corp</td>
</tr>
<tr>
<td>Average savings from 4% increased productivity</td>
</tr>
<tr>
<td>Additional profits from 2.5% increased sales</td>
</tr>
<tr>
<td>Risk from (Lack of) Diversification</td>
</tr>
<tr>
<td>Average total benefits</td>
</tr>
<tr>
<td>Annual firm contribution</td>
</tr>
<tr>
<td>Undistributed profits</td>
</tr>
</tbody>
</table>

All told, we calculate that S ESOPs increase earnings by $33 billion annually compared to what these same firms would earn in the absence of ESOPs. These gains are more than enough to contribute $14 billion to employee accounts and still leave a substantial surplus to share with non-employee owners and invest in growth. In addition, some portion of that productivity gain can be expected to go to employee owners through increased rates of return on their ESOP balances.

**Societal Costs and Benefits of Employee Ownership**

In the prior section, we concluded that adoption of S ESOP legislation has led to $33 billion in annual productivity gains. That increase was sufficient to fund annual contributions to employees of $14 billion and produce an additional $19 billion that is divided among other owners, sellers, and employee owners as a return on their investment. Those gains are private gains. In this section, we look at public or societal costs and benefits from S ESOPs.

**Consequences to the US Federal Treasury**

It is tempting to think of any increase in tax revenue as a benefit to society and any reduction as a cost from a tax policy change. However, viewed properly, increases in tax revenue are neither a benefit nor a cost to society, but simply a transfer from taxpayers to the government. Similarly, reductions in tax revenue are neither a benefit nor a cost to society, but rather a transfer in the opposite direction: from the government to taxpayers. Accordingly, to the extent that the rules authorizing S ESOPs and granting their participants specific tax incentives increase national income, there is a net benefit to the country from the provision of those incentives regardless of the impact of those provisions on tax revenues. 24

However, in a time of large federal deficits, some might see any decline in tax revenues as a cost of S ESOPs that needs to be balanced against their benefits. Accordingly, in this section, we examine the tax revenue consequences of S ESOPs. Specifically, we look at the tax revenue consequences of the current treatment of S

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23 Some finance scholars have been critical on the use of ESOPs in the 1980s as a takeover defense. For example, Beatty (1994) and Scholes and Wolfson (1990) claimed that the increase in C ESOPs in the 1980s was largely prompted by the surge at the time in hostile corporate takeovers. C ESOPs were an effective takeover defense because they increase both the number of shares under management control and corporate debt -- making them simultaneously less vulnerable and less attractive.

24 That is not to say that taxes cannot have welfare consequences – they can – but their welfare consequences are not the same as their revenue consequences. In general, the welfare consequences of a policy are more complicated to discern than the revenue consequences.
ESOPs relative to a regime where S corporations cannot sponsor an ESOP.25

**Tax Treatment of S ESOPs**26

S corporations are generally not subject to the corporate income tax.27 Instead, all items of income, gain, loss, expense, or basis pass through pro-rata to the shareholders. From a tax perspective, an S corporation is more like a partnership than a corporation.

In order to be taxed as an S corporation, a corporation must meet certain requirements28 and elect to be treated under subchapter S of the Internal Revenue Code.29 Contributions made to an ESOP are deductible by the employer. When the employer is an S corporation those deductions are passed through to the shareholder. If the S ESOP owns 100 percent of the corporation, then there is no one to whom to pass through those deductions. If there are any individual shareholders (so the ESOP owns less than 100 percent of the company), then each shareholder receives his or her pro rata share of the total deductions. Until 1998, those restrictions limited ownership to domestic individuals and prohibited ownership by any nonprofit entity, including an ESOP.30

The beneficiaries of the S ESOP are not taxed when the ESOP is established or as the shares are released into the employees’ individual accounts. Instead, the employees are taxed only when they withdraw their shares (or more typically cash) from their individual ESOP accounts.31 At that time, the individual shareholders are taxed at ordinary income tax rates on the value they receive.32

**The Tax Advantages and Disadvantages of S ESOPs**

The most common forms of ESOPs – both S and C – are leveraged ESOPs. In a leveraged ESOP, the corporation establishes a trust, which borrows money and purchases shares from the employer or another shareholder. The employer, then, makes regular contributions to the trust on behalf of its employees for the benefit of its employees. The contributions go to pay principal and interest on the ESOP loan. These payments are deductible in full by the employer.

As the loan is paid down, the shares, which secure the loan, are released into the individual ESOP accounts of the employees. An employee can withdraw securities from her individual ESOP account – or sell those securities back to the company and withdraw cash – when the employee reaches certain benchmarks, such as minimum age and years of service or retirement.

**An S ESOP does not affect the amount of taxable income**

In the view of some experts (e.g., Rosen 2005), the largest tax benefit from using an S ESOP is that employers can deduct both principal and interest on ESOP loans. That is considered to be an unusually generous benefit because in most business circumstances payment of interest is deductible, but payment of principal is not.

That simple and seemingly compelling argument – that the ability to deduct principal on the ESOP loan is a tax benefit – is wrong. The flaw in that argument was first described by Scholes and Wolfson (1990) in the context of C ESOPs. As they make clear, employers’ contributions to ESOPs are a form of compensation and as with other

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25 In other words, we do not attempt to determine if there are less favorable tax regimes that would yield as large or almost as large benefits. Instead, we only seek to compare the tax revenue under the current regime with that from a regime that prohibited or effectively precluded ESOPs from owning shares in an S corporation.
26 For a discussion of the legislative history surrounding the creation of S ESOPs, see Rosen (2005a).
27 The corporate income tax is imposed under Internal Revenue Code (“Code”) Section 11 on corporate income as defined in subchapter C. The provisions of that subchapter are set forth in Code Sections 301 through 385.
28 These requirements are set forth in Code Section 1361. For example, an S corporation can have no more than 100 shareholders; none of its shareholders can be C corporations or nonresident aliens. In addition, the S corporation must be a domestic corporation and it cannot be engaged in certain lines of business.
29 The reference to subchapter S is to subchapter S of chapter 1 of Subtitle A of the Code. The provisions of that subchapter are set forth in sections 1361 through 1379 of the Code. The election to be taxed as an S corporation requires unanimous consent of the shareholders. Code Section 1362.
30 Prior to 1998, if an ESOP held any shares of a corporation, the corporation would not be able to make the S election – and if it did, it would be ineffective. As a result, such a corporation would be subject to corporate tax under subchapter C.
31 It is rare for an S ESOP to transfer shares to a beneficiary because the sale of even a single share to a person not qualified to hold the shares of an S corporation would void the S election and cause the corporation to be taxed as a subchapter C corporation.
32 ESOP participants can defer taxation still further by rolling over their withdrawals into an individual retirement account (IRA) or other qualified account.
forms of compensation – salary, health care, and contributions to qualified retirement accounts – they are deductible by the employer upon payment. Thus, the S ESOP does not provide the employer with a deduction that it would not otherwise receive. If the employer paid its employees the same total compensation, but made payment in a different form (not to a leveraged ESOP for the benefit of the employee), the employer would still have the same amount of total deductions.

Furthermore, the S ESOP structure does not allow the employees to escape taxation on any of their income that would otherwise be subject to tax. That is because all amounts withdrawn by employees are eventually subject to tax. Thus, in the long run, the employer and employee are taxed on all of their income with the S ESOP structure as they would be with any other structure.

**ESOPs defer employee tax without affecting employer deduction timing**

Although there is no reduction in total income subject to tax from an S ESOP, the S ESOP does affect the timing of tax collections. The use of an S ESOP has no effect on the timing of the employer’s deductions: a taxable employer deducts its compensation payments when it makes them. The S ESOP structure, however, does defer taxation of the income received by the ESOP’s beneficiaries. And the deferral of tax payments is valuable to the taxpayer and costly to the tax collector. Accordingly, we next consider the argument that the S ESOP structure is costly to the federal treasury because taxation of the employee’s income is deferred.

The participants in an S ESOP defer tax on their income received through the S ESOP until they withdraw proceeds. That is to say, there is no taxation of the beneficiaries on the amounts contributed into an S ESOP until those funds are withdrawn, at which point the entire sum withdrawn – both the original amounts contributed and any subsequent earnings on those amounts – is subject to tax at ordinary income tax rates.

**S ESOPs increase tax collections because productivity gains are taxed**

Earlier in this paper, we calculated, based on a review of the available empirical studies, that overall firm-level benefits from S ESOPs are on the order of $33 billion annually. Moreover, based on the available studies, we concluded that the firm-level benefits derived from S ESOP adoption are at least as large as the ESOP contributions for the benefit of employees, $14 billion annually. That is to say, the evidence indicates that shares in an S ESOP come on top of and not in place of other forms of compensation, and result in increased firm value, even after dilution. Thus, a typical firm that establishes an S ESOP and grants shares to its employees produces a surplus on top of the value of the grant. Moreover, that benefit is on top of a far more difficult to quantify benefit to society.

On average, then, the contributions received by the beneficiaries through an S ESOP are made out of additional income that would not have arisen without the S ESOP. That is to say, the employee’s income received through the S ESOP comes out of the surplus created through the adoption of that ESOP. It, thus, follows that there would be no gain to the government from taxing that income sooner – when the contributions were made to the S ESOP – if the effect of such a change would be to discourage the establishment of the S ESOP and to prevent the creation of that income.

Viewed from this perspective, there is no trade-off between the benefits of S ESOPs and tax collections. There is no reduction in tax collections from the S ESOP structure. That is because the adoption of an ESOP creates a surplus. That surplus is shared between employees and investors with employees at ESOP firms earning more outside of the ESOP (or at least not less) than employees at comparable non-ESOP firms. Accordingly, the adoption of S ESOP legislation has increased tax collections from employees and employers as they are earned because some portion of the productivity gain does not go through the ESOP. In addition, the authorization and adoption of S ESOPs has led to additional deferred tax collections from employees through S ESOPs. These additional collections, which, in aggregate, are all tax collections from employees through S ESOPs would not have occurred without employee ownership.

Current federal ordinary income tax rates are as high as 35 percent. Because the top rate applies only to incomes above $350,000 a year, many ESOP participants are taxed at lower rates. If we assume that S ESOP participants on average are taxed at 25 percent – including both federal and state taxes, then 25 percent of the annual benefit of $33 billion or about $8 billion a year – goes to federal and state treasuries. These tax revenues are revenues that would not otherwise be collected without S ESOP legislation.

Suppose, however, that our earlier analysis is wrong. That there is no surplus beyond the contributions and
that some contributions – whether made by employers or by employees – do not come out of productivity gains, but instead come out of income that would still have been created, earned and taxed without an ESOP. In that case, there is a cost to the treasury from the ESOP structure, but only on those contributions that do not come out of productivity gains. Of course, the cost to the Treasury from any contributions that do not come out of productivity gains will first reduce the increased tax revenue from those contributions that came out of gains. Only if the reduction in tax revenue from contributions that would still have occurred exceeds the increase in tax revenue from contributions that come out of the surplus created by the S ESOP would the S ESOP structure reduce tax revenue.

Moreover, employees who contribute to an S ESOP get the same tax benefit – deferral – on their contributions as on their employer’s contributions. Of course, an ESOP is not the only saving vehicle that can provide employees with tax deferral. There are other tax-advantaged investment vehicles available to individuals. Individuals can also invest through tax qualified accounts, such as 401(k)’s, IRAs, etc, which work similarly to ESOPs. Those accounts can be used to defer the beneficiary’s income, including ordinary income, until funds are withdrawn. Thus, relative to investing in a qualified account, there is no additional tax benefit from an S ESOP.

Furthermore, most ESOP investors likely have additional capacity in such accounts. The vast majority of eligible employees contribute substantially less than their personal maximum to such qualified retirement accounts. Thus, most employees have excess capacity, some portion of which is used up by their contributions to an S ESOP. Moreover, the limits for all such accounts is typically 25 percent of income and does not depend upon how many accounts and what types of accounts are used. Accordingly, the use of an S ESOP does not expand the total capacity of such accounts, but at most only their use. Thus, if there is a cost to the treasury from contributions to an S ESOP, that cost is the same as would occur if the employee contributed the same amount to any other qualified account.

Society-wide economic benefits attributable to S ESOPs

In the previous sections, we noted, in addition to benefits derived by individuals and the firm, that ESOPs contribute to overall economic growth through increased productivity and sales.

Expanded economic activity is widely seen as not only a benefit for the firms and their employees, but a societal benefit as well. It certainly does represent an expanded tax base generating income tax, payroll and sales taxes. An additional benefit is obtained through job growth. Based on Dun and Bradstreet reports of all ESOPs and matched counterparts, Blasi & Kruse (2000) found that ESOPs created jobs at a much more rapid rate – 2.3% annually. That’s 85,000 jobs annually, attributable to S ESOPs.

Social benefits of employee ownership

Aside from the societal benefits of economic growth, many social benefits of employee ownership have been suggested, although research has been limited.

One hope of ESOP legislation was that employee ownership could help mitigate disparities in wealth that capitalism typically foments. A small scale survey by Onaran (1992) found slightly greater intra-firm equality on most measures of wealth, decision-making, and status in employee-owned firms, but a much larger study by Kardas et al (1998) in Washington State found that, although average and low-level workers did considerably better within ESOPs than in comparable companies, the difference at the high end of the pay scale was even greater. While hardly conclusive, this finding does mean that we cannot simply presume that ESOPs reduce income disparity. On the other hand, income disparities may be less cause for concern if everyone is better off.

Advocates speculate that employee ownership can also lead to increased political and civic participation, continuity and orderly transition, ownership and social stability, and improved general stakeholder relations.

33 Greenberg (1986) speculated on a “spillover” effect from employee ownership, that those who participate in workplace governance would generally increase political and civic participation. As far as we know, no one has tested this link directly, but political scientists (e.g., Schur, et al 2005) have begun investigating the relationship between workplace participation (not necessarily in employee-ownership) and citizenship. Given the established links between employee ownership and workplace participation, a finding of a relationship between workplace participation and citizenship would suggest that employee ownership does lead to citizenship behaviors.

34 Firm survival is not generally understood by economists as a social benefit, and may even be seen as a social cost, the failure of the old to die and make way for new, innovative firms. Research on resilience however (e.g., Freeman 2004), suggests that there
No studies of which we’re aware empirically test these claims, so none of these societal goods are operationalized and proven let alone quantified. Nevertheless, it is reasonable to imagine that societal gain from employee ownership extends even beyond employee gains, firm benefits, and economic growth, and that we all benefit if employee ownership confers a greater sense of belonging and participation among people who otherwise might feel little or no stake in society.

Summary

It has been ten years since S ESOPs became a feasible legal structure. For most of that time, S ESOPs were outside of public view. That changed in 2007 when Samuel Zell announced that he was going to purchase the Tribune Company using an S ESOP. In this paper, we take a fresh – and as far as we know – first look at the costs and benefits of S ESOPs. We have thus drawn on the extensive empirical literature on C ESOPs and ESOPs generally to evaluate the non-tax consequences of S ESOPs. Those studies show that the adoption of an ESOP is likely to lead, on average, to an increase in productivity and profitability that redounds to the benefit of both employees and employers.

Our calculations indicate that S ESOPs result in equity contributions of $14 billion annually, plus $3 billion attributable to increased job stability, as well as non-quantified benefits of greater work satisfaction and reduced stress. Moreover, this $14 billion is channeled into forced savings. Evidence suggests that this forced savings shows up almost entirely in increased savings where it generates an additional $34 billion a year. That increase is not technically a welfare gain because the convention is to measure gains when they arise not later after years of saving and investment. Nonetheless, that is wealth that U.S. workers would not otherwise have without S ESOPs.

The welfare gain from increased productivity and sales is worth approximately $33 billion, which suggests that S ESOP firms have an additional $19 billion of gain beyond what they pay directly to employees. Some of that cash is retained by the firm, where it is used to create new jobs at a clip 2.3% greater than counterpart non ESOP firms.

Moreover, because ESOP contributions come on top of other compensation that is as large as the compensation received by employees at non ESOP firms, and because the tax benefit from an S ESOP is deferral, not avoidance, of tax, it follows that S ESOP adoptions do not on average lead to a reduction in tax collections. Instead, S ESOP adoptions increase tax collections by increasing the tax base.

Any particular S ESOP adoption, including Zell’s Tribune purchase may or may not serve the public interest, or any interest other than the selling or purchasing shareholders. But our calculations derived from the empirical literature indicate that in the aggregate S ESOP legislation, like ESOP legislation more generally, has provided substantial benefits to employees, firms and society. Moreover, these benefits come at no overall cost to the US Treasury. Rather, our analysis indicates that ESOP legislation is revenue positive: taxes collected by the government through S ESOPs are generally additional tax revenues that the government never would have collected without the laws that authorize S ESOPs.
References


Knoll, Michael, Samuel Zell, the Chicago Tribune and the Emergence of the S ESOP: Understanding the Tax Advantages and disadvantages of S ESOPs, unpublished draft.


Rosen, C. (2005a) "How S Corporation ESOPs Came to Be", in Corey Rosen, ed., S Corporation ESOPs


**Relevant but not cited:**


**Appendices**

**Appendix A. Enhancements and Modifications of ESOP Tax Incentives**

Important enhancements and modifications of ESOP tax incentives since 1974's ERISA include:

- 1975 Tax Reduction Act (P.L. 94-12), which created a corporate tax credit for ESOPs;
- 1984 Tax Reform Act (P.L. 98-369), which added new tax incentives for ESOPs;
- 1986 Tax Reform Act (P.L. 99-514), which imposed a 10 percent penalty on withdrawals prior to age 59/6 months;
- 1996 Small Job Protection Act (P.L. 104-188), which allowed ESOPs to hold S corporation shares;
- 2000 Comprehensive Retirement Security & Pension Act; and
- 2001 Economic Growth and Tax Relief Reconciliation Act (P.L.107-16), which imposed anti-abuse rules for S corporation ESOPs to ensure that S corporation ESOPs provide meaningful benefits to rank-and-file employees.
- 2004 American Jobs Creation Tax Act
Appendix B. Sensitivity Analysis of our Estimates

What if actual numbers are smaller or larger than we estimate?

Attributes and Extent of S ESOPs and C ESOPs
In Table 1, we explained the S ESOP multipliers we use for all subsequent analyses. For our best estimates, highlighted, we assume that S ESOPs represent only one third of the overall plan assets and participants which would mean that they are, on average, about 35% smaller than C ESOPs (lower right of Table 4). If, in fact, S ESOPs are, on average, only half the size of C ESOPs, that would depress all our figures by 24%; If, in fact, S ESOPs are, on average, equal in size to C ESOPs, that would augment all our figures by 24%

Table 4: Range of Firm and Plan Size Estimates for S ESOPs and C ESOPs

<table>
<thead>
<tr>
<th></th>
<th>S ESOP %</th>
<th></th>
<th>C ESOP</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>All ESOPs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of Plans</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>low est</td>
<td>best est</td>
<td>hi est</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of Participants (Millions)</td>
<td>9,225</td>
<td>35%</td>
<td>40%</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of Plan Assets ($ Billions)</td>
<td>$928</td>
<td>25%</td>
<td>33%</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>participants/plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,214</td>
<td>25%</td>
<td>33%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Contributions
S ESOP contributions corresponding to 9% of pay would average $3,735 per participant and aggregate to $14 billion. If contributions did, in fact, average only $2,510 (6% of pay), that would aggregate to $9.3 billion. If this were true and S ESOPs are, on average, only half the size of C ESOPs, then total contributions would aggregate to $7 billion or half of our best estimate. All other aggregate values in the paper would correspondingly be halved.

S ESOP firm-level productivity gains and profits from increased sales
ESOPs both grow faster and are more efficient than counterpart non-ESOPs and as indicated in Table 3, different assumptions – or actualities – about gross margins and overall production savings do not make a big difference in terms of how much, on average, this increases profit. ESOPs that profit most from increased sales profit least from productivity gains and vice versa. In our best estimate scenario (central column highlighted), we assume that ESOPs result in 4% productivity savings on variable costs equaling 70% of total revenues, and increased sales result in increased profits based on margins equaling 30% of total revenues. In the “Low margin, High var cost” right column scenarios, we assume 4% productivity savings on variable costs equaling 90% of total revenues and increased profits based on margins equaling 10% of total revenues. In the “Hi margin low variable cost” left column scenarios, we assume 50% variable costs and 50% margins. Regardless of these assumptions, evidence shows that adopting an ESOP will, on average, increase profits by three to four percentage points.

Table 5: Range of Estimates for S ESOP Productivity and Sales Gains

<table>
<thead>
<tr>
<th></th>
<th>Annual increased profits for $250M S ESOP (Millions $)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hi margin low var cost</td>
</tr>
<tr>
<td>Average savings from 4% increased productivity</td>
<td>5.0</td>
</tr>
<tr>
<td>Additional profits from 2.5% increased sales</td>
<td>3.1</td>
</tr>
<tr>
<td>Total</td>
<td>8.1</td>
</tr>
</tbody>
</table>
Of course, if these productivity or sales estimates overstate or understate actual gains then the numbers would decrease or increase proportionally. Likewise if S ESOPs are smaller or larger than we originally estimated, aggregate gains would decrease or increase proportionally as per Table 6.

### Table 6: Range of Estimates for Annual S ESOP Firm Benefits (and Costs)

<table>
<thead>
<tr>
<th>Annual firm contribution</th>
<th>Annual increased profits for $250M S ESOP (Millions $)</th>
<th>Annual Aggregate Gain for all S ESOPs (Billions $)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.5 3.7 5.4</td>
<td>7 14 26</td>
</tr>
<tr>
<td>Undistributed profits</td>
<td>2.7 5.2 7.4</td>
<td>7 20 33</td>
</tr>
</tbody>
</table>

### Appendix C. Sources of additional information about ESOPs and Employee Ownership

- ESCA (Employee-Owned S Corporations of America) [http://www.esca.us/](http://www.esca.us/)
  ESCA is the Washington, DC voice for employee-owned S corps. ESCA’s mission is to preserve and protects S corp ESOPs and the benefits they provide to the employees who own them.

  The ESOP Association, founded in 1978, is a national non-profit membership organization, with 18 local Chapters, serving approximately 2,400 ESOP companies, professionals with a commitment to ESOPs, and companies considering the implementation of an ESOP. (866) 366-3832.


- NCEO (National Center for Employee Ownership) [http://www.nceo.org/](http://www.nceo.org/)
  The National Center for Employee Ownership (NCEO) is a private, nonprofit membership and research organization that aims to serve as the leading source of accurate, unbiased information on employee stock ownership plans (ESOPs), equity compensation plans, and ownership culture.

- OEOC (Ohio Employee Ownership Center) [http://dept.kent.edu/oecoc/](http://dept.kent.edu/oecoc/)
  A university-based program established in 1987 to provide outreach, information, and preliminary technical assistance to Ohio employees and business owners interested in exploring employee ownership. The OEOC provides ownership training on a single and multi-company basis to existing employee-owned firms and operates a listserv devoted to employee ownership issues: ownership@cog.kent.edu

- Vermont Employee Ownership Center
  Executive Director, Don Jamison, 802-861-6611, don@veoc.org. (National Center for Employee Ownership) Chris Mackin cm@ownershipassociates.com of [http://ownershipassociates.com/](http://ownershipassociates.com/)