

## **The debt-worthiness of ESOP acquisition loans**

Jacquelyn Yates

Ohio Employee Ownership Center, Kent State University

for the Beyster Fellowship Symposium

La Jolla, California

June 23-26, 2013

**Abstract/Summary:** Data on acquisition debt among ESOP plans in Ohio between 1993 and 2010 indicates that most ESOPs are able to pay off their acquisition debt within 5 years and gain sufficient financial strength to take on additional debt in order to purchase more shares in the company, acquire other firms, or make major capital improvements. The Great Recession slowed the repayment process but data do not indicate any greater likelihood of default.

### *Why this study?*

In its broad outlines, the stories of ESOP companies touch the most cherished American values. They are stories about people who don't have a lot, but through a little luck and a lot of hard work and sacrifice are able to realize material ambitions they never thought to attain. Their good luck is that they worked at a company where the owners wanted to share the company with their employees, and the hard work is what it took to follow in the founders' footsteps to continue and grow the company. It is a story of business success and personal growth for both owners and employees, where, as in the Dr. Seuss stories, every heart grows a little bit larger and every mind grows a little bit broader. Like all mythic accounts, the story is true in its essence, but slips around details and difficulties.

One such difficulty is finding the money to enable the transfer of ownership. This being America, most employees haven't saved enough to pool their wealth and purchase the company outright. And most owners can't afford to give the company away. What is needed is credit, that lubricant of economic life that Fernand Braudel praises as the neglected ingredient in understanding the early history of capitalism (Braudel, 1986, pp.384-390). If employees who want to buy and owners who want to sell can't find timely credit, the sale won't occur and something else will happen — a sale to private equity (that often drives a hard bargain) or a competitor (who just wants the customer list and closes the company) or, more happily, a purchaser that wants to expand or enhance its operations and keeps the company facilities open and the employees retain their jobs.

In any decision, one is never sure about the motivations of individuals, much less organizations, but those who have helped to make employee buyouts happen volunteer some reasons why ESOP acquisition loans are difficult to get. One reason is that banks don't understand employee-ownership in any of its forms because they are not the modal form of business organization. They amount to just 10,000 of the more than 2.3 million businesses with more than four

employees (<http://www.census.gov/econ/smallbus.html> accessed 20130610). That is less than 0.5 percent of all firms. So banks usually don't feel truly competent to evaluate the credit risk of the company. A second reason is that in a buyout, the company leadership is likely to change in the near future, as the seller transitions out and new management takes the lead. A third reason is that banks don't feel comfortable lending more than 30% of the value of the business. That amount of financing can initiate the deal if the owner is comfortable with selling the business in tranches, agreeing to sell a minimum of 30% in the first purchase, so that he/she can benefit from the "1042 rollover," an important tax benefit for the seller. For the seller, that can be a comforting arrangement. If things go awry after the sale, the seller is still the majority owner and can direct the business to a better end. For the bank, it is troubling to have divided ownership in a small company — who is responsible, in case of difficulties? If ill will develops between the seller and the buyers, will lawsuits be needed to sort things out, and will the bank ever get its money back? In addition, the ownership structure of an ESOP is complicated: the seller owns his shares, but a trust owns the employees' shares. From a bank's point of view, already things are too complicated.

As a result, many small companies where the owner is ready to transition out of the business don't get converted into ESOPs even though the seller and the employees would like it to happen. In even more, employee ownership isn't even considered because of a lack of knowledge on the part of the employees, the owner, or the owner's professional advisors.

From the bank's point of view, the company with an ESOP is a new company, even though it has the same employees and plans to produce the same products or services with almost exactly the same personnel. Once the initial acquisition loan is repaid and the company is ongoing in its new incarnation, additional loans are much easier to negotiate, as the organization has a track record.

### *Introduction to ESOP pension plans*

Broad-based employee owned enterprises trace their roots to French and English workers who organized themselves for mutual benefit at the dawn of the capitalist age. Burial societies, consumer cooperatives, ships' companies, guilds, and share companies are the ancestors of today's ESOPs, modern cooperatives of all kinds, stock purchase plans, and employee savings plans.

ESOP trusts were created by the federal government in 1974. The concept was developed by economist Louis Kelso as a way to create an income stream for workers who might lose their work due to automation, as it was called at that time. Kelso set up a few trusts in the 1950s which implemented his ideas. He argued that if workers owned shares of companies, they would receive dividends to supplement the income earned by their work.

His idea was championed in the U.S. Senate by Russell Long, who was a member and then chairman of the Senate Finance Committee when the notion was circulating in Congress. Long is said to have remarked, "What America needs is more capitalists."

Federal legislation adopted a somewhat different approach to employee ownership, constructing the ESOPs as pension trusts, where employees' ownership shares would accumulate over the years, and their value would be transferred to employees at the time of separation from the company, usually at retirement. It was expected that the company's growth would be sufficient to redeem the shares or they could be sold on the stock market.

Because the ESOPs are constituted as trusts, with the employees as beneficiaries, there is considerable flexibility within legal requirements. The flexibility seems to appeal to companies because they can tailor the trust to their own needs and those of the beneficiaries. The plan document creates the ESOP, names its members, states its purposes, and specifies how assets of the plan will be managed. Action of the board of directors is necessary to revise it. This flexibility is one factor that has made ESOPs the most popular form of employee ownership among U.S. companies (Kruse, Freeman and Blasi 2010 p. 49).

Once the ESOP is established, the company can contribute up to 55% of participants' pay toward buying shares from the owner, and deduct the expense from its taxable income, but that may not be sufficient to cross the 30% threshold in smaller firms.

Contrary to Louis Kelso's expectations, ESOPs rarely pay dividends out of profits, but they do report paying better wages and providing better benefits than comparable companies in their industry (Logue and Yates, 2009, p. 10; Buchele et.al. pp. 362-368). The companies can provide the wages and benefits tax-free as a cost of doing business, and while wages are taxed, most benefits are not and are therefore provided by the company at lower cost than the individual employee could buy them.

Since the days of Louis Kelso and Russell Long, new federal policy has made the economic system more friendly to ESOPs, chiefly the 1042 rollover in 1984 and the S-Corp ruling in 1998.

#### *Risks of lending for acquisition debt*

But the problem of funding employee buyouts has remained. While millions in investment funds seem to flow to poorly performing private equity firms and outright fraudulent Ponzi schemes, loans for ESOP buyouts are much more prudently bestowed. Banks, where one would think loans might be had, are reluctant to lend more than 30% of the company's value to the new owners. Where selling owners choose to hold an unsecured note or a majority share of the stock (until the employees can pay off the initial loan), the deals may succeed, but not every owner desires or can afford to extend liberal credit.

These stringent conditions of credit might suggest that lending to ESOPs is quite risky.

People who know the ground, however, do not agree. From experience, they know that ESOP companies that have passed a thorough prepurchase financial analysis are quite likely to remain in business and grow. If the employees receive enough business education to understand how their jobs affect the company's bottom line and how the bottom line affects their retirements, the company will grow, likely faster than a comparable company without an ESOP, whether it makes cardboard boxes or designs communications systems for controlling unmanned aircraft (Logue and Yates, 2001, Chapter 5, and esp. p.150).

If those are the benefits of creating more ESOPs, the question arises of how to create conditions that would foster them.. One part of that question is ...

*Are ESOPs worthy of credit?*

Two questions any reasonable lender asks are, "When (if ever?) will the principal be repaid?" and "What will I earn additionally for lending the funds?"

There is evidence easily available to answer (at least partially) the first of these questions. Knowledge exists about unsecured notes and the rate of return on lenders' principal, but it is spread among many parties.

What can be easily learned about ESOP acquisition loans lies in the historical records of the IRS Form 5500, where ESOP trust reports have been filed annually or triennially since the program was implemented. The first of these data in usable form appeared for 1993.

For potential lenders, the most important thing is that the loans will be repaid, preferably as originally written, but certainly in full with reasonable interest. Beyond the lenders' interests, it is important to consider the value of employee ownership in a market society and whether the loans provide a lasting foundation for employee ownership.

In Ohio, since 1993, more than 1000 companies have reported that they have ESOPs or stock bonus plans, with about 300-400 existing as legal pension trusts at any once time over the past 20 years. Among the data they have been required to report to the Internal Revenue Service (IRS) is debt owed for acquisition or improvement of the business. The information then flows to the Department of Labor, which enforces the Employee Retirement Income Security Act (ERISA) governing private pensions and guaranteeing them in case of failure.

The IRS requires that ESOPs report the amount of "acquisition debt" (money borrowed to acquire company stock) owed by the trust. This is not necessarily a complete accounting of the amount of credit provided to close the ownership transfer. Sellers are not always willing to sell the company in tranches, and a bank loan is likely to cover no more than 30% of the purchase price. To finance the rest of the purchase, the selling owner may accept a note from the buyers or from the company. Other credit options, rarely used, are a loan or grant from a community fund, a union fund, or local government. However, not all transfers of ownership to an ESOP require a

purchase. An employer may contribute stock as a match for employee contributions to the retirement plan or award stock for company performance. Some employers simply grant stock to the trust free of charge, viewing it as a low cost benefit plan that may increase the loyalty and cooperation of the employees.

### *Limitations of data*

Pension trust data is released from ERISA approximately two years after it is filed. Data drawn on a specific date constitutes a tranche or slice of information that is continually flowing in. If companies fail to file for a certain year, an older filing may be retained in the data. The information in a given tranche may overlap with that in the previous tranche, or there may be information that falls between two tranches and can only be collected by taking tranches at closer intervals. The potential for overlap or missed reports is clarified in Table A1, which lists the tranches that were taken for this study.

The IRS/DoL data is subject to an ample range of human errors and missteps. The responsible person at the firm or consultant's office may fail to file on time. Errors may be made in data entry through ignorance or physical misstates (i.e. punched the wrong key), including errors in the distinctive federal Employer Identification Number and plan number which together uniquely identify each pension plan. In addition, neither the IRS nor the DoL seems to insist that the form be fully completed. Many companies routinely omit certain variables, such as the number of employees.

A further complication has come up since the data began to include historical information in 2009 (The most recent forms request five data points on a number of important variables.) That data is not organized in an orderly fashion, but only tagged with the date of filing, so that the information is not necessarily presented in chronological order.

The data for this study were formed by merging eight tranches of IRS Form 5500 records spanning 1993 to 2011. The records were drawn between one and four years apart for practical reasons: primarily to avoid unnecessary expense of data acquisition. With time, the value of accumulating an ongoing record of the ESOP sector in Ohio took greater priority and tranches were drawn with greater regularity.

Data were drawn, usually at year's end, for 1993, 1997, 1999, 2003, 2004, 2007, 2009, and 2010. Each tranche is labelled by its median filing date. The data contain records for nearly 1100 Ohio pension plans that were reported to exist for at least one year. They do not constitute a complete historical record of Ohio's ESOPs, but there are enough tranches of data to capture the choices of the more enduring ones and the comings and goings of perhaps half of those with briefer lives.

Table A1 summarizes reporting dates and number of plans in the tranches drawn for this study.

### *The evidence*

In spite of all the ways that credit granted for a buyout might not be recorded, it is still somewhat surprising to find that only about 15% of the plans (165 of 1091) reported any acquisition debt between 1993 and 2010.

Eighteen plans appeared to have borrowed more than once, paid down a debt, then incurred another. It was possible that they had borrowed earlier (during the 1984-1996 debt interest tax expenditure window) and already established a good credit record, making it easier for them to borrow again. Consequently, they were excluded from this study.

The first tranche of data includes 58 debts that were initiated in that tranche (median filing date 12/31/93) or carried over from prior years. Subsequent tranches included ESOPs and stock bonus plans with prior debt as well as those with new debt that was written before or during each reporting period. The number of new loans is shown in Figure 1.

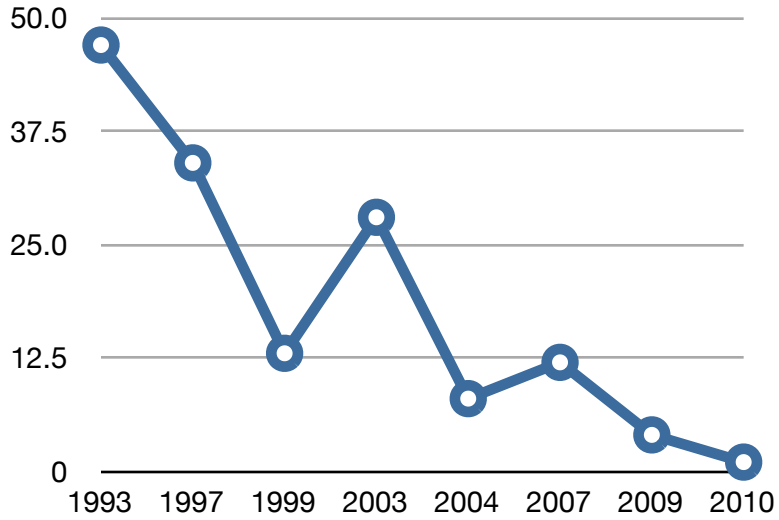
Each debt was followed from one tranche to the next. The total acquisition debt created in each tranche and its subsequent history is traced in Figure 2, and the micrographs in Figure 3 show the patterns of debt payoff for the loans originated in each tranche (or already existing in the 1993 tranche).

It is easiest to see the pattern of debt payoff by examining what happens to the new loans made in each tranche as in Figure 3. Typically, companies and their pension trusts pay off the initial acquisition loans in full and never again use the legal power of the trust to borrow money (Figure 4).

From 1984, banks could exclude from their taxable income half of the interest earned on ESOP loans. The effect of repealing this provision in 1996 can be seen in far fewer new loans after 1997 and the decline in totals borrowed, as shown in Figure 1 and Figure 2.

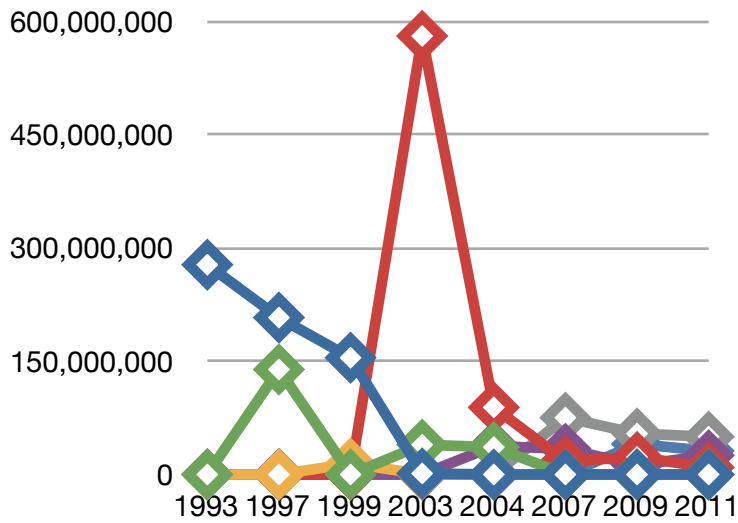
○ N of Loans

**Figure 1. Number of One-Time Acquisition Debt Borrowers**



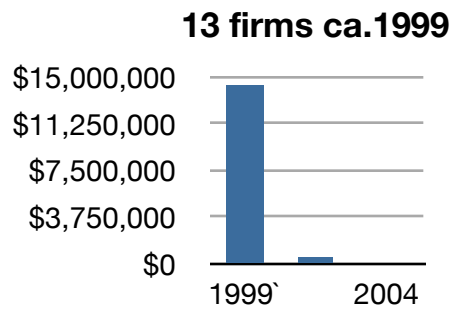
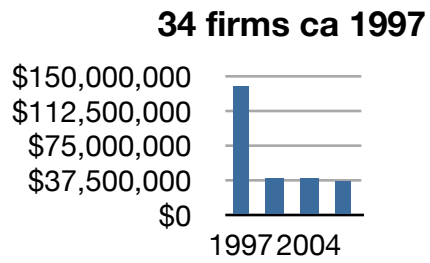
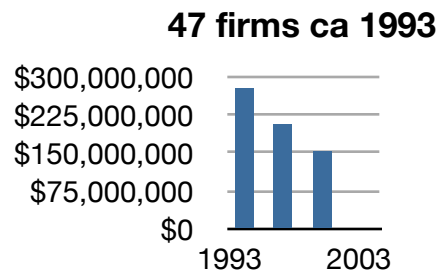
◆ Sum 1993    ◆ Sum 1997    ◆ Sum 1999    ◆ Sum 2003  
◆ Sum 2004    ◆ Sum 2007    ◆ Sum 2009

**Figure 2. Acquisition Debt Total of Balances by Year Debt was Initiated**



I

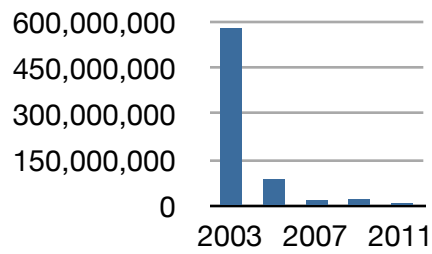
**Figure 3. Payoff Records for Firms Originating Acquisition Debt, by Tranches of Form 5500 Data**



■ Sum 2003

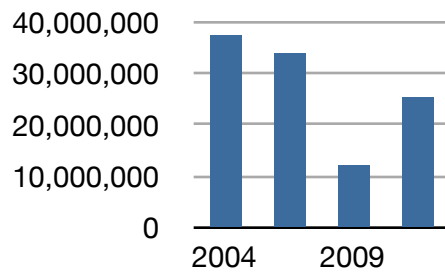


### 28 firms ca 2003



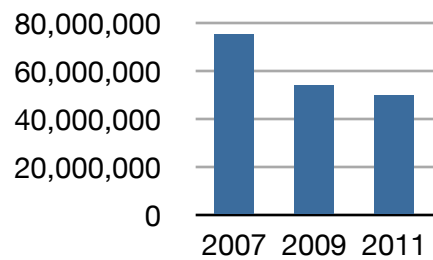
### Sum 2003

### 8 firms ca 2004



■ Sum 2004

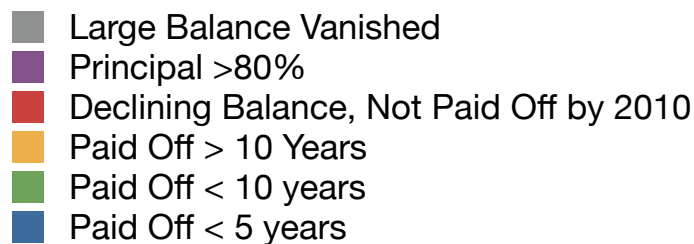
### 12 firms ca 2007



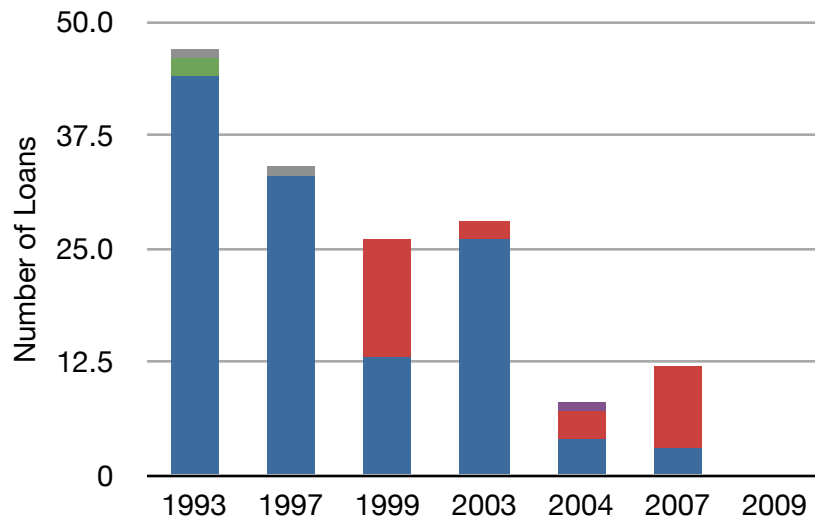
■ Sum 2007

Of 130 one-time acquisition loans written between 1993 and 2004, 72% (94 of 130) were paid off within 5 years, and 92% (120 of the 130) were paid off in less than 10 years. Five loans are still outstanding, but their balances are generally declining (with the exception of Tranche 2004) in each successive reporting period, as shown in Figure 3.

Among the one-time loans were a handful with a large balance that suddenly vanished from the acquisition debt records (Shown in green in Figure 4). One was sold before the debt was repaid, but details of the sale are unknown. One was sold with a handsome profit for the employee-owners. One terminated the 401k and may have been under considerable stress, but some division of the enterprise probably remained — the plan’s final filing was submitted in the same year that a company of the same name in the same business was incorporated in the state.



**Figure 4. Payoff Histories for Loans Originated in Tranches 1993-2007**



ESOPS appearing earlier in the historical record paid off their acquisition loans more promptly than those appearing later. 40% of ESOPs in Ohio are small manufacturers (2005 OEOC survey), and it is worth recalling that Ohio’s manufacturing industry has been under increasing competitive pressure since the 1970s with many companies moving production to the U.S. South, or later, overseas. Between July 1993 and July 2005, manufacturing employment in Ohio

declined by 17% (BLS 2010). The loan history in Figure 4 also reflects the approach of the Great Recession, with a smaller proportion of loans paid off within five years. However, loans originated in 1999 and after and not fully repaid by 2010 have not gone to bankruptcy. Those still outstanding in 2010 remain as acknowledged acquisition debt and report declining balances. The creditors seem likely to recover their principal with interest, but perhaps it will be over a longer period than they originally expected. In fact, they may have been happy to have interest income while U.S. Treasuries were near 0% and the stock market was historically low and quite sluggish.

Once a company has succeeded in paying off its ESOP's original acquisition debt, it typically does not use the trust to borrow again. To purchase additional stock from a selling owner, the company may fund future buyouts out of its income. It is not unusual for employees to contribute from their own wages. This can be a sacrifice but also a source of pride for employees who feel that they are making wise choices for the future by sacrificing wage or benefit increases in the present in order to acquire a larger ownership share in their company.

Acquiring a greater share of the company is even more attractive since the passage of S-corp legislation in 1996. The share of the company that is owned by the ESOP is not subject to corporate taxes. Instead it is taxed like a partnership, with taxes due when funds are paid to the owners. Employee owners pay taxes on their wages at the time they receive them, but since they don't receive ESOP funds until they separate from the company, their income taxes are not due until that time, and the rate is the employee's rate, not a corporate rate. Although the employee's payoff usually takes place at retirement, separation can occur for other reasons, including dismissal, early retirement or leaving to take another job.

Avoidance of double taxation through a 100% employee owned S Corporation is a great competitive advantage if it is well-managed. The company can use funds that would have gone for taxes to make investments to improve or expand its operations, eventually increasing the value of the employee owners' pension plans. For companies that are already substantially owned by their employees, the attraction of 100% ownership is a powerful emotional draw in itself, and the prospect of greater economic benefits at retirement further increases the attraction.

### *Why make more ESOPs?*

Employee ownership through an ESOP is a useful approach to leadership succession and retirement for small business owners who lack an interested and qualified heir and who cannot find an appealing buyer for their firms. Finding a buyer is especially hard for owners of "sunset" industries where production is being offshored or the market is shrinking due to changes in tastes, lifestyles or product substitution.

However, there is always one group interested in purchase. That is the employees, who may fear a management succession or outside purchase that will lead to the loss of employment. Right behind them are state and local officials, who can well estimate the probability of a sale leading to lower tax revenues, higher unemployment, and greater demand for social services.

In addition, ESOP companies seem to be generally good citizens in their communities and states. They offer better wages and benefits than typical companies in their industry (Logue and Yates 2009 p. 10; Buchele, Kruse, Rodgers and Scharf in Kruse, Freeman and Blasi 2010 pp. 362-365). Since they are locally-based, employees from all levels of the company are more likely to spend those wages in their communities. Retirees will have income to spend locally as well. ESOPs in the 2010 tranche paid \$3.9 billion to separated plan participants, mainly retirees. They are not as likely to outsource as other companies (Logue and Yates 2009, p 18), and they rarely move their facilities to another community. The company itself spends money and employee time to improve the community. That means their employees feel comfortable investing in local housing, and they are more likely to care for the community as resident individuals and as corporate citizens. David Erdal found that Italian communities with the most cooperative members scored higher on almost every indicator of social desirability — health, public order, education, satisfaction (Erdal, 2001).

In addition to what the company does as an organization in the community, most long-lasting ESOP companies offer employees a journey of personal growth through their work experience. The companies with lasting ESOPs formally or informally teach their employees about business and what it takes to run a business (Logue and Yates 2008). This is so that employees can understand what is going on with their business and how what they do on their job contributes to the company's bottom line. The company helps employees to understand that rugged individualism has its limits -- appropriately helping each other on the job is a vital contribution to the company's reputation with customers. As they learn more about their business, the employees take pride in it and in their own work. They become aware of the long-term planning needed to ensure that the company will remain employee owned while redeeming the stock of retiring employees. Understanding how a business works, knowing how to help it grow, contributing to others' work as well as one's own, making long-term plans and carrying them out, correcting errors and sometimes facing setbacks — these topics are not taught in any public high school and most are not covered at university, either. Combined, they are exceptional accomplishments in any adult population. In this case, they grow out of the gradual construction of an ownership culture where decisions are devolved to appropriate levels so that work units and individuals can control their own work and conditions, and employees from the shop floor sometimes sit on the board of directors. Because they prefer leadership that is already acculturated to employee ownership, ESOP companies almost always promote from within, creating opportunities for upward mobility. Even management usually comes from within the company, because rank-and-file employees with the drive and initiative to get appropriate education are considered prime candidates for the highest ranks of company management.

So even though debt repayment isn't the only issue, it might matter to many people whether companies retain their ESOPs or lose them.

*Do ESOP Companies Endure?*

Internet research periodically collects information on the current business status of the nearly 1100 companies in the database. The primary concern is to ascertain if the company still has its ESOP, and if it does not, what has happened since the last review. These data are not as solid as the IRS data, because online information is constantly being improved as small publications put their earlier print-only editions online. The research can lag reality because many companies seem to terminate their ESOPs without notifying the IRS. Data for the 165 debtor companies was examined in June 2013.

Of the 165, 93 are still employee-owned and 57 more are still in business, even though their ESOP or stock bonus plan was terminated. Four are known to have been closed in distress or liquidated, and seven others are closed, including one that distributed substantial assets prior to the company's termination. Over half of companies that had acquisition debt remained as ESOPs, and most of them have cleared their debt entirely. Some of these enduring ESOP companies trace their employee ownership farther back than the ESOP law, because they had employee ownership in some form before Congress recognized ESOPs as legal entities.

To boil these outcomes down, 91% of the companies that borrowed money to establish an ESOP are still ongoing enterprises, and 56% still have their ESOPs. Over 17 years, that is a fairly good rate of survival for a creditor worrying about repayment.

### *Discussion*

While surprisingly few ESOPs borrow to purchase their company, more ESOPs could be created. More were created every year before tax incentives for lenders were removed.

ESOP companies are almost certain to repay acquisition loans, even if they are eventually sold or even closed.

If bankers are cautious about lending for company acquisition, more and better evidence might persuade them that properly screened acquisition loans are a safe bet with a good return. Qualified professionals could develop standardized prepurchase evaluation procedures and forms that thoroughly examine a company's financials.

Requiring a short program of training and education as a condition of the loan would not be easy to monitor, but existing professional ESOP training firms could facilitate the monitoring by creating a certification program for trainers and a structured menu of choices for new ESOP companies. Certification of trainers along with a standardized evaluation form might provide sufficient structure to encourage more ESOP lending.

ESOP companies are desirable citizens in their communities and they anchor capital locally, acting as a countervailing force to the tendency to centralize economic activity. They are

unlikely to fail in business. They retain jobs and economic activity that otherwise might be lost for the locality and the nation.

## References

Braudel, Fernand, 1986. *Civilization & Capitalism 15th-18th Century, vol. 2. The Wheels of Commerce*. Harper and Row.

Buchele, Robert, Douglas Kruse, Loren Rodgers and Adria Scharf. *Show Me the Money: Does Shared Capitalism Share the Wealth?* in Kruse, Freeman and Blasi 2010.

Bureau of Labor Statistics (BLS) “State and Area Employment, Hours and Earnings.” <http://data.bls.gov:8080/PDQ/outside.jsp?survey=sm>. Accessed November 1, 2010.)

Erdal, David. “Effects of Living in an Egalitarian Environment: Summary of some findings from 1999 Ph.D. Thesis” unpublished paper on “The Psychology of Sharing: An Evolutionary Approach” Department of Psychology, University of St. Andrews October 1999.

Kruse, Douglas, Richard Freeman and Joseph Blasi, *Shared Capitalism at Work* 2010 University of Chicago Press

Logue, John and Jacquelyn Yates. 2001. *The Real World of Employee Ownership* (Ithaca: Cornell University Press).

Logue, John and Jacquelyn Yates. 2008. “The Evolution and Impact of Democratic Practice in Ohio Employee-Owned Companies over 20 Years.” Biennial Conference of the International Association for the Economics of Participation, Hamilton College, Clinton NY.

Logue, John and Jacquelyn Yates. 2009. *Continuity and Change over 25 Years of Ohio ESOP Companies: Examining the Much Discussed but Little Studied Mysterious Life Cycle of Employee-Owned Companies* Beyster Symposium, La Jolla, California July 21-23, 2009.

## Tables

Table A1. Data tranches used in data acquisition research (Yates 20130624)

<b>Median date of tranche</b>	<b>Range of reports</b>	<b>N of plans in tranche</b>	<b>N of Plans reporting acquisition debts</b>	<b>N of new debtors appearing in debt table with continuous records or single skips in monotonic record*</b>
12/31/1993	12/31/1993-12/31/1994	239	58	47**
12/1/1997	12/1/1995-9/1/1998	470	52	34
4/16/1999	12/1/1996-7/1/2000	248	22	13
12/31/2003	1/4/02-11/30/04	410	47	28
12/31/2004	1/31/2002-6/30/06	435	37	8**
12/31/2007	4/30/2003-6/30/2008	425	38	12
12/31/2009	3/1/2006-6/30/2010	350	28	4
12/31/2010	3/31/2008-5/31/2012	316	30	1
MULTIPLE, SUCCESSIVE DEBTS				18**
Total			312 reports	165 debtors

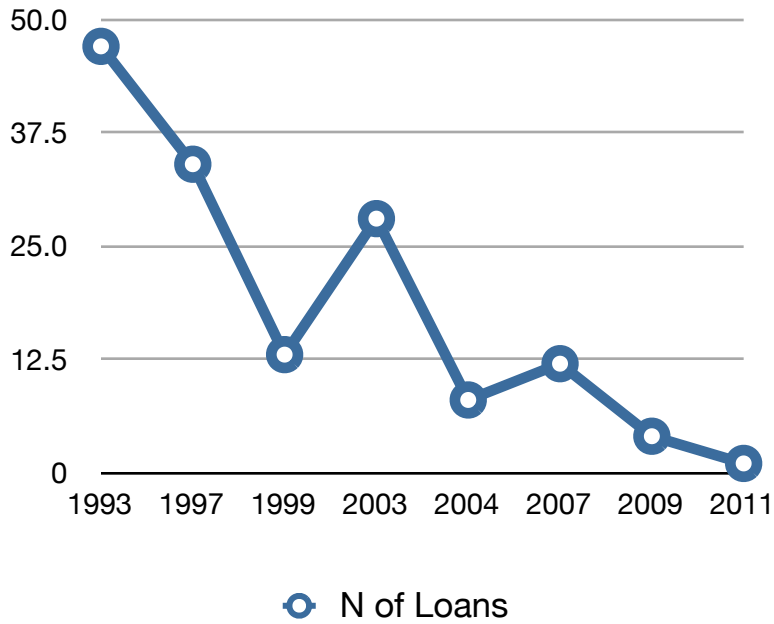
\*“New” debtors had no acquisition debt in previous tranche, but did have debt in current tranche. IRS data prior to 1993 was not usable, so not possible to know which were new loans and which were ongoing in the first tranche. New debts were followed through subsequent tranches if they had no than one skipped datapoint and the balance was plausibly related to the previous balance in terms of overall magnitude or monotonic decrease from the prior balance.

\*\*Eighteen debtors had multiple successive loans, marked by a large and sharp increase in the loan balance. Sometimes ( but not always) there was one or more \$0 intervals between the loans. They were set aside for separate treatment, as, after the first loan they would have established a credit record and faced fewer hurdles for obtaining future loans.

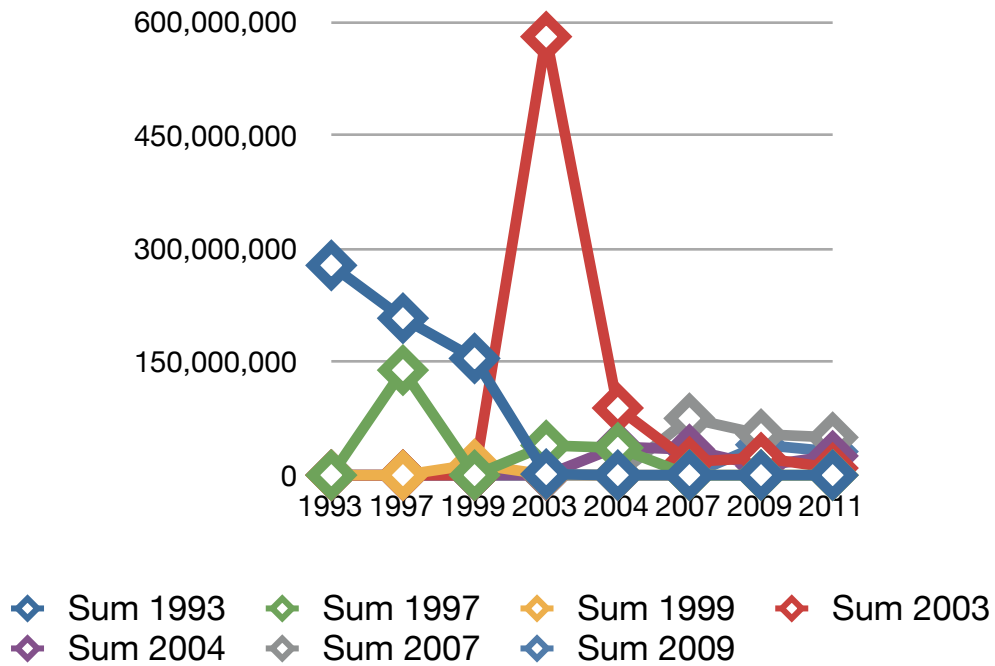


## Figures

**Figure 1. Number of One-Time Acquisition Debt Borrowers**



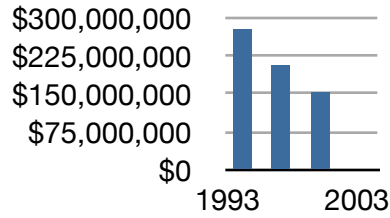
**Figure 2. Acquisition Debt Total of Balances by Year Debt was Initiated**



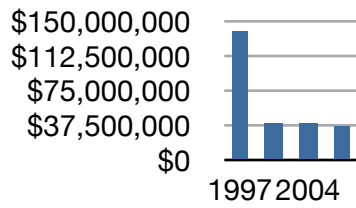
5

**Figure 3. Payoff Records for Firms Originating Acquisition Debt, by Tranches of Form 5500 Data**

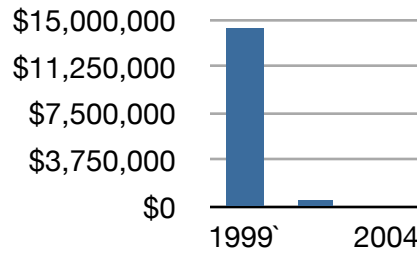
**47 firms ca 1993**



**34 firms ca 1997**

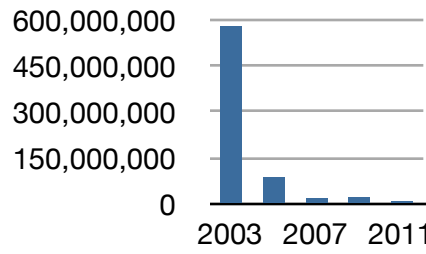


**13 firms ca.1999**

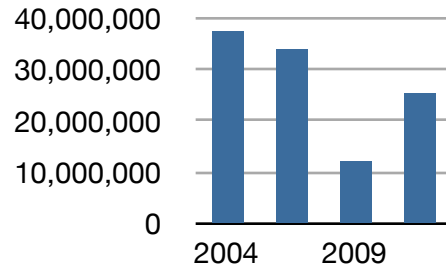


■ Sum 2003

### 28 firms ca 2003

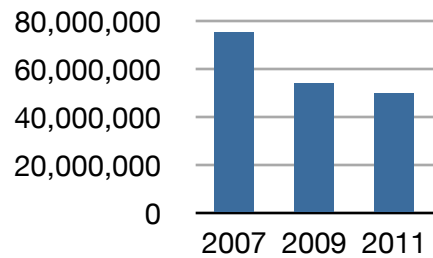


### 8 firms ca 2004



■ Sum 2004

### 12 firms ca 2007



■ Sum 2007

- Large Balance Vanished
- Principal >80%
- Declining Balance, Not Paid Off by 2010
- Paid Off > 10 Years
- Paid Off < 10 years
- Paid Off < 5 years

**Figure 4. Payoff Histories for Loans Originated in Tranches 1993-2007**

