Who Pays for ESOP Shares?:

ESOP Analysis and Evaluation

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The Ideology of the ESOP Movement

ESOPs are certainly touted as "worker capitalism"—although the reality is interestingly different from the advertisements. But first we should consider the ideologies surrounding ESOPs.

The originator and popularizer of the leveraged ESOP was Louis Kelso. Kelso's "two-factor theory" is particularly bizarre. When today's economists talk about "productivity," they are referring to *labor* productivity. Kelso apparently inferred that capitalist economists think that labor is the only productive factor (never mind over a century of criticism of the labor theory of value by the same economists). Kelso has discovered another productive factor, capital, so there are really two productive factors, labor and capital. Kelso announced this discovery in a book *Two-Factor Theory* (Kelso and Hetter, 1967), and his theories are often referred to as "Binary Economics" (see Kelso, 1988a).

How does all this relate to ESOPs? Kelso claims that capital is much more productive than labor, and that if labor was really paid according to its productivity, the workers would not receive a living wage. Thus the economy is askew; labor is being paid more than it is worth so that workers can survive, and capital is underpaid. Kelso's solution is to give workers a capital income, to make them "capital workers" in addition to labor workers. Then labor and capital can each be paid what they are worth, workers will do well on their two incomes, and the economy will finally be set aright.

To professional economists, Kelso's theories have all the earmarks of a self-taught credit-crank, and they treat him accordingly.

> The U.S. today has so-called ESOP plans that give some tax loophole advantage to certain kinds of profit-sharing trusts. Louis Kelso, a San Francisco lawyer, has made extensive claims for such innovations. Often John-Law schemes, in which somehow, out of bank loans, equity is created from thin air, get involved in the profit-sharing Gospel. Those few economists who have audited the economic theories underlying the proposals and the claims made for them have generally not rendered favorable verdicts on them. I must concur in these negative appraisals. (Samuelson,1977, n. 3, p. 16)

Indeed, anyone who announces in the twentieth century that they have discovered the productivity of capital is not likely to be met with a chorus of hosannas from the economics profession. While economists have treated the two-factor theory as beneath comment, ESOPs have nevertheless grown to cover about 10 per cent of the workforce in a decade and a half. *Something* is happening that requires attention.

In the circles of ESOP promoters, Kelso's "two-factor theory" and "binary economics" is all very politely ignored, and treated only as the idiosyncratic indulgence of the founding father of the ESOP concept. Senator Russell Long and other ESOP advocates such as Jeffrey Gates use a populist or redistributive approach. ESOPs cut workers in on a "piece of the action." ESOPs help correct the obscene maldistribution of income and wealth in America. When people get rich, it is usually through the appreciation of equity capital, not through wages and salaries. When profits are made and reinvested in companies, that accrues to the existing equity holders, and does not create any new equity owners. The ESOP changes that. Some of the reinvested profits flows to the workers through their ESOP. The workers can thus cut into the otherwise "closed-loop" financing system; some of the flow of new value is redirected to them. Since the closed-loop system exemplifies the logic of capitalism—to those who have capital, the profits shall be given—ESOPs must initially violate that logic in order to cut into the loop. This non-capitalist feature of ESOPs will be considered in the next section on the labor-based aspects of ESOPs.

Ownership of a corporation legally includes control of the corporation. The redistributive theme of cutting workers in on a piece of ownership is rather silent about cutting workers in on a proportional part of control. The ESOP movement is sometimes characterized as being "democratic" in a spread-the-wealth sense. Many of the ESOP boosters are in fact anti-democratic in the original sense of the word "democratic" pertaining to self-governance. Sometimes the whole question of workplace democracy is passed off with simplistic "Not all Indians can be chiefs" remarks as if all workers would be managers or "chiefs" in a democratic firm. That is hardly the real reason for managers' antipathy since after over two centuries of political democracy, they are well aware that democracy does not mean that "all Indians are chiefs." Rarely do those who have management power desire to be accountable—particularly to those who are managed.

There is another reason why the ESOP movement has not faced up to the real question of democracy. It is a total captive of the Fundamental Myth that governance rights are part of property ownership. ESOP ideology is the ideology of *ownership*.

One can construct an excellent political analogue by considering a government where the franchise was based on land ownership. Indeed, before the political democratic revolutions in the West, political sovereignty over people's lives was sometimes interpreted as being based on property rights in land. The monarch was the ultimate owner and ruler of the land. Some power was delegated to lesser nobilities who had "tenancy" and thus governed various regions of the country. The ownership of land was equated with political sovereignty over the people on the land. The landlord was the Lord of the land. By substituting capital for land, that interpretation of pre-democratic political government becomes one of the intellectual origins of the Fundamental Myth which interprets governance rights over workers as part of the "ownership of the means of production."

Given such an ownership-based system of political government, one could imagine two strategies for the transition to *political* democracy:

(1) a broadened *ownership rights* strategy, or
(2) a broadened *human rights* strategy.

In the approach of "broadened ownership" (to use a common ESOP phrase), the equation between land ownership and political sovereignty would not be challenged. Instead, the idea would be to "democratize" and broaden the ownership of land, to "give the little guy a piece of the action." By becoming small landholders, some people would then gain a small measure of political control over their lives.

In the broadened human rights approach, the idea would be to sever the connection between land ownership and political control so that the rights to govern the people residing in a community could be transformed into personal rights assigned to the functional role of residing in that community.

While there was some weakening of the grip of traditional landed property by the development of numerous small holders, the political democratic revolutions of the eighteenth and nineteenth centuries ultimately took the human rights approach and did not stop short with "broadened ownership." There are good reasons for this. The right to democratic self-determination should be a human right, not a property right which must be "purchased" from its prior "owners." From a practical viewpoint, it is a will-o'-the-wisp to think that political democracy could be approximated by keeping the rights to govern people's lives as property rights.

It is a fundamental fact that property rights can be concentrated into a few hands, while personal rights are automatically decentralized on a one-per-person basis. As long as political power was based on property ownership, it would be futile to expect the broadened ownership of small land-holders to fundamentally challenge the historical concentrations of property and power. Political democracy was only established by removing the question of political sovereignty from the whole arena of property rights through universal suffrage without property qualifications. That analogy captures the redistributive impulse in ESOP ideology. The redistributive impulse is well-intended. But it usually contains no clue that the road to democracy lies not in redistributing property but in separating the governance rights off from property ownership and in restructuring those rights as personal rights attached to the functional role of being governed.

That is the road already taken by political democracy, and that is the road ahead for economic democracy.

Labor-based Aspects of Conventional ESOPs

Progressive ESOP commentators (including the author) have sometimes drawn an over-simplified contrast between "worker-capitalist" conventional ESOPs on the one hand, and worker cooperatives and democratic ESOPs on the other hand. Yet one of the great ironies in the ESOP phenomenon is that in spite of the constant drumbeat of worker capitalist ideology amongst conservative ESOP boosters, even the conventional ESOPs have a number of significant labor-based characteristics.

In a pure worker capitalist firm, the workers would individually own the shares and the shares would be freely salable. Some workers or managers might buy shares, other might not. The correlation between work in the firm and ownership would be "accidental." In a democratic firm, the workers hold the membership rights as personal rights inherently correlated together with work in the firm. The annual patronage is allocated to the capital accounts of the workers in accordance with their labor often as measured by wages or salary. The capital rights embodied in their internal capital accounts are built up while working in the firm and are paid off when the workers leave the firm.

In an ESOP, the shares are not individually owned as salable property; they are held in a trust. The trust prevents a worker from selling his or her shares while working in the firm. It is also not an individual decision to become an owner. As loan payments are made on an ESOP loan, the typical arrangement is for shares to be allocated to the accounts of all the currently employed workers in the firm. Moreover, the shares are usually allocated between the accounts in accordance with the workers' wages or salaries. If that initial distribution of shares was not labor-based, then capital-less workers could never cut into the closed-loop system of capitalism. And when the workers leave the firm and can then sell the shares freely, the usual arrangement is for the firm to buy back the shares.

Thus the conventional ESOP, not to mention the democratic ESOP, already implements significant parts of the legal structure of the democratic firm. This is not surprising in view of the legislative history of the ESOP. It is a variation on a pension plan. Participation in a pension plan is correlated with employment in the firm. Firms do not make pension contributions for people not working in the firm, and there are non-discrimination clauses which require that the pension contributions are not restricted to only certain workers. The shares purchased with the pension contributions are not individually salable by the workers; the shares are held in a trust. And the pension contribution for each worker is proportional to the worker's labor as measured by pay. All these labor-based characteristics of pension plans carry over to ESOPs giving them their strong labor-based flavor in spite of the "official" worker-capitalist ideology.

The labor-based characteristics of American ESOPs have given ESOPs some advantages over worker capitalist firms and even over traditional stock cooperatives. When the connection between ownership and work is accidental, then the workers and their shares are "soon parted." Worker capitalist firms that are successful don't remain worker-owned very long. Sooner or later

there is a share-selling stampede and the workers sell out in favor of managers or outsiders. Thus there are few worker capitalist worker-owned companies. The ESOP in turn is rather stable. Some management-dominated ESOPs have sold out but that has been relatively rare.

The non-discriminative aspect of the ESOP also addresses another of the old problems in worker-owned companies, the degeneration into two classes of owner-workers and non-owner-workers. Traditional stock cooperatives, such as the plywood cooperatives in the Pacific Northwest, have had a degeneration problem as new workers could not afford to buy the shares of departing workers. Mondragon-type worker cooperatives in the United States are structured with membership attached to work in the firm. After a probationary period, the up-or-out rule requires that workers either be accepted into membership or have their contract terminated. But that up-or-out rule in American co-ops is typically only embedded in the by-laws, not in a state or Federal statute. Thus greed can set in and the current members can change the by-laws to close off membership to new workers. For ESOPs, the non-discrimination clause is part of Federal law.
The degeneration question is related to the old question of why more firms aren't set up as worker-owned firms in the first place. One important reason can be understood by reviewing the virtues of financial leverage. If the residual claimants of an investment project anticipate future profits resulting from more capital, they will want to raise the funds by borrowing as opposed to sharing the anticipated profits with new equity-holders. Financial leverage gears up the return of the current equity-holders.

The same logic holds for renting people as for renting capital. The employment relation is the legal instrument for human leverage. The people involved in starting up a new company of course anticipate that it will be profitable. Therefore it is in their interest to *hire* the additional people needed in the company as opposed to allowing them in as members. Thus the people who control the legal form of a new company will tend to choose the capitalist form (with themselves as the owners) instead of the democratic form of organization.

The same phenomenon can be observed in the political sphere. The leaders of successful revolutions or coups are in a position to determine the new form of government, and they rarely choose a democracy that could vote them out in a few years. Marxism has been the choice of many revolutionaries in part because it provides a covering ideology for non-democratic government. Capitalist entrepreneurs and Marxist autocrats have more in common than first meets the eye.

The Basic Contribution of the ESOP Idea

What do ESOPs do; what is their basic contribution to worker ownership? Why haven't workers previously cut into the closed-loop financing system? Workers can't just buy companies; they don't have the cash. But why can't they get the credit? Why can't they take out loans backed by the value of the assets to be purchased with the loan money? There are several reasons. If a buyout was totally leveraged in that fashion, then in the face of difficulties the workers could "walk away" with little or no loss leaving the bank to try to auction off the assets to recover on its loan. Thus banks look beyond asset value to "equity" put in by the borrowers—money that

would be lost if the borrowers defaulted on the loan. Workers usually don't have that type of equity.

Moreover, the cash demands of running a business extend beyond owning the plant and equipment. They need operating capital to pay the initial expenses and salaries until the revenues start to come in. Borrowing that money may be even more difficult particularly with uncertainty about the market for the product. There is also prejudice against worker buyouts on the part of many traditional lenders ("That's not labor's role.") but it is not the deciding factor. "Banker bashing" is the easy excuse used by those who are unwilling to examine the more objective reasons why workers have traditionally had great difficulty financing buyouts.

One alternative is for the workers to only buy *part* of a company—a company that is already operating and showing profits. What is the collateral for the loan, and how will the workers make the loan payments? If the workers put up little or no equity, then the purchased stock might be the collateral. But how can workers make the loan payments? The dividend stream over the term of the loan would in general be quite inadequate to pay off the principal and interest on the loan (since stock may be valued at the discounted value of *all* future dividends). Moreover, the company can't declare greater dividends on the worker shares without paying the same on all shares. In addition, dividends are twice-taxed income, once at the corporate level and once at the individual level.

Some other collateral and some other method of payment is needed to pay off the loan for the worker share purchase. Here the ESOP idea makes its true contribution.

Basic ESOP Idea:
Use the borrowing power of the company itself to take out the loan to buy worker shares, and pay the loan off as a labor expense deductible from taxable corporate income.

The ESOP does address the traditional problem of the workers getting credit because the earning power of the company itself backs up the loan. And it addresses the problem of paying off the loan since the company itself pays off the loan—and with pretax income. That basic ESOP package has been further "sweetened" by additional ESOP legislation (see Blasi, 1988)—which may or may not survive future congressional efforts to reduce tax breaks.

To evaluate the uniqueness of the ESOP contribution, one might compare an ESOP with traditional benefit plans. The idea of a company increasing worker share ownership and treating it as a deductible expense is not new; that was the purpose of a stock bonus plan where deductible bonuses to the worker were paid in stock. Deductible cash contributions to a trust with the workers as beneficiaries are also not new; that occurs in the usual defined contribution pension plan. An ESOP differs from a stock bonus plan in that it can be *leveraged*; it can take out a loan to buy shares. An ESOP differs from a pension plan because it buys shares in the employer company (whereas pensions must be diversified). The leveraging feature is crucial

because that makes the ESOP into a *financial* tool. Relaxing the diversification requirement allows the ESOP to be a financial tool for employee ownership (of the employer company).

Who Pays for ESOP Shares?

Worker shares and employer tax breaks? Are ESOPs totally "win-win"? Who pays for the shares in the ESOP?

The analogy or "picture" used by ESOP boosters is that of a loan that is invested in some productive project which in turn yields the cash flow to pay off the loan. By this picture, it appears that no one else pays for the shares; they are created out of pure credit and good investments. The new capital is "self-liquidating"; it pays for itself out of new profits.

> This new capital is self-liquidating, meaning that it is designed to pay for itself out of the increased profits flowing from expanded production. What keeps most people from acquiring self-liquidating capital is lack of access to long-term credit. (Speiser, 1985, p. 429)

Kelso paints a similar picture using "in effect" metaphors.

> In effect the employees are buying the stock and personally repaying the price, because from the moment that stock is purchased it is theirs. The corporation gives its guarantee to the bank that it will make a certain scheduled level of payment necessary to enable the trust to pay off its loan. These payments are, in effect, dividends which amount to a relatively full payout of the earnings of the assets represented by that stock. (Kelso, 1988b, p. 5)

But this lovely picture is inaccurate on two crucial points.

Firstly, the loan to buy the stock is not collateralized by just the stock but by the earning power of the company. It is by no means clear that earning power and loan repayment power is based on "capital" as opposed to "labor." American union leaders involved in ESOP deals have been quick to point out that their members usually must take a cut in pay and benefits (and perhaps relax the work rules). Even if employees do not take a pay cut in the beginning, lenders realize that in the event of difficulties, employees are more willing to finance debt repayments with pay cuts if *they* are the beneficiaries as in the ESOP arrangement.

Secondly the loan is not paid off by the cashflows thrown off by the stock investment; the dividend stream is quite inadequate to pay off a term loan. The company is obliged to pay off the loan with appropriately timed contributions channeled through the ESOP back to the bank. Those ESOP contributions must be made whether or not the return from the firm's investment of the loan proceeds would pay off the loan. Thus the picture of pure credit being used to finance a self-liquidating investment is only a "picture."

Another pollyanna description of the ESOP transaction is the *no-dilution argument* that there is no dilution since the shares are purchased at their full market value. This argument would be

fine if the loan used to purchase the shares at their full value were paid off by a third party. But the company itself is paying off the loan to the ESOP that was used to purchase the shares. ESOP descriptions often involve a type of "*shell game*" of switching between two quite different interpretations of the transaction. The front-end is described as an equity injection—a purchase of shares at full market value. And the back-end of the transaction is described as paying off a loan with pretax dollars. But if the front-end is described as shares being purchased with money borrowed by another party (the ESOP), then it should be added that the corporation itself pays off the *other* party's loan with the ESOP contributions. And if the back-end of the transaction is described by paying off a loan with pretax dollars, then it should be added that the company has *already* "paid for" the cash injection (the loan) with the transfer of shares to the ESOP. But ESOP descriptions often focus on either the front-end equity injection or the back-end tax-favored loan payments without giving the effect of the whole transaction.

A stark way to state the argument is that a company pays twice for the funds received in an ESOP loan, once by issuing the shares and once in paying back the loan. One transaction is a quid pro quo, and the other transaction is tax-advantaged. Thus instead of 100% dilution (the second time the funds are paid for), the dilution is reduced by the amount of the tax break. In a 40% tax bracket, the ESOP shares are paid for 40% by the tax break and 60% by dilution.

The question of "Who pays for ESOP shares?" can be answered precisely if a number of "extreme-case" assumptions are made: the worker shares do not result in lower wages or lower wage demands; the worker shares do not lead to any increase in productivity or efficiency; the firm could have gotten the same loan on the same terms without using the ESOP; and there are no other tax or non-tax advantages associated with putting the loan through the ESOP. Under those assumptions, the ESOP shares are paid for by the combination of *dilution* of the existing shareholders and the *tax break* associated with paying the loan off with pretax dollars.[see below for numerical examples and algebraic arguments]

Fortunately, the extreme-case assumptions usually do not hold. There are some tax breaks that apply specifically to ESOP loans in the United States so that the company usually cannot get the loan on the same terms. Sometimes ESOPs are established as part of an explicit wage concession bargain. Even more often, there seems to be implicit bargains or expectations that future wage demands will be tempered if an ESOP is installed. And lastly, there is good evidence that ESOPs do improve productivity particularly when coupled with concrete worker participation programs inside the firm (see Quarrey, Blasi, and Rosen, 1986; Blasi, 1988). The combination of these factors would decrease the part of the ESOP shares paid for by dilution of the existing owners—by increasing the tax breaks and by having the workers make a contribution through wage concessions and productivity enhancements.

Do these other factors completely counterbalance the dilution effect? In view of the rapid spread of ESOPs, one must conclude that for many firms, the dilution is either counter-balanced, or there are non-economic factors that outweigh any remaining dilutive effect such as the owners' desire to reward the workers and/or to induce the workers to more closely identify with the firm.

Technical Analysis of "Who Pays for ESOP Shares?"

The No-Dilution Argument

One of the important arguments concerning the question of "Who pays for ESOP shares?" is the no-dilution argument. Since shares are purchased by an ESOP at their full (appraised or market) value, it is argued that no dilution is involved. To see the flaw in the argument, let us consider a loan to a corporation both with and without an ESOP. Since the dilution is of less practical concern in an employee-owned company with majority or more employee ownership, it may be assumed that any ESOP shares constitute a small minority of the outstanding shares. The numbers are only illustrative. The loan is for the same amount, say $200, in both cases (with and without an ESOP). The annual interest rate is 15%. The loan is, for simplicity, paid back in one $230 principal and interest payment at the end of the year. In order to make the tax break significant, assume the earnings before interest and taxes or EBIT are $1,030 and assume the corporation is in the 50% tax bracket.

The corporation without an ESOP cannot deduct the $200 principal payment on the loan, only the $30 interest payment. The corporate income tax is 50% of $1000 (1030 – 30) or $500. The remaining $500 goes to the owners (e.g., as retained earnings or as dividends).

Non-ESOP Corporation	
EBIT	$1030
– Interest	–30
Taxable Income	$1000
– Income Tax (50%)	–500
Increase to Equity	$500

With a leveraged ESOP, the $200 loan proceeds were used by the ESOP to purchase $200 of newly issued shares at their full value from the company, and then the proceeds were used in the same manner by the corporation. We make the assumption (which can be relaxed later) that the earnings EBIT are the same regardless of whether or not the loan is channeled through an ESOP. At the end of the year, the same $230 for the loan was paid in the form of an ESOP contribution and deducted from the same $1030 EBIT so the taxable income is now $800. The tax is $400 so the remaining $400 was the increase in owner's equity.

ESOP Corporation	
EBIT	$1030
– ESOP Contribution	–230
Taxable Income	$800
– Income Tax (50%)	–400
Increase to Equity	$400

When the loan was channeled through the ESOP (as opposed to the non-ESOP loan), the workers obtained $200 worth of shares in the company. Who ultimately paid for them? Were the previous owners diluted in the total transaction (loan and payback through the ESOP) in spite of the shares being purchased at full value?

The questions can be answered by comparing the situations without and with the ESOP. The government tax receipts were decreased by $100 (= 500–400) so $100 of the $200 worth of employee shares was paid for by the tax break. The other shareholders' equity increase was $400 with the ESOP as opposed to $500 without, so the other $100 of the $200 of worker shares was paid for by the reduced increase in the shareholders' equity. Actually the previous non-ESOP owners would receive slightly less than the $400 since a proportionate part of those capital gains (or dividends) would go to the ESOP shares. But we will ignore this additional loss to the other owners by assuming that the new ESOP shares are a negligible portion of the total shares.

Thus we have the answer to the question of who pays for the $200 of ESOP shares. If the corporation is in the 50% tax bracket, 50% or $100 is paid for by the tax reduction and 50% or $100 is paid for by the reduction in what would otherwise be the shareholders' equity.

If the company had been in a 30% tax bracket, then 30% of the $200 or $60 would be paid for by the tax reduction and 70% or $140 would be paid for by the relative reduction in equity.

Non-ESOP Corporation (30%)	
EBIT	$1030
– Interest	–30
Taxable Income	$1000
– Income Tax (30%)	–300
Increase to Equity	$700

ESOP Corporation (30%)	
EBIT	$1030
– ESOP Contribution	–230
Taxable Income	$800
– Income Tax (30%)	–240
Increase to Equity	$560

The difference in tax receipts if $60 and the difference in equity is $140 which again sums to the $200 of worker shares. The general result is that for $S worth of worker shares and 100t% taxes, the tax break accounts for tS and the reduction in relative equity is (1–t)S which sums to S.

ESOP Loan = Direct Loan + Diluted Sale

Under our assumption of no change in earnings between the ESOP and no ESOP cases, for every $100 of loan that a corporation channels through an ESOP (as opposed to a direct non-ESOP loan) at 50% taxes, the owners lose $50, the IRS loses $50, and the employees gain $100.

Is that dilution? Yes, the effect is exactly that of dilution (but repackaged as part of a complicated transaction). This has been pointed out in the literature, e.g., "Perhaps the most serious problem is the dilutive effect which an ESOP can have on the pre-existing ownership." [Hartman et al. 1977, 44]

To see this clearly, consider the first situation where the $200 loan was not channeled through an ESOP. Suppose then that an ESOP was established but that the Government simply agreed to

give $100 of the $500 tax payment to the ESOP if the company would sell $200 worth of shares to the ESOP in return for that $100 tax refund. That certainly would be dilution by any definition since the $200 worth of shares were sold at half price for the $100 tax refund (passed through the ESOP). In general, the Government gives $tS to the ESOP which passes it through to the company in return for $S worth of shares.

That is the net effect of the more complicated transaction (loan through ESOP to buy shares with loan repayment back through ESOP). That is, the Government got $400 taxes (=500–100), the owners' equity increased by $400 (=500+100–200), and the workers got $200 worth of shares. Thus we can see what has really happened, when stripped down to the economic essentials, in the whole complicated loan transaction through the leveraged ESOP. In effect, the Government took $tS part of the tax bill and donated it to the ESOP which used it to purchase $S worth of shares from the company. Thus the $S worth of shares are paid for the $tS tax break and the $(1–t)S dilution.

It is easy to misunderstand this argument about the economic essentials of the leveraged ESOP transaction. I am not saying that the government actually gives $100 to the ESOP which then purchases shares at half price. I am saying that if the normal non-ESOP direct loan (the first situation described above) was accompanied by this tax-donation and the diluted share-sale, then the end results are exactly the same as with the leveraged ESOP loan (the second situation above). Hence the net effect of channeling the loan through an ESOP as opposed to a direct non-ESOP loan is exactly that tax donation and diluted sale.

What About the No-Dilution Argument?

The no-dilution argument is clearly mistaken. But where is the error? How can there be dilution since the shares were actually purchased at full market value by the ESOP? That argument would be fine if the shares were purchased and the loan was paid off by some third party. But it is the corporation itself which pays off the loan with the deductible ESOP contributions. The $200 ESOP contribution expense reduces the owners' equity by $200 but half of that is counterbalanced by the $100 reduction in the tax bill. As was pointed out about a quarter century ago in the *Harvard Business Review*, the "net effect is that, in the case of a 50% taxpayer, the addition to net worth is half that of a straight equity issue to third parties." [Reum and Reum 1976, 139]

ESOP descriptions often involve a type of 'shell game' of switching between two quite different interpretations of the transaction. The front-end is described as an equity injection; a purchase of shares at market value. And the back-end of the transaction is described as paying off a loan with pretax dollars. But both descriptions leave out a crucial bit of information. If the front-end is described as another party (ESOP) using borrowed money to inject equity into the company, then it should be added that the company itself is paying off the loan (with the loan payments packaged as ESOP contributions to get the tax break). And if the back-end is described as paying off a loan with pretax dollars, then it should be added that the company has already 'paid for" the cash injection ('loan') with the transfer of shares to the ESOP.

To put it simply, the company 'pays' for the cash twice, once with the shares transferred to the ESOP and once with the loan payments. One of the times is a straight *quid pro quo* transaction and the second time is a dilution attenuated by the tax break.

The Case of a Non-Leveraged ESOP

It is also useful to consider a third situation which utilizes a non-leveraged ESOP. The loan is to the corporation rather than the ESOP. But when the $200 principal payment is made at the end of the year, a simultaneous contribution of $200 worth of new shares is made to the ESOP. That yields a deduction of $200 from taxable income so the principal payment is in effect covered by the ESOP contribution. The interest payment is already deductible from taxable income.

The only real difference between the leveraged and non-leveraged ESOP examples is that, in the latter case, the ESOP shares do not capture any of the $400 capital gains (since the ESOP got the shares only at the end of the year). But we have already assumed that the new ESOP shares were a negligible portion of the whole ownership so that effect would be negligible.

The results concerning "Who pays for ESOP shares?" are, of course, the same. It is even clearer in the non-leveraged case that the $200 worth of ESOP shares are being paid for with the $100 tax break with the remainder being a $100 dilution.

This case of the non-leveraged ESOP reveals a surprising conclusion. The loan itself is actually irrelevant to the transfers between the government, the owners, and the employees (no matter how important it is for other reasons). Forget the loan in the non-leveraged case. Instead of issuing $200 worth of new shares to cover the loan principal payment, just issue $200 worth of shares to the ESOP anyway. The end results are the same: the tax bill decreases by $100, the owners' equity is diluted by $100, and the workers have $200 worth of shares in the ESOP. The loan itself may have been a good idea or not, but in any case it was irrelevant to the net effects of the ESOP.

The non-leveraged ESOP example is thus useful as an antidote to the remarkable Pollyanna descriptions of ESOPs as creating employee equity out of "pure credit." Not only is the employee equity fully paid for by the tax savings and owner dilution (possibly with counterbalancing worker concessions to be considered below), but credit, "pure" or otherwise, has nothing essential to do with the ESOP effects. The loan may independently be a good idea, but all the ESOP effects can be obtained without it.

An ESOP Loan--Compared to What?

When a certain investment or financial transaction is being analyzed, one should always ask the basic question: "Compared to what?". What is the benchmark of comparison? The real point of comparison is the best alternative. In economics, this is called the *opportunity cost doctrine*. The real economic cost of employing resources to do plan A is the value foregone by not choosing plan B, the best alternative use of the same resources.

Since the transfer of shares to an ESOP is usually presented in the context of an ESOP loan, it is often said that the shares are paid for by the profits from the investment of the loan proceeds.

But the best alternative for the owners is not to have no loan but to have a direct non-ESOP loan (which assuming no effects on labor productivity or wage concessions, would yield the same EBIT such as $1030 in the example). When the ESOP loan is compared to that alternative, then we have seen that the net effect on the owners is the transfer of shares to the workers in return for the tax savings. It is only the pseudo-comparison of the ESOP loan with no loan at all which makes it appear that the shares are being paid for by the productivity, the procreativity, and the self-liquidating aspects of capital. Actually, the capital "doesn't know the difference" between the ESOP loan and the direct non-ESOP loan so it is equally productive in both cases, so the worker shares are paid for by other means in the ESOP case.

Analysis with Non-Negligible Worker Shares

We now relax the condition that the worker shares of value S are a negligible portion of the total outstanding shares. Let E be the portion of employee shares of value S in the total shares outstanding (after the issue of these shares to the ESOP). If i is the interest rate on the loan, then iS is the interest on the ESOP loan so let EBT be the EBIT after the interest is subtracted, i.e., EBT = EBIT – iS (where any other debt in the same in the ESOP and non-ESOP cases so it is ignored or set to zero). As before, t is the tax rate. In the first example, EBIT = 1030, EBT = 1000, and t = 0.5. When the loan was direct and not channeled through an ESOP, then the increase in the non-ESOP owners equity was (1–t)EBT. When the loan was channeled through the ESOP, then the increase in the non-ESOP owners' equity for the year's operations is (1–t)(EBT–S) when we treated the worker shares as being of negligible proportion but now we must multiply by 1–E to obtain (1–t)(EBT–S)(1–E). Thus the reduction in non-ESOP owners' equity between the direct loan and ESOP loan cases is:

$$(1–t)EBT – (1–t)(EBT–S)(1–E) = (1–t)S + (1–t)(EBT–S)E.$$

The first term of (1–t)S was the previous dilution effect and the second term (1–t)(EBT–S)E gives the additional loss due to a portion of the year's profit going to the non-negligible ESOP shares (E was in effect zero in the previous analysis). Moreover the ESOP shares bought for S at the beginning of the year are worth S + (1–t)(EBT–S)E at the end of the year. Hence we again have the result that the value of the ESOP shares are the end of the year is the sum of the tax break tS and the dilutive effect on the original pre-ESOP shareholders:

$$S + (1–t)(EBT–S)E = tS + (1–t)S + (1–t)(EBT–S)E.$$

All this analysis so far has been for the case where the ESOP gets new shares issued by the company. Suppose that E is almost one meaning that the new shares have totally swamped the original shareholders. Setting E equal to one for the calculation, we see that the year-end value of the ESOP shares is tS + (1–t)EBT, and that the loss in equity to the original shareholders has been the year's after-tax profits of (1–t)EBT in comparison with the direct non-ESOP loan. Again the value of the worker shares is equal to the tax break and the equity loss to the non-ESOP shareholders.

Analysis of the Leveraged ESOP Buyout Transaction

Now we move the algebraic analysis of the buyout transaction where the ESOP shares of value S are not new shares but are purchased from the existing shareholders and that these shares represent the proportion E of the total. Since the loan money does not go to the company in this case, we may take the non-ESOP benchmark of comparison to be no loan at all. However since we are analyzing the effects on the non-ESOP shareholders, we must take account of the fact that they received the loan proceeds of S at the beginning of the year. We assume they invest it and receive the interest iS at the end of the year. We assume heroically that the interest income is taxed at the same rate so their after-tax income from S is (1–t)iS.

For the non-ESOP case, the original shareholders have the increase in wealth at the end of the year of (1–t)EBIT (where EBIT = EBT since there is no ESOP loan and we are ignoring other debt). With the ESOP loan of S to purchase proportion E of their shares, their portion of the year-end profit is (1–t)(EBIT–(1+i)S)(1–E) where the (1+i)S is the ESOP contribution made at the yearend which is deductible from the EBIT. These non-ESOP shareholders also receive the (1–t)iS after-tax income from the buyout proceeds. Hence the reduction of their wealth or dilutive effect between the two cases is:

$$(1–t)EBIT – [(1–t)(EBIT–(1+i)S)(1–E) + (1–t)iS]$$

which, after some algebra, reduces to:

$$\text{dilution} = (1–t)S + (1–t)[EBIT – (1+i)S]E.$$

The ESOP shareholders would receive the value of the shares S plus their portion of the year's after-tax profit:

$$\text{Year-end ESOP Shares} = S + (1–t)[EBIT – (1+i)S]E.$$

In the no-ESOP case, the government tax revenue was tEBIT, and in the ESOP case, it was:

$$t[EBIT – (1+i)S] + tiS = tEBIT – tS.$$

Thus the drop in tax revenue was tEBIT – [tEBIT – tS] = tS as before. Hence the year-end value of the ESOP shares is again the sum of the tax break and the dilution:

$$S + (1–t)[EBIT – (1+i)S]E = tS + (1–t)S + (1–t)[EBIT – (1+i)S]E.$$

It is useful to check the limiting case of the 100% buyout when E = 1. Then the change in income for the bought-out non-ESOP shareholders is:

$$\text{dilution effect} = (1–t)EBIT – (1–t)iS = (1–t)EBT.$$

Under conditions of certainty (we are ignoring risk) and economically rational shareholders, this dilution effect would be zero or negative since the shareholders would not sell if it would reduce their income.

The 100% ownership of the ESOP shares gets share value S plus the full yearend after-tax profits for a total of:

$S + (1–t)[EBIT – (1+i)S] = tS + (1–t)EBIT– (1–t)iS = tS$ (tax break) + $(1–t)EBT$ (dilution effect).

If the dilution effect was negative, then the tax break would in effect be shared between the ESOP and the original shareholders.

Numerical Example of Buyout Analysis

We might consider a numerical example to illustrate the algebra in the case of the buyout transaction. Let us take the following data:

S = 400
E = .6 (60% buyout)
i = 0.10 (10% interest)
t = 0.30 (30% tax rate for corporate and individual income), and
EBIT = 100.

In the no-ESOP case, the after-tax profit going to the shareholders is 70% of 100 or $70. With the 60% buyout, they receive S = $400 which they invest at interest for the after-tax income of 70% of 10% of $400 or $28. The after-tax corporate net income is 70% of EBIT–(1+i)S or 70% of 100–440 = –340 or –$238 (implicitly taking loss carry-forwards into account). The original shareholders bear 40% of those losses or –$95.20. Hence the net change in the original shareholders income between the two cases is:

70 – [–95.20 + 28] = $137.20 = dilution effect.

The government tax revenues go from $30 to –102+12 = –90 for a total drop of tS = $120.

The ESOP workers get shares originally worth $400 and their 60% share of the $238 losses are $142.80 so their yearend share value is 400–142.80 = $257.20. This is equal to the sum of the tax break of $120 and the dilution effect of $137.20, i.e., 120 + 137.20 = 257.20.

Non-Tax Benefits of ESOPs

The burning question through all the analysis is: why would economically rational shareholders suffer any positive dilution effect? This is where our assumption of the same EBIT between the non-ESOP and ESOP cases can be relaxed. Let us go back to the original example of EBIT = 1030 with a $200 ESOP loan to buy new shares at 15% interest with a 50% corporate tax rate. The non-ESOP direct loan case would be as before:

Non-ESOP Corporation	
EBIT	$1030
– Interest	–30
Taxable Income	$1000

– Income Tax (50%)	–500
Increase to Equity	$500

Now we assume that in return for channeling the loan through an ESOP, the workers agree to a one-year-only concession in labor costs of $200. Then with other things the same, the EBIT increases by 200 to $1230 so the ESOP calculation is as follows.

ESOP Corporation	
EBIT	$1230
– ESOP Contribution	–230
Taxable Income	$1000
– Income Tax (50%)	–500
Increase to Equity	$500

Then there is no dilution effect and no reduction in tax revenue; the worker shares are entirely paid for by the concession. In this case, the ESOP transaction puts no strain on economic rationality. Since the workers are now part shareholders, there may be some effect on motivation and productivity which would yield additional benefits to all shareholders. It might also be noted that the alternative to paying for ESOP shares with tax breaks and dilution is solely based on employees changing the EBIT: concessions and productivity improvements. The productivity of capital has nothing to do with it as that is the same between the ESOP and non-ESOP cases. It is part of the secret of the relative success of the ESOP movement that the tax financing and dilutive effects of ESOPs have been so well hidden behind an incredible fog of rhetoric about the prodigious productivity of capital--as if the same productivity was not available to non-ESOP firms.

In some other cases, ESOP contributions might be motivated by non-economic motivations on the part of the original shareholders. The owners of closely-held firms might see the ESOP shares as a reward to their loyal employees. In anticipation of eventually selling the company to the employees, an owner might set up an ESOP to give the workers a foretaste of ownership.

It is one of the great discoveries of Louis Kelso and the ESOP movement that there can be significant ownership redistribution to corporate employees if it is spurred by a tax break, if the immediate cost to the existing owners is in the relatively painless form of dilution (and is well covered by a rhetorical fog), and if it holds out the promise of mutual benefits for both the current employees and shareholders.

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