WORKING PAPER SERIES - 251

PROFIT SHARING AND EMPLOYEE OWNERSHIP: POLICY IMPLICATIONS

By

Daniel J.B. Mitchell

Daniel J.B. Mitchell
Professor
Anderson Graduate School of Management
University of California, Los Angeles
405 Hilgard Avenue
Los Angeles, CA 90024

Telephone: 310/825-1504
FAX: 310-206-2002

DRAFT: May 1993

INSTITUTE OF INDUSTRIAL RELATIONS

UNIVERSITY OF CALIFORNIA

LOS ANGELES

Profit Sharing and Employee Ownership:

Policy Implications

Daniel J.B. Mitchell
Anderson Graduate School of Management
U.C.L.A.
Los Angeles, California 90024-1481
Phone: 310-825-1504
Fax: 310-206-2002

May 1993

Paper for presentation at the 68th Annual Western Economic Association Conference, panel on "Policy Implications of Research on Employee Ownership and Profit Sharing," June 21, 1993, Lake Tahoe, California. Panel organizer: Michael A. Conte.

Should public policy encourage certain types of pay systems? That is the question this paper addresses; not whether such systems are "effective" or "ineffective" from the usual micro-level managerial viewpoint. The kinds of public policy encouragement considered are twofold: 1) subsidies (usually via the tax code) and 2) information spreading. And the kinds of pay systems taken as the potential targets for public policy are also two: i) profit sharing (and related systems such as gain sharing plans based on plant or divisional profits or some other revenue measure) and ii) Employee Stock Ownership Plans (ESOPs). Conceptually, the two kinds of plans can be combined, e.g., a profit sharing bonus could be paid in stock and placed in an ESOP; there apparently are many plans of this type.[1] However, for analytical purposes, the two types of pay systems will be separated in what follows.

It is probably best at this point to state the author's biases up front. Whenever ESOPs are discussed, the ownership aspect has had an alluring effect on certain politicians and academics. Some politicians - most notably former Senator (and chair of the Senate Finance Committee) Russell Long of Louisiana - have seen a new economic order with themselves as founders.[2] Social reformers - in particular the late Louis Kelso - have had similar visions.[3] Academics also have had utopian dreams of carrying worker participation in management to new heights. The result of these perspectives has been a history of (unjustified) special tax subsidies to ESOPs unavailable to other pay systems.

Meanwhile, financiers, managers, and professional compensation consultants take the public policies that result from this attempt at social uplift and draw ESOPs into takeover battles, the retention of control of closely-held family enterprises, the obtaining of cheap loans, and tax avoidance. As a result, there is a continuing gap between promise and outcome that can only be described as jarring. In a time of federal budget deficits and pressures for fiscal economy, this discrepancy will eventually erode Congressional beneficence towards ESOPs, as well it should.

What about other pay systems, especially profit sharing? Profit sharing has also had some history of interaction with notions of social uplift. In the past, some reformers - and business owners - have seen profit sharing as a way of educating workers on the benefits of capitalism and as a way - especially in the late 19th century - of solving the "labor problem" of labor-management conflict. But generally, today, it is possible to discuss profit sharing calmly from the personnel management perspective as an ordinary employee incentive plan or - from the economist's perspective - as an employer incentive plan. (More on the latter perspective follows below). Since I am not of a utopian orientation, and because I rarely become teary-eyed over personnel matters, I will argue below that public policy - if it is to favor any pay system - should tilt toward profit sharing, not ESOPs. And I will make the case based on the employer - rather than the employee incentives - entailed in profit sharing.

When public policy matters are discussed, the issue - at least as posed by economists - is often one of alternatives. Are there better uses for the money than the specific one being proposed? In the abstract, posing the issue that way is attractive. In practice, however, such discussions can easily turn sterile. One could in principle compare proposals to favor a certain pay system with all other potential uses of government monies. It could be asked, for example, whether it would be better to spend government resources on space stations, medical research, crime prevention, or tax cuts. But making such comparisons is very difficult because of the wide range of potential uses. Hence, it is best to confine discussion in this paper to narrower questions. Is there a case to be made for using public policy to favor a particular type of pay system? If so, what type - profit sharing or ESOPs?

Before starting discussion of that issue, it is worth exploring how widespread is the use of the two types of plans. Table 1 provides the best data available, that from the U.S. Bureau of Labor Statistics, on the subject. As can be seen at a glance, neither type of plan is widely in use. Especially to ESOP fans, who have probably seen much more encompassing numbers from other sources, the table may be surprising. (More on the numbers will be presented below). Profit sharing is more commonly used than ESOPs, according to Table 1. But even those numbers are somewhat exaggerated by the tendency of employers to describe plans without specific formulas linking bonuses to profits as "profit sharing."[4]

I. Standard Rationales for Government Intervention

For economists, the main rationales for government intervention in markets are externalities, positive or negative.[5] In either case, the full impact of the behavior of economic actors is not captured or felt by those actors. If the externalities of an activity are positive, the actors do not do enough of it. And if they are negative, the actors do too much.

Table 1

Deferred Profit Sharing and Employee Stock Ownership Plans

	Deferred Profit Sharing			Employee Stock Ownership Plans		
	Medium & Large Establishments 1991		Small Establish-ments (a) 1990	Medium & Large Establish-ments 1991		Small Establish-ments (b) 1990
	Full-Time	Part-Time	Full-Time	Full-Time	Part-Time	Full-Time
All Employees	16%	10%	15%	3%	*	1%
Professional/ technical	13	-	16	4	-	1
Clerical/ Sales	16	-	17	4	-	1
Production/ Service	18	-	13	2	-	*

*Less than 0.5%.
- = not available.

(a) When confined to small independent businesses (as opposed to establishments), the data in this column are 14, 15, 16, 13.

(b) When confined to small independent businesses (as opposed to establishments), the data in this column are 1, 2, *, *.

Source: U.S. Bureau of Labor Statistics, press release USDL 92-764, December 9, 1992; U.S. Bureau of Labor Statistics, Employee Benefits in Small Private Establishments, 1990, bulletin 2388 (Washington: GPO, 1991), pp. 79, 85.

In short, there is a market failure which public policies might be used to correct.

For example, localities may subsidize the siting of new plants in their territory because such siting raises land values of neighbors and creates enhanced employment opportunities for immobile local residents. "Public goods", ranging from provision of defense to operation of judicial systems and to construction and maintenance of lighthouses are also commonly-cited examples of positive externalities. Similarly, government authorities restrict excessive fishing, oil drilling, and pollution, because of the external negative effects associated with these activities. All of these externality examples are usually justified on the grounds that private incentives do not impel actors in the economic system to do the right thing.

Less easy to fit into economic reasoning, but still a common target of public policy, are merit goods such as education, health care, vehicles for saving for retirement, provision for the emergencies of life, cultural events, and housing. The justification here tends to be paternalistic and, hence, does not easily accord with simple economic notions of rational behavior. Basically, proponents of subsidizing merit goods assume that left to their own devices, people will be too short sighted and will not consume enough of them. Or, perhaps, consumers just don't understand the beneficial effects and can't see how much they would benefit from more education, health insurance, opera houses, home ownership, and zoos than the free market would otherwise provide.

Finally, social transformation is sometimes a justification for public policy. The tilts toward collective bargaining in American labor law of the 1930s and towards civil rights in the laws of the 1960s fall into this category. It may be possible to dress up the social transformation motive in the guise of an externality or a merit good. For example, one might argue that encouraging home ownership gives the owners a "stake" in their communities, creates good citizenship, etc. But often there is a pressing social dilemma or conflict which leads to such shifts in public policy as in the labor-management confrontations of the 1930s and the confrontations over civil rights and race relations in the 1960s.

If there is to be a public policy favoring a particular type of pay system, how does the justification for that policy fit into the three categories - externalities/market failures, merit goods, or social transformation? Are there positive externalities caused by the pay system which are not captured by employer or employee? More generally, is there a market failure that the pay system can address? Is the pay system a merit good of some type? Or is the rationale one of social transformation?

II. Applying the Justifications to Profit Sharing and ESOPs

Both profit sharing plans and ESOPs have traditionally been viewed by personnel managers as <u>incentive</u> systems. Proponents argue that they will raise productivity - thus addressing the principal/agent problem of how to ensure that employees do what their bosses want in the face of imperfect information and high monitoring costs. Alternatively, they can be seen as saving on those monitoring costs, i.e., supervisory expense. If workers are led by the pay system to do what their bosses want, then monitors are not needed.

i. Incentive Problems and Evidence

There are many qualifications that real world personnel managers (and economists) would want to make to the traditional view. While both profit sharing plans and ESOPs will make workers better off if the company prospers, the reward from extra effort that goes to the individual worker will be small, especially if the firm is large. In an enterprise of 100 workers, each worker will receive only 1/100 of the added reward; with 1000 workers, the fraction drops to 1/1000.[6] For that reason, some managers seeking incentive pay arrangements for their workers prefer individual incentives such as piece rates and commissions.[7]

But individual incentives have various problems which also are well known. They may favor quantity over quality, lead to wastage of materials as workers strive to meet production targets, and encourage competition when teamwork is desirable. There may be attempts to restrict output in order to beat time and motion estimates of normal work standards. And, although individual pay systems seem to create a common interest in more output between worker and owner, in fact - since workers cannot be given 100% of the value of their work - a gap can open between worker desire to expend effort and employer desire to receive it.[8]

Over the years, pay plans have been developed which attempt to address various aspects of these problems. Group incentive programs, including gain sharing plans, may be used to foster teamwork, although the free rider problem of sharing the reward can still arise. Some program, such as Scanlon Plans, use participative arrangements to encourage team spirit as a response to tendencies toward free riders. An overlay of participation in decision making can also be added to profit sharing, ESOPs, or other programs.

So the impact of pay systems comes down to - as economists like to put it - an empirical matter. Since there are pros and cons in the abstract of any pay system, what does the empirical evidence say? As is always the case in economic research, the evidence is indecisive. But on balance, profit sharing seems to have a positive impact on productivity. ESOPs, although the evidence is weaker, may also have a positive effect. And certainly there are case studies of particular applications of profit sharing or ESOPs which suggest favorable productivity outcomes.[9]

Rather than debate the strength of the evidence on productivity, let us concede the case to those who take the positive point of view and simply assume that profit sharing and ESOPs have positive effects on productivity. But let us note that many personnel practices may also have positive productivity or cost saving effects. These include nonfinancial participation schemes (quality circles, autonomous work teams), piece rates, ordinary performance appraisal and reward systems, bonuses for good attendance records, use of promotion opportunities as a performance reward, employee assistance plans, and even Muzak in the workplace.[10] A turn-of-the-century telephone company gave its operators free nutritious lunches so that indigestion would not erode their afternoon work performance.[11] The free lunch paid for itself, according to the company, contrary to Milton Friedman oft-quoted dictum!

If there are grounds for subsidizing profit sharing and ESOPs based on supposed positive productivity or cost saving effects, all other personnel practices which might have the same type of effect are potential targets for fiscal largesse, even free lunches and Muzak.

ii. Grounds for Intervention?

The problem with the case for tax subsidies to all of these worthwhile practices is that there is no obvious externality stemming from their use. If productivity is indeed enhanced, or if costs are in fact reduced, the employer captures the gain. There is already present all the subsidy needed for these arrangements, but it comes from the normal market incentives facing profit-maximizing employers. What is the case for going further with public resources?

Undoubtedly, creative minds can uncover a market failure or two that needs addressing here. For example, it might be argued that the use of ESOPs as takeover defenses in the 1980s discouraged takeover artists who, in turn, were responding to some improper incentives in the market for corporate control. Of course, some might argue in reverse that takeover defenses entrenched incumbent manager and shielded them from the market. But even if we were to grant the market failure argument in the case of takeover battles, what about alternatives? Might the problem be better addressed through tightly focused antitrust policies than through the blunt instrument of tax expenditures on all ESOPs. The one area of market failure where there are no handy alternatives is at the macro level, an issue to be taken up later.

iii. Information Spreading Policies

It should be clear that the usual rationales for installing profit sharing and ESOPs cited by personnel managers - productivity boosts or cost savings - do not justify tax incentives or other direct subsidies. But there may be some case for limited government expenditure on information spreading. A firm which discovers a pay system that has beneficial internal effects may not have adequate incentives to let that information be known to other employers. (Indeed, there might be incentives to hide it.) So there might be a rationale for government sponsored research, case reports, pamphlets, conferences to exchange information, and the like, along the lines of the activities of the now-defunct Bureau of Labor-Management Relations and Cooperative Programs in the U.S. Department of Labor.

It should be noted, however, that there are some market incentives for private information spreading. Surely, there is no shortage of management consultants who, for a fee, will provide advice on installing particular pay programs. Urban hotel meeting rooms are filled with seminars on various personnel problems and purported solutions, including those linked to pay. Companies who discover good practices may want to publicize their innovations for public relations purposes. Academics have strong incentives to uncover innovations and information, write papers about them, and thereby receive tenure, merit increases, consulting opportunities, and other glory.

As a indication of the availability of information, I made a quick search using the Nexis database system. Table 2 shows the results. Using the "CURRNT" (current) file and the "MAJPAP" (major newspaper) file for years 1991-1992, I searched under the key words "productivity", "employee" and various words descriptive of incentive plans. There was no lack of references regarding both profit sharing and ESOPs. Relatively few references - but still a respectable number - appeared for piece rates and commercially-marketed gain sharing plans such as Scanlon, Rucker, and Improshare. But the number of articles found would have undoubtedly increased if more years were added to the search or if a search had been done of professional personnel journals. Raw information, it appears, is readily available now on pay systems.

The argument for government dissemination of pay system information must be, therefore, that the incentives for "reliable" information spreading are insufficient and that, because government is "neutral," its reports and conferences will be seen as more credible (better) than those of potentially-biased private disseminators (or possibly of fuzzy-thinking academics left on their own). Neutral, credible information on pay systems might be viewed

Table 2

Results of Nexis Search for Articles on Pay Systems

(Number of Articles Found)

Key Words Used	MAJPAP File	CURRNT File
"Profit sharing"	41	326
"ESOP" and/or employee stock ownership"	27	188
"Piece rate"	1	11
"Gainsharing and/or "gain sharing"	27	114
"Scanlon Plan" and/or "Rucker Plan" and/or "Improshare"	0	8
"Pay for performance"	20	80

Note: The search was made on March 25, 1993. Nexis automatically includes certain variations of words and phrases such as plurals. For example, a search of "piece rate" will capture articles on "piece rates". All searches also required the presence of the words "productivity" and "employee" and were confined to 1991-1992.

as a public good and there is on that rationale some case for subsidizing its spread. At any rate, information spreading about pay plans is likely to cost much less than a direct subsidy to them.

If, however, the case for information sharing is to be made mainly on reliability and quality grounds, the information to be spread at public expense must be accurate. Puff pieces, faddism, and the other ills that often characterize private writings about any workplace innovations (including pay systems), must be avoided. Follow-up studies need to be provided. Otherwise, the public sector would simply add to the already-sufficient quantity of materials.

Hyatt Clark - a GM parts plant saved from closing by a worker buyout - was the darling of employee ownership until it went bankrupt in the mid 1980s.[12] Seymour Wire was highlighted in a Labor Department study - another saved-from-closing plant which eventually went bankrupt.[13] Even Weirton Steel, cited as a success story in numerous articles and which has not gone bankrupt, has been laying off its worker owners.[14] And what are we to make of strike action against a worker-owned shipyard?[15] So if there is to be a public provision of information, the good, the bad, and the ugly must be exposed.[16]

One area in which provision of public information is essential is basic data collection. It is very difficult for a private organization to replicate the kind of data gathering undertaken by agencies such as the U.S. Bureau of Labor Statistics (BLS). Although there are numerous private surveys of personnel practices including pay, information on their sampling and methodology is often absent. And access to the information by outsiders and researchers may be expensive or nonexistent.[17]

The problem is particularly acute with regard to ESOPs. The National Center for Employee Ownership (NCEO) data series on the number of employees covered by ESOPs is often cited. Indeed, it is reprinted in the Statistical Abstract of the United States.[18] According to this series, there were 11.3 million workers under ESOPs in 1990. The problem is that this estimate does not square with the BLS figure already seen on Table 1 of 3% of full-time workers in medium to large establishments covered by such plans (and a still lower percentage if we consider part-timers and small firms).[19]

NCEO acknowledges the discrepancy but indicates that its figures include workers under non-ESOP programs which hold company stock, such as stock bonus plans and profit sharing plans.[20] Generally, those who want to make the case for an impending revolution of employee ownership like to cite large numbers of covered workers and thus are prone to include non-ESOP plans, even pension plans which hold some company stock.[21] However, it is important that users be aware that non-ESOPs are often lumped with ESOPs in tabulations. The fact that BLS does define plans accurately is testimony to the benefit that public information sharing can have. But the fact that the Bureau of the Census reprints data from NCEO without a clarifying footnote in the Statistical Abstract points to the danger that public information can also be incomplete.

Even when making the case for public data gathering and spreading, it is important to note that pay practices are not the only personnel policies worthy of such attention. There has been a general lack of public surveys of nonunion practices; public data mainly give general employment counts, average pay levels, and rates of pay change. The union sector before the 1980s had better coverage, because of the availability of union contracts as a database. However, federal budget pressures in the 1980s, and the shrinkage of the union sector, substantially eroded that coverage. In short, reports on personnel practices other than pay can legitimately compete for public dollars to be spent on information gathering or spreading. This is true whether the information is pure data, case studies, or information gathered from experiments or commissioned research.

iii. The Merit Good Rationale

Congress seems to have decided that saving for retirement is a Good Thing - a merit good - that should be encouraged. Thus, pension programs of various types have received favored tax treatment. Current payments to pension funds are not taxable to the employee until withdrawn upon retirement. And, of course, there is direct involvement of Congress in provision of retirement income through creation of the Social Security system. Are there related merit good aspects of the two types of pay systems considered here - profit sharing plans and ESOPs?

If Congress is hoping to promote "adequate" retirement incomes (and perhaps less dependence on public Social Security), then programs which have a strong element of risk are not the kind of merit goods for which Congress ought to be looking. ESOPs, which tie retirement income to the fate of a single company, violate good portfolio management. Deferred profit sharing plans may or may not be especially risky, depending on what portfolio policies are followed. Of course, cash profit sharing and gain sharing have no direct retirement aspect at all and receive no tax subsidy. Nor, on the merit good rationale, should they be subsidized.

Congress does not appear to have considered the risk issue carefully. Defined benefit and defined contribution pensions receive equivalent tax treatment although they entail different burdens of risk on employer and employee. 401k plans may or may not permit diversified portfolios, but all of them receive the same tax treatment despite their structural differences.

Given these allowed variations in congressional generosity, there is a case for simply having all deferred plans - deferred profit sharing, ESOPs, 401ks, IRAs, defined contribution pensions, and defined benefit pensions - receive the same favored tax treatment. There is certainly not a case, based on the merit good approach, for providing special tax benefits to particularly risky deferred pay systems <u>beyond</u> those advantages applying to any other deferred plan.

iv. The Social Transformation Rationale

As already noted, there is a history of regarding both employee ownership and profit sharing as instruments of social transformation. The difference is primarily one of historical timing. Profit sharing plans are rarely today viewed in utopian terms. But ESOPs sometimes are so seen.

The divergence in the visions surrounding the two types of plans is evident in their tax treatment. Deferred profit sharing enjoys no special tax favors other than those applying generally to all deferred compensation arrangements. Cash profit sharing and gain sharing enjoy no tax favors at all. ESOPs, however, thanks to the efforts of Senator Russell Long, have a history of receiving special treatment beyond the other deferred plans.

Long was acting in the tradition of his populist father, Huey Long, whose "share the wealth" movement in the 1930s attracted a considerable following. Russell Long was impressed with the social transformation through ESOPs proposed by Louis Kelso. When Kelso died recently, his eulogies included the claim that he had made millions of workers shareholders.[22] But in fact, sharing the wealth with workers - even if it taken to mean share ownership rather than other forms of wealth - has come about much more through ordinary pension plans than through ESOPs. Noninsured private pensions held about $781 billion in equities in 1991.[23] Surely, "pension fund socialism" is much more impressive as a wealth spreader.[24] And with ordinary pensions the equity wealth is diversified across many firms. Where is it written that the wealth to be shared can only be that of the firm in which you are employed?

If we use the BLS estimates of ESOP coverage, i.e., something less than 3% of the private workforce, perhaps what is remarkable is how resistant business has been toward sharing the wealth, not how effective the tax favored treatment of ESOPs have been in sharing the wealth. In fact, it was only when the government offered tax credits (not just deductions) to PAYSOPs, a special variant of ESOPs created by Russell Long, that coverage really spread. Even so, coverage peaked at 28% of full-time workers in medium to large establishments, despite the fact that the government was basically buying the shares for the employees.[25]

The record with ESOPs and PAYSOPs shows that government can share the wealth through such plans if it willing to put a very heavy subsidy into the effort. But apparently the subsidy has to be so large so as to be impractical. The observation, already noted, that deferred profit sharing, which has not benefited from the attention of a Senator Long, seems to be more widely in use than are ESOPs is important. It is our best indication that employers are more receptive to profit sharing than ESOPs (although a sufficient tax incentive can be used to distort their choice).

III. An Alternative Macro Rationale

Is there another argument for public support of particular types of pay systems that fits standard economic rationale? We have already noted that the externalities approach essentially involves market failures. But productivity enhancements and cost savings are not externalities, since employers internalize them. However, there is a kind of market failure that tends to dwarf the microeconomic externality inefficiencies that economists like to cite. The really big failures occur at the macro level and take the form of idle resources, i.e., cyclically-based unemployment and unused capacity. Idle resources are likely to represent much larger costs to society than misallocated resources.

As is often said in macro circles - at least among economists not prone to see unemployment as voluntary leisure and the business cycle as costless - it takes a load of Harberger triangles to fill an Okun gap.[26] A rough estimate is that each 1% increase in the unemployment rate represents a $120 billion loss of GDP.[27] So if encouraging a particular pay system could reduce the sustainable level of unemployment, or even keep the unemployment rate closer to the minimum sustainable level, it would have an externality truly worth of subsidy.

i. The Macro Case for Profit Sharing

There is a long history of viewing profit sharing (and certain types of gain sharing) as a form of backdoor pay flexibility capable of producing macro benefits. But much of the discussion in modern economic circles of this effect stems from the work of Martin Weitzman.[28] In the Weitzman model, the firm pays a base wage and a profit sharing bonus.[29] The expected bonus substitutes for some of the time-based (or piece-rate) compensation that would otherwise have to be paid. As a result, the marginal cost of hiring labor is reduced and more labor is hired. A share economy, in the Weitzman model has a propensity to operate in a perpetual labor shortage. Thus, during periods of demand decline, firms lay off unfilled vacancies rather than real people. The economy is therefore stabilized and tends to stay at full employment. Alternating bouts of inflation and unemployment are avoided.

At one time, such unemployment/inflation problems were viewed as the province of monetary and fiscal policy. But, beginning in the 1970s, many factors have combined to make the (already-complex) conduct of monetary and fiscal policy more difficult. These factors include the move to flexible exchange rates, the sensitivity of international capital flows to domestic economic conditions, and the deregulation of the financial sector. So a micro-level change in pay practices of the Weitzman type, which assisted in the conduct of traditional macro policy, would be especially desirable.

There has been much discussion in economic circles over whether - if complications are added to the Weitzman model - the predicted perpetual labor shortage result would follow. If, for example, firms pay an "efficiency wage" and need an unemployment "penalty" threat for disciplinary purposes, the labor shortage might not develop.[30] Such arguments, however, simply illustrate a more general proposition: The more complicated a model becomes, the more ambiguous are its predictions likely to be. And there are strong market incentives for academic economists to add complications to existing models (the aforementioned tenure and glory being among them). But even if the perpetual shortage element is lost from the Weitzman approach, the potential stabilizing effect remains.[31]

Ultimately, a firm's weekly labor costs can be expressed as the product of three components:

$$W \times H \times E$$

where W is compensation (including all elements of pay) per hour, H is average weekly hours, and E is the number of employees. Fluctuations in the demand for labor can be absorbed in all three elements. The standard American firm permits some variation in H, e.g., increasing or decreasing overtime hours, very little variation in W, and most of the adjustment in E (layoffs and hires).[32] Profit sharing, by adding a flexible bonus element to W which is likely to vary with labor demand, permits less stress on E in exchange for more variability in W. This potential stabilizing effect of profit sharing provides the only strong case for subsidizing use of a particular pay system, through the tax system or otherwise. Micro-level employers do not capture the widespread macro-level gains of a more stable economy.

Two qualifications should be noted. First, a macro case for a tax subsidy (or any subsidy) to profit sharing should apply equally to cash, as well as deferred profit sharing (and to certain cash gain sharing plans). At present, only deferred profit sharing receives favored tax treatment and that treatment is no better than for other deferred pay plans. Second, the macro rationale applies only to genuine profit sharing plans, i.e., to those in which the bonus is truly linked to profits. Deferred saving plans, with no formula tying bonuses to profits, are dubious targets for subsidy. If special tax incentives are offered to any plan called profit sharing, vast relabeling without substance would occur.

ii. Lack of a Macro Case for ESOPs

What about ESOPs? Unfortunately, when pay flexibility is discussed as a policy matter, there is a tendency to throw in all forms of pay which go beyond time-based wages and salaries. And there is confusion between the internally-captured productivity and cost saving effects and the externally-beneficial macro stabilization (and maybe employment-expanding) effects. So ESOPs and profit sharing are viewed erroneously as part of the same story.[33]

As noted earlier, some forms of pay systems may combine ESOP and profit sharing elements, i.e., the profit sharing bonus might be paid in stock placed in an ESOP. In that case, we are really talking about a profit sharing plan and whatever public subsidies apply to profit sharing should apply to the hybrid plan. But a pure ESOP is quite different. Essentially, it involves a one-time bonus to employees in the form of shares, to which they receive an entitlement. Thereafter, pay is no more flexible than it was before.

There is no obvious reason why the traditional firm balance in the demand management of its labor cost formula - W x H x E - would shift in the face of an ESOP entitlement. If W was inflexible before the ESOP, it is likely to be equally inflexible after.

So there is no reason to expect either macro stabilization or employment expansion from more widespread use of ESOPs. Indeed, in the case of worker-owned firms, there has long been concern that incentives to hire would be reduced, as incumbent worker/owners feared their shares of the enterprise's surplus would be diluted by additional claimants.[34] There is no general macro case for a public subsidy of the use of ESOPs.

In some limited instances where ESOPs are used to prevent plant shutdowns there might be a rationale on a case-by-case basis for some kind of subsidy. It might be argued that the ESOP facilitated a needed wage concession to the enterprise, lowering labor costs to a competitive level. Possibly workers would not have made such concessions to a standard capitalist firm because they could not be sure that the bargain - lower wages for employment security - would be upheld by the employer.

If there were enough such examples around, ESOPs might add some marginal wage flexibility over the business cycle and help stabilize employment. But case-by-case evaluations are difficult to make, and not the kind of thing one wants to charge the Internal Revenue Service with carrying out. Such matters are not well treated by blunt instruments such as across-the-board tax favors. In any event, the vast majority of ESOPs are not of the plant-saving variety. So it would be expensive to subsidize all ESOPs to capture the benefits of a few.

iii. Empirical Evidence

When theoretical issues are debated to an impasse, economists are fond of declaring that "it's an empirical issue," as if significant debates over policy are often settled empirically. Readers seeking an illustration of the inconclusiveness of empirical argument would do well to review the vast literature on whether minimum wages cause employment displacement. And in the matter of the minimum wage, the only "theory" involved is a downward-sloping demand curve. If we cannot settle that issue empirically, what hope is there for convincingly and definitively demonstrating (or refuting) the macro effects of particular pay systems?

Generally, on the macro side, there is some evidence for Weitzman-type employment stabilization associated with profit sharing.[35] The Japanese case - with large bonus payments which seem to have a profit sharing element - is often cited in regards to both employment expansion and stabilization since Japan has exhibited low unemployment which varies narrowly in response to the business cycle, OPEC oil shocks, and the like.[36] Skeptics, however, will not be convinced by the evidence to date on Japan or the U.S.

There has not been much research on the macro effects of ESOPs, perhaps because no one expects macro effects from them. Possibly there should be such investigations; who (in academia at any rate) can be against more research?[37] But absent a convincing economic model predicting beneficial macro effects from ESOPs, what would we make of a finding that there nevertheless were some?

Hypothetically, we might find evidence that a variety of personnel practices, some unrelated to pay, seemed to be linked to employment stabilization. Suppose - for example - it turned out that the use of job evaluation was associated with such an employment-stabilizing effect. I doubt that anyone would propose subsidizing job evaluation on macroeconomic grounds, based on such a finding. More likely, there would be a rounding up of the usual suspects to prove that the correlation was spurious. And it would be right to do so. In some cases, you simply have to go with theory. Unless there is a plausible theory that ESOPs have positive macro consequences, empirical evidence that suggested they do could not be persuasive.

IV. How Much Are We Subsidizing ESOPs?

As already noted, both profit sharing and ESOPs receive the general favored tax treatment applicable to all deferred pay plans. Given the apparent merit good rationale that Congress applies to saving, there is not much to quibble over here. But since ESOPs have no special claim beyond the deferred treatment, it is important to determine what added subsidy they do receive. Unfortunately, this is not a straight forward question to answer.

In fiscal year 1993, the tax loss officially attributed specially to ESOPs was $2.2 billion.[38] This is not a great deal of money when placed against a $6 trillion GDP or even a $1.1 trillion level of federal receipts. Included in that estimate is the tax loss due to favorable treatment of loans to ESOPs, a provision which has been restricted in coverage as part of the general post-Russell Long retreat from tax subsidies to these plans.[39] And, of course, the incredible PAYSOP subsidy of the mid 1980s is long gone (no pun intended!).[40]

However, included in the official estimate for fiscal year 1993 federal tax loss was the tax deductibility of principal repayment in leveraged ESOPs. Although Kelso thought this was a great tax advantage, if ESOPs are honestly valuing the stock given to employees, it is not at all clear that any real subsidy is involved. The principle repayment mirrors the supposed value of the stock given to employees. If the valuation is genuine, there is no reason why the cost should not be deductible, just as cash wages given to employees (or Thanksgiving turkeys given to employees) are also deductible.

For companies with publicly-traded shares, valuation is not a major issue. But for closely-held companies, which are often attracted to ESOPs, the possibility of deliberate overvaluation looms. Such overvaluation has the potential for cheating the IRS (and the employee), and there is some indication that it has occurred.[41] Indeed, the seeming rush to create ESOPs when the tax code was first changed in the mid 1970s to allow the principal deduction is itself suspicious.

Profit sharing plans, unlike ESOPs, seem less likely to pose problems of tax evasion. There is no stock to be valued. And if there were a requirement that a formula link bonuses to profits, those profits can be audited, just as profits are now audited for corporate income tax purposes.

V. Conclusions

There are three possible rationales for subsidizing pay systems such as profit sharing and ESOPs. The traditional economic approach requires positive externalities (market failure). Even definitive proof that particular plans raise productivity or lower employer costs would not qualify for subsidy under this approach since such benefits are internalized by the firm. Normal market incentives are sufficient. Only features that improve macro performance, e.g., Weitzman-style employment expansion or stabilization, benefits not captured by the firm, are candidates for subsidy. And it is profit sharing plans (and certain associated gain sharing plans) which are likely to have these macro externalities, not ESOPs.

The economic approach is somewhat less definitive when it comes to information gathering and dissemination (as opposed to direct subsidy). Possibly, firms do not have adequate incentives to spread information about their internal pay innovations. Certainly, it is difficult for private information gatherers to replicate the kinds of data surveys undertaken by BLS. So there is always a case for using some public resources to study both ESOPs and profit sharing.

Certain public subsidies are made on the grounds that consumption of a particular merit good is inherently desirable. It appears that Congress thinks saving for retirement falls into this category, and provides a general subsidy towards it through the tax system. There is a case to be made for providing such treatment to deferred profit sharing and ESOPs, if it is to be given to other pensions and saving plans. However, ESOPs at closely-held firms provide an opportunity to cheat the tax collector due to the stock valuation problem.

Finally, social transformation is sometimes viewed as grounds for the intervention of public policy. Profit sharing is no longer viewed as a mechanism for social transformation. But ESOPs, because of the worker ownership aspect, still is seen that way by some observers. Ultimately, social transformation is a matter of taste. Claims, however, that ESOPs are well on the road to accomplishing a redistribution of wealth and a change in the social order are substantially overstated. It is surprising how few workers - not how many - are covered by genuine ESOP plans. In any case, pensions have created far more indirect share ownership by workers than ESOPs have (or ever will).

Footnotes

1. One study reports that there are about 2,000 companies with profit sharing plans at least half invested in company stock. Source: "ESOPs Decline in 1992: Other Plans Grow," Employee Ownership Report, vol. 13 (May/June 1993), p. 1.

2. For those interested in Long and his background, see Robert Mann, Legacy to Power: Senator Russell Long of Louisiana (New York: Paragon House, 1992).

3. Louis O. Kelso and Mortimer Adler, The Capitalist Manifesto (New York: Random House, 1958).

4. Three-fifths of the participants under deferred profit sharing plans in medium-to-large private enterprises has their bonuses determined by a profit-related formula in 1989. The rest were under plans in which the bonus was determined at employer discretion. Source: U.S. Bureau of Labor Statistics, Employee Benefits in Medium and Large Firms, 1989, bulletin 2363 (Washington: GPO, 1990), p. 110.

5. Many of these points are made in a draft manuscript by Douglas Kruse on the impact of pay systems. I thank him for sharing the draft with me.

6. This dilemma is sometimes called the "1-over-N" problem, where N is the number of worker/participants.

7. Daniel J.B. Mitchell and Renae F. Broderick, "Flexible Pay Systems in the American Context: History, Policy, Research, and Implications" in David Lewin, Donna Sockell, and David Lipsky, eds., Advances in Industrial and Labor Relations, volume 5 (Greenwich, Conn.: JAI Press, 1991), pp. 95-149, especially pp. 130-136.

8. Daniel J.B. Mitchell, David Lewin, and Edward E. Lawler III, "Alternative Pay Systems, Firm Performance, and Productivity" in Alan S. Blinder, ed., Paying for Productivity: A Look at the Evidence (Washington: Brookings Institution, 1990), pp. 15-88, especially pp. 48-51.

9. General reviews of a variety of pay systems can be found in Blinder, op. cit. and a special issue on "Do Compensation Policies Matter?" of the Industrial and Labor Relations Review, vol. 43 (February 1990).

10. Readers might not be surprised to know that the Muzak Company - which now terms its service "environmental music" - can cite studies showing productivity boosts. Its music becomes more lively at certain hours of the day when it is believed that worker productivity is likely otherwise to slacken. It is interesting to speculate on why academics do not do much research on background music's effects on productivity and certainly do not call for tax subsidies for it. I would guess that the notion of almost subliminally stimulating productivity is less politically correct than techniques which seem to be "participative" or "sharing." Sources: "Bank Employees

are Proof Environmental Music Works," Modern Office Technology, vol. 32 (September 1987), p. 26; Mark Trumbull, "Muzak Pipes in Data, Advertising as Well as Tunes," Christian Science Monitor, December 29, 1992, p. 7.

11. Elizabeth Lewis Otey, Employers' Welfare Work, U.S. Bureau of Labor Statistics bulletin 123 (Washington: GPO, 1913), pp. 61-62.

12. Hyatt-Clark was treated as a success story in the normally skeptical, union-oriented Labor Research Review. See "The Hyatt-Clark ESOP: An Interview with Jim May," Labor Research Review, number 5 (Chicago: Midwest Center for Labor Research, 1985), pp. 25-33.

13. Michael Remez, "Union Leader Has Hopes for Failed Business," Hartford Courant (August 10, 1992), business weekly, p. 3; U.S. Department of Labor, Bureau of Labor-Management Relations and Cooperative Programs, "Saving Jobs and Putting Democracy to Work: Labor-Management Cooperation at Seymour Specialty Wire," labor-management cooperation brief no. 11, September 1987.

14. Maria Mallory, "How Can We Be Laid Off If We Own the Company?," Business Week (September 9, 1991), p. 66.

15. National Steel & Shipbuilding has been employee-owned since 1989 but a strike was called in late 1992 by the employee/owners over a pay increase demand after a long wage freeze. The company's management threatened to replace strikers permanently in the course of the dispute. A temporary cooling off period ended the strike and provided a small pay increase. Source: Chris Kraul, "Strike Called at West's Last Big Shipyard," Los Angeles Times, October 2, 1992, p. A3; and later news reports.

16. One of the few articles to trace through an unhappy ESOP experience is Tove H. Hammer and Robert N. Stern, "A Yo-Yo Model of Cooperation: Union Participation in Management at Rath Packing Company," Industrial and Labor Relations Review, vol. 39 (April 1986), pp. 337-349.

17. Sanford M. Jacoby and Daniel J.B. Mitchell, "Alternative Sources of Labor Market Data" in Barbara D. Dennis, ed., Proceedings of the 38th Annual Meeting, December 28-30, 1985, Industrial Relations Research Association (Madison, Wisc.: IRRA, 1986), pp. 42-29.

18. U.S. Bureau of the Census, Statistical Abstract of the United States: 1992 (Washington: GPO, 1992), p. 534.

19. There were 86.1 million private wage and salary earners in 1990. Three percent - clearly an upper-limit estimate of ESOP coverage since part-time coverage is lower than that - would be 2.6 million workers.

20. "More on the Number of ESOPs," Employee Ownership Report, vol. 13 (May/June 1993), p. 10.

21. For example, see the database used in Joseph Raphael Blasi and Douglas Lynn Kruse, The New Owners: The Mass Emergence of Employee Ownership in Public Companies and What It Means to American Business (Champaign, Ill.: HarperBusiness, 1991), pp. 8-28. Blasi and Kruse come up with an estimate of 10.8 million workers covered by "employee ownership plans" in 1989. Their figure is based partly on estimates from the National Center for Employee Ownership and includes pensions, 401k plans, and profit sharing plans which hold employer stock, stock options, etc.

22. "Louis Kelso, Employee Stock Ownership Pioneer, Dies," Washington Post, February 22, 1991, p. D5.

23. U.S. Bureau of the Census, Statistical Abstract: 1992, op. cit., p. 363. State and local government pensions held another $373 billion in equities and insured private pensions indirectly held still more. ESOP holdings make up only a small part of these totals. Blasi and Kruse, The New Owners, op. cit., p. 23, for example, put ESOP assets of the top 1000 plans at $47 billion in 1990.

24. The phrase pension fund socialism comes from Peter F. Drucker, The Unseen Revolution: How Pension Fund Socialism Came to America (New York: Harper & Row, 1976).

25. The tax subsidy to PAYSOPs was estimated to be over 100%. See U.S. Office of Management and Budget, Special Analyses: Budget of the United States Government, Fiscal Year 1987 (Washington: GPO, 1986), pp. G29-G30. The 28% coverage estimate is from U.S. Bureau of Labor Statistics, Employee Benefits in Medium and Large Firms, 1986, bulletin 2281 (Washington: GPO, 1987), p. 81.

26. Harberger triangles (named after Arnold C. Harberger) are measures of microeconomic inefficiency caused by taxes, subsidies, and other such distortions of free-market pricing. They are the usual focus of micro-level discussions of public policy costs. Okun gaps (after the late Arthur M. Okun) are a macro measure of lost output due to business downturns.

27. Simple regression analysis suggests that during the period 1979-1992, a 1 percentage point increase in the unemployment rate was associated with a 2% decline in real GDP. Hence, in 1993, the loss associate with each percentage point of the unemployment rate was about $120 billion.

28. Martin L. Weitzman, The Share Economy: Conquering Stagflation (Cambridge, Mass.: Harvard University Press, 1984).

29. The bonus might be also be a share of revenue or value added, as under some gain sharing plans or pay plans in the film and TV industry.

30. David Levine, "Efficiency Wages in Weitzman's Share Economy," Industrial Relations, vol. 28 (Fall 1989), pp. 321-334.

31. On the MacNeil-Lehrer NewsHour, June 5, 1992, Weitzman described the Lincoln-Electric profit sharing system as follows: "The mechanism is that the pay adjusts automatically so that a worker is being paid less when times are bad and is automatically being paid more when times are good. So the system is adjusting through pay, rather than through the number of workers employed."

32. Daniel J.B. Mitchell and Mahmood A. Zaidi, "Macroeconomic Conditions and HRM-IR Policies," Industrial Relations, vol. 29 (Spring 1990), pp. 164-188, especially pp. 171-174.

33. Thus, when the British government installed special tax incentives for flexible pay systems in the late 1980s, it applied them to profit sharing and ESOPs. Coverage by all such plans has increased in Britain from negligible numbers to 1.2 million workers in 1992. Source: Economist, May 9, 1992, p. 71; April 24, 1993, p. 62.

34. Domenico Mario Nuti, "On Traditional Cooperatives and James Meade's Labor-Capital Discriminating Partnerships" in Derek C. Jones and Jan Svejnar, eds., Advances in the Economic Analysis of Participatory and Labor-Managed Firms, vol. 4 (Greenwich, Conn.: JAI Press, 1992), pp. 1-26. Weitzman's profit sharing plan has been called "taxation without representation" because he assumes that workers will not acquire managerial control under profit sharing and therefore will not acquire the power to restrict hiring. See John P. Bonin, "The Share Economy: Taxation Without Representation" in Derek C. Jones and Jan Svejnar, eds., Advances in the Economic Analysis of Participatory and Labor-Managed Firms, vol. 3 (Greenwich, Conn.: JAI Press, 1988), pp. 185-200.

35. A review of studies dealing with the stabilizing effect of profit sharing can be found in Douglas Kruse, "Profit Sharing in the 1980s: Disguised Wages or a Fundamentally Different Form of Compensation?" in Randall Eberts and Erica Groshen, eds., Structural Changes in U.S. Labor Markets: Causes and Consequences (Armonk, N.Y.: M.E. Sharpe, 1991), pp. 67-99, especially pp. 79-84.

36. Richard B. Freeman and Martin L. Weitzman, "Bonuses and Employment in Japan," Journal of the Japanese and International Economies, vol. 1 (1987), pp. 168-194; Kazutoshi Koshiro, "Bonus Payments and Wage Flexibility in Japan" in Kazutoshi Koshiro, ed., Employment Security and Labor Market Flexibility: An International Perspective (Detroit: Wayne State Press, 1992), pp. 45-77.

37. However, keep in mind Mark Twain's observation in another context that "researchers have already cast much darkness on the subject, and if they continue their investigations we shall soon know nothing at all about it."

38. U.S. Office of Management and Budget, Budget of the United States Government, Fiscal Year 1993 (Washington: GPO, 1992), Part Two, p. 39.

39. It might be noted that there was an argument that ESOPs provide somewhat less tax incentives than other forms of deferred pay because dividends paid on share are not tax

deductible, unlike interest on loans. In that view, the special treatment given interest payments by ESOPs (the exemption of one half of the proceeds from lender income tax liability) crudely offset the dividend disadvantage. Note that the interest provision has since been restricted. See Myron S. Scholes and Mark A. Wolfson, "Employee Stock Ownership Plans and Corporate Restructuring: Myths and Realities," Financial Management, vol. 19 (Spring 1990), pp. 12-28, especially pp. 24-26.

40. The subsidy cost for PAYSOPs for fiscal 1987 was estimated to be $4 billion. This cost was restrained by the limit on the subsidized employer contribution of 1.5% of payroll. Source: U.S. Office of Management and Budget, Special Analyses, Budget, 1987, op. cit., p. G39.

41. U.S. General Accounting Office, Employee Stock Ownership Plans: Who Benefits Most in Closely Held Companies, HRD-80-88 (Washington: GAO, 1980).