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FLEXIBLE PAY SYSTEMS IN THE AMERICAN CONTEXT:
HISTORY, POLICY, RESEARCH, AND IMPLICATIONS

by

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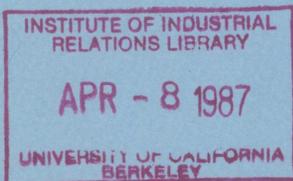
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Appendix A

Increasingly in the U.S., the professional literature -- both in economics and in the field of compensation -- has focused on the FORM of wage payments as opposed to the magnitude. Economists have been concerned about two adverse indicators of macro performance. First, there has been a relatively poor history in the U.S. of ensuring a stable economy (one free of major cyclical swings) combined with both low unemployment and low inflation. Second, there has been very disappointing productivity growth. Compensation specialists have obviously been more concerned with the latter problem -- mainly as it appears at the micro level of the organization -- than with the former.

In this paper, we first examine the two concerns that have triggered renewed interest in flexible pay systems. We then define the various forms of flexible pay which have received the most attention (although not necessarily widespread use). The history of flexible pay in the U.S. is briefly described, as a lead in to a discussion of current utilization of such compensation systems, based on publically-available data sources.

Following the historical analysis, prevailing views in the U.S. literature concerning the efficacy (or lack thereof) of the various forms of flexible pay are analyzed. We then present evidence on this issue, based on our own survey of American managers. Our survey deals with management beliefs about the different plans and the perceived and actual substitutability or complementarity of alternative forms of flexible pay. We conclude with discussion of American public policy options which might foster flexible compensation systems.

I. The Macroeconomic Background of Flexible Pay.

Table 1 summarizes the American macroeconomic dilemma using two basic indexes of economic distress: unemployment and inflation. The table shows peak and trough annual unemployment rates from the early

Table 1

Trends in Unemployment and Inflation, 1961-86

Year	Unemployment Rate		Consumer Price Inflation Trend ²
	All Civilians	Married Males ¹	
1961	6.7%	4.6%	Low & trendless (1.0%)
1969	3.5	1.5	Accelerating (5.4%)
1971	5.8	3.2	Decelerating (4.3%)
1973	4.9	2.3	Accelerating (6.2%)
1975	8.3	5.1	Decelerating (9.1%)
1979	5.8	2.8	Accelerating (11.3%)
1982	9.7	6.5	Decelerating (6.1%)
1985	7.2	4.3	Decelerating (3.8%)
1986			

¹Spouse present.

²The figures in parentheses refer to year-over-year percent changes in the Consumer Price Index (CPI-U for years 1979 and later).

Source: U.S. Bureau of Labor Statistics.

1960s to the mid 1980s and the magnitude and trend in consumer price inflation. In general, when unemployment has hit a peak, inflation has been either trendless or decelerating. And when unemployment has hit a trough, inflation has tended to accelerate. During the mid 1980s, U.S. unemployment stagnated at a rate of around 7% -- a level roughly comparable to the peak of the early 1960s. Inflation decelerated and then became trendless.

Also apparent from the table is a rising underlying trend in unemployment. The peak annual unemployment rates of the 1960s, 1970s and 1970s, were 6.7%, 8.3%, and 9.7%, respectively; the trough rates (through 1986) were 3.5%, 4.9%, and 7.%. Although some analysts have attributed this upward drift to changing workforce composition (more young people and women), the table shows that such compositional effects cannot be the sole source of the trend. That is, even when the unemployment rate is narrowly confined to married males with spouses present (a group weighted towards prime age males with strong labor force attachments), the same upward trend emerges.

From the viewpoint of economic policy, only two basic options emerge. One is simply to assume that there is a need for relatively high unemployment and slack labor markets to keep inflation in check. The conclusion would then be that efforts to lower unemployment through expansionary demand policies risk both inflation acceleration and a repeat of the stop/go policies of the 1970s and early 1980s. A second approach is to analyze the economic system to see if some institution might be altered, thus making low unemployment and low, nonaccelerating inflation simultaneously compatible.

II. The Weitzman Proposal.

Martin L. Weitzman of MIT has attracted considerable attention from fellow economists and editorial writers with his proposal concerning

profit sharing. He argues that the institution which needs to be changed to improve macro performance is wage setting, essentially because the contemporary wage system lacks a significant share element. (Weitzman, 1983, 1984, 1985; New York Times, 198_a, 198_b). He paints the modern wage system as rigidly based on protecting a wage rate, either real or nominal, regardless of the level of product demand.

The idea that profit sharing would add "flexibility" to the wage structure has a long history. It received renewed attention in the 1980s, due to the Japanese example of a bonus system with a profit sharing element. (Hashimoto, 198_; U.S. Bureau of International Labor Affairs, 198_). Indeed, Weitzman himself uses the Japanese example in support of his proposal (Freeman & Weitzman, 198_).

What Weitzman added to the previously vague notion that flexibility would be a Good Thing from a macro perspective, was a clearcut supporting micro analysis, i.e., a theoretical justification. His analysis suggests that with more profit sharing, firms would have a greater incentive both to hire more workers (thus, reducing unemployment) and to avoid laying them off when demand fell (thus keeping unemployment at its low level). With the economy tending toward full employment, swings in demand would be largely nominal, i.e., affecting prices rather than real output. Monetary policy could then focus easily (and painlessly) on price stability.

Unlike many clever economic schemes that have been proposed in the past, Weitzman's proposal does not require a new technology. Profit sharing has been around for a long time. But in the past, it has generally been seen by economists and compensation analysts as a micro device. Viewed that way, society as a whole could -- and presumably should -- leave it to firm-level decision makers to decide if profit sharing would be beneficial to their particular circumstances. (Alchian & Demsetz, 197_) Weitzman now points to "externalities" of profit

sharing, creating a social interest in its propagation. And he can point to evidence that even viewed in the conventional way, use of a profit sharing bonus to reflect company "ability to pay" in wage compensation is likely to be seen as "fair" by the general population. (Kahneman, et al, 1986).

III. American Productivity Trends.

There is little point in belaboring the well-known deterioration in U.S. productivity performance which became apparent by the late 1970s. The 3% annual improvement in productivity which had come to be expected by the early 1970s seemed mysteriously to vanish. From the cyclical peak 1973 to cyclical peak 1979, measured nonfarm productivity hardly rose at all.

Careful analysis of the phenomenon initially suggested a variety of partial explanations, but none which either provided a large portion of the answer, nor which pointed to an solution. (Denison, 19__). Moreover, since 1979, there has been little evidence of an amelioration of the productivity trend, despite the many press accounts of corporate reorganizations, reductions of overhead personnel, and plant closings. The deteriorating American trade balance in the 1980s, although mainly a function of U.S. dollar appreciation, focused increased public attention on the question of international competitiveness and its relation to productivity growth. Evidence that the trend in U.S. productivity improvement was below that of most other industrialized countries, reinforced this questioning.

In the past, suggestions among economists that workplace attitudes might play an important role in aggregate productivity developments have tended to be made by "radicals." (Brookings article) More conventional economists probably will concede that the method of compensation could influence worker output, but have generally not devoted much thought to

the topic. In contrast, compensation specialists place much more substantial weight on concepts such as incentives and pay for performance, particularly during the 1980s. (Cite surveys) And, at least on an intellectual level, human resource managers and union representatives are likely to believe that the workplace environment has an important role in determining productivity and quality.

IV. Definition of Flexible Pay Plans.

The term "flexible pay" has been used somewhat indiscriminately. In this paper, we define the term flexible pay to mean pay that is contingent on some measure of performance and that is not added to an individual's base salary (Lawler, 1984). Even within the confines of this definition, however, there are four types of plans that are commonly lumped together. These are 1) simple incentives such as piece rate plans, 2) profit sharing plans, 3) gain sharing plans (Scanlon, Rucker, Improshare) and 4) employee stock ownership plans (ESOPs, tax-credit ESOPs). Each plan can be distinguished by type, by prescribed motivational impact (productivity, cooperation, loyalty), by its external economic impact, and by tax treatment.

i. Flexible Pay Plan Types

SIMPLE INCENTIVE PLANS began as piece rate plans in early manufacturing settings. Under such plans each piece of work was priced and the worker's weekly pay determined by the number of completed pieces. Such plans still exist. But as scientific management developed in the early part of this century, more elaborate systems evolved (Bedaux, Halsey, Rowan and Gantt plans). These plans -- still in use today -- involve engineered, hourly or daily standards for production. Workers get a base wage for production levels that meet this standard and incentive premiums for above standard production. Simple incentive

plans are distinguished from other types of plans in their emphasis on tying pay to individual (usually quantitative) measures of performance and frequent payments (usually with each paycheck) (Lawler, 1981).

In contrast, PROFIT SHARING PLANS link bonuses to company profits. These plans tend to be loosely defined. The employer contributes a share of profits (somehow defined) to the plan at quarterly or annual intervals. The size of the individual employee's share is typically proportional to his or her base salary. However, the means an employer uses to determine the overall size of the share pool can range from highly formal (X% of a specified profit measure) to highly discretionary.

There are two major types of profit sharing plans in use today: cash and deferred. In a cash plan, an employee's share is paid in cash when earned. But in a deferred plan, an employee's share is paid in cash or stock to a trust account maintained by the employer. The shares are then distributed according to some prespecified vesting schedule (PSRF, 1986).

GAIN SHARING PLANS, like profit sharing plans, tend to be somewhat loosely defined. The gain sharing label is sometimes applied to any plan that ties pay to group measures of performance (Lawler, 1981; American Compensation Association survey, 1986). In this paper we use the label in the narrower sense typified by the Scanlon, Rucker and Improshare plans (Schuster, 1985). These plans commonly provide a monthly bonus to the workers of a production line or plant. The bonus is based on value added or cost savings, defined as the difference between present production or labor costs and the historical averages of these costs (as established by accounting data). Savings are split between employees and management; management uses its split to implement employee cost saving suggestions (O'Dell, 1982; Leseur, 1964).

Finally, EMPLOYEE STOCK OWNERSHIP PLANS (ESOPS) represent one form

of deferred profit sharing or qualified benefit plan which has been singled out for special tax treatment since the 1970's (see IV-iii and V-v below). In an ESOP plan, employers purchase stock from their own shareholders and these stocks are contributed to employee accounts held in trust. These plans are sometimes known as leveraged or leverageable ESOPs because the employer can borrow through the ESOP, issue stock to the ESOP trust fund in the amount of the loan, and then deduct repayment principal as well as interest (BNA, 1986; Marsh & McAllister, 1981). Some ESOPs, however, are not leveraged and merely hold stock for workers.

A second kind of ESOP plan, known as a tax-credit ESOP, became available to any private employer in 1983 (BNA, 1986). Under these plans or PAYSOPs, the employer received a tax credit for stock contributions up to 15% of the payroll. The tax subsidy for these plans ended with the 1986 Tax Reform Act (see also, V-v, below).

ii. Motivational Impact of Flexible Pay Plans.

Proponents of each of the four types of flexible pay plans claim some relationship between the plans, employee productivity, and flexible labor costs. However, in some cases, such relationships are indirect. In other cases, the organization conditions required for the optimal plan effects are not present.

Motivation theory predicts that simple incentive plans provide the greatest potential for increasing employee productivity. Such plans tie pay to individual performance and payments are timely (every paycheck) (Lawler, 1971;1981). However, because of measurement difficulties, the plans tend to emphasize quantity over quality performance. Moreover, workers must feel that they have independent control over the performance measured and must trust the measures used. When these conditions are not met, perverse work group norms (such as restricting output) often develop (Whyte, 1958). Such conditions limit the work

settings in which simple incentives can be used successfully.

From a motivational perspective, gain sharing plans are next in terms of potential for productivity improvement. Most proponents of gain sharing plans hold that a work environment that encourages participation and communication is essential to plan success. (The exception is the Improshare plan [Fein, 1984]). Motivation theory predicts (Lawler, 1971; Campbell, 1976) that employee participation in work decisions can increase job satisfaction and, indirectly, productivity. This productivity would evolve from the increased teamwork and the positive work group norms that encourage higher quality and (perhaps) quantity of output. Increased job satisfaction is also associated with lower turnover or higher employee loyalty to the firm (March and Simon, 1959).

However, not all organizations will offer the conditions prescribed for gain sharing success. In addition to participative management, the employer must have the historical accounting data needed to establish gain sharing formulas. These data must be shared with employees or their representatives.

Under profit sharing, the link between individual productivity and plan implementation becomes more tenuous. Simple incentive plans tie pay to individual performance and pay out as often as every week. It is not difficult to see how workers could be aware of their individual contributions to group performance in gain sharing plans, and the payout for gain sharing is often monthly. However, profit sharing ties pay to organization performance measures over which individual workers have little control. The payout is, at most, quarterly, and, in the case of deferred plans, can be put off to retirement.

Profit sharing can, however, increase employee loyalty to the firm by instilling a sense of involvement in the firm's fortunes (PSF, 1985). This outcome is especially likely if the plan is made highly visible and

employees are educated about how business conditions, as well as their own performance, can influence profit measures.

Finally, employee stock ownership plans (ESOPs) can lay even less claim on producing higher productivity than many profit sharing plans. These plans have the potential, like profit sharing, of increasing employee loyalty and involvement in a firm's success. The exception here may be the 100% worker owned firm in which individual employees would have the same interest as stockholders in firm productivity. However, such ESOPs are rare. (See sections V-v and VI below).

iii. Economic Impact and Tax Treatment of Flexible Pay Plans.

As indicated earlier, Weitzman has suggested that the external economic benefits of profit sharing create a social interest in its propagation. In the Weitzman view, neither simple incentive plans nor ESOPs foster external macroeconomic benefits. Whether or not gain sharing plans foster such benefits depends upon the cost savings formula used. If the Weitzman view is correct, then relative to the other plans, profit sharing should receive preferred tax treatment.

There is no tax preference for simple incentive or gain sharing plans. Payments under both types of plans are taxed as ordinary income. Income from profit sharing plans that pay immediate cash bonuses does not receive any tax preference. But under deferred plans, tax liability is also deferred. However, the implicit tax subsidy is no greater than provided under qualified pension plans or deferred savings arrangements such as 401(k) plans. ESOPs have received increasingly favorable tax treatment since the mid 1970s. The tax preference issue is revisited in the concluding section of this paper.

V. History of Flexible Pay in the U.S.

It would be pleasant to report that there were available official

statistics tracing back usage of alternative forms of pay systems historically. Unfortunately, information on forms of pay -- as opposed to magnitudes -- has been collected only on an AD HOC basis, sometimes by the U.S. Bureau of Labor Statistics, and sometimes by private organizations. The further back in time one goes, the more spotty are information sources.

i. Piece Rates and Incentive Bonus Systems.

Simple piece rates were common in factory work in the 19th century. Exactly how common, it is difficult to say. But they were probably the norm. In many respects, piece rates bridged the transition between workers functioning as independent artisans and workers hired as paid employees. An independent shoe maker charging a price for a pair of shoes is effectively collecting a piece rate from his customers. Thus, paying an employee/shoe maker a piece rate treats him as a quasi-contractor to the shoe factory.

In the early 20th century, the growing popularity of "scientific management" focused more attention on the details of the payment system. A wide variety of incentive and bonus systems were introduced and promoted. By the mid 1920s, roughly half of factory employees were covered by some kind of piece rate or incentive system. (NICB, 1930) Apart from simple piece rates, industry wage surveys by the U.S. Bureau of Labor Statistics (BLS) suggest that bonus arrangements were commonly found in manufacturing establishments in the 1920s and early 1930s, as can be seen from Table 2. Usage, however, varied substantially from industry to industry. And, unfortunately, terminology regarding bonuses was loose. Some "bonuses" reported by BLS were actually wage premiums for overtime work, for night shifts, etc. Nevertheless, many of the bonuses systems related to the achievement of production goals or to labor cost or labor time savings. Some were rewards for good attendance

Table 2

Bonus System Usage in the 1920s and Early 1930s

Industry	Year	Surveyed Establishments with Bonuses (percent)	Industry	Year	Surveyed Establishments with Bonuses (percent)
Tires	1923	31%	Woolen & worsted goods	1926	61%
Foundries	1923	15		1928	58
	1927	14		1930	42
	1929	11		1932	21
	1931	9			
Machine shops	1923	19	Cotton goods	1926	17
	1927	22		1930	21
	1929	23	Hosiery	1928	22
	1931	24		1932	19
Paper & pulp	1923	11	Underwear	1928	17
Meatpacking				1932	12
	1927	42	Airplanes & aircraft engines		
	1929	49		1929	5
Boot & shoe	1926	21	Portland cement		
	1930	11		1929	19
Men's clothing	1924	4	Furniture		
	1928	2		1929	15
	1929	0	Cigarettes		
Paper box-board	1925	16		1930	23
Lumber mills			Textile dyeing & finishing		
	1923	1		1930	21
Motor vehicles				1932	28
	1925	38	Cane sugar refining		
	1928	45		1930	52
Rayon & synthetic yarn	1930	57	Bakeries		
Leather goods				1931	3
	1932	17	Gas stations & garages		
Silk & rayon goods				1931	6
	1931	16	Metal mines		
				1931	37

Source: U.S. Bureau of Labor Statistics, various industry wage studies.

records or for the avoidance of accidents or damage to equipment.

(Profit sharing plans were reported as bonus systems only in a handful of cases).

The available evidence from BLS surveys indicates a substantial upward trend in the use of time rates rather than piece and incentive rates after the 1920s. By the end of World War II, perhaps two thirds of U.S. factory workers were on time rates. And by the late 1950s and early 1960s, the proportion had increased to three fourths. All indications are that the upward trend in time-based wages continued into the 1970s, not only for factory workers but others as well. (Various BLS studies thru 1982) At the all-occupation level, one factor behind the decline in piece rates and related pay systems is clearly the shift in job mix to white collar employment and, generally, to jobs where output measurement is difficult. But since the decline appears to have occurred even in manufacturing, other influences must also be present. Some appear to relate to broad social trends, while others are probably linked to a growing sophistication among managers concerning the limits of piece rates and incentives.

The notion that jobs should provide steady, guaranteed incomes is potentially at odds with systems linking pay to production, efficiency, or other measures of performance. New Deal policies were focused on providing or encouraging income security and guarantees. Later, these ideas were reflected in union demands for guaranteed annual wages (GAW) in the 1940s and 1950s.

Income security goals were not fully achieved by New Deal policies such as minimum wages and unemployment insurance, nor by the supplemental unemployment benefits plans negotiated by some unions as an outgrowth of the GAW agitation. But they did shift the climate of thinking about what kind of wage system was appropriate for a "good" employer to provide. There is evidence, for example, that increased

wage rigidity developed in the post World War II period, linked to these concepts. (Mitchell, AEA/IR) Good employers were not supposed to vary the wage in response to labor demand or business conditions, as had been common practice before the New Deal. (Shister, 1943, p. 542)

Although unions undoubtedly played a role in changing the form of wage payments, it would be a mistake to assume that they universally opposed piece rates and incentives -- or that they now do. As will be noted below, surveys of union contracts in the mid 1980s, suggest that about one third contain such systems for SOME covered workers. (BNA) Thus, part of the reduction in the popularity of piece rates and incentives must have come from a change in management perceptions. Specifically, management learned that while the idea of "paying for performance" sounds good in the abstract, actual implementation may be difficult.

For example, it is now widely recognized that since jobs must be timed in order to establish an appropriate piece rate, perverse incentives can develop. Workers may restrict production in order to hold down expected norms. Or quality may be sacrificed for quantity, unless careful measurement occurs. Such problems, particularly when efforts are made to correct them, can lead to workplace frictions. Thus, management may conclude that time rates, combined with good supervision and motivation, can outperform piece rates.

Finally, as indicated earlier (II-iii) simple piece rates and incentives receive no special preferential tax treatment, unlike many forms of compensation. Congress has diverted the attention of compensation specialists towards keeping pace with the latest wrinkles in the tax code, and to complying with numerous regulatory requirements. Tinkering with piece rates and incentives is no longer the central focus of managers charged with compensation policy.

ii. Performance Appraisal and Merit Plans as an Alternative to Simple Incentive Plans.

Despite problems with the implementation of incentive pay plans, industrial psychologists continued to emphasize the beneficial effects of tying pay to performance (Campbell, Dunnette, Lawler and Wieck, 1972). They warned that any increase in pay not related to performance would reward good and mediocre performers alike, causing the good performers either to leave the firm or to restrict performance. Such warnings, coupled with the problems of developing engineered performance standards for white collar and managerial workers, led many employers to develop performance appraisal and merit pay systems.

Most performance appraisals link pay increases to relatively subjective performance indicators. The most common form requires an employee's supervisor to rank each of his or her subordinates as outstanding, good, satisfactory, or unsatisfactory on vaguely defined work dimensions (Tichy and Fobrum, 1984). Then the budgeted merit pay pool is then allocated to employees based on their performance ratings. Payments are typically made annually.

The merit system is not flexible in the sense defined earlier because employee or firm performance does not affect the size of the merit pool. Also, merit pay, like a general wage increase, is added to base pay and thus contributes in the same way to wage rigidity. Indeed, there is evidence that both supervisors and their subordinates view merit increases in much the same way as general wage increases (Haire, Ghiselli and Gordon, 1967; Lawler, 1971; Pearce and Porter, 1986).

Performance appraisal and merit systems have also been associated with perverse incentives similar to those common to simple incentive systems. Pearce and Porter (1986) found that supervisors try to "beat the system" by giving all subordinates a merit increase no matter what their performance. This behavior extended to giving promotions in order to assure that everyone received an increase. Other studies have shown

that even when supervisors do distinguish among performers, those employees who receive low performance ratings and merit pay increases do not subsequently improve their performance (Pearce and Porter, 1986; Pearce and Stevenson, 1985). The result can be lowered overall productivity. These results persist despite improvements in the performance appraisal system and training for supervisors (Pearce and Stevenson, 1985).

From the viewpoint of providing an incentive for good performance, managers have tended to view performance appraisal and merit plans as an alternative to automatic incentive systems. While both systems have drawbacks and potential perversities, the merit approach historically has displaced simple incentives. Apparently, management often concludes that merit plans have fewer drawbacks and/or are easier to operate over the long haul.

iii. Profit Sharing.

It is pointless to attempt to pinpoint the first profit sharing plan in the U.S. Some researchers have claimed to find examples as far back as the 18th century. (Jeuck reference; NICB, 1934) Others would put the date later, and would suggest the origins of profit sharing lie in Europe. (Encycl of Soc Sci) However, profit sharing as a notable form of compensation in modern corporations dates from the late 19th century in the U.S. context. (PSRF) One of the difficulties with profit sharing is that the term is sometimes used loosely. For example, Henry Ford's famous \$5 a day plan was essentially a wage premium for workers who had been with the firm for at least 6 months and who met company standards of thrift and morality. The Ford premium was unrelated to profits; yet it was termed "profit sharing" at the time. (BLS, 1916, pp. 94-122)

This tradition of vague and misleading nomenclature continues up to

the present time. For example, a recent union-management contract in the shipbuilding industry includes "profit sharing" bonuses which are guaranteed regardless of profitability. (DLR-Todd) More generally, employers have been prone to describe various forms of tax-deferred savings arrangements as profit sharing, even if no formula links the employer contribution to company profits.

The Early Twentieth Century.

Profit sharing was considered a sufficiently important phenomenon early in this century to be the subject of a 1916 BLS survey. According to the survey's introduction, profit sharing arrangements were seen by advocates at the time as "the permanent solution to the so-called labor problem" and a way of "fostering the development of a larger spirit of harmony." (BLS, p. 5) Religious views influenced the establishment of some plans. (MLR in AEA) However, in the background was a general concern about labor unrest and about the growth of unionization during the World War I period.

While proponents of profit sharing had strong views concerning the socially-beneficial effects of the idea, public policy in the early 20th century did not favor its implementation. The BLS study noted that profit sharing bonuses were viewed legally as "mere gratuities" given by the employer to workers, and were therefore not deductible from corporate income taxes as a business expense. (BLS, p. 6) Given this disadvantageous treatment, it is not surprising the profit sharing was not extensively used in 1916.

BLS found only 60 plans to study; some of which -- as in the case of the Ford program -- were not really profit sharing at all. The earliest plan included in the 1916 report dated from 1886, but over three fourths of the plans listed were no more than a decade old. This finding suggests, therefore, that a minority of employers during this

early period felt a need to experiment with their personnel practices. They were open to consideration of financial participation by employees in their companies.

There is a potential linkage between financial participation by workers and other forms of participation. Although most company unions and employee representation plans were established in the early New Deal period, some were created initially with government encouragement during the World War I era. (Guzda) Government policy aimed at ensuring a climate of friendly labor-management relations, and representation systems were seen as a progressive employment policy. In some cases, these plans had profit sharing elements attached. (Mitchell, AER) However, government interest in profit sharing was not triggered again until the late 1930s, another period of labor tensions and union growth.

The Great Depression Era.

Not surprisingly, the Great Depression placed severe strains on profit sharing plans, many of which found themselves without profits to share. Some of the older plans may have provided a financial cushion for laid off workers. (MLR-Sears) But a National Industrial Conference Board study in 1934 found that out of 134 surveyed plans, 48 were "suspended" and 6 had been discontinued. In one case, a plan had been terminated after a newly organized union struck to end the program's bonus system and substitute a fixed hourly wage. And even where plans were not discontinued, some firms took steps to limit employee eligibility for participation. (Jeuck, p. 158)

Responding to the BLS 1916 survey, employers gave profit sharing only a mixed review with regard to its ability stimulate workforce efficiency. However, during that era of high employee turnover, profit sharing plans -- which often required that the employee remain on the payroll for a year before receiving a bonus -- were credited with

holding down turnover. Excessive quits were not a general problem during the Great Depression, and the Conference Board's 1934 report did not focus on reduced turnover as a positive effect of profit sharing. However, the report did find that employers of the period viewed profit sharing as having had only "indifferent success" in stimulating efficiency or improving morale. (NICB, 1934, pp. 26-27).

As the economy began to recover in the 1930s, some revival of employer interest in profit sharing was also evidenced. For example, Westinghouse resumed a suspended plan in 1936. (NICB, 1937) At the same time, certain economists began to argue that there were macroeconomic benefits to be had from profit sharing, foreshadowing Weitzman's recent proposal. And political leaders again began to look to profit sharing as a way of dealing with labor-management tensions. But union officials generally were not enthusiastic about such ideas.

Economists and Profit Sharing in the 1930s.

A major debate among economists in the 1930s concerned the role of wage rate determination in causing, exacerbating, or curing the Depression. Two competing theories initially existed. Orthodox economic analysis suggested that unemployment was a sign of oversupply in the labor market. As in the case of any market, so this view went, the price (or in this case, the wage) should be reduced to alleviate excess supply. An opposing view, held by many New Deal officials and some prominent economists, was that RAISING wages was the appropriate Depression remedy. According to this argument, higher wages would mean higher consumption and more demand.

By the late 1930s, Keynesian views, which downplayed manipulating wages as a way of reducing unemployment, added to the confusing stew of economic ideas in the U.S. (Mitchell, EEA) Still, it appears that a majority of economists believed that economic conditions of the period

were being worsened by wage "rigidity." (Slichter, 1934) This view, in turn, suggested that profit sharing bonuses -- which would tend to fluctuate with business cycle conditions -- might add a kind of ersatz flexibility to the wage setting system. (King, 1941). That is, profit sharing was proposed as a route to improved macroeconomic performance.

Political Leaders and Policy in the 1930s.

As already noted, the prevailing thrust of New Deal policy was that income stability was desirable, that minimum "decent" incomes should be provided, and that to the extent that wages were considered as a tool of economic policy, they should be pushed up. This latter objective was initially to be accomplished through NIRA codes; when that route became unavailable, the objective was pursued by encouraging unions and collective bargaining. (Mitchell-Stanford)

However, the 1930s were marked by industrial unrest, as new unions formed, old ones expanded, and employers resisted union encroachment and demands. The old idea was revived that profit sharing might be a means of reconciling labor and capital. In addition, given the limited scope of pension plans then prevailing, and given the search by some in Congress for private alternatives to expanding Social Security, use of profit sharing programs as retirement vehicles seemed attractive.

As a result, a Senate subcommittee recommended favorable tax treatment for retirement-related profit sharing in 1939. (Senate reports, ILO report) The recommendation led to tax code changes which in broad terms are still applicable. Employers were permitted to deduct contributions to profit sharing plans (within limits) as business expenses from profits in calculating corporate income tax liability. Payments into profit sharing trust funds were not taxable to the employee at the time of distribution.

Union Attitudes.

Union representatives at the Senate hearings of the late 1930s did not condemn profit sharing in the abstract. But they expressed deep reservations about the actual implementation of such programs. Profit sharing was linked in the minds of union leaders to the earlier company union movement. It was seen as an employer-dominated device designed to substitute for collective bargaining. AFL and CIO leaders suggested that for true profit sharing to occur, employers would have to permit union access to corporate accounts and to allow union participation in managerial matters. Such developments, they felt, were most unlikely to occur in practice. (Senate, Green & Lewis)

The union viewpoint expressed to Congress was not just a product of the 1930s. It had in fact been the prevailing AFL view since the 19th century, in contrast to those of the more utopian Knights of Labor. (Kruger and Bearup; Frey) And after the 1930s, the "management rights" movement and management resistance to union restrictions on longstanding prerogatives, dampened the participative elements that might have gone along with widespread profit sharing. (Jacoby) Some unions did make profit sharing proposals to employer in the post-World War II period. (Kruger and Bearup) But profit sharing remained a negligible element of compensation in the union sector until the 1980s. For example, a 1978 survey of major union contracts, for example, found profit sharing was referenced in less than 2% of the contracts studied and that it covered less than 1% of the workers in the sample. (BLS, 1980, p. 42)

Union Wage Concessions and Profit Sharing in the 1980s.

During the 1980s, union attitudes toward profit sharing shifted in a more favorable direction, although under conditions of duress. In a number of prominent bargaining situations, profit sharing plans were introduced as a QUID PRO QUO for wage and benefit concessions on the

part of the union. Mitchell estimated that the number of union workers covered by profit sharing plans negotiated as part of wage concessions stood at 500,000 - 600,000 as of mid 1985. (BPEA, 1985) The bulk of these workers were at General Motors and Ford, pursuant to concession agreements made in 1982.

If concessions are defined as first-year wage freezes or cuts, the concession movement can be dated as beginning in 1981. However, it was not until 1982 that a substantial proportion of negotiated outcomes fell into the concession classification. In that year, 6% of concession contracts contained profit sharing, a proportion which dwindled in 1983 and 1984. But the downward trend reversed in 1985 and 1986. During the first half of 1986, for example, 9% of concession agreements contained profit sharing. (Mitchell/Hymans) Profit sharing was extended into concession contracts in such industries as steel and lumber.

Perhaps more significant has been the spread of profit sharing in non-concession agreements. A number of such contracts were negotiated in the telephone communications industry in 1986. Moreover, in the automobile industry, profit sharing was retained in negotiations which produced wage and benefit increases after 1982. Both union and management seemed to see profit sharing as a component of the income security arrangements which were negotiated for senior workers in the 1982 contracts (and which were extended in subsequent negotiations). Profit sharing represented a substitution of labor cost flexibility for employment flexibility.

In the automobile industry, profit sharing developed in relation to job and income security innovations. It is also possible that over time, a profit sharing element could arise from the lump sum bonus plans which became a major feature of U.S. collective bargaining in the mid 1980s. Under these programs, workers receive a fixed bonus -- often either a flat amount or an amount proportionate to earnings -- rather

than a wage rate increase. During the first half of 1986, over one fourth of all settlements contained lump sums, including over three fifths of the concessions. (BNA; Mitchell/Hymans)

If lump sums become standard practice in union contracts, they might take on a variable element related to profitability along the lines of the Japanese bonus system. At this point, however, no such development has occurred. And even conventional profit sharing's hold in the union sector remains tenuous. It is doubtful that the proportion of private sector union workers under major contracts with profit sharing exceeds one tenth; for all private contracts, the proportion would be significantly lower.

Tax and Regulatory Incentives.

When Congress permitted employers to deduct profit sharing contributions as business expenses originally, it was simply removing the earlier disadvantage placed on profit sharing by the tax code. The favorable treatment of profit sharing in the tax code comes not from the employer deduction, but from the exemption of DEFERRED contributions from the current tax liabilities of employees. Put another way, profit sharing plans which pay current cash bonuses receive no net stimulus from the tax code; tax advantages accrue only to deferred plans.

It is also important to point out that profit sharing plans which do provide for deferred benefits -- while they obtain a net tax subsidy -- are receiving no more favorable tax treatment than are other deferred retirement programs. Qualified pension plans, for example, also are permitted deductibility of employer payments to the associated trust fund. And there is no tax liability to the employee accruing from current employer contributions. Moreover, since the issue of whether the employer or employee makes the contribution to a savings arrangement is a legal distinction -- not an economic one -- plans such as 401(k)s

and IRAs essentially receive the same benefits as deferred profit sharing. Under such plans, the employee places pre-tax income in a fund designated primarily for retirement.

Thus, the tax subsidy by itself, while favoring employment-related savings plans, does not necessarily favor deferred profit sharing among the various alternatives. However, there are some regulatory aspects of alternative savings plans which may tilt employers towards profit sharing. Requirements that the plan maintain a balanced investment portfolio, for example, do not apply to profit sharing trust funds, which may invest their assets in the stock of the employer. Moreover, the rules concerning employer contributions give the firm more flexibility with regard to the timing and magnitude of such payments.

iv. Gain Sharing.

As in the case of profit sharing, it is impossible to determine when gain sharing was invented. One study attributes the concept to the ancient Romans. (Ross & Hauck, 1984, p. 9) Histories of modern gain sharing in the U.S. typically begin with the first Scanlon Plan in the 1930s. (Lesieur) Yet the idea of a group bonus related to productivity and/or labor cost or time savings certainly existed in American industry before then.

The available evidence suggests that before the 1930s, employers generally felt that rewards for productivity or savings should be at the individual -- rather than at the group -- level. Those firms which did have group bonuses argued that their plans induced an ESPRIT DE CORPS or that peer pressure was put on slackers to improve performance. (NICB, 1930, pp. 116-118). But prevailing opinion had it that such systems might inadvertently reward slackers, whose shirking could be hidden by overall group effort. Thus, group bonuses were to be used only in situations when individual effort could not be discerned, i.e., in cases

of true team production.

As will be seen from the section on plan usage (below in the text), it is not at all clear that this viewpoint has substantially changed. Sometimes the term "gain sharing" is used loosely to cover programs such as profit sharing, or any bonuses awarded on a group basis, or virtually any management system that emphasizes and links teamwork, cooperation, and rewards. (Ross & Ross, PSRF pamphlet) But if gain sharing plans are defined narrowly, i.e., as Scanlon, Rucker, Improshare, or similar arrangements, their incidence in the workforce is extremely rare. Thus, the history of gain sharing in the U.S. is one of much discussion, but little implementation.

Perhaps the most widely publicized gain sharing program was the Kaiser Steel Long Range Sharing Program, established in 1963. The program was an outgrowth of a major strike in the steel industry in 1959, and of the general automation scare of the early 1960s. During this period, there was concern that workers would resist productivity improvements if job loss resulted. Hence, the Long Range Sharing Program was surrounded by provisions regarding job security in cases of potential technological displacement. It provided bonuses linked to productivity-based cost savings (estimated by complex formulas), and was compared with the Scanlon plan in contemporary accounts. (MLR, 1/63)

Despite the initial hoopla at the time of its creation, the Kaiser program slowly faded from public consciousness. Its job security arrangements did not apply to the demand declines experienced by the steel industry in the 1980s, and could not protect workers from them. Perhaps the greatest lesson from the Kaiser experience relates not to the plan itself, but to a failing of academics and journalists.

Gain sharing (and other innovative programs) are widely discussed when they are implemented. Often the resulting literature has been disproportionately written by advocates. Successes have invited

continued attention; failures seem to disappear without analysis. Calls for follow up studies (e.g., Schuster, 1984, pp. 223-224) are well taken, but seldom heeded.

v. Employee Stock Ownership Plans.

The notion that workers should own part or all of the enterprises which employ them is quite old. Various utopian and cooperative schemes from the 19th century to the present have been based on this concept. (Jackall & Levin rev in CMR) However, with the exception of small family owned and operated businesses and farms, such arrangements have always been extremely rare in the U.S.

Modern corporations have been known to encourage and/or subsidize purchase of their stock by ordinary employees since at least the 1920s. (NICB) And, of course, employees of publically traded firms can always buy shares in them as individuals, regardless of whether they are encouraged to do so. However, during the 1970s, public policy -- expressed in the tax code -- began to tilt toward ESOPs as the preferred arrangement of employee ownership.

Arguments for ESOPs have been made at two levels. First, there is a broad social question about the distribution of wealth. Louis Kelso, who is often viewed as the father of the modern ESOP, stressed this aspect in books written in the 1950s and 1960s. (Kelso, 1958, 196_) However, once the tax code became more favorable to implementation of ESOPs, a second idea -- one designed to appeal to managers -- began to be stressed. Arguments were made that ESOPs would stimulate productivity, cooperation, and, ultimately, profitability.

It is doubtful that Congress would have provided the tax subsidies to ESOPs without the intervention of Senator Russell B. Long, chair of the Committee on Finance until his retirement at the end of the 1986 session. Kelso's notion of spreading wealth appealed to Long, whose

father -- the legendary Huey Long -- led a "share the wealth" movement in the 1930s. However, it is noteworthy that that the heavy tax subsidy to PAYSOP plans, an offshoot of ESOPs, was not extended by the tax code modifications of 1986 (see below). Although the tax subsidies to basic ESOPs were continued, their long term future without a well-placed Congressional patron is uncertain.

Tax History.

The first general tax law change applied to ESOPs was enacted in 1974. ESOPs became recognized as qualified benefit plans. This recognition meant that employer contributions to ESOPs were tax-deductible business expenses to the firm, but were not currently taxable to employees. It was often argued that the 1974 law made leveraged ESOPs especially attractive to firms in need of financing. Firms could borrow through the ESOP, issue stock to the ESOP's trust fund in the amount of the loan, and then deduct repayment of principal as well as interest. The deductibility of principal -- not permitted under conventional financing -- was initially touted by advocates of ESOPs as a major tax break. (Senate Fin Com, 1980, pp. 18-23)

However, it is unclear that a real tax break was involved, IF THE EMPLOYER'S CONTRIBUTION OF STOCK WAS APPROPRIATELY VALUED. The repayment of loan principal was supposed to be matched by an equivalent contribution of stock to the ESOP. Thus, the borrowing firm should have incurred a real business expense, equal in value to the principal. A neutral tax code ought to have recognized business expenses for employee compensation of all types, whether wages, benefits, contributions of stock, or Thanksgiving turkeys. Since the 1974 tax code change did no more than that (Atlanta Fed, p. 26), it at best removed discrimination AGAINST ESOPs.

Nevertheless, there was a jump in basic leveraged and leverageable

ESOP formation immediately after the 1974 tax changes. A report by the General Accounting Office (GAO) has linked this activity to the new law. (GAO, 1986, p. 10) If there was no net tax subsidy, why should such a jump have occurred? Still another GAO report suggested the answer. For closely held companies, a problem arose concerning the valuation of stock issued to the ESOP. The tax code creates a temptation to overvalue the contributed stock. Overvalued stock contributions would, of course, create a net tax subsidy where none was intended by Congress to exist. In addition, the GAO report found that voting rights of the shares were often retained by the employer, thus permitting continued control of the firm in the hands of the original owners. (GAO, 1980)

Although the initial tax changes may not have amounted to a true tax subsidy, after 1974, a series of more favorable tax treatments of ESOPs and related plans were enacted. Each new tax bill seemed to contain an ESOP-subsidizing provision. For example, when Congress adopted investment tax credits to stimulate the economy in the 1970s, additional credits were given to firms which created tax-credit ESOPs (then known as TRASOPs). (Marsh & McAllister) Of course, only firms which were undertaking eligible investment projects could benefit from a TRASOP. Thus, a search was begun for a more general form of tax-credit ESOP. Congress' search ended in 1983 with the creation of the PAYSOP to supersede the TRASOP.

Under a PAYSOP, the employer received a tax credit for stock contributions (rather than just a deduction), effectively making the U.S. Treasury the contributor. PAYSOP contributions were not linked to investment projects; any private employer could make them. The tax credit effect was amplified by the exemption of the employee from current taxation on the contribution. Thus, the effective tax subsidy exceeded 100% (Budget). Not surprisingly, when Congress looked for tax loopholes to close in 1986, the PAYSOP tax subsidy was permitted to

expire.

The use of basic leveraged ESOPs as a financial tool received a substantial boost from the tax code in 1984. Banks and other institutions lending to a firm through an ESOP were permitted to deduct half of their interest income on such loans from taxation. As a result, lower interest rates are currently available to ESOP-related borrowers than to conventional borrowers.

Employee Buyouts and Concessions.

Only 17% of the firms reporting to the ESOP Association's 1985 survey were more than 50% owned by their ESOPs. (Survey) This proportion is undoubtedly substantially exaggerated -- relative to all ESOPs -- by the fact of membership in the Association. Most ESOPs do not involve either worker control or control on behalf of workers. However, because of the economic dislocations of the 1980s, instances of employee buyouts of firms through ESOPs have received substantial attention in the U.S. (Conf Bd, 1983)

When ESOPs are used to save a plant or a company from a planned shutdown, the restructured enterprise is obviously starting from an economic disadvantage. Since it was failing under conventional ownership, the risk of failure under an ESOP must also be high. And, indeed, some firms, such as Hyatt Clark (a former General Motors parts plant) and Rath Packing (see Hammer & Stern, 1986), were not saved by ESOP takeovers.

ESOPs and Wage Concessions.

Even in apparently successful cases of ESOP/worker takeovers, such as Weirton Steel, wage and benefit reductions were a major element rescue package. (NY Times, 1985) As in the case of profit sharing, ESOPs involving minority ownership have been included in several union

wage concession negotiations in the 1980s. Such ESOPs have been used in the deregulated trucking and airline industries. (Rosen in DOL Selections) Some resistance by union dissidents to ESOP/concession deals has been reported. (DLR/IBT) But generally, unions in the 1980s took a pragmatic view of ESOPs in the context of the economic problems they faced. (Olson, Wisc Law Rev) Management pressure for wage concessions was not welcomed by unions, but worker receipt of some ownership in the firm through an ESOP lessened the blow.

Employer Buyouts.

ESOPs have also been used by corporate management in the 1980s to fend off unfriendly mergers and takeovers by other firms and investors. The tax subsidy available to borrowing through ESOPs can make them a useful tool to the incumbent management in a leveraged purchase of the firm. With sufficient stock in the hands of the ESOP, the unwanted raider is effectively rebuffed. However, apart from external borrowing, there have been instances in which pension fund assets have been diverted into ESOPs to accomplish leveraged buyouts. (Bus Wk, 1984, 1985) Such uses of ESOPs have made proponents of these plans uncomfortable; buyouts may spread the use of ESOPs but also raise questions in the public and Congressional mind about the desirability of the ESOP tax subsidy. (Rosen, Pension Wld, 1984)

VI. Data on Current Usage of Flexible Pay Plans.

Our historical examination of the history of flexible pay plans indicated that no systematic effort has been made to trace the different types of plans or their use in different employment settings. This is still true today. An investigation by the authors concerning the incidence of alternative pay plans turned up no comprehensive survey providing detail on the number and characteristics of employers and

employees involved in such pay plans, or on the employer expenditures involved. As an illustration of what is available, Table 3 summarizes information from four major surveys covering flexible pay plans. Based in the limited data which can be obtained, the following conclusions about pay plan usage may be reached.

Simple incentive plans still are used with some frequency, especially in the manufacturing sector. In 1984, some 17% of firms in manufacturing, as opposed to 8% of non-manufacturing firms reported using incentive plans (BNA, 1984). Among manufacturing firms, such plans are still most common in situations where output can be easily measures (e.g. textile, garment, basic steel). Where production workers in these firms are unionized, the contracts include wage incentive provisions (approximately one third of surveyed contracts according to a 1986 report of the BNA). Nevertheless, simple incentive plans have declined in popularity over the long run and in recent years. The BLS (1982) reports that the proportion of manufacturing production workers covered by such plans dropped from 30% in 1947 to 18% in 1980. Hourly rates are by far the more common pay method.

Gain sharing plans (as narrowly defined in section IV) appear to be so rarely used that they should be regarded as curiosities (BNA, 1986; GAO, 1986; Hewitt, 1985)*. (footnote from the ACA survey) There are no consistent data on their use by employers or their coverage of different types of employees. Profit sharing plans cover no more than 20% of private sector employees (BLS, 1982). Most of these programs are deferred plans. Hewitt (1986) estimates that only 4% of the private sector firms in their survey offered cash based profit sharing plans. Overall, these statistics indicate that profit sharing coverage is not at a level high enough to meet the Weitzman proposal.

Finally, data on employee stock ownership plans (ESOPs) can be misleading. The GAO (1986) estimated that as much as 90% of the workers

Table 3

Flexible Compensation Plans: Major Data Sources

1) Bureau of National Affairs, Basic Patterns in Union Contracts, triennial survey of 400 union contracts. Reports one third of contracts have simple incentives, concentrated in manufacturing.

2) Bureau of National Affairs, Productivity Improvement Programs, 1984 survey of 195 employers. 19% have profit sharing, 18% have employee stock ownership, 1% have Scanlon, 1% have Improshare, 40% have performance bonuses (merit?), 10% have piecework plans.

3) General Accounting Office, Employee Stock Ownership Plans, special survey of 4200 ESOPs and tax credit ESOPs based on IRS reports covering 7 million workers as of 1983. 90% of these workers are covered by tax credit ESOPs.

4) Bureau of Labor Statistics, Employee Benefits in Medium and Large Firms. Annual survey covering over 42,000 establishments with 23.1 million workers. In 1985, 18% of covered workers had profit sharing, 2% had ESOPs, 22% had tax credit ESOPs.

covered by these plans were under tax-credit ESOPs, not leveraged or unleveraged "basic" ESOPs. According to the GAO, tax-credit ESOPs were more prevalent in larger firms with publically traded stock (64%), while leveraged ESOPs were most often found in smaller firms with privately traded stock (91%). With the 1986 end to tax subsidy for tax-credit ESOPs, it is difficult to predict whether the use of basic ESOPs will grow. Possibly, some employers will substitute basic ESOPs for their now-defunct tax-credit ESOPs.

The limitations of these data on plan use certainly underscore the need for systematic tracking of the adoption and discontinuance of different types of plans, the characteristics of employers involved and the types of employees covered. Systematic information on plan effectiveness and cost is also needed (as the next section makes clear). The development of such data bases is beyond the resources of any individual researcher. Yet without them it will be difficult, if not impossible, to do research supporting tax policy that favors one plan over another.

VII. Research on Attitudes Towards Flexible Pay Plans and Plan Effects.

Research literature tracing the actual effects of different types of flexible pay plans on workforce measures such as productivity, cooperation, loyalty and labor costs is dominated by qualitative case studies and attitude surveys. The latter typically ask for manager or employee attitudes about the effectiveness of a particular type of plan; the former tend to focus on "success" stories for a particular plan. There is little research that traces the effectiveness of a single plan across several firms using common workforce measures and virtually none that compares the effectiveness of two or more plans*. (Footnote: We found only one study that compared the effectiveness of two different plans across firms and this was in a Japanese setting. (Barney, 1985))

The reason for this lack of systematic evaluation is not difficult to find. BNA (1984) reports that less than 6% of the firms using different types of flexible pay plans attempt any sort of objective evaluation of plan effectiveness.

Table 4 presents selected resources that summarize the research on the effectiveness of the different types of flexible pay plans. Although limited by the data, four conclusions can be reached. These are reported below.

First, there are no recent data on the effectiveness of simple incentive plans. Earlier lab and field studies (Campbell, 1976) indicate that the plans do increase productivity in work settings where output can be easily measured. However, the decline in the use of these plans since 1960 indicates disenchantment with their ability to increase worker productivity without undesirable side effects (such as poor labor/management relations, administrative overloads, and negative work norms). These side effects have been well documented.

Second, both the GAO (1986) and Hewitt (1985) report case studies in which the implementation of gain sharing plans resulted in cost savings averaging 16% (ranging from 8% to 77%, however). Plans that have been in effect more than five years yielded better cost savings. GAO also reported that 80% of the firms interviewed felt that gain sharing had improved labor and management relations, half felt that grievances had been reduced, and one third felt that turnover and absenteeism had been reduced. White's (1979) review of Scanlon plans indicated that success (whether or not the plan had been retained and attitudes toward the plan) was highly correlated with employees' participation in decision making and with the length of time the plan had been in effect. This finding supports the notion that participative management is important in gain sharing implementations.* (Footnote: White's review tried to compare more objective measures across firms,

Table 4

Flexible Compensation Plans: Selected Evaluation Studies

1) Campbell, John "Motivation in Organization." (this is not the right chapter title) in the Handbook of Industrial and Organization Psychology, 1976. Summary of lab and field studies of simple incentive plans.

2) White, J. Kenneth "The Scanlon Plans: Causes and Correlates of Success." Academy of Management Journal, Vol. 22, No. 2, 1979. Summary of 40 studies (case and empirical) of Scanlon Plan implementations.

3) Schuster, Michael Union-Management Cooperation: Structure, Process and Impact, 1984. Chapter 4 analyzes qualitative data from many case studies.

4) Profit Sharing Council of America. Profit Sharing: Philosophy, Practice and Benefits to Society, 1984. Summarizes the results of both case and empirical studies on profit sharing.

5) General Accounting Office. Employee Stock Ownership Plans, 1986. Summarizes evidence on the effectiveness of ESOPs in meeting Congressional objectives--productivity, corporate financing and distribution of corporate wealth.

6) Marsh and McAllister, "History and Survey of ESOP Firms." (this is not the right title) Journal of Corporate Law, 1981. Survey of 165 firms using ESOPs; covers both attitudes and some productivity measures.

7) ILR Press, Cornell University. Handbook on Worker Owned Firms, 1985 (this is not the right title). Summary of evidence from case and empirical studies on firms using ESOPs as a vehicle for worker ownership; particularly the chapter by Hammer and Stern (Rath).

but found that the measures were not comparable).

Third, as in the cases of simple incentive and gain sharing plans, the effectiveness of profit sharing is rarely evaluated. Some firms seem to favor profit sharing plans because their dependence on bottom line statistics that are routinely collected makes administration relatively simple (Hewitt, 1985). BNA (1984) reports that profit sharing plans are believed to increase employee loyalty by the majority of firms who have adopted them.

Profit sharing plans have been more commonplace in executive pay than in pay for other employee groups. Many of the studies of profit sharing have examined the relationships between executive profit sharing bonuses and measures of firm performance (Redling, 1981; Loomis, 1982; Rabin, 1986). Most have found no high correlations between bonus and performance; correlations between bonus and size of firm are more significant. However, compensation specialists and firm managers alike feel that profit sharing -- especially in the executive group -- is important in retaining employee loyalty.

Fourth and finally, the literature on employee stock ownership plans (ESOPs) is prodigious. Proponents of worker ownership have turned out many case and field studies of the effects of ESOP adoption on workers. However, most of these studies focus on changes in worker attitudes towards the firm and on workplace democracy, not on measures of productivity or labor costs.

All of these studies indicate that legitimate (i.e. management supported) employee participation in decision making at all levels of the organization is needed to sustain employee enthusiasm for ESOP arrangements. And the higher the portion of worker owned equity in the firm, the more likely that ESOPs will be associated with worker loyalty. However, the tendency of the ESOP literature to be written by ESOP proponents strongly suggests a need for independent corroboration. The

fact the basic ESOPs are rare, despite the strong tax incentives they have enjoyed, indicates that management is dubious about what ESOPs can accomplish. Our own survey (reported below) supports this proposition.

The tax preference afforded ESOPs has led to studies examining the extent to which they have met the objectives set by Congress. Most comprehensive of these is one being conducted by the GAO (1986)* (Footnote: the future study proposed by the GAO). The three major goals Congress intended for ESOPs (Senate hearing, 1984) are: 1) to increase employee productivity, 2) to finance corporate investment programs, and 3) to broaden the ownership of corporate stock. In its initial report, GAO found that productivity (based on four measures of firm profitability) was not higher for firms with ESOPs. GAO also found no clearcut evidence that the use of ESOPs in funding corporate investment programs has been important or that the distribution of corporate stock ownership was significantly more widely dispersed in 1985 due to ESOPs (basic and tax credit) than it was in 1975.

This summary of previous research, like that on plan use, confirms the need for systematic studies of differences in plan effectiveness. Conspicuous in its absence is any study of the tradeoffs between different types of flexible pay plans in terms of either objective or attitudinal measures. Our own survey, described in the next section, addresses this issue. The question of plan substitutability is an important issue to resolve if recommendations about tax preference for one plan over another are to be made.

VIII. A Survey of Management Attitudes.

To supplement the previous literature on attitudes toward flexible pay systems of U.S. managers, the authors conducted their own survey during 1986. Three mailing lists were used to send detailed questionnaires to management respondents. These were 1) the management

mailing lists of the U.C.L.A. Institute of Industrial Relations, 2) management and business members of the Industrial Relations Research Association reported in the IRRRA's membership directory, and 3) managers in larger firms reporting the presence of ESOP-type plans to the Internal Revenue Service on form 5500.* In the case of the third group, where names of the managers in charge of the plans were not supplied by the IRS, the American Compensation Association directory was used to identify the top compensation executive in the firms listed in IRS records. Attempts were made to remove consultants, as opposed to practicing managers, from the survey. Only managers from private, profit-making firms were included.

Respondents who did not reply to the first request for information were sent a follow up (reminder) questionnaire a few weeks later. Analysis of responses from those who answered the follow up questionnaire can be used as a source of information about non-respondents. The analysis suggests that non-respondents to the survey were more likely to be from smaller, nonunion firms than respondents. They were less likely to have flexible pay plans at their firms or to have had long experience in the personnel/industrial relations field.

In short, the respondents, both because of the authors' selection of mailing lists, and the response bias, are heavily weighted toward managers knowledgeable about flexible pay plans. Over half reported that their firm had profit sharing, one fourth reported having an ESOP, 39% reported a tax-credit ESOP, 6% reported gain sharing, and 23% reported having simple incentives. Eighty-two percent were employed by firms having at least one of these plans in operation. (See Appendix A).

Respondents were asked various questions about their firm and background. The survey then requested scaled attitudinal responses (strongly agree, general agree, no opinion, generally disagree, strongly disagree) concerning profit sharing, ESOPs, tax-credit ESOPs, gain

Table 5

Attitudes of Management Respondents Toward Selected Plans
(percentages)

		Profit Sharing	ESOP	Tax Credit ESOP	Gain Sharing	Simple Incentives
Plan best for:						
raising productivity		28(30)	5(5)	-(-)	26(59*)	42(55*)
increasing loyalty		48(49)	17(22)	2(2*)	18(41*)	15(20*)
retirement income	TD	81(88*)	12(24*)	7(9)	n.a.	n.a.
linking labor costs to firm's economic condition		53(56*)	n.a.	n.a.	28(57*)	19(23*)
Agrees that plan:						
raises productivity	CB	43(45)	18(24*)	10(10*)	38(80*)	n.a.
	TD	32(32)				
increases loyalty	CB	51(51)	32(39*)	20(22*)	29(51*)	n.a.
	TD	50(52)				
needs more tax incentives	TD	29(25*)	25(29*)	24(30*)	n.a.	n.a.
creates demands for participation in management	CB	44(39*)	26(25*)	17(15*)	34(69*)	n.a.
	TD	39(33*)				
links labor costs to firm's economic conditions		63(64)	n.a.	n.a.	42(74*)	n.a.
Plan easiest to:						
administer		39(50*)	7(14*)	13(29*)	3(15*)	38(50*)
explain		32(39*)	8(18*)	7(17*)	4(18*)	49(62*)
Disagree that plan is:						
difficult to administer	CB	50(57*)	35(53*)	35(59*)	16(43*)	n.a.
	TD	43(54*)				
difficult to explain	CB	54(61*)	37(52*)	34(54*)	22(40*)	n.a.
	TD	47(54*)				

*Chi-squared test on a contingency table indicated that pattern of responses by those who firms had the plan was significantly different from that of other respondents at 5% level.

Note: Figures in parentheses refer to respondents whose firm had plan listed in column. CB refers to cash bonus plans with regard to profit sharing; TD refers to tax deferred profit sharing plans.

sharing, and simple incentives (piece rates and commissions). Some questions also requested respondents to indicate which plan they thought was top ranked on the basis of some attribute. In all cases, respondents were asked to base their reply on the application of the plans to NONEXEMPT employees.

i. Management Attitudes Concerning Plan Effects and Operations.

Table 5 summarizes highlights of the responses. Generally, simple incentives were seen as best for raising productivity. Profit sharing was more likely to be viewed as a device to increase employee loyalty, and -- in its tax deferred version -- as a retirement vehicle. In addition, profit sharing was seen as a good method of linking labor costs to the firm's economic condition.

As a rule, those respondents whose companies actually had a plan were more likely to see such programs in a positive light, and were less likely to view them as difficult to explain to workers or to administer. Only a minority of respondents thought that the three types of plans which received favored tax treatment needed still further incentives. However, what emerges most sharply from Table 5 is a sense of diversity of opinion and widespread skepticism on the part of knowledgeable respondents about the touted effects of the various plans.

For example, barely half thought that profit sharing increased employee loyalty and an even smaller percentage thought it had a positive productivity impact. Generally, ESOPs (and especially tax-credit ESOPs) were seen as ineffective as either loyalty or productivity enhancers. And they were also seen as rather difficult to administer and explain. The small number of respondents with gain sharing were very enthusiastic about the effect of such plans on productivity. But the vast majority of those responding had no direct knowledge of gain sharing, at least based on the compensation practices of their current

employers.

ii. The Question of Substitutability.

A surprising and important result of the survey was that the various plans are typically neither regarded as substitutes, nor treated as substitutes. Table 6 shows that only a relatively small minority viewed having one plan as precluding implementation of one of the others. The only exceptions were the few respondents who had gain sharing. Four out of 10 of these individuals viewed gain sharing as a close substitute for simple incentives and for cash-bonus profit sharing.

Actual implementation of flexible pay plans is reported on Table 7. Roughly half of the respondents indicated that their firms had profit sharing, regardless of what other plans they had. Those with tax-credit ESOPs were somewhat more likely to have basic ESOPs, probably because knowledge of one form of ESOP was helpful in implementing the other. Despite the attitudes expressed, gain sharers reported roughly the same incidence of profit sharing as the other respondents and a HIGHER incidence of simple incentives.

iii. Participatory Implications.

According to Table 5, managers who actually worked for companies which had profit sharing or the two forms of ESOPs were somewhat less likely to believe that these plans created worker demands for participation in management than were other respondents. But we know that on other dimensions, managers in firms with plans tended to think more highly of those plans than those in firms without them. Thus, it may be that some managers saw participatory demands as a potentially NEGATIVE aspect of flexible pay systems; those with the plans may have been anxious to emphasize that this negatively-perceived effect was

Table 6

Management Attitudes Toward Substitutability
of Selected Plans
(percentages)

. Firm Doesn't if . need it has: . -->	Profit Sharing	ESOP	Tax Credit ESOP	Gain Sharing
ESOP	CB 14(18)[14] TD 15(18)[13]	-		
Tax credit ESOP	CB 13(9)[12] TD 12(10)[10]	22(22)[28]	-	
Gain sharing	CB 27(41)[21] TD 23(26)[15]	13(6)[14]	9(9)[9]	-
Simple Incentives	CB 17(16)[13] TD 13(13)[9]	4(3)[4]	5(4)[3]	23(22)[40]

Note: Figures in parentheses () refer to respondents whose firm had the plan listed on the same row. Figures in brackets [] refer to respondents who firm had the plan listed in the same column. CB refers to profit sharing plans with cash bonuses; TD refers to tax deferred profit sharing plans.

Table 7

Incidence of Plans Reported by Management Respondents

	Have Profit Sharing	Have ESOP	Have Tax Credit ESOP	Have Gain Sharing	Have Gain Sharing
All Respondents	53%	25%	39%	6%	23%
Respondents in firms with:					
profit sharing	-	27	37	6	25
ESOP	56	-	50*	4	27
tax credit ESOP	50	32*	-	11*	24
gain sharing	49	17	66*	-	40*
simple incentives	59	30	41	11*	-

*Chi-squared test applied to a contingency table indicates that respondents with plan in row had a different response pattern from other respondents.

actually unlikely to occur.

The few gain sharers in the sample are again an exception to this response pattern. They were much more likely to think of gain sharing as inducing demands for participation than other respondents. In at least the Scanlon variety of gain sharing, employee participation is overtly encouraged. Thus, firms adopting these plans are likely to have a positive attitude toward worker participation, or they would not have installed their pay systems in the first place.

Generally, however, it was the presence or absence of a union which seemed to condition managerial responses with regard to worker participation. Table 8 shows that respondents from nonunion firms were less likely to believe that flexible pay systems caused worker demands for participation in management than those from unionized firms. The higher the unionization rate in the firm, the more likely the respondent was to think that participatory demands would be induced by a flexible pay system. This finding may simply reflect the fact that even if participatory demands were created, nonunion workers would not automatically have a channel of expression. However, in terms of actual practice, the degree of unionization within our sample did not have a statistically significant impact on the likelihood that the firm had some type of flexible pay system.

IX. Conclusions on Flexible Pay in the American Context.

Although certain forms of flexible pay plans may have macroeconomic (Weitzman-type) benefits, the persons making the decisions on whether or not to install such compensation arrangements respond to perceived MICRO-level benefits. The chief method of public policy which has been used to influence this choice has been tax incentives. For example, tax inducements created tax-credit ESOPs; they were purely an artifact of the tax code. Basic ESOPs have also been the recipient of generous

Table 8

Management Attitudes Toward Unionization
and Demands for Employee Participation

Type of Plan	Percent Agreeing that Implementation of Plan Leads to Demands for Employee Participation in Management		
	Unionization Rate for Nonexempt Employees in Respondent's Firm:		
	Zero	.1 - 49.9%	50% or Greater
Profit sharing			
Cash bonus	39%	46%	55%
Tax deferred	33	40	50
ESOP	22	26	36
Tax credit ESOP	16	16	20
Gain sharing	25	43	45

Congressional favors. However, even with the tax subsidy, relatively few workers are covered by basic ESOPs, according to the BLS data discussed earlier. This finding suggests that despite the literature extolling the influence of ESOPs on firm efficiency and profitability, most managers do not anticipate that ESOPs would produce such benefits for their companies.

i. Redirecting Tax Subsidies.

Inducements for tax-credit ESOPs have now been ended, leaving only those for basic ESOPs. Since ESOPs do not have Weitzman-type macro effects, the question arises as to whether tax subsidies might better be directed to other types of plans, especially profit sharing and gain sharing. It is true that managers do not perceive the ESOPs to be substitutes for other kinds of flexible pay systems. Thus, subsidizing ESOPs does not necessarily cut down on the incidence of other plans. However, the monies spent on the subsidy might be spent elsewhere to greater advantage. The main case for a social subsidy to a compensation system is that it provides positive externalities, such as improved macro performance. Plans whose benefits are internal to the firm, i.e., higher productivity and increased loyalty, will be adopted without subsidies.

ii. Participation and Union-Management Relations.

The presence or absence of a profit sharing or gain sharing plan does not inherently create a climate of greater worker participation in management. However, our survey suggests -- and common sense indicates -- that where unions exist, such plans could have important industrial relations impacts. It has become a commonplace to point to the tacit "understanding" reached in the 1940s and 1950s that unions would not play a managerial role. But if the compensation system now tilts toward

arrangements which encourage worker participation, the traditional union role as a non-managerial demander and griever could be importantly altered.

Compensation systems which are geared to company or group performance are inherently more difficult for workers to verify than simple hourly wages or piece rates. At the very least, therefore, unions could play an "auditing" role where such pay systems exist. To do so, however, union officials would need access to internal firm information. Thus, information sharing demands by unions are likely to be linked to the establishment of flexible pay arrangements. And as our survey suggests, information sharing may in turn give way to demands for sharing in the managerial role itself.

iii. Bringing Together Diverse Viewpoints.

The fact that flexible pay systems potentially have various types of impacts has attracted considerable interest in compensation innovations during the 1980s. However, the discussions that have ensued -- while nominally about the same topic -- have been hindered by diverse alternative perspectives. Macroeconomists, compensation specialists, and industrial relations practitioners have largely exchanged views in separate forums.

Congress, despite its interest in compensation from a tax subsidy and revenue viewpoint, does not appear to have a coherent policy regarding flexible pay. It has considered such arrangements largely from a perspective of retirement incomes and wealth redistribution. Macroeconomic aspects have not been a significant element in Congressional policy.

The Reagan administration, after the installation of Labor Secretary Brock, adopted a policy of loosely favoring labor-management cooperation and seems interested in employee participation

arrangements.* However, this interest has not been clearly linked to fostering pay systems that might reinforce cooperation and participation. Nor has it been extended to applications in nonunion workplaces. As in the case of Congress, the macro side has not been an important element in Administration policy.

Because of the economic difficulties felt by many sectors in the 1980s, there is now a greater willingness to consider "new" ideas in compensation, industrial relations, and human resource management, than existed a decade ago. However, the diversity of interests and viewpoints, left in isolation, is unlikely to produce a consensus regarding how employees should be paid. Unless the disparate views are brought together, the current lack of clear direction in American public policy and private practice will continue.

Appendix A

Summary of Respondent Characteristics

Category	Proportion in Category	
Responded to initial questionnaire	66%	
Responded to follow up (reminder) questionnaire	34%	
Firm produces goods (mining, manufacturing, agriculture)	63%	(58%)
Firm produces services	37%	(42%)
Firm has less than 1,000 employees	49%	(71%)
Firm has at least 1,000 employees	51%	(29%)
Unionization rate for nonexempt employees		
0%	56%	(76%)
.1 - 49.9%	18%	(7%)
50 - 100%	26%	(17%)
Firm's stock is publically traded	62%	(52%)
Firm's stock is not traded	38%	(48%)
Respondent has less than 10 years' experience	34%	(45%)
Respondent has at least 10 years' experience	66%	(55%)
Firm has a profit sharing, ESOP, tax credit ESOP, gain sharing, or simple incentive plan	82%	(75%)
Firm has no plans	18%	(25%)
Firm has profit sharing of which:	53%	
cash bonus only		27%
tax deferred only		47%
mixed (cash bonus & tax deferred)		26%
Firm has ESOP of which:	25%	
leveraged		33%
nonleveraged		61%
Firm has tax credit ESOP	39%	
Firm has gain sharing	6%	
Firm has simple incentive plan	23%	

Note: Figures in parentheses refer to respondents who answered reminder (follow up) questionnaire. Where percentages to less than 100, missing responses have been omitted. Where percentages sum to more than 100, firms had more than one type of plan. A total of 545 responses are included in the sample.