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8

Do Workers Gain by Sharing? Employee Outcomes under Employee Ownership, Profit Sharing, and Broad-Based Stock Options

Douglas L. Kruse, Richard B. Freeman, and Joseph R. Blasi

Today, more employees than ever before have ownership stakes in their firms through Employee Stock Ownership Plans (ESOPs) and firm-based stock ownership plans, receive stock options once limited to top executives, and are covered by profit-sharing plans. The media has publicized both the rewards and dangers of tying worker pay and wealth to company performance. The 1990s produced many stories of regular employees becoming millionaires by working in Silicon Valley firms with broad-based options that paid off handsomely. The early 2000s produced stories about Enron employees losing their retirement moneys in a 401(k) plan that was heavily concentrated in company stock. Apart from the extreme cases that get publicized, are these programs generally good or bad for workers?

This chapter uses the General Social Survey (GSS) and NBER data sets to analyze the relationship of shared capitalism programs to a range of employee outcomes: participation in decisions, supervision, training, company treatment of employees, pay, job security, and job satisfaction.

8.1 What We Expect

On the basis of incentive and organization theory and previous empirical work, we expect that linking employee pay to company performance will impact workers in several ways.

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8.1.1 Employee Participation in Decision Making

Shared capitalist compensation systems should be associated with greater freedom for workers to make decisions at their workplace. It is difficult to imagine a firm devolving decisions to workers without developing some pecuniary mechanism for motivating them to make decisions in the firm's interest, be it profit sharing, gain sharing, stock options, or share ownership. Indeed, one common reason for firms to institute compensation systems relating employee pay to company performance is to induce workers to make decisions that improve firm performance (assessed in chapter 4).

Two national surveys of workers have found the expected relation. For the United States, Dube and Freeman (2001) found a positive relation between shared capitalist compensation systems and employee decision making in Freeman and Rogers' (2006) Worker Representation and Participation Survey, with strong results for profit sharing but weak results for employee ownership. For the United Kingdom, Conyon and Freeman (2004) found a positive link between changes in variable pay and changes in decision making in the Workplace Employment Relations Survey. However, firm-based studies of *employee ownership* find only a weak pattern between perceived or desired participation in decision making and employee ownership. Half of the ten studies reviewed by Kruse and Blasi (1997) found participation levels higher with employee ownership while half found no difference in participation. None of the studies found a connection between participation in decisions and the size of one's ownership stake. Two of the studies that asked about *desired* participation found no difference between employee-owners and nonowners, while a third study found a decline in desired worker participation after an employee buyout, which the author attributes to wariness by employees about the commitment levels of new employees and trust in management (Long 1981, 1982).

8.1.2 Supervision, Training, and Workplace Relations

Any shared compensation system must overcome potential free rider problems. The larger the number of people who share in the rewards of the firm or group, the lower is the incentive for the individual to work hard and the greater the reward to shirking. In chapter 2, we find that worker monitoring of the group is an important mode for overcoming the free rider problem. Firms cannot force workers to self-monitor but they can provide supportive supervision, training, and a workplace climate that encourages group norms to sustain a self-monitoring equilibrium.

Few studies have examined the relation of shared capitalism programs to supervision, training, and workplace climate. Regarding supervision, Pendleton (2006) finds greater employee discretion in establishments with broad-based employee ownership plans. Brown and Sessions (2003) report that employees in performance-related pay plans have more positive views about

management-employee relations and how the workplace is run. Consistent with the idea of improved management-employee relations, the probability of a strike goes down after a unionized firm adopts an ESOP (Cramton, Mehran, and Tracy 2008). Two studies have found that employees in profit-sharing plans are more likely to receive employer-provided training (Azfar and Danninger 2001; Robinson and Zhang 2005). One study found mixed effects of profit sharing on relations among co-workers, with profit sharing increasing cooperation for nonsupervisory personnel but decreasing it for supervisors, and having no effect for those who highly value cooperation on the job (Heywood, Jirjahn, and Tsertsvadze 2005b). A companion study found that profit sharing reduces worker-management conflict for nonsupervisory workers in excellent health, but not for supervisors or those not in excellent health (Heywood, Jirjahn, and Tsertsvadze 2005a).

Two studies have examined whether workplaces are safer under shared employee ownership. Rooney (1992) found fewer OSHA injuries in employee ownership companies with greater worker participation in decisions, but otherwise found mixed results for ownership without participation. Rhodes and Steers (1981) found that accidents were no lower in a plywood cooperative compared to a standard plywood company.

8.1.3 Pay and Benefits

There are two reasons for expecting shared capitalist compensation systems to be associated with higher pay and benefits.

First, shared capitalist systems could operate in part as a "gift exchange" between the worker and the firm, in which the higher pay increases worker effort, decreases turnover, and increases worker loyalty (Akerlof 1982). By encouraging employee cooperation, shared capitalism programs could increase output, some of which would go to workers as their share of profits and some as higher base wages or benefits. The sharing system would be a key component of a mutual-gains or high-commitment system where both workers and the firms come out ahead (Handel and Levine 2004, 5). While employers may get some gift exchange benefits simply by raising levels of fixed pay, the provision of this higher compensation in the form of shared capitalist pay may further help to create and reinforce a sense of common interests and incentives for discouraging free riding. Second, since shared capitalism increases risk to workers, compensating differential theory predicts that workers will want higher overall compensation. Whether this compensation takes the form of fixed pay and benefits or shows up in a larger share in profits and ownership is unclear. Again, what creates the potential for higher income to workers is the higher productivity generated by the system. If the higher compensation is only enough to compensate for the added risk, then we might see some greater effort by employees to justify the higher compensation, but would not expect other changes in attitudes and behavior associated with a gift exchange (higher commitment and loyalty, reduced

turnover, etc.). If the higher compensation also provides a gift on top of the risk premium to help change attitudes and behaviors, shared capitalism will need to pay for itself through large productivity improvements, both to cover the risk premium and the extra gift.

Despite some well-publicized examples of wage concessions when workers buy out their companies or accept large ownership stakes (which make up a very small percentage of the employee ownership landscape), workers in employee ownership plans tend to have comparable or higher wages or compensation than other workers. In a pre/post study of ESOPs adopted by public companies between 1980 and 2004, Kim and Ouimet (2008) find significant increases in employee compensation following the adoption of ESOPs, particularly for ESOPs owning more than 5 percent of a company where the long-term increase in compensation is 4.5 percent. A similar method used on German firms adopting profit-sharing plans also concluded that profit sharing supplemented rather than substituted for standard compensation (Ugarkovi 2007). Blasi, Conte, and Kruse (1996) found that US public companies with broad-based employee ownership plans had 8 percent higher average compensation levels than other comparable public companies, and compensation increased with the percentage of stock held by employees. Studies of pay and benefits in ESOP and non-ESOP firms in Massachusetts and Washington state also found that the levels of pay and other benefits were similar between these two types of firms, so that ESOPs appear to come on top of other worker pay and benefits (Kardas, Scharf, and Keogh 1998; Scharf and Mackin 2000). With regard to other forms of ownership, Renaud, St-Onge, and Magnan (2004) found that stock purchase plan participation was associated with subsequent pay increases for employees, and employer stock held in 401(k) plans appears to come largely on top of other pension assets (Kroumova 2000). Seven studies from the United States, Great Britain, and Germany find that profit-sharing firms also have generally higher average compensation than otherwise-comparable firms (Kruse 1993, 113–14; Handel and Gittleman 2004).

Still, it is possible that the higher pay levels associated with shared capitalist compensation reflect higher unmeasured worker quality, and that workers in fact take a cut in compensation to link their pay to company performance. But the evidence runs against these possibilities. Kruse (1998) found that average base pay levels and other benefits increase as young workers join profit-sharing firms and decrease as they leave such firms, so worker selectivity cannot dominate the cross-section relation. Similarly, Azfar and Danninger (2001) found that employees in profit-sharing plans receive higher annual raises in base pay than employees in other firms, connected in part to the greater training noted earlier. Other studies find that neither wages nor total labor costs exclusive of the sharing component fall significantly in pre/post comparisons of firms that adopt profit sharing (Black, Lynch, and Krivelyova [2004] for wages; Cappelli and Neumark [2004] for total labor

costs). The implication is that trade-offs between base pay and shared capitalist compensation are minimal and that profit sharing may be used in conjunction with higher base pay levels as part of an efficiency wage strategy.

Another possibility is that the higher monetary compensation associated with shared capitalist systems may come at the cost of greater effort, stress, workplace danger, or other disamenities at work. Some analysts view the systems as a bit of a sham, designed to elicit greater worker effort and to shift risk to workers, without increasing the pay or quality of jobs. This is "'management by stress' . . . which believes that [employee involvement] is simply a method of sweating the workforce and curbing worker power and influence" (Handel and Levine 2004, 6).

Our data allows us to compare compensation for workers covered and not covered by the shared capitalist compensation and to compare compensation for workers by the intensity of their shared compensation arrangements.

8.1.4 Job Security

Traditional theoretical analysis of hypothetical labor-run firms predicts that they have lower employment than in management-run firms, and respond perversely to demand shocks, lowering employment when output prices increase (reviewed in Bonin and Putterman [1987]). Most empirical studies show that employee ownership firms tend to have more stable employment than other firms, and do not respond perversely to demand shocks (Craig and Pencavel 1992, 1993; Blair, Kruse, and Blasi 2000). Two studies report that employment grew faster in firms following the adoption of ESOPs, particularly if they had greater employee participation in decision making (Quarrey and Rosen 1993; Winther and Marens 1997). In addition, public firms with substantial employee ownership are more likely than other comparable firms to survive over time (Blair, Kruse, and Blasi 2000; Park, Kruse, and Sesil 2004). French worker cooperatives also have high rates of survival (Estrin and Jones 1992).

Profit sharing, in contrast, should create excess demand for employment and thus provide substantial job security (Weitzman 1984). Nineteen studies have examined Weitzman's predictions that profit sharing should stabilize firm employment (Kruse 1998, 109–13). A majority found that firms view profit sharing differently from fixed wages in making employment decisions. Of the twelve studies directly examining employment stability, six found greater employment stability under profit sharing; four showed greater stability in some but not all samples; while two have little or no support for the stabilizing effects of profit sharing.

8.1.5 Job Satisfaction

If shared capitalism is associated with greater participation and decision making at the workplace, better supervision, more training, more job security, and higher total compensation, these modes of pay ought to raise

job satisfaction. But the twelve existing studies on job satisfaction under employee ownership yield no clear generalization.[1] Several studies show higher satisfaction; several show no relationship; and one study shows lower satisfaction among employee-owners where the union had lost a bitter strike the year before.[2] Participation in decisions seems to be important: one longitudinal study found that satisfaction went up only among those who perceived increased participation in decisions after an employee buyout (Long 1982). Our data provide the largest sample for assessing these inconclusive findings.

In sum, prior research on employee outcomes under shared capitalism has yielded generally positive results, though there is sufficient variability in some results to suggest that they depend on the context in which they are implemented. By addressing all of the employee outcomes with the GSS and the NBER data sets, and providing more robust measures of the employment context inside these firms, we should be better able to provide a more consistent generalization than the existing work. These studies span a period of a quarter century. It must be recognized, for example, that the phenomenon of employee decision making and shared capitalism may have been evolving over this period. (For an example of evolution in Silicon Valley, see Blasi, Kruse, and Bernstein [2003].)

8.2 Data and Analysis

This chapter uses the GSS and NBER data sets (described in the "Studying Shared Capitalism" section of the introduction to this volume). Our key independent variable of interest is the thermometer-style index of shared capitalism, which assigns points based on coverage by shared capitalism programs and the size of the financial stakes. This index is described in appendix B. We also present results breaking out the different forms of shared capitalism types and intensities using the NBER data.

We have organized employee outcomes into eight areas: participation in decisions, company treatment of employees, supervision, training, pay and benefits, co-worker relations, job security, and job satisfaction. These outcomes are related to each other—for example, training generally leads to higher pay; participation in decisions, training, job security, and supervision are likely to affect perceptions of how the company treats employees; and so on. We lack instruments to identify causality, so we do not try to tease

1. This is based on nine studies on job satisfaction in Kruse and Blasi (1997); plus Pendleton, Wilson, and Wright (1998); Keef (1998); and Bakan et al. (2004). The studies were selected if they used systematic data collection from representative samples of employees, and used statistical techniques to rule out sampling error. Many used multivariate analysis to hold constant the effect of other factors on employee attitudes or behavior.

2. Reminders by management that the strike would hurt ESOP account values brought the response "We don't vote; we don't control the company; we don't care" (Kruse 1984, 51).

out possible causal links among the outcomes. Rather, we test for the reduced form relationship between shared capitalism and each of the individual outcomes conditional on demographic and job characteristics, and in some cases on other outcomes as well—for example, since company training is likely to affect pay, we examine whether shared capitalism is related to pay both before and after controlling for training.

8.3 Empirical Results

We first use the shared capitalist index to predict each of the outcomes (table 8.1), and then probe the impact of different types and intensities of shared capitalist compensation using the NBER data set (tables 8A.1 to 8A.5). We estimate ordinary least squares (OLS) regressions when outcomes are numeric and use ordered probits when the outcomes have three or four values with a natural ordering (e.g., "not at all true, not very true, somewhat true, and very true"). The regression predicting hours of training use a Tobit specification, to account for the censoring at zero. Most of the regressions using the NBER data set include company fixed effects so that coefficients reflect *within-company differences* rather than cross-company differences that might be due to unmeasured differences among the companies. At the bottom of tables 8A.1 to 8A.5, some ESOP coefficients are reported where company fixed effects are not used. Federal Employee Retirement Income Security Act (ERISA) law imposes strict requirements on coverage so that most or all employees are covered by an ESOP within a firm; the small number of excluded employees are thus likely to differ in some particular way from other employees in the same firm. Because of this the ESOP effects are better determined by comparing otherwise-similar ESOP and non-ESOP workers *across firms* in the specifications without fixed effects.

Table 8.1 summarizes our empirical results in terms of the coefficients on the shared capitalism index variable for the eight outcomes under study. In most cases, we examine more than one outcome under the specified domain.

8.3.1 Employee Participation in Decisions

Almost all of the measures of participation in decision making in table 8.1 are positively and significantly related to the shared capitalism index in both the GSS national and NBER data sets. There are two exceptions in the NBER data—the relationships with participation in company decisions and satisfaction with participation in the NBER data, but only after controlling for other outcomes (employee involvement team, training, and job security). This indicates that shared capitalism is strongly correlated with these policies, and the package of these policies may be the most important determinant (which we examine in table 8.2).

When the shared capitalism policies are broken out in appendix table

Table 8.1 **Relation of eight employee outcomes to shared capitalist compensation**

Dependent variables	Coefficient (standard error) of shared capitalism index	Job and demog.	EI team	Training	Job security	*N*
1. Participation in decisions						
National data						
Lot of say about what happens on job (1–4 scale)	**0.064** *** (0.014)	x				1,677
Take part with others in making decisions (1–4 scale)	**0.100** *** (0.015)	x				1,680
Participate with others in setting way things are done (1–4 scale)	**0.084** *** (0.015)	x				1,679
Lot of freedom to decide how to do work (1–4 scale)	**0.053** *** (0.015)	x				1,680
NBER company data						
Part. in job decisions (1–4 scale)(ordered probit)	**0.039** *** (0.004)	x				39,117
	0.019 *** (0.005)	x	x	x	x	35,596
Part. in group/dept. goals (1–4 scale)(ordered probit)	**0.020** *** (0.004)	x				38,997
	0.004 ** (0.004)	x	x	x	x	35,501
Part. in company decisions (1–4 scale)(ordered probit)	**0.012** *** (0.004)	x				38,942
	–0.002 (0.004)	x	x	x	x	35,462
In employee involvement team (0–1)(linear prob.)	**0.020** *** (0.002)	x				38,576
	0.017 *** (0.002)	x		x	x	35,838
Satisfaction with participation (1–4 scale)(ordered probit)	**0.016** *** (0.004)	x				38,964
	–0.002 (0.004)	x	x	x	x	35,494
2. Company treatment of employees						
National data						
Am treated with respect at work (1–4 scale)(ordered probit)	0.029 * (0.015)	x				1,679
Mgt-employee relations (1–4 scale)(ordered probit)	**0.036** *** (0.014)	x				1,677
Promotions are handled fairly (1–4 scale)(ordered probit)	**0.042** *** (0.014)	x				1,610
Worker safety is high priority with mgt. (1–4 scale)(ordered probit)	**0.067** *** (0.015)	x				1,671
Lack of stress at work (1–4 scale)(ordered probit)	0.008 (0.013)	x				1,681

NBER company data						
When co. does well, ees. share benefits (1–7 scale)(OLS)	**0.126** ***(0.006)	x				39,065
	0.104 ***(0.006)	x	x	x	x	35,592
Co. is fair to ees. (1–7 scale)(OLS)	**0.063** ***(0.006)	x				39,030
	0.038 ***(0.006)	x	x	x	x	35,548
Grade of co. on sharing info (0–4 scale)(OLS)	**0.023** ***(0.004)	x				38,932
	0.008 ** (0.004)	x	x	x	x	35,452
Grade of co. on trustworthiness (0–4 scale)(OLS)	**0.029** ***(0.004)	x				38,821
	0.012 ***(0.004)	x	x	x	x	35,394
Grade of co. on employee relations (0–4 scale)(OLS)	**0.023** ***(0.004)	x				38,884
	0.008 ** (0.004)	x	x	x	x	35,420
3. Supervision						
National data						
Supervisor is helpful to me (1–4 scale)(ordered probit)	**0.038** ***(0.015)	x				1,675
Supervisor cares about welfare of those under him or her (1–4 scale)(ordered probit)	**0.055** ***(0.015)	x				1,667
NBER company data						
Freedom from close supervision (0–10 scale)(OLS)	**0.039** ***(0.009)	x				39,488
	0.034 ***(0.009)	x	x	x	x	35,838
4. Training						
National data						
Have training opportunities I need	**0.045** ***(0.016)	x				1,678
NBER company data						
Formal job training in past 12 mos. (0–1)(OLS)	**0.019** ***(0.002)	x				38,863
	0.015 ***(0.002)	x	x		x	35,838
Hours of training in past 12 mos. (Tobit)	**2.289** ***(0.226)	x				37,905
	1.838 ***(0.236)	x	x		x	34,974
Informal job training from co-workers (1–4 scale)(ordered probit)	**0.022** ***(0.004)	x				39,033
	0.009 ***(0.004)	x	x	x	x	35,597

(*continued*)

Table 8.1 (continued)

Dependent variables	Coefficient (standard error) of shared capitalism index	Job and demog.	EI team	Training	Job security	*N*
5. Pay and Benefits						
National data						
Yearly earnings (natural logarithm)(OLS)	**0.092** *** (0.009)	x				1,681
Paid what you deserve (1–5 scale)(ordered probit)	**0.059** *** (0.013)	x				1,841
Fringe benefits are good (1–4 scale)(ordered probit)	**0.117** *** (0.014)	x				1,860
NBER company data						
Fixed pay (natural logarithm)(OLS)	**0.023** *** (0.002)	x				30,122
	0.024 *** (0.002)	x	x	x	x	28,324
Fixed pay % diff. from market (OLS)	0.094 (0.067)	x				30,782
	0.051 (0.070)	x	x	x	x	28,152
Total compensation % diff. from market (OLS)	**0.511** *** (0.072)	x				29,569
	0.468 *** (0.075)	x	x	x	x	27,199
Grade of co. on wages (0–4 scale)(OLS)	**0.025** *** (0.004)	x				39,068
	0.018 *** (0.004)	x	x	x	x	35,564
Grade of co. on benefits (0–4 scale)(OLS)	**0.034** *** (0.004)	x				39,011
	0.024 *** (0.004)	x	x	x	x	35,519
6. Co-worker relations						
National data						
Co-workers can be relied on for help	**0.030** ** (0.015)	x				1,680
Co-workers take personal interest in me	**0.047** *** (0.015)	x				1,675
7. Job security						
National data						
Job security (1–4 scale)(ordered probit)	**0.047** *** (0.015)	x				1,676
Not laid off in past year (0–1 dummy)	**0.012** *** (0.003)	x				1,681

NBER company data							
Job security (1–4 scale)(ordered probit)	**0.054** ***	(0.004)	x				37,052
	0.051 ***	(0.004)	x	x	x		35,838
8. Job satisfaction							
National data							
Job satisfaction (1–4 scale)(ordered probit)	0.022	(0.018)	x				1,262
NBER company data							
Job satisfaction (1–7 scale)(OLS)	**0.015** ***	(0.005)	x				39,192
	–0.004	(0.005)	x	x	x	x	35,685

Notes: Each row represents results of separate regression. Job and demographic controls include age, sex, race, tenure, occupation, earnings, full-time status, and ease of seeing co-workers for all regressions, plus work in a team for national regressions, and management level, supervisory status, disability status, closeness of supervision, payment on an hourly rate, and company fixed effects for the NBER company regressions. Earnings controls include ln(yearly earnings) for the national data and ln(base pay) for the NBER company regressions. See appendix A for variable definitions and descriptive statistics. Coefficients in bold are significant at $p < .05$. ees. = employees.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

Table 8.2 Complementarities of shared capitalist compensation in affecting employee outcomes

Dependent variables	Shared capitalism base effect (1)	High performance policies		Closely supervised	
		Base effect (2)	Shared cap. Interaction (3)	Base effect (4)	Shared cap. interaction (5)
Participation in decisions					
Part. in job decisions (1–4 scale)(ordered probit)	0.056***	0.212***	0.009***	–0.037***	–0.015***
	(0.008)	(0.013)	(0.003)	(0.004)	(0.001)
Part. in group/dept. goals (1–4 scale)(ordered probit)	0.017**	0.238***	0.013***	0.008*	–0.011***
	(0.007)	(0.013)	(0.003)	(0.004)	(0.001)
Part. in company decisions (1–4 scale)(ordered probit)	–0.020**	0.211***	0.021***	0.030***	–0.007***
	(0.008)	(0.013)	(0.003)	(0.004)	(0.001)
In employee involvement team (0–1)(linear prob.)	0.011***	0.070***	0.006***	0.002	–0.001
	(0.003)	(0.007)	(0.002)	(0.002)	(0.000)
Satisfaction with participation (1–4 scale)(ordered probit)	–0.010	0.251***	0.024***	0.019***	–0.010***
	(0.007)	(0.013)	(0.003)	(0.004)	(0.001)
Company treatment of employees					
When co. does well, ees. share benefits (1–7 scale)(OLS)	0.187***	0.396***	–0.031***	0.013**	–0.008***
	(0.011)	(0.018)	(0.004)	(0.006)	(0.001)
Co. is fair to ees. (1–7 scale)(OLS)	0.090***	0.422***	–0.010***	0.017***	–0.010***
	(0.010)	(0.017)	(0.004)	(0.006)	(0.001)
Grade of co. on sharing info (0–4 scale)(OLS)	0.043***	0.272***	–0.002	0.029***	–0.010***
	(0.007)	(0.012)	(0.003)	(0.004)	(0.001)
Grade of co. on trustworthiness (0–4 scale)(OLS)	0.050***	0.287***	–0.004	0.028***	–0.010***
	(0.007)	(0.012)	(0.003)	(0.004)	(0.001)
Grade of co. on employee relations (0–4 scale)(OLS)	0.043***	0.257***	0.000	0.029***	–0.011***
	(0.007)	(0.011)	(0.002)	(0.004)	(0.001)
Supervision					
Freedom from close supervision (0–10 scale)(OLS)	0.017	0.031	0.012		
	(0.014)	(0.027)	(0.006)		

Training					
Formal job training in past 12 mos. (0–1)(OLS)	0.015***	0.092***	0.001	0.005***	0.000
	(0.003)	(0.007)	(0.002)	(0.002)	(0.000)
Hours of training in past 12 mos. (Tobit)	2.047***	11.048***	0.076	0.344	–0.106*
	(0.398)	(1.002)	(0.209)	(0.239)	(0.055)
Informal job training from co-workers (1–4 scale)(ordered probit)	0.005	0.188***	0.008***	0.030***	–0.004***
	(0.007)	(0.012)	(0.003)	(0.004)	(0.001)
Pay and benefits					
Fixed pay (natural logarithm)(OLS)	0.028***	0.017***	–0.001	–0.009***	–0.001*
	(0.003)	(0.005)	(0.001)	(0.002)	(0.000)
Fixed pay % diff. from market (OLS)	0.249**	0.870***	0.012	0.297***	–0.073***
	(0.124)	(0.218)	(0.047)	(0.071)	(0.016)
Total compensation % diff. from market (OLS)	0.558***	0.771***	0.094*	0.184**	–0.084***
	(0.134)	(0.239)	(0.050)	(0.078)	(0.018)
Grade of co. on wages (0–4 scale)(OLS)	0.041***	0.141***	–0.002	0.007**	–0.006***
	(0.007)	(0.011)	(0.003)	(0.004)	(0.001)
Grade of co. on benefits (0–4 scale)(OLS)	0.057***	0.187***	–0.008***	0.007*	–0.006***
	(0.007)	(0.011)	(0.002)	(0.004)	(0.001)
Job security					
Job security (1–4 scale)(ordered probit)	0.065***	0.098***	0.002	–0.029***	–0.005***
	(0.006)	(0.015)	(0.003)	(0.004)	(0.001)
Job satisfaction					
Job satisfaction (1–7 scale)(OLS)	–0.007	0.264***	0.019***	0.001	–0.009***
	(0.008)	(0.014)	(0.003)	(0.004)	(0.001)

Notes: Each row represents results of a separate regression, with standard errors in parentheses underneath. See appendix A for variable definitions and descriptive statistics. Based on NBER company data. Job and demographic controls include age, sex, race, tenure, occupation, earnings, full-time status, management level, supervisory status, disability status, closeness of supervision, ease of seeing workers, payment on an hourly rate, and company fixed effects.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

8A.1, the most consistent result is that profit-sharing intensity (measured using the most recent bonus as a percent of pay) is linked to greater participation in decisions and greater satisfaction with participation (columns [1] through [5]). The small negative coefficients on profit sharing eligibility (columns [2], [3], and [5]) indicate that very low profit sharing bonuses are associated with lower participation and satisfaction—an effect that is erased as the bonus size increases. In addition, employee ownership is linked to greater participation in decisions (columns [1] through [4]) but satisfaction with participation is linked to employee-owned stock as a percent of pay (column [5]).

Examining the different types of employee ownership, the data show some significant associations but no strong patterns. The 401(k) stock intensity is associated with greater involvement in job and department decisions (columns [1] and [2]), while involvement in company decisions is highest among those with any 401(k) employer stock or those who retain stock from exercised options (column [3]). These latter two groups are also more likely to be in employee involvement (EI) teams (column [4]), while satisfaction with participation is highest among those holding open market stock or with large ESOP or 401(k) stakes (column [5]). As noted earlier, given the ERISA rules about coverage within a company, it is more sensible to make inferences about the effects of ESOPs by comparing workers between companies with and without ESOPs, which requires elimination of company fixed effects in the calculations. When this is done at the bottom of table 8A.1, the estimates show that ESOP participants are more likely to be involved in job, department, and company decisions (columns [1] through [3]), but are much *less* likely to be satisfied with their participation (column [5]). This latter result, which is consistent with the within-company comparison, suggests that the simple membership in ESOPs in these companies may have raised the desire for participation more than they raised actual participation (or alternatively, that the additional participation itself raised desires for more participation in ESOP companies) so that one must examine the incentive intensity of the ESOP. The impact of an ESOP on satisfaction with participation is more closely tied to the ESOP value as a percent of pay—that is, ownership intensity in relationship to one's economic situation—than to simple membership in an ESOP plan.

8.3.2 Company Treatment of Employees

Both the GSS and the NBER company survey asked a variety of quality of work life questions. Item 2 in table 8.1 contains results for ten of those measures.[3]

The national survey data give generally positive results. Shared capital-

3. The GSS contains other quality of work life measures that we also analyzed. The results (available on request) were broadly similar across these measures, generally showing positive relationships to profit sharing but not to the other shared capitalism measures.

ism employees are more likely to say that they are treated with respect, management-employee relations are good, promotions are handled fairly, and worker safety is a high priority with management. A measure that reflects directly on the "management by stress" theories is the employee's perception of stress at work, which is not significantly related to the shared capitalism index. In additional calculations not presented here, we examined the positive worker safety result using breakdowns by type of shared capitalism program. In contrast to studies that found no consistent relationship between employee ownership and worker safety (Rooney 1992; Rhodes and Steers 1981), our data show that employee-owners as well as profit-sharers are more likely to report that worker safety is a high priority with management.

The NBER data, in contrast, show consistently positive results for shared capitalism and company treatment. Shared capitalism is positively linked to perceptions that the company shares success with employees and is fair to employees, and to grades workers give to the company on sharing information, trustworthiness, and employee relations. These positive associations become smaller in magnitude but remain positive and highly significant when controlling for several human resource policies (being in an EI team, training, and job security). Disaggregating by type of shared capitalism program in table 8A.2, profit sharing and gain sharing eligibility are strongly linked to perceptions that the company shares and is fair to employees (columns [1] and [2]), while profit-sharing intensity is strongly associated with all three of the grades (columns [3] through [5]). Employee-owners are also more likely to say the company shares with employees (column [1]), while the size of the ownership stake is a strong predictor of each of the five measures.

Comparisons among employee ownership types show an interesting disparity. Having more employer stock in a 401(k) plan is positively linked to each of the measures, while ESOP membership and stake are positively associated with perceptions that the company shares with employees, but ESOP membership is negatively associated with the other four perceptions of company treatment both with and without company fixed effects. This is consistent with the finding that ESOP members are less likely to be satisfied with their participation in decisions.

8.3.3 Supervision

Since incentive programs are one way to reduce the principal-agent problem when supervision is difficult or costly, we expect less supervision in shared capitalist environments. In addition, we expect supervisors to be more concerned with maintaining a cooperative atmosphere that helps solve the free rider problem than with watching workers work.

The GSS asked respondents for views of their supervisors, while the NBER survey asked about the degree of supervision. As seen in item 3 of table 8.1, shared capitalism employees are more likely to see their supervisors

as helpful and caring, while they are less likely to report that they are closely supervised both before and after controlling for other HR policies. When broken out by type of shared capitalism program in table 8A.3, the strongly significant result is that ESOP members have greater freedom from supervision (column [1]). Most of the coefficients on other programs are positive, which indicates that each program contributes to the strongly positive shared capitalism coefficient in table 8.2.

8.3.4 Training

The national GSS data in table 8.2 show that shared capitalism employees are more likely to say they have the training opportunities they need. The NBER data show that they report a higher likelihood of formal job training in the past year, greater hours of training, and higher levels of informal job training from fellow workers, with and without controls for participation in an EI team and job security. The breakdowns by plan in table 8A.3 show that both training and hours of training are higher among workers with profit sharing and employee owners, and are also positively linked to size of gain-sharing bonus and employee ownership stake. But training is negatively related to the size of stock option value from future potential profits (columns [2] and [3]). Among the types of employee ownership, training and training hours are highest among ESOP participants and those with 401(k) employer stock.

The pattern of coefficients is quite different for informal job training from co-workers, which suggests that informal job training often substitutes for formal training. Both stock option holding and the size of the stake are positively linked to informal training (table 8A.3, column [4]). Also, while ESOP members are more likely to get formal training, they are less likely to get informal training. Gain sharing is positively associated with informal training, as is the size of a workers' higher profit-sharing stake. The broad range of associations between shared capitalism and formal and informal training suggest that training is complementary with shared capitalism.

8.3.5 Pay and Benefits

Table 8.1 shows that pay tends to be higher among employees with greater shared capitalist forms of pay in both the national GSS and NBER company data. Employees in the NBER company data set with greater shared capitalism are more likely to say that their fixed pay is at least equal to market and their compensation is higher than market. Shared capitalism employees in the national survey are more likely to feel they are paid what they deserve. Employees with greater shared capitalism in both data sets rate their companies as better on fringe benefits. The NBER results are not affected by the inclusion of several human resource policies. When the shared capitalism programs are broken out in table 8A.4, most of the shared capitalism types are associated with higher fixed pay, though the gain-sharing bonus inten-

sity and employee ownership stake are inversely related to pay. There are few associations with the employee's rating of fixed pay relative to market (column [2]), but total compensation relative to market is higher among gain sharers and those who have bigger profit-sharing bonuses and are employee-owners through Employee Stock Purchase Plans (ESPPs) and 401(k) plans (columns [4] and [5]). The pay and benefit results indicate that shared capitalism does not generally substitute for fixed pay or other benefits. This rejects a simple compensating differences story of shared capitalist modes of pay, although the higher pay may help compensate for greater effort or other forms of costly behavior.

8.3.6 Co-Worker Relations

Does shared capitalism help or hurt relations with fellow workers? Employees with greater shared capitalism in the GSS data set are more likely to report that their co-workers can be relied on for help when needed, and that their co-workers take a personal interest in them. Such helpfulness and interest presumably make work more pleasant and increase employee welfare directly, but may also lay the foundation for cooperation among employees that can increase workplace performance (explored in chapters 2 and 4).

8.3.7 Job Security

Shared capitalism is associated with greater job security. Employees higher in the shared capitalist index report a lower likelihood of losing their jobs, and in the national GSS data they report a lower likelihood of being laid off in the past year. The NBER results are maintained when controlling for participation in an EI team and receipt of training. When broken out by shared capitalism policy, both profit-sharing eligibility and the size of the profit share are linked to greater job security (table 8A.5, column [1]). Owning employer stock, and the size of the ownership stake and stock option value, are also positively associated with job security. The breakdowns by type of employee ownership indicate that job security is highest among ESOP participants and those holding 401(k) employer stock, and those with greater holdings in both of those plans. The findings that job security is greater for employee-owners than for other workers is consistent with prior research on the employment stability and company survival of employee ownership firms (Blair, Kruse, and Blasi 2000; Park, Kruse, and Sesil 2004).

8.3.8 Job Satisfaction

Job satisfaction is positively linked to the shared capitalism index in both the national GSS and NBER company data, but the result is statistically significant only in the NBER data. This NBER result disappears, however, when controlling for the human resource policies. The strong association between shared capitalism and these human resource policies indicates that there may be important complementarities, which we explore in table 8.2.

When the policies are broken out in table 8A.5, job satisfaction is positively associated with the size of the profit-sharing and gain-sharing bonuses, and with participation in an ESOP when company fixed effects are removed (column [2]). The positive ESOP result on job satisfaction presumably reflects the positive effects of ESOP membership on training, freedom from supervision, rating of benefits, and job security overpowering ESOP participants' lower satisfaction with participation in decisions (table 8A.1) and their lower ratings for the company on several measures (table 8A.2).

8.3.9 Complementarities

Both theory and evidence support the idea that there may be important complementarities among human resource policies in affecting workplace performance (e.g., Levine and Tyson 1990; Huselid 1995; Ichniowski et al. 1996). These complementarities may also affect employee outcomes: for example, job satisfaction may be increased more by combining shared capitalism with employee involvement and training than by the sum of the policies in isolation.

Measurement of high-performance human resource policies varies among studies. One analysis divides them into seven broad categories: group incentive pay, teamwork/employee involvement, training, employment security, information sharing, flexible job assignment, and recruitment and selection (Ichniowski, Shaw, and Prennushi 1997). The NBER surveys contain measures of each of these, but not for every company.[4] For our investigation of complementarities, we created a human resource policy index that gives one point each for being in an employee involvement team, receiving formal training in the past twelve months, and having high job security, and we then interact this index with the shared capitalism index.[5]

Shared capitalism may also interact with supervision in affecting employee outcomes. Shared capitalist policies may, as noted, help substitute for close supervision of workers by providing greater incentives for workers to work hard and monitor their co-workers. The finding that shared capitalism is associated with greater freedom from supervision lends support to this idea (table 8.1). When shared capitalist policies are combined with close supervision, however, the results may be negative. If workers are not given much latitude in how they do their work, shared capitalist policies may serve mainly to shift financial risk to workers, resulting in more negative worker behavior and attitudes. At a minimum, combining shared capitalism with

4. Flexible job assignment was measured as job rotation at six companies, and rigorous selection was measured at one large company.

5. We also experimented with indices using measures of information sharing, job rotation, and rigorous selection, producing a similar pattern of results. Here we use the index based only on employee involvement, training, and job security since the sample sizes are smaller for job rotation and rigorous selection, and the grade of the company on sharing information reflects an employee evaluation of the policy's success (highly correlated with evaluations of the company on other dimensions), rather than the existence of a policy.

close supervision sends a mixed message to employees: "We want you to work harder and be more committed to the company because of your (profit share/employer stock/stock options), but we're still going to keep a close eye on you." Workers may not respond well to this mixed message.

Table 8.2 assesses interactions between the shared capitalism index and other workplace policies to assess possible complementarities in effects on employee attitudes. The statistical analysis shows that shared capitalism interacts with high performance policies and supervision in affecting a number of employee outcomes.[6] The interaction with high performance policies shows that employees are especially likely to have high participation, and to be satisfied with their participation, when they are covered by both shared capitalist and high performance policies (column [3]). The interaction is also positive with informal training and overall job satisfaction. The interaction is negative, however, on perceptions of company sharing, fairness, and benefits; the coefficients indicate that shared capitalism has a positive effect both for those with and without high performance policies, but has a more positive effect for those who are not also covered by high performance policies.

The pattern is more straightforward with respect to supervision: the combination of shared capitalism with close supervision produces a more negative outcome in almost every case (column [5]). The main effect of close supervision is generally positive (column [4]), indicating that in the absence of shared capitalism, having close supervision may often be a good thing (e.g., giving workers a better sense of what they are supposed to do). But the main effect is counteracted in most cases, however, by the negative shared capitalism interaction—for example, the predicted overall effect of increased supervision on perceptions of company fairness is negative whenever the shared capitalism index is 2 or greater.

The contingent effects of shared capitalism on job satisfaction are illustrated in figure 8.1, which uses the regression results from table 8.2. When workers are covered by high performance policies and have low or average levels of supervision, the effects of increased shared capitalism are positive (top two lines). When they are not covered by high-performance policies, and/or are very closely supervised, the effects of shared capitalism are slightly or very negative (bottom four lines). While the overall relationship between shared capitalism and job satisfaction is close to zero after controlling for other policies (table 8.1), these results illustrate that the other policies can greatly condition the effects of shared capitalism.

The same caveats issued in the "Studying Shared Capitalism" section of the introduction and in chapter 4 apply here. The GSS findings may reflect

6. When the high performance index included the outcome being predicted, that item was deleted from the high performance index (e.g., employee involvement was deleted from the high performance index in predicting participation in an employee involvement team).

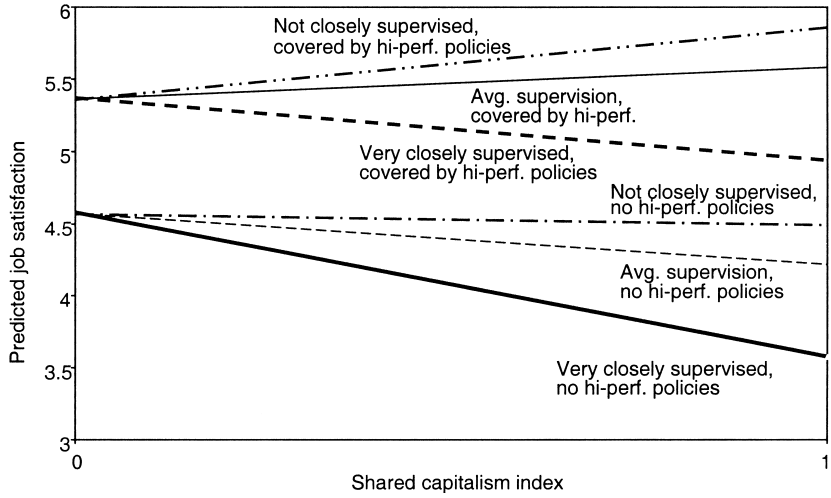

Fig. 8.1 The contingent effects of shared capitalism on job satisfaction

selectivity of shared capitalist firms, or of workers into shared capitalism firms, and the NBER findings may reflect selectivity of workers into shared capitalism plans within the firms. Such selectivity makes causal interpretations open to criticism. As described in the "Studying Shared Capitalism" section, we experimented with specifications to reduce endogeneity but had little luck in finding suitable exogenous variables that would predict the endogenous variables but not directly affect the outcome variables of interest. Even if there is substantial selectivity among workers or firms, however, such selectivity may operate primarily to lead workers and firms into shared capitalism arrangements where it is most likely to have benefits. If this is the case, the shared capitalism is having good effects even in the presence of selectivity, although we are not able to confidently infer what would happen if other workers and firms adopted shared capitalism.

8.4 Conclusion

Do workers gain by sharing? The evidence generally supports an answer of "yes," with some caveats. Both the national GSS and NBER company data indicate that shared capitalism is positively linked to participation in decisions, evaluations of company climate and employee treatment, perceptions of helpfulness by supervisors, lower levels of supervision, and higher levels of training, pay and benefits, job security, and job satisfaction. Almost all of these relationships remain strong when controlling for other human resource policies. This rejects the "management by stress" theories of work innovation.

When broken out by type of shared capitalist program, profit sharing was

most consistently linked to the positive outcomes, although gainsharing, stock options, and employee ownership also affect some outcomes positively. In many cases the positive effect was tied to simply being covered by a policy (e.g., being eligible for profit sharing, or being an employee-owner), but there were also many cases in which the effect was tied to the size of the financial stake involved (size of most recent bonus, or value of employer stock or stock options).

Estimated negative relations between some aspects of shared capitalism and some outcomes are also informative about how this form of financial sharing operates. In particular, while being a member of an ESOP was linked to a number of positive outcomes (participation in decisions, perception that the company shares, freedom from supervision, formal training, pay and benefit levels, job security, and job satisfaction), in the NBER data set ESOP members also had lower satisfaction with participation in decisions and lower ratings of the company on fairness, trustworthiness, and employee relations. One possible reason is that employee-owners may be frustrated by unfulfilled desires for greater participation in decisions (above the higher levels they already have). Another possible reason is that some ESOP accounts have too little stock to be meaningful and some employees may have negative attitudes when they are called owners but have very little ownership so the size of the ownership stake is important. The importance of the size of the ownership stake is highlighted by the finding that satisfaction with participation rises with the value of employee-owned stock as a percent of pay. The dynamics of employee ownership may work differently for ESOPs than for other forms of ownership: it is the only form where all eligible workers are automatically enrolled and called owners even with miniscule accounts.

Finally, our data reveals potentially important complementarities of shared capitalism with other workplace policies, particularly with high performance work policies and closeness of supervision. Those who are covered by the combination of high-performance policies with shared capitalism are most likely to report high participation in decisions, satisfaction with participation, and overall job satisfaction. The combination of close supervision with shared capitalism, however, has negative effects on almost every outcome.

Overall, our findings are consistent with theories that stress the linkage between group incentive pay systems and other labor and personnel relations policies. Taken as a package, a high performance work system involves greater participation, higher quality of supervision, more formal training, better wages and benefits, higher job satisfaction, and better job security. Employers who are concerned about company performance, and workers who are concerned about the quality of their working life, have reasons to be interested in this package. Our findings that shared capitalist programs are often associated with these policies and outcomes indicate that there is good potential for workers to gain through sharing.

Appendix

Table 8A.1 **Participation in decisions by type of shared capitalism plan**

Dependent variable	Involved in job decs. (1–4 scale) oprobit (1)	Involved in dept. goals (1–4 scale) oprobit (2)	Involved in co. decs. (1–4 scale) oprobit (3)	In EI team (0–1 dummy) OLS (4)	Satisfied w/ participation (1–4 scale) oprobit (5)
Bonuses					
Profit sharing	0.016 (0.022)	–0.067 (0.021)***	–0.101 (0.022)***	0.046 (0.008)***	–0.048 (0.021)**
Profit sharing bonus as % of base pay	0.269 (0.115)**	0.547 (0.098)***	0.389 (0.097)***	0.087 (0.039)**	0.321 (0.096)***
Gain sharing	–0.052 (0.030)*	–0.071 (0.027)***	–0.002 (0.028)	0.013 (0.011)	0.028 (0.026)
Gain sharing bonus as % of base pay	0.188 (0.133)	0.149 (0.111)	0.129 (0.107)	0.074 (0.043)*	0.040 (0.106)
Individual bonus	0.096 (0.028)***	0.123 (0.025)***	0.093 (0.027)***	0.005 (0.010)	0.040 (0.025)
Individual bonus as % of base pay	0.280 (0.135)**	–0.044 (0.112)	–0.174 (0.111)	–0.036 (0.044)	0.207 (0.110)*
Stock options					
Stock option holding	–0.002 (0.045)	0.052 (0.039)	0.033 (0.038)	–0.052 (0.015)***	–0.054 (0.037)
Stock option value as % of base pay	0.007 (0.007)	0.017 (0.006)***	0.011 (0.005)**	0.008 (0.002)***	0.015 (0.005)***
Employee ownership					
Any employee ownership	0.043 (0.020)**	0.039 (0.019)**	0.043 (0.021)**	0.032 (0.008)***	–0.016 (0.019)
Employee-owned stock as % of pay	0.018 (0.010)*	0.016 (0.009)*	0.007 (0.009)	0.002 (0.004)	0.026 (0.009)***
n	34,439	34,347	34,309	34,671	34,337
(pseudo) R^2	0.125	0.117	0.086	0.123	0.074
Cut point 1	0.149 (0.292)	1.958 (0.256)	2.617 (0.262)		0.132 (0.252)
Cut point 2	0.937 (0.292)	2.709 (0.256)	3.541 (0.262)		1.194 (0.252)
Cut point 3	2.026 (0.292)	3.911 (0.256)	4.631 (0.263)		2.743 (0.252)

Breakdowns by type of employee ownership					
ESOP	0.071 (0.056)	–0.008 (0.054)	–0.040 (0.056)	0.055 (0.022)**	–0.253 (0.053)***
ESOP stock as % of pay	0.029 (0.022)	0.048 (0.021)**	0.029 (0.020)	0.002 (0.008)	0.052 (0.020)***
ESPP	0.027 (0.044)	0.065 (0.039)*	0.038 (0.040)	–0.006 (0.016)	0.057 (0.038)
ESPP stock as % of pay	–0.031 (0.036)	–0.032 (0.031)	–0.003 (0.030)	0.003 (0.012)	–0.035 (0.030)
401(k) stock	0.031 (0.018)	0.016 (0.018)	0.032 (0.019)*	0.042 (0.007)***	0.021 (0.018)
401(k) stock as % of pay	0.046 (0.017)***	0.030 (0.015)**	0.011 (0.016)	–0.007 (0.006)	0.028 (0.015)*
Stock from options	–0.067 (0.043)	0.044 (0.038)	0.089 (0.037)**	0.039 (0.015)***	–0.009 (0.037)
Stock from options as % of pay	0.029 (0.025)	–0.012 (0.021)	–0.030 (0.020)	–0.009 (0.008)	0.025 (0.020)
Open mkt. stock	–0.046 (0.032)	0.014 (0.028)	0.027 (0.029)	0.002 (0.011)	0.069 (0.028)***
Open mkt. stock as % of pay	–0.072 (0.053)	–0.046 (0.045)	0.000 (0.044)	0.061 (0.018)***	–0.044 (0.045)
ESOP coefficients without fixed effects					
ESOP	0.126 (0.035)***	0.227 (0.033)***	0.252 (0.034)***	0.014 (0.013)	–0.103 (0.032)***
ESOP stock as % of pay	0.007 (0.021)	0.047 (0.019)***	0.003 (0.018)	–0.001 (0.007)	0.015 (0.018)

Notes: All regressions include the control variables from table 8.2. Standard error in parentheses. Oprobit = ordered probit

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

Table 8A.2 **Company treatment of employees by type of shared capitalism plan**

Dependent variable	Ees. share when co. does well (1–7 scale) OLS (1)	Co. fair to ees. (1–7 scale) OLS (2)	Co. grade: sharing info (0–4 scale) OLS (3)	Co. grade: trustworthy (0–4 scale) OLS (4)	Co. grade: ee. relations (0–4 scale) OLS (5)
Bonuses					
Profit sharing	0.481 (0.030)***	0.126 (0.029)***	–0.003 (0.019)	–0.018 (0.019)	–0.031 (0.018)*
Profit-sharing bonus as % of base pay	0.089 (0.136)	0.188 (0.131)	0.258 (0.087)***	0.261 (0.089)***	0.397 (0.083)***
Gain sharing	0.106 (0.038)***	0.136 (0.037)***	0.021 (0.024)	0.037 (0.025)	0.021 (0.023)
Gain sharing bonus as % of base pay	–0.079 (0.151)	–0.167 (0.146)	0.074 (0.097)	0.005 (0.099)	0.107 (0.092)
Individual bonus	0.047 (0.036)	0.023 (0.035)	0.074 (0.023)***	0.105 (0.024)***	0.082 (0.022)***
Individual bonus as % of base pay	0.475 (0.156)***	0.398 (0.151)***	0.030 (0.100)	0.142 (0.102)	–0.022 (0.095)
Stock options					
Stock option holding	–0.078 (0.054)	–0.061 (0.052)	0.033 (0.034)	0.059 (0.035)*	0.035 (0.033)
Stock option value as % of base pay	0.006 (0.008)	0.004 (0.007)	0.003 (0.005)	0.000 (0.005)	0.003 (0.005)
Employee ownership					
Any employee ownership	0.116 (0.028)***	0.005 (0.027)	–0.016 (0.018)	–0.008 (0.018)	–0.013 (0.017)
Employee-owned stock as % of pay	0.041 (0.013)***	0.027 (0.012)**	0.027 (0.008)***	0.022 (0.008)***	0.016 (0.008)**
n	34,433	34,395	34,303	34,242	34,271
(Pseudo) R^2	0.196	0.203	0.164	0.205	0.179

Breakdowns by type of employee ownership					
ESOP	–0.021 (0.077)	–0.207 (0.074)***	–0.242 (0.049)***	–0.158 (0.050)***	–0.197 (0.047)***
ESOP stock as % of pay	0.027 (0.028)	0.026 (0.027)	0.035 (0.018)*	0.027 (0.018)	0.023 (0.017)
ESPP	0.120 (0.055)**	0.075 (0.053)	–0.009 (0.035)	0.028 (0.036)	0.006 (0.034)
ESPP stock as % of pay	0.006 (0.042)	–0.001 (0.041)	–0.016 (0.027)	0.010 (0.028)	0.002 (0.026)
401(k) stock	0.161 (0.025)***	0.037 (0.025)	0.019 (0.016)	0.024 (0.017)	0.020 (0.016)
401(k) stock as % of pay	0.065 (0.022)***	0.066 (0.021)***	0.067 (0.014)***	0.048 (0.014)***	0.042 (0.013)***
Stock from options	0.042 (0.053)	0.001 (0.051)	–0.088 (0.034)***	–0.068 (0.034)**	–0.050 (0.032)
Stock from options as % of pay	0.008 (0.028)	0.031 (0.027)	0.024 (0.018)	0.027 (0.019)	0.016 (0.017)
Open mkt. stock	0.010 (0.040)	0.055 (0.039)	0.056 (0.026)**	0.062 (0.026)**	0.030 (0.024)
Open mkt. stock as % of pay	0.013 (0.064)	–0.010 (0.062)	–0.029 (0.041)	–0.071 (0.041)*	–0.025 (0.039)
ESOP coefficients without fixed effects					
ESOP	0.231 (0.047)***	–0.119 (0.045)***	–0.042 (0.030)	–0.103 (0.030)***	–0.047 (0.028)*
ESOP stock as % of pay	0.102 (0.026)***	0.033 (0.025)	0.050 (0.017)***	0.024 (0.017)	0.017 (0.016)

Notes: All regressions include the control variables from table 8.2. ees. = employees; OLS = ordinary least squares. Standard error in parentheses.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

Table 8A.3 Supervision and training by type of shared capitalism plan

Dependent variable:	Free from supervision (0–10 scale) OLS (1)	Formal training (0–1 scale) OLS (2)	Training hours Tobit (3)	Informal training (1–4 scale) oprobit (4)
Bonuses				
Profit sharing	0.068 (0.044)	0.021 (0.009)**	2.487 (1.192)**	–0.014 (0.021)
Profit-sharing bonus as % of base pay	0.175 (0.203)	0.067 (0.039)*	6.948 (5.084)	0.190 (0.095)**
Gainsharing	–0.106 (0.057)*	–0.010 (0.011)	–0.081 (1.470)	0.081 (0.026)***
Gain-sharing bonus as % of base pay	0.174 (0.225)	0.125 (0.044)***	24.545 (5.652)***	0.036 (0.105)
Individual bonus	0.029 (0.054)	0.050 (0.011)***	3.718 (1.403)***	0.035 (0.025)
Individual bonus as % of base pay	0.344 (0.233)	–0.138 (0.045)***	–20.235 (5.823)***	–0.023 (0.109)
Stock options				
Stock option holding	–0.014 (0.080)	0.006 (0.016)	–1.398 (2.053)	0.096 (0.037)***
Stock option value as % of base pay	0.017 (0.011)	–0.009 (0.002)***	–1.010 (0.280)***	0.016 (0.005)***
Employee ownership				
Any employee ownership	0.034 (0.041)	0.045 (0.008)***	5.437 (1.133)***	–0.047 (0.019)**
Employee-owned stock as % of pay	0.025 (0.019)	0.011 (0.004)***	1.041 (0.493)**	–0.005 (0.009)
n	34,671	34,671	33,834	34,437
(Pseudo) R^2	0.177	0.148	0.024	0.031
Cut point 1				–1.497 (0.252)
Cut point 2				–0.598 (0.252)
Cut point 3				0.786 (0.252)

Breakdowns by type of employee ownership				
ESOP	0.402 (0.114)***	0.054 (0.022)**	7.987 (3.198)**	–0.099 (0.054)*
ESOP stock as % of pay	0.056 (0.042)	–0.002 (0.008)	0.205 (1.090)	–0.019 (0.019)
ESPP	0.051 (0.082)	0.011 (0.016)	2.352 (2.120)	0.024 (0.038)
ESPP stock as % of pay	–0.005 (0.063)	0.015 (0.012)	0.986 (1.595)	–0.012 (0.030)
401(k) stock	0.057 (0.038)	0.050 (0.007)***	6.971 (1.056)***	–0.007 (0.018)
401(k) stock as % of pay	0.016 (0.032)	0.022 (0.006)***	1.973 (0.835)**	0.012 (0.015)
Stock from options	–0.006 (0.078)	0.028 (0.015)*	1.093 (1.974)	–0.015 (0.037)
Stock from options as % of pay	–0.018 (0.042)	–0.007 (0.008)	–0.086 (1.068)	–0.003 (0.020)
Open mkt. stock	–0.027 (0.060)	–0.004 (0.012)	0.584 (1.507)	–0.028 (0.028)
Open mkt. stock as % of pay	0.046 (0.095)	0.003 (0.018)	–0.268 (2.357)	–0.012 (0.044)
ESOP coefficients without fixed effects				
ESOP	0.403 (0.067)***	0.169 (0.014)***	15.145 (1.857)***	–0.087 (0.032)***
ESOP stock as % of pay	0.121 (0.040)***	0.018 (0.008)***	2.043 (1.000)**	–0.012 (0.018)

Notes: All regressions include the control variables from table 8.2. Standard error in parentheses.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

Table 8A.4 Pay and benefits by type of shared capitalism plan

Dependent variable:	Fixed pay (natural log) OLS (1)	Fixed pay (% diff. from mkt.) OLS (2)	Total comp. (% diff. from mkt.) OLS (3)	Grade of co. on wages (0–4 scale) OLS (4)	Benefits (0–4 scale) OLS (5)
Bonuses					
Profit sharing	0.015 (0.007)**	0.222 (0.340)	–0.051 (0.362)	0.069 (0.018)***	0.068 (0.018)***
Profit-sharing bonus as % of base pay	0.168 (0.032)***	1.057 (1.490)	8.130 (1.587)***	0.194 (0.085)**	0.329 (0.084)***
Gainsharing	0.028 (0.009)***	0.374 (0.439)	1.544 (0.456)***	0.033 (0.024)	0.026 (0.024)
Gain-sharing bonus as % of base pay	–0.079 (0.035)**	–0.664 (1.668)	–3.522 (1.765)*	0.059 (0.095)	0.021 (0.094)
Individual bonus	0.007 (0.008)	–0.725 (0.423)*	–0.607 (0.444)	0.023 (0.023)	0.089 (0.022)***
Individual bonus as % of base pay	0.039 (0.036)	4.148 (1.712)**	12.875 (1.832)***	0.193 (0.098)**	–0.119 (0.097)
Stock options					
Stock option holding	0.160 (0.013)***	0.594 (0.629)	1.013 (0.666)	–0.002 (0.033)	0.024 (0.033)
Stock option value as % of base pay	0.012 (0.002)***	0.282 (0.081)***	0.601 (0.088)***	0.007 (0.005)	0.002 (0.005)
Employee ownership					
Any employee ownership	0.066 (0.007)***	0.012 (0.308)	0.251 (0.331)	–0.008 (0.016)	0.040 (0.016)**
Employee-owned stock as % of pay	–0.009 (0.003)***	–0.127 (0.158)	0.244 (0.158)	0.000 (0.008)	0.002 (0.008)
n	27,359	27,320	26,401	34,408	34,363
(Pseudo) R^2	0.765	0.063	0.137	0.108	0.164

Breakdowns by type of employee ownership					
ESOP	0.144 (0.020)***	–0.168 (1.020)	0.751 (1.331)	–0.051 (0.048)	0.031 (0.047)
ESOP stock as % of pay	–0.006 (0.007)	–0.414 (0.360)	0.949 (0.401)**	–0.008 (0.018)	0.018 (0.017)
ESPP	0.051 (0.013)***	0.943 (0.651)	1.629 (0.698)**	0.037 (0.034)	0.060 (0.034)*
ESPP stock as % of pay	–0.086 (0.010)***	0.079 (0.488)	–0.041 (0.532)	0.002 (0.027)	–0.008 (0.026)
401(k) stock	0.042 (0.007)***	–0.188 (0.307)	0.219 (0.323)	–0.004 (0.016)	0.029 (0.016)*
401(k) stock as % of pay	–0.006 (0.005)	–0.270 (0.309)	–0.079 (0.252)	0.011 (0.014)	–0.008 (0.013)
Stock from options	0.012 (0.012)	1.354 (0.580)**	1.503 (0.620)**	–0.003 (0.033)	–0.035 (0.033)
Stock from options as % of pay	0.005 (0.007)	–0.233 (0.306)	–0.126 (0.332)	0.007 (0.018)	0.017 (0.018)
Open mkt. stock	0.072 (0.010)***	0.833 (0.434)*	0.956 (0.463)**	0.003 (0.025)	0.011 (0.025)
Open mkt. stock as % of pay	–0.018 (0.015)	–1.548 (0.684)**	–1.006 (0.743)	–0.058 (0.040)	–0.034 (0.039)
ESOP coefficients without fixed effects					
ESOP	0.193 (0.017)***	0.834 (0.555)	–0.674 (0.665)	0.006 (0.028)	0.299 (0.027)***
ESOP stock as % of pay	0.037 (0.010)***	–0.766 (0.388)**	1.643 (0.379)***	–0.063 (0.017)***	–0.010 (0.016)

Notes: All regressions include the control variables from table 8.2. Standard error in parentheses.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

Table 8A.5 Job security and satisfaction by type of shared capitalism plan

Dependent variable:	Job security (1–4 scale) oprobit (1)	Job satisfaction (1–7 scale) OLS (2)
Bonuses		
Profit sharing	0.102 (0.021)***	–0.063 (0.023)***
Profit-sharing bonus as % of base pay	0.486 (0.098)***	0.255 (0.105)**
Gain sharing	0.068 (0.027)***	0.025 (0.029)
Gain-sharing bonus as % of base pay	–0.021 (0.109)	0.270 (0.117)**
Individual bonus	0.057 (0.026)**	0.023 (0.028)
Individual bonus as % of base pay	–0.046 (0.112)	0.168 (0.121)
Stock options		
Stock option holding	0.040 (0.039)	–0.008 (0.041)
Stock option value as % of base pay	0.011 (0.005)**	0.007 (0.006)
Employee ownership		
Any employee ownership	0.082 (0.020)***	–0.006 (0.021)
Employee-owned stock as % of pay	0.018 (0.009)**	0.001 (0.010)
n	34,671	34,525
(Pseudo) R^2	0.042	0.107
Cut point 1	–1.917 (0.259)	
Cut point 2	–1.175 (0.259)	
Cut point 3	0.476 (0.259)	
Breakdowns by type of employee ownership		
ESOP	–0.001 (0.056)	–0.038 (0.059)
ESOP stock as % of pay	0.042 (0.021)**	–0.002 (0.022)
ESPP	–0.058 (0.040)	–0.027 (0.042)
ESPP stock as % of pay	–0.005 (0.031)	–0.001 (0.033)
401(k) stock	0.096 (0.018)***	–0.001 (0.020)
401(k) stock as % of pay	0.054 (0.015)***	0.018 (0.017)
Stock from options	–0.089 (0.038)**	–0.006 (0.041)
Stock from options as % of pay	0.013 (0.020)	–0.003 (0.022)
Open mkt. stock as % of pay	0.038 (0.046)	–0.033 (0.049)
Open mkt. stock	0.008 (0.029)	0.005 (0.031)
ESOP coefficients without fixed effects		
ESOP	0.299 (0.034)***	0.090 (0.036)***
ESOP stock as % of pay	0.043 (0.020)**	–0.029 (0.020)

Notes: All regressions include the control variables from table 8.2. Standard error in parentheses.

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

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