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SHARED CAPITALISM IN THE U.S. ECONOMY? PREVALENCE, CHARACTERISTICS,  
AND EMPLOYEE VIEWS OF FINANCIAL PARTICIPATION IN ENTERPRISES

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Shared Capitalism in the U.S. Economy: Prevalence, Characteristics, and Employee Views  
of Financial Participation in Enterprises

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**ABSTRACT**

Between one-third and one-half of employees participate directly in company performance through profit sharing, gainsharing, employee ownership, or stock options. This flies in the face of concerns about the free rider problem and worker risk aversion in group incentives, and raises many questions about the effects on firms and workers. This paper lays out the major reasons we may see such "shared capitalism" plans, and reviews recent nationally representative surveys on the prevalence of these plans. We also introduce the NBER shared capitalism data, based on questions added to the 2002 and 2006 General Social Surveys (GSS) and more than 40,000 employee surveys from 14 companies with different combinations of shared capitalism plans. We find that while shared capitalism exists broadly throughout the economy, it is more likely in larger establishments. The free rider effect may be countered by the use of other policies to create productive teamwork and a cooperative culture: shared capitalism is positively linked to workplace decision-making, training, job security, teamwork, the ability to easily observe co-worker performance, and low levels of supervision. Also, more risk-averse employees avoid participating in several types of shared capitalism, but two-thirds of even the most risk-averse employees in these companies say they want shared capitalism as part of their pay package. The effects of these plans for both workers and firms are more fully explored in accompanying papers.

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In the past several decades the U.S. and other advanced countries have seen growth in direct employee participation in the financial performance of capitalist enterprises. This participation can take many forms, including profit sharing, gain sharing, bonuses, employee stock ownership, and broad-based stock options. All of these approaches have one thing in common: offering the worker a share in profits or stock appreciation when the company makes a profit. Our broad label for this participation is "shared capitalism."

This growth is driven in part by increased competitive pressures, environmental volatility, and rapid technological change, which have led firms to implement new forms of workplace organization and human resource practices. These changes include increased teamwork, employee participation in decisions, and other practices that can work in conjunction with financial participation to increase worker productivity, skills, commitment, and job security. Shared capitalist institutions with new forms of high performance work organization, not traditional labor-management relations, may be the emerging form of employee relations under capitalism.

This raises a number of important questions for firms, workers, and economic policy-makers:

- To what extent are these new modes of financial participation and decision-making related?
- Are they likely to increase or decrease economic inequality?
- Do they generally supplement or substitute for standard forms of compensation?
- How can they best improve productivity in ways that will benefit both firms and ordinary workers?
- Do employees welcome shared capitalism or are they uneasy about the increased

financial risk and responsibility that this places on them?

- Are the new forms of participation likely to continue to grow?

This paper introduces the NBER project that was established to address these questions. Following a discussion of why shared capitalism exists at all, we summarize data on the current forms and extent of shared capitalism in the U.S. economy. We then introduce the General Social Survey and NBER employee survey datasets that will be used to answer the above questions in accompanying papers<sup>1</sup>, and provide an overall portrait of the data and an initial exploration of how shared capitalism is related to job and company characteristics, work organization, risk aversion, and worker preferences.

### **Why Share with Workers?**

Standard economic analysis outlines two key problems with shared capitalism plans that argue against their use. Principal-agent analysis says that owners/managers can improve employees' performance by giving employees pay contingent on performance, but group incentives suffer from the free rider or "1/N" problem due to the increasingly weak link between individual performance and rewards as the size of the group expands. Economic analysis therefore predicts that firms will favor tying financial rewards to local economic performance and outcomes rather than to company-wide outcomes. This is because profit-sharing or gain-sharing based on workplace outcomes can motivate workers in a small group, who can influence the costs and revenues of that group. Hence, the argument suggests that firms that introduce financial sharing should eschew company-wide sharing, since there is virtually nothing the local

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<sup>1</sup> The accompanying papers using the GSS and NBER survey data are Blasi, Kruse, and Markowitz (2008), Blasi et al. (2008), Buchele et al. (2008), Budd (2008), Carberry (2008), Freeman, Kruse, and Blasi (2008), Harden, Kruse, and Blasi (2008), and Kruse, Freeman, and Blasi (2008). These issues are addressed using additional U.S. and UK

group can do to affect the share price of the firm.

A second key problem with shared capitalism plans is income variability for risk-averse workers. Firms are predicted to select the least costly form of rewarding workers. In traditional analyses where firms are risk-neutral and workers are risk-averse, this means paying employees wages or salaries, rather than with variable pay dependent on company performance. Firms that offer more risky modes of wage payment should have to compensate workers for risk.

Given these (and other<sup>2</sup>) problems, why are there any shared capitalism plans? The major reasons for adopting shared capitalism can be categorized as productivity- or flexibility-related.

#### *Productivity reasons for shared capitalism plans*

Firms may find that group incentives are better than individual incentives for encouraging productive teamwork and information sharing, especially where centralized supervision is costly. The free rider problem may be overcome by creation of an implicit cooperative agreement among employees to work hard, enforced by monitoring co-worker performance and applying peer pressure where needed (Weitzman and Kruse, 1990). What it takes to create and maintain such an agreement is unclear and may vary from workplace to workplace—it is likely that company human resource policies, employee relations, and general corporate culture play a large role. A growing body of literature finds that combinations of workplace policies may induce behaviours that improve performance (see, e.g., Ichniowski et al.

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datasets in Bryson and Freeman (2008) and Dube and Freeman (2008).

<sup>2</sup> While these are the two most common theoretical objections to shared capitalism plans, there are others as well. These include the possibility that diluting the economic surplus received by the owner will decrease performance by weakening the owner's incentive to monitor workers closely (Alchian and Demsetz, 1972), and the objection that profit sharing will decrease the firm's incentives to make capital investments (Summers, 1986). See Putterman and Skillman (1988) and Weitzman (1986) for responses to these, and Bonin and Putterman (1987) and Dow (2003) for additional theoretical arguments for and against shared capitalism plans.

1996). It has been demonstrated that globalization in specific industries and firms is linked to the adoption of high performance work practices in firms in specific industries (Blasi and Kruse, 2006).

A productivity motivation for adopting and maintaining shared capitalism plans is directly expressed by many firms (U.S. GAO, 1986: 20; Kruse, 1993: 33), and is supported by several findings in studies of adoption.<sup>3</sup> Studies generally find, however, that profit-sharing and employee ownership plans are more common in large firms, which runs counter to the idea that the free rider problem will favor greater productivity in small firms.<sup>4</sup>

Shared capitalism does appear to create productive cooperation at least in some companies. Existing evidence from over 60 studies indicates a positive association on average between shared capitalism programs and company performance, but with substantial dispersion in results (Kruse and Blasi, 1997; Kruse, 2002). The average estimated increase in productivity associated with employee ownership and profit sharing is about 4.5%, and is maintained when using pre/post comparisons and attempts to control for selection bias. Boning, Ichniowski, and Shaw (2001) find positive effects of group incentives, particularly when combined with problem-solving teams. Other studies of gainsharing also find positive results, particularly when there is high employee involvement in design and operation, shorter pay out periods, controllable targets, and perceptions of procedural and distributive justice (Bullock and Tubbs, 1990; Collins, 1998).

Many of the effects of shared capitalism plans on performance are likely to work through

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<sup>3</sup> Oyer and Schaefer (2005) find that adoption of broad-based stock option plans can be explained by retention and sorting, but not incentive effects. Kruse (1996) finds that R&D levels are higher among old profit-sharing firms, and job enrichment plans were more likely to be adopted just before new profit-sharing plans, suggesting complementarities aimed at improving productivity. Beatty (1994) finds that risk variables suggest a productivity motivation for adoption of ESOPs. Ichniowski and Shaw (1995) find that group incentives are more likely to be adopted when they are part of a package of complementary policies to improve productivity, and also find evidence of large switching costs that discourage firms with established technologies and workplace relationships from

employee attitudes and behaviours.<sup>5</sup> Most studies find that organizational commitment and identification are higher under employee ownership, while giving mixed results between favorable and neutral on motivation and behavioral measures (Kruse and Blasi, 1997). The results are consistent with opinion polls which find that most members of the public think that workers in employee ownership firms work harder and better (reviewed in Kruse and Blasi, 1999).

#### *Flexibility reasons for shared capitalism plans*

Firms may also adopt shared capitalism plans for flexibility-related reasons. These plans can provide something of value to workers without a fixed obligation (such as a wage or salary increase) that the company may have difficulty meeting depending on future performance and the competitive environment. A flexibility motivation is supported by the finding that increased volatility in profits helps predict adoption of profit sharing and employee ownership plans (Kruse, 1996), although another study found that low-risk firms are more likely to provide company stock matches in 401(k) plans (Brown et al., 2004).

Some of the firm's financial risk is being shared with workers, which as noted above may disadvantage risk-averse workers unless they are compensated for the risk. Consistent with the idea that workers are risk averse, most prefer straight wage salary to company-wide or individual incentives; however, a majority express positive views toward employee ownership and profit sharing, and would like at least part of their next raise to be in company stock (summarized in Kruse and Blasi, 1999). The extant evidence indicates that workers generally do not sacrifice pay and benefits for shared capitalism plans: wages and compensation tend to be higher on

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adopting new practices.

4 See Gregg and Machin (1988), Poole (1989), Fitzroy and Kraft (1995), and Kruse (1996).

5 Bartel et al. (2003) find that employee attitudes affect a variety of workplace outcomes.

average for workers in employee ownership and profit sharing plans (Blasi et al., 1996; Kardas et al., 1998; Kruse, 1993: 113-114; Kruse, 1998; Scharf and Mackin, 2000). In exchange for the financial risk, workers may benefit through lower risk of displacement: prior studies find that employee ownership firms tend to have more stable employment and higher survival rates than other firms (Craig and Pencavel, 1992, 1993; Blair et al., 2000; Park et al., 2004). The prediction by Weitzman (1984) that profit sharing should stabilize firm employment has also received support in many, though not all, studies.<sup>6</sup>

#### *Other reasons for shared capitalism plans*

There are several reasons that firms may adopt shared capitalism plans apart from those that are productivity- or flexibility-related. First, firms may adopt such plans due to tax and regulatory incentives—for example, ESOPs enjoyed substantial tax incentives in the 1980's, and retiring owners can still avoid capital gains taxes if they sell their stock to an ESOP. Second, some employee ownership plans were adopted in the 1980's in response to hostile takeover threats (Blasi and Kruse, 1991). Both takeover threats and tax incentives were clearly a factor in some 1980's ESOP adoptions (Blasi and Kruse, 1991; Beatty, 1994). Third, firms may adopt employee ownership or profit sharing out of a desire to discourage unionization by increasing employee identification with the company. Profit sharing plans are less common among unionized workers, which at least partly reflects firms dropping such plans after a union drive (Freeman and Kleiner, 1990; Mitchell et al., 1990; Kruse, 1996). Findings are mixed on the

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<sup>6</sup> Studies of Weitzman's prediction that profit sharing should stabilize firm employment have produced mixed findings: a majority support the proposition that firms view profit sharing differently from fixed wages in making employment decisions, while half of the studies find greater employment stability associated with profit sharing and the other half find either no greater stability or greater stability only in some samples (summarized in Kruse, 1998: 109-113).



relation between unionization and employee ownership.<sup>7</sup>

Finally, shared capitalism plans may be adopted and promoted for moral or social reasons. Albert Gallatin, a signer of the Declaration of Independence and Secretary of the Treasury under Thomas Jefferson, set up a profit sharing plan at the Pennsylvania Glass Works in 1795, stating that the "democratic principle upon which this Nation was founded should not be restricted to the political processes but should be applied to the industrial operation" (quoted in U.S. Senate 1939: 72). Workers who started the first unions in colonial American coastal cities set up some worker cooperatives as alternatives to the craft firms where some master craftsmen were attempting to introduce more division of labor in order to de-skill traditional craft workers and reduce their pay. A century later, some labor organizations set up worker cooperatives as part of a political challenge to how capitalism was developing, while others saw employee ownership and profit sharing as a means to build support for capitalism in opposition to the competing communist and socialist systems—arguing that it would help cure "unrest" and "irrational agitation" in capitalism, and that the "great uplift and inspiration that sharing of profits cultivates in the employee" would lead to "harmony and contentment" (Askwith, 1926: 20). John D. Rockefeller and other corporate leaders in 1919 encouraged employee ownership, employee involvement in corporate decision-making, and profit sharing as part of a grand plan for "welfare capitalism" that spread in the 1920's. Profit sharing was promoted in the 1930's in Congressional hearings in the 1930's by Republican Senator Arthur Vandenberg, and ESOPs were promoted by investment banker Louis Kelso in conjunction with Democratic Senator

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<sup>7</sup> Gregg and Machin (1988) and Poole (1989) find employee ownership is more common in unionized companies in the UK, while Kruse (1996) finds that ESOP adoption was equally likely in union and non-union establishments in the 1970's and 1980's.

Russell Long of Louisiana in the 1970's, as ways to broaden participation in the economic system.<sup>8</sup>

In sum, the two key objections to group incentives—the free rider problem and worker risk aversion—have not been sufficient to quash shared capitalism plans. They continue to be adopted and maintained, providing a fertile ground for examining outcomes for both firms and workers. As will be seen, such programs now involve over a third of adult workers in the economy, albeit at different levels of intensity and with different combinations of work practices. The next section reviews current data on the prevalence of shared capitalism plans, followed by a more intensive look at the kind of company policies associated with shared capitalism that can shed light on how they are used by companies.

### **Prevalence of Shared Capitalism Programs**

There are a variety of forms that shared capitalism programs can take, which we break into four broad categories: profit sharing, gainsharing, employee ownership, and stock options. The NBER Shared Capitalism program sponsored several questions on shared capitalism in the 2002 and 2006 General Social Surveys and the 2003 National Organizations Survey, providing the most recent representative data available. The results from these surveys are summarized in Table 1, while Appendix Table A-1 summarizes other nationally representative surveys and administrative data over the past 15 years. All of the surveys have high response rates. Four of the surveys were conducted by the U.S. Census Bureau (the two National Employer Surveys, the National Compensation Survey and the National Longitudinal Survey of Youth), two surveys were conducted by the National Opinion Research Center of the University of Chicago (General

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<sup>8</sup> For a more extensive history of shared capitalism see Blasi, Kruse, and Bernstein (2003).

Social Survey and National Organizations Survey), and two were conducted by professional survey organizations (the Worker Representation and Participation Survey by Princeton Survey Research Associates, and the Employee Benefits Research Institute survey by Gallup). All surveys are based on the full private sector, except the National Employer Surveys which are limited to private for-profit firms.<sup>9</sup>

There is no hard and fast definition of profit sharing. Many firms have formal plans that are called profit sharing, but there is variation in a) how profits are defined, b) whether profits must meet a threshold level, c) whether some or all of the profit share is discretionary, and d) whether the profit share is paid in cash or is deferred (put into a defined contribution pension plan). In addition, firms may have bonus plans that are not called profit sharing, but which effectively share profits since the bonus is affected by how well the company is doing. As shown in Table 1, just over one-third of employees say that they are covered by profit sharing in 2002 (34%) and 2006 (38%), which is in line with earlier employee surveys in Table A-1. Employers reported a higher percentage of employees eligible for bonuses based on company performance (46%), though another survey using a more restricted definition showed lower figures (30% of workers are in a deferred profit-sharing plan while 5% are in a cash profit sharing plan, in Table A-1).

Gainsharing plans typically tie employee compensation to a group-based operational measure -- such as physical output, productivity, quality, safety, customer satisfaction, or costs -- rather than to a company-wide financial measure such as profitability or returns. These plans often involve employees in some formal way to develop ideas and skills for improving

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9 The full private sector figures include non-profit organizations. While these organizations cannot have employee ownership and stock options, they can have organization- and group-based bonuses that are equivalent to profit sharing and gainsharing, so their inclusion provides the best estimates of the extent to which shared capitalism has

performance. The three most popular types are Scanlon, Rucker, and ImproShare plans, although there is a growing number of custom-designed plans. As shown in Table 1, employee and company surveys agree that about one-fourth (23-27%) of employees are eligible for bonuses based on group or workplace performance.<sup>10</sup>

Employee ownership of company stock can occur in a variety of ways. Combining all the ways, the GSS surveys in Table 1 show that roughly one-fifth of employees report owning some company stock (21% in 2002 and 18% in 2006, which is in line with earlier surveys in Table A-1). The most popular type of plan is the ESOP (Employee Stock Ownership Plan). The ESOP is distinguished by the fact that workers do not have to use their own money to buy the stock (unless stock was traded for wage and work rule changes which happens only in a very small minority of ESOPs). Federal legislation allows companies to borrow money from a bank to fund the worker stock and pay for it in installments from company revenues. About 5% of employees are part of ESOPs (Table A-1). Employees may also own company stock through other types of defined contribution plans. Many employees have bought stock through their company 401(k) plan, a retirement plan where they make pre-tax contributions from their paycheck. Sometimes corporations will match employee contributions to 401(k) plans with company stock, so this type of employee ownership is closer to the ESOP because workers do not buy it. About 20% of workers are eligible for a defined contribution plan that holds employer stock (Table A-1). These non-ESOP pension plans also include various ERISA-covered stock bonus plans and deferred profit sharing trusts (often combined with 401k plans)

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permeated the entire private sector. Other papers in the NBER project restrict attention to for-profit firms.  
10 About two-fifths (43%) of Fortune 1000 surveyed companies have gain-sharing plans somewhere in the company, although most include less than 20% of employees (Lawler et al., 1995: 19). Broader surveys of compensation and human resource managers have found that only about one-eighth (13%) have formal gainsharing plans (Collins, 1998).

which actually hold some of their assets in company stock.

Employees can also own company stock outside of pension plans. Employee Stock Purchase Plans (ESPPs) allow workers to buy stock with deductions from their paycheck with a discount from the market price, and some corporations provide employees direct grants of stock as part of a stock bonus plan. Employees may also hold onto stock after exercising stock options, or own stock through open market purchases. These plans combine with the pension plans to make about one-fifth of private sector employees into employee-owners.

Stock options represent a kind of hybrid between profit sharing and employee ownership. A stock option is the right to buy the stock at a set price for 10 years into the future. The worker does not have to purchase the stock. Receiving one hundred stock options to purchase Biotech Inc. stock at \$10 per share gives the worker the right to exercise these options anytime over 10 years if the stock price goes above \$10 per share. During the ten years, the worker can for example buy a stock trading at \$15 a share for \$10 per share, then sell the stock, and pocket the \$5 profit after taxes. While stock option excesses have been abused among higher executives, for other managers and workers, a stock option has less risk than using one's savings to buy the stock and really involves the right to the upside gain without the risk of losing one's capital. The GSS surveys show a decline in stock option holding from 13% in 2002 to 9% in 2006, which we believe is due to the Security and Exchange Commission's implementation of stock option expensing that led some companies to cut back on broad-based plans.<sup>11</sup> Only 14% of companies reported making stock option grants in 2002 and 5% of employees in the 2006 GSS reported

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<sup>11</sup> This drop in stock option holding likely accounts for the drop in the percent of workers in the computer services industry who own company stock (from 58.3% to 31.9%). Because employee ownership often comes about as a result of being granted stock options, this drop is likely an unintended consequence of the employee stock option expensing.

actually receiving a stock option grant in the prior year (Table 1), while other surveys showed that 8% of employees are eligible to receive stock options (Table A-1).

The prevalence of any type of shared capitalism is high: the GSS surveys showed that 43% of employees reported participating in one or more of the above plans in 2002, rising to 47% in 2006 (Table 1). The rise in profit-sharing and gainsharing eligibility more than offset the declines in employee ownership and stock option holding between these two years. Earlier surveys show that between 41% and 75% of firms have shared capitalism plans (Table A-1).

What is the overlap among the different types of shared capitalism? This issue has never been comprehensively explored until the 2002 and 2006 General Social Surveys. As shown in Table 1, close to 15% of employees in the 2002 survey received a profit- or gainsharing bonus in the prior year but do not own company stock or hold stock options, rising to 21% in 2006. There were 4-5% who just own company stock and less than 1% who just hold stock options. About 10% had two of the three forms of shared capitalism in both years, while 5-6% had all three. The important point here is that employee ownership and stock option holding are uncommon on their own, and typically paired with another type of shared capitalism. Over three-fourths of the employee-owners also have profit/gainsharing bonuses and/or stock options, while almost all of the 13% who hold stock options also have profit/gainsharing bonuses and/or employee ownership. This high overlap suggests that firms may believe that it is worthwhile to examine employee ownership and stock options in combination with each other and profit/gainsharing.

Employee ownership and profit sharing have also received substantial attention in other advanced countries and transition economies. With coverage similar to that in the U.S., between 20% and 30% of workers in France, Great Britain, Italy, and Japan are covered by some

form of profit sharing, while smaller numbers covered by employee stock ownership (Del Boca et al., 1999; Jones and Kato, 1995). Across the European Union, between 5% and 43% of firms within each country have profit-sharing plans, between 1% and 22% have employee share ownership, and between 5% and 38% have team-based bonuses (European Foundation for the Improvement of Living and Working Conditions, 1997; Pendleton et al., 2003). Some employee ownership is also found in some socialist countries transiting to private ownership, including China (Tseo, 1996), Russia (Blasi et al., 1997), and the countries in central and eastern Europe (Uvalic and Vaughan-Whitehead, 1997; Smith et al., 1997). Broad-based stock options have appeared in stock market companies and high tech firms in Asia and are newly emergent in China and India.

Employee participation in decision making is often seen as complementary to financial participation, most basically because financial participation provides the incentive to improve performance while participation in decision making can provide a means to improve performance. Before looking at their overlap in the next section, Table 2 summarizes the most recent survey data on the overall prevalence of employee participation in decisions. There is a lot of variation in the types and measures of employee participation. About two-fifths of employees report having a lot of influence in decisions or say they often participate with others in job decisions in both 2002 and 2006, while one-third of employees report being in an employee involvement team (30%) or self-directed work team (33%). Firms report a lower number of employees in these plans (17% each), while about two-fifths of firms report having these plans at all. Data from earlier surveys in Table A-2 show great dispersion using different measures, from a low of 13-16% of employees in self-managed teams to a high of 52-55% of employees in work-related meetings for nonmanagers.

## **Looking Inside the Shared Capitalism Firms**

The current NBER project was established to take a closer look at shared capitalism plans, providing a more complete portrait along with an analysis of their causes and effects. The first component of this project was to place several questions on the 2002 and 2006 General Social Surveys, in order to collect data from a representative sample of employed Americans. The basic results were presented in Tables 1 and 2. The second component of the project was to do a more intensive look by conducting employee surveys in a number of firms that use shared capitalism programs. Project members recruited 14 companies with a variety of shared capitalist programs, and surveys were conducted over the 2001-2006 period.

### *The NBER database*

Basic information on the shared capitalism firms is contained in Table 3 (described only in broad terms to preserve company confidentiality). All of the firms have some sort of broad-based employee ownership plan, but the plan types vary: eight have standard ESOPs, one has a 401(k) ESOP, four have Employee Stock Purchase Plans (ESPPs), and three have 401(k)'s with company stock. Eleven of the firms have broad-based profit-sharing plans, while five have broad-based stock option plans. We also have variation by company size (six with fewer than 1000 employees and three with more than 10,000 employees), and industry (eight in manufacturing, four in service/financial, and two in high-tech/Internet).

While there is useful variance in types of companies and plans, we acknowledge that our sample is non-representative, first because many firms refused our requests to run the survey, and second because two of the firms were bought out by others who refused to proceed with the planned survey. Each company in the sample agreed to have our research group administer a



survey to all or a random sample of employees. The survey included core questions common across all companies, and some questions of special interest or relevance to that company. Six company surveys were conducted entirely by web, seven company surveys were done on paper, and one survey was done using both the web and paper. The company response rates ranged from 11% to 80%, with an average of 53% across the 14 companies. A total of 41,206 respondents provided usable surveys.

Question wordings for the GSS and NBER measures are provided in the appendix.

#### *Size of financial stakes in shared capitalism*

The extent and characteristics of shared capitalism programs in the GSS and NBER datasets are presented in Table 4. This table combines the 2002 and 2006 GSS prevalence figures from Table 1 (showing about one-third of workers covered by profit sharing, one-fourth covered by gainsharing, one-fifth holding company stock, and one-ninth holding stock options), and adds detail on the financial stakes involved. The monetary value appears to be significant for covered employees. The median profit sharing and gain sharing bonus in the GSS is \$1,500 or 4.6% of annual pay, and employer stock totals \$10,000 or 23% of annual pay for the median employee-owner.

The column labelled "NBER company dataset" naturally gives higher figures for the shared capitalist modes of compensation since we selected these firms on the basis of having these programs. Seventy-one percent of the workers in the firms report being paid by profit sharing, 21% report gain sharing, 64% report owning employer stock, and 22% report holding stock options. Overall, 86% of surveyed workers report having at least one of these programs. The size of the median profit-sharing and gain sharing stake are only somewhat higher among

the NBER companies than in the GSS (5.7% compared to 4.1%), as is employee ownership as a percent of pay (30.6% compared to 21.2%). The median stock option holding is \$75,000 (counting the estimated profit on both vested and unvested stock options if they were exercised on the day of the survey), representing 100% of annual pay and 29% of total wealth. These stakes should be large enough to detect effects on worker and firm outcomes, if such effects exist.

#### *Participation by type of job and company*

Where are shared capitalism plans most likely? Theory broadly suggests that they are most likely to be adopted in jobs and companies where performance is most sensitive to employee effort, or where the need for flexibility is greatest. Table 5 provides participation rates by basic job and company characteristics, using both the representative GSS dataset and our larger NBER dataset with more extensive measures.

The idea that shared capitalism is most likely in performance-sensitive jobs is supported by the finding that profit/gainsharing is most common among sales and management employees (48% and 56%, in col. 1), but the incidence remains substantial among all but service employees (19%). Managers are also the most likely to own company stock (27%, col. 2), but are not particularly more likely to hold stock options (14%, col. 3). The NBER data show high levels of participation in profit/gainsharing and employee ownership for all occupational groups, and low levels of stock options only among production workers and service employees (since the NBER stock option companies had few production or service employees, although this is not true for all stock option firms in the U.S.).

Those who have been at their jobs for less than one year are the least likely to participate in shared capitalism, partly reflecting probationary periods (e.g., employees only become eligible for an ESOP after 6 months or one year). The exception is that new employees are more likely than older employees to hold stock options in the NBER dataset, probably reflecting the use of stock options to lure workers into the jobs.

Not surprisingly, shared capitalism is more common among full-time employees in both the GSS and NBER data—such employees are more likely to be core employees whose commitment and effort are important to workplace performance. Also not surprisingly, union members are less likely than non-union employees to be part of profit/gainsharing plans (38% vs. 14%, in col. 1). Unions tend to resist profit sharing due to concerns that management can manipulate profit figures, and that such pay can create inequality among workers (Zalusky, 1990). It is striking, however, that union members in the GSS are actually slightly more likely than non-union employees to report owning company stock and holding stock options. While there have been some noteworthy examples of unions leading employee buyouts (which make up a very small percentage of firms with employee ownership), this employee ownership result more likely reflects the greater likelihood of retirement plans among union employees, many of which invest in company stock.

The free rider problem predicts that these plans will be most advantageous in small workplaces. Contrary to this prediction, larger establishments are more likely to have each of the types of shared capitalism (cols. 1-3). All three types of shared capitalism are most common in establishments with 1000 or more employees. These large establishment sizes strongly suggest that if these companies want to use shared capitalism to enhance performance, they need to take steps to counter the free rider problem.

Finally, shared capitalism is well-represented in every broad industry. Profit/gainsharing is most common in manufacturing, finance, and computer services (>50% in each), while employee ownership and stock options are most common in transportation/ communications/ utilities, finance, and computer services. The figures are consistently highest in computer services, reflecting the strong use of these incentives in new economy companies that rely heavily on human skill and ingenuity (Blasi, Kruse, and Bernstein, 2003). This is not consistent with the notion that shared rewards (especially employee ownership) will only work with professional groups such as lawyers or more specialized service firms (Hansmann, 1996).

#### *Work organization and shared capitalism*

How are these jobs structured, and what policies accompany shared capitalism plans? Table 6 uses the GSS and NBER data to explore how shared capitalism relates to several aspects of work organization and policies, shedding some light on the role these plans may play in companies. The figures in Table 6 are simple cross-tabulations—these relationships are analyzed using probit regressions in Table 7.

Consistent with the idea that shared capitalism can encourage cooperative teamwork, profit/gainsharing employees are more likely to work in teams, to be able to observe co-worker performance, and to have low levels of supervision (cols. 2, 6). The patterns are mixed, however, for employee-owners and stock option holders. The stock option holders are more likely to work in teams and to have low levels of supervision, but are no more likely (and may be less likely) to easily observe co-worker performance (cols. 4, 8). This may have to do with their concentration in high tech and computer industry firms. Employee-owners are not more likely to work in teams or to find it easy to observe co-workers, although they are more likely to have low

levels of supervision (cols. 3, 7). This suggests that profit/gainsharing may be the primary method for encouraging cooperative teamwork in day-to-day work, while employee ownership and stock options may affect other outcomes (e.g., identification, loyalty, turnover). This is a good example of how we can learn from the analysis of prevalence. It could possibly be the basis of an argument for combining short-term forms of shared capitalism like profit/gainsharing with longer horizon forms such as employee ownership and stock options. Whether these forms do have the effects suggested by the prevalence figures is the job of accompanying papers to sort out.

Participation in decisions may, as discussed earlier, be an important complement to shared capitalism programs in affecting workplace performance. Such participation can give employees the means to improve performance, while shared capitalism provides the incentives. The data in Table 6 generally support the idea of complementarity, with shared capitalism employees having higher levels on both the objective measure of participation (being in an employee involvement team) and the subjective measures (having say/influence in one's job, or participating with others in decisions affecting one's job). Profit/gainsharing is consistently linked to higher participation in both datasets, while employee ownership and stock option holding show mixed results in the GSS but strong associations with participation in the NBER data.

Training may be another important complementary policy, helping to develop worker skills and commitment that can be reinforced by shared capitalism. The GSS tabulations in Table 6 show that those with profit/gainsharing are more likely to report that they have the training opportunities they need. The shared capitalism employees in the NBER firms are more likely to have had employer-sponsored training in the past year, while profit/gainsharing

employees and employee-owners—but not stock option holders—are slightly more likely to frequently participate in job rotation.

Finally, job security may be an important complementary policy—it is hard to maintain worker commitment and cooperative teamwork if employees are afraid they will be laid off. Just over 90% of the GSS shared capitalism employees report they are unlikely to be laid off, which is higher than the 88% figure for the entire sample, with significantly greater job security for profit/gainsharers and employee-owners. All three groups of shared capitalism employees report significantly greater job security in the NBER data. In addition, each of these three groups reports a higher expected likelihood of working at the company for a long time, and of seeing their current jobs as part of a long-term career.

Table 7 analyzes these relationships using probit regressions to predict the likelihood of participating in each of the types of shared capitalism. The NBER regressions control for company fixed effects, thereby doing within-company comparisons of who participates. Most of the simple relationships described above are maintained when controlling for other variables. In particular, each of the plans is associated with greater participation in decisions and with employer-sponsored training in the past year. The ease of observing co-workers is a significant predictor of profit/gainsharing in both the GSS and NBER data, suggesting an important role for peer pressure. Closeness of supervision is a strong negative predictor in the NBER sample, and high job security is a strong positive predictor, indicating that freedom from supervision and job security may be complementary policies. Finally, the GSS regressions confirm that each of the types of shared capitalism are more likely in larger establishments (though the highest prevalence of profit/gainsharing is among establishments with 100-999 employees rather than the 1000+ group).

### *Risk aversion and shared capitalism*

Risk aversion is clearly an important consideration in shared capitalism. We measured risk aversion with several questions on the NBER company surveys, including a self-rating on a 0-10 scale, how much one would pay for a bet, whether one would take a job with stable pay versus one with risky but higher pay, and whether one regularly buys and sells stock on the stock market. These are strongly related and appear to measure a common risk propensity. Here we focus on the employee's self-rating, where 0 is "hate to take any kind of risk" and 10 is "love to take risks" (see question wording in appendix). The average score is 5.6, but there is wide dispersion: 20% of employees give scores of 3 or less, while, and 41% give themselves scores of 7 or more. Of course these employees are not representative of the overall workforce, since they have chosen to work in companies with shared capitalism and 85% are covered by some type of shared capitalism plan. We can nonetheless learn something about the role of risk aversion by examining its relation to plan participation and worker views of variable pay.

Risk aversion is related to plan participation, as shown in Table 8, but not always in expected ways. A surprising finding is that those who are eligible for profit sharing rate themselves as more risk averse (less risk loving) than those who are not eligible, both before and after controlling for demographic, pay, and wealth variables (cols. 3, 5). One explanation of this is that profit sharing may be less risky than sinking your savings in your company stock under certain circumstances, such as where you feel you are paid at the market rate for wages and there is no wage substitution. Eligibility for gainsharing and individual bonuses, in contrast, is associated with greater risk loving. Like profit sharers, stock option holders appear slightly more risk averse after controlling for demographic, pay, and wealth variables.

Employee owners appear to like risk more on average, but this varies by type of employee ownership. Those owning stock through 401(k) plans or open market purchases are clearly more risk loving than others (Table 8, col. 6), undoubtedly reflecting the self-selection of risk lovers buying stock or allocating 401(k) accounts toward company stock. ESOP members, however, are more risk averse than non-ESOP members in a simple comparison, and risk loving is not a significant predictor of ESOP membership, or of owning stock through an ESPP or exercised stock options, after controlling for demographic, pay, and wealth variables.

Does risk aversion affect employees' views of variable pay? Most of the NBER workers would prefer to be paid in part with profit sharing, company stock, or stock options, as shown in Table 9. Remarkably, even two-thirds (66%) of the most risk-averse employees would prefer this, while 86% of the least risk-averse prefer this. Very similar results are obtained by a question asking about the employee's next pay increase, where again two-thirds of the most risk-averse would prefer at least some of the increase in shared capitalism pay.

About three-fourths of employees would prefer a new bonus program to be based at least in part on their individual performance, where the line of sight is clearly greatest. Almost three-fifths (58%), however, prefer that it also be based on company profits or performance, while only about one-third (37%) prefer that it be based in part on workgroup performance. It may be that the greater line of sight for workgroup bonuses is trumped by their greater perceived risk, as workgroup performance is probably seen as more variable than overall company performance (which averages across all workgroups in the company). Those with low risk aversion are more likely to choose individual- or workgroup-based bonuses, while risk aversion is not related to the desire for company-based bonuses.

Most employees would not vote to sell the company to an outside investor for a 50%



premium, but would do so for a 100% premium. This likelihood is lowest among those with high risk aversion, reflecting greater concern about job loss if the company were sold. While the concern about job loss is the most common reason for refusing to sell the company, about one-third of employees say they would refuse to sell because they like owning company stock (33%), and a similar number say they would refuse because they like the sense of community from employee ownership (37%). A lot more research is needed on this broader issue of employee ownership and workers' corporate governance rights since governance has always been seen by corporate finance experts as being partly about managing risk. (It is standard in investment banking to provide more governance rights when risk is higher.)

Finally, most workers say that they would be willing to accept some degree of lower regular pay in exchange for the opportunity to participate in a company-based bonus system averaging 10% of their pay. This willingness varies substantially, however: two-fifths (41%) would not accept lower pay, while one-sixth (15%) would accept less than 5% lower pay, one-fourth (27%) would accept 5% lower pay, and one-sixth (17%) would accept more than 5% lower pay. This is predictably related to risk aversion: a majority of the most risk averse would not accept any lower regular pay (55%), compared to only a third of the least risk averse (33%).

The NBER employees of course may not be representative of the overall workforce—in particular, they may have joined these companies because they are less risk averse and more favourably inclined toward shared capitalism than most workers. The data are broadly consistent, however, with existing representative surveys. Over half (57%) of workers in a 1986 BNA/Bruskin poll said they would trade their next pay increase for a share in company, while 44% said this in a 1989 EBRI/Gallup poll (summarized in Kruse and Blasi, 1999). Workers in general report that, if they had company stock, they would be less likely than the NBER workers

to vote to sell the company even for a substantial premium.<sup>12</sup> This indicates either a more rosy view of the advantages of employee ownership among the workforce in general, or more concern about an outside investor laying off workers. The public surveys do show positive views of employee ownership: strong majorities think employee-owners will work harder, have higher commitment, and be more concerned with the long-term success of the company. Participation in decisions, however, appears to be very important: most employees would prefer participation in decisions to having a share of ownership, and say that if they owned stock, they would not let management vote their shares on major corporate issues (summarized in Kruse and Blasi, 1999).

Overall, as expected, risk aversion is a key factor for shared capitalism: it appears most likely to steer workers away from positions providing gainsharing or individual bonuses, and to discourage workers from allocating 401(k) assets toward company stock or purchasing company stock on the open market. Greater risk aversion is associated with less positive views of shared capitalism pay, but even among the most risk-averse employees, two-thirds says they prefer some shared capitalism as part of their pay package.

## **Conclusion**

Contrary to concerns about the free rider problem and worker risk aversion, a substantial number of workers participate in shared capitalism plans and are open to more shared capitalism in their firms. Nationally-representative surveys of private-sector employees and firms show that:

- One-fourth to one-third of employees are eligible for profit sharing

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12 The 41% who would sell for a 50% premium is somewhat higher than the 23% figure for all employees from a 1989 EBRI/Gallup poll, and the 64% who would vote to sell for a 100% premium is much higher than the 36% figure for all employees from a 1994 EBRI/Gallup poll (summarized in Kruse and Blasi, 1999).

- About one-fourth of employees are eligible for gainsharing
- About one-fifth of employees own stock in their companies
- Between one-twelfth and one-eighth of employees are eligible for stock options or hold stock options
- Overall, between one-third and one-half of employees participate in some form of shared capitalism

Why do firms use these plans, and why do workers accept them? This paper broadly reviews the major reasons for adopting these plans and some of the research results. The two major categories of reasons for adopting these plans are productivity-related and flexibility-related reasons. Prior studies find that these plans tend to be associated with better company performance on average, but there is wide dispersion in outcomes. The goal of accompanying papers using these data is to explain this dispersion and understand why, where, and how shared capitalism does or does not work. Limited evidence also shows that these plans tend to be associated with greater job stability, firm survival, and employee compensation—the latter finding helping to explain why employees express positive attitudes toward shared capitalism plans.

The dispersion of results indicates that there is still much to learn about how these plans can play a positive role in workplaces. Research has not nailed down the complementary role that other human resource policies play in affecting worker attitudes and firm performance. To help address the variety of questions surrounding shared capitalism, this paper has introduced the NBER database of over 40,000 employee surveys in 14 firms with different combinations of profit sharing, gainsharing, employee ownership, and stock options.

Both the NBER dataset and the nationally-representative GSS dataset indicate that while shared capitalism exists broadly throughout the economy, it is not distributed randomly across firms and employees. One important finding is that shared capitalism plans are more likely in larger establishments, where free riding is likely to be the highest. To counter free riding, firms may combine shared capitalism with other policies to create a cooperative culture. An initial exploration of work organization and policies supports this idea: shared capitalism employees are more likely to participate in workplace decision-making and training programs, and to have high job security and low levels of supervision. Within-company comparisons show that they are also more likely to work in teams, and profit/gainsharing employees can more easily observe co-worker performance, creating the conditions for cooperative teamwork. An examination of risk aversion in the NBER dataset shows that, as expected, risk aversion is linked to lower participation in several types of plans and less positive views of shared capitalism, but even among the most risk averse employees, two-thirds prefer to have some form of shared capitalism in their pay package.

So risk aversion does not appear to be an insurmountable barrier and there appear to be conditions for productive cooperation—does this in fact occur? What other effects does shared capitalism have on both firms and employees? These relationships are probed and tested in the accompanying papers, using the GSS and NBER data to explore a wide variety of outcomes for both workers and firms.

Over the last few decades many economists have said about various shared capitalism practices: “If it makes so much sense then why do we not observe more firms and employees doing it?” The response put forward by these prevalence figures is: “It appears to have spread throughout the economy, so what does that mean?” This paper has examined some of the

linkages between shared capitalism practices and other employment practices. These linkages raise another series of questions: Are managers in companies making the right choices about how to achieve optimal performance from shared capitalist practices, or are there patterns and combinations that work better and worse? In other words, is what we observe optimal because that is the shared capitalist arrangement that has emerged in the laboratory of real life? Or, should managers consider making substantive changes to how they organize shared capitalism because it can be done well or poorly? One needs to beware of looking at these incidence patterns with a “deterministic” frame of mind. It should not be immediately concluded that just because there are certain types of shared capitalist practices (such as company stock in 401k plans as a lone form of shared capitalism) or combinations of these practices with human resource policies (such as a low incidence of self-directed work teams with employee ownership) that somehow managers have told us these are the best workable combinations. Firms and managers may have it wrong in some cases and right in others. These data will be used to explore the answers to these questions.

This NBER research program continues a long tradition of examination of shared capitalism by economists. The phenomenon was seen as being so important that John Bates Clark, a founder of the American Economic Association, wrote a book in the 1880's calling for the combination of profit-sharing and employee ownership in companies to improve business performance by motivating worker involvement (Clark, 1886). With his encouragement, the first volume of the journal of the American Economics Association included an article surveying shared capitalism in companies in the Northeast (Bemis, 1886) and in the Midwestern city of Minneapolis (Shaw, 1886). Given that almost half of U.S. employees currently report participating in some form of shared capitalism, it is time to take a closer look.

## APPENDIX: GSS and NBER question wordings

### COMPENSATION

**Profit sharing** (GSS and NBER): "In your job are you eligible for any type of performance-based pay, such as individual or group bonuses, or any type of profit-sharing? What does the size of these performance-based payments depend on? Company profits or performance" (0=no, 1=yes)

**Profit sharing as % of pay** (GSS and NBER): If "yes" to profit sharing, answer to "What was the approximate total dollar value of the payment(s) you received [in the most recent year of bonuses]?" divided by basepay+overtime, otherwise 0.

**Gainsharing** (GSS and NBER): "In your job are you eligible for any type of performance-based pay, such as individual or group bonuses, or any type of profit-sharing? What does the size of these performance-based payments depend on? Workgroup or department performance" (0=no, 1=yes)

**Gainsharing as % of pay** (GSS and NBER): If "yes" to gainsharing, answer to "What was the approximate total dollar value of the payment(s) you received [in the most recent year of bonuses]?" divided by basepay+overtime, otherwise 0.

**Individual bonus** (GSS and NBER): "In your job are you eligible for any type of performance-based pay, such as individual or group bonuses, or any type of profit-sharing? What does the size of these performance-based payments depend on? Individual performance" (0=no, 1=yes)

**Individual bonus as % of pay** (GSS and NBER): If "yes" to individual bonus, answer to "What was the approximate total dollar value of the payment(s) you received [in the most recent year of bonuses]?" divided by basepay+overtime, otherwise 0.

**Own employer stock** (GSS): "Do you own any shares of stock in the company where you now work, either directly or through some type of retirement or stock plan?" (0=no, 1=yes)

**Employer stock as % of pay** (GSS): If "yes" to "hold employer stock," answer to "Please give a general estimate of how much cash you would get if all this stock were sold today?" divided by annual earnings, otherwise 0

**Own employer stock** (NBER): Any employer stock held through ESOP, Employee Stock Purchase Plan, 401(k), exercised stock options, or open market purchases (0=no, 1=yes)

**Employer stock as % of pay** (NBER): If "yes" to "Hold employer stock," the sum of answers to questions about value of stock held in different plans, divided by

basepay+overtime, otherwise 0

**Hold stock options** (GSS and NBER): "Do you currently hold any stock options in your company (vested or unvested)?" (0=no, 1=yes)

**Stock options as % of pay** (NBER): If "yes" to "Hold stock options," the sum of answers to questions about value of vested and unvested stock, divided by basepay+overtime, otherwise 0

## WORK ORGANIZATION

**Work as part of team** (GSS and NBER): "In your job, do you normally work as part of a team or group, or do you work mostly on your own?"

**Ease of observing co-worker performance** (GSS and NBER): "In your job how easy is it for you to see whether your co-workers are working well or poorly? Please rate on a scale of 0 to 10, where 0 equals not at all easy, and 10 equals very easy."

**Closeness of supervision** (NBER): "Are you closely supervised, or do you work fairly independently of close supervision?" (0-10 scale, 0=closely supervised, 10=independent of close supervision)

**In EI team** (NBER): "Some companies have organized workplace decision-making in ways to get more employee input and involvement. Are you personally involved in any team, committee or task force that addresses issues such as product quality, cost cutting, productivity, health and safety, or other workplace issues?" (0=no, 1=yes)

**Lot of influence in job decisions** (NBER): "How much involvement and direct influence do YOU have in: Deciding HOW to do your job and organize the work" (coded 1 if worker responded 4="a lot" on 1-4 scale, and 0 otherwise)

**Lot of influence in setting dept. goals** (NBER): "How much involvement and direct influence do YOU have in: Setting GOALS for your work group or department" (coded 1 if worker responded 4="a lot" on 1-4 scale, and 0 otherwise)

**Lot of influence in company decisions** (NBER): "How much involvement and direct influence do YOU have in: Overall company decisions" (coded 1 if worker responded 4="a lot" on 1-4 scale, and 0 otherwise)

**Lot of say on job** (GSS): "I have a lot of say about what happens on my job" (coded 1 if worker responded "strongly agree" on 1-4 scale, and 0 otherwise)

**Often make decisions with others** (GSS): "In your job, how often do you take part with others in making decisions that affect you?" (coded 1 if worker responded "often" on 1-4 scale, and 0 otherwise)

**Often help set way things done on job** (GSS): "How often do you participate with others in helping set the way things are done on your job?" (coded 1 if worker responded "often" on 1-4 scale, and 0 otherwise)

**Participation index** (GSS): Average of above three items (alpha=.737)

**Have training opportunities I need** (GSS): "I have the training opportunities I need to perform my job safely and competently" (coded 1 if worker responded "very true" on 1-4 scale, and 0 otherwise)

**Formal training** (NBER): "In the last 12 months have you received any formal training from your current employer, such as in classes or seminars sponsored by the employer?" (0=no, 1=yes)

**Frequently participate in job rotation** (NBER): "How frequently do you participate in a job rotation or cross-training program where you work or are trained on a job with different duties than your regular job?" (coded 1 if worker responded "frequently", and 0 otherwise)

**High job security** (GSS and NBER): "Thinking about the next twelve months, how likely do you think it is that you will lose your job or be laid off?" (coded 1 if "not at all likely" or "not very likely", and 0 otherwise)

**See myself working here a long time** (NBER): "Which ONE of the following statements best describes how you think of your current employer? 1=I see myself working here for the foreseeable future (a long time), 0=I do not see myself working here very long."

**Current job is part of long-time career** (NBER): "Thinking about your current job (rather than your employer), do you look upon it as part of your long term career, or a position that is not part of your long term career?" (1=yes, 0=no)

## **RISK AVERSION AND PREFERENCES OVER PAY**

**Risk loving** (NBER): "Some people like to take risks and others dislike taking risks. Where would you place yourself on a scale of how much you like or dislike taking risks, where 0 is hating to take any kind of risk and 10 is loving to take risks?"

**Risk aversion** (NBER): High risk aversion=0 to 3 on risk loving scale, medium risk aversion=4 to 6 on risk loving scale, and low risk aversion=7 to 10 on risk loving scale.

**Type of pay preferred** (NBER): "If it was your choice and yours alone, would you prefer that you be paid: 0=All fixed wage or salary, with no profit-sharing, company



stock, or stock options; 1=Paid in part with a variable amount dependent on company performance, through profit-sharing, company stock, or stock options"

**Preference for new bonus plan (NBER):** If your employer announced a new compensation plan that would give up to 10% of pay in the form of bonuses, would you like this pay to be based on (mark all that apply): Your individual performance, Your workgroup performance, Company profits or performance"

**Would vote to sell company (NBER):** "If you owned stock in a company where you worked and an outside investor offered to buy the company for 50% more than the market value of the stock, would you vote to sell the company?"

**Lower pay accepted for company-based bonus (NBER):** "Imagine that you work for a company that offers you the opportunity to participate in a bonus program. Over time, the bonus will pay you on average 10% of your regular pay, but it could be higher or lower in any given year depending on the company's performance that year. How much less regular pay would you be willing to accept in order to get the possible performance bonus?"

**Preference for next pay increase (NBER):** "For your next pay increase, would you prefer that it come in the form of: 1=All fixed wages, with no profit sharing, company stock, or stock options, 2=Split between fixed wages and profit sharing, company stock, or stock options, 3=All in the form of profit sharing, company stock, or stock options"

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**Table 1 – Current Prevalence of Shared Capitalism Plans**

	Source:	GSS	GSS	NOS
	Year:	2002	2006	2002
	Type of data:	Employee survey (1)	Employee survey (2)	Firm survey (3)
<b>PROFIT SHARING</b>				
<b>Percent of employees covered</b>				
Eligible for bonuses based on company performance		34%	38%	46%
Received bonus last year based on company performance		24%	30%	
<b>Percent of firms with plans</b>				
Any employees eligible for bonuses based on company performance				62%
<b>GAINSHARING</b>				
<b>Percent of employees covered</b>				
Eligible for bonuses based on department or team performance		23%	27%	23%
Received bonus last year based on department or team performance		17%	21%	
<b>Percent of firms with plans</b>				
Any employees eligible for bonuses based on department or team performance				35%
<b>EMPLOYEE OWNERSHIP</b>				
<b>Percent of employees covered</b>				
Own company stock		21%	18%	16%
<b>Percent of firms</b>				
Any employees own company stock				33%
<b>STOCK OPTIONS</b>				
<b>Percent of employees covered</b>				
Hold stock options			9%	
Granted stock options last year			5%	
<b>Percent of firms</b>				
Any employees granted stock options last year				14%
<b>COMBINATIONS</b>				
Any of above		43%	47%	
Just one form:				
Rec'd profit- or gainsharing bonus last year		14.6%	21.2%	
Hold company stock		5.0%	3.8%	
Hold stock options		0.7%	0.7%	
Two forms:				
Hold co. stock and rec'd profit- or gainsharing bonus last year		3.7%	5.3%	
Hold co. stock and stock options		6.1%	3.2%	
Hold stock options and rec'd profit- or gainsharing bonus last year		0.4%	0.6%	
All three forms		6.1%	4.6%	
Sample size		1257	1173	312



**Table 2: Current Prevalence of Employee Participation in Decisions**

	Source:	GSS	GSS	NOS
	Year:	2002	2006	2002
	Type of data:	Employee survey (1)	Employee survey (2)	Firm survey (3)
<b>Percentage of employees covered</b>				
Employee involvement team				
Self-directed team			30%	17%
Quality circles or employee involvement committees			33%	17%
Often participate with others in making decisions that affect job		42%	38%	
Often participate with others in helping set how things are done on job		45%	42%	
<b>Percentage of firms with plans</b>				
Self-managed teams for non-managers				39%
Quality circles or employee involvement committees				42%
Worker safety committees				49%
Sample size		1257	1173	312

GSS=General Social Survey (from National Opinion Research Center, analyzed by authors)(all private sector)

NOS=National Organizations Survey (from National Opinion Research Center, analyzed by authors)(all private sector)

**Table 3: NBER Survey Companies**

	Broad-based profit sharing	Broad-based employee ownership	Broad-based stock options
<b>Manufacturing</b>			
<1000 employees			
Company 1	Yes	ESOP	No
Company 2	Yes	ESOP	No
Company 3	Yes	ESOP	No
Company 4	Yes	ESOP and ESPP	Yes
1,000-9,999 employees			
Company 5	Yes	ESOP	No
Company 6	Yes	401(k) ESOP	No
Company 7	Yes	ESOP	No
10,000+ employees			
Company 8	Yes	401(k) w/co. stock	No
<b>Service/financial</b>			
<1000 employees			
Company 9	No	ESOP	No
1,000-9,999 employees			
Company 10	No	ESOP	No
Company 11	No	ESPP and 401(k) w/co. stock	Yes
10,000+ employees			
Company 12	Yes	ESPP and 401(k) w/co. stock	Yes
<b>Hi-tech/Internet</b>			
<1000 employees			
Company 13	Yes	ESPP	Yes
10,000+ employees			
Company 14	Yes	ESPP	Yes
<b>Total companies with plans</b>	11	14	5

**TABLE 4: Shared capitalism types and intensities in GSS and NBER datasets**

	General Social Survey 2002-2006	NBER company dataset	Sample sizes	
			GSS	NBER
Bonus eligibility				
Profit sharing	35.9%	71.3%	2386	41018
Gainsharing	24.9%	20.7%	2386	41023
Size of most recent bonus, if eligible for any				
Mean dollar value	\$6,265	\$11,329	693	26113
Median dollar value	\$1,500	\$2,000	693	26113
Mean % of pay	8.9%	12.1%	645	22019
Median % of pay	4.6%	5.7%	645	22019
Employee ownership				
Own employer stock in any form	19.4%	64.0%	2406	41206
Own employer stock through:				
Employee Stock Ownership Plan		8.1%		41109
Employee Stock Purchase Plan		17.6%		40990
401(k) plan		33.5%		40885
Exercising options and keeping stock		5.0%		41032
Open market purchase		7.3%		41145
Value of employer stock, if own stock				
Dollar value: Mean	\$63,130	\$60,078	318	25447
Median	\$10,000	\$14,375	318	25447
% of pay: Mean	81.7%	65.0%	302	22715
Median	23.0%	30.6%	302	22715
% of wealth: Mean		19.6%		23141
Median		10.0%		23141
Stock options				
Currently hold stock options	11.3%	21.9%	2392	41166
Ever granted stock options		22.3%		41166
Granted stock options last year		20.4%		41158
Value of stock options, if hold options:				
Mean dollar value of unvested options		\$112,882		8390
Mean dollar value of vested options		\$143,117		8497
Total dollar value: Mean		\$249,901		8656
Median		\$75,000		8656
% of pay: Mean		183.7%		8403
Median		100.0%		8403
% of wealth: Mean		60.3%		8104
Median		28.6%		8104
Any of above programs	44.9%	85.7%	2430	41206

**Table 5: Participation in Shared Capitalism by Job and Company Characteristics**

	GSS, 2002-2006			NBER			Sample sizes	
	Percent of those at left who:			Percent of those at left who:			GSS (7)	NBER (8)
	Are eligible for profit- or gainsharing (1)	Own co. stock (2)	Hold stock options (3)	Are eligible for profit- or gainsharing (4)	Own co. stock (5)	Hold stock options (6)		
Overall	37.2%	19.4%	11.3%	76.4%	64.0%	21.9%	2,430	41,206
Occupation								
Production	32.8%	17.2%	9.2%	72.1%	51.6%	1.8%	638	18,227
Admin. support	35.8%	23.5%	15.5%	68.5%	63.8%	18.1%	340	2,246
Professional/technical	36.7%	21.9%	13.7%	82.9%	78.8%	44.1%	443	11,582
Sales	47.6%	21.5%	12.9%	64.8%	75.7%	49.6%	299	2,220
Service	19.2%	6.5%	4.1%	71.4%	50.8%	0.0%	322	1,105
Management	55.8%	26.5%	13.6%	90.6%	78.6%	42.3%	368	4,836
Lower mgt.				88.4%	83.7%	60.3%		4,214
Middle mgt.				88.9%	79.4%	48.3%		2,946
Upper mgt.				90.4%	74.4%	46.8%		856
Tenure								
1 year or less	30.5%	7.5%	4.4%	62.3%	51.2%	33.1%	775	6,029
>1, <=5 years	39.7%	20.3%	11.6%	75.2%	61.1%	24.5%	828	10,602
More than 5 years	41.8%	30.3%	17.8%	80.8%	69.1%	18.2%	805	23,639
Hours of work								
Part-time (<35)	20.7%	8.2%	4.9%	54.8%	45.9%	13.1%	447	588
Full-time (35+)	40.9%	22.0%	12.7%	76.7%	64.2%	21.6%	1,983	39,625
Union member								
No	38.0%	19.0%	10.9%	80.9%	70.3%	25.2%	1,455	35,547
Yes	14.0%	24.2%	12.4%	46.7%	22.4%	0.7%	161	5,001
Establishment size								
1 to 9	26.0%	8.9%	4.2%				505	
10 to 49	35.6%	12.3%	7.1%				604	
50 to 99	40.5%	20.3%	13.8%				329	
100 to 999	44.1%	26.9%	16.0%				656	
1000+	44.8%	36.8%	20.1%				300	
Industry								
Ag./mining/constr.	22.3%	11.1%	5.2%				183	
Manufacturing	52.0%	29.1%	18.3%				399	
Trans./comms./utilities	43.8%	37.9%	23.7%				214	
Wholesale/retail	32.7%	14.0%	8.3%				553	
Finance/insurance	55.0%	35.5%	18.8%				198	
Computer services	65.2%	43.4%	40.3%				52	
Other services	28.6%	9.9%	4.0%				771	

**Table 6: Work Organization by Type of Shared Capitalism**

	GSS (2002-2006)				NBER			
	All employees (1)	Eligible for profit- or gainsharing (2)	Own co. stock (3)	Hold stock options (4)	All employees (5)	Eligible for profit- or gainsharing (6)	Own co. stock (7)	Hold stock options (8)
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Work as part of team	57.8%	60.8% **	60.4%	64.8% **	59.3%	60.8% **	57.9% **	64.7% **
Ease of observing co-worker performance								
Hard	15.5%	12.5% **	16.1%	11.9%	18.3%	17.8% **	19.2% **	26.3% **
Medium	14.4%	14.1%	13.5%	16.2%	32.7%	33.3% **	33.8% **	37.7% **
Easy	70.1%	73.3% **	70.4%	72.0%	49.0%	48.9%	47.1% **	36.0% **
Closeness of supervision								
Low supervision					47.5%	50.5% **	53.9% **	66.6% **
Medium supervision					33.7%	33.1% **	32.0% **	24.8% **
High supervision					18.7%	16.4% **	14.1% **	8.7% **
Participation in decisions								
Employee involvement team					34.7%	37.9% **	37.7% **	37.7% **
Lot of involvement in job decisions					50.5%	53.5% **	56.5% **	71.2% **
Lot of involvement in setting dept. goals					21.3%	22.6% **	23.8% **	33.2% **
Lot of involvement in co. decisions								
A lot of say about what happens on job	24.6%	30.8% **	28.4% *	28.7%				
Often help set way things are done on job	39.7%	46.8% **	47.5% **	49.0% **				
Often make decisions with others	43.5%	50.1% **	49.4% **	52.1% **				
Training/multi-skilling								
Have training opportunities I need								
Formal training in past year	60.3%	62.7% *	61.6%	60.6%	56.4%	59.2% **	61.8% **	76.3% **
Frequently participate in job rotation					11.2%	11.4% *	11.5% *	6.2% *
High job security	88.3%	92.7% **	91.7% *	91.3%	84.3%	86.9% **	87.8% **	92.0% **
See myself working here a long time					81.7%	83.6% **	84.8% **	88.3% **
Current job is part of long-time career					76.2%	78.0% **	79.1% **	83.5% **
Sample size	2430	908	470	275	41206	31351	26390	9019

\* Difference between those who are and are not covered by this plan is significant at  $p < .10$  \*\*  $p < .05$

**Table 7: Predicting Participation in Shared Capitalism**

Figures are derivatives based on probit regressions, representing effect of one-unit change in independent variable on probability of dependent variable.

	GSS						NBER											
	Eligible for profit- or gainsharing (1)		Own co. stock (2)		Hold stock options (3)		Eligible for profit- or gainsharing (4)		Own co. stock (5)		Hold stock options (6)							
Occupation																		
Production (excl.)																		
Admin. support	0.058	(0.041)	0.080	(0.036)	**	0.083	(0.031)	***	-0.010	(0.010)	0.023	(0.011)	**	0.044	(0.017)	***		
Prof./technical	0.041	(0.043)	0.075	(0.036)	**	0.059	(0.027)	**	0.019	(0.006)	***	0.064	(0.006)	***	0.141	(0.011)	***	
Sales	0.214	(0.044)	***	0.096	(0.039)	***	0.074	(0.032)	***	-0.240	(0.014)	***	0.035	(0.012)	***	0.147	(0.022)	***
Service	-0.056	(0.045)		-0.031	(0.036)		0.012	(0.031)		-0.022	(0.013)	*	-0.016	(0.015)				
Management	0.224	(0.041)	***	0.099	(0.036)	***	0.049	(0.026)	**									
Lower mgt.										0.033	(0.008)	***	0.039	(0.010)	***	0.146	(0.018)	***
Middle mgt.										0.062	(0.008)	***	0.072	(0.010)	***	0.473	(0.020)	***
Upper mgt.										0.085	(0.012)	***	0.045	(0.017)	**	0.741	(0.018)	***
Tenure (years)	0.000	(0.002)		0.006	(0.001)	***	0.002	(0.001)	***	0.004	(0.000)	***	0.009	(0.000)	***	0.005	(0.000)	***
Full-time	0.144	(0.029)	***	0.089	(0.019)	***	0.036	(0.015)	**	0.000	(0.000)	***	0.000	(0.000)	***	0.000	(0.000)	
Union member	^			^			^			-0.343	(0.010)	***	-0.390	(0.010)	***	-0.100	(0.007)	***
Work as part of team	0.006	(0.024)		0.003	(0.018)		0.020	(0.012)		^			^			^		
Ease of observing co-worker	0.007	(0.004)	**	-0.001	(0.003)		0.001	(0.002)		0.004	(0.001)	***	0.002	(0.001)	*	-0.002	(0.001)	
Closeness of supervision										-0.004	(0.001)	***	-0.011	(0.001)	***	-0.009	(0.001)	***
Participation index	0.114	(0.018)	***	0.051	(0.013)	***	0.030	(0.009)	***									
Employee involvement team										0.054	(0.004)	***	0.041	(0.005)	***	0.012	(0.007)	*
Formal training in past year										0.039	(0.005)	***	0.039	(0.005)	***	0.027	(0.006)	***
Have needed training opps.	0.015	(0.024)		-0.004	(0.018)		-0.004	(0.013)										
High job security	^			^			^			0.083	(0.007)	***	0.061	(0.007)	***	0.053	(0.008)	***
(continued)																		

Table 7 (continued)

	GSS						NBER		
	Eligible for profit- or gainsharing		Own co. stock		Hold stock options		Eligible for profit- or gainsharing	Own co. stock	Hold stock options
	(1)		(2)		(3)		(4)	(5)	(6)
Establishment size									
1 to 9 (excl.)									
10 to 49	0.109	(0.036) ***	0.034	(0.031)	0.031	(0.024)			
50 to 99	0.164	(0.042) ***	0.117	(0.039) ***	0.109	(0.034) ***			
100 to 999	0.174	(0.036) ***	0.171	(0.034) ***	0.117	(0.028) ***			
1000+	0.155	(0.045) ***	0.253	(0.045) ***	0.142	(0.039) ***			
Industry									
Ag./mining/constr.	-0.235	(0.035) ***	-0.072	(0.027) **	-0.053	(0.015) ***			
Manufacturing (excl.)									
Trans./comms./utilities	-0.075	(0.041) *	0.081	(0.037) **	0.038	(0.026)			
Wholesale/retail	-0.190	(0.034) ***	-0.058	(0.025) **	-0.042	(0.016) **			
Finance/insurance	-0.029	(0.048)	0.070	(0.042) *	0.007	(0.024)			
Computer services	0.090	(0.090)	0.101	(0.076)	0.135	(0.071) ***			
Other services	-0.208	(0.034) ***	-0.128	(0.022) ***	-0.098	(0.014) ***			
Company fixed effects							Yes	Yes	Yes
n	2283		2275		2264		34316	34790	30301
Pseudo-R-sq.	0.12		0.165		0.156		0.194	0.211	0.815

\* p&lt;.10 \*\* p&lt;.05 \*\*\* p&lt;.01

^ These variables were available only for a limited number of observations. When they are included, the significant relationships are:

Union membership in GSS: negative and significant only in column 1

High job security in GSS: positive and significant only in column 1

Work as part of team in NBER: positive and significant in columns 4-6

**Table 8: Risk Aversion and Participation in Variable Pay**

Based on NBER data

	Risk-loving mean values (0-10 scale)				Risk loving as predictor of plan at left^			
	Participate in plan at left		Simple difference (3)	(s.e.) (4)	Coeff. (5)	(s.e.) (6)		
	Yes (1)	No (2)						
Profit sharing eligibility	5.57	5.73	-0.16	(0.03)	***	-0.009	(0.001)	***
Gainsharing eligibility	6.02	5.51	0.51	(0.03)	***	0.004	(0.001)	***
Individual bonus eligibility	6.01	5.46	0.55	(0.03)	***	0.003	(0.001)	***
Hold stock options	6.12	5.47	0.65	(0.03)	***	-0.001	(0.001)	*
Own co. stock	5.71	5.45	0.26	(0.03)	***	0.003	(0.001)	**
Own employer stock through:								
Employee Stock Ownership Plan	5.32	5.65	-0.33	(0.04)	***	0.000	(0.001)	
Employee Stock Purchase Plan	6.16	5.51	0.65	(0.03)	***	0.000	(0.000)	
401(k) plan	5.57	5.65	-0.08	(0.03)	***	0.005	(0.001)	***
Exercising options and keeping stock	6.11	5.59	0.52	(0.06)	***	0.000	(0.000)	
Open market purchase	6.49	5.55	0.94	(0.05)	***	0.003	(0.000)	***

\* p<.10 \*\* p<.05 \*\*\* p<.01

^ Controlling for age, gender, marital status (2 dummies), family size, college graduate, graduate degree, number of kids, race (4 dummies), disability status, ln(fixed pay), ln(wealth), and 21 country dummies.



**Table 9: Worker Views of Performance-based Pay**

	Overall	Risk aversion			
		High	Medium	Low	
Type of pay preferred					
All fixed wage or salary	22%	34%	25%	14%	***
Paid in part with profit sharing, stock, or stock options	78%	66%	75%	86%	***
	n 13199	2090	5069	5953	
Preference for next pay increase					
All fixed pay	27%	33%	28%	23%	***
Split between fixed wages and profit sharing, stock, or options	60%	55%	61%	62%	***
All profit sharing, stock, and options	13%	12%	11%	15%	***
	n 25869	5318	9805	10330	
Would prefer new bonus plan to be based on (can pick more than one)					
Your individual performance	77%	71%	77%	79%	***
Your workgroup performance	37%	31%	36%	40%	***
Company profits or performance	58%	57%	59%	59%	
	n 13379	2144	5133	6002	
Would vote to sell company if outside investor offered:					
50% premium	41%	36%	39%	45%	***
100% premium	64%	57%	61%	68%	***
Reasons for not selling for 50% premium:					
Like owning company stock	33%	35%	33%	32%	
Like sense of community from employee ownership	37%	37%	36%	39%	
Concerned about investor laying off employees	70%	75%	73%	65%	***
Offer might mean company is worth more	39%	33%	38%	44%	***
	n 12938	2059	4931	5854	
Lower pay accepted for company-based bonus averaging 10%					
Mean percent lower regular pay accepted	3.31	2.28	3.15	3.91	***
(std. dev.)	(3.56)	(3.21)	(3.51)	(3.63)	
0% lower pay accepted	41%	55%	43%	33%	***
Between 0% and 5% lower pay accepted	15%	15%	15%	15%	
5% lower pay accepted	27%	19%	26%	31%	***
More than 5% lower pay accepted	17%	11%	16%	21%	***
	n 29426	5535	11141	12480	

\* Significant difference among risk groups at p<.10 \*\* p<.05 \*\*\* p<.01

Appendix Table A1 – Prior Evidence on Prevalence of Shared Capitalism Plans

	Source:	WRPS	NLSY	EBRI	NES	NES	Form 5500	NCS	NCS	NCS
	Year:	1994/95	1993	1994	1994	1997	1998	2003	2005	2007
	Type of data:	Employee survey (1)	Employee survey (2)	Employee survey (3)	Firm survey (4)	Firm survey (5)	Admin. data (6)	Firm survey (7)	Firm survey (8)	Firm survey (9)
<b>PROFIT SHARING</b>										
<b>Percent of employees covered</b>										
Receive any bonuses based on profit sharing		30%								
Employer makes profit sharing available			35%							
Deferred profit-sharing plan								21%	30%	
Cash profit-sharing plan								5%		5%
<b>GAINSHARING</b>										
<b>Percent of employees covered</b>										
Receive any bonuses based on meeting workplace goals		27%								
<b>EMPLOYEE OWNERSHIP</b>										
<b>Percent of employees covered</b>										
Participate in an employee stock ownership or ESOP plan		24%								
Own company stock				21%						
ESOP participant							6%	5%	4%	
Participant in non-ESOP 401(k) w/employer stock <sup>^</sup>							11%			
Participant in other defined con. plan w/employer stock <sup>^</sup>							1%			
Eligible for other defined con. plan w/employer stock <sup>^</sup>								20%		
Participant in savings/thrift plan w/employer stock <sup>^</sup>									16%	
<b>STOCK OPTIONS</b>										
<b>Percent of employees covered</b>										
Eligible to receive stock options								8%		8%
<b>COMBINATIONS</b>										
<b>Percent of employees covered</b>										
Any of above		57%								
<b>Percent of firms</b>										
Profit sharing, bonus, or gainsharing plan					75%					
Stock options or profit sharing						41%				
Sample size		2408		1000	2867	2963	50769	3030	3227	8256

<sup>^</sup> At least some employees in these plans own company stock, but the employee him/herself might not own stock (e.g., if s/he declined

to allocate some contributions to employer stock in a 401(k))

WRPS=Worker Representation and Participation Survey (Freeman and Rogers 1999); NLSY=National Longitudinal Survey of Youth (Kruse 1998);

EBRI=Employee Benefits Research Institute (EBRI/Gallup 1994); NES=National Employer Survey (Kruse and Blasi 2000); Form 5500=Form 5500 pension dataset (Kruse 2002); NCS=National Compensation Survey (BLS 2005, 2007, 2008)

**Appendix Table A2: Prior Evidence on Prevalence of Employee Participation in Decisions**

	Source:	WRPS	NES	NES
	Year:	1994/95	1994	1997
	Type of data:	Employee survey (1)	Firm survey (2)	Firm survey (3)
<b>Percentage of employees covered</b>				
Employee involvement team		31%		
Self-managed team			13%	16%
Work-related meetings for non-managers			52%	55%
Quality circles or employee involvement committees				
A lot of influence in decisions about how job is done		57%		
A lot of influence in setting group or dept. goals		32%		
<b>Percentage of firms with plans</b>				
Self-managed teams for non-managers			32%	34%
Work-related meetings for non-managers			80%	74%
Sample size		2408	2867	2963

WRPS=Worker Representation and Participation Survey (Freeman and Rogers 1999)(all private sector)

NES=National Employer Survey (Kruse and Blasi 2000)(private for-profit firms)