

APPENDIX B: The shared capitalist thermometer index

As a first step in assessing the relation of shared capitalism to employee outcomes, we constructed a thermometer-style index of shared capitalism. This index assigns one point each when the worker was covered by any of the shared capitalist forms of compensation about which the survey asked, with additional points for recent bonuses or grants, and for large bonuses or stock holdings. For questions with a continuous numeric answer, we gave the item a value of 1 if the respondent had a value greater than the median value. Because there is no natural ordering of shared capitalist systems in the sense that a firm first introduces profit-sharing, then adds employee ownership, and then gain-sharing, the index is not a Guttman scale. It is a simple summated rating (Bartholomew et al, 2002; Bartholomew, 1996), using dichotomous scoring.

In the GSS, there are eight variables in the index: profit sharing eligibility, gain sharing eligibility, owning any company stock, holding stock options, receiving a profit sharing bonus in the past year, receiving a gain sharing bonus in the past year, having an above-median profit- and gain sharing bonus as a percent of pay, and having an above-median company stock holding as a percent of pay. In the NBER data there are ten variables in the index: all of the above items plus one point each for receiving a stock option grant in the past year, and having above-median stock option holdings (including unvested options if they could be exercised today) as a percent of pay.

Indices of this style have both advantages and disadvantages. On the plus side, they provide a quick and ready measure of the extent of shared capitalist arrangements that makes it easy to compare results across surveys and to summarize the broad thrust of findings. Since our firm surveys covered only firms with some shared capitalist arrangements, the index allows us to differentiate workers with differing degrees of incentive to their firm's programs. On the negative side, the index treats different programs the same even though they potentially have

different effects on particular outcomes. It postulates a single scale with equal weights rather than using factor analysis or other statistical modelling to obtain weights for given factors. To deal with these problems, we also estimate the relationship of the outcomes to the different types of shared capitalism, introduced as dummy or continuous variables in regressions.¹ By comparing the results using the shared capitalism index to the results using the disaggregated measures, we can assess the loss of information due to the amalgamation of the measures into a single index.

Figure B1 shows the distribution of our shared capitalism index in the GSS. This survey estimates that 40% of US workers have some form of shared capitalist program. This estimate is close to that obtained by Dube and Freeman in the WRPS. The mean score of the index is 1.48 – a figure greatly affected by the substantial number of workers without shared capitalism systems. Conditional on having a program, most workers report scores in the range of 2 to 5, with 6% reporting scores of 6 or greater. Figure B2 gives the distribution of the index in the NBER survey data. It also shows a non-normal distribution, with the most common scores as 2 to 4 but a sizeable number of workers scoring 7 or above. There is sufficient variation in the index to differentiate the extent of the shared capitalist “treatment” on workers.

¹ There are statistical techniques to deal with the formation of latent variable indices from questions of the sort that we are amalgamating into a single summated rating. See Bartholomew et al. (2002) and Spector (1992).

Figure B1: Distribution of Shared Capitalism Index in GSS

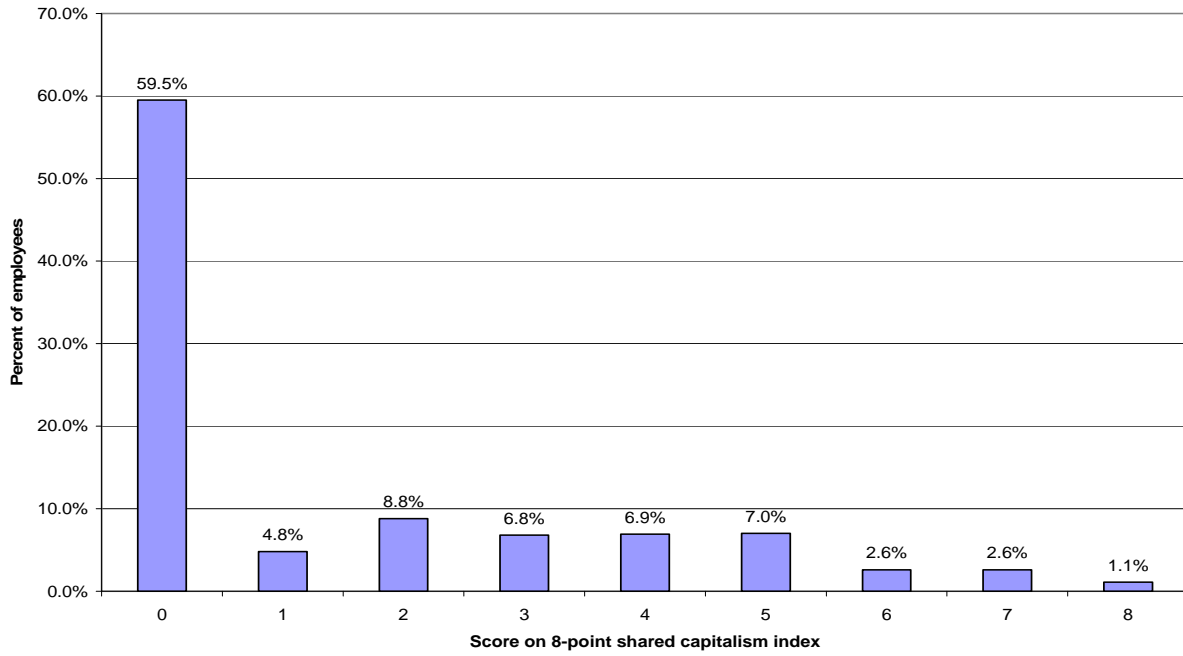


Figure B2: Distribution of Shared Capitalism Index in NBER Companies

