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THE PRODUCTIVITY EFFECTS OF WORKER REPRESENTATION ON THE BOARD

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Abstract

Using an unusually long panel data set of firms we investigate the effect of worker representation on the board of directors by estimating separate production functions for three industries. In addition we estimate the effect of profit sharing alone on productivity. Finally we test the complementarity hypothesis-- whether there are synergies between worker directors and profit sharing and their effects on business performance.

In our baseline OLS regressions we find that when worker representation on boards is measured as a percentage of the overall board, in printing there is a small and positive effect on firm productivity (about 2%) whereas there is no effect in the other industries. Effects are more evident when board representation by workers is measured using categorical variables. Relative to firms with no worker directors, there were firms in all industries for which at least one category of worker directors enhanced firm performance. We also find that profit sharing with employees also enhances organizational productivity, by about 3% on average. Using different measures of profit sharing did not affect our findings—PS continued to enhance firm productivity. The productivity effect of worker representation on the board is seldom enhanced by profit sharing—at best we find weak evidence in support of complementarities. Our findings were not sensitive to excluding very tiny firms from our sample.

In on-going work we allow decision making participation (and profit sharing) not only to directly affect output but to also affect the output elasticities of labor and capital and also, to account for the possible endogeneity of labor and the capital stock, we estimate production functions by instrumental variables (IV). For a typical firm, the productivity gain of profit sharing when evaluated at industry averages varies across industries from 3.6% in clothing, 4% in printing and 10% in footwear. In clothing, worker directors lower productivity by 0.4%, raise it by 2.5% in printing and by 7.3% in footwear though none of these estimates are statistically significant. In printing and footwear we find evidence that the productivity effect of worker representation is enhanced by both size and capital intensity and that these effects are statistically significant. These estimates do not provide strong support for the complementarity hypothesis.

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