The Case for Equality: Research Results from the Laboratory and the Workplace

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Economic inequality tends to undermine equality in other spheres. Economists are aware of this regrettable tendency but they commonly assume that were the goal of economic equality to be pursued, economic inefficiency would result. As Okun (1975, p. 48) has put it: “Any insistence on carving the pie into equal slices would shrink the pie. That fact poses the trade-off between economic equality and efficiency.”

Is there, inevitably, the trade-off between efficiency and equality which is so commonly assumed? This paper summarizes experimental research done in my laboratory which bears upon this question. It also reviews the scholarly literature relating to work as it relates to this issue: the diverse research dealing with different forms of work compensation, ownership, participation, and control.

I. Experimental Research on Egalitarianism

Studies of Cooperation-Competition

Although I was unaware of it as I conducted my early experiment on the effects of cooperation and competition upon group processes (Deutsch, 1949b) this study has direct relevance to basic issues relating to the consequences of an egalitarian as compared to a meritocratic system of distributing rewards. As originally formulated, the experiment was meant to test my theory of cooperation and competition which focused on the social psychological effects of different types of goal interdependence in combination with different types of instrumental actions (Deutsch, 1949a). It was only much later, as my attention centered on distributive justice,
Experimental Studies of the Effects of Different Systems of Distributive Justice

Recently, my students and I (Deutsch, 1985) have conducted a series of studies that were stimulated by the assumption implicit in equity theory that people will be more productive if they are rewarded in proportion to their contribution. The research described in the preceding section on cooperation-competition had clearly demonstrated that this assumption is not correct when the individuals are working on tasks where it is helpful for them to cooperate, to share information and resources, or to coordinate their activities. Perhaps the assumption has validity only when the individuals are involved in non-interdependent tasks, in work which is not facilitated by effective cooperation.

In fact, careful thought about the circumstances under which rewarding members in proportion to their contribution to a group (or rewarding individuals in proportion to their performance) would most likely induce relatively high productivity suggests that there are a number of basic requisites. These include the following: (1) the task to be accomplished must be clearly defined and specified; (2) the individuals involved must believe that their performance can be measured reliably, validly, and with sufficient precision; (3) achievement must be readily susceptible to continued improvement by increased effort and this is believed to be so by the individuals involved; (4) the type of reward offered for performance must be desired by the individual and its value to the individual must increase with the amount of reward he or she receives; (5) the dependence of an individual’s reward upon his or her accomplishment must be known to the individual and subjectively salient
**Winner-takes-all:** Under this system, whoever performs the task best in the group wins all the money the group is paid.

**Proportionality:** Under this system, each person is rewarded in proportion to his contribution to the group score. In other words, the person who contributes 50% of the group's total output will get 50% of the money to be distributed within the group; a person who contributes 10% of the group's total output would get 10% of the money to be distributed within the group, and so on.

**Equality:** Under this system, each person in the group will get an equal share of the money to be distributed within the group. In other words, each person will get 1/3 of the group’s total earnings.

**Need:** Under the need distribution system, each group member will be rewarded according to the need expressed on the biographical data sheet. In other words, the person who needs the money most would get proportionately more money; the person who needs the money least would get the least amount of money.

The overall results of the six experiments will be presented in terms of a number of key questions asked of all the data.

1. **Did the different distributive systems have differential effects on performance?** There is clear and consistent evidence in all of the relevant experiments that there are no reliable effects of the distribution system on individual or group productivity when neither individual nor group task performance depends upon effective social cooperation. This result is obtained when the individual is working in a group context and also when he or she is working alone. That is, there is no evidence to indicate that people work more productively when they are expecting to be rewarded in proportion to their performance than when they are expecting to be rewarded “equally” or on the basis of “need”.

2. **Were there initial differences in attitudes toward the different distributive systems?** Initially, the subjects strongly preferred the
(those whose performance was neither best nor worst) preferred the "proportionality" principle more than either the "low" or "high" performers. In the nominal group, the relationship between task performance and preferences for distributive principle remained essentially the same from the pre-task to post-task measurement. Parallel results were obtained for the ratings of the "fairness" of the distributive principle.

However, in the face-to-face interacting groups, the relationship between task performance and preferences for the different distributive systems changed during the course of the experiment. After performing the various tasks, the "proportionality," "equality," and "need" systems were in each case just as likely to be chosen by "high" and "low" performers. Only the choice of the "winner-takes-all" system appeared to reflect self-interest; it was chosen by "winners" only.

6. What were the pre-experimental correlates of initial attitudes toward the different distributive systems? Preferences for "winner-takes-all" and, to a lesser extent, for "proportionality" were associated with a sense of power, toughness, self-confidence, and a more conservative political orientation, a feeling of competitiveness and a tendency to downplay one's groupmates. In contrast, preferences for the "equality" and "need" principles were correlated with more favorable attitudes toward one's fellow group members and less favorable views of one's own chances and capabilities. The greater the tendency to be "Machiavellian," the higher the subject's preference for "winner-takes-all" and the lower their preference for "equality."

Our results provide little support for the common assumption that productivity would be higher when earnings are closely tied to performance. Despite the fact that the tasks were neither particularly
equality would appear in research on "real-life" egalitarian work groups, even if it does not necessarily occur in the laboratory or classroom.

Here, I shall briefly review the diverse scholarly literature dealing with different forms of worker compensation, ownership, participation, and control to see whether egalitarianism and efficiency are incompatible. However, before proceeding with this review, I consider the meaning of "economic egalitarianism."

The Meaning of Economic Egalitarianism

In the literature on economic democracy, worker cooperatives and the like, there is a clearly emerging social ideal of economic egalitarianism that has several key components. Central to the ideal of economic egalitarianism is the view that the workplace should be a cooperative rather than an authoritarian or adversarial system. (Whyte and Blasi, 1982). A cooperative framework is required to do away with the oppositional, alienating tendencies inherent in the power differences between the bosses and the bossed as well as those implicit in the different economic interests of employers and employees. Worker cooperatives are democratically controlled by those who work in them. In small cooperative enterprises, decisions are usually made by the entire work group in frequent meetings. Larger ones have management positions which are filled by election on the basis of one person, one vote. Such positions are usually subject to rotation and are open to all qualified members. Managers can be recalled by the members; ultimate authority rests in the work force. Full worker participation in decision-making exists at all levels of the organization. The opportunity for informed and effective participation is aided by training and full access to relevant information.
some research evidence to suggest that individuals work more efficiently when their pay is clearly liked to their performance. But there are many qualifications that have to be added to this statement. First, the research does not demonstrate that it is the connection between pay and performance rather than the connection with "accountability" (i.e., with performance appraisal and feedback) or with other confounded factors that are instrumental. Second, as Lawler has pointed out, merit pay systems can be dysfunctional and lead to inefficiencies when the organizational conditions necessary to their effective functioning do not exist. There is little reason to believe that the necessary conditions for their effective functioning exist in most work organizations.

There is also some research evidence suggesting that performance-based pay plans where the performing unit is the group (department, plant, or firm) can lead to more efficiency than pay plans based on individual performance when cooperative work is required. Such plans tend to be more egalitarian than plans based on individual performance. Group plans, in addition, are less plagued by some of the measurement and other administrative problems of individual merit pay systems.

I could find no research evidence that directly addresses the question of whether individual as compared to group merit pay systems lead to more efficient retention of high performing employees and more efficient elimination of lower performing ones. One reason for assuming that egalitarian pay systems are relatively inefficient is because high performers presumably could earn more in a non-egalitarian system, and hence, would be likely to leave the egalitarian system, but this would not be the case in an individually-based, merit system. There are other reasons to suppose that the closer personal attachments and the more
arrangements; hiring, firing and promotion of employees; and the acquisition, organization and control of resources needed for production. At the corporate level, worker participation is through representatives on corporate boards which are concerned with such long-range strategic policy decisions as: setting goals and objectives; choice of products and geographic locations; pricing and marketing policies; major capital expenditures; diversification; mergers, acquisitions, raising of capital; and disposition of profits.

The meagre available research evidence about the effects of a more equal sharing of power in the workplace suggests that it increases rather than decreases economic efficiency (see Katzell and Yankelovich, 1975; Jain, 1980.) Although there is a significant push toward more participatory control in the workplace, propelled in part by the increasing education and sophistication of the high tech workforce, neither employers nor unions yet seem to be eager to extend cooperation to include the corporate board as well as the shop floor.

Employee Ownership

Two forms of employee ownership of firms are emerging in the United States (Woodworth, 1981). Here, we briefly discuss one form, sometimes labeled “worker capitalism,” in which employees, as individuals, typically acquire shares in the enterprise through an “employee stock ownership plan” or through direct purchase of a plant that is about to close, be relocated or be subjected to a takeover by a conglomerate. The employees function as individual shareholders, who have a personal economic interest in the profitability of their firm; as shareholders, even when they together own a majority interest (this is often not the case), the employees do not use their shares collectively to determine management
decisions that would affect the community or system of which it is a component.

There are many examples of successful, well-established, worker-controlled enterprises and of long-lived communes (see Oakeshott, 1978; Lindenfeld and Rothschild-Whitt, 1982; and Simmons and Mares, 1983, for illustrations of worker-cooperatives and Kanter, 1987, for communes.) Below, I discuss several examples of such enterprises which are structured on the egalitarian principle of “one member, one vote” including the U.S. Plywood Cooperatives, The Mondragon Cooperative System in Spain, and the Kibbutz Cooperative Sector in Israel.

The U.S. Plywood Cooperatives. Various studies have shown that the plywood cooperatives have consistently outperformed private plywood firms substantially (25-60 percent) in productivity and also in the wages received by the workers (about 25 percent higher.) A large portion of this productivity difference may result from the smaller number of management and supervisory personnel required in the cooperatives. In traditional firms, supervisory personnel are used to police the workforce, checking on goofing off and careless or inefficient work. In the coops, workers police themselves and one another, saving an enormous amount of money that is traditionally spent for supervisors.

The Mondragon Cooperative System. The Mondragon Cooperatives in the Basque region in Spain have grown from a single industrial cooperative started by five young men in 1956, to a network of more than 87 cooperatives with 18,000 workers, and $1.7 billion in annual sales. Thomas and Logan (1982, pp. 126-127) after a careful economic analysis conclude:
average of three times a month, A Kibbutz is “owned” by its members but it cannot be sold and its assets cannot be divided by its members. If individual members leave, they have severance pay provisions based on a number of clearly defined factors. Kibbutzim are organized into a “holding company” which is affiliated with the general labor organization of Israel. Should the majority of a Kibbutz decide to dissolve it, the Kibbutz’s assets would be turned over to the holding company. (For additional descriptions of Kibbutz life, see Blasi, 1980; Lieblich, 1982; Rayman, 1982; and Snarey, 1982.)

People who work together in a Kibbutz factory, no matter what their positions in the factory, live together in the same community and have equal standards of living as well as equal control over community affairs. The decision-making process on issues related to the industrial plant within a Kibbutz is partly determined by the nature of the substantive issues. The Kibbutz General Assembly usually makes the decision on the election of a plant manager, the investment plan, the professional training plan, and the hiring of outside workers; the Worker’s Assembly, within the plant, commonly makes the decisions with regard to production plans, work arrangements, choice of candidates for training, and election of other plant officials than the manager; and the plant management decides with regard to technical and professional problems. Even when the General Assembly retains final decision power, it will receive suggestions and proposals from the Worker’s Assembly and the plant manager with regard to the issue being considered.

For the Kibbutz as a whole as well as for its industrial plants and other branches, all managerial and coordinating positions are rotated in order to prevent the emergence of a managerial elite. Rotation implies not
So, it highlights the effectiveness of psychological motivations of higher order needs.

- In other words, the Kibbutz experience is inconsistent with the assumption of an inevitable trade-off between equality and efficiency.

Concluding Comment

I have reviewed an extensive literature (see Deutsch, 1985, for a more extensive review) which indirectly or directly bears upon the issue of whether egalitarian work systems are inherently less efficient than nonegalitarian systems. The existing research is meager and not of high quality but its findings are concordant with the results of the more carefully controlled laboratory studies described in the first section. There is no reliable or consistent research-based evidence that justifies the conclusion that egalitarian systems are intrinsically less productive than the more traditional, nonegalitarian systems. To the contrary, the available research suggests that, when efficient work requires efficient cooperation, almost any movement toward a democratic, egalitarian, cooperative system and away from the more traditional authoritarian, hierarchical, adversarial system of work improves productivity and lessens worker alienation. This is so whether the movement is from individual- to group performance-based pay, from non-participation to worker participation in decision-making and profit sharing, from outside ownership to worker ownership, or from authoritarian control to democratic control. This is not to deny the importance of individual performance and accountability but rather to suggest that when everyone has a stake in your performance, your immediate co-workers as well as yourself, this enhances rather than reduces your accountability and your motivation to work and cooperate effectively. Nor is it to deny that one
expands beyond a certain point. This difficulty is exacerbated in emergency situations that require quick decisions. These problems often lead to more centralization in decision-making, as organizations and communities grow in size; more centralization, in turn, results in an increase in alienation and a decrease in the sense of cooperativeness.

How can one handle this size-related dilemma for participatory decision-making and cooperation? No one really knows. Although small is beautiful, it is not yet clear how in a large world, with world-scale problems, the small units can be nested together into increasingly larger units so as to avoid the problems associated with remote, centralized decision-making. Nevertheless, there seems to be an emerging consensus among utopian thinkers that as much decision-making as possible should be placed in the hands of small, cooperative local units that are democratically controlled by the immediate members of the local unit -- the inhabitants of the local community or the people working in a given institution -- and that cooperative, regional federations of local units should coordinate activities of the local units to enable the economies of large-scale purchasing, production, and distribution. Similarly, cooperative national federations would coordinate the regional units. Ideally, the control of resources and of decision-making would remain in the small, local units and would not move upwards. There are, unfortunately, many factors conducive to the flow of power and decision-making to centralized units. How to inhibit this flow while maintaining effective coordination and cooperation among smaller units is a problem that needs our most creative work. Social injustice is fostered by the accumulation of power and the control of resources in remote, central decision-making bodies, but it is also fostered by the inequalities of local communities, by their out-
Footnotes


(2) It should be noted that the "meritocratic" principle is not always "competitive"; it is so only when a fixed amount (a constant sum) is being allocated: hence, the more one person gets, the less is available for another. An "individualistic" form of this principle occurs whenever the amount to be allocated is variable and dependent upon the level of the total contributions: here, the allocations the individuals receive are independent of one another. Thus, the results of this early experiment had no direct relevance to the individualistic form of "meritocracy."


