Theory O – Is the Case Closed?

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Using survey data from employee ownership firms, the author examines employees' perceptions of being employee-owners. It appears that the employees do not really consider themselves to be employee-owners, and they do not see their status in the hierarchy change. These findings are implicitly distinct from recent research on employee stock ownership plans (ESOPs). ESOP researchers have debated whether employee ownership combined with participatory decision-making is an important explanatory variable for the comparative performance variance. Moreover, a new theory O, beyond McGregor's and Ouchi's theory Y and Z has recently been introduced by Corey Rosen and Karen Young, stressing this complementary effect. The author elaborates further on the theory and defines the O-type firm as an organization characterized by non-discriminatory inclusion in ownership and decision-making. Operationalizing this by distributional analysis may enhance the precision of empirical research on particular performance effects due to an O-type management philosophy.

Introduction

Empirical analysis of the economic performance of American employee ownership firms has during the last ten years suggested an impressive trend. The evidence shows that *if* there are any workplace-related incentives other than wages with an impact on the performance of employee ownership firms, they are probably related to non-managerial employee involvement in decision-making. Karen Young and Corey Rosen now conjecture whether a new employee ownership type of organization has emerged, extending on Douglas McGregor's and William G. Ouchi's theory X, Y and Z organizations (McGregor, 1960; Ouchi, 1981; Rosen and Young, 1991a; Young et al., 1997). Nevertheless, an appraisal

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of the scarce literature suggests unexplored methodological avenues that could increase our certainty on the explanatory value of a new theory O (O for employee *O*wnership). Without referring to the work done by employee ownership researchers as a failure, I think we have to admit that there are both common methodological problems in our performance studies, as there are unanswered questions in relation to our analysis of participatory ownership and decision-making. This phenomenon is common to all of us – the ideal study on employee ownership of course does not exist, and although the results have become more convincing since 1978, I think it is important to emphasize that our research is still young and in progress.

As for distribution of stock and influence on decisions, an O-type organization seems more egalitarian than conventional organizations. Hence, employee perceptions of distributional aspects appear essential in an approach to the relation between egalitarianism and economic performance. With one exception (Rosen et al., 1986; Rosen and Quarrey, 1986) neither of the studies on comparative performance have taken into account employee perceptions of workplace relations in their firms. In terms of power and ownership, distributional aspects have until now been neglected in sociological and econometric ESOP studies.

This article elaborates further on Rosen and Young's (1991a) theory O. Our point of departure is the results of empirical performance studies on American firms with an ESOP (Rosen and Quarrey, 1986; GAO, 1987; Conte and Svejnar, 1988; Winther et al., 1994; Kardas et al., 1994; Winther, 1995; Winther and Marens, 1997). These studies appear to substantiate the theory, because they do leave a strong impression of a superior performance effect explained complementarily by stock ownership and participatory decision-making. Furthermore, the results of a survey of 470 employees I implemented in 1994 in five Washington state employee ownership firms are presented. These findings may epitomize a paradox to the often quoted findings of empirical research. The five firms outperform their conventional competitors; however, assessing employee perceptions of their ESOP, it seems that they do not contemplate their status in the workplace as particularly different from the status they would have had as an employee hired in a conventional workplace. These results are not generalizable, but they do cast suspicion on our interpretations of the empirical material in ESOP research, and they suggest further explorations and empirical analysis are necessary. In order to do that properly we need to conceptualize an O-type organization, hence a final proposal for further methodological developments is presented. In the author's opinion, distributional measures on stockholding and decision-making increase the validity of analysis emphasizing the combinations of participative decision-making and employee ownership as explanatory for a superior economic performance.

Beyond Theory Y and Theory Z?

Classical organization theory and Douglas McGregor's theory X are rooted in negative assumptions on human behaviour at the workplace that resemble economic theories based on the axiom of *Homo œconomicus*. The axiom of neoclassical economics rests on utilitarian ethics, and this implies an economics based on rational self-seeking agents maximizing their gains at minimum efforts (Alchian and Demsetz, 1972; Williamson, 1975; Jensen and Meckling, 1976, 1979).

As opposed to theories based on a pessimistic management philosophy, Douglas McGregor's theory Y on the other hand constituted a positive view on human beings at the workplace. Employees will exercise self-direction and self-control if they are committed to the objectives. They can learn to accept, even seek, responsibility, and creativity is widely dispersed throughout the workforce; in other words it is not necessarily the sole province of those in managerial functions (McGregor, 1960; Argyris, 1964). According to Paul Blumberg (1968) many studies on workplace relations suggest that the motivation to work will increase in participatory organizations, so there may be other positive outcomes like productivity increases related to theory Y management styles. Reviewing analysis of a wide array of participatory arrangements in conventional firms, cooperative and employee ownership firms, David Levine and Laura Tyson reached similar conclusions (Levine and Tyson, 1990).

Looking into prototypes of the Japanese and the American organization, William G. Ouchi (1981) developed a theory of a clan-type organization similar to the Japanese corporation characterized by lifetime employment and stable labour–management relations. According to Ouchi, comparisons between the American (type A) and the Japanese (type J) organizations reveal considerable discrepancies. Confronted with top ranked chief executives (CEOs) in the USA, Ouchi later realized that several well-known American corporations had already adopted similar practices to those prevalent in the Japanese-type organization although modified to the US industrial relations style. Following the McGregorian alphabetical order, Ouchi labelled these corporations 'Z organizations'.

The picture of modified Z-type organizations frequently appeared rosy – referring to both theory Y and studies of utopian communities that succeeded as commercial enterprises in the USA, Ouchi claimed that although maintaining what in essence is still a hierarchical structure, the theory Z organization bears a close resemblance to communitarian organizations. According to Ouchi, theory Z managers rely upon means to promote an attitude of egalitarianism among the employees. Ostensibly, this should replace hierarchical direction with self-direction and, subsequently, an increased commitment, loyalty and motivation among the employees may evolve:

> Argyris challenged managers to integrate individuals into organizations, not to create alienating, hostile, and impersonally bureaucratic places of work. In a real sense, the type Z organization comes close to realizing that ideal. It is a consent culture, a community of equals who cooperate with one another to reach common goals. Rather than relying exclusively upon hierarchy and monitoring to direct behavior, it relies upon commitment and trust. (Ouchi, 1981: 83)

Coinciding with a critique of the rosy picture, Rosen and Young (1991a) argue that the mindsets of employees and managers of necessity will first change in an O-type organization that takes seriously the employees' right to participate in decision-making. The employees being owners means having some fundamental control over one's destiny at work. It is believed that because an employee-owner is an owner like other employees, he or she is at some fundamental level equal to other owners, even when those owners are managers. This equality, institutionalized through ownership, demands mutual respect recognized through the structures of participative decision-making. According to Rosen and Young participatory decision-making fails in conventional firms and works best in combination with employee ownership (Rosen and Young, 1991a; Young et al., 1997; Kardas et. al., 1994). Rosen and Young emphasize that

> . . . it is not enough to enrich jobs and treat people more respectfully (as in Theory 'Y' management), nor is it even enough to set up a consultative, participative management style (as in Theory 'Z'). Valuable as these theories may be, they

> still envision a distinction between employees and employers. In 'Theory O' (for ownership) companies, there are only 'partners' or 'associates' or 'fellow owners'. People – managers and non-managers – are expected to act and to treat each other like the owners they all are. It is assumed that everyone has ideas and talents that should be used fully, that the people who know the most about something should be the ones making decisions about it, and that every employee has a responsibility to make a contribution. (Rosen and Young, 1991a: 36)

If there is an impact on productivity performance due to participatory decision-making, it is probably mainly related to a democratic organization based on common ownership and *substantive* participation in decision-making. Significant participation as described by Levine and Tyson (1990) seems to corroborate one of Oliver Williamson's (1975) theories on peer group associations. Williamson emphasized the advantages of collective groups:

> Associational benefits can accrue to peer groups through increased productivity among members of the group who feel a sense of responsibility to do their fair share as members of a group but, left to their own devices, would slack off. (Williamson, 1975: 44)

Reviewing the evidence of employee ownership and corporate performance in the USA, the position of the National Center of Employee Ownership appears firm. If there is a relationship between ownership and performance, it is explained by the complementary effect of ownership and employee participation in an O-type organization:

> Researchers now agree that 'the case is closed' on employee ownership and corporate performance. Findings this consistent are very unusual. We can say with certainty that when ownership and participative management are combined, substantial gains result. Ownership alone and participation alone, however, have, at best, spotty or short-lived results. (NCEO, 1994: 10)

Admittedly, the record *is* impressive, but taking a more cautious point of view, there are still some unanswered questions that suggest further analysis. It appears to me that not all avenues are closed when it comes to the possibility of obtaining better evidence on a complementary impact on corporate performance. Moreover, the theory O approach is still a theory in the making, and there may be disputes ahead concerning what we would consider essential characteristics for an O-type organization.

Employee Perceptions in Five Washington State Firms

Since the late 1980s, ESOP research in the USA frequently suggests a positive and discernible statistical association between participatory employee ownership and economic performance. Studies on the effects of employee ownership have been done since 1978 with different methods and with severe sampling problems – ESOP data *are* extraordinarily hard to come by. The US General Accounting Office is to date the most comprehensive study on American ESOPs, and as remarked by the authors of the GAO (1987) report, the general picture in the late 1980s seemed quite patchy:

> . . . the evidence from prior studies of ESOP effects on corporate performance is inconclusive. Few studies have reported statistically significant positive effects for ESOPs. Most of the studies, whatever their findings, suffer from deficiencies in samples examined, the performance measures used, or the designs employed. (GAO, 1987: 48)

Yet, from 1986 the picture changed, comparative studies in the late 1980s and the early 1990s seem to generate results allowing more confident generalizations. It seems indisputable that *if* there are any incentives at all related to employee ownership, it is mainly participation in shop floor decisions that have an explanatory power. Neither of ownership per se variables showed strong and discernible results (Rosen and Quarrey, 1986; GAO, 1987; Conte and Svejnar, 1988; Winther et al., 1994; Kardas et al., 1994; Winther, 1995; Winther and Marens, 1997).

As suggested earlier, our own two studies at the state level were not without flaws. First we were not able to interview the employee-owners on their perceptions of the ESOP and second, we were not able to assess whether the distribution of ownership and influence had any impact on comparative performance. This is important to control in the context of developing a new theory O assuming that management perceptions are representative, and that employees to a higher degree participate on an equal footing in O-type organizations than seen in other types of organizations.

Working as a visiting research fellow at the Washington State Department of Community, Trade and Development, I did a survey in 1994 among employees in five Washington state firms. The results presented here are tentative, and they do not allow for confident generalizations. Nevertheless, they are an example of an uneven distribution of influence even in employee ownership firms that outperform their competitors. The employees' perceptions of their ESOP could be considered essential in an analysis of potential theory O effects: are the employees satisfied with their ESOP; do they feel a different atmosphere at their workplace; do they feel they participate in decision-making; and do they believe that their ESOP increases the firm's economic performance? Despite employee ownership firms' comparative growth lead to their control groups, it appears that the employee-owners generally do not have positive answers to all questions phrased on these important workplace-related variables.

I surveyed 470 employees in the five companies and obtained a response rate of 57.2 percent. Of the surveyed companies, two had ESOPs with a minority stake in the company. The first (company 1) manufactures aircraft components and the second (company 4) is a sawmill. The remaining companies are a producer's cooperative with an ESOP in manufacturing wooden products (company 2), an employee-owned engineering company in geotechnics with a profit sharing and a 401 (k) plan (company 5) and finally (company 3) a printing company with stock held by all the employees. Yet, management held almost 90 percent of all stock – and rather than labelling the last mentioned an ESOP, we may, as suggested by Logue (1986) call this type of employee ownership a MESOP, or management's employee stock ownership program.

To survey the companies, a combination of two types of questionnarial batteries was applied. The first was the same as the one Rosen et al. (1986) used in their analysis reported in *Employee Ownership in America: The Equity Solution*. They surveyed 2804 respondents in 37 companies in the early 1980s and the main purpose of this study was to assess employee perceptions of their ESOP and relate these results to four outcome variables (ESOP satisfaction, turnover intention, organizational commitment and job satisfaction). Rosen et al. did not survey the employees and management on their perceptions of the distribution of influence in decision-making. Thus the second part of the questionnaire was inspired by the Tannenbaum control graph approach to distributional analysis (Tannenbaum, 1968; Dreisler, 1982; Mayntz, 1969; Rosen et al., 1986).

The last two columns of Table 1 compare the Washington results with the national study of Rosen et al. and although the percentages are not so strong for the five Washington companies, evidently the results are the same for some questions in the two surveys – in the

TABLE 1
Employees' Perceptions of the Employee Ownership Programme in Five Washington State Employee Ownership Firms ($N = 269$)

	Respondents Agreeing		
	Average		**(NCEO)**[b]
a. I feel like a real owner in this company.	3.1	21.6%	(42%)
b. Because of employee ownership my work is more satisfying.	3.7	29.0%	(50%)
c. Employees here have more influence in company decision-making than they would if they did not own company stock.	3.1	19.7%	(29%)
d. I really don't care about the ownership plan in this company (reversed scoring).[a]	2.9	14.5%[a]	(10%)
e. I'm proud to own stock in this company.	5.0	64.7%	(75%)
f. Employee ownership at this company makes my day-to-day work more enjoyable.	4.0	29.4%	(41%)
g. Owning stock in this company makes me want to stay with this company longer than I would if I did not own stock.	4.3	45.7%	(65%)
h. Because of employee ownership, managers here treat workers more like equals.	3.3	25.7%	(31%)
i. I work harder on my job because I own company stock.	3.6	23.5%	(43%)
j. Employees have more say in company decisions because they own stock.	2.9	15.7%	(29%)
l. It is very important to me that this company has an employee stock ownership plan.	4.6	53.1%	(65%)
m. Owning stock in this company makes me more interested in the company's financial success.	5.1	69.5%	(84%)
n. Because of employee ownership, people here try to cooperate more.	3.8	30.8%	(44%)
o. Employee ownership at this company gives me a greater share in the company profits.	3.9	42.7%	(65%)
p. I am more careful and conscientious in my work because I own stock in this company.	3.7	23.8%	(46%)

1: Strongly disagree; 2: disagree; 3: slightly disagree; 4: neither agree nor disagree; 5: slightly agree; 6: agree; 7: strongly agree.

[a] A reversed scoring counts here as 5, had the question been phrased as 'I really do care about the employee ownership plan in this company.' Actually 62.8 percent disagreed to question d, and this suggests that the employees have positive feelings about employee ownership.

[b] See Rosen et al. (1986: 90).

Rosen et al. (1986) study, employees mainly agreed to the five following survey items:

- Owning stock in this company makes me more interested in the company's financial success.
- I am proud to own stock in this company.
- It is very important to me that this company has an ESOP.
- Owning stock in this company makes me want to stay with this company longer than I would if I did not own stock.
- Employee ownership gives me a greater share in company profits.

In Washington, the employees also agreed to the first three items listed and they disagreed with survey item (d), 'I really do not care about the employee ownership plan in this company'.

It seems that the employees usually have positive feelings about the employee ownership plan. Yet, the remaining questions suggest that they do not feel any positive effect due to ownership and participative decision-making. Employees do not feel more involved or accepted as co-owners. Two surprising results appear – first, seen in the context of the findings of the quoted ESOP research, we could expect employees to agree to the performance-related questions, and yet the employees did not agree to a statement like 'I work harder on my job because I own company stock.' Second, the questions on the extent to which employees responded that co-ownership makes a difference with respect to workplace relations, all implied the same. Owning stock does not increase cooperation, it does not increase employee influence in decision-making and it does not change the status of an employee in the hierarchy.

Constructing Tannenbaum control graphs confirms this result. The respondents were ranked in three occupational groups: (1) top management, (2) middle management and (3) workers. Influence levels were scaled in two ways. Either employees were asked to say how much influence they felt each group had (the actual distribution of influence), or they were asked how much influence they meant the group should have (the ideal distribution of influence). The decision levels were scaled from 1 to 5:

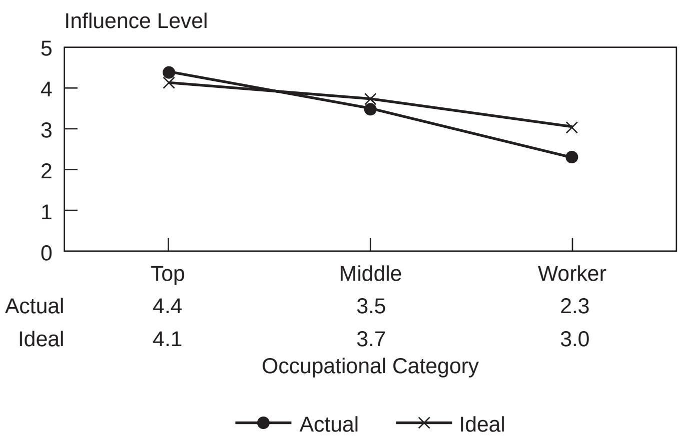
1. This group of employees has no say at all.
2. This group of employees has no say, but they receive information.

3. This group of employees is asked their opinion.
4. This group of employees decides with managers or, vice versa, managers decide with other groups.
5. This group of employees takes decisions alone.

The employees were asked to indicate the distribution of influence for six decision types: (1) technological change, (2) job performance, (3) pay and other compensation, (4) working conditions, (5) hiring and firing and (6) selection of supervisors and management. In Figure 1 the first six decision types are averaged. Obviously the employees do not experience being particularly much involved in decision-making. The vertical scale suggests level 2 for subordinated personnel being informed about instead of participating in decisions. Analysing each of the six decision types, the respondents only meant that non-managerial employees were consulted (decision level 3) in relation to the two decision items, technological change and working conditions.

The remaining types of decisions fluctuated around level 2 – employees have no say, but they receive information. An interesting feature of Figure 1 is related to the ideal control graph. Employees do ask for more involvement; however, they do not ask for a perfect horizontal line resembling an egalitarian distribution of power (level 4 for all groups of employees).

FIGURE 1
The Distribution of Influence: Employee Perceptions



In Table 2 we compare annual average growth performance to the items in Table 1 related to democratic decision-making. The growth rates in the table are the employee ownership firms' growth lead over control firms of a comparable size and the same line of business. If growth is 28.2 percent on sales for company 1, it shows the difference between the employee ownership firm and its control firms; this means that the firm is growing faster than its competitors (negative signs imply they are growing more slowly). Only company 5 had employees slightly agreeing to the questions c, j and n.

The variables were as follows:

a. I feel like a real owner in this company.
c. Employees here have more influence in company decision-making than they would if they did not own company stock.
h. Because of employee ownership, managers here treat workers more like equals.
j. Employees have more say in company decisions because they own stock.
n. Because of employee ownership, people here try to cooperate more.

Company 5 is the only case allowing for conjectures in the direction of an impact from participatory and cooperative decision-making. The company had both a growth lead over their competitors in terms of sales and sales per head and some weak indications of the ideal workplace relations emphasized in organization theory. However, the respondents in this company were mostly highly educated employees (engineering), and we cannot exclude the possibility of participative and consultative practices as the normal way of communicating. Organizations with highly educated staff could be considered team networks where participants due to their specific skills have a significant say in operational decision-making.

Obviously, Table 2 does not support any supposition of a theory O effect. Whether employee ownership companies had an average growth lead over the comparison companies or the comparison companies had an average growth lead over the employee ownership companies (negative signs), employees do not agree to the statements on participatory workplace relations.

On the other hand, theory O cannot be completely ruled out – a cross-section of individual perceptions instead of company data averaging the perceptions does lend some support to the theory.

TABLE 2
Comparative Annual Average Growth Performance and Employee Perceived Influence Levels in Five Washington State Employee Ownership Firms

	Growth Rate		Perceived Influence, Equality, Labour–Management Cooperation Questions in Table 1				
	Sales	**Employment**	**a**	**c**	**h**	**j**	**n**
1989–92:							
Company 1	28.2%	19.4%	3.0	3.1	3.5	3.0	4.0
Company 2	13.5%	25.5%	3.5	3.7	2.9	3.4	2.7
Company 3	0.0%	10.0%	3.3	3.1	4.1	2.6	3.7
Company 4	1.0%	−6.3%	2.9	2.7	3.1	2.5	3.6
Company 5	10.6%	−7.0%	4.0	5.5	3.8	4.5	4.5

The ESOP influence questions evaluate the extent to which employees feel that owning stock increases cooperation and influence in company decision-making and changes their status in the company. The scales are:

1: Strongly disagree; 2: disagree; 3: slightly disagree; 4: neither agree nor disagree; 5: slightly agree; 6: agree; 7: strongly agree.

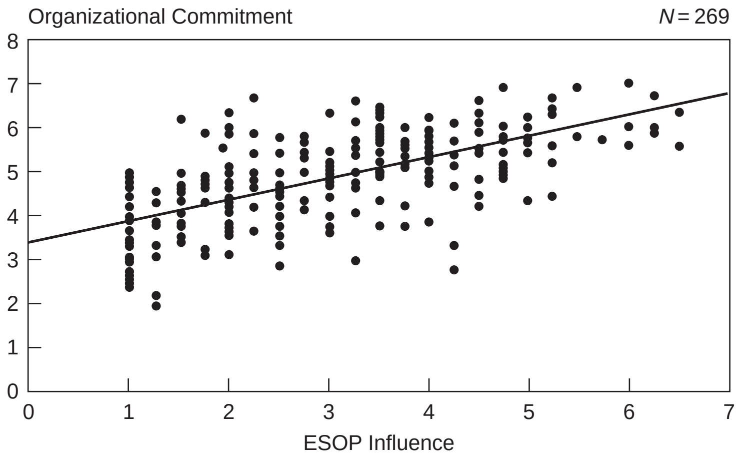
a. I feel like a real owner in this company.
c. Employees here have more influence in company decision-making than they would if they did not own company stock.
h. Because of employee ownership, managers here treat workers more like equals.
j. Employees have more say in company decisions because they own stock.
n. Because of employee ownership, people here try to cooperate more.

As in the Rosen et al. (1986) study, we raised several questions to the employees for each of the following employee perceptions: organizational commitment, turnover intention, job variance, job freedom, job satisfaction, pay satisfaction, ESOP satisfaction, ESOP effects and ESOP influence. ESOP influence relates to participatory decision-making and labour–management cooperation.

In Figure 2, it appears that ESOP influence had a strong statistically discernible correlation to organizational commitment (.64, discernible at the 0.0% level). Similar results were found for turnover intention and job satisfaction. For these variables mildly strong correlations were found for ESOP influence to turnover intention (−.43, discernible at the 0.0% level), and for influence to job satisfaction (.49, discernible at the 0.0% level). The results suggest that the more an employee perceives an involvement in decision-making, the more committed the employee is to the organization, the more the turnover intention diminishes and job satisfaction increases. Apparently, some employees in each of the five companies are motivated as described by organization theories positively inclined to employee's behaviour at the workplace.

It could of course be that it is mainly management and key personnel that feel appreciated and are rewarded through enhanced

FIGURE 2
The Relationship Between Perceptions of ESOP Influence and Organizational Commitment



degrees of ownership and inclusion in decision-making, and this could impact the performance positively despite a loss of egalitarianism. On the contrary, it could also be argued that when this is extended to all staff in each firm, everyone feels appreciated as equal owners. We could then still hypothesize the existence of a general theory O effect of the kind suggested by Rosen and Young. In this context, we may of course ask whether a loss of subordination, special privileges and hierarchy led management and key personnel to 'shirk their management responsibilities' with a reversed performance effect as a potential result. This emphasizes an important question in empirical research: *How does egalitarianism in ownership and decision-making correlate to comparative economic performance of employee ownership companies?*

Towards a New Theory O?

The power distribution illustrated in Figure 1 looks familiar when compared to the results of analyses of control in conventional firms, in cooperatives, in employee-owned firms within capitalist social settings or in the worker-managed socially owned firm in the former Yugoslavia. Typically and despite institutional differences, we most often see a control graph like that in Figure 1 illustrating an authoritarian structure with a few upper management employees having much greater power than the majority of non-managerial employees.

The results demonstrate the weakness of our analysis – we may see employee ownership firms outperform their competitors, managers may deliver data on their perceptions of employee influence in decision-making in these successful companies, and they may report to us that they have adopted a range of participation techniques. But we still do not know whether the employees share management's perceptions, and we do not know whether all employees actually participate in decision-making.

In the following I argue that *if* we persist in endeavours on an authentication of a theory O effect, equal access to ownership and influence is an important element of the theory. *If* we ignore the necessity to segregate egalitarian types of ownership and management from different types of employee ownership combined with type Y and Z management philosophies, we may not see the often stressed synergistic impact on comparative performance. In other words, *if* ownership is most often unevenly distributed, *if* the employees do not enjoy the same ownership rights as traditional shareholders and *if* participative decision-making mainly surfaces as window-dressing arranged to persuade the employees to share information with management, then the difference between traditional ownership combined with theory Y and Z management philosophies and employee ownership combined with them is probably negligible in terms of an impact on performance. Employees being treated as equal 'partners' or 'associates' in a democratic and highly participative organizational culture does imply an organizational innovation of a different kind than suggested by McGregor (1960) and Ouchi (1981).

Although not addressing employee ownership, Williamson (1975) defined a similar organization as a group involving collective and cooperative activity, providing for some type of other-than-marginal productivity and income sharing arrangement and never characterized as a hierarchical organization (Williamson, 1975: 41–2). This type of organization holds some of the same characteristics as the ideal self-managed organization:

> The anarchist wing of the new Left according to Lindbeck, holds that 'economic decisions should be undertaken in about the same way as they are in a democratic family in a primitive subsistence economy. The ideal seems to be some kind of "council democracy" in which people are supposed to convince one another or in which decisions are taken by general vote'. It may be described as an all-channel network, with everyone connected to everyone else, within which the absence of a hierarchy prevails. (Williamson, 1975: 45)

Conceptualizing egalitarianism further, the archetypal theory O organization in terms of both ownership and decision-making could be understood by ordering different forms of ownership and participation according to two crucial factors: (1) inclusion in decision-making and (2) inclusion in ownership. Inclusion in ownership can be related to the allocation of stock between employees and external investors, and it can be related to the allocation of assets between different groups of employees. Additionally, the degree of influence can include either the extent of participation, namely what decision types are the employees involved in, or it can involve the influence distribution among different groups of personnel. Then both allocation of assets and influence can be unevenly distributed among occupational groups, and ownership can be either minority or majority ownership.

An ideal employee ownership firm based on egalitarian management practices is difficult to operationalize in the day-to-day practices of firms in any capitalist economy. Obviously associative ownership combined with significant participation in decision-making and control are practices rarely encountered in capitalist firms. After all, human capital is distributed unevenly among us, and at the present level of development, technologies mainly embody qualification structures that operate best through a hierarchy. Shares cannot be distributed evenly between members of a group of employee-owners, there may be differences in seniority, older generations of employees may have accumulated more stock in their portfolios than younger colleagues. Nevertheless, our intention is to operationalize empirically which organization bears the highest resemblance to the egalitarian model. Thus, our point of departure is to conceptualize theory O characteristics in order to delimit them from the characteristics of theory X, Y and Z.

The first step in an analysis of egalitarianism is based on the notion of inclusion in ownership and decision-making. We could order different organizational and ownership arrangements as in the matrix of Table 3 – that is, ordered horizontally by discriminatory and non-discriminatory participation. A non-discriminatory practice presupposes involvement of all members of the organization. Ownership is divided vertically into minority co-ownership, majority co-ownership and de facto employee ownership: namely, as in a cooperative there are no external owners, the firm is owned and operated by the employees. Decision-making is defined according to the Levine and Tyson (1990) approach quoted earlier. *Consultative* participation indicates that employees are asked their opinions, yet the ultimate power still rests with management and owners. Formal consultative communication and participation techniques are for instance suggestion systems, quality circles, employee task forces and autonomous work groups in which employees are supposed to share information with management in control. Consultative practices mainly coincide with a theory Z management philosophy. Distinct from that, *significant* participation at least includes formal schemes for operational decisions where employees decide on their own, and it could include strategic decisions instituting 'workers' control'. It is an open question whether significant participative practices are compliant to the prototype Z- and Y-type organizations. Yet, assuming that these organizations could adopt significant participatory decision-making at least in terms of

TABLE 3
The Archetype O Organization: What is it Compared to Employee Ownership with Theory X, Y and Z Types of Management

	Employee Involvement in Decision-Making		
	Discriminatory	Non-discriminatory	
		Consultative[a]	Significant
Employee ownership			
A: Co-owned: (minority)			
Discriminatory	(X)	(Y) and (Z)	(Y) and (Z)
Non-discriminatory	(X)	(Y) and (Z)	(Y) and (Z)
B: Co-owned: (majority)			
Discriminatory	(X)	(Y) and (Z)	(Y) and (Z)
Non-discriminatory	(X)	(Y) and (Z)	(O)
C: Fully employee owned:			
Discriminatory	(X)	(Y) and (Z)	(Y) and (Z)
Non-discriminatory	(X)	(Y) and (Z)	(O)

[a] Consultative means that employees have a say, they are asked their opinion, but management still decides. Significant implies that employees take decisions on their own or their proposals have an equal status to management's proposals in democratic decision processes.

Type X: Hierarchy, strict supervision and control (employees discriminated from participating in decision-making).
Type Y: Job enrichment, respectful treatment of workers, enhanced individual responsibility.
Type Z: Consensual decision-making, enhanced individual responsibility, consultative participation, 'ad hocracy', comprehensive concern for the employees from management.
Type O: Consensual and significant participation, enhanced individual responsibility, non-discriminatory ownership and power structures in the organization, 'workers' control', egalitarianism.

operational decisions, it makes sense to include these in combinations of ownership and Y and Z types of employee involvement too. Alternatively we would have to consider qualitative differences between the Y and Z types of management philosophies and a new S-type organization for significant participation in traditional firms, in minority employee ownership firms and in majority co-owned discriminatory firms. Because the O-type management philosophy is of main interest here, we ignore this potential theoretical development, but further considerations may prove it necessary to order even more carefully in accordance with differences in participative practices.

Analysis of employee ownership cases involves the three types of discriminatory and non-discriminatory ownership structures combined with either a traditional hierarchical organization (theory X) or with consultative or significant participatory organizations of the theory Y and Z types. The O-type organization is distinct from the rest, because (1) it is non-discriminatory for both the inclusion of employees in ownership and in decision-making, and because (2) it is not just co-owned with a minority stake to the employees, instead it is employee owned and operated, that is the employees, being a majority group, take a high degree of democratic control over their portfolios and engage actively on an equal footing in the decision-making processes at all levels.

An analysis of employee participation in decision-making suggests control graphs as in Figure 3. According to Tannenbaum, there are four types of control (Tannenbaum, 1968; Mayntz, 1969; Dreisler, 1982):

The democratic model. This curve depicts workers' self-management. The slope is positive, as we move away from the origin on the horizontal axis we move downwards in the hierarchy, and the degree of influence increases upwards from the origin at the vertical axis. Non-managerial employees are in control of the firm, and these employees have more power than other occupational categories.

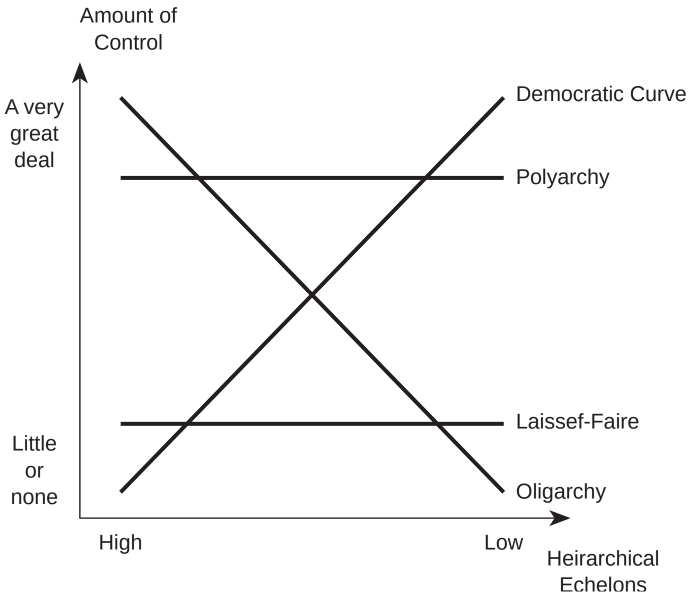
The autocratic or oligarchic model. This curve illustrates the traditional hierarchical organization.

The laissez-faire model. All members of the organization hold the same degree of power. The influence level is low, this implies that none of the employees exercises control.

The polyarchic model. This curve also depicts self-management, and it shows an equal degree of influence for all hierarchical echelons.

The laissez-faire model was also labelled 'anarchic' by Tannenbaum (1968: 32); however, returning to Williamson's peer group association resembling anarchic or self-management structures, it should be argued that anarchism need not be tantamount to the generally accepted negative vision of this as something resembling 'chaos' or lack of organization. Instead polyarchic structures resemble

FIGURE 3
Hypothetical Distributions of Influence (Tannenbaum Graphs)



Williamson's all-channel network with an 'anarchist' or highly participative and communicative organizational culture.

Thus, two democratic models are illustrated by the graphs. The 'democracy' graph depicts workers' management reducing management to mere executives carrying out directives articulated democratically by non-managerial employees. The polyarchic graph, however, is more democratic, because it builds on a concept of non-discriminatory decision processes as described in Table 3. This graph represents the non-discriminatory and significant participatory decision-making in our model for an O-type organization.

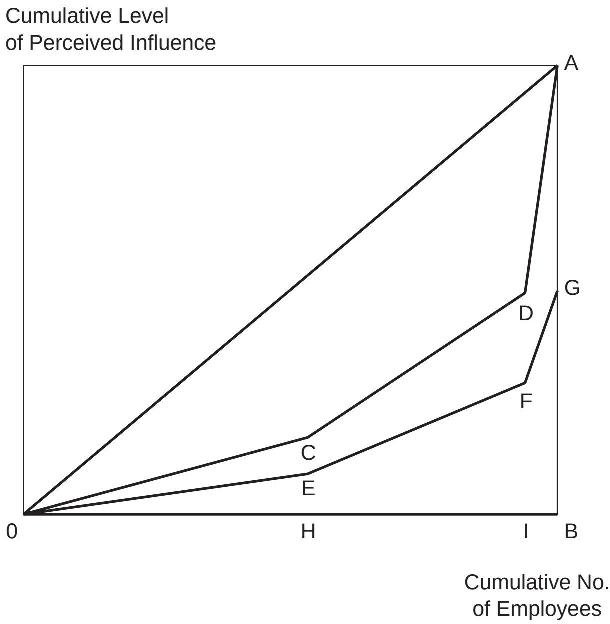
In a cumulative context, analysis of polyarchic control suggests the Lorenz curve method often applied in macro-economic analysis of the distribution of income and wealth. Whisler et al. (1968) used this approach to distributional analysis in their assessment of centralized control in 73 departments within a large insurance company. Important in this context is that a similar approach to distributional analysis could be adopted in relation to stock ownership. In a study of the distribution of ownership in Danish employee ownership firms Niels Mygind (1987) introduced the Lorenz approach in his conceptualization of self-managed firms owned by the employees. However, neither Whisler et al. nor Mygind included gini-coefficients as variables in causal analysis.

The Lorenz curve approach is illustrated by Figure 4, where we have an ideal 45° distribution between points 0 and A, each cumulatively added employee on the horizontal axis holds either as much perceived power as the rest of the employees in the organization or each added employee holds as much stock as the remaining employees (the vertical axis could instead measure cumulatively how much stock the employees hold). If external interests hold either all power or all issued stock, the relevant 'curve' is 0BA. The curve 0CDA illustrates an uneven distribution of either power or ownership in an employee-owned firm.

Concerning power, the curve 0EFGA illustrates a combination of power held by employees, management and external interests – for stock ownership this firm is employee co-owned. The distance AG is externally controlled stock, while GB is the remaining stock unevenly distributed among the employees (e.g. the employees 0H hold as little as the amount EH in stock). The two curves illustrate the actual distribution in contrast to the ideal egalitarian 45° line 0A. The degree of unequally distributed power or ownership is usually measured as the area between the straight line 0A and an actual Lorenz curve in proportion to the area demarcated by 0AB – this ratio is called the *gini-coefficient*. The closer the gini ratio is to 1 the more uneven is power or stock distributed, and the closer the ratio is to zero, the more egalitarian is distribution. In Figure 4 the 0CDA distribution has a smaller gini-coefficient than the 0EFGA distribution, hence the first is more egalitarian than the second.

The ideal distributions compose a quantitative picture of the non-discriminatory model for a theory O firm. As suggested, 'ginis' taking the value of zero or a value very close to zero are rarely met in a corporate capitalist economy. However, firms with the lowest ginis may approximate the model to such a degree that comparative performance is affected. If there are strong impacts from egalitarianism on performance, Pearson product moment correlations between performance variables and gini-coefficients suggest a negative slope, as illustrated in Figure 5. If there is a relatively stronger impact from either egalitarian ownership or egalitarian participation than from the unequal distributions often

FIGURE 4
Hypothetical Distributions of Influence and Ownership

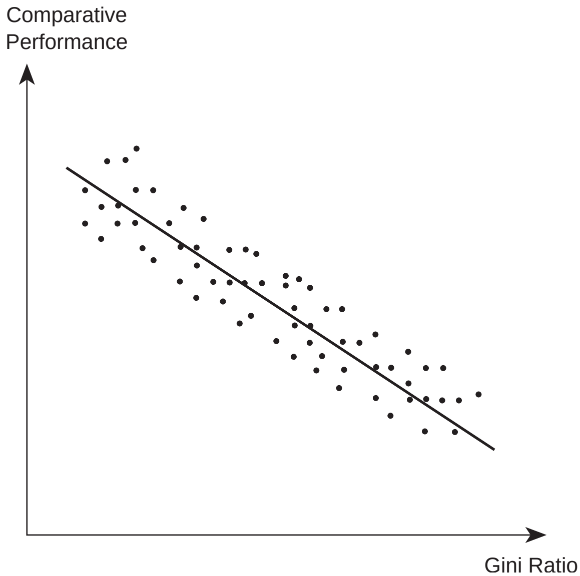


met in relation to discriminatory ownership and control, we would expect low ginis (close to the origin) related to high performance figures (e.g. comparative growth rates), and high ginis related to relatively poorer performance figures.

Conclusion

The results presented here on average did suggest that five employee firms outperformed their conventional comparison firms in terms of annual average growth. These findings do not allow for generalization, yet other studies do allow this, and the findings of those are similar to our cases. Often, employee ownership research stresses a particular participation effect. However, we did not see the employees experiencing themselves as real employee-owners, and we did not see the employees perceiving decision-making in their

FIGURE 5
Hypothetical Correlation – Egalitarianism and Performance



firms as particularly participatory in this study of employee-owners' perceptions. In general, it appeared that the employees did not see that their status in the hierarchy had changed, and the participation evidence alone suggests that none of the five Washington state employee ownership firms were even close to the polyarchic model. This does not suggest a particular theory O effect.

On the other hand, the correlations for individual perceptions did not exclude the possibility of ownership and participation having a beneficial impact on organizational commitment, job satisfaction and turnover intention. Although not all employees saw their ESOP as advantageous to them, it could be conjectured that a more egalitarian plan could increase commitment and satisfaction even further, and to such a degree that it could have a positive influence on comparative performance.

Though not generalizable, the findings cast suspicion on our interpretations of the data in ESOP research previously performed in the USA. This suspicion is supported introspectively by our 'everyday knowledge' of an unequal distribution of stock and of bureaucratic organizations in existence in most companies. It appears necessary to adopt a concise approach to distributional analysis of employee stock ownership and participation in decision-making. Defining the O-type firm as a non-discriminatory or egalitarian organization, and operationalizing this by distributional analysis, may enhance the precision of our predictions of the virtues of participatory employee ownership.

Note

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