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**Gainsharing:
Some Questions and Fewer Answers**

**CEO Publication
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ABSTRACT

The experience of 33 organizations with gainsharing programs is reviewed and summarized. Although many questions are left unanswered, the review indicates that success rate for gain-sharing plans is quite high. In addition, the review indicates that they are frequently tried in unionized locations and that they have largely been tried in manufacturing settings.

Gainsharing: Some Questions and Fewer Answers

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Many approaches have been used in recent years to develop the human resources of organizations. One of these approaches, gainsharing, is a major system-wide program. Gainsharing has received attention recently as a tool for simultaneously integrating several key aspects of the human system into an effective long-term effort.

Unfortunately, there is still inadequate information for managers interested in gainsharing plans. Most of the relevant literature focuses on implementation of one type of plan or another, for example, installing a Scanlon Plan. Consequently, many fundamental questions about gainsharing have not been answered. The purpose of this paper is to ask some of these basic questions about gainsharing. To answer these questions, we develop a basic conceptual model and use that model to review the case study literature reporting implementation of some type of gainsharing plan. Not all the questions can be answered and the remaining questions are posed as future research issues.

Some Questions With Answers

What is gainsharing? We need to define what gainsharing is. A gain-sharing plan is an organizational system of employee involvement with a financial formula for distributing organization-wide gains to individuals. Gainsharing plans involve all employees in solving problems in costs, quality, and productivity and share these gains with organizational members --usually in the form of a cash bonus. The essence of these plans is to share the responsibility and rewards for organizational improvement. Thus, they differ significantly from traditional reward systems, which bases individual pay on time, task, and tenure.

What organizations have experimented with gainsharing? To answer this we conducted a wide-ranging search of the literature. After much referencing, cross-referencing, and personal communication, we found a series of published and unpublished cases. Many plans were mentioned by name only, but others were described in enough detail to allow a closer examination. Some well-known cases were reported in several different sources, while others were briefly mentioned in the literature only once. From this search, we were able to identify companies and unions that had experimented with gainsharing.

How much information was available? Strikingly little. Informal estimates of the total number of implemented plans range from 500 to 1000, but we could find only 33 cases that were reported in even moderate detail. Of these 33, 11 were anonymous while 22 were identified by name, address, industry, etc. Yet even these 33 cases provided little concrete evidence about the dynamics and results of organizational gainsharing plans. It is unfortunate and remarkable that the data are so scanty on this topic.

Where is the information? Just about everywhere: Business Week. Fortune. Books. Appendices. Speeches. Government documents. Trade journals. Industrial relations memos. Newspapers. Wall Street Journal. Even Life magazine.

The only place we could not find case research information was in the scientific journals. Not a single case study of gainsharing has been published in such a forum. To be sure, there has been quantitative research, but no empirical case studies measuring organizational change with standard statistical methodology can be cited.

What is the quality of these cases? Poor to excellent. Although there are some excellent case studies of gainsharing, in general the information on gainsharing currently available is inadequate for assessing the long-term

impact of such plans. The cases consist of post hoc analyses of a single organization; this design is generally recognized as being of little or no scientific value. Not a single case in the literature we referenced involved even the administration of a survey before and after the implementation of the plan. Those who have done post hoc surveys have generally failed to report any data on validity and reliability so measurement quality is unknown.

The Conceptual Model

In order to analyze the 33 cases, some type of conceptual model is needed. The model we use here contrasts with traditional compensation theory and practice. The traditional compensation question for determining pay is: What is the minimum a person needs to be paid to be motivated to do the desired task? Gainsharing is based on a very different principle. Instead of using the minimization strategy that most managers employ to determine pay, gainsharing employs a maximization strategy: how can we maximize pay while simultaneously maximizing organizational effectiveness?

Given this principle of simultaneously maximizing organizational effectiveness and individual rewards how do these plans affect individual behavior? One primary psychological variable may be the performance-pay link. Gainsharing plans should be more likely to succeed if employees perceive that performance and cooperation are tied to pay through organizational productivity measures. This construct provides us with a framework from which to develop our conceptual model. This model is shown in Figure 1.

Structural factors. Under what conditions will employees see a relationship between performance and pay? First, there must be an actual observable relationship. This implies that there is a measurement system that evaluates organizational productivity in a specified way and distributes these gains to the members of the organization through some concrete mechanism.

The existence and nature of the measurement system must also be communicated. Our hypothesis is that for the plan to be successful, the organization must generally be trusted by its employees to perform the necessary calculations in a reasonable way and to distribute these gains consistently and fairly.

Implementation factors. Issues of communication and trust are influenced by more than the structural properties of the system. One major determinant is the process of implementation. Extrapolating from the literature on participative decision-making, we would expect that the probability of achieving a strong performance-pay perception is a function of the involvement in implementation.

Situational factors. In addition to an appropriate structure and a reasonable process of implementation, situational factors must also be considered because measures of organizational effectiveness are determined by more than cumulative individual performance. Environment, managerial style, climate and size are also major determinants of the pay-performance relationship.

Literature Review

On the basis of these three sets of factors--structural, implementation and situational--we studied the sample of 33 cases and analyzed each one on several dimensions. Table 1-4 are summaries of our results.

Structural factors. Table 1 shows the analyses of the 33 cases on five dimensions of plan structure. The gainsharing literature has emphasized the role of involvement. Our review indicates that the vast majority of reported cases included the development of a specific structure of committees, task forces, etc., with the purpose of involving employees in the direct

impact on organizational productivity. In roughly two-thirds of the cases the target of the measurement system was some evaluation of productivity. Other plans were based on measures of profitability, such as gross profit margin or pre-tax income.

Each of the productivity-based plans was analyzed to determine if the measure was based on labor, material, capital or energy. In every case the emphasis was on labor: however, we expect that this focus will shift as the economy and organizations give increased attention to such factors as energy productivity and material resources.

Once productivity gains have been determined, a distribution method must be constructed. The typical pay-out percentage of the plans studied was 60-75%. In all but one case, payout was made either monthly or annually.

Implementation factors. Table 2 lists four variables involved in implementation. Plan descriptions were analyzed for evidence of employee involvement in the design and implementation process. For those 26 cases where coding was possible, 22 showed evidence of employee involvement. Over two-thirds of the cases also used the services of an outside consultant or interventionist. This is undoubtedly an over-estimate of the population parameter. Many case studies are reported by those outside the organization, and we would thus expect a sampling bias. We would also expect that the explicit and implicit objectives for the gainsharing plan would influence its ultimate success. In many cases multiple objectives are stated; in others the emphasis is on pay, improvement of union-management relations, etc. In all but two cases for which evidence is available, employees were reported to favor the gainsharing plan.

Situational factors. Table 3 describes five situational factors that might affect the ultimate success of the plan. Two-thirds of the cases were implemented in unionized situations, echoing the utility of gainsharing plans in both union and non-union settings. Size has been described in the literature as an important factor. Our review indicates a wide range of organizational sizes. The technology dimension, on the other hand, does not show such variability: with the exception of two cases, all these gain-sharing plans were implemented in manufacturing operations.

Management style was also indicated in 11 of the 33 cases. Of these, 8 were coded as at least somewhat participative and 3 as autocratic. Given that one of the common objectives of gainsharing plans is the development of a participative management style, one might suspect that those most interested in such a plan would be those whose style was similar to participative styles. Our review supports this hypothesis, although tentatively.

Modern organization theory has established the significance of situational factors. Thus we would expect situational factors to influence the success of a gainsharing plan. Many cases report some impact, either favorable or unfavorable, but it is unclear at this point which situational dimensions are critical. Conceptual and empirical research is definitely needed on this point.

Outcomes. Five dimensional measures of success and one summary measure of overall programs success, measured as plan continuation or discontinuation, are given in Table 4. In all, two-thirds of the programs were successful. About three quarters of the gainsharing plans reported some improvement in productivity, quality, cost reduction, or customer service. About two-thirds reported improvements in individual attitudes,

morale, or quality of worklife. Over three-quarters reported more ideas, more suggestions, more innovation. Over half reported improvement in labor-management relations, working with the union, or better communication and cooperation between supervisor and worker. All but three cases reported at least some bonuses and pay increases based on performance improvements. It is remarkable to note that even though a significant amount of data is missing, in each dimension over half of the case studies reported improvements. Table 4 indicates that where gainsharing plans are successful, major systemic effects have been observed.

Several answers have emerged from this analysis. First, the amount of available research data is insignificant compared to the potential utility of organizational gainsharing plans. Given the wealth of possible applications and the demonstrated possibilities for success, it is critical that more research be conducted in this area. The payoffs for such research are high--for the theoretical advancement of organizational dynamics as well as the practical payoffs in organizational effectiveness.

Second, the quality of the research must be substantially upgraded. There is a methodology for assessing organizational change, and it is imperative that measurement become more sophisticated. Even given a single case, there is much more we can do with multiple measurements and longitudinal change data.

Third, it is crucial that future case studies be more complete and specific. The vagaries of journalism generate mediocre data for scientific analyses. With the development of standardized case studies across a wide variety of organizations, we can go far in assisting the development of more enlightened gainsharing plans.

Some Questions Without Answers

Our review suggests that several issues are ripe for study. Although the existing literature has answered very few of the key questions concerning gainsharing plans, it can help focus research on the important issues. This section identifies some of the unanswered questions.

What is the success pattern? According to this review, more than half of such plans appear to produce some tangible benefits to those organizations that install them. While it is quite possible that the actual success rate is lower than that indicated by our literature review--as failures of workplace experimentation tend to be under-reported--the data nevertheless suggest that there are enough successes to warrant further research.

It would, of course, also be desirable to know in some detail the kinds of organizational outcome variables--the quality of worklife, union-management cooperation, cost reduction, etc.--a plan can reasonably be expected to affect. This is a key question since no plan is likely to improve all aspects of an organization simultaneously and to the same degree.

What works best? There are literally thousands of different ways to implement and structure a gainsharing plan. At this point virtually nothing is known about which programs are likely to work best. This is a crucial issue since many practitioners and consultants have a standardized gain-sharing package that includes both an implementation procedure and a formal plan structure--e.g., the Scanlon Plan.

It stands to reason that some plans will be more effective than others, and it would certainly be useful to have information on the expected outcomes of various options. In the absence of such knowledge, firms and their employees are at the mercy of the experts. In short, it is very difficult

to be an intelligent consumer if one has no evidence on the impact of different plans.

When and where do gainsharing plans work? So far our questions have focused on whether plans do or do not work. We have ignored the important role that situational conditions can play. This, of course, is a gross over-simplification of the real world. In fact, there is good reason to believe that many factors dramatically influence the effectiveness of any gainsharing plan and that certain plans may work better under some conditions than others. The crucial research issues here involve when and where various plans work best.

The literature is rather silent on which situational conditions should be considered in determining whether a particular kind of gainsharing plan can be expected to work. Nevertheless, it is developed enough to suggest some thing that should be examined: for example, the businesses that surround the organization and the environment in which the enterprise operates are crucial. Plans rarely succeed when the business environment is deteriorating and there is no strong market for the product.

There is also evidence that a number of organizational characteristics are of vital importance. Some studies have suggested that size is crucial; others have emphasized climate, type of product and so on. At the moment these and similar observations are largely speculative. Information on this point would seem crucial because without it all a potential user of any plan can do is guess which program will work in any particular situation.

How are the plans integrated into the organization? A gainsharing plan is often installed as part of an organization development program. This raises issues about how the plan fits in with other changes, both in terms

of consistency and timing. Many existing plans have been installed in a participative management context as part of an overall effort to get workers more involved in decision-making. Indeed some observers have stressed the fact that gainsharing plans work best when integrated with a participative approach. There is good reason to believe that this is true, but there is little research on this topic.

Timing is a critical issue in any change effort involving an on-going organization. All changes cannot be introduced simultaneously: thus the issue of when to install a gainsharing plan is highly important. Elsewhere we have speculated that a plan could either lag or lead other changes. Specifically we have proposed that such a program can be an effective lead variable in older organizations because it can stimulate changes in other management practices that would not have occurred in its absence. On the other hand, a gainsharing plan in highly participative organizations may reinforce the existing management structure and be an organizational renewal variable in an on-going, effective system. All this is, of course, highly speculative at this time. We have installed gainsharing plans as both lag and lead variables and feel they can serve both purposes, but we are a long way from having convincing evidence on how they work in these two roles. This would seem to be a vital research need given the growing recognition of the important interface between all management systems in an organization.

Why they work? Although there is some evidence that gainsharing plans can indeed work, there is surprisingly little evidence as to why they work. Speculation on this issue ranges all the way from the belief that somehow employees exert more effort when they are involved in a gainsharing plan to

the view that workers simply "work smarter" when gainsharing is operative. Both these hypotheses deserve research, but so far they have not been examined to any great degree. The way to address them is through longitudinal studies that look at how the total organization changes when a gain-sharing plan is installed.

One interesting speculation as to why gainsharing may work is that such plans change the culture of the organization, and this is our view. Gainsharing plans appear to transform individuals, working on their own tasks and largely unaware of how their jobs interface with the whole of the organization, into groups of employees which suddenly have a much broader understanding of and commitment to the total enterprise and its success. This can encourage employees to work smarter and perhaps harder because they feel they are part of an on-going team which needs their energy, ideas and allegiance if it is to win. Again, this explanation is largely speculative, but it is one worth following up with hard data.

Summary and Conclusions

Some questions are answered, but some others are not. We have a basic definition of gainsharing as a system combining employee involvement with organization-wide financial rewards. Gainsharing plans share the responsibility and rewards for organizational improvements among all employees. Many organizations have experimented with gainsharing, with estimates of several hundred implementations and our review locating 33 documented case studies. Information about gainsharing is spread across a wide range of publications and periodicals, but no case studies have been documented in the scientific literature. The quality of these case studies reports varies greatly, but none have used standard statistical methods for assessing organizational change.

Nonetheless, the case study literature has provided some useful information about gainsharing. To synthesize the information from the case studies of gainsharing, we developed a basic heuristic model that analyzed gainsharing plans in terms of structural factors (what the feature of the plans are), implementation factors (how it is developed and implemented), and situational factors (the characteristics of the organization and environments). Structurally, most gainsharing plans have formal involvement structures and are based on labor productivity formulas, with a majority share of the gains distributed to employees in a monthly payout. In implementation, the plans are installed for several reasons, with objectives for improvements in labor-management cooperation, organizational effectiveness, and pay. Most plans involve an outside consultant and employee in implementation, and in most cases, employees are favorable to gainsharing. Situationally, gainsharing plans have been installed in both union and non-union organizations and is small, medium, and large organizations with different management styles. Most cases are in manufacturing plants and most cases report that the environment is favorable to gainsharing. In terms of outcomes, two-thirds of the plans were successful. In the majority of cases there were improvements in such areas as productivity and cost savings, individual attitudes and quality of worklife, ideas and suggestions, labor-management cooperation, and pay and bonuses. Although not every case reported improvements in every area, most cases reported improvements in several areas and considered the program to be a success.

These preliminary data indicate that further research on the unanswered questions is warranted. Some crucial research issues are:

- what is the success pattern?
- what works best?
- when and where do gainsharing plans work?
- how are the plans integrated into the organization?
- why do they work?

We think these research issues should be followed with respect to gain-sharing plans, and even this incomplete list represents a full menu. We hope the increased use of gainsharing plans will lead to research activities that will try to answer some of the questions we have raised. In the absence of research we are sure to be condemned to another half century of misunderstanding and mythology. If we have learned nothing else from past experimentation with gainsharing plans, we should realize that we need to know more about when, where, and how they work.

Table 1

Structural Factors

Formal Involvement Structure	Yes N=24 (73%)	No N=3 (9%)	Not Available N=6 (18%)
Target	Productivity N=24 (73%)	Profitability N=4 (12%)	Not Available N=5 (15%)
Productivity Focus	Labor N=22 (67%)	Material N=0 (0%)	Capital N=0 (0%)
		Energy N=0 (0%)	Other/NA N=11 (33%)
Employee Distribution	20%	37%	40%
	N=1 (3%)	N=1 (3%)	N=1 (3%)
	60%	70%	75%
	N=3 (9%)	N=3 (9%)	N=7 (21%)
			N=4 (12%)
Payout Period	Weekly N=1 (3%)	Monthly N=26 (79%)	Quarterly N=0 (0%)
			Annually N=3 (9%)
			Not Available N=3 (9%)
			N=10 (30%)

Table 2
Implementation Factors

Employees Involved	Yes	No	Not Available	
	N=22 (67%)	N=4 (12%)	N=7 (21%)	
Interventionist Used	Yes	No	Not Available	
	N=24 (73%)	N=3 (9%)	N=6 (18%)	
Objectives	Pay/Rewards	Productivity/ Costs	Labor/ Management	Not Available
	N=15 (45%)	N=11 (33%)	N=8 (24%)	N=6 (18%)
	Employees Favorable	Yes	No	Not Available
	N=21 (64%)	N=2 (6%)	N=10 (30%)	

Table 3
Situation Factors

	Yes	No	Not Available		Not Available
Union Organization	N=22 (67%)	N=6 (18%)	N=5 (15%)		
Size	1-100 N=4 (12%)	101-500 N=13 (39%)	501-10,000 N=10 (30%)		Not Available N=6 (18%)
Technology	Manufacturing N=31 (94%)	Process N=1 (3%)	Service N=1 (3%)		
Environment Favorable	Yes N=17 (52%)	No N=8 (24%)	Not Available N=8 (24%)		
Management Style	Autocratic N=3 (9%)	Participative N=8 (24%)			Not Available N=22 (67%)

Table 4

Outcomes and Success

Organizational Effectiveness	Yes	N=24 (73%)	No	N=6 (18%)	Not Available	N=3 (9%)
	Yes	N=21 (64%)	No	N=8 (24%)	Not Available	N=4 (12%)
Quality of Work Life	Yes	N=25 (76%)	No	N=3 (9%)	Not Available	N=5 (15%)
	Yes	N=18 (55%)	No	N=9 (27%)	Not Available	N=6 (18%)
Labor-Management Cooperation	Yes	N=30 (91%)	No	N=3 (9%)		
	Yes	N=22 (67%)	No	N=11 (33%)		
Pay	Yes		No			
	Yes		No			
Program Success	Yes		No			
	Yes		No			

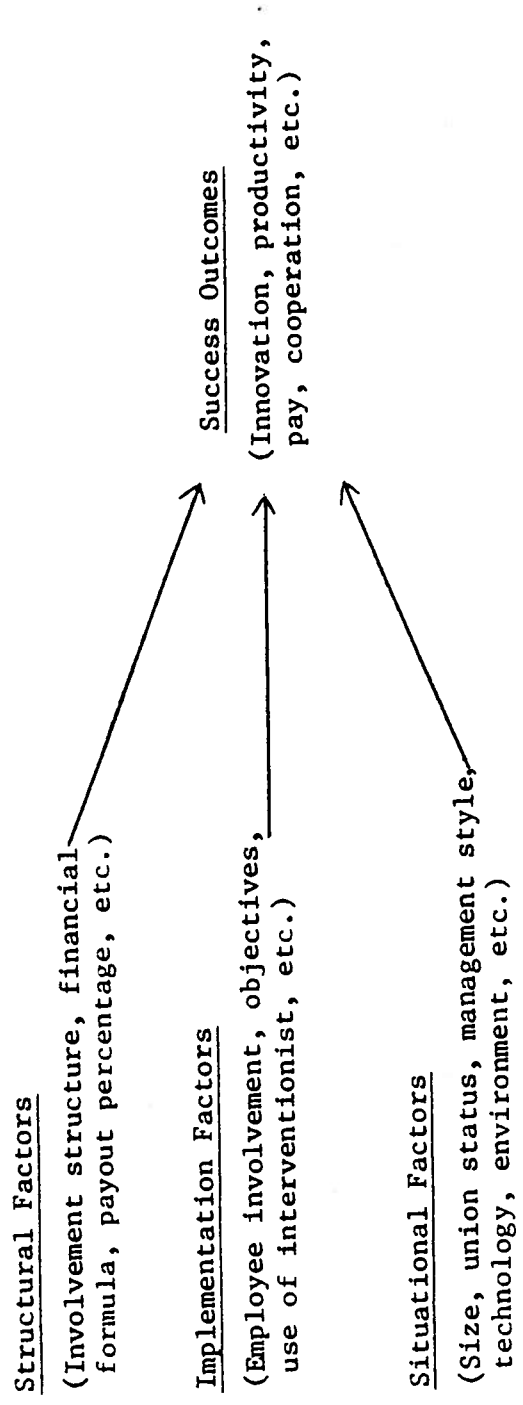


Figure 1. A heuristic model of gainsharing.