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STYLES OF LEADERSHIP

By Dr. Patricia Lynch Duckworth, CPA

THE THEORY OF
PROBABILITY SAMPLING

By Glenda E. Ried, CPA

DEPARTMENTS

- *Editor's Notes*
- *Tax Forum*
- *Theory and Practice*
- *Reviews*

SEPTEMBER 1972

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"The average human being has an inherent dislike of work and will avoid it if he can."

"If the leader is to motivate in a positive manner, he must have available a series of rewards that subordinates value."

"What form is best? It depends on the leader, the led, and the situation . . ."

THE THEORY OF PROBABILITY SAMPLING

Glenda E. Ried, CPA 8

"Sampling is 'not mere substitution of a partial coverage for a total coverage.' It is a science of controlling and measuring the reliability of a sample by statistical methods through the theory of probability."

"Probability sampling is a statistical theory; personal judgment in no way enters the picture."

EDITOR'S NOTES

CONGRESS OF ACCOUNTANTS

The Tenth International Congress of Accountants will be held in Sydney, Australia, October 16-20. We hope that the Congress will be a great success and that the individual members of the Congress will return to their homelands with a greater understanding and appreciation of their profession, its practitioners, its challenges, and its future.

IN THIS ISSUE

Many are predicting that the 1970s will be the decade of women in the United States. Whether this will come to pass will depend to a great deal on women themselves, among other things, on their ability to develop into effective leaders rather than efficient followers.

"Styles of Leadership," authored by Patricia Duckworth, beginning on page 5, should give each professional woman accountant food for thought. Do you have the skills to be a leader?

This seems to be an era in which surveys, samples, and studies are a prerequisite to any major business decision. In a two-part article beginning on page 8 of this issue, Glenda Ried explains in some detail the theory which under-

lies probability sampling, the basis for most consumer and opinion surveys.

REGULATION S-X

The Securities and Exchange Commission has recently amended—in the first major changes since 1950—Regulation S-X, Form and Content of Financial Statements. The amended "bible" for preparing financial statements to be filed with the SEC is effective for periods ending on or after December 31, 1972. Those whose professional involvement includes SEC-regulated businesses are urged to become familiar with the changes.

A "HOT" TOPIC

The September 1971 issue of this magazine contained a manuscript by the Assistant Controller of the University of Cincinnati, Wilma Loichinger, entitled "Accounting for Grants and Contracts in an Educational Institution." We are pleased to report that more than fifteen colleges and universities have borrowed the accounting manual which was developed with the system described in Miss Loichinger's article. It is most gratifying to realize that most of those institutions undoubtedly learned of this needed manual through these pages.

HOW LITTLE HAVE THINGS CHANGED?

The following is from the August 1947 issue of THE WOMAN CPA — 25 years ago!

Industry has been unsuccessful in presenting published accounting information to the public, Carman G. Blough, director of research of the American Institute of Accountants, told the 2500 delegates attending the NACA convention. "Misunderstandings of business operations are widespread," Mr. Blough declared, "and it is up to industry to devise means of presenting accounting information so that the intelligent, ordinary man in the street will understand them."

Suggesting a redesigning of basic financial statements with a view to providing clearer terminology and more satisfactory disclosure of information, he pointed out that many of the methods used today to "clarify" financial statements fail of their purpose due to omission of essential information, "slanting" reports to various groups such as stockholders and employees, and over-simplification which suggests a patronizing attitude on the part of the management.

"The presentation of complete, fair, unbiased and reliable accounting information can contribute much to renew the public's confidence in business enterprise," he concluded.

This editor read that comment with mixed emotions—have we made no progress in the past 25 years?—perhaps the much-discussed credibility gap between youth (or the "public") and business is not the sole fault of business leaders of the last decade? One certainly must at least pause and wonder at the apparent lack of progress in a period when many of us felt that so many changes were being made.

STYLES OF LEADERSHIP

The author discusses various means of coping with a situation which most accountants must face daily—how to effectively serve in a leadership role.

DR. PATRICIA LYNCH DUCKWORTH, CPA
Denver, Colorado

Whether you are a supervisor of one person or twenty; a committee chairman or the president of an ASWA chapter; you need to practice good leadership. You know that good leadership is the building of an effective work force and motivating each member of it to turn in his best performance. You know the leader must stimulate the members of the organization to undertake the work required and that he, or she, has primary responsibility for initiating and guiding work toward the accomplishment of organization objectives.¹ In a business environment, the objective to be achieved is often the maximization of profits. In a voluntary professional organization, the goals or objectives differ, but there still are goals—goals that are too large and complex to be executed by a single person.

Flippo defines management as the planning, organizing, directing, and controlling of the enterprise's operations so that objectives can be achieved economically and effectively.² Planning is the specification of goals and means; organizing is concerned with developing a framework or organization chart; directing is concerned with stimulating the organization to undertake action along the lines of the plans; and control is the regulating of whatever action results from direction. The third major function of management, directing, includes the initiation of action in accordance with developed plans. Leadership is a major element in this initiation. This article examines the styles and various aspects of leadership.

Styles of leadership exist which rest on the locus of decision making. Such styles can be categorized as autocratic, participative, and laissez-faire.

The Autocrat

In autocratic, also called authoritarian or leader centered, the decision making is located solely with the leader. Flippo states that autocrats can be classified as three types: the hard-boiled, the benevolent, and the manipulator.³ The hard-boiled autocrat gives the orders and the subordinates take them. He makes use of negative influences. The benevolent autocrat uses the techniques of positive leadership. He makes ample use of praise to achieve acceptance of his decisions. The manipulative autocrat makes the subordinates feel that they are participating in decision making even though the manager is pulling the strings. These authoritarian patterns, or management by direction and control, have deep roots in long and successful experience of diverse organizations—especially the church and the military. The assumptions behind this view of management have been well expressed by the late Douglas McGregor's "Theory X".

1. The average human being has an inherent dislike of work and will avoid it if he can.
2. Because of this human characteristic of dislike of work, most people must be coerced, controlled, directed, threatened with punishment to get them to put forth adequate effort toward the achievement of organizational objectives.
3. The average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, wants security above all.⁴

These assumptions about human behavior

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indicate that the boss never really trusts his subordinates . . . he carefully limits the amount of responsibility and information he gives them. Management by centralized direction and control “gets results,” and some managers believe that people would rather have autocratic leaders, though preferably benevolent ones.⁵ This style of leadership tends to stifle the initiative of subordinates and reduces the possibility of innovations which might increase productivity.⁶

Participative Leadership

The second style of leadership, participative, emphasizes the principle of mutual responsibility and shared objectives. Pigors and Myers emphasize that high standards of performance are expected, but a maximum of external controls and incentives is supplemented by self-imposed controls, by enlistment in organizational goals, and by a high degree of self-direction.⁷ With this style of management, discussion of company objectives is an important way to attain cooperative action. “Management by objective and self control” is the way Peter Drucker has described this approach.⁸

The participative leader cannot share all of his decisions; but, when possible, he consults with the subordinates and attempts to share some of the decision making responsibility with them. He usually has a higher estimate of his subordinates than the autocrat. Flippo states that the participative leader attempts to develop a general sense of responsibility for the accomplishment of group goals, using both praise and criticism, but he does this objectively and in relation to clear job assignments.⁹ The ultimate responsibility for the decision rests with the leader; only the decision making is shared.

McGregor expressed the implications of this alternative concept of management as follows:

Above all, the assumptions of Theory Y point up the fact that the limits on human collaboration in the organizational setting are not limits of human nature but of management’s ingenuity in discovering how to realize the potential represented by its human resources. Theory X offers management an easy rationalization for ineffective

organizational performance: it is due to the nature of the human resource with which we must work. Theory Y, on the other hand, places the problems squarely in the lap of management. If employees are lazy, indifferent, unwilling to take responsibility, intransigent, uncreative, uncooperative, Theory Y implies that the cause lies in management’s method of organization and control.¹⁰

In McGregor’s Theory Y the assumptions about human behavior are expressed as follows:

1. The expenditure of physical and mental effort in work is as natural as play or rest. The average human being does not inherently dislike work. Depending upon controllable conditions, work may be a source of satisfaction (and will be voluntarily performed) or a source of punishment (and will be avoided if possible).
2. External control and the threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-direction and self-control in the service of objectives to which he is committed.
3. Commitment to objectives is a function of the rewards associated with their achievement. The most significant of such rewards, e.g. the satisfaction of their ego and self-actualization needs, can be direct products of efforts directed toward organizational objectives.
4. The average human being learns under proper conditions not only to accept but to seek responsibility. Avoidance of responsibility, lack of ambition, and emphasis on security are generally consequences of experience, not inherent human characteristics.
5. The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population.
6. Under conditions of modern industrial life, the intellectual potentialities of the average human being are only partly utilized.¹¹

Random — “Arising from chance alone, in contrast with haphazard or systematic; . . . randomization requires careful planning to make certain that only chance elements are present, or that bias, if present, or introduced, is known and measurable.”

“A Dictionary for Accountants,”
Eric L. Kohler

These assumptions of Theory Y underlie participative management. The concept is based on the belief that the most effective way to get results is to work with people, rather than through them. Many years ago Mary Parker Follett called this "co-action" as contrasted with coercion.¹²

The Laissez-faire Leader

The third style of leadership, laissez-faire, refers to a leader who does not wish either to make decisions alone or to merely ask for advice. He gives little or no direction and allows his subordinates a great deal of freedom. He leads with a very loose rein and uses little or no formal structuring. Often he attempts to pass the responsibility for decision making to the group.

Of the three styles of leadership, laissez-faire is the slowest and likely to be the least effective. The traditional concept (management by centralized direction and control) and the alternative personnel concept (management by objective and self control) can be considered as points at each end of a continuum—ranging from little or no participation in decision making by subordinates at one extreme to considerable participation at the other end. What kind of theory do you advocate—Theory X (little participation) or Theory Y (much participation)?

Motivation

Regardless of his style, the leader must deal with two major aspects of leadership—motivation and delegation.

One of the central problems of any organization is to motivate its members to work for the organization's overall objectives.¹³ If the leader is to motivate in a positive manner, he must have available a series of rewards that subordinates value. To have value, the rewards must be effectively related to organizational goals. Flipppo's list of various rewards that have been used in organizations include (1) judicious use of praise, (2) public recognition of accomplishments, (3) delegation of more responsibility, (4) development of an atmosphere that suggests productivity and creativity, (5) a sincere interest in the people with whom one works, (6) competition, (7) information, (8) money, (9) security, (10) participation.¹⁴

Although it is not difficult to understand the theory behind each of these rewards, their application in particular situations is an art that requires experience. Perhaps the first two—praise and public recognition—are the most useful rewards in voluntary professional organizations. Those two, plus the additional eight, are useful in influencing and motivating em-

ployees in business organizations.

Delegation

Another aspect of leadership is delegation. In some areas a supervisor makes decisions by himself, and in other areas he delegates to his subordinates. Strauss and Sayles state, "In applying delegation a manager makes relatively few decisions by himself and frames his orders in broad general terms."¹⁵ Delegation gives each subordinate a sense of being his own boss and exercising control over his own work environment.

Delegation is feasible only when the superior is assured that the subordinate will make decisions which are adequate from the viewpoint of the organization. Four substitutes for close supervision used by leaders are rules, goals, indoctrination, and technology.

Rules set up standard operating procedure and make it unnecessary for every decision to be referred to the supervisor. Goals avoid the necessity for either making specific decisions or laying down detailed rules. Subordinates are given a definite assignment in terms of the results expected. Strauss and Sayles state, "Typically, when supervision by goal-setting is practiced, management interferes very little, so long as the goals are met, except perhaps to give subordinates praise, promotion, or some financial reward. Only when serious trouble develops does higher management step in."¹⁶

Indoctrination, the full acceptance of the goals and values of the organization, makes it easier to delegate authority. Highly indoctrinated individuals tend to think in the same terms and make their decisions on the basis of the same premises as their supervisors. Often indoctrination is different and less effective in a business organization than in a nonprofit institution.

Technology refers to the rearrangement of jobs so as to reduce the number of "human orders." Often the nature of the work to be done restricts subordinates in much the same way as do direct orders, rules, and other supervisory techniques.¹⁷

There is some evidence that close supervision, as well as the four substitutes for close supervision, is most effective where the job is challenging, where the work cycle is long, and where there is an opportunity for intrinsic job satisfaction. If there is little opportunity for creativity and internalized motivation, subordinates are less likely to perform effectively when left by themselves.¹⁸

(Continued on page 19)

THE THEORY OF PROBABILITY SAMPLING

In this first of a two-part series, the author begins an explanation of the theory behind simple random sampling.

GLEND A. E. RIED, CPA
Toledo, Ohio

An understanding of sampling and the various methods of sampling is essential to the accountant of modern day. He is interested in sampling as a technique to be used in auditing. Accounts receivable may be confirmed 100 per cent or only a sample may be taken which, for various reasons, is considered adequate and acceptable. Although the auditor normally observes the taking of an inventory at the client's yearly closing, he may perform interim inventory procedures by testing samples or portions of the inventory.

Sampling, in its most elementary sense, is the selection and study of a relatively small number of individuals to learn the characteristics of the group from which they are selected. These individuals may be animate or inanimate things and are frequently referred to as items. The total number of items in the group (the population) may be small, large, or infinite.

In situations where examining all the items in a population and recording and summarizing the results of such a study would be expensive, time-consuming, or both, then sampling procedures are very useful.

Sampling involves many problems such as defining the universe to be studied, defining the variables to be studied, and choosing the sample design. Discussion in depth of these areas shall be excluded from this paper as sub-topics which depend on the type and purpose of the study needed.

The basic sampling methods may be outlined as unsystematic, unrestricted probability, quota, and area sampling. Only unrestricted probability sampling, sometimes called random sampling, shall be discussed. Probability sampling can be further subclassed into various

kinds of random sampling called simple random, stratified random, cluster (one-stage and multi-stage) sampling, and so forth.

The purpose here is to explain why probability sampling is considered more objective than other sampling methods without elaborating on or defining these other sampling techniques, but by delving into the theory behind the probability principle, relating this theory to sampling, and revealing through representativeness and reliability that the sample can approximate a certain degree of accuracy.

Probability Sampling Defined

Probability (or random) sampling as defined by the *Encyclopaedia Britannica* is:

"The method used to discover the opinions and intentions of a large population by questioning a sample of them chosen in such a way that theoretically everyone has an equal chance of being included in the sample."¹

A more all-inclusive definition is that given by Lyndon O. Brown, which states:

"Probability sampling is a method of choosing for investigation a number of units or individuals according to some mechanical or automatic principle unconnected with the subject or purpose of the inquiry, the selection being arranged so that each unit or individual in the universe has an equal or known chance of being included in the sample."²

No two definitions of probability sampling will be exactly the same, yet they will have in common the following characteristics:



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- (a) each unit in equal chance of being selected,
- (b) the probabilities of selection are known,⁴
- (c) the sample is selected in accordance with the laws of chance, and
- (d) another sample drawn from the same universe will differ from the first.

Some authors use the term in a more restrictive sense, that is to distinguish it from sampling by purpose selection or the judgment of an expert.

Pure probability sampling at one time meant that a sample was chosen from a list of names by marking off every 10th, 20th, or 100th name.³ This no longer can be classified as probability sampling because each person in the population does not have an equal chance of being selected.

The possibility of obtaining a pure probability sample is very minute. The closest example would be one in which the universe to be sampled is a file of cards. By this method there can be no refusals or nonresponses unless some of the entries on the cards are illegible. However, refusals, nonresponses, and errors of response in collecting the information have been carried over to the cards, and, therefore, into the sample.⁴

Universe and Unit

“Universe” and “population” are synonymous for the larger group from which the sample is drawn. The group, whose characteristics are to be measured, may be the population of the world, a special group within a specified area, or a business firm’s inventory. Any quantity or relationship pertaining to the population which is to be studied is defined as a “characteristic.” Each individual or item comprising the universe may be called an “elementary unit.” The sample is derived from these elementary units whose characteristics are to be measured in the analysis.

Probability Theory

The theory of probability derives its theoretical background from a branch of mathematics called the science of chance. Mr. Brown states the two links between probability theory and practical sampling methods are:

- ⁴ (a) the link of experience, and
- ⁵ (b) the link of intuition.⁵

He believes that the decision making an individual must constantly encounter is related to past experience and future expectations. For example, Miss A is late for work; upon reaching the intersection, she finds the traffic light

is against her. Faced with two alternatives, waiting or crossing against the light, she chooses to wait. Why? Based on past experience, Miss A knows that the chance of being struck by a moving vehicle is too great to warrant the risk of crossing against the light. The odds may be known imperfectly, but Miss A is aware of them subconsciously.

On the other hand, the link of intuition can be illustrated by the problem of measuring parking facilities of grocery stores. A sample of 100 out of 1,000 grocery stores may include 20 single-clerk type stores and 80 large supermarkets.⁶ On the basis of intuition, one should know that this is not a good sample because it does not represent all the stores in term of size. Common sense says that, out of every 100 stores, 80 cannot be supermarkets. In both social and physical scientific research, such a probability can be numerically estimated. The researcher can be sure, in most cases, that a sample will produce results relatively close to the actual situation—results which can provide a valid and realistic basis or guide for making business decisions.

Sampling is “not mere substitution of a partial coverage for a total coverage.”⁷ It is a science of controlling and measuring the reliability of a sample by statistical methods through the theory of probability. Until the probability theory was developed, the problems of specification, design, and appraisal were independent of each other. Objective calculations of accuracy were impossible, either before or after a survey. The efficiency and cost of one plan could not be compared with another. Because a particular survey appeared to give precise results, it did not necessarily give information helpful in designing other surveys. Without probability theory, the best means of appraising survey results was to make comparisons with similar surveys and census reports. The survey was considered good if they appeared to agree. If they disagreed, the difference could arise from many causes: sampling errors, questionnaire errors, interviewer bias, and others. Probability sampling is a statistical theory; personal judgment in no way enters the picture.

Probability Survey

A probability survey conforms to a statistical plan whereby the elements or items are selected automatically. Therefore, neither the interviewer nor the elements in the sample have any choice or influence regarding what items are included in the sample.⁸ In selecting the sample, the use of a list or table of random numbers will make it possible to determine the probabilities of selecting the various samples.

For example, the tossing of a coin has shown that there is "a high degree of stability in the proportion of times a particular result will occur in a sufficiently long series of performances of the operation."⁹

The theory deals not only with selecting the sample, but also with obtaining the information from the sample, interpreting the information, and evaluating the accuracy of the results. Random selection of the sample is, perhaps, the most important role that probability plays in sampling.¹⁰ Yet a considerable part of the theory deals with the calculations of formulas for variances of the estimates, precision, and so on.

Simple Random Sampling Defined

Random sampling may be defined the same as probability sampling because it is a probability method. Many of the fundamental principles of probability sampling can be explained through an analysis of simple random sampling. The United States government used random sampling for the census taken in both 1940 and 1950. Canada used it in 1951 for the taking of its census.

Selection of Sample

In practice, a simple random sample is drawn unit by unit, without replacement. At any stage in the draw, this process gives an equal chance of selection to all units not previously drawn. This is not taking every tenth unit, which is non-probability sampling. The classic

example is a bowl of chips, each chip numbered to represent a unit of the population. When a chip has been drawn from the bowl, it is not replaced, since this would allow the same unit to enter the sample more than once. Therefore, the sampling is described as without replacement. Normally, a sample will not contain the first units in the population, except in those rare instances in which these units happen to be drawn.¹¹

Table I shows the incomes of a population of twelve individuals, A through L, and their respective incomes. From this population of twelve, a sample of two individuals shall be selected. Whether using a bowl of chips or a deck of cards, they must be thoroughly mixed or shuffled. It is possible that any number of inequalities may affect the drawing, with the same result that every combination does not have the same chance of being drawn.¹²

Assume that sample BG was drawn from Table 2. The proportion of times that BG would occur would be the same as for AK or any other combination. Drawing a sample of two, 66 possible combinations of two individuals could be drawn from a population of twelve. Table 2 shows all of the 66 possible samples and the average income of the two.

Take sample BG for illustration. B's income was \$6,300 and G's income, \$1,800; the average of their total income, \$8,100, is \$4,050.

Rather than use a bowl of chips, a table of random numbers will serve the purpose just as efficiently. Taking the above population of twelve individuals, replace the letters A through L with the numbers one through twelve. Assume the following illustrates a table of random numbers. Preselect a starting place in the table, and then proceed systematically through the table using as many rows as are needed.

TABLE I

INCOMES OF A HYPOTHETICAL POPULATION OF TWELVE

<u>Individual</u>	<u>Income</u>
A	\$1,300
B	6,300
C	3,100
D	2,000
E	3,600
F	2,200
G	1,800
H	2,700
I	1,500
J	900
K	4,800
L	1,900
Total Income	\$32,100
Average Income	\$2,675

05	02	12	03	07	05	07	06	06	07	03	03
09	07	03	11	08	08	07	08	05	11	08	12
09	07	04	04	08	05	05	04	08	01	10	05
08	10	05	03	07	03	09	02	04	12	03	01
09	06	06	05	12	05	08	03	07	07	07	04

A predetermined method may be to start with row two, the second column, and count off each fifth pair. In selecting a sample of two units, the first number chosen is 07. The fifth pair from 07 is 07 again. Since that number has already been drawn, it will be ignored, and five more pairs counted off. Thus the second individual of our sample is number 12. It is unknown what number will be selected, because they appear at random throughout the table and the probability each number has of being selected should be equal.

Source: Hansen, *et al.*: *Sample Survey Methods and Theory*, I, p 12.

TABLE 2

ALL POSSIBLE SAMPLES OF TWO
DRAWN FROM THE POPULATION OF
INDIVIDUALS – TABLE 1

Individuals in Sample	Average Income	Individuals in Sample	Average Income
AB	\$3,800	DJ	\$1,450
AC	2,200	DK	3,400
AD	1,650	DL	1,950
AE	2,450		
AF	1,750	EF	2,900
AG	1,550	EG	2,700
AH	2,000	EH	3,150
AI	1,400	EI	2,550
AJ	1,100	EJ	2,250
AK	3,050	EK	4,200
AL	1,600	EL	2,750
BC	4,700	FG	2,000
BD	4,150	FH	2,450
BE	4,950	FI	1,850
BF	4,250	FJ	1,550
BG	4,050	FK	3,500
BH	4,500	FL	2,050
BI	3,900		
BJ	3,600	GH	2,250
BK	5,500	GI	1,650
BL	4,100	GJ	1,350
		GK	3,300
CD	2,550	GL	1,850
CE	3,350		
CF	2,650	HI	2,100
CG	2,450	HJ	1,800
CH	2,900	HK	3,750
CI	2,300	HL	2,300
CJ	2,000		
CK	3,950	IJ	1,200
CL	2,500	IK	3,150
		IL	1,700
DE	2,800		
DF	2,100	JK	2,850
DG	1,900	JL	1,400
DH	2,350		
DI	1,750	KL	3,350

Source: Hansen, et al.: *Sample Survey Methods and Theory*, I, p 13.

Probability is Known

The probability that each individual has of being selected in samples of any size can be calculated mathematically.¹³ If a sample of one unit is drawn from a population of twelve, then the probability of any one being selected is one-twelfth. To determine the probability that A will be included in a sample of two elements,

consult Table 2. Table 2 reveals 66 combinations of two individuals and that each has the same chance of being drawn. Individual A occurs in eleven of the combinations. Therefore, the probability of drawing A equals 11/66 or one-sixth. A has the chance of being drawn once out of every six selections. The probability is the same for each of the remaining individuals. To determine the probability of selection for a sample of three, count the number of samples (55) in which A would occur, divide this into the total number of possible samples (220), and the answer is 55/220 or one-fourth.

The probability that each individual will be drawn can be determined mathematically from the formula n/N^{14} , where "n" equals the number drawn in the sample and "N" equals the population number. Computation of the above examples gives exactly the same answers. The population in all instances remains twelve.

Sample of 1 1/12 probability
 Sample of 2 2/12 or probability of 1/6
 Sample of 3 3/12 or probability of 1/4

Steps must be taken to insure that each individual has the same probability.

Sample Values

The value that would be obtained if no errors were made in any way in obtaining the information or computing the characteristics is the "true value" of a sample. Using the following symbols and formulas, the population value and sample value¹⁵ can be determined:

y = total value of all units in the sample
 \bar{y} = average value of all units in the sample
 Y = total value of all units in the population
 \bar{Y} = average value of all units in the population

Population Values

Total: $Y = y_1 + y_2 + \dots + y_n$
 $Y = \$1,300 + \$6,300 + \dots + \$1,900$
 $Y = \$32,100$

Mean: $\bar{Y} = \frac{y_1 + y_2 + \dots + y_n}{N} = \frac{Y}{N}$
 $\bar{Y} = \frac{\$32,100}{12}$
 $\bar{Y} = \$2,675$ (Table 1 - Average Income)

Sample Values

$$\begin{aligned}\text{Total: } y &= y_2 + y_7 \text{ (Sample BG)} \\ y &= \$6,300 + \$1,800 \\ y &= \$8,100\end{aligned}$$

$$\begin{aligned}\text{Mean: } \bar{y} &= \frac{y_2 + y_7}{n} = \frac{y}{n} \\ \bar{y} &= \frac{\$8,100}{2} \\ \bar{y} &= \$4,050\end{aligned}$$

The ratio of the size of the sample to that of the population is called the sampling ratio or sampling fraction and is expressed n/N . The opposite, N/n is the expansion, raising, or inflation factor. When multiplied by this factor, the sample total is projected to represent the population. A sample of 1,000 is drawn from a population of 10,000, making the factor 10. From the sample of 1,000, assume that 456 read *Fortune*. If the sample has been selected by probability methods and is considered representative of the population sampled, then 456 factored by ten projects to 4,560 and means that approximately 4,560 individuals from a population of 10,000 read *Fortune*.

Estimate and Accuracy

The average of the units in the sample is an estimate of the average of the population. Referring back to Table 2, the sample of C and K gives an estimated average income of

\$3,950. Thus, the definition of an estimate could be worded, in this particular case, to say that the average income of the persons in the sample, CK, is an estimate of the average income of the population, A through L, inclusive.

What is accuracy and how is it related to the estimate? Accuracy is the measure of how close the estimate may be expected to come to the true value of the characteristic. True value is the value that would be obtained if no errors were made in obtaining the information or in computing the characteristic. An examination of all possible samples (Table 2) is necessary to determine the accuracy of an estimate. Table 1 indicates the average income of the population is \$2,675. A comparison of the average of each sample with the average of the population will result in a variance either above or below the population average. Some variances will be greater than others. From such a study, an inference can be drawn as to what degree of error may be expected on the average and what is a "reasonable" maximum for the error of a single sample. Every sample will have a different estimate of the universe mean. A range of values within which the true value lies is known as the "interval estimate." In probability sampling, the researcher can state that in a certain number of cases out of 100 (95, for example) the "results obtained from the sample will differ from the true value of the universe being sampled by no more than a stated percentage."¹⁶

To be concluded in the November issue.

¹*Encyclopaedia Britannica*, XVIII (Chicago: Encyclopaedia Britannica, Inc., 1958), p 744A.

²Lyndon O. Brown, *Marketing and Distribution Research* (New York: The Ronald Press Company, 1955) p 253.

³*Encyclopaedia Britannica*, *op. cit.*, p 744B.

⁴William Edwards Deming, *Some Theory of Sampling* (New York: John Wiley & Sons, Inc., 1950), p 13.

⁵Brown, *op. cit.*, p 244.

⁶*Ibid.*, p 246.

⁷Deming, *op. cit.*, p 2.

⁸*Ibid.*, p 2.

⁹Morris H. Hansen, William N. Hurwitz, and William G. Madow, *Sample Survey Methods and*

Theory, II—*Theory* (New York: John Wiley & Sons, Inc., 1953), p 10.

¹⁰Robert Ferber, *Statistical Techniques in Market Research* (New York: McGraw-Hill Book Company, Inc., 1949), p 60.

¹¹William G. Cochran, *Sampling Techniques* (New York: John Wiley & Sons, Inc., 1953), p 5.

¹²Morris H. Hansen, William N. Hurwitz, and William G. Madow, *Sample Survey Methods and Theory*, I—*Methods and Applications* (New York: John Wiley and Sons, Inc., 1953), p 13.

¹³*Ibid.*, p 15.

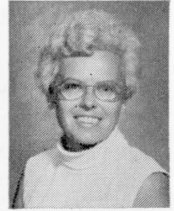
¹⁴*Ibid.*, p 15.

¹⁵Cochran, *op. cit.*, p 12.

¹⁶Brown, *op. cit.*, p 257.

TAX FORUM

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TAX ADMINISTRATION 1972-73

At a recent appearance before a subcommittee of the House Committee on Appropriations, officials of the Treasury Department and the Internal Revenue Service provided some insight into their plans for the fiscal year 1972-73. Among items discussed were three that will directly affect the conduct of IRS tax investigations and audits during the coming year.

Economic Stabilization Program— “Caveat Emptor”

It is the intent of the IRS to move more actively into the economic stabilization program by simultaneously running double audits that will encompass a review of the taxpayer's compliance with price and wage controls as well as with the tax laws. Secretary of the Treasury John Connally stated that he and Commissioner Walters of the Internal Revenue Service have made a decision that an Internal Revenue agent who is conducting a tax investigation for whatever reason could concurrently check on prices or wages. Conversely, if he is there primarily to check on compliance with the Pay Board regulations or price commission orders, he could also, if necessary, carry out the normal function of an Internal Revenue agent with respect to income tax returns.

In light of the provisions of Revenue Ruling 72-236 (C.B. 72-20, p. 7, 5/15/72) a lack of compliance with price and wage controls could be a costly situation for all taxpayers, including companies now exempt from such controls. (Generally, those companies with 60 or fewer employees and less than \$50 million in annual sales who are not in the health or construction industries—CLC (Cost-of-Living Council) Reg. 101.51.) Rev. Rul. 72-236 provides that no deduction as an ordinary and necessary business expense will be allowed for tax purposes if the payment of wages, salaries, rent or any price item is in violation of the amount permitted under Executive Order 11640. The basis for the disallowance stipulated in Rev. Rul. 72-236 is Code Section 162(c) (2) which provides in part that no deduction (as a trade or business expense) shall be allowed for any payment

constituting an illegal payment under any law of the United States. Section 1(a) of Executive Order 11640 includes the provision that “No person shall charge, assess, or receive, or knowingly pay or offer to pay, directly or indirectly, in any transaction, prices or rents in any form higher than those permitted hereunder, and no person shall, directly or indirectly, pay or agree to pay, in any transaction, wages or salaries in any form, or to use any means to obtain payment of wages and salaries in any form, higher than those permitted hereunder, whether by retroactive increase or otherwise.”

In determining how an exempt taxpayer might be affected, let us take a hypothetical situation: An IRS agent in the process of an examination of Company L, a Tier II taxpayer subject to wage-price controls, discovers that the company is charging excessive prices for material sold to customers. Among these is Company S, a Tier III taxpayer exempt from controls. Question: In addition to levying penalties against L for an infraction of the Price Control law, can the Service look through to Company L's buyer and assess a tax deficiency on any tax return in which the excess portion of prices paid by S has been used in computing cost of goods sold? Presumably, since the excess is classified as an illegal payment, the answer could be yes. Whether S might avoid the additional assessment as an exempt entity or by claiming that it unknowingly made excessive payments is speculative. In order to prevent such a situation from arising, a buyer would be wise to determine that he pays prices no higher than allowed by the price commission. In other words, “let the buyer beware”—not only of quality, but of overpricing.

Computer Audits

Commissioner Walters also discussed computer assisted techniques now being used by revenue agents for examining firms with computerized accounting systems. Computer assisted audits are presently being conducted in the larger IRS districts, and plans are to have these techniques available to most agents during 1973.

The history and planning of computer audits go back at least as far as 1964 when Rev. Proc. 64-12 established the guidelines for keeping records within an EDP system. Code Section 6001 and the regulations thereunder provide the requirement for maintaining adequate records. On January 18, 1971, the IRS issued Rev. Rul. 71-20 classifying machine-sensible data as "records" and placing this information on the same legal retention basis as paper or hardcopy records. Included among machine-sensible data media are punched cards, magnetic tapes, disks, etc.

The Service has stated that it is not intended that all record media be retained, only the records the IRS considers necessary for future tax audits. In order to keep these at a minimum, IRS personnel are available to evaluate a taxpayer's records and enter into a written agreement specifying the ones to be retained. (The writer's one experience in this area indicates that, during the period of time such an agreement is in force, the taxpayer's obligation under Rev. Rul. 71-20 will be satisfied.) If there is a program change as a result of an alteration in accounting procedure, etc., the Service should be advised. Guidelines have been issued to all district offices and training courses have been established to insure that agents are qualified to make adequate evaluations. Martin Roberts, Assistant Professor, Georgia State University, who has been working with the IRS as a consultant on computer audits, has written two articles in the March 1971 and June 1971 *Tax Advisor* containing the majority of the IRS guidelines.

The Service's attitude toward implementing the guidelines is one of flexibility both in adapting its procedures to various taxpayer situations and in working with taxpayers on potential problems that may arise. IRS officials have emphasized that, as technical advances are made in computer methodology, Rev. Rul. 71-20 will require updating. It should be noted that Rev. Proc. 64-12 has not been revoked and is still in effect. This procedure has frequently been incorrectly interpreted as requiring the retention of hardcopy records when, in fact, it has a provision that requires only the ability to print hardcopy records. This means that a taxpayer is not bound to maintain both hardcopy and machine-sensible data as long as there is the capacity available to print hardcopy records when needed. However, if a taxpayer has printed hardcopies for his own use, the Service has suggested that these be retained as possible source documents during a tax audit in the event that machine-sensible data prove inadequate due to incompatibility, deterioration or programming problems. Rev. Proc. 64-12 also

provides that a taxpayer may destroy the machine-sensible data after an examination has been completed, but it would be necessary to retain hardcopy to back up the data destroyed.

Taxpayers with heavily automated accounting systems should remain current on changes in the guidelines for record retention and, if possible, reach agreements with local IRS officials as to their individual retention requirements in order not to be burdened with unnecessary storage of superfluous information.

Team Audits

Mr. Walters went on to say that, in an effort to focus on high-yield areas, the IRS has instituted a coordinated examination program that uses teams of audit specialists to examine large cases, including some that are international in scope. This program places primary responsibility for audits in key districts where the audits are centrally planned and managed. In many ways this approach is not unlike the audit program drafted by a certified public accountant in preparing to review the financial statements on which he is to render an independent opinion. (The programs may prove more comparable in theory, however, than in actual application.) Presently, the Service has some 1500 large cases involving 45,000 separate business entities which it considers as needing audit attention. Among this group the tax deficiencies identified at the time of the Committee hearing amounted to over \$2.5 billion. It appears that through more sophisticated audit procedures the IRS will net some rather large "fish" from the "Sea of Revenue."

After selecting the taxpayer to be examined, a Large Case Audit Plan is transmitted to the company(ies) on Form 4764. The plan is prepared by an acting case manager from the district office and in general includes the following information:

- (a) — Name and position or specialty of the Internal Revenue Service personnel assigned to the examination; i.e., J. Smith — Case Manager, R. Jones — Team Coordinator, W. Black — International Specialist.
- (b) — Taxpayer's personnel to be contacted and the information for which they will be responsible; i.e., G. Black, Controller, all corporations, L. Green, President, XYZ corporations and subsidiaries.
- (c) — Examination schedule setting forth the corporate entities to be examined, the site, records location, agents assigned to each entity and the scheduled starting and completion dates.

(Continued on page 16)

THEORY AND PRACTICE

Current Studies and Concepts

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In the last issue a summary was given of the proposed reorganization of the Accounting Principles Board (APB) into a completely different organizational structure. The plan was adopted by the Council of the American Institute of Certified Public Accountants, and at press time it was expected that the new Financial Accounting Standards Board (FASB) would be selected and in operation by the start of 1973. It is hoped that the new Board (with its members serving on a full-time basis) will be able to react much more quickly to the needs of the profession than has been possible in the past with a volunteer group serving without pay.

This editor would also express the hope that the new FASB will employ someone who is able to translate the pronouncements of the new Board into language which the average accountant can understand. For in recent years the Opinions issued by the Accounting Principles Board have become increasingly incomprehensible to many accountants, and too often one is forced to rely on an interpretation of those Opinions in order to apply them to situations met in everyday practice.

Because the Accounting Principles Board will shortly go out of existence, the proposed Opinion regarding Stock Issued to Employees may be one of the final Opinions to come from this body. A review of the exposure draft of that Opinion is the subject of this article.

ACCOUNTING FOR STOCK ISSUED TO EMPLOYEES

Background

It has become common practice for a corporation to offer its stock to employees for one reason or another. For a period of time it became traditional to offer the employee an option to buy shares of stock at a specific price for a certain length of time, usually at a discount from the market price of the stock at the time the offer was made. Accounting for these traditional options became a relatively routine matter.

However, with changes in the tax laws and with the ability of the corporate executives to develop increasingly complex and diverse plans, the matter of accounting for such plans

has come to be one of the more common headaches encountered by the company's accountant. The new Opinion is an attempt to respond to the need of accountants to apply a set of standards to such plans.

Opinion

In a nutshell, the draft of this Opinion says that, when stock is issued to employees as a form of compensation, the cost to be recorded is equal to the market price of the stock less the amount, if any, to be paid by the employee. This sounds simple enough, but applying the principle to a given situation can be less than simple.

The draft Opinion is a modification of the standard set forth in ARB No. 43, Chapter 13B which remains in effect—that the fair value of a given stock was not necessarily equal to the market quotations of that stock on that date. The Board has come to the conclusion that one cannot objectively measure the value attributable to restrictions on transferability of the stock nor on restrictions on the right to receive stock. For this reason, the Board has concluded that the “unadjusted quoted market price of a share of stock” which is freely traded should be used as the measure of compensation.

This Opinion apparently applies only to those stock plans which are intended to be part of the compensation paid to the employee. It leaves untouched the means of accounting for the traditional noncompensatory stock purchase plan. To qualify as noncompensatory, the Board has stipulated the following four characteristics as essential:

1. Most employees may participate,
2. The stock is offered on a generally equal basis to all employees,
3. The stock is offered for a limited time only (the IRS rules state five years), and
4. The stock is offered at a discount price no greater than would be reasonable if offered to stockholders and others.

An example of such a noncompensatory plan is one which qualifies under Section 423 of the Internal Revenue Code.

Any plan which fails to meet the test of the four above-named characteristics will usually

be considered compensatory—and some charge against income will be necessary.

Compensatory Plans

In the compensatory plans, the price received for the stock is recorded as the cash (or other assets) received plus the services performed by the employee. The catch being, of course, how to determine what the value of the “services received” may be. The Board concludes that such compensation should be measured by the “quoted market price of the stock at the measurement date less the amount, if any, that the employee is required to pay.” This is a modification of the principles set forth in ARB 43, Chapter 13B, insofar as the meaning of “fair value” of the stock and also the “measurement date” are concerned.

The “measurement date” is set forth as that date on which both the number of shares and the purchase price are known—usually the date the award is granted, but it may be a later date in plans with variable terms which depend on events after the date of award. (At this point, the draft describes the principle in some detail for special situations.)

The draft then proceeds to explain that the compensation costs should be considered an expense of the period in which the employee performs services. Again, complications result because those services will probably extend beyond one accounting period, or because the stock may be issued before the services are performed. In such an event, the accountant must accrue the expense—and such accrual may often have to be an estimate, with adjustments to those estimates to come in later periods.

Obviously, the corporation recognizes no

compensation cost if the employee pays an amount at least equal to the quoted market price at the measurement date.

Income Tax Benefits

Because the deduction allowed for income tax purposes may be in different amounts and in a different period than that which the corporation recognizes for financial statement purposes, timing differences may exist and the resultant tax allocation of income taxes may be necessary. A corporation may be entitled to a tax deduction even if there is no compensation expense recorded in computing net income (or the tax deduction may be in excess of the book deduction). In such instances, any “excess” tax reduction should not be included in income but is to be added to capital or, conversely, where tax benefits are less, the difference should be deducted from additional capital (but only to the extent of previous additions to such account through the workings of the same or a similar compensatory stock plan).

Conclusion

This Opinion is to be effective for all awards made after June 30, 1972. It may have been apparent to the Board that this Opinion would be extremely difficult to interpret, and so several illustrative examples are provided in an appendix to demonstrate what the Board considered the most vital distinction of this Opinion—compensatory plans in which the cost of compensation is measured at the date of grant or award—and those in which the cost of compensation depends on events after the date of the grant or award. Even combination plans are described briefly in a final section.

TAX FORUM

(Continued from page 14)

(d) — Record of pre-examination conferences including the participants, their titles and the date or dates of the conferences.

(e) — A list of books, records, schedules, exhibits and analysis to be available at the start of the examination.

(f) — Space and other facilities to be provided for Service personnel and any other pertinent agreements.

The final page of the audit plan also includes a statement that the plan is a guide for examination and “is subject to revision as progress indicates the need for more, less, or different work than originally planned.”

It would seem that the planned audit program should provide the IRS with a definitive and more comprehensive examination of large, multi-operational taxpayers, and may well result in greater tax revenue from closer scrutiny of the so-called “gray” areas of the tax laws that are frequently subject to varying interpretations and much litigation. It may also prove to be beneficial to taxpayers whose records, though complex and detailed because of the magnitude of their operations, are factually correct and within the provisions of pertinent Code sections and regulations. A planned program should eliminate wasted time that might otherwise occur as a result of inexperienced Service personnel examining tax areas in which they might have no expertise.

REVIEWS

Writings in Accounting

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"Income and Capital: Fisher's Legacy," R. J. Chambers, **Journal of Accounting Research**, Vol. 9, No. 1, Spring, 1971.

For readers who question the discrepancies between economic theory and accounting practice, Chambers' review of "Fisher's Legacy" laments an uncomfortable kinship. An illustrious accountant reviews an economist of like lustre when R. J. Chambers examines "The Nature of Capital and Income" by Irving Fisher. He disputes Mr. Fisher's claim that his book "forms a sort of philosophy of economic accounting, and, it is hoped, may supply a link long missing between the ideas and usages underlying practical business transactions and the theories of abstract economics."

Professor Chambers finds inconsistencies in Fisher's definitions of value and capital when the theory switches back and forth between macro- and micro-economics—between the whole economy and the private firm or investor. He especially dislikes ambiguities in valuation, the objective (market price) valuation of wealth, and the subjective valuation of property as a store of future services—future services that are uncertain. Capital, in the Chambers interpretation of Fisher's concepts, has a mixture of both objective and subjective meaning when it is considered as a stock of wealth.

Few accountants adjust with ease to the classic economic method that ignores depreciation in computing net income. Mr. Chambers is no exception. Differences follow naturally from this point and include a great disparity in tolerance for future uncertainties of income flow. The economist can contain income fluctuations in his theorizing, but even as economics-oriented an accountant as Chambers cannot disregard them.

Professor Chamber's scholarly review presents the best of both worlds, the validities of both economics and accounting. That they are not identical is not to say that either is to be discredited, and an understanding of the difference broadens the perspective of a practicing accountant.

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"Accounting for Changes in Currency Exchange Rates," John C. Archibald, **Journal UEC**, January 1972.

The devaluation of the dollar; changes in the parity rates of exchange of the pound sterling, the French franc, and the German mark; and changes in exchange rates in other countries make Mr. Archibald's article timely. In order for a parent company to consolidate its accounts with those of foreign subsidiaries, it is necessary to express the annual financial statements of each member of the group in the unit of currency used by the parent company. Mr. Archibald recommends a set of accounting conventions, selected from those at present in general use in the United Kingdom, which are considered to be the most satisfactory for dealing with the more common problems involved in consolidating foreign subsidiaries.

Two methods commonly adopted to convert the balance sheet of a foreign subsidiary to the domestic currency are discussed in the article. The first is the historical rate basis in which fixed assets are converted to the domestic currency at the rate of exchange in effect when these assets were acquired or, if they were purchased in a third currency, at the cost of acquiring that currency. The aggregate provision for depreciation is converted at the same rate. All other assets and all liabilities are converted at the rate of exchange in effect at the end of the financial period. Capital stock held by the parent company is converted at the rates in effect on the actual dates when the shares were acquired, but stock held by outside interests is converted at the closing rate.

In the second method, the closing rate basis, all balance sheet items are converted to the domestic currency at the closing rate of exchange. Partly because of its simplicity, the author prefers the closing rate basis to the historical rate basis.

Three methods of preparing consolidated profit and loss accounts are given. In the first method, trading profits or losses of the subsidiary are first apportioned in terms of the local currency into profits or losses earned before and after the parity change. The results for each of the periods are then converted at the rates of exchange in effect during these

periods.

In the second method an average rate of exchange is used to convert the profit or loss as expressed in the local currency for the entire financial period. Both the first and second methods can be used with the historical rate basis for converting the balance sheet.

In the third method, conversion is made at the rate of exchange in effect at the end of the financial period. This method is used in conjunction with the closing rate basis.

Examples of the methods of conversion are given and a number of problems encountered in preparing consolidated statements are discussed. In an appendix the author presents some accounting procedures for recurrent inflation and gives detailed examples of the application of the procedures.

The article is concerned principally with the problems of United Kingdom companies in consolidating their foreign subsidiaries, but a knowledge of United Kingdom procedures could be helpful to American companies having investments in British firms. The section on inflation is applicable to any country where inflation is a problem. Mr. Archibald has done a good job in discussing two difficult subjects.

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"Footsteps Toward Professionalism," Joseph S. Glickauf, Arthur Andersen & Co.; Chicago, Illinois, 1971, 180 pages. (Available only through Arthur Anderson & Co. offices.)

At times nostalgic, more often bracing as pattern and form emerge from the wastes of rejected programs, Mr. Glickauf's addresses become a sweep of his mind's eye over a 22 year horizon. The compilation is, in effect, a scanning of administrative services as practiced by Arthur Andersen & Co., which ineluctably moved to the tempo of computerization.

Computers have been too much for many: too much money, too much printout, too much status in the hierarchy of decision alternatives. As early as 1961 the author said: "Today, technological developments are following each other with such rapidity that it is to the credit of businessmen and managers everywhere that they are not completely bewildered and befuddled by the resulting operating and financial problems." In the same address he pointed out the devastating rate of obsolescence for data processing systems. Particularly apropos to the field, he observed, is that ancient, all-purpose philosophy from the East: "This, too, shall pass away."

However rapidly the generations of computers succeed each other and newer concepts replace more primitive forms, it is incumbent on the accounting practitioner to be familiar with the passing scene if he is to maintain the title of professional, as Mr. Glickauf thinks of it. "This broader education, incidentally, is one of the significant factors which separate the professional from the highly trained technician."

With the most recent addresses, 1969 and 1970, emphasis shifts from processing data and controlling production to corporate modeling, or simulation techniques. This is a significant change. It recognizes that computers can move from routine iterative functions up the organizational ladder to the level of the board room, where strategy is developed, analyzed, and chosen.

Discussion in the last chapters thus graduates from accounting into the sophistications of modern business administration. Although Mr. Glickauf's enthusiasm for model simulation is not shared by all authors, he does make a cogent argument for the corporate model. With a bow to his prestigious associate at Arthur Andersen, he quotes Leonard Spacek: "One of the most far-reaching computer techniques I know of is the financial model. This is management firepower only dreamed of before."

If you have recently agonized over a computer program, or despaired of bringing a new installation into productive harmony with the rest of the firm, or if you would just like to enjoy a lucid overview of a quarter of a century of computers, retread the "footsteps toward professionalism" with Mr. Glickauf.

Constance T. Barcelona
The Camargo Club,
Cincinnati, Ohio

"Taxation," Gilbert Simonetti, Jr., **The Journal of Accountancy**, Vol. 133, No. 2, February 1972.

In a short three-page article, Mr. Simonetti reviews the investment credit controversy. He discusses the Accounting Principles Board's action, the Senate Finance Committee's original report, its floor amendment, the action of the Conference Committee, and reaction by the APB and the press. *The article not only provides good reading for the student of tomorrow; it provides information on the workings of lobby groups and a warning that business has a choice: (1) to follow leadership provided by the Institute or (2) to follow this precedent which may ultimately result in Congress' writing accounting principles and procedures.*

M.E.D.

“Don’t Be Too Sure,” Robert M. Trueblood, *The Journal of Accountancy*, Vol. 133, No. 2, February 1972.

“The wish for easy solutions is not a phenomenon just of this time nor only of the accounting profession.” Mr. Trueblood decries man’s desire for absolutes and for simple solutions to complex questions. He mentions that the accountant’s concerns for absolutes are misguided both in education and in the setting of accounting principles. “While total education should be balanced, it does not follow that collegiate education—which is only a brief part of the total education process—must necessarily be balanced within itself.”

Trueblood envisions that a financial statement which includes a range of figures may be of infinitely more use to readers than one which produces final figures which fall on a point. Total assets and net income might well be stated “as 10 million plus or minus 20 percent or some such percentage.”

Mr. Trueblood suggests that we should begin with a simple model, an absolute. From this, more complex models can be developed to make the report more realistic. He suggests that accounting is now ready to enter a new stage in which accountants “will better state and more realistically describe the complexities of the real business world.”

M.E.D.

STYLES OF LEADERSHIP

(Continued from page 7)

Delegation is not only possible if subordinates are given some sort of direction, it has several advantages. Strauss and Sayles list the advantages as:

1. Few supervisors have the time to handle both their own job and the jobs of their subordinates.
2. A subordinate can take pride in results that are directly attributable to his own judgment.
3. Delegation helps to develop the talents and abilities of subordinates.¹⁹

¹Edwin B. Flippo, *Management: A Behavioral Approach*, 2nd edition, Allyn and Bacon, Boston, 1970, p 276.

²Flippo, p 4.

³Flippo, p 290.

⁴Douglas McGregor, *The Human Side of Enterprise*, McGraw-Hill Book Company, New York, 1960, pp 33-34.

⁵Robert N. McMurry, “The Case for Benevolent Autocracy”, *Harvard Business Review*, Vol. 36, No. 1, pp 82-90, January-February, 1958.

⁶Paul Pigors and Charles A. Myers, *Personnel Administration—A Point of View and A Method*, 6th edition, McGraw-Hill Book Company, 1969, p 10.

⁷Pigors and Myers, p 12.

⁸Peter F. Drucker, *The Practice of Management*, Harper & Row, Publishers, Incorporated, New York, 1954, chapter 11.

In Conclusion

The essential differences between the traditional (authoritarian) and the alternative personnel concept of management (participative) are assumptions about human behavior and the consequent difference in leadership patterns and organizational structure. There is no difference between the concepts in the final responsibility of management.²⁰ The leader’s concept about human behavior also affects his means of motivating and his ability to delegate.

What form is best? It depends on the leader, the led, and the situation—the best leader is the one who is sensitive to the needs of the situation and adjusts his style of management accordingly.

⁹Flippo, p 291.

¹⁰McGregor, p 48.

¹¹McGregor, pp 47-48.

¹²Mary Parker Follett, *Creative Experience*, Longmans, Green & Co., Inc., New York, 1924, p XIII.

¹³George Strauss and Leonard R. Sayles, *Personnel: The Human Problems of Management*, 2nd edition, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1967, p 145.

¹⁴Flippo, p 287.

¹⁵Strauss and Sayles, p 146.

¹⁶Strauss and Sayles, p 155.

¹⁷Strauss and Sayles, p 158.

¹⁸Strauss and Sayles, p 166.

¹⁹Strauss and Sayles, p 149.

²⁰Pigors and Myers, p 12.

AWSCPA EDUCATIONAL FOUNDATION

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