receiving serious attention both from the government and the profession. Adoption of many of the guidelines suggested in this study relating to determination of the depreciable base, useful life and allocation methods may make the financial reports more meaningful and informative here too. The recommendation for supplemental disclosures of depreciation accounting methods followed by the units should remove the element of doubt in the minds of users as to their correctness and fairness.

N. Ramachandaran

Research Fellow,
Finance & Control Group
I. I. M., Calcutta

The Effects of Human Asset Statements on Investment Decision : An Experiment, by N. Elias, *Emperical Research in Accounting : Selected Studies*, 1972, issued as supplement to the *Journal of Accounting Research* Vol. 10, 1974, pp. 215-233.

and

Assessing the Validity of a theory cf Human Resource Value : A field Study, by E. G. Flamholtz, *Emperical Research in Accounting* : *Selected Studies* 1972, issued as supplement to the *Journal of Accounting Research* Vol. 10,1974. pp. 241-261

Both these studies are probably among the first few empirical research contributions in the field of human asset accounting. This commonality apart, the two pieces represent widely disparate, premises, objectives, and methodologies. As we explore these three aspects separately, our own observations would also be thrown in

(A) *Premises* : The chief premise of Elias's contribution appears to lie in the proper matching of revenues against related expenses. Present accounting practice of charging off all manpower — related costs of each year including recruitment, induction, training and development outlays, against that year's revenue fails to satisfy this principle. For, such outlays carry a frozen potential of benefits likely to accure over a period extending beyond the year of incurrence (p. 215).

Flamholtz seems to proceed on the premise that prior to assigning money value to the manpower resource, it is essential to identify a comprehensive set a variables which influences such value (p. 242).

Unlike Elias, for Flamholtz no given or known monetary evaluations or indicators of the human resource exist. While Elias seems to assume that money expenditure, excluding salaries, on personnel is indicative of their value, Flamholtz appears to place greater emphasis on a large number of intervening process and structural variables affecting human resource value.

The reader may note a difference in the titles of the papers from these two contributors. Elias uses the phrase 'human *asset* statements'. Flamholtz uses the expression 'human *resource* value'. The word 'resource' is a more general expression that the word 'asset'. Thus, for researchers considering manpower as an asset (or assets) immediate concern with monetary figures may become indispensable. But for those who conceive personnel as a resource (or resources) a delayed or deferred look at some kind of monetary expression is possible. It may be argued, however, that power and fuel, or repairs and maintenance services are also resources used in the production activity. Seen in this light does the attribute of 'resource' as applied to the manpower factor convey any radical shift in thinking ? The word 'asset' certainly conveys in no uncertain manner such a shift.

We think that the fundamental premise in accounting for personnel is that of a shift to the 'stock' concept from the conventional 'flow' concept. Both 'stock' and 'flow' items are resources. But there is a world of difference in the accounting treatment and management of stock resources v. flow resources. Thus, it is to stock items alone that the functions of repairs, maintenance and the like are relevant. By trying to consider personnel as a 'stock' item a fresh conceptual and operational thrust might be given to manpower management.

(B) *Objectives* : The main objective pursued by Elias has been to test whether the inclusion of human asset figures in financial statements affects investment decisions by different groups of people. In doing so, the human asset value has been defined as "the unexpired portion of the historical costs of recruiting hiring, training, familiarisation and development of personnel of the company" (p. 216). Although the investment choice by external user groups was associated with the shift to human assets information being supplied, as against conventional statements, the relationship was not very strong (pp. 223-224).

A major problem that arises, however, is regarding the definition of human asset offered by Elias. It appears to us that this is more a 'deferred revenue expenditure' treatment than an asset treatment than an asset treatment. No accounting treatment of personnel may claim to have attained the objective of indicating its asset value, unless the *future* value yielding potential of manpower is considered in some from. We all know that cost, in the absolute sense, is a poor indicator of value. Yet, in real life cost does offer an assessment of value in a relative sense. In this train of thought one needs to accommodate in some form the remuneration offered to manpower. The cost package of Elias leaves out this vital and larger chunk of total manpower costs. Whether the deferred revenue treatment of 'manpower costs, less remuneration' may be called human asset accounting is perhaps an open question.

Flamholtz's objective differs from that of Elias's in that the former is concerned with the determination of "an *individual's* value to an organization" (p. 242, emphasis ours), while the latter offers an aggregate assessment not built up on individual valuations. The ultimate measure of an individual's value to an organisation is his 'expected realisale value' which "is defined as the present worth of the set of future services an individual is expected to provide during the period

he is anticipated to remain in the organisation" (p. 243). The E. R. V, in turn, depends on the product of 'conditional value' and the probability of the individual maintaining his expected service life with the organisatian. C. V. is defined as "the present worth of the potential services that are expected to rendered to the organisation. if an individual maintains membership in the organisation thoughout his expected service life" (p. 243). Flamholtz thus invokes the concept of economic value. He goes on to suggest various qualitative individual and organisational determinants of C. V. e.g., skills, motivation, role, rewards etc. Thereafter he proceeds to determine the validity of these and other factors in assessing human resource value through a field study (see section C below). Throughout the paper, therefore, the reader looks in vain for a crystallised human asset measure in money terms. Perhaps this is not to be expected either as the author himself says : "The primary research question is : Does the model predict the variables which are actually used by evaluators in assessing the value of people to organisation ?" (p. 245). The study thus goes into qualitative depths of assessing the patterns of evaluation criteria used for personnel. Even if this is conceded to be an initial step in the evolution of a full theory, one still cannot resist the question : given that all such variables are duly crystallised, how does one assess the value of potential services in money terms ? What will be the base figure ? Will salaries or remuneration and other manpower — related costs be incorporated in the model ? If so how ? If discounting is envisaged, how to arrive at that rate ?

A more basic question regarding Flamholtz's paper is his atomatic approach to the question of human resource valuation. It is possible to derive values of individual organisational members when the very foundation of such organisations interdependency — direct or indirect ? Whether one thinks of shop-floor employees, or field sales force, or office executives, it is impossible to escape the fact of join contributions by small or large groups of employees. How does one assess the potential services in money terms which a marketing director is expected to render as distinct from these of his deputy, or area manager, or field supervisor ? Although skills, role, rewards, promotability, productivity, transferability etc., of individual employees may be obtained or forecasted, yet no link emerges between these variables and a mesure of the services potential in concrete terms. Despite the conceptual finesse of the model, its operational possibilities for incorporation in management reporting systems deserves more attention. If an operational answer to the question of equitable isolation of individual contributions is found then the greatest battle in the field of human asset accounting would have been won.

(C) *Methodologies* : To students and researchers of human asset accounting the research methodologies devised by both authors should be of benefit.

Elias had six groups of respondents : Chartered Financial Analysts, other Financial Analysts, Certified Public Accountants, intermediate accounting students, advanced accounting students, and senior finance course students. Questionaires were sent to members in these groups along with financial statements for two hypothetical companies ABC and XYZ of similar size in the same industry. On the basis of the balance sheet and profit and loss account data for three years, the respondents were asked to indicate which company they would choose to invest 10

per cent of their net annual income. ABC was assumed to be denuding itself of its manpower, whereas XYZ was expanding and developing the manpower base. When the final accounts were presented first only on the conventional basis for both companies, ABC appeared better ofi. In the second presentation (where human assets were incprporated via deferred revenue expenditure basis), XYZ was revealed as better off then ABC. A third presentation showed both the final accounts for both companies in combined form i.e., human asset version followed by conventional version. Each of these three versions or presentations was sent separately with the questionnaire i.e., each respondent received three questionnaire sets. It was expected that "by comparing the combined and conventional statements, the differences in the decision outcomes would primarily reflect the degree of utilisation of human asset accounting statements" (p. 219). The study did not indicate any significant variation in responses due to different background variables of the six respondent groups. As the author himself admits, the study was done from the external users' viewpoint only (p. 225), there is positive need to extend such work to the areas of internal management planning, control and decision-making both within an organisation, and across several firms. Would Elias's approach be of advantage to company management ? If so, in what ways ? These aspects have not been mentioned in the article.

Flamholtz selected two seniormost and long-tenure personnel managers of a large audit firm to evaluate 39 randomly selected professionals amongst the 600 or so employed by the firm. Among other reasons for selecting a firm of CPA's was the feasibility of obtaining 'measures of an individual's value to an organisation in such firms" (p. 248). This statement is not at all clear, no elaboration is given. If read with a later observation that, "These (personnel) managers are at the centre of a data collection system designed to appraise performance and potential. Thus, they typically collect information which is essential in assessing value of people to a firm" (p. 249), it appears that the author always contemplates qualitative ranking and not value measures in money terms. Be that as it may, the two personnel managers were asked to rank order the 39 staff people by the alternation ranking method in terms of 'positional' (i.e. current) value, 'conditional' value and 'realisable' value dimensions. The differences in their evaluations were sought to be reconcided on the principle of Festinger's theory of cognitive dissonance. With the researcher himself being on observer, the two personnel managers were asked to explore through discussions their differences in rankings. These discusions were tape-recorded and then subjected to 'content analysis'. This process confirmed most of the originally hypothesised determining variables, and indicated a few more for incorporation in the model (e.g. management style, organisation structure).

While to the accountant or finance manager the above processes and discoveries may be new and revealing; to students of performance appraisal, motivation and the like there does not seem to be much new in what Flamholtz finally comes out with. Granting that for the finance man such understanding is beneficial and necessary, yet the 'accounting' for human resources through measured valuations does note seem to be helped in any way by the above research - at least to the extent that it has evolved at the end of the article. The integration of the evalvation criteria and information system in the personnel department

with those in the accounts function is the key question which Flamholtz (or others) may wish to explore. Besides, whether human resource valuations can be founded upon personal evaluations by a few people in the personnel department, even if they are in possession of much relevant date, and whether these will be acceptable to the rest of the organisation may also have to be considered. An answer to the letter could, of course, be that such an exercise for human resource valuation should not be used for actual managerial promotion/ remuneration decisions. These may only be taken by the line or functional managers. Human asset valuation may in fact *follow* such decisions by line managers. The train of thinking set in motion by Flamholtz needs attention to this aspect too. Lastly in a true human asset accounting model, the questions of 'depreciation' and 'appreciation' (not due to inflation as for plant and equipment) of human assets must also be considered. Neither of the two papers has paid attention to these issues.

S. K. Chakraborty

Member of Faculty,
Finance & Control Group,
I.I.M., Calcutta.