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A socio-economic paradigm for analysing managers' accounting choice behaviour

38

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Introduction

Social science researchers draw on paradigms or a set of assumptions to organize their efforts to understand our world, the goals we pursue, the ways we choose to advance our goals, and the ways we relate to one another as we proceed as individuals or in unison (Etzioni, 1988). It has been recognized for some time that the scope of accounting research should be broadened beyond traditional positivist investigations with its technical-efficiency focus to include social and political phenomena (Cooper, 1980; Tinker, 1980). Tinker (1980) noted the rigour which the accounting researchers applied to the economic realm and suggested that a commensurate degree of rigour should be applied to their understanding of the political and social realms. When a paradigm is limited in its empirical and ethical scope and is used to formulate theories and policies the study of our world suffers. This study argues that the economic paradigm[1] can be modified into a socio-economic paradigm which has the potential to be more explanatory and predictive than the present. This modified paradigm seeks to be developed from existing positivist literature and existing social constructionist[2] literature. The approach of this article is one of first approximation. It is argued that this developing socio-economic paradigm is less parsimonious and more encompassing and may break down the criticism that neo-classical economics separates the economic and social spheres.

Dierkes and Antal (1986, p. 106) argue that there is a need in accounting to research the business and society interface for the purpose of redefining the roles and tasks of business corporations from purely economic to socio-economic institutions. The purpose of this study is to suggest that adopting a socio-economic perspective to analyse managers' selection of accounting practices can provide a richer, more inclusive explanation of factors influencing information supplied to the capital markets. The identification of such an explanation would aid managers in understanding their response to matters

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Accounting, Auditing & Accountability Journal, Vol. 8 No. 1, 1995, pp. 38-62. © MCB University Press, 0951-3574 socio-economic and its relationship with the value of the firm. A study carried out on a social construction of positive choices, posited by Neu (1992), together with the valuable contributions made by Cooper and Keim (1983) in the finance field and Etzioni (1988), in the sociological field, on the development of a socio-economic approach have provided the impetus for this article.

The study proceeds by reviewing the case for a socio-economic approach to the examination of management behaviour and concludes that there is a case for the recognition of the defining behaviour of social relations. Such inclusion is required to recognize the degree to which societal influences impact on managers' economic behaviour. Disclosures of social responsibility is a method that a corporation can use to inform external parties that a corporation is responsive to the concerns of interested external stakeholders. The article then examines the economic influences on managers' accounting policy choices, then reviews the results of empirical investigation by positivist theorists into the relationships between accounting choice and the efficient market hypothesis (EMH) and the use of proxy accounting variables in the capital asset pricing model (CAPM). The corporate social responsibility literature concerning empirical examinations of financial performance and corporate social reporting variables is then examined in a similar way. Both sets of literature are found to have established that some relationship exists. It is argued that the measures of corporate social responsibility are in fact measures of corporate social responsiveness and that the ill-defined financial performance may be better defined as the reported results of a portfolio of accounting choice which is socially developed. These relationships are seen as providing the basis for proposing that there is a likely relationship between accounting choice and corporate social responsiveness, with accounting choice as the dependent variable.

A case for a socio-economic approach to managerial behaviour

The sociological modification of positive economics utility/rationality Political economy may have been a more evocative term than socio-economic, but it is avoided in this article as in recent years this term has come to be associated with the works of some researchers who question the validity of the assumptions underlying the neo-classical economic paradigm (for example, Cooper, 1980; Tinker, 1984). In the absence of consensus among accounting researchers this article extensively adopts the conventional accounting paradigm which relies on the neo-classical economic model.

While the socio-economic approach favours a measure of cross-disciplinary integration, it does not "return to the womb of early political economy" (Etzioni, 1988), but attempts to link spheres that will remain distinct. It seeks to integrate elements of economics and other social sciences into one system, but not to fuse them. Such an integration is not new and was proposed by Cooper and Keim (1983) when criticizing the narrowness of assumptions in finance theory which underpinned corporate financial disclosure. Their solution was to broaden the prevailing economic perspective to include relevant social and political

40

influences. In a commentary article on Cooper and Keim, Tinker (1984) advocated that the "patching up of orthodox theory" would be futile as the flaws are fundamental and warrant the abandoning of neo-classical state theory.

Cross-disciplinary efforts of the kind launched here exact a price. As one draws on several disciplines one inevitably sacrifices some detail and even precision in the quest for a broader scope of analysis. For example, Hopwood (1985) reported on the deliberations of an interdisciplinary committee that had been set up to investigate the integration of accounting with the social. This committee became so involved in the debate about paradigms that it never reported. Nonetheless, some justification for this integration can be observed in articles such as those by Conlon and Parks (1988), Eisenhardt (1988, 1989), Hirsch *et al.* (1987), Kosnik (1987), and Singh and Harianto (1989) where organizational research has been conducted using agency theory and complementary theories from sociological literature.

From a socio-economic perspective, positive accounting research (PAR)[3] has not explicitly considered managers in social relations and therefore has unnecessarily assumed away many of the factors that influence and constrain one's choices (Neu, 1992). Mouck (1992) postulated that researchers utilizing PAR assume the existence of detached objective reality that can be observed in a value-free manner while arguing that accounting procedures are intertwined with interpretation and understanding. As such, PAR excludes the complexity of the socio-historical context in which the choice of accounting procedures occurs. By modifying what is taken to be utility and rationality, a socio-economic approach provides a richer understanding of these choices.

A socio-economic approach, by recognizing the embeddedness of managers in social settings, provides us with a more complete understanding of factors that affect behaviour than do current positive theory explanations. Identification of the influences constraining and defining the nature of social relations directs us to the significance of individual, institutional and societal norms in mediating behaviour (Neu, 1992). This approach also emphasizes the inadequacy of explanations of behaviour that depend exclusively on efficiency or economic utility reasoning. When taken together, the social and economic analysis of managers' behaviour extends our understanding of the selection of accounting practices. As Neu (1992) argues, it provides us with an alternative vocabulary for describing managers' social behaviour, one that modifies the economic reductionism present in positive studies.

In the main, economic influences on managers' behaviour have treated tastes, preferences and value as exogenous and focused on change in constraints such as income and prices, among others (Etzioni, 1988). On the other hand sociological studies focus on changes in tastes, preferences and values with little or no attention to constraints such as income and prices (Etzioni, 1988). Similarly, positive studies tend to analyse the market, or the economy, as if it was worlds apart from polity, culture and society, while some other social scientists study the latter as if there was no economy at their core. As a

consequence, theories of the positive type seek to explain only the relations among variables that characterize a particular slice of the world that they define as "theirs" through reductionism. The implication of this is that major realities, conditions and constraints are excluded and must be included in order to expand to a richer and more complex range of contexts (Perrow, 1986).

The socio-economic perspective posited is less parsimonious and more encompassing than positive theory through the inclusion of the social relations of managers in the explanation. Hence, whatever its limitations, socio-economics seems promising as a research area for furthering our understanding of the "world-as-it-is". The advantage of the socio-economic approach is in the incorporation of both social and economic factors which makes it more encompassing than the mono-disciplinary approach of positive theory. In particular, the approach taken seeks to assist in the breakdown of one of the major criticisms of neo-classical economics; the separation of the social and economic spheres (for a discussion on the separation of the study of economics from its relationship with humanity, see Harcourt, 1969, p. 395).

There is more to economics than rational economic man or woman. A major source of conflict for managers arises from being both a member of the community and a self-seeking individual (Lewis and Cullis, 1990). The dilemma in assumptions posed for researchers is whether managers discharge their duties in some self-interested way or by acting in some morally and socially responsible way. Do managers maximize their own satisfaction or that of the society in which they operate? Which values in that society will they reflect? The resolution of this dilemma will necessarily involve assumptions by the researcher which concern differing maximizations of utility between managers, while those individual utilities do not necessarily sum to some other assumption concerning macro utility maximization. If it is assumed that individual managers become moderate utilitarian managers who do take societal as well as economic values into account, then it is suggested that managers' attitudes will reflect the belief that there is more to life than merely a quest to maximize one's economic utility.

Socio-economic utility and managers' accounting policy choice

Given that societal relations influence what is taken to be utility and that these relations cannot be assumed away, then both social and economic factors will become important considerations for managers in their selection of accounting practices. Further, symbolic considerations such as the desire to maintain legitimacy and to adhere to societal norms of fairness will also become considerations for managers' choice. Positive accounting researchers have established their focus on economic variables which are intended as proxies for behaviour. These economic variables include compensation incentives, the impact of external contracts and the threat of government regulation. The implication is that all social variables are caught in the measurement of the data and the portfolio of choices made in accounting practice in such proxies.

42

It is posited that by including proxies for social variables the concept of utility is thus broader than that used in PAR. More specifically, a socioeconomic approach recognizes that agents and institutions other than the State, investors, auditors, or those with formal contracts with the firm influence managers' goals. Moreover, this perspective recognizes the influence of non-economic factors such as personal relations on managers' choices. By expanding the potential influences on managers' behaviour to include both economic and social factors along with both formal and informal relations, a socio-economic perspective provides a more inclusive view of utility (for example, Jones, 1983; Neu, 1992; Perrow, 1986; Preston, 1975).

This article also suggests that a socio-economic perspective reconsiders what is taken to be rational action of managers. The normative influences on managers, changes both the problem as it is perceived and the potential accounting solution to that problem. Managers are seen to be constrained by institutional factors such as industry norms and government regulations. Thus a socio-economic perspective expands on positive studies by considering both the existing and future roles that industry practice and government regulation may play in influencing choice, while taking into account societal and cultural norms regarding acceptable business practices which limit the range of potential accounting solutions.

A socio-economic perspective does not suggest that managers ignore economic factors in their decision making when choosing accounting practices. Instead, it posits that a fuller explanation of a managers' choice must also consider the social context of those choices. It does highlight the inadequate explanations of behaviour that rely solely on efficiency or maximization of economic utility arguments. In consequence the recognition of the influencing, constraining and defining nature of social relations is required in order to recognize the degree to which societal influences impact on economic behaviour.

Economic influences on managers' accounting choice

Positive accounting research and managers' accounting policy choice In analysing economic influences, positive accounting research into managers' accounting policy choices relies on a common core of interrelated assumptions to describe variables used and to interpret their results.

There appear to be three common core assumptions. First, managers are assumed to be rational economic utility maximizers who pursue self-interest (Thornton, 1984). The assumption is that managers behave by exercising their discretion in choosing between accounting policies, which can be considered as ex-ante efficient, but with consequential ex-post opportunism resulting. In response, shareholders and creditors aware of such behaviour as being contradictory to their interests, partially price protect themselves by assuming an average amount of opportunism on the part of managers. Second, managers are assumed to transact in a perfectly competitive market (this assumption is relaxed in studies as to the degree of efficiency in the market). The third

assumption follows from the second, that is that the role of accounting is one of providing information for the capital markets.

Socio-economics and accounting

In general, tests of PAR as to the market response into managers' accounting choice, in traded securities, are tests of the EMH. In tests of non-traded securities the tests involve using accounting variables as reflections of the CAPM variables. In these models the role of accounting as information provider is a form of supply driven economics to a market which demands such information for decision making. Both these forms of testing imply that accounting practices (which create the accounting numbers) and government regulation (which controls some forms of the accounting numbers) formulate the nature of information which flows to the marketplace from the portfolio of accounting choices made by managers within the quasi and government regulated environment. The process that controls this flow is a formal and informal set of contracts between self-interested parties and a process of political competition for wealth transfers between the self-interested parties.

In consequence of the assumptions outlined, variables representing depreciation policies (Hagerman and Zmijewski, 1979); net accruals (Healy, 1985); early versus late adoption of accounting standards (Scott, 1987; Thornton, 1985); and a portfolio of accounting policy choices (Zmijewski and Hagerman, 1981) all rely on the assumptions in analysing their results from empirical study. However, consideration of the social mores which surround decisions of choice is assumed away in the economic utility maximizing paradigm.

The following discussion attempts to generalize the results of studies conducted by the positivists, but due to the consolidation of the studies, information loss[4] will occur. This loss is not intended to discredit the issues or the results of many researchers over many years, but is intended to conceptualize some aggregate conclusion in order to analyse the attempts in the literature to examine similar issues. From the ensuing simplification, comparison and generalization, the concept of a socio-economic paradigm can evolve toward specifics. These specifics can in turn be generalized until a theory which better explains concrete practice emerges. This developed theory can then in turn be hypothesized and tested for better definition and prediction purposes.

Emphasis on a subset of three economic influences

Research focusing on economic factors influencing managerial behaviour has in the main considered three economic influences in explanation of managerial incentives for selecting accounting policy (Watts and Zimmerman, 1990). These economic influences are management compensation, debt covenant and political cost variables.

The first economic influence, managerial compensation, is usually made up of the following components: salaries, bonus, compensation and share compensation (Watts and Zimmerman, 1978, p. 114). Second, the debt covenant is frequently measured by proxies in the form of debt to assets or debt to equity,

44

representing contracting costs resulting from financial commitments with external financial institutions (Watts and Zimmerman, 1990). Jensen and Meckling (1976) note that debt covenants are used as a method of reducing agency costs associated with debt. These proxy measures of debt covenants are represented by accounting numbers (for example, Leftwich, 1983; Smith and Warner, 1979). The justification for this approach is that managers are motivated to reduce the probability of binding debt constraints. The net effect is to increase their manoeuvrability and reduce renegotiating costs that can have a negative effect on the value of managerial share holdings (Watts and Zimmerman, 1990).

Political costs is the final economic variable which proxies for the possibility of government intervention (Watts and Zimmerman, 1986, p. 223). The assumption when using this variable, provides that firms which are large, high risk and highly unionized, among other characteristics, are more visible and thus are more likely to be the target of wealth transfers resulting from the political process. In order to attain flexibility and the value of personal share holdings, managers will choose accounting policies that minimize the possibility of such intervention, *ceteris paribus*.

In sum, managers are assumed to trade off the expected impact of the economic influences; compensation, debt and political costs when selecting an accounting method. The selection of a particular accounting method may have opposing effects on compensation variables versus political variables[5]. Managers are assumed to choose the accounting method that best balances these conflicting influences. In general the studies of the EMH in traded securities where there is a mandated accounting change show a general agreement of an average share price effect with accounting change while inconsistencies in results may be due to the variables being used not being a proxy for the function specified or multicollinearity between the variables.

With respect to non-legislated accounting change, or where there is a choice of, or non-defined accounting method, the EMH tests of voluntary changes in accounting method and share price effects have produced no general agreement[6]. The propositions that flow in these opportunistic accounting change tests (Holthausen, 1981) are that the accounting change effects share price in the following ways: if the change permits the management to increase its share of the reported profit then share price will decrease; if the change permits a wealth transfer to shareholders from debt holders then the share price will increase and in the reverse case the share price will decrease; if the change in accounting method increases reported earnings then there will be an increased political cost and share price should fall; the greater the change in cash-flow variance the greater the share price effect, however the share price effect may be opposite to the direction of the variance in cash flow where there is an increased probability of default. The magnitude of the change will effect share price in the direction of the greater change where two or more of these effects occur. In a test of accounting policy choice (re goodwill) over periods of non-regulation and regulation Anderson and Zimmer (1992) argue that

45

behaviour

Socio-economics

and accounting

accounting choices are temporally independent of previous accounting policy choices. This study was criticized by Taylor (1992) as to the assumption of independence of accounting policy choice over time, but concluded that the study remained robust as to results. Watts and Zimmerman (1986, p. 307) advise that with the advantage of hindsight it is difficult to design powerful tests of voluntary accounting change and share price effects.

In conclusion it appears that general accounting changes[7] have general share price effects while non-generalized accounting changes[8] do not have share price effects (Watts and Zimmerman, 1986, p. 311). This apparently paradoxical conclusion is intuitively supportable using the assumptions of an efficient market in that the market recognizes general change and adjusts accordingly while in non-generalized change the market recognizes that an industry is under pressure with respect to some political cost (for example, pollution, deforestation, potentially harmful to human chemical excretion, etc.) and has already adjusted the price before the accounting change in expectation of the associated change. It is this latter point that a socio-economic economic paradigm would seek to explain in terms of timing of the market recognition, therefore increased predictability of the model.

The empirical tests of accounting choice using accounting numbers as reflections of the CAPM variables seem to suggest that the higher a firm's debt/equity ratio the more likely it is to use procedures which increase reported current earnings (Watts and Zimmerman, 1986, p. 245). Watts and Zimmerman point out that testing of these hypotheses explains relatively little of the cross-sectional variation in accounting procedures and predicts no better than a naive prediction that all firms use the same accounting procedures. However, the use of the hypotheses is better than the use of the naive in that the hypotheses provide a richer explanation of the accounting procedure choice.

Accounting procedure choice is not a simple either/or choice. Managers face a portfolio of accounting methods when preparing accounts. Zmijewski and Hagerman (1981) investigated four accounting choices: inventory, depreciation, investment tax credit and pension cost amortization procedures. Given two choices for each of the procedures there is a portfolio of 16 combinations. In consequence researchers in the area need multiple tests to discriminate in hypothesis testing.

In general the empirical tests of accounting choice have shown a relationship between debt/equity ratios, firm size variables and accounting procedures, but there is a need for more powerful tests to increase the predictive power of the theory.

A critical discussion of purely economic influences

Positive accounting researchers in considering economic influences solely, eliminate analysis of the human factors influencing decision making. For instance, PAR and capital market research assume that:

managers act unreservedly in their own narrowly defined economic self-interest with, if necessary, guile and deceit (Hines, 1989, p. 61)

46

As Noreen (1988, p. 368) notes, by treating managers in this category as the ideal and by not coming to terms with problems associated with the assumptions and values on which it is based, implies that the values of self-interest, opportunism and greed are considered as normal behaviour. Such a restriction of economic assumptions to an excessively narrow framework inhibits research preventing its expansion to the richer and more complex range of contexts (Perrow, 1986). When the positive researcher examines how individuals handle uncertainty the conclusion is that individuals are poor intuitive statisticians. Individuals, when faced with a complex environment and uncertain probabilities will bias their estimate by using simplifying assumptions to make the task less difficult, for example, anchoring and functional fixation (Abdel-Khalik and Keller, 1979; Joyce and Biddle, 1981). The inference is that the individual calculates poorly (does not maximize utilities), not that the "world-as-it-is" is not explained by the model.

From the positive accounting assumptions outlined above, criticism in the article, is directed to the assumptions which underpin the advocates of purely economic influences as an explanation of human behaviour in accounting choice. What is argued is that socio-effects on behaviour and accounting choice is a missing variable. This concept is not new; for example see Ronen and Sorter (1978, p. 1) where they argue that the selection among accounting alternatives is a problem of social choice.

Much of the positive research which has empirically tested economic influences in accounting is based on the assumption that accounting information both precedes, and is the product of rational decision making. Managers are assumed to be economically motivated, self-interested utility maximizers. A socio-economic approach questions the extent of this assumption. Social situations, such as social responsibility reporting, do not necessarily rely on maximizing utility as it is defined in neo-classical literature. Further, the role of accounting in mainstream accounting literature is assumed to be that of neutral information provided by a neutral observer. This view of neutrality is seriously challenged by Lehman (1992) when she argues fluently that the process and the participants cannot be neutral as accounting is steeped in values, wealth transfers and social discourse and is by nature a transforming practice.

Such a transforming practice requires that social influences as well as the economic influences be evaluated in a model of accounting choice as the managers are both being influenced by and are influencing the environment to which they report.

Managers who include a social component in their decision-making processes may be considered by positive accounting researchers as simplifying the complexity by neglecting account of the economic influences of the situation, together with failure to understand the probabilities because the information is subjective and difficult to quantify. On the contrary, it is argued that managers who utilize accounting procedure choice, do so with social influences embedded in their decision making. DiMaggio and Powell (1983) see the process of

Socio-economics and accounting behaviour

Social influences on managers' accounting policy choice

Social responsiveness and accounting procedures

On analysing the accounting literature very few empirical examples of a socioeconomic approach to explain or examine accounting policy choices were identified. One noteworthy example is that of Neu (1992), who investigated senior managers' decision to forecast earnings using both economic and social influences through positive and social construction research. He assessed disclosure of earnings forecasts in Canada between 1983 and 1987. The influences of positive accounting studies were considered as a contribution to the understanding of managers' economic behaviour. Economic variables which measured the influence of compensation, contracting and political factors were used for the positive research. The social variables were intended to measure the influence of social relations on the decision to disclose an earnings forecast (Neu, 1992, p. 231). What Neu calls a social construction perspective, we call social responsiveness of managers. That is, such variables are proxies for the influence that society places on the managers and the influence with which the manager responds in order to influence society.

To illustrate, in Neu's (1992), research four variables were used to measure social constructions on managers' decisions to disclose earnings forecast. For the purpose of this analysis two of those variables are relevant. The first variable, normative influences of the accounting profession, was reflected in a professional accountant being identified as sitting on the firm's board of directors or as a member of senior management. Since earnings forecasts are a function of an accounting technique and since such techniques tend to be disseminated through professional bodies (DiMaggio and Powell, 1983), the presence of a professional accountant should be positively related to the decision to forecast earnings. Neu (1992) argued that the presence of a professional accountant on the board of directors or as a member of senior management increased the likelihood that senior managers would include an earnings forecast in the prospectus.

The second variable was called *industry norms*. In a study carried out by Eisenhardt (1988) industry norms were identified by discussions with industry informants. Likewise, Neu (1992) contacted six brokerage houses regarding the appropriateness of including a forecast in a prospectus and collated industry norms after questioning. There was a general agreement among informants that resource firms and financial firms generally do not forecast earnings. Resource firms do not forecast because the lack of a track record along with the "hit" or "miss" nature of exploration makes it unlikely that investors will trust the forecast. In contrast, financial service firms do not forecast because of the conservative image that these institutions wish to project (Neu, 1992).

47

48

From the empirical study of Neu it appears that the *normative influence* of a professional accountant along with *industry norms* were useful explanators of the publication of forecasts. When evaluating economic and social factors, Neu (1992) found that in comparing the results of the positive and the social construction approach, the social construction perspective provided a fuller explanation than the positive one as reflected by the R^2 measures and the percentage of correct predictions. Even when Neu excluded non-profit companies from the tested sample the results provided better explanation in the social construction form than the positive form.

The work of Neu (1992), provides support for an argument of an association between accounting policy choice and social responsiveness. Notwithstanding the valuable contribution of his work, a social factor not considered was the social responsiveness of managers reflected by the degree and content of social responsibility reporting (SRR) that is often contained in the annual reports of companies. Such reflections revealed through content analysis are linked to the role of accounting as a legitimating institution (Lehman, 1983; Richardson, 1987) whereby social values are linked to economic actions and revealed through semiotic relationships between actions and values (Lehman, 1992; Richardson, 1978; Richardson and Dowling, 1985). This association is similar to that proposed by Lindblom (1982) where a form of interest group theory explains the character of the liberal democratic state in terms of conflict resolution and common-benefit organizations. Authors, such as Tinker (1984) and Lehman (1992), would dispute the legitimating influence of society on corporations as the information provided to that society is value laden and therefore biased. In a study of Broken Hill Propriety Limited, Guthrie and Parker (1989) failed to confirm legitimacy theory as an explanation of reporting social responsibility over time.

Managers' influence on their social environment

From an analysis of the social reporting literature there is evidence to suggest that managers either influence or seek to influence their environment through social disclosures. Anderson and Frankle (1980) in their study analysed voluntary social reporting and suggested a tendency for companies to report only their most favourable social activities. Ingram and Frazier (1980) noted that companies which are poor social performers have, through the choice of voluntary disclosure, the opportunity to report in annual reports information that favourably misrepresents their social performance. Wiseman (1982) also recognized the problem of voluntary social disclosure as a vehicle which could be used by managers to influence their environment. In his study he articulated disquiet that voluntary environmental disclosures could be misrepresentative of a company's environmental performance.

Ullmann (1985) saw stakeholder power as influencing the amount and nature of social responsibility reported. The proposition put forward was that if the stakeholder power was high then it was expected that corporations would report more social responsibility than those with low stakeholder power.

The observations that managers seek to influence their environment for the purpose of self-interest raises the question of whether the "market" should be in control of the specification of information through demand and "agency penalties" (in the form of costs to managers) or whether disclosure should be regulated and "forced" (for example, Beaver, 1973; Benston, 1982; Gonedes and Dopuch, 1974; Jensen and Meckling, 1976; Ronen, 1979; Watts and Zimmerman, 1978, 1979, 1990). No unambiguous solution to the above debate has as yet been developed, however, it is clear that there is agreement among the parties that managers do seek to influence the environment to which they report. It is argued that if managers seek to influence the market on matters of general accounting it is not unreasonable to assert that managers will attempt to influence the information available to the market on matters of social interest.

Social responsiveness

Social responsibility reporting into managers' accounting choices and/or actions encapsulates the social response of managers as it depicts the influence that the social environment has on the managers and the influence which the managers would like to have on the environment. Cowen et al. (1987), speculated that social responsibility reporting is a social response to the desires of government and the community while Ronen and Sorter (1978) argued that selection among accounting alternatives is a problem of social choice. Consequently, the socio-economic assumption is that managers respond to social influences, while selecting from a portfolio of accounting choices to influence those social pressures. Consequently, neither managers nor accounting are neutral and the output resulting from this process cannot provide value free information to a market which is then efficient in its use of such information. That is, if the managers act sub-optimally, how can the aggregate of this process be optimal?

Research on determinants in social responsibility reporting

Two general streams of enquiry

Previous research has defined social responsibility activity as policies or actions which identify a company as being concerned with society-related issues (Roberts, 1992). Studies have examined SRR activities in many areas including the following categories: environment, affirmative action programmes, equal employment opportunity policies, community involvement, product safety, policies towards South Africa and energy concerns (Cowen *et al.*, 1987). There are at least two general streams of past research which highlighted determinants of social responsibility reporting. These streams tend to have focused on: market reaction to social responsibility; and studies of the determinants of social responsibility reporting.

Market reactions to social responsibility reporting

Several studies of the market reaction to general disclosures of social responsibility information have been conducted (for example, Anderson and

50

Frankle, 1980; Belkaoui, 1976; Ingram, 1978), as well as market reaction to specific categories of social responsibility reporting (for example, Freedman and Jaggi, 1982, 1986, 1988; Shane and Spicer, 1983).

It has been asserted that the amount of pollution expenditure provides information to investors in the market. Belkaoui (1976) using the value of pollution expenditure as indicated by 1970-71 annual reports found that this expenditure provided material information to investors. Empirical testing was performed in order to determine how the capital market reacted to disclosure of pollution control data in annual reports. The findings suggest that disclosure had a substantial but temporary effect. Belkaoui contended that the study refuted the suggestion that companies which report the least amount of social costs will reap the greatest rewards in the capital market.

Investigating a sample of annual reports of United States Fortune 500 Companies, Ingram (1978) used the Ernst and Ernst (1976) summary of voluntary disclosure of social factors over the period 1971 to 1976. This disclosure was categorized into environment, fair business, personnel, community and product. Companies were classified according to the forms of disclosure they made. Equal risk portfolios were constructed for each disclosure category and for non-disclosing companies. Initially, the general results indicated no significant differences in mean monthly returns and variances, between disclosing and non-disclosing companies. Ingram (1978) then divided the companies into market segments based on: the sign of excess earnings in the year of disclosure; the year of disclosure; and industry. The study tested whether returns on shares were positively related to social disclosure categories for the market segments. Excess returns on shares were found to be significant for all categories of social disclosure in specific market segments.

The Council on Economic Priorities (CEP) in 1970 and 1972 analysed and released a pollution disclosure index for 109 companies from the chemical, oil-refining, steel and paper and pulp industries of the United States of America. This database was used by a number of researchers for the purpose of examining market reaction and social responsibility in the form of pollution controls. Spicer (1978) examined market-based performance measures using profitability of the firm and concluded that most profitable larger companies tended to have better pollution controls. However, when Chen and Metcalf (1980) replicated the Spicer study they concluded that size was the major explanatory variable. Shane and Spicer (1983), examined the market reaction to non-voluntary disclosures of pollution control performance based on a market model utilizing daily returns. The authors showed that the firms with positive as opposed to negative pollution controls (based upon the CEP's criteria) significantly outperformed their counterparts.

In a further series of articles utilizing the CEP database, Freedman and Jaggi (1982, 1986, 1988), examined stock market reaction and economic performance to pollution disclosures included in firms' annual reports. Economic performance was measured by six frequently used accounting ratios. In the

1982 reported research the results indicated no correlation between pollution disclosure and economic performance; the correlations were insignificant with respect to all ratios. In the 1986 reported research, monthly returns were used. The researchers found no significant difference in returns between firms with extensive pollution controls and those with either minimal or limited disclosures. However the results of this study were questioned by Haw and Ro (1988, p. 90). Haw and Ro noted Freedman and Jaggi had failed to distinguish the market reaction to pollution disclosure from the market reaction to other firm-specific information released at the same time. However, in the 1988 reported research of Freedman and Jaggi, after adjusting for industry groups and firm size they found positive correlation between economic performance and pollution disclosure.

Contrarily, McGuire *et al.* (1988) suggested that financial performance may be a variable which influences the level of socially responsible activity. Using *Fortune* 500 magazine's ratings of corporate reputations to analyse the relationship, prior financial performance of the firms, as measured by both stock market returns and accounting-based measures, were found to be more closely related to social responsibility than was subsequent financial performance.

Determinants of social responsibility: the search

Over a period of many years, various researchers have attempted to identify whether there is a relationship between financial performance and social performance and whether this relationship is of a negative or positive nature. In order to determine the relationship and its effect a number of determinants of socially responsible activities have been identified and tested by these researchers.

In a test of relationships between social disclosure in annual reports and several variables, Fry and Hock (1976) used company size and image as determinants. One conclusion was that although compared to other companies, large companies and companies in industries with poor public image tended to report more about their social activities, there was no indication that they performed better or worse financially than other companies. These researchers suggest that profits would not be adversely affected if companies became more socially responsive as evidenced by social disclosure in annual reports.

Utilizing data from Ernst and Ernst (1976), Preston (1978) sought to determine whether a relationship existed between the amount of social disclosure in annual reports and return on equity. Preston found that a weak positive association existed between profitability and the extent of social responsibility. It was acknowledged that the association between profitability and firm size may complicate the association between profitability and social responsibility reporting. In the same year, the research of Bowman (1978) was published whereby he set out to identify those variables that can be associated with companies' commercial success, as determined by return on equity. Among the variables tested was the disclosure, in annual reports, of

52

information regarding equal employment opportunity. A content analysis of the narration within annual reports was performed in order to determine the percentage of such disclosure in the 1974 annual reports of 46 companies in the computing industry in the United States of America. A positive correlation was found to exist between the disclosure of equal employment opportunity information and corporate commercial success.

Abbott and Monsen (1979) used content analysis to analyse annual reports and the overall score obtained from the Ernst and Ernst studies to construct a social involvement disclosure scale. This scale was used to determine whether a relationship existed between the social involvement and the economic performance of 450 companies. The study did not find conclusive evidence of an association, in either direction between social involvement and profitability. When size (number of employees) of the company was controlled for, there was evidence of a non-substantial positive relationship between social involvement and profitability.

Examining voluntary social reporting by American companies, Anderson and Frankle (1980) found that such reporting had positive information content. This study was based on the overall social disclosure and types of disclosure identified by Ernst and Ernst (1976). Anderson and Frankle controlled for risk and measured economic performance by monthly stock returns six months after the year-end for all companies. The first set of results indicated that companies that disclosed social information performed better than those that did not. Further analysis revealed that companies that previously disclosed social information performed better than companies that disclosed for the first time, however there was no significant difference in performance between companies making financial disclosure and those making non-financial disclosure.

Mills and Gardner (1984), in their study of the relationship between social disclosure and financial performance found that companies are more likely to report social responsibility when their financial statements indicate favourable financial performance. Reporting in the same year Cochran and Wood (1984), using the social responsibility rankings attributed to Moskowitz (1972), tested the relationship between social responsibility reporting and financial performance, using three improved financial performance measures: the ratio of operating earnings to assets; the ratio of operating earnings to sales; and excess valuation. The outcome of these improved measures of financial performance indicated the significant role of firms' assets in financial performance. Specifically, asset turnover and asset age were included as explanatory variables. After controlling for industry classification and corporate age, a weak positive association between social responsibility reporting and financial performance was found to exist. In their study they found that the key correlate with corporate social reporting was asset age.

In specifying the relationship between several corporate characteristics and specific categories of social responsibility reporting, Cowen *et al.* (1987) hypothesized that company size, industry classification, profitability and the

presence of a social responsibility committee were potential influences on social reporting. McGuire *et al.* (1988) researched the relationship between perceptions of firms' corporate social responsibility and measures of their financial performance. The outcome of this study was that a firms' prior financial performance is a better indicator of corporate social responsibility than is subsequent financial performance. Financial performance was measured using: stock market returns; and accounting-based measures. Furthermore, this research indicated that there may be a link between a firm's level of risk and corporate social responsibility.

A weak conclusion that can be drawn from the results of the foregoing research into market reaction and social responsibility reporting is that there is a market reaction to social responsibility disclosure. However, the direction of price and the impact of such disclosure remain unclear. The determinates appear to include size, asset age, industry grouping, risk and profitability without any clear indicator as to which determinant or group of determinants is dominant.

While the reports of the research on the relationship between financial performance and social responsibility have produced mixed results, the relationship remains significant for management behaviour as to the degree of response to pressure to be socially responsible (for example, Cochran and Wood, 1984, p. 42). If a positive relationship between financial performance and social responsibility can be shown to exist then managers may be prompted to place more emphasis on the level of socially responsible activity. However, there is as yet no consensus in prior studies of how to determine the function that relates financial performance with social responsibility. Table I represents a summary of the findings of studies which have examined the relationship between financial performance and corporate social reporting.

The inconsistency in findings may be due to misspecification of the proxy variables and/or the employment of differing methods to measure financial performance. Some studies used accounting variables (Bowman, 1978; Cochran and Wood, 1984; Freedman and Jaggi, 1982; Preston, 1978), whereas others used market variables (Anderson and Frankle, 1980; Belkaoui, 1976; Ingram, 1978; McGuire *et al.*, 1988). Cochran and Wood (1984) include small sample size and control groups and inadequate time periods. Furthermore, limitations may apply to studies which assume that capital markets are efficient (for example, Ingram, 1978) and that the CAPM applies (for example, Anderson and Frankle, 1980).

A search for the function and the explanatory variables Research implications

There appears to be a weak positive link between financial performance and corporate social responsiveness as tested in the corporate social responsibility literature. Within this literature there is no clear consensus of what financial performance is. There appears to be a relationship between accounting choice and traded shares and while the results are mixed there also appears to be a

AAAJ	Researcher(s)	Findings
Table I. Summary of findings of research into the relationship between financial performance and corporate social responsibility	No relationship	
	Fry and Hock (1976)	No relationship
	Abbott and Monsen (1979)	No relationship
	Freedman and Jaggi (1982)	No relationship
	Freedman and Jaggi (1986)	No relationship
	Freedman and Jaggi (1988)	No relationship prior to adjusting for industry and size
	Positive relationship	
	Preston (1978)	Weak, positive relationship
	Cochran and Wood (1984)	Weak, positive relationship
	Spicer (1978)	Positive but size related
	Chen and Metcalf (1980)	Positive but size related
	Belkaoui (1976)	Positive but temporal relationship
	Ingram (1978)	Positive relationship subject to segmenting companies
	Bowman (1978)	Positive relationship
	Anderson and Frankle (1980)	Positive relationship
	Shane and Spicer (1983)	Positive relationship
	McGuire et al. (1988)	Positive relationship
	Freedman and Jaggi (1988)	Positive relationship (after industry and size adjustment

weak relationship between the proxy variables of accounting used in CAPM testing as assessed by positivist researchers. The positivist literature has also identified that accounting choice is a matter of selection from a portfolio of accounting methods, hence it would be wise to use multiple tests to discriminate.

The social constructionist literature has identified that economic activity is embedded in a social environment of human endeavour. Even the choice of accounting method is itself a social activity. In the economic environment we are both affected by and have effect on the activity. There is no beginning to this effect other than when the activity first begins. The concept is one of an open system in which the images and symbols of our activity are socialized. Nevertheless, the economic activity cannot exist without the social, hence there appears to be a need to include social variables in any testing of relationships between economic activity and results.

It has been argued that corporate social responsibility is a form of corporate social responsiveness by the managers of a firm to pressures which they perceive and that the managers then attempt to influence the social environment. Managers' accounting choice and literate response in annual reports form part of the corporate social responsiveness within the economic activity.

In consequence it is argued that research into the relationship between financial performance and corporate social responsibility should be directed towards establishing the relationship between accounting choice and corporate social responsiveness, but that such research should use the well-established methodology of the EMH and CAPM with proxies for variables of corporate social responsiveness included. The source of these variables can be found in the corporate social responsibility literature and may involve using hermeneutics, content analysis and reputational indexes to develop analogue measures for model inclusion. Further adaptation of the models would include past disclosures (whether numeric or text) to differentiate between rhetoric and action in corporate social responsiveness and to understand better the nature of the relationship and lags. For example, the Appendix includes some dimensions of corporate social disclosure that could be used for measuring proxy variables of corporate social responsiveness. The precise use of these dimensions will vary with the research method employed, however a generalized approach could be to use logistic regression similar to that used by Zmijewski and Hagerman (1981) but modified to include social responsiveness proxy variables exampled in the Appendix and lags where appropriate.

55

The development of hypotheses for testing with these models would be a combination of those of the positivist researchers and of the corporate social responsibility researchers with modification for assumption differences. In the positivist literature the nature of information that is being provided to a capital market is one of information provided by a neutral supplier with tastes, preferences and values being exogenous. Whereas in the social constructionist literature, the nature of information supplied to any market contains no such assumption of neutrality, the nature of the provider or the information supplied. A further relaxation of positive assumptions would include the preference utility regarding maximization of economic value. In positive research the assumption is of a manager who discharges duties by maximizing economic value through self-interest. Whereas in socio-economic literature the assumption as to utility preference is of a moderate utilitarian who takes societal as well as economic values into account.

In the development of such models it is argued that one of the criticisms of neoclassical literature (the debate on the separation of the social and economic sphere) will be ameliorated as a developing paradigm of socio-economics emerges.

Conclusion

The purpose of this study has been to suggest that adopting a socio-economic paradigm to analyse managers' selection of accounting practices can provide a richer, more inclusive explanation of factors influencing information supplied to the capital markets. The identification of such an explanation would aid managers in understanding their response to matters socio-economic and its relationship with the value of the firm. A study carried out on a social

56

construction of positive choices, posited by Neu (1992), together with the valuable contribution made by Etzioni (1988), in the sociological field, to the development of a socio-economic approach have provided the impetus for this article.

The study acknowledges that positive researchers provide an undersocialized or atomized-actor explanation of managers' choices (Granovetter, 1985) of accounting policy. PAR has concentrated on a narrow subset of economic variables, intended to proxy for compensation, contracting and political influences on management behaviour. This study suggests that positive studies have failed to acknowledge that economic actors are influenced by their environment and also have the ability to influence that environment. However, advocating abandonment of positive accounting theory (Tinker, 1984) would deny the valuable contribution of economic influences on managerial behaviour.

An analysis of empirical studies of explanations of managers' choice of accounting policy was undertaken from two perspectives. The first set of these explanations utilized the empirical testing of CAPM or EMH as explanators in both a regulated and non-regulated market. The second set of explanations utilized hermeneutic analysis or constructed reputational indexes to explain financial performance. In general the results of the first set (PAR) indicated a general share price effect between accounting policy choice and share market price under generalized changes, but no share price effect under non-generalized changes in accounting policy. The second set of empirical studies found a weak positive relationship between financial performance and reported corporate social responsibility.

Building on the normative discussions of Cooper and Keim (1983), Etzioni (1988) and the empirical work of Neu (1992) a socio-economic paradigm is posited which integrates PAR and sociological literature towards developing a research framework which expands positive accounting theory.

This study suggests that the paradigm being formulated here has the potential to be a productive one. Responding to Neu's (1992) recommendations and the strengths of both the positive and the social constructionist literature, the article advances corporate social responsiveness as an additional factor within the PAR models. Corporate social responsiveness can be measured using annual reports of companies. Two measurement methods have been identified in prior research, namely content analysis and reputational indexes. It is claimed that social responses influence managers' accounting policy choice and in support the discussion has focused on prior research which has tested the relationship between corporate social responsibility and financial performance.

Social variables have an impact on managers' behaviour and choice of accounting policy is a social act. It is argued that corporate social responsiveness as demonstrated within the content of corporate annual reports is both a visible and measurable social influence. Whether a relationship actually does exist between corporate social responsiveness and accounting procedures needs to be verified by empirical research. From an analysis of

and accounting

studies testing the relationship between corporate social responsibility and financial performance and tests of the EMH and the CAPM with respect to accounting choice, it can be implied or deduced that there is a likely association between corporate social responsiveness and the accounting policy choice behaviour of managers. Such a development would assist in the breakdown of the separation of the social and economic spheres and lead to a preliminary socio-economic paradigm.

Notes

- 1. Economic paradigm will refer to the assumptions used in positive research.
- 2. For a discussion of the term "social constructionist" see Richardson (1987, pp. 346-49).
- The phrase, "positive accounting research into managers' accounting policy choice" is used to represent those empirical studies into managers' accounting policy choice which utilize a positive accounting theoretical framework based on purely economic assumptions.
- 4. The information loss occurs due to summarizing the results of the researcher and in selecting for analysis only that portion of the researchers' results which was considered relevant for this work.
- 5. An example would be where the selection of a particular method may increase compensation, but at the same time increase the probability of political intervention.
- For an earlier discussion on market effects of non-legislated accounting change see Holthausen and Leftwich (1983).
- The term "generalized accounting changes" refers to accounting changes which all firms undertake at a similar time.
- 8. The term "non-generalized accounting changes" refers to accounting changes which all firms do *not* undertake.

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Appendix: Some dimensions with potential for measuring variables

Employee related

- (1) Bonuses/promotions/share option plans
- (2) Profit sharing by employees or employee property ownership
- (3)Training programmes
- Ensuring employment and advancement opportunities for minorities (4)
- (5) Labour representation/unions/labour contract negotiations
- (6)Data on formal education of employees
- (7) Education and development for employees and trainees
- (8) Tuition assistance plans
- (9) Data on female managerial employees
- (10)Data on females in the total workforce
- Handicapped employees (11)
- (12)Drug and alcohol rehabilitation and educational counselling
- (13)Company health services and insurance programmes
- (14)Safety and accident prevention measures
- (15)Training for safety in the workplace
- Safety and fire protection research (16)
- Number of fatal accidents (17)
- (18)Provision of child care facilities
- (19)Number of employees
- (20)Employee related costs including indirect costs
- (21)Hours worked
- Employee turnover (22)
- (23)Employee absenteeism

Product related

- (1) Product quality/assurance through adequate control
- Product safety and design
- (3)Formulation/packaging of products to minimize possibilities of harm or injury
- (4) Raw materials used/source of/type of/environmental impacts
- (5) Research and development activities re minimum environmental impacts

Community related

- (1) Direct financial aid/scholarships/grants
- (2)Support of higher education
- (3) Support for minority students
- (4) Direct financial support to art/institutions and the performing arts
- Developing and supporting a better system of health care

61

- (6) Help for minority businesses
- (7) Minority hiring
- (8) Minority suppliers
- (9) Philanthropic contribution
- (10) Charitable contributions
- (11) Company financed foundation rendering service to the sciences
- (12) Public or social relations department
- (13) Assistance to nation for social welfare
- (14) Publications of a public interest report
- (15) Employee volunteer activities

Environment

- (1) Pollution reduction measures/air/water
- (2) Report on environmental protection
- (3) Installation of modern pollution control equipment
- (4) Engineering new facilities for production with minimum environmental effects
- (5) Co-operating with state and local authorities in developing improved systems of environmental management
- (6) Engineering new products for minimum environmental effects
- (7) Clean up costs/waste
- (8) Litigation
- (9) Measures to reduce risks of environmental accidents
- (10) Environmental research programmes
- (11) Particular type of energy used or produced
- (12) Amounts spent of environmental protection investments
- (13) Quantified and/or qualified indication of effects of environmental investment
- (14) Recycling/by-products

This Appendix is a composite of information gathered from Dr Fouad K. AlNajjar of Wayne State University; Roberts, C. (1992), "Environmental disclosures in corporate annual reports in western Europe", Chapter 7 in Owen, D. (Ed.), *Green Reporting: Accountancy and the Challenge of the Nineties*, Chapman and Hall; Gray, R. (1990), *The Greening of Accountancy*, Chartered Association of Certified Accountants, June; United Nations intergovernmental working group of experts on international standards of accounting and reporting, reported in Gray (1990).