EVALUATING THE COMMUNICATION GAP BETWEEN ACADEMIC RESEARCHERS AND PRACTISING ACCOUNTANTS USING STOCK MARKET INFORMATION

By Dr. H. M. Mujiga Saira C.P.A*

Abstract

The objective of this paper is to illustrate in a non-mathematical way how studies dealing with the efficiency and operation of the stock market may be made simple to understand without resorting to sophisticated mathematical and statistical techniques of analysis. It begins by examining the basic concepts used in various ARS dealing with the relationship between share prices and accounting information in the efficiency of markets. Other ARS that illustrate the role of accounting information in several phases of market efficiency are also discussed. A general critique of the weakness of these studies is made. The paper examines how other people with an interest in accounting information use it, and argues that there is an obvious communication gap between academic researchers and practising accountants that can be bridged by adapting certain collaborative tasks and interactive such as workshops, seminars and professional development sessions.

INTRODUCTION

The usefulness of accounting information has been the subject of several academic accounting studies (ARS) during the 1970-1980 period. Some have focused on topical areas of finance theory such as the efficiency of stock markets relative to the release of accounting information. However, the impact of accounting information on share prices leaves some accountants in doubt as

* Dr. Saira Mujiga is working with Twiga Training Institute, Queensland, Australia.

to their practical usefulness. The quantitative nature of the ARS was also the focus of a committee of the American Accounting Association (AAA) . Through its 1977-78 "Schism Committee" the AAA examined the issue of whether or not a communication gap existed between practising accountants and academic researchers. The committee reached the conclusion that journals like The Accounting Review (TAR) and the Journal of Accounting Research (JAR) were not widely read by practitioners because of the:

"... heavy use of mathematical notation, reliance on complex statistical methodologies and attention to intellectually tractable problems at the expense of direct realism... characteristics of the bulk of the papers published in these journals (TAR,JAR) today. (Leon Hay, quoted in Abdel-Khalik, 1980)".

In view of this conclusion, this paper avoids any rigorous application of statistical and mathematical tools of analysis. Their application, while acknowledged in applied research, is looked at very unfavourably by accountants not versed in mathematics and statistics, in practical, practising accountants. They argue that because of the complexities of mathematical expositions inherent in existing accounting studies, the manner stock market and its prices is not easy to understand, which then makes it difficult for them to make use of the information. They conclude that the bulk of the ARS do not address key practice problems. For example, practising accountants question the extent to which published accounting information really changes the prices of securities on the stock markets. In support of his opinion, Emmanuel and Edwards (1990) suggest that academic researchers must devise tests, experiments and examples to illustrate how findings of research are beneficial to practice and how they can be incorporated successfully into practice.

Key Concepts

Several concepts are important for this type of study . These include:

- Stock market is defined as a market which brings together lenders and borrowers. Lenders have money to invest and borrowers need the money to invest. Thus we find stock exchange markets in Nairobi, Johannesburg, Lagos, Cairo, London, New York and so on.
- Accounting information refers to financial statements and other supporting data forming part of the company's audited accounts.
- Efficiency refer to the capability to do things well and right.
- Efficient market hypothesis (EMH) assumes there exists a stock market capable of ensuring the prices of shares always fully reflect all publicly available information: Fama (1970-1976).

Markets in General

A market is a public place where people meet for the purpose of buying and selling various items. For example , the Sugar Market, the Tea Market , Ugolo (tobacco) Market, the Auction Market, the Stock Market, the Bullion Market. This paper is concerned with the stock market as defined in the previous paragraph. It is argued that the absence of efficient stock markets in many countries in Africa, South America, Asia and Eastern Europe is due to inefficiencies in other markets. This issue is not pursued any further . However, where a stock market exists, the government, the business community and the people meet as lenders and borrowers and mutually support it.

The stock market has two important attributes: its direct and its indirect resource allocation responsibilities. It has a direct responsibility because the market determines whether or not a firm (or company) trading on the market can borrow or lend money through the market. A good company will find it easy to raise finance on the market because lenders have trust and confidence in it. The market has an indirect responsibility because a bad company with poor records of performance will be unable to get fund through it. It is this indirect assessment by the market which leads a company's shares to fetch a low price. The stock market normally reflects two characteristics of behaviour: bad and good. Bad behaviour indicates that the market is inefficient and the opposite (i.e. efficient) for good behaviour. This dichotomy will become more clearer later.

The role of the stock market is two fold: Beaver (1968),says that it:

> *"...(i) is a mechanism for separating the ownership of assets and management of those assets by agents who have a comparative advantage in making production decisions and, (ii) provides means whereby investors can exchange claims to present and future consumption than would have been possible if no exchange market existed"*

From the above quote to " exchange claims to present and future consumption" implies that by spending money now, in the future one should receive back more than was spent. Thus, future pricers for shares should be higher than current prices to enable an investor to lend out money. What makes prices increase or decrease is partly because of information produced by accountants that reaches the market. The orderly distribution of accounting information to marketers implies good behaviour in the allocation of information as resources in an otherwise efficient stock market.

Efficient Stock Market

Broadly, a stock market is considered efficient if the conditions of a perfect market as cited in many economic studies are varied. Copeland and Weston (1988) and Samuels and Wilkes (1986) state the conditions of a perfect stock market as:

> Markets are frictionless, that is without transaction costs and taxes. There should be no restrictive

regulations limiting the freedom of entry and exit for investors and borrowers in search for funds. All shares should be perfectly marketable.

- All services in the market should be provided at the minimum average cost, with all participants as price takers.

- Markets are informationally efficient: that is, information is costless, and it is received simultaneously by all individuals.

- All individuals are rational expected utility maximizers.

- There should be many buyers and sellers.

Under these conditions both product and securities markets will be both allocationally and operationally efficient. By allocational efficiency it means that all funds reaching the stock market are allocated where they can be most effectively used. Similarly it is operationally efficient if it carries out its operations with economy, at the minimum possible cost which portrays the good behaviour traits of the market.

Furthermore, some of the conditions can be done away with and still have an efficient market. For example , the conditions of a frictionless market, costless information and many buyers and sellers can be removed. The removal of certain conditions can only be understood when the concept of an efficient packet hypothesis (EMH) is explained.

Efficient Market Hypothesis (EMH)

EMH states that prices of trade shares always "fully reflect" publicly available information and that any new or additional information is instantaneously reflected in those prices. If that is true, then any new information published in quarterly, interim or annual reports can lead to a change in share prices, in that prices will adjust to reflect this new information in what is called the pricing efficiency.

Samuels and Wilkes (1986) argue that EMH implies only the operation of pricing efficiency. They say, it does not refer to allocational efficiency and does not explain the relationship between the efficiency of the stock market and the efficiency of the economy in total". Samuels and Wilkes (1986) suggest that pricing efficiency can be attained if the following conditions are satisfied:

- All available information is costless to all market participants.
- There are no transaction costs, and
- All investors take similar views on the implication s available information for current prices and distribution of future prices of each security.

However, in third-world conditions it is operational efficiency which is considered sustainable. It is only upon the relaxation of perfect market conditions that stock market efficiency becomes operational and in line with Fama (1970, 1976) that share prices tend of " full reflect" all available relevant information.

The dissemination of accounting information is vital for all market participants. Whether or not everyone has simultaneous access to all the relevant available information is another issue not dealt with. The EMH concept does not specify whether all investors behave in a given way upon the receipt of accounting information. Marketers know that accounting information is transmitted to the market upon release and believe that it is impounded quickly and unbiasedly. The EMH model it can be said has had a major influence in the exposition of market efficiency and the following satisfactions are market derived there from:

EMH is useful in determining the standards for reporting accounting information as evidenced by the existence of such bodies as the Financial Accounting Standards Board (USA), Financial Reporting Council (UK), Australian Accounting Research Foundation (Australia), International Standards Committee, and similar bodies world-wide.

- EMH assists in emphasizing the need for investors to learn to produce and use all information that has benefit to them and the society at large.Government and their agencies participating on the stock market should be in the forefront in insuring that desired information is properly produced and used. Because, this is vital in the resource planning and allocation activity of governments and others .

- EMH forces management to maintain reliable financial reporting systems. In essence management has access to the most useful information, perhaps better than the impounded on stock market. It is vital for them to ensure that reporting systems are improved.

Assuming that the market for shares is efficient it makes reasonable sense to consider whether or not accounting information aids the markets pricing of shares.

Accounting Information and Efficiency

The function of financial accounting and reporting is to present the accounts (Saira 1990) in a from which is useful to investors to be able to assess the prices (or returns) and the risks (or costs) associated with each alternative investment Accounting information has significant roles in the economic allocation of resources in the stock market: first, to aid in establishing a set of share prices to insure appropriate allocation of resources among firms and an allocation of securities among investors; second to assist an individual investor, faced with a set of prices, in the selection of an optimal portfolio of securities (Beaver, 1968) . Thus , if accounting information is responsible for changes in prices (or changes in wealth) it means that as prices increase the investor will be able to sell at a higher price and indulge in higher consumption. A decrease in price reflects the bad image of the market resulting in a reduction in the consumption ability of marketers . The implication of this is important for governments and public policy makers.

The input of accounting information is important in measuring the efficiency of markets. When the benefits of accounting information to decision makers (users) exceed the cost of producing it, the accounting process system (which produces accounting information) is considered efficient. The only difficulty lies in measuring the benefits of each additional information. The additional information reaching the market is assumed to contain superior enhancement characteristics such that its arrival automatically improves the prices rather than diminishes them. The new accounting information is also assumed to satisfy the criteria of relevance, reliability, and understandability as defined by the Statement of Accounting Concepts SAC 4 "Definition and Recognition of Elements of Financial Statements" issued by the Australian Accounting Research Foundation (AARF, 1992) .

Fatma (1970,1976) developed three tests for explaining and interpreting the contention that the market is efficient when all publicly available relevant information is correctly impounded in the market price. The three efficiency test: weak-form efficiency, semi-strong efficiency and strong-form efficiency are useful in this study:

* ***Weak-from efficiency***. No investor can acquire excess return s because security prices fully reflect historical information given to the market. Or the information in pas prices or returns is not useful or relevant in achieving excess returns.

* ***Semi strong-form efficiency***. No investors can

acquire excess return by solely relying upon historical rules reflecting publicly available information. Examples of publicly available information are accounting reports, investment advisory such as in investor journals or bulletin.

* *Strong-form efficiency.* No investor can acquire excess returns using any information, whether that information is public or private.

Accounting information is efficient in this case if no individual can use it to consistently earn above average return (price) ; and the stock market is also information efficient. If the information being processed is limited to past share prices above, efficiency is said to be of the weak-form. If the information being processed included all publicly relevant and reliable information, efficiency is said to be n the semi-strong form. If information available includes all public as well as private information, efficiency is said to be of the strong-form. The strong-form efficiency test has little relevance and usefulness in judging the efficiency of stock markets.

However, the Fama test. have a significant bearing on certain ARS referred to below.

Reports from Accounting Researchers .

Stock markets are presumed to operate in the semi-strong form efficiency arena which has a high regard for accounting information. It is presumed also that no insidious manipulators of information directly operate in the market so that accounting information reaching the market is responsible for changes in market prices and possible the behaviour of marketers. Empirical ARS currently available support this view. Studies by Bal and Brown (1968) ; Brown and Kennelly (19720; May (1977) Joy, Litzernberger and McNally (1977); Watts (1978); Aharony and Swary (1980); and Patell and Wolfson (1984) articulate the view that accounting information has a primary role in changes in security prices. Their findings are evaluated in summary form below in three sets; information contained in annual reports quarterly reports, and earning and divided announcements.

Information in annual reports.

Ball and Brown (1968) concluded that (i) the market is able to forecast earning quite well before the release of annual financial statement . Most of the above average rise or fall in price took place before the earnings announcements showing relatively successful forecasting by investors; (ii) About 50 percent or more of the information about an individual company that become available during the year is captured in that year's earning; (iii) On the average only 10 to 15 percent of the total price adjustment took place in the month of announcement and, (iv) being able to predict the direction of earnings over a period of a year would therefore have resulted in large share profits for an investor.

Beaver (1968) evaluated the significance of financial statements by examining the impact of annual earnings announcements both on security returns and on the number of shares being sold on the stock market. He used information of 143 firms, out of a total of 506 earning announcements from 1961 to 1965. His study revealed a clear increase in the volume of shares traded in the week of the earning announcement (week 0) than in other weeks. Both Ball and Brown's (1968) and Beaver's (1968) studies showed that the announcement of earnings figures resulted in changes in share prices and had a clear impact on invesdtmen decision making for those participating on the stock market.

Information in quarterly reports.

Brown and Keenly (1972) , using an extended Ball and Brown methodology, based their study upon quarterly reports rather than annual reports. The two found that the earnings announcement conveyed new and useful information to investors and resulted in changes in shares prices.

Another study by May (1977) using similar methodologies and Ball and brown , and Beaver, reached the conclusion that quarterly reports contained useful economic information and is helpful in predicting share prices.

Joy, Ltzenberger and McNally (1977) thinking that because quarterly reports were more timely than annual reports and the they had "new " information were amazed to find the previous studies results were tenable.

Watts (1978) found a statistically significant increase in returns in the quarter of the announcement which clearly indicated that quarterly earning reports contained new information . Unfortunately, he found also that there was a significant increase in return in the following quarter which led him to conclude that "the existence of those abnormal return is evidence that the market is inefficient: Watts,1978)"

Dividend announcements.

Usually announcements of quarterly reports are followed by announcements of divided changes which also affect share prices. In their study, Aharony and Swary (1980) evaluated the impact on share prices of the announcements of dividend and earnings, within the same quarter that are at least 11 trading days apart. Their conclusions were (i) there is no evidence of market inefficiency and (ii) that the quarterly earnings and divided change announcements have significant effect on the share prices.

Aharony & Swary (1980) were of the opinion that perhaps to prove the existence of market inefficiency more research work was needed in situations that followed the unexpected announcement of earning changes. Patell and Wolfson (1984) , assessing the speed of market reaction to disclosure of dividend and earnings information , found that the market reacts to unexpected changes in earnings and dividends and that this is very fast movement.

Abdel-Khalik and Ajinkya (1980) also discovered that the were no abnormal returns after the week of public disclosure of the changes. The market was found to be efficient in a semi-strong test sense as it adjusted quickly to the information immediately it was announced.

The results of the cited ARS indicate strong association between security prices and accounting information. Indeed, these studies influenced America's Financial Accounting Standards Board (FASB, 1978) to assert that the objective of financial reporting was to ..." provide information that is useful to present and potential investors and creditors and users in making rational investment, credit and similar decisions".

This assertion by FASB, if correctly applied, means that accounts are in a position to explain what accountants should be doing: " present the accounts" Without the financial accounts, the stock market will not be seen to be efficient, effective and economic in the allocation of resources among alternative uses.

In the United States, the Trueblood Report of 1973, and in the United Kingdom, the Company, Law reform Committee (the Jenkins Committee) of 1962, emphasized the need for useful and relevant disclosure of information not just for shareholders but also for other parties . Disclosed information was broadened beyond the traditional accounting information in the form of balance sheets, profit and loss statements and notes thereto. In relying too much on traditional reports, the ARS have been considered weak.

Weaknesses of Research Reports.

The ARS sighted earlier suffer from a timing difference. The period from Fama 's study of EMH in 1970 to the Patell and Wofson in 1984 reflects that length to time. It is a long time to hold all variables constant and reflect appropriately the behaviour either of the market, the individuals involved or that of security prices. The time lag denies them a fair generalization.

The evaluation of accounting information at different intervals over which returns were computed, for example monthly versus weekly, affects the similarity of the results, even though their results consistently show that no above average returns can be earned on publicly available profit and loss reports. In addition, the use of different firms in the studies renders the generalization somewhat suspect as each firm operate under different markets , organisation and environmental condition and influences such as the different levels of government; local state or federal.

Most of the ARS looked at the stock market as a market for stock (share) only. Broadly the stock market involves the buying and selling of bonds also. By restricting themselves to stocks their studies became one-sided. However, studies involving bonds reveal no above average returns are earned when publicly available information is available.

The existence of the government as a modifying pressure group on the operation of the stock market is ignored by these studies. For example, government policy announcements on interest rates affect the behaviour of both price and marketers. Furthermore both the government and business polices affect the reporting practices of firms and in turns may influence the consumer's expenditure decision. Indeed, accounting information affects more sectors of the economy than just private investors participating on the market.

The effect on share price by other than accounting information can be illustrated further. In November 1990, the then Australian Federal Treasures, Mr. Paul Keating (now in recession (R) meaning that the big R was here . The presence of R was actually confirmed by a fall in the price of shares of many companies. For example, the Adlaide Steamship Co. Ltd, (Adsteam), conglomerate with interest in brewing retailing and manufacturing , saw its share price fall from $6.56 in January to $0.16 by the middle of December 1990. The "Business Australian of November 24-25, 1990 conformed and reported:

"The massed annual meeting of the Adsteam faithful in Adelaide yesterday was stunned as the chairman, Mr. Ken Rusell, said "Directors must regretfully advise shareholders that an interim divided is not likely to be paid in April 1991.. the prospect of final dividend cannot be forecast at this stage."

The chief executive of Adsteam, Mr. John Spavin, was also the biggest loser. His shareholding in the company fell from $75 million (or $1000 million at share price of $6.56) to around $10 million . Both Mr. Keating's and Mr. Rusell's announcement caused the company's shares to plunge.The announcement did not refer to accounting data. Evidence of this frustration can be seen in the grim faces of marketers. Next page also, considers carefully the mood and attitude of marketers at the time public statements about a company's financial affairs reach the stock market. Indeed, such public policy announcements often destabilized market activity.

Away from the stock market, the Chief Executive, Mr. John spavin, and the Chairman , Mr. Ken Rusell, lashed out at the tightening of credit by the banks particularly Japanese banks, which had apparently been the company's long-term sources of credit, the essence of this non- accounting information is to confirm the contention that accounting information may not be only major cause of stock market inefficiency and failure .

Other causes may also assist to explain change in share prices and perhaps why there was stock market crash in 1987. Another weakness seen in the ARS is the failure of researchers to use audited quarterly earning reports. Some researchers used unaudited interim/quarterly reports as a basis for assessing their impact on share prices. While there is general presumption or even agreement that company accounts are subject to only a single annual audit and the there was no way of obtaining in time audited data, in using unaudited report the researchers compromised the validity of the results with regard to relevance and reliability.

The need for useful accounting information implies and includes audited financial information. Reliability and relevance is akin to the credence opinion expressed by auditors. Without that credence signature information is essentially irrelevant and unreliable. Thus efficiency of the capital market cannot be achieved as long as the information impounded by the stock market for security pricing is from unaudited financial reports, and any useful academic research utilizing such data undermines the validity of the research.

Implication for Financial Reporting

The importance of accounting information for reporting purposes is accepted. For example, accounting information has effect on company tax and policy, contracts involving the buying and selling of shares, bonds and other securities divided and dividend policy (e.g not to distribute dividend without earning a profit), workers and management compensation planning, contracts and certain scheme arrangements.

ARS indicate that the EMH concept does not explain all the factors involved in making investors set price decisions and that other possible players may exists. In fact there are several groups with direct or indirect interest in the information reaching the stock capital market. According to Beaver (1981) they include investors, policy makers, management, auditors and other information reaching the market in many ways. However, Beaver's interest groups are not discussed here but his work is worthy reading.

Conclusion

The purpose of this paper has been to reduce the communication gap between academic and practising accountants by finding practical solutions for the successful incorporation of ARS results into practice. As noted at the beginning a, schism developed because accounting researchers tended to be mathematic (which is true of the papers just summarized) to the extent that practising accountants could not see the need to implement those findings. The basis of failure and dissatisfaction with ARS has not been so fully researched as to warrant the contention that academic research in accounting to far removed from practice.

Accounting research on the efficient market theory supports clearly the proposition that there is an association between security prices and accounting information, especially in the semi-form, where security price reflect all currently known information including that held by insider traders. The association results are significant not only for understanding of stock market efficiency but also for financial reporting and accounting practice. If the research studies can form the basis of new ways of doing things, in practice all the resentment or aloofness would't have been tolerated. However, aloofness can be done away with through co-operation whereby the research findings are communicated to practitioners in various ways.

The various ways, methods or techniques that can include among others, exchange of information at practice events such as continuing professional education (CPE) sessions, seminars , workshops, and conferences which form major activities carried out by professional accounting bodies. CPE programmes, for example, can bring about wider reader ship of accounting research studies and interaction among professionals. Academic researchers can be persuaded to simplify research findings to enable non-technical practising accountants, students and other readers to understand technical reports and how to implement them in practice . More so, professional examination can incorporate written tests on various published academic research studies with a bearing on a major accounting topic, issue or development and other trends. Recently, some academic writers have collaborated with software houses to produce electronic programmes designed to interpret research findings .These products bring the knowledge and skills of academic researchers to the desk of practising accountants providing significant guidance to them in evaluating specific subjects. Virtually all accountants are familiar with the electronic spreadsheet programs such as Excel, Lotus 1-2-3, Symphony, and Quatro-Pro. These products will be used in the future to manipulate research findings into user products faster than time spent reading journal articles with sophisticated mathematic manipulations.

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