COMPARISON OF NEW ZEALAND AND UNITED STATES SECURITIES MARKETS
THROUGH THE LOOKING GLASS OF THE EFFICIENT MARKET HYPOTHESIS:
ASPECTS OF THEIR SYSTEMS OF DISCLOSURE ACCORDING TO THE EFFICIENT
MARKET HYPOTHESIS

by

CARLA NATALIA GARGIULO

(Under the Direction of Dr Fredrick Huszagh)

ABSTRACT

In the United States the Efficient Market Hypothesis has dictated academic
debate on securities law, particularly in the consideration of the regulatory system of
mandatory disclosure under the Securities Exchange Act 1934.¹ In New Zealand the
Efficient Market Hypothesis has rarely been cited by the legal fraternity, the courts or by
politicians. However, capital market ideas are entrenched in the Efficient Market
Hypothesis,² and because New Zealand has been at the forefront of deregulation since
the early 1980s it has a regulatory system of mandatory disclosure which reflects, at
least in part, the principles of the Efficient Market Hypothesis.

Chapter 1 of this thesis reviews the literature concerning the Efficient Market
Hypothesis. Chapter 2 provides a general description of the characteristics of the New
Zealand and United States financial environments, and then focuses on the legal and
regulatory systems of mandatory disclosure within which those countries operate.

¹ Cunningham, Lawrence A., Capital Market Theory, Mandatory Disclosure, and Price
Discovery, 51 Wash. & Lee L. Rev. 843 (1994) at 844
² Cunningham, Lawrence A., Capital Market Theory, Mandatory Disclosure, and Price
Discovery, 51 Wash. & Lee L. Rev. 843 (1994) at 844
Chapter 3 discussed applying the Efficient Market Hypothesis to the environments described in Chapter 2. It considers whether the New Zealand and United States financial markets can be considered efficient markets under the accepted definition. It then examines some examples of existing mandatory disclosure laws, both in the United States and New Zealand, which seem to rely on notions that are supported by the Efficient Market Hypothesis, whether or not these notions are expressed as such. Finally, Chapter 4 discusses the relationship between efficient markets and mandatory disclosure laws, and then summarises how this relationship has been reflected in New Zealand and the United States. The conclusion is that there are many aspects of Efficient Market Disclosure apparent in the legal and regulatory systems in the United States and New Zealand.

INDEX WORDS: Efficient Market Hypothesis, Securities, Shares, Regulation, and Disclosure, Capital Markets
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A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial
Fulfilment of the Requirements for the Degree

MASTER OF LAW

ATHENS, GEORGIA
2004
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CHAPTER 1
THE EFFICIENT MARKET HYPOTHESIS

Introduction

Chapter 1 of this thesis provides an introduction to the topic of the Efficient Market Hypothesis. The historical roots of the Efficient Market Hypothesis are considered and a survey of the recent academic comment on the nature of the Efficient Market Hypothesis is undertaken, both positive and negative. An attempt is made to formulate a definition of the Efficient Market Hypothesis from the material considered.

The Efficient Market Hypothesis underlies much of contemporary thinking in relation to regulation of the financial markets. Financial markets exhibit two types of efficiency; operational and allocative efficiency. Operational efficiency refers to the cost-effectiveness of a range of intermediaries between buyer and seller. Allocative efficiency refers to a market where information may be obtained freely or cheaply by all so that investors have the opportunity to make informed and sensible choices. The information is widespread and all information is reflected in prices.

Definition

The concept of allocative efficiency was substantially expanded by Eugene Fama

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3 Fisse, B., NZSE and the Securities Market in New Zealand in Securities Regulation in Australia and New Zealand, Walker, G. & Fisse, B. (eds), at 122
4 Id. at 122
5 Id. at 122
6 Id. at 122
in 1965, when he first coined the term “efficient market”.\textsuperscript{7} His innovative paper defined an efficient market as a market with a high number of participants striving for profit maximisation “with each trying to predict future market values” and where “information is almost freely available to all participants”.\textsuperscript{8} The basic concept underlying market efficiency is that competition between market actors will cause all information to be quickly absorbed into the price of securities. Share prices reflect information, therefore an efficient market will, on the average, reflect information into market prices “instantaneously”.\textsuperscript{9} Therefore information based on events which have already occurred and on events which the market expects to take place have already been impounded into the prices of specific shares.\textsuperscript{10} Conversely, information will only slowly be reflected into market prices if the market is inefficient, and may not reflect information into market prices at all.

In an efficient market, as soon as news about a stock reaches the stock exchange, traders act on that information.\textsuperscript{11} If the news is good news (information about a new product or a potential merger or takeover) investors will buy and the price of that stock will increase by as much as the value of the information.\textsuperscript{12} If the news is bad news (an earnings decrease or a major loss) investors will sell their stock and the price will decrease accordingly.\textsuperscript{13} If the news is neither good nor bad, investors will

\textsuperscript{7} Fama, Eugene F., Random Walks in Stock Market Prices in Posner and Scott (eds), Economics of Corporation Law and Securities Regulation (1980) 329 at 157
\textsuperscript{8} Id. at 157
\textsuperscript{9} Id. at 157
\textsuperscript{10} Id. at 158
\textsuperscript{12} Id. at p 227
\textsuperscript{13} Id. at p 227
disregard that information and the price will remain stable.\textsuperscript{14}

Later research identified three different levels of the Efficient Market Hypothesis as reflected in the capital markets, weak-form, semi-strong and strong-form. Each form of the Efficient Market Hypothesis is more comprehensive than the earlier one.

The market is said to be efficient in weak form if current share prices fully reflect all the information contained in past price movements. Weak-form efficiency asserts that share prices fully reflect all sharemarket information, including the historical sequence of prices and trading volumes. This implies that there is no relationship between past price changes and future price changes.\textsuperscript{15} Past prices contain no information about future changes and price changes are random. Prices will only change on the basis of new information.

The market is said to be in semi strong form when current prices reflect not only past prices but also all publicly available information. Trading rules are unable to produce superior returns because there are no undervalued or overvalued securities. When new information is released, it is fully incorporated into the price relatively promptly. There is some evidence of public information impacting stock prices within minutes.\textsuperscript{16} Semi-strong efficiency assumes that share prices adjust rapidly to the release of all new public information, including economic news, share earnings, etc. Consequently, security prices reflect all publicly available information.\textsuperscript{17}

\textsuperscript{14} Id. at p 227
\textsuperscript{15} Fisse, B., \textit{NZSE and the Securities Market in New Zealand} in Securities Regulation in Australia and New Zealand, Walker, G. & Fisse, B. (eds), at p 122
\textsuperscript{17} Fisse, B., \textit{NZSE and the Securities Market in New Zealand} in Securities Regulation in Australia and New Zealand, Walker, G. & Fisse, B. (eds), at p 122
The market is said to be efficient in strong form if stock prices reflect all available information, including private information. Specifically, the strong form of the Efficient Market Hypothesis asserts that current stock prices not only reflect all published and known information but all relevant information, including information not yet published. Strong-form efficiency contends that prices fully reflect all information, both public and private.\textsuperscript{18} As a result, no investor has a monopolistic access to information relevant to the formation of prices allowing them to be able to gain above average profits every time.\textsuperscript{19} Therefore a strong form market will deny even the insider from making an above average profit. Fama has acknowledged that the Efficient Market Hypothesis is unlikely to offer an exact description of the behaviour of share prices.\textsuperscript{20} Indeed, Fama has stated that “as there are surely positive information and trading costs, the extreme version of market efficiency is surely false.”\textsuperscript{21}

Early in the development of the Efficient Market Hypothesis the focus was on the ‘random walk’ nature of share prices.\textsuperscript{22} However, current thinking is based on the rational expectations model, whereby financial markets are based on rational expectations about asset values.\textsuperscript{23} Therefore the information that is integrated into share prices is simply information that is reasonably related to expectations about future

\textsuperscript{18} Id. at p 122
\textsuperscript{19} Id. at p 122
\textsuperscript{23} Id. at p 856
values.\textsuperscript{24} It then becomes reasonable to maintain that prices reflect the “the most rational possible assessment of present value”.\textsuperscript{25}

One of the tenets of the Efficient Market Hypothesis is that the actors are expected to act rationally in the pursuit of monetary gains.\textsuperscript{26} However, one of the principal objections to the EMH theory is that investors are not rational. There are a number of factors to explain why investors do not behave rationally.

One of the factors that explains why investors do not behave rationally is that individuals become predisposed to poor judgement as the certainty of decision-making decreases.\textsuperscript{27} A number of studies suggest that investors often find patterns in what is statistically random data.\textsuperscript{28} Research has indicated that investors disregard information and risks that do not support their opinion, while putting too much emphasis on information that does support their opinion.\textsuperscript{29} Investors may invest without all the information, and some subjective data indicates that some investors decide whether to invest in an initial public offering even before the required offer documents (investment statement and prospectus) are available.\textsuperscript{30}

Another factor which explains the irrationality of investors is related to the intrinsic value of investments. Maximisation of expected returns in dollar terms in not

\begin{itemize}
\item[24] Id. at p 857
\item[25] Id. at p 857
\item[26] Id. at p 858
\item[30] Id.
\end{itemize}
the exclusive motivation for individual investors. A further factor which may explain the irrationality of investors is the tendency to “herd behaviour”. Herd behaviour suggests that individual investors can be affected by the actions of others and this type of behaviour has often featured in financial markets. Investors may trade on noise which is caused by the actions of others as if it were information and it may persuade investors to buy and sell more often than they would otherwise.

Another factor which may explain investor behaviour is investor's pride. Research has indicated that commonly, people are highly confident in their intuitive judgement, which may mean that they are prone to illusions and poor judgement. Some research shows that investors frequently believe their decisions are based on superior information while unaware what information is available to the opposing party to their trade. There is evidence that investors are less likely to sell securities which they have personally selected. Pride is also a factor in the regularity with which investors trade as the investor takes pride from the perception that they are playing the share market.
Another related factor driving some investors' behaviour is the possible fear of regret. This factor is most likely to dictate investor behaviour where individual investors are not confident of their information, or their own ability to process it, and where the potential loss to their pride of a wrong choice is thought to be too much to go through. The result is that some investors, when faced with deciding between a popular or unpopular security, may decide on the popular security because it would be simpler to justify losses if everyone else has purchased the same security. Institutional investors may also exhibit this type of behaviour when they aim to protect their reputations.

Research has revealed that investors confronted with the decision to sell an investment are influence by whether the security was originally purchased for more or less than the current price. It is also suggested that investors, in losing funds, are reluctant to face the evidence that they have made a poor investment by selling their investments at a loss. In some circumstances investors may even be driven to take high risk investments to attempt to break even, and in so doing will save face. Indeed, the exposure of losses frequently seems to be the cause of a great deal of embarrassment.

These factors clearly illustrate that for a variety of reasons investors do not always act rationally, however this may not invalidate the Efficient Market Hypothesis.

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40 Id.
41 Id.
42 Id.
43 Id.
44 Id.
45 Id.
“The validity of the efficient market hypothesis is based on a set of statistical tests demonstrating that the market prices securities as if there was a rational process, whether or not the market’s constituent actors qualify as rational.”

Therefore the Efficient Market Hypothesis does not reject the possibility of irrational conduct by some sharemarket actors. However the Efficient Market Hypothesis does minimise the potential.

There is no universally accepted definition of market efficiency. However, simply and briefly put, it is well established that “[there is no other proposition in economics which has more solid empirical evidence supporting it than the efficient market hypothesis.”

Research in the eighties and nineties criticised and challenged the early research and there are some critics who do not subscribe to the Efficient Market Hypothesis. However, for the purposes of this thesis I will accept the definition based on the on the rational expectations model, whereby financial markets are based on rational expectations about asset values. Therefore, it is accepted that information is integrated into share prices because it reasonably related to expectations about future values. It then becomes reasonable to maintain that prices reflect the “the most rational possible assessment of present value”.

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47 Id. at p 857
50 Id. at p 857
51 Id. at p 857
Competition in the securities industry is the major “driving force” behind this swift digestion of information into the market. Information is a valuable asset in the securities business and security analysts will research both financial reports and information about companies with publicly traded securities.

Further, it must be determined whether there is a need for a mandatory disclosure system under the Efficient Market Hypothesis. If both the New Zealand markets and the United States markets are generally accepted to be in the semi-strong form then some form of mandatory disclosure would be required because it is unlikely that private information has been absorbed into share prices in these markets. In particular the New Zealand market will require some form of compulsory disclosure regulation as investment research activities by analysts and other informational activities by the private sector are less significant than in the United States. It then needs to be determined whether the New Zealand and United States markets are efficient.

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52 Lorie, J. & Brealey, R., Modern Developments in Investment Management, A Book of Readings 102 (1972)
53 Id.
CHAPTER 2
FEATURES OF THE NEW ZEALAND AND UNITED STATES FINANCIAL ENVIRONMENT

This chapter looks first at the different characteristics of the financial environment in New Zealand and the United States, then focuses on the legal and regulatory environment in which they operate.

New Zealand – Financial Environment

Since 1984 the government has accomplished major economic restructuring, transforming New Zealand from an agricultural economy dependent on concessionary British market access to a more industrialised, free market economy that can compete globally. Economic deregulation in New Zealand has been rapid and wide-ranging since 1984, including major structural change in the financial sector. Changes included complete removal of the all price regulations in the financial sector, freedom of entry to financial markets, and a preference for open market operations as instruments of monetary control. The exchange rate was floated, international capital controls were removed and foreign investment liberalised. The rapid opening up of the economy to competitive pressures and the release of all financial sector restrictions gave rise to some excesses in the business and financial community. There were a considerable number of business failures and demands on banks and financial services

56 Id. at p 176-177
57 Id.at p 177
providers, many of which were not capable of managing the new freedom and did not have suitable management skills or risk management practices in place.\textsuperscript{59}

New Zealand has now one of the world’s most open and competitive economies,\textsuperscript{60} but capital investment remains a significant issue for the New Zealand economy.\textsuperscript{61} Large-scale capital investment transformed New Zealand into an efficient producer and exporter of primary products, however these industries are now declining in importance and capital investment is required in new and developing industries to sustain the New Zealand economy.\textsuperscript{62} The New Zealand economy is short of capital for items that require a large input of capital and issuers need to look to offshore suppliers.\textsuperscript{63} Reasons for lack of domestic capital include poor capital productivity, the level of household savings, government demands of national-capital resources and limited capital markets, all of which influence the accessibility and cost of capital.\textsuperscript{64} A further reason for the lack of domestic capital in New Zealand is the paucity of advanced, specialised-capital markets, which inhibits the development of competitive advantage in the New Zealand economy.\textsuperscript{65}

It is the role of the government and the private sector to remove endogenous capital constraints and it is necessarily distinct from the regulation of the securities market, however an appropriate regime of securities regulation may support the


\textsuperscript{59} Id.

\textsuperscript{60} Id.

\textsuperscript{61} Walker, G., \textit{The Policy Basis of Securities in New Zealand in Securities Regulation} in Australia and New Zealand, Walker, G. & Fisse, B. (eds), at p 176-177

\textsuperscript{62} Id. at p 178

\textsuperscript{63} Id. at p 178

\textsuperscript{64} Id. at p 179

\textsuperscript{65} Id. at p 179
elimination of such constraints and result in beneficial economic effects.\(^{66}\) New Zealand securities regulation is seen as part of a larger goal of economic growth because domestic demand for capital cannot be met internally due to endogenous capital constraints.\(^{67}\) Consequently, the structure of New Zealand’s securities regulation must be internationally compatible and in so doing support the inflow of capital into New Zealand.\(^{68}\) It is therefore a reasonable inference that New Zealand must meet the expectations of international investors in regulating its capital and securities markets in order to secure an adequate inflow of foreign capital.\(^{69}\)

**New Zealand - Legal and Regulatory Environment**

This portion of the chapter sketches the structure of New Zealand’s securities regulation. Both the history of securities law in New Zealand and the philosophy underlying them are examined, A brief outline is then given of the two major pieces of securities legislation in New Zealand, the Securities Act 1978 and the Securities Markets Act 1998.

New Zealand currently has a considerable number of protection and control systems in place in relation to the securities markets. The implementation of these systems was a reaction to the stock market collapse that occurred in the United States, which then flowed down to New Zealand in the 1980s.\(^{70}\) The key laws of today’s investment environment are directed specifically at those who manage companies that

\(^{66}\) Id. at p 179
\(^{67}\) Id. at p 172
\(^{68}\) Report of the Ministerial Committee of Inquiry into the Sharemarket (1989), para 2.3
\(^{69}\) Walker, G. *The Policy Basis of Securities in New Zealand* in *Securities Regulation in Australia and New Zealand*, Walker, G. & Fisse, B. (eds), at p 178
issue securities to the public and controlling their behaviour.\textsuperscript{71} A summary of these laws is as follows.

The Companies Act 1993 comprises a number of investor protections, including public registration of companies, protection of shareholders, defined directors’ duties and provision for their enforcement; disqualification of directors and supply of information.

The Financial Reporting Act 1993 delineates the nature and content of financial information that companies must present to their shareholders. In order to readily evaluate the financial information, the presentation is required to have a high level of standardisation for comparative purposes.

The Investment Advisers (Disclosure) Act 1996 requires specified disclosures where any person or organisation offers investment advice. These disclosures include personal details including any recent convictions for dishonesty crimes, bankruptcy, and details of their procedures for the receipt and disbursement of invested funds. On request further details such as qualifications, experience, conflicts of interest must be provided.

The Financial Transactions Act 1996 requires reporting of cash transactions over a specified amount or any suspicious transactions to facilitate the prevention, detection, investigation and prosecution of money laundering.

The two major pieces of legislation in New Zealand are the Securities Act 1978 and the Securities Markets Act 1988. It is these pieces of legislation that control the issue of securities, the behaviour of shareholders and seek to keep up the flow of

\textsuperscript{71} Darvell, P.P., & Clarke R.S., \textit{Securities Law in New Zealand}, 1983 at p 4
information about the company and its activities.\textsuperscript{72} Securities regulations, both in its statutory form and in the New Zealand listing rules, seek to ensure that an informed market is maintained.\textsuperscript{73} In New Zealand the traditional policy basis of securities regulation is investor protection.\textsuperscript{74} The primary method used to realise that purpose is disclosure of material information by the issuer of public securities to the prospective and/or existing investor.\textsuperscript{75} The Securities Commission, in its “Proposed Recommendations for Securities Regulation” (March 1990) stated:

“our conclusion upon the desirable bases of security laws for public issues in New Zealand is that their thrust should be directed towards attaining public disclosure of relevant information. We are required to consider this question as at the time of formation of investment contracts (which, we should say, is not the only relevant time). Our view is that at that time the potential investor should be told; it matters not that he does not understand. Some of those who are told will understand, and as Professor Loss has observed, the effects of their conduct in understanding will seep through to the general body of investors. To those who must provide information they feel is surplusage to their well-conducted activities, we feel obliged to say that the burden of providing it is part of the price they must pay for the benefit of public confidence in the fund-raising mechanisms of the business sector. The alternatives are to pass the control of access to capital to some regulatory agency, or substantially to increase the legal liability of

\textsuperscript{72} Latimer, Paul, \textit{Securities Regulation Laws – What Are They Trying to Achieve?}, in Securities Regulation in Australia and New Zealand, Walker, Gordon and Fisse, Brent (eds), at p 167
\textsuperscript{73} Id. at p 167
\textsuperscript{74} Id. at p 171
\textsuperscript{75} Walker, Gordon, \textit{The Policy Basis for Securities Regulation in New Zealand}, in Securities Regulation in Australia and New Zealand, Walker, Gordon and Fisse, Brent (eds), at p 171
businessmen for the funds entrusted to their care. This Commission sees its responsibility as to assist in securing that New Zealand commercial law is well adapted to the marshalling of resources and the transaction of business. In a system in which businessmen appeal directly to the public for funds, we think businessmen should publicly say who they are, and tell what they do.”

The courts have supported this interpretation and in Re AIC Merchant Finance Ltd., Richardson J stated:

“The pattern of the Securities Act... makes it plain that the broad statutory goal is to facilitate the raising of capital by securing the timely disclosure of relevant information to prospective subscribers for securities. In that way the Act is aimed at the protection of investors.”

The Securities Act 1978 has two major purposes. Firstly, the Act creates the Securities Commission. The Securities Commission has a watchdog role in relation to the whole securities industry and is now empowered to enforce breaches of securities law. The Securities Commission has been operating since 1979.

Secondly, the Securities Act 1978 provides for the application of a homogeneous prospectus regime to most public offers for securities. The public offering of most new securities is controlled by the Act, together with the Securities Regulations 1983. The terms “securities” and “public” are both widely defined in the Securities Act 1978. In relation to disclosure, the main requirements are for a public issuer to provide all investors with both a prospectus and an investment statement on offering shares to the

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76 [1993] NZLJ 194 at 198
78 Id. at p 3.
79 Section 2, Securities Act 1978.
public. The Securities Act 1978 requires registered prospectuses for public offerings of securities and the Securities Regulations 1983 stipulate the information and reports which must be contained in the prospectuses, and impose a number of specific restrictions on the content.\textsuperscript{80} However, although the prospectus must be prepared, it is not required to be provided to an investor unless requested.\textsuperscript{81} Instead the focus of the disclosure is on the investment statement. The investment statement is intended to provide a format which can be easily understood by individual private investors using plain language and answering a set of specified questions. An investment statement must be received by any person who subscribes for securities.\textsuperscript{82}

The Securities Market Act 2003 has only recently implemented a system of periodic disclosure.

**United States – General Environment**

The United States has the biggest and most technologically powerful economy in the world.\textsuperscript{83} It is a market-oriented economy, and United States business firms enjoy considerably greater flexibility than their counterparts in Western Europe and Japan in decisions to expand capital plant, lay off surplus workers, and develop new products.\textsuperscript{84} United States corporations lead in technological development, especially in computers and in medical, aerospace, and military equipment.\textsuperscript{85}

There is a high level of domestic capital available in the United States and, unlike in New Zealand, there are a number of advanced, specialised-capital markets which

\textsuperscript{80} Darvell, P.P., & Clarke R.S., *Securities Law in New Zealand*, 1983 at p?.

\textsuperscript{81} Section 54B, Securities Act 1978.

\textsuperscript{82} Section 33, Securities Act 1978.

\textsuperscript{83} The World Factbook 2002, \url{http://www.cia.gov/cia/publications/factbook/geos/us.html#Intro}

\textsuperscript{84} Id.

\textsuperscript{85} Id.
increase the development of competitive advantage. For example, in the United States the venture capital industry has developed specialised skills for the equity financing of high-risk, high-growth enterprises in the software business. This is a powerful advantage for the development of the United States software industry.  

United States – Legal and Regulatory Environment

The major piece of legislation is the Securities Act of 1933, which has two basic objectives:

- to require that investors receive financial and other important information concerning securities being offered for public sale; and
- proscribe deceit, misrepresentations, and other fraud in the sale of securities.

The key method of achieving accomplishing these objectives is the disclosure of significant information through the registration of securities. This information enables investors to make knowledgeable judgements about whether to purchase a corporation’s shares.

The Securities Exchange Act of 1934 created the Securities and Exchange Commission. It enables the Securities and Exchange Commission to act with authority over all aspects of the securities industry. This includes the power to register, regulate, and oversee brokerage firms, transfer agents, and clearing agencies as well as the nation's securities self regulatory organisations. Various stock exchanges, such as the New York Stock Exchange, are self regulated organisations.

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The Securities Exchange Act of 1934 also identifies and prohibits certain types of conduct in the markets and provides the Securities and Exchange Commission with disciplinary powers over regulated entities and persons associated with them.

The Act also empowers the Securities and Exchange Commission to require periodic reporting of information by companies with publicly traded securities.
CHAPTER 3
APPLYING THE EFFICIENT MARKET HYPOTHESIS TO THE LOCAL ENVIRONMENT

What form of allocative efficiency is reflected in the United States and New Zealand

If information about a security is being processed efficiently then the efficient market hypothesis is valid. Therefore the efficient market hypothesis will only be of value if the market to which it is applied is an efficient market.87

Economists use linear theory to show why public capital markets are efficient.88 To avoid the need for complex economic equations of linear theory “it is more reasonable to approximate efficiency by looking at the more easily identifiable… characteristics that indicate the market is developed.”89 This chapter identifies the factors that can be used to support the conclusion as to whether a market for a particular stock is efficient. The presence or absence of one or more of these factors does not point to a market as either efficient or not efficient, but efficiency can be seen as a broad scale upon which a security may move depending on circumstances. The presence or absence of one or more of these factors points to efficiency of a market on a broad scale. At one end of the scale is a heavily-traded stock on the New York Stock Exchange where each of the mechanisms for an efficient market are present and the market is identified as highly efficient. Such mechanisms include a large number of

89 Bromberg A. & Lowenfels, L., Securities Fraud And Commodities Fraud § 8.6 (1989)
analysts regularly researching the company, market trading, many shareholders, institutional investors. The prices of stocks on this type of market would almost instantaneously adjust to new information. On the other end of the scale is a regionally traded corporation listed on an over-the-counter market, where trades are infrequent between a small number of shareholders. There are no mechanisms present that regulate the market and allow information about the company to be efficiently processed. In this case a shareholder cannot rely on the price of the share to be accurate and may need to rely on some other source of information, such as a prospectus.

The specific factors which have been identified as supporting or opposing the view that a particular market is an efficient market include:

- an open and developed market;
- the identity of the security’s trading market;
- whether the stock is a leading gainer;
- and the average trading volume.

These factors have been identified from a number of sources, both judicial and academic.

An open and developed market is the first factor which is critical in assessing the efficiency of a securities market.

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91 Id. at p 251
92 Id. at p 247
“[A]n open market is one in which a large number of people freely purchase a security. A developed market is one in which a large buy or sell order will not by itself alter price.”

This means that there is a relatively high level of trading for which trading information is widely available and it will usually have continuity and liquidity. This requirement is necessary under the Basic v. Levinson ruling which is discussed later in this thesis.

Eligibility for form S-3 registration is the second factor which is influential in assessing the efficiency of a securities market. In the United States a security that proceeds by way of form S-3 short-form prospectus is deemed to be a security trading on an efficient market. The United States Securities Commission bases the form S-3 on the basis of the efficient market hypothesis theory so by definition the corporation is trading via an efficient market.

There is no New Zealand equivalent to form S-3 because the New Zealand Securities Commission uses its power to allow the use of a short-form prospectus on a different basis. Under section 5(5) of the Securities Act 1978 the Commission is able to exempt any person or class of persons from compliance with Part II of the Securities Act and any regulations made under section 70(1) of the Securities Act (dealing with the disclosure requirements for offers of securities to the public). This allows the issuer to provide a short-form prospectus only. The New Zealand Securities Commission bases its exemption on whether security holdings are outside the purposes or objects of the

93 Id. at p 248
94 Bromberg, A & Lowenfels, L., Securities Fraud And Commodities Fraud § 8.6 (1989)
regime\textsuperscript{96} and makes no assumptions as to the efficiency of the market on which that security is traded.

The security’s trading market is the third factor which is significant when assessing the efficiency of a securities market. Unless there is evidence of an anomaly, a security trading on the American Stock Exchange or the New York Stock Exchange can be assumed to trade on an efficient market.\textsuperscript{97} If the security trades in a “lesser” form of over-the-counter market, such as the “Pink Sheets”, a court will need to examine other factors to determine if the market is efficient for that security.\textsuperscript{98}

In New Zealand the only stock exchange is the New Zealand Stock Exchange, and it is commonly accepted amongst traders that the New Zealand Stock Exchange is a semi-efficient market.\textsuperscript{99}

Whether a particular share is a “leading gainer is another factor which is useful in assessing the efficiency of a securities market. A “leading gainer” is one of the most actively traded securities on its market and in so doing it is being traded efficiently when it is.\textsuperscript{100} This proposition is supportable because intense trading tends to occur in concert with exposure in the financial press, reporting by professional analysts and the presence of institutional investors in the market for that security.\textsuperscript{101}

Average trading volume of a share is another factor used in assessing the efficiency of a securities market. The courts in the United States have viewed average trading volume as a key indicator as to whether a security is being traded efficiently:

\textsuperscript{96} http://www.nz-lawsoc.org.nz/hms6(1)secact300502.asp
\textsuperscript{98} Id. at p 249
\textsuperscript{99} Fisse, B., \textit{NZSE and the Securities Market in New Zealand} in Securities Regulation in Australia and New Zealand, Walker, G. & Fisse, B. (eds), at p 122
\textsuperscript{100} Peil v. Speiser, 806 F.2d 1154 (3d Cir. 1986)
“The reason the existence of an actively traded market, as evidenced by a large weekly volume of stock trades, suggests there is because it implies significant investor interest in the company. Such interest, in turn, implies a likelihood that many investors are executing trades on the basis of newly available information or disseminated corporation information.”

For example, it will be assumed that a security is trading on an efficient market if the turnover of a security on an over-the-counter market is the same as the turnover of a security on the New York Stock Exchange. An alternative proposition is that turnover measured by average weekly trading of two percent or more of the outstanding shares would raise a strong presumption that the shares are being traded in an efficient market. Even turnover of one percent may raise a substantial presumption.

A following by security analysts is another key indicator used in assessing the efficiency of a securities market. This is because the likelihood that all information distributed by a corporation is being relied on is increased if there are a large number of security analysts following a particular security. In the United States, hundreds of security analysts will track the major corporations while only a few analysts will track the smaller corporations. In New Zealand, there are only a limited number of analysts and they will focus on the larger corporations also, although these are far smaller in size than in the United States.

102 Cammer, 711 F. Supp. At 1286.
104 Bromberg, A & Lowenfels, L., Securities Fraud And Commodities Fraud § 8.6 (1989) at 641.
105 Id.
106 Cammer, 711 F. Supp. At 1285-87
Assessing the efficiency of a securities market can also be indicated by the presence of market makers. In the United States a market maker will instantly buy and sell large blocks of stock on receipt of new information from a corporation in an over-the-counter market.\textsuperscript{108} It has been proposed that a showing of ten market makers will raise a substantial presumption that a market is efficient, while even five market makers will raise a presumption, though weaker, that a particular market is efficient.\textsuperscript{109} Similarly, institutional holders can also indicate the efficiency of the market because institutional investors carry out a role similar to that of market makers.\textsuperscript{110} They also have the means to carry out research into the financial reports of companies and use their expertise.\textsuperscript{111}

A further indicator is media coverage because it is to be expected that stock market activity will increase if the interest of an average investor is amplified by significant coverage of a security in the financial press.\textsuperscript{112} The efficient market develops through a competitive and vigorous financial press.\textsuperscript{113} United States publications include the Wall Street Journal, Forbes and Business Week. In the Wall Street Journal the investment column is Heard on the Street, in Forbes, the column is Informer and in Business Week it is Inside Wall Street.\textsuperscript{114} The New Zealand publications are The Independent and the National Business Review. In The Independent the column is known as Chalkie and in the National Business Review it is Shoeshine. Each of these

\textsuperscript{108} Id. at p 250

\textsuperscript{109} Bromberg, A & Lowenfels, L., \textit{Securities Fraud And Commodities Fraud} § 8.6 (1989) at 641


\textsuperscript{111} Id. at p 250

\textsuperscript{112} Id. at p 250

\textsuperscript{113} Lowenstein, Louis, \textit{Efficient Market Theory: Let the Punishment Fit the Crime}, 51 Wash. & Lee L. Rev. 879 (1994)

\textsuperscript{114} Id.
publications attempts to attract readers with their own stockmarket analysis. The publications look for “inside information” and print columns with investment advice that has the potential to result in wise investment decisions, and otherwise circulating information to the investors.\textsuperscript{115}

Finally, one other indicator of efficiency in the market is cause and effect data. Historical data can be used to show that a particular security is trading in an efficient market. The data must show the effect of information, both positive and negative, on the price of a security.\textsuperscript{116}

In general, in New Zealand investment analysts tend to support the view that the New Zealand stockmarket is in the form of a semi-strong efficient market, in that new publicly released information is rapidly and rationally factored in to share prices.\textsuperscript{117} The consequences of that are that investors, when selling or buying securities, are usually doing so at prices that reflect all publicly available information.\textsuperscript{118}

However, the New Zealand market is subject to some qualifications that are made in relation to the Efficient Market Hypothesis. For example, the New Zealand stockmarket may not be uniformly efficient because institutional investors are the most prominent owners of New Zealand listed equities. Private ownership was approximately 19\% as at 31 March 1998, compared with a figure of 40\% as of 31 March 1991.\textsuperscript{119}

Institutional investors do improve efficiency in the Efficient Market Hypothesis sense by

\textsuperscript{115} Id.
\textsuperscript{117} Fisse, B., \textit{NZSE and the Securities Market in New Zealand} in Securities Regulation in Australia and New Zealand, Walker, G. & Fisse, B. (eds), at p 122
\textsuperscript{118} Blair, Mark, & Ramsay, Ian M., \textit{Mandatory Corporate Disclosure Rules and Securities Regulation} in Securities Regulation in Australia and New Zealand, Walker, G. & Fisse, B. (eds), at Securities Regulation, at p 276
reason of their information acquisition activities. However, institutional investment in New Zealand is uneven. Institutional investors tend to be concentrated in the share registers of larger companies and are less interested in small companies. This may result in an efficient market in the largest companies but an inefficient market in smaller companies.

Another reason why the New Zealand sharemarket may not be uniformly efficient is because the shares of larger corporations are more actively traded than the shares of smaller corporations and are consequently more informationally efficient. Under the Efficient Market Hypothesis it is expected that the shares which are the most informationally efficient are those that are the most actively traded because it is in the course of share trading that shares prices reflect new information. Accordingly, under the Efficient Market Hypothesis the shares prices of the largest companies listed on the New Zealand Stock Exchange are more informationally efficient than the share prices of smaller companies. Evidence of this proposition is evident from the fact that the three companies with the highest trading volume on the New Zealand Stock Exchange, are three of the largest companies in New Zealand.

A further qualification to the supposition that the New Zealand stockmarket tends to be semi-strong efficient is that there is ample evidence of stockmarket

120 Blair, Mark, & Ramsay, Ian M., Mandatory Corporate Disclosure Rules and Securities Regulation in Securities Regulation in Australia and New Zealand, Walker, G. & Fisse, B. (eds), at Securities Regulation, at p 276
121 Id.at p 276
122 Id.at p 276
123 Id.at p 276
124 http://www.nzx.com/
inconsistencies which are incompatible with the Efficient Market Hypothesis. This means that in some situations the market mis-prices shares.

**Specific Manifestations of the Efficient Market Hypothesis**

The development of the Efficient Market Hypothesis is best illustrated by a number of specific contemporary manifestations, including in the enactment of law and judicial comment about it.

**The Enactment of Law**

In the United States today, it is commonly accepted that the efficient market hypothesis constitutes the theoretical underpinning for the federal securities laws’ disclosure policy. The Securities and Exchange Commission requires full disclosure of information about publicly traded companies by way of its regulations. Much of the information released will not be read by those investors who purchase stocks in a particular company, particularly because a great deal of the information released is extremely technical and requires professional assistance to grasp its meaning. However, at least some investors or their agents will read the information and it will be processed and incorporated into the price.

The Securities and Exchange Commission has assimilated the theory into Securities and Exchange Commission regulations in order to reduce unnecessary

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126 Id. at p 276


129 Id.

130 Id.
disclosure expenses for those companies where the stockmarket has already assimilated all relevant information into the price of the shares.\textsuperscript{131} Since a typical investor is unlikely to read all the information in a detailed prospectus and probably not to understand the complex information if read.\textsuperscript{132} The United States Securities Commission removed the requirements for such prospectuses and put into place a new requirement for periodic disclosure documents known as “short forms”.\textsuperscript{133} The United States Securities Commission opined as follows:

“Forms S-3 and F-3 recognise the applicability of the efficient market theory to those companies which provide a steady stream of high quality corporate information to the marketplace and whose corporate information is broadly disseminated. Information about these companies is constantly digested and synthesized by financial analysts, who act as essential conduits in the continuous flow of information to investors, and is broadly disseminated on a timely basis to the financial press and other participants in the marketplace. Accordingly, at the time S-3 and F-3 registrants determine to make an offering of securities, a large number of information already has been disseminated to and digested by the marketplace.”\textsuperscript{134}

In New Zealand there has been little overt recognition of the Efficient Market Hypothesis. This part of the chapter examines a number of New Zealand disclosure rules that appear to rely on assumptions that relate to informationally efficient markets, although these assumptions are not specifically articulated.

\textsuperscript{131} Id.
\textsuperscript{132} Id.
\textsuperscript{133} Id.
\textsuperscript{134} Id.
The first example of a disclosure law that seems to rely on principles supported by the Efficient Market Hypothesis is in the Securities Markets Act 1988, which provides that a public issuer is not required to disclose material which is generally available to the market. Section 19F provides that:

“19F. What information is generally available to the market—

(1) For the purposes of this Act, information is "generally available to the market" if—

(a) it is information that—

(i) has been made known in a manner that would, or would be likely to, bring it to the attention of persons who commonly invest in relevant securities; and

(ii) since it was made known, a reasonable period for it to be disseminated among those persons has expired; or

(b) it is likely that persons who commonly invest in relevant securities can readily obtain the information (whether by observation, use of expertise, purchase from other persons, or any other means); or

(c) it is information that consists of deductions, conclusions, or inferences made or drawn from either or both of the kinds of information referred to in paragraphs (a) and (b).

In this section, "relevant securities" means securities of a kind the price or value of which might reasonably be expected to be affected by the information."

Security 19F(1)(a) and (b) are the market efficiency elements of the test. A public issuer may not need to disclose information to the market because it is "generally available to the market". However, an analyst who obtains this information is unable to advise any person about it because it would probably trigger the current "not publicly available" test in the insider trading laws.135

Inherent in this clause is the notion that even if an individual investor does not have knowledge of a particular piece of information, this is not a breach of the Act so long as investors in general, or their advisers, are aware of the information.136 To the extent that information is already in the public domain and is incorporated into the share prices then it would be redundant to require the mandatory disclosure system to cover the same ground.137 This recognises that in an efficient market, information is rapidly reflected in share prices and that share prices generally reflect all publicly available information.138 This recognition is founded on principles of the Efficient Market Hypothesis in that the disclosure regime acknowledges that information is quickly impounded into share prices in efficient markets and that this is highly desirable.139

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136 Blair, Mark, & Ramsay, Ian M., Mandatory Corporate Disclosure Rules and Securities Regulation in Securities Regulation in Australia and New Zealand, Walker, G. & Fisse, B. (eds), at Securities Regulation, at p 278
137 Id. at p 278
138 Id. at p 278
139 Id. at p 278
It does not matter if the knowledge or ability of an individual investor is inadequate because investors are “protected” by the price set up by the market. Where the material has been made public so it is reasonably to rely on the market to price the shares based on the information made available to it. This reliance is justified because material which has already been released by means other than the prospectus and is widely disseminated, available for free or at nominal cost, and closely studied by financial analysts and other sophisticated market participants. Therefore, this public information should be reflected in the price of the corporation’s shares.

There is no basis for repeating the information in a prospectus distributed to prospective shareholders for the sale of new securities because the only information which has not been incorporated into the share price are the details of the new issue. Implicit in these provisions is the concept that even if an individual investor is not aware of a particular piece of information that is not critical so long as investors in general, or their advisers, have knowledge of the information.

This disclosure regime closely follows the Australian version, and that is as a result of the new law described to be bringing the New Zealand market in line with best international practice. It is a struggle between “the market fairness” element (the

142 Id. at p 278
143 Id. at p 279
144 Id. at p 277
equally informed market) and the “market efficiency” element (the “generally available” test), which may not be reconcilable as they are two different policy goals.\textsuperscript{145}

Another reflection of the Efficient Market Hypothesis in New Zealand is through self-regulation of the market. Self-regulation is as an expression of the free market forces which underpin the Efficient Market Hypothesis and the Securities Markets Act 1988 which provides for some self-regulation by the securities industry. The Act includes responsibilities and obligations for the New Zealand Stock Exchange, the leading stock exchange which is the New Zealand equivalent to the New York Stock Exchange. The New Zealand Stock Exchange is the only registered stock exchange in New Zealand. The New Zealand Stock Exchange also has its own conduct rules which it uses as a matter of contract to regulate between the New Zealand Stock Exchange and market participants. The Act puts specific obligations on the New Zealand Stock Exchange, including obligations to:

- refer specific matters to the New Zealand Securities Commission;
- provide assistance to the New Zealand Securities Commission when requested;
- submit its rules of conduct, and changes to those rules, to the Minister; and
- consult with the New Zealand Securities Commission about determinations concerning the continuous disclosure rules of the New Zealand Stock Exchange.\textsuperscript{146}

The New Zealand Securities Commission and the New Zealand Stock Exchange both have important roles to play in the securities market. In essence, the New Zealand Securities Commission is the statutory regulator and is charged with many

\textsuperscript{146} Section 36, Securities Markets Act 1988
responsibilities under the law. However, it does not have the ability to prosecute for criminal breaches of the law; that is the domain of the Registrar of Companies. The New Zealand Stock Exchange can be considered as the frontline regulator, which monitors trading activity and is concerned with breaches of its rules.

**Referrals**

The New Zealand Stock Exchange must refer specific matters to the New Zealand Securities Commission. This arises where:

- the New Zealand Stock Exchange takes any disciplinary action against a person;
- the New Zealand Stock Exchange know or suspects that a person has committed, is committing, or is likely to commit a “significant” contravention of:
  - the New Zealand Stock Exchange’s rules of conduct;
  - the Securities Act 1978, the Securities Markets Act 1988, or the Takeovers Act 1993.\(^{147}\)

Under the Securities Markets Act these are compulsory referrals which do not allow much flexibility for self-regulation. There is a further type of referral which is known as a discretionary referral. This allows the New Zealand Stock Exchange to draw the attention of the New Zealand Securities Commission to any other information that the New Zealand Securities Commission considers may assist the New Zealand Securities Commission in carrying out of its functions.

The New Zealand Securities Commission also has the ability to refer matters to the New Zealand Stock Exchange, and in particular matters relating to the New Zealand Stock Exchange’s rules of conduct or the application of those rules.

\(^{147}\) Section 36 Securities Markets Act 1988
Referrals by both the New Zealand Stock Exchange and the New Zealand Securities Commission are subject to procedures for provision of information, assessment and reporting.

A further aspect of self-regulation is that the New Zealand Stock Exchange is empowered to administer the continuous disclosure rules to ensure listed companies make disclosures on a regular basis. However, if the New Zealand Stock Exchange proposes to make a “determination” relating to its continuous disclosure rules then the Securities Markets Act requires the New Zealand Stock Exchange to notify the New Zealand Securities Commission. A “determination” is a ruling on, or a waiver from, any of the “continuous disclosure provisions” of the listing rules of the New Zealand Stock Exchange. “Continuous disclosure provisions” mean any provisions that require a public issuer to notify information about matters or events as they arise for the purpose of that information being made available to market participants.

The government perceives the legislation as enabling the two organisations, the New Zealand Stock Exchange and the New Zealand Securities Commission, working together for regulation of the New Zealand securities market. The role of the New Zealand Stock Exchange is as a front-line regulator, which has the ability to sanction market participants when necessary. Where appropriate and possible the New Zealand Securities Commission will notify the New Zealand Stock Exchange of any information which relates to trading, regulation or market conduct that may lead the New Zealand Securities Commission to given notice of an intention to make a direction. If the New Zealand Securities Commission does raise any such matter, the New Zealand Stock Exchange

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Exchange will consider the issue as soon as practicable, and inform the New Zealand Securities Commission.\textsuperscript{150} Representatives of each organisation will meet, where practicable, to review the matters. The purpose is for the New Zealand Stock Exchange and the New Zealand Securities Commission to know and understand each other’s perspectives, and, if possible, to preclude disruption to the market.\textsuperscript{151} It appears that leaving the New Zealand Stock Exchange with the responsibility of self-regulation is a reflection of the free market policies underpinning the Efficient Market Hypothesis. The benefits of self-regulation are a reduction in costs due to the increased flexibility than is possible under rigid statutory rulings.

This part of the chapter examines a number of existing disclosure rules which appear to rely on assumptions which concern informationally efficient markets.

The same justification used for section 19F of the Securities Act 1978 underlies a New Zealand corporation’s ability to issue a short-form prospectus under the Act. The requirement to issue a short-form prospectus can be substituted for the assurance of a full prospectus and contains only transaction specific information rather than the comprehensive details normally required in a prospectus. The justification for this reduction in disclosure is that the short-form prospectus is sufficient to advise the investor of the risks because all information has already been incorporated into the share price.\textsuperscript{152}

\textsuperscript{149} Id. at p 121
\textsuperscript{150} Id. at p 121
\textsuperscript{151} Id. at p 121
\textsuperscript{152} Blair, Mark, & Ramsay, Ian M., \textit{Mandatory Corporate Disclosure Rules and Securities Regulation} in Securities Regulation in Australia and New Zealand, Walker, G. & Fisse, B. (eds), at Securities Regulation, at p 279
There are three other justifications for reducing the disclosure contained in a prospectus:

- Short-form prospectuses are more cost-effective;\(^{153}\)
- Verification of disclosure;\(^{154}\)
- Confidence that the investor may find little value in a prospectus.\(^{155}\)

Disclosure by way of a detailed prospectus can be seen as an inefficient (if not irrelevant) means of information disclosure.\(^{156}\) It is argued that investors make no real use of prospectuses and therefore there is no rational expectation that investors will read the complex and detailed information provided to them by means of a prospectus.\(^{157}\)

**Comparison**

It is widely accepted today that the New York Stock Exchange represents an efficient market. However, current literature identifies a number of anomalies to the efficient market hypothesis. Particularly relevant to a comparison between the United States and New Zealand is the “small firm effect”. The concept of the small firm effect is that the prices of securities issued by larger companies react more quickly and predictably to the distribution of information than the prices of securities issued by smaller companies.\(^{158}\) Research into smaller firms listed on the New York Stock Exchange and other firms of a comparable size have revealed a small firm effect because commonly, investors are less interested in smaller corporations and thus

\(^{153}\) Id. at p 279  
\(^{154}\) Id. at p 279  
\(^{155}\) Id. at p 279  
\(^{156}\) Id. at p 279  
\(^{157}\) Id. at p 279  
market information is not processed efficiently.\textsuperscript{159} This is relevant to the comparison of the effect of the efficient market hypothesis on the New Zealand and United States markets because New Zealand firms tend to be on a far smaller scale than in the United States.

A related anomaly is comparisons of the New York Stock Exchange with smaller stock markets show that smaller firms which do not trade on the New York Stock Exchange are not as efficient as those that do. This suggests that smaller stocks have a market which is not as efficient as the New York Stock Exchange securities.\textsuperscript{160} One study that compared market efficiency between stock exchanges, demonstrated that after an earnings announcement the New York Stock Exchange displayed certain responses four to five weeks before the American Stock Exchange and the over-the-counter markets.\textsuperscript{161}

\textbf{Judicial Comment}

In the United States the Efficient Market Hypothesis is a powerful force in contemporary securities regulation.\textsuperscript{162} From its origins as an economic theory developed by a variety of American scholars of economics, it has evolved into a working tool for legal academics,\textsuperscript{163} and both the courts and the United States Securities Commission quote it as authority for an array of ideas and schemes.\textsuperscript{164}

\begin{thebibliography}{9}
\bibitem{159} Id. at p 231
\bibitem{160} Id. at p 231
\bibitem{161} Brown, \textit{A Comparison of Market Efficiency Among Stock Exchanges}, J. Bus. Fin. & Acct., Autumn 1988, at 373-84
\bibitem{163} Id. at p 851
\bibitem{164} Id. at p 851
\end{thebibliography}
In the United States the courts have referred directly to the Efficient Market Hypothesis as an authority for their decisions, particularly in the 1980s and 1990s.\footnote{Id. at p 851} For example, in Wielgos v. Commonwealth Edison Co., Judge Easterbrook espoused that “[t]he United States Securities Commission believes that the markets correctly value the securities of well-followed firms, so that new sales may rely on information that has been digested and expressed in the securities price.”\footnote{892 F.2d 509, 510 (7th Cir. 1989)}

The United States Supreme Court was strongly influenced by the Efficient Market Hypothesis in Basic Inc. v. Levinson.\footnote{485 U.S. 224 (1988)} In that case the Supreme Court accepted the Efficient Market Hypothesis in relation to the fraud on the market doctrine. The Court determined that the key principle underlying the semi-strong form of the Efficient Market Hypothesis was “that the market price of shares traded on well-developed markets reflects all publicly available information.”\footnote{Id. at 247.} This principle functioned as the basis for presuming that investors trading in a particular security could satisfy the reliance requirement in a fraud action in relation to that security.\footnote{Cunningham, Lawrence A., \textit{Capital Market Theory, Mandatory Disclosure, and Price Discovery}, 51 Wash. & Lee L. Rev. 843 (1994) at 848}

Conversely, there has been very little litigation arising out of the Securities Act in New Zealand, particularly compared to commercial or company law.\footnote{Morison’s Company and Securities Law Service No 31 – August 1998 V3/3302} In particular, there has been no reference in the Efficient Market Hypothesis by any of the courts in New Zealand.
CHAPTER 4
CONCLUSION

The Relationship between the Efficient Market Hypothesis and Mandatory Disclosure

Academic theorists have asserted that the Efficient Market Hypothesis is “the context in which serious discussion of the regulation of financial markets takes place”.¹⁷¹

The extent of mandatory disclosure required under the regulatory system has been debated since the system was first passed in the United States in 1934 and New Zealand in 1978.¹⁷² The express purpose of the 1934 Act and the New Zealand 1978 Act is to prevent fraud against investors by enforcing truth in securities. However, because the Efficient Market Hypothesis is purported to provide the protection investors need, the investor protection purpose has been subject to substantial criticism from supporters of Efficient Market Hypothesis.¹⁷³ Economists use a reasonably straightforward linear theory under the Efficient Market Hypothesis to show why public capital markets are efficient, and can establish that information is rapidly and precisely absorbed into share prices.¹⁷⁴ Proponents of the Efficient Market Hypothesis then argued that if the public capital markets are efficient in the strong or semi-strong form then mandatory disclosure is superfluous, and private incentives would be sufficient to encourage public issuers to produce and distribute information or other parties to

¹⁷³ Id. at 845
discover information to provide to investors.\footnote{Cunningham, Lawrence A., \textit{Capital Market Theory, Mandatory Disclosure, and Price Discovery}, 51 Wash. & Lee L. Rev. 843 (1994) at 846} Given the private incentives, the necessity of a securities regulatory system is negated because the progression of information production and distribution, and consequent incorporation into the price would afford sufficient investor protection.\footnote{Id. at 846}

Conversely, there is an opposing viewpoint for disclosure rules in relation to the Efficient Market Hypothesis.\footnote{Id. at 846} Firstly, even if a stockmarket is informationally efficient mandatory disclosure rules may still be vital.\footnote{Beaver, \textit{The Nature of Mandated Disclosure} in Posner and Scott (eds), Economics of Corporation Law and Securities Regulation (1980) 329} Even though all publicly available information is reflected in the share price, these prices may not reflect private information, therefore compulsory disclosure is a reliable method of putting private information in the public domain.\footnote{Blair, Mark, & Ramsay, Ian M., \textit{Mandatory Corporate Disclosure Rules and Securities Regulation} in Securities Regulation in Australia and New Zealand, Walker, G. & Fisse, B. (eds), at Securities Regulation, at p 277} In contrast, it is possible that mandatory disclosure rules may not add any value to the disclosure process because private information is incorporated into the price of shares in a number of ways, and particularly by way of investment research by analysts and other activities by the private sector information system.\footnote{Id. at p 277} Therefore the price of shares will naturally incorporate a considerable amount of information made otherwise than through the compulsory disclosure system.\footnote{Id. at p 277}
Conclusion

Securities are not tangible products but are an intangible interest in a corporation which can be issued in unlimited amounts.\textsuperscript{182} Therefore securities regulation is directed to the information behind the securities and this information is required to be accessible to the market on the basis that this information may not otherwise be accessible.\textsuperscript{183} Securities regulators in both New Zealand and the United States attempt to correct any market failure in the provision of information by compelling information to be made available.\textsuperscript{184} The information intended to be disclosed in a prospectus is the information which investors and their professional advisers may require in order to make an informed evaluation of the corporation's financial position, assets and liabilities, profits and losses and prospects for the future.\textsuperscript{185}

The structure and regulation of New Zealand's securities markets are currently undergoing profound changes. These changes are intended to bring about a convergence of New Zealand's securities regulatory practice with international regulatory practice.\textsuperscript{186}

New Zealand has always looked to overseas regulatory models for the detailed design of its commercial laws.\textsuperscript{187} Usually, New Zealand tends to look to Australia,

\textsuperscript{182} Latimer, Paul, Securities Regulation Laws – What Are They Trying to Achieve?, in Securities Regulation in Australia and New Zealand, Walker, Gordon and Fisse, Brent (eds), at p 166
\textsuperscript{183} Id. at p 166
\textsuperscript{184} Id. at p 166
\textsuperscript{185} Id. at p 166
\textsuperscript{187} Dalziel, Lianne, Securities Markets Regulation: The Minister's Right of Reply, Company and Securities Law Bulletin Issue 4, April 2003 at p 19
which is a country in the same region and with many similarities and economic links.\textsuperscript{188} The New Zealand government currently operates from a presumption that commercial laws will be based on an Australian model rather than a model from any other country. Nevertheless, both the Companies Act 1993 and the Personal Property Securities Act 1999 were based on the Canadian models.\textsuperscript{189} Whichever model is used the government intends to make changes to fit with New Zealand conditions and institutions and the benefits that can be realised in a smaller country need to be evaluated in light of the fixed costs of certain types of regulations.\textsuperscript{190} New Zealand is also attempting to create a consistency with international regulatory norms by adopting regulatory standards that comply with international requirements.\textsuperscript{191}

Surprisingly, the legal and regulatory systems in the United States and New Zealand have many similarities. Both require the production of a prospectus on the issue of securities to the public, both compel periodic reporting for its largest companies and both empower the Securities Commission and the Securities and Exchange Commission to act with broad authority over all aspects of the securities markets.

Even with such broad diversity in the financial environments of New Zealand and the United States, aspects of the Efficient Market Hypothesis can be identified in both countries. Although the New Zealand markets are much smaller, the Efficient Market Hypothesis is a useful tool for considering the relationship between efficient markets and mandatory disclosure.

\textsuperscript{188} Id. at p 19  
\textsuperscript{189} Id. at p 19  
\textsuperscript{190} Id. at p 17  
\textsuperscript{191} Id. at p 17
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