THE EFFICIENT MARKET HYPOTHESIS REVISITED: SOME EVIDENCE FROM THE ISTANBUL STOCK EXCHANGE

A thesis submitted for the degree of Doctor of Philosophy

By

Nuray Ergül

Department of Economics and Finance, Brunel University

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Author :Nuray Ergul

Qualification :Doctor of Philosophy (PhD)

Institution :Brunel University

Department :Economics and Finance

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ABSTRACT

This thesis seeks to address three important issues relating to the efficient functioning of the Istanbul Stock Exchange. In particular the thesis seeks to answer the following questions :

1.What makes markets informationally efficient or inefficient?

2. Has increased stock market volatility had an impact on the equity risk premium and the cost of equity capital to firms? and

3.How is it possible to reconcile the view that markets are weak form efficient and yet technical analysis is a pervasive activity in such markets?

Unlike previous studies, this thesis seeks to examine the issue of efficiency when institutional features specific to the market under investigation are taken into account. Specifically, the thesis adopts a testing methodology which enables us to recognize possible non-linear behaviour, thin trading and institutional changes in testing market efficiency. The results from this investigation show that informationally efficient markets are brought about by improving liquidity, ensuring that investors have access to high quality and reliable information and minimising the institutional restrictions on trading. In addition, the results suggest that emerging markets may initially be characterised as inefficient but over time, with the right regulatory framework, will develop into efficient and effective markets.

The second important issue to be examined in this thesis concerns the impact of regulatory changes on market volatility and the cost of equity capital of firms. It is not sufficient to simply examine whether volatility has increased following a financial market innovation such as changes in regulation. Rather, it is necessary to investigate

why volatility has changed, if it has changed, and the impact of such a change on the equity risk premium and the cost of equity capital to firms. Only then can inferences be drawn about the desirability or otherwise of innovations which bring about increases in volatility. Surprisingly, these issues have not been addressed in the literature. The evidence presented here suggest that the innovations which have taken place in the ISE have increased volatility, but also improved the pricing efficiency of the market and reduced the cost of equity capital to firms.

Finally, the thesis tries to identify the conditions under which weak-form efficiency is consistent with technical analysis. It is shown that this paradox can be explained if adjustments to information are not immediate, such that market statistics, in particular statistics on trading volume contain information not impounded in current prices. In this context technical analysis on volume can be viewed as part of the process by which traders learn about fundamentals. Therefore, the thesis investigates the issue whether studying the joint dynamics of stock prices and trading volume can be used to predict weakly efficient stock prices.

In summary, the findings of this thesis will be of interest to international investors, stock market regulators, firms raising funds from stock markets and participants in emerging capital markets in general. The implication of the results presented here is that informational efficient emerging markets are brought about by improving liquidity, ensuring that investors have access to high quality and reliable information and minimising the institutional restrictions on trading. In addition, the evolution in the regulatory framework of, and knowledge and awareness of investors in, emerging markets may mean that they will initially be characterised by inefficiency, but over time will develop into informational efficient and effectively functioning markets which allocate resources efficiently. In addition, the results of this thesis have important implications, for emerging markets in general, in identifying the regulatory framework that will achieve efficient pricing and a reduction in the cost of equity capital to firms operating in the economy.

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