Chapter 15


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ABSTRACT

The purpose of this chapter is to examine if even the simplest trading rules could take advantage of the market’s inefficiency and lead to profitable trading decisions. For this reason, this study examined the profitability of the simplest trading rules, using only the simple moving averages (SMA) rules that even an amateur investor could apply. In order to examine the specific issue a data sample from the Greek stock market during the period 2002-12 was used. The results suggest that even if one takes into account the most expensive transaction fees, the trading rules signal profitable investment decisions; therefore, even an amateur trader and/or investor who does not have a significant amount of money to invest (which may lead to reduced transaction costs) could take advantage of the market’s inefficiency. Behavioral finance theories may provide some useful and alternative explanations regarding some of the reasons that contribute to the Greek stock market’s inefficient environment.

1. INTRODUCTION

Technical analysis is a field of applied financial economics literature which gathers many conflicting opinions regarding the ability of the trading rules to present significant higher profits than the buy-and-hold strategy. If we assume that specific trading rules generate increased profits, this means that the study of the historical prices enables us to predict future prices, which is in contrast to Fama’s (1970) efficiency market hypothesis (EMH). There are numerous studies which confirm that several simple or advanced trading rules (moving average, RSI index, MACD, stochastic rules etc.) enable the investors who apply them to increase their profits in several stock markets around the world (Brock, Lakonishock, & LeBaron(1992); Chong & Ng, 2008; Ulku & Prodan, 2013 etc.).

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Is Technical Analysis Profitable even for an Amateur Investor?

Scholars suggest that a crucial prerequisite in order to achieve profits using trading rules is the non-linearity in prices (Neftci, 1991). However, similar to most issues examined in finance, there are studies which disprove the aforementioned point. Usually, a friction point is that the transaction costs significantly reduce the trading rules profits. Indicatively, Alexander (1961) presents that the trading rules outperform the buy-and-hold strategy, but Alexander (1964) re-examines his earlier findings including transaction costs and finds significant reductions in the trading rules profits. Fama & Blume (1966) suggest that technical rules fail to outperform the buy-and-hold strategy, but Sweeney (1988) questions their findings taking into account a later sample (1970-82).

The main objectives of this paper are to examine the following: (i) whether the simplest trading rules (simple moving average, SMA) or composite SMA rules enable us to predict the financial trend, which leads to increased profits in comparison to buy-and-hold trading strategy, (ii) how profitable could these rules be, and (iii) if even the financial crisis period could be profitable for someone who applies the examined strategies using derivatives. We examine the trading rules profitability taking a data sample from the Greek stock market during the period 2002-12 because there are recent studies which provide empirical evidence for the existence of calendar anomalies (Vasileiou & Samitas, 2014; Vasileiou, 2014 a,b), which is an indication for market inefficiency.

The rest of this paper goes as follows: Section 2 reports the trading rules and clearly defines the assumptions under which we examine their profitability. Section 3 briefly presents market information and describes the dataset. Section 4 presents the examined strategies, the theoretical and methodological background and their outcomes. Section 5 further discusses the empirical findings and links them to previous studies under a behavioral financial view. Finally, section 6 concludes the study.

2. TRADING RULES AND PRACTICAL ASSUMPTIONS DEFINITIONS

This paper examines the profitability of simple trading rules in the ATHEX. Therefore, we should declare the assumptions under which we examine the specific issue and clearly demonstrate how the individual investor can apply simple trading rules and present the final returns. Three main points should be noted in order to adequately present the results:

1. Which are the indexes in which we could apply the trading rules,
2. Which trading rules are simple and could be applied even by an amateur technical analyst-investor, and
3. Which are the possible trading strategies that could be applied.

Most of the studies that examine the Greek stock market use datasets from the Athens Exchange General Index (ATHEXGI) as a sample, which consists of the 60 largest companies stocks and is the most reliable indicator regarding the Greek stock market. This means that a possible applied strategy may be that an investor holds a stocks' portfolio which simulates the ATHEXGI and when the trading signal suggest a sell period he sells the stock and deposits his money in Greek banks. This could be named as the 1st strategy, but its main drawback is that an investor cannot gain profits from the sell period signals, by shorting the specific index because there is no future contract with the ATHEX as underlying value.

However, in the ATHEX derivatives exchange (ADEX) there are several financial products using as an underlying index the FTSE/ASE20, FTSE/ASE 40 or futures on stocks. Among them we finally chose to include the futures on FTSE/ASE20 index because this index presents increased correlation with the ATHEX GI (e.g. the ATHEXGI and FTSE/ASE40 correlation is 87.41%).