ISSN 1822-6515
EKONOMIKA IR VADYBA: 2009. 14

ISSN 1822-6515
ECONOMICS & MANAGEMENT: 2009. 14

RELEVANCE OF FUNDAMENTAL ANALYSIS ON THE BALTIC EQUITY MARKET

Julia Bistrova[1], Natalja Lace[2]
Riga Technical University, Latvia, [1]julija_g@inbox.lv, [2]natalja.lace@rtu.lv

Abstract

Before making decision how to allocate assets of the equity portfolio the majority of professional and private investors are making their homework, i.e. analysis of the company, which in the most cases takes into consideration financial situation of the company, competitive edge and its market positions. However, due to certain constraints of the emerging markets (e.g. low liquidity, small number of investors) fundamental analysis is not always able to provide value. The relevance of fundamental analysis has been tested within Baltic equity market context by emphasizing the value of such classical ratios as PE, ROE, equity ratio, PB etc. Besides, the interdependence of liquidity and share price performance was checked. The findings of the research prove that fundamental analysis does not add a lot of value to the portfolio performance (exception – PE), while market liquidity influences performance of the share prices in a certain way.

Keywords: Baltic equity market, fundamental analysis, value added, liquidity, inefficiency, share performance

Introduction

According to the findings of the study conducted by Göteborg University researchers Michael Jannach and Armand Moube (2003), an absolute majority of institutional asset managers uses fundamental analysis when constructing a buy-list to form the portfolio. The study was carried out by questioning Swedish, Austrian and British assets managers, the ones who invest mainly in the equities of developed stock markets.

However, the applicability and relevance of fundamental analysis when investing in emerging markets is of questionable value. There are number of reasons which make an investor hesitant about whether he or she should spend time and money resources on analyzing companies. Very low liquidity and trading volumes on the emerging stock markets, which provoke abnormal rises and falls in stock prices, non-mature legal base, which is not yet regulating insider trading efficiently enough, coupled with the low transparency and lack of stable information flow can make the market inefficient, i.e. share prices of the companies may not reflect the true value of the company and its expected earnings.

Besides, the majority of turnover of the stock markets of the developing markets are created by the institutional investors as local population is still in the phase of accumulating capital and does not invest the bulk of their savings in equities. Therefore, one could see significant price changes caused by the trading activity of large institutional investors, basically, without any fundamental reason for that.

There have been several studies on Latvian and Lithuanian equity markets the findings of which prove that these markets comply with weak form market efficiency hypothesis (Kiete & Uloza, 2005). The stocks of the very low liquidity were proved to be inefficient, meaning that the price does not reflect the fair value of the company and that the price movements during the trading day can occur without any evident reason for that.

In these conditions it could very well be that neither fundamental nor technical analysis works for constructing income-generating portfolio, which is able to beat the market. According to the information at authors' disposal, there was not any research conducted on whether fundamental analysis creates additional value to the performance of the portfolio constructed of the companies traded on the Baltic stock exchanges.

This problem is becoming more topical as the number of private investors, who often need a guideline to make a proper investment decision, in Baltic equity market increases. Institutional investors become more sophisticated and understand that the abnormal growth which was experienced on the emerging markets in early years of 21st century has expired and now one needs to make well-thought decisions.

Therefore, the aim of the research is to evaluate whether fundamental analysis and the main tools it offers are able to add value to the performance when investing in Baltic equities.

The authors of the research set an objective to find out which fundamental ratios are of a greater importance and add the most value to portfolio performance in the investment process within the Baltic equity markets.

The methods chosen for conducting a research are mainly quantitative, which include comparison of the results to the relevant benchmark, statistical, descriptive. Though it was not the primary aim of the

ISSN 1822-6515

research authors, using qualitative analysis methods they tried to find out where the above average performance comes from and which companies turn out to be winners in the end.

Application of Fundamental Analysis on Emerging Markets

As Frank Shostak states in his work "In Defense of Fundamental Analysis" (2005) the stock market does not have the life of its own. Success or failure of the stock investing is determined ultimately by the failure or success of the business itself, which is undoubtedly true for the majority of cases.

Moube A. and Jannach M. (2003) tried to find out which of the concepts of fundamental analysis are the most important factors and indicators for the asset managers. Basically for everyone questioned the first factor to look at is the financial state of the company, which is usually determined by such ratios as return on equity, sales development, future earnings, stability of balance sheet (debt to equity, equity ratio). Besides, majority of respondents mentioned such key valuation concepts as price to earnings and price to book value. It should be noted, that certain share of attention receives companies' market share, their competitive strategy as well as the general development of the industry the companies operate within.

However, fundamental analysis in its common sense, i.e. financial ratios analysis could not be very valuable on the emerging markets especially if there is a limited time frame (less than 1 year).

Numerous studies on investing in emerging markets show that the investment approach which usually works well within the developed equity market often cannot be applied in the same way on stock market of developing markets. Croatian researchers Tihomir Hunjak and Marijan Cingula (2005) argue that neither technical nor fundamental analysis can be used on the Croatian stock market due to low trading volumes and high volatility. The researchers have developed their model, which according to their opinion, should suit during the investment process on the Croatian stock market. Fundamental analysis was assigned the weight of 8.1%, technical analysis – 18.8% and the rest was dedicated to other factors: risk (market, political and development) – 34.1%, insider trading – 31.6% and subjective estimation – 7.3%.

A group of researchers of Texas A&M University (Swanson *et al.*, 1999) examined developing Mexican equity market and found out that the value of fundamental analysis could contribute to generate higher returns. The findings were that though fine fundamental analysis could help to enrich investors, the earnings of the companies are not the primary factor that determines the share movement.

Research Background

Indeed, the relevance of fundamental analysis becomes questionable if one looks at the performances of the Baltic regional benchmarks (OMX Riga, OMX Tallinn, OMX Vilnius) a year prior and a year after their accession to the European Union in FY 2004, when all of them demonstrated performances of 100%-200%. The reason for abnormal growth of basically all of the companies regardless their financial state was capital inflow. Continuing on this issue, capital outflow due to the major risk aversion because of the global liquidity crunch resulted in the local stock indices declined by more than 60% in FY 2008. Naturally, the financial state or other aspects of the companies could not have changed so dramatically in such a short period. However, it should be determined who the winner is during the rising market and which companies lose the less during the falling markets.

Research Methodology

The study is done on the basis of the fundamental and trading data of the companies that are or were components of the main Baltic equity market benchmark – *OMXBBGI*, making 45 companies a corpus of the research. The period examined in the course of the study was January 2000 – November 2008. The data used in the research was originated from corporate annual reports and from OMX homepage. Monthly closing share prices were downloaded from *Bloomberg* information system

The authors of the research primarily paid their attention to the fundamental analysis ratios that are most popular among the professional investors: return on equity, equity ratio, PE, PB. Additional ratios such as return on invested capital and net debt to assets were considered to check whether they add value.

The authors tried to find the relationship between the share price performances and the fundamental concepts mentioned above by using mainly statistical analysis methods such as correlation analysis, quartile analysis and indexation.

ISSN 1822-6515

Research Results

The first criteria chosen for checking was return on equity, which tends to be of the outmost importance to the shareholder's of the company as it shows the ability of the company to generate profit using the capital company shareholders have invested.

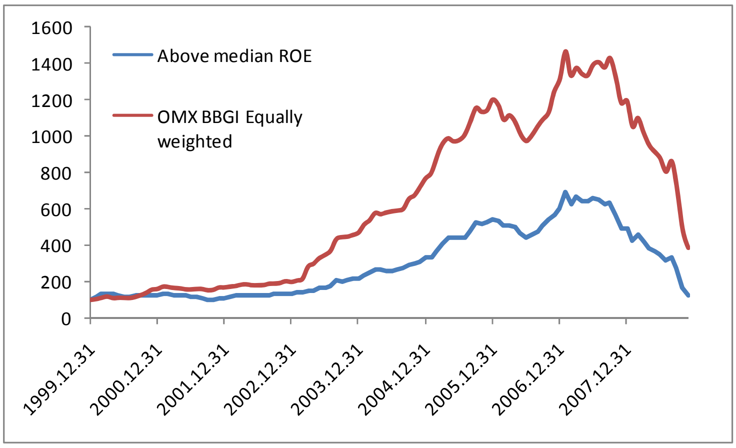

Figure 1. Modelled portfolio (selected stocks with ROE above median) performance in comparison to market benchmark

As the chart on Figure 1. shows, above average return of equity which is usually preferred by the shareholders deteriorates the performance – the ending value of high-ROE companies is more than two times lower than the value of relevant benchmark. It should be noted that in not a single year except for FY 2003, high-ROE companies were able to beat the market.

Second, the structure of total assets of the Baltic companies was checked. The ratio, indeed, is very important to investors when checking the financial solidity of the company, especially in the environment liquidity shortage.

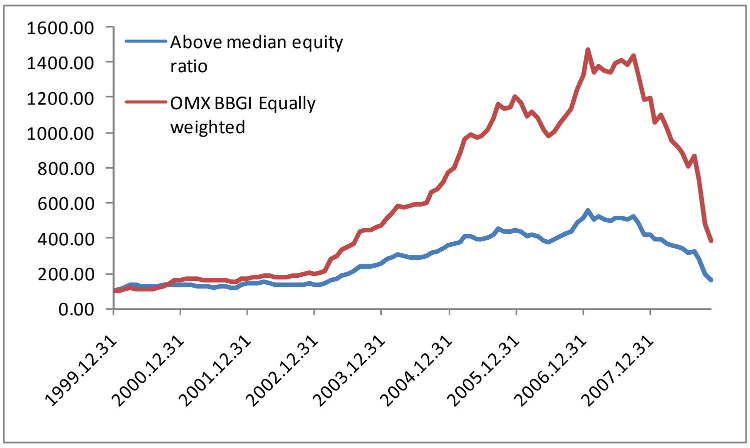

Figure 2. Modelled portfolio (selected stocks with equity ratio above median) performance in comparison to market benchmark

Though there were several periods (FY 2000, 2003, 2008) observed when companies with high equity ratio beat the market, the end value significantly lags behind the index value of the general market.

In the same way return on invested capital (ROIC), which provides investors with a feeling of how the company invests its money to generate returns, and net debt (calculated as total liabilities minus cash and equivalents) to assets, which reveals the debt situation of the company, were checked. However, as the results of the study show neither of these ratios was able to lift the performance, i.e. the companies, which have above average ROIC and below average net debt to assets, were not able to outperform the market.

Another concept of fundamental analysis such as market valuation has been checked as well. PE turned out to be the only ratio of the tested for the investor in Baltic equity market to consider.

ISSN 1822-6515

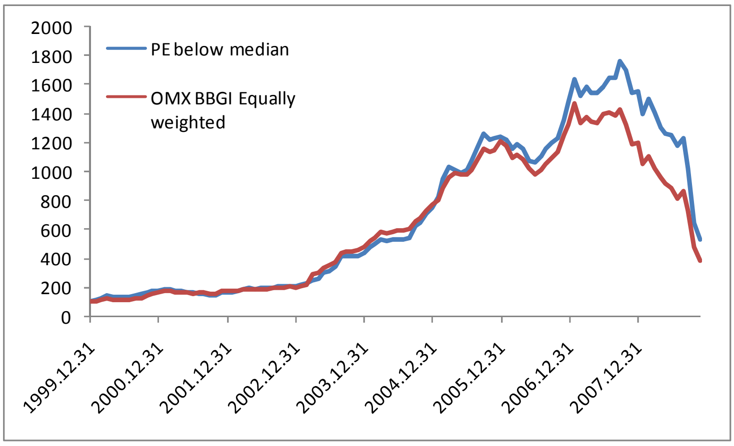

Figure 3. Modelled portfolio (selected stocks with PE ratio above median) performance in comparison to market benchmark

The companies with price to earnings ratio below market average were able to beat the market in the long-term. The major tailwind received by the cheap companies became evident since 2005 and particularly it was seen in financial year 2007. Based on this fact, one can make a conclusion that Baltic stock market tends to be value market, which, however, should be probated for the longer time period.

Price to book ratio, which is also widely used by followers of fundamental analysis, has been also applied when modeling a portfolio. However, companies being cheap according to PB ratio (below median) were not able demonstrate lucrative performance during the analyzed time period.

Other Factors to Consider

Taking into account that Baltic equity markets are still in their development stage and market liquidity often becomes an issue, the dependence of share price performance on the liquidity and trading volumes has been checked as well.

The companies were divided into two equal parts according to the average monthly turnover. The first group included the companies with the turnover above 2 mn EUR a month, while the second consisted of the companies, which had volumes not exceeding 2 mn EUR a month. Then, the average performance of each group was calculated (the performance of the companies was calculated since they started to be quoted in the main list). It turned out that the average performance of the companies with higher liquidity since 2000 was around 32%, while the companies with lower liquidity posted 8% average performance during the analyzed period from January 2000 to December 2008.

To check the behaviour of the most liquid companies during the major risk-aversion, which was seen in financial years 2007-2008, the authors decided to consider just the most recent time periods.

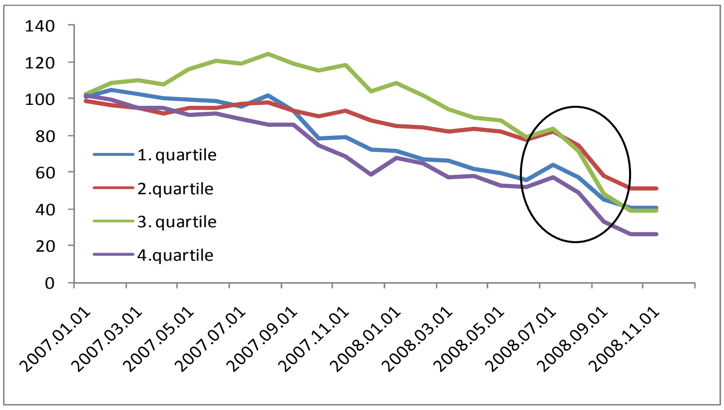

Figure 4. Liquidity quartiles performance (universe - *OMX BBGI*)

ISSN 1822-6515
ECONOMICS & MANAGEMENT: 2009. 14

The whole universe was divided into four equal parts (quartiles) according to the number of companies and their liquidity, meaning that the companies of the first quartile have the lowest liquidity, while companies in the fourth quartile have highest turnover on the market (e.g. *Eesti Telekom, Ukio Bankas* etc.)

According to the results shown on the chart (Figure 4.) the major sufferers of the massive capital outflows were exactly most liquid companies, i.e. the companies of the 3rd and 4th quartiles. This phenomenon is easily explained by the fact that major investors in Baltic equity markets were large foreign institutionals. In need for liquidity the first thing many asset managers did – took out the funds from the emerging markets with Baltic stock markets being among them. Therefore, least liquid (1st and 2nd quartiles) companies, which were not too favoured before by big asset managers turn out to be defensive in such tough market conditions. The biggest capital outflow was observed in autumn 2008 (see Figure 4.).

There was made an interesting observation by the authors in the course of the research. During the phase of major capital inflow obviously the most attention of the Baltic investors was deserved by the growth companies with attractive internationally diversified business models regardless of their financial state and their profitability. There was seen rapid growth of share values of the pharmaceutical companies (e.g. *Sanitas*), apparel manufacturing and selling companies (e.g. *Baltika, Apranga*), shipping company *Latvijas Kugnieciba*, construction companies (e.g. *Merko Ehitus*). However, the companies with seemingly solid financial position but with business model, which did not provide with lots of growth opportunities (domestically focused business, evident business erosion) were not among the major winners on the Baltic equity market: telecommunication companies (e.g. *Eesti Telekom, TEO LT*), seat belts manufacturer *Norma*, data transmission equipment manufacturer *SAF Tehnika*. Besides, the companies which made IPOs in financial years 2006-2008 were also not able to demonstrate splendid performance. Often this was the case because of putting too high prices in the primary offering and, thus, losing the trust of the shareholders (e.g. *Tallink, Olympic Entertainment Group*).

Conclusions and Recommendations

The main target of the present research was to discover the importance of fundamental analysis on the Baltic equity markets. The hypothesis that fundamental analysis is not able to generate substantial additional value to the performance of the portfolio comprised of Baltic enterprises stocks was proved.

The relevance and need of fundamental analysis was checked by analyzing the performances of portfolios, which were created on the basis of key fundamental ratios: ROE, equity ratio, ROIC, net debt to assets as well as PE and PB. Naturally, the companies with better than average ratios were selected to form stock portfolios. The findings of the conducted study demonstrate that neither of the mentioned ratios helped in the creating portfolio, performance of which would beat market's performance. The only exception was price to earnings ratio, which proved that cheap companies seem to be attractive to the investors.

It was decided to look closer at the major performers and to find out whether there are any common patterns among the winners and the losers of the Baltic equity markets. Basically, equity investors ignored financial situation of the companies (profitability, stability of balance sheets) and focused mainly on assessing their growth opportunities and attractiveness of business model. So, investors were mainly forward-looking when making company selection. As a result, major sufferers performance-wise were the companies with limited growth potential or total business model erosion.

The authors of the research have also checked whether the trading volumes of the stock have any impact on the performance. The study results show that in the phase of the major capital inflows (2001-2006), indeed, most liquid companies tended to reward investors with higher performances. However, the shareholders of these companies suffered the most in financial years 2007 and 2008, when there was a major selling across stock market all over the world.

Therefore, the recommendations to the investors in Baltic equities would be to analyze the growth potential of the companies and to put more emphasis on company's expected earnings income, while also considering the valuation of the company, basing investing decisions on PE ratio.

The authors of the research strongly advise to continue to study the topic of fundamental analysis relevance on the emerging markets as the results should be valuable for the investment professionals and also for private investors in the Baltic market. Study results would provide certain orientation when deciding on the asset allocation. It would be advisable to analyze longer time period and particularly to focus attention to the time span when the global liquidity crunch started to influence equity markets.

ISSN 1822-6515

References

1. Hunjak T. & Cingula M. (2005). The Securities Portfolio Modelling for Emerging Markets. ISAHP, Honolulu, Hawaii, July 8-10. Retrieved December 20, 2008, from http://www.isahp.org/2005Proceedings/Papers/HunjakT_CingulaSecuritiesPortfolioModelling.pdf
2. Ķiete K. & Uloza G. (2005). The Information Efficiency of the Stock Markets in Lithuania and Latvia. Stockholm School of Economics in Riga.
3. Moube A. & Jannach M. (2003). Mutual funds and Stock Selection. Göteborg University, School of Economics and Commercial Laws.
4. Shostak F. (1997). In Defense of Financial Analysis: A Critique of the Efficient Market Hypothesis. Review of Austrian Economics 10, 2, 27-45.
5. Swanson, E. P., Rees L. L., Juarez-Valdes L.F. (2001) The Contribution of Fundamental Analysis in the Presence of Inflation and a Currency Devaluation. Retrieved December 20, 2008, from SSRN: http://ssrn.com/abstract=260596