

# The Efficiency of Cyclical and Defensive Stocks

Ing. Mgr. Radim Gottwald

Department of Finance, Faculty of Business and Economics,  
Mendel University in Brno, Zemědělská 1, 613 00 Brno, Czech Republic  
radim.gottwald@mendelu.cz

**Keywords:** Market efficiency, Cyclical stock, Defensive stock.

**Abstract.** The paper is focused on the relation between intrinsic value of a stock and its market price, in detail on the differences between values and prices of cyclical and defensive stocks. These stocks differ in sensitivity of corresponded industry to business cycle movements. Based on the differences between values and prices, corresponding form efficiency of the market can be found. Author investigates, whether higher market efficiencies are measured for cyclical or defensive stocks and what market efficiencies are measured according to different models. Models, which are used to estimate the intrinsic value of a stock are applied to stocks of chosen stock markets. Cyclical and defensive stocks are analysed within 1996-2012. They are chosen of stock market volume leaders within this period of all stocks included in chosen stock market indexes. US stock market index DJIA, UK index FTSE 100 and German index DAX are used. Period 1996-2012 is chosen because of the middle-term or long-term character of the fundamental analysis and the effort to use current data. Intrinsic values of stocks are calculated by following models of the fundamental analysis: historical model P/S, historical model P/BV, historical model P/CF, historical model P/D, dividend discount model and profit model. Author uses following input data: dividend yield, sales, total assets, book value, cash flow, dividend, profit, P/E, beta coefficient, stock price together with US, UK and German government bond rates. Market efficiency is expressed by means of the ratio of the intrinsic value of a stock and its market price. Based on presented results, author concludes, that measured market efficiencies for cyclical stocks are higher than the ones for defensive stocks. Thus, the differences between values and prices are lower for such stocks, which rise and fall with the business cycle. Analyses focused on the differences between intrinsic values of stocks and their market prices are cited in the paper. Author's analysis of cyclical and defensive stocks can be considered as contributive and unusual with regard to mentioned analyses. Author uses more models of the fundamental analysis, exactly six, than majority of other authors. Cited analyses of Capozza and Israelsen (2009), Foerster and Sapp (2006), Johnson and Xie (2004) and other researchers indicate, that author's paper is current and needed [1,2,3]. Author specifies the contribution of the paper for such investors, that calculate intrinsic values of stocks. Presented results can make easier their decision how to invest and their choice of optimal investment. Further directions of next research in this field are indicated. Results are calculated according to different regions, different models and different stocks. Specifics of individual stock markets or differences among models could be found in the future.