The Equity Valuation Accuracy among Multiple Screening Models: A Study from an Emerging Stock Market

Rayenda Khresna Brahmana and Chee-Wooi Hooy
School of Management, University of Science Malaysia, 11800 Minden, P. Penang, Malaysia

Abstract: Over the past 3 decades, none of valuation models is accepted as the most accurate valuation model. The most common debate in academic area is about Discounted Cash Flow (DCF) and Residual Income Valuation (RIV). Multiple screenings, a valuation model that common for practitioners are seldom investigated. This research conducted a test to investigate the best multiple screening models in term of valuation accuracy. Hypothetically, multiple screening models are classified into Price Earnings Ratio (PER) approach, Price to Sales Ratio (PSR) and Price to Book Value (PBV) ratio. After conducting the investigation in pooled data, PER method is superior in term of valuation accuracy compare to PSR and PBV. In industrial classification, PBV outperform the accuracy of PER and PSR approach in 17 industrial categories. Meanwhile PER which outstanding in accuracy of pooled data is only superior in 10 industrial categories. Thus, PER method still can be used in those 17 PBV industrial categories because of the small differences. But, PBV cannot be used as valuation method in 3 industrial categories. This research still needs further discussion, especially, the discussion of using non-linear approach using forecasted value driver and using combination of value drivers.

Key words: Valuation accuracy, PER, PBV, PSR, Malaysia listed companies, DCF

INTRODUCTION

Over the past 3 decades, none of valuation models is accepted as the most accurate valuation model. This inaccuracy can be caused by many factors, such as: time frame of valuation (Pike et al., 1993; Ingibergsson, 2007), effect of revenue forecast (Sivaramakrishnan and Rees, 2001; Bradshaw, 2004; Loh and Mian, 2005; Ertimur and Stubben, 2005), effect of interest rate (Frühwirth and Schweiger, 2004; Gode and Ohlsson, 2002), effect of cash flow (Fernandez, 2002; Barth et al., 2004; Ertimur and Stubben, 2005) and effect of high or low inflation (Ashton et al., 2007; O’Hanlon and Peasnell, 2002). The most common debate of valuation accuracy in academic area is between Discounted Cash Flow (DCF) and Residual Income Valuation (RIV). Multiple screenings (hereafter, MS), a valuation model that common for practitioners are seldom investigated because of its errors in appraising fundamental value (Pereiro, 2001). MS is widely practiced technique. It is very popular because of its simplicity concept. Unlike DCF and RIV, MS does not require cost of capital and multi-period forecasted financial data. Thus, MS has problem in differences of relative company’s value. It makes practitioner hardly to know which MS model is the best accurate model. There are three common models of MS which are Price Earnings Ratio (PER), Price to Book Value (PBV) and Price to Sales Ratio (PSR). Even though, there is remarkable practitioner interest in the best accuracy among MS models, the valuation accuracy in multiple screening is rarely investigated. Analyst do not notice which model of multiple screening is the best in evaluating the stock of emerging market. According to all these conditions, this study addresses the following question which multiple screening model is the best valuation model in term of accuracy? This study is important for practitioner, especially equity analyst. This study can assist equity analyst and (also) global portfolio manager in evaluating the stock from emerging markets as it will deliver the best multiple screening models that can be used for valuation. This study also contributes to body of knowledge, especially portfolio management and securities analysis. It delivers the best model of securities valuation in term of accuracy. It also delivers the suitable model to be employed in emerging markets such as Malaysia.

Literature review: Academic research about valuation focuses on DCF and RIV model. Research about multiple screening, especially measuring the valuation accuracy in emerging market is very rare. In other hand because of time constraints, analyst usually conducts multiple screening and rarely uses DCF or RIV. Therefore, there is

Corresponding Author: Rayenda Khresna Brahmana, School of Management, University of Science Malaysia, 11800 Minden, P. Penang, Malaysia