

# Grouping Emerging Stock Markets Based on Market Data<sup>†</sup>

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## Abstract

This paper uses cluster analysis, a multivariate statistical technique to classify emerging stock markets that have similarities into different groups. A number of key market data such as number listed companies, market capitalization, trading volume, turnover ratio, percentage change in price index, price-earnings (P/E) ratio, and market value-to-book value ratio are used. Analyses showed that the most important factors in grouping are market capitalization, trading volume, and turnover ratio. In addition to that, investable emerging markets and developed markets are clustered to see whether the same distinction is still valid in terms of market data. Analyses revealed that this distinction disappeared when the market data were taken into account. Based on these results, it is more appropriate to classify stock markets as large, medium or small markets; liquid markets, moderately liquid markets or illiquid markets as opposed to developed or emerging markets.

**Key Words:** *Emerging Stock Markets, Cluster Analysis, Portfolio Management.*

**JEL Classification:** *C 53, G 11, G 15*

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