

Stock Market Integration, Return Forecastability and Implications for Market Efficiency: A Panel Study

May 2002

Ronald J. Balvers
West Virginia University

and

Yangru Wu
Rutgers University
Hong Kong Institute for Monetary Research

Summary

Since the deregulation of financial markets started in the 1980s, the extent of international investments by investors worldwide has been steadily increasing. Investors now allocate a substantially higher proportion of their financial wealth in international assets than two decades ago. As equity markets are becoming more open globally, understanding the extent of market integration and the implications for market efficiency is of great importance for policy makers and investors. Employing a panel data set of stock market indexes for 18 countries from 1969-1999, this paper finds fairly strong evidence of market integration among national equity markets. A country's stock index price can be decomposed into a common trend (or world) component and a stationary country-specific component. Our results show that the 18 country indexes reverse to the world common trend with a speed of 18% per year, and that the Hong Kong market converges to other markets with a speed of 22% per year or a half life of around three years. The world common component and the country-specific component can be separately estimated using maximum likelihood. The country-specific component displays substantial variability and is found to have both mean reversion over the long horizon and momentum over the short horizon. A simple parametric trading strategy exploiting simultaneously mean reversion and momentum effects produces an excess return of 16.7% per year, which exceeds those of strategies based on momentum or mean reversion separately. The excess return is statistically significant, and cannot be explained by systematic risk factors or by transaction costs. The results seem to support the behavioralist overreaction view vis-à-vis an efficient markets view.