Macroeconomic influence on the stock market: Evidence from an emerging market in South Asia

Abeyrathna Gunasekarage[1], Anirut Pisedtasalasai[2] and David M. Power[3]

[1]Department of Finance,
Waikato Management School,
University of Waikato, Private Bag 1305, Hamilton, New Zealand.
[2]Department of Accountancy, Finance and Information Systems,
University of Canterbury, Private Bag 4800, Christchurch, New Zealand.
[3]Department of Accountacy and Business Finance,
University of Dundee, Dundee, Scotland, UK.
E-mail: abeyratna.gunasekarage@canterbury.ac.nz

This study examines the influence of macro-economic variables on stock market equity values in Sri Lanka. We use the Colombo all share price index to represent the stock market and (i) money supply, (ii) treasury bill rate (as a measure of interest rate), (iii) consumer price index (as a measure of inflation) and (iv) the exchange rate as macro-economic variables. We analyse monthly data for the above variables for the 12-year period from 1985:1 to 2001:12 employing a battery of tests, which include unit roots, co-integration, vector error correction models (VECM), impulse response functions (IRFs) and variance decompositions (VDCs). These tests examine both long-run and short-run relationships between the stock market index and the economic variables. The VECM analyses provide some support for the argument that the lagged values of macro-economic variables such as consumer price index, money supply and Treasury bill rate have a significant influence on the stock market. The Treasury bill rate demonstrates the strongest influence on price changes compared to other variables. However, the share price index does not have any influence on macro-economic variables except for the Treasury bill rate. Both VDC and IRF analyses revealed that shocks to economic variables explained only a minority of the forecast variance error of the market index; these effects did not persist for very long.

Key Words: Stock returns; Equity values; Econometric analysis; Sri Lanka