

Does an Augmented Fama and French (2015) Five Factor Model Work Better in Sri Lanka?

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ABSTRACT

Purpose: This research aims to empirically evaluate the effectiveness of an augmented Fama and French (2015) Five-Factor Model in explaining the variation of stock returns on the Colombo Stock Exchange (CSE) in Sri Lanka.

Design/Methodology/Approach: The study uses monthly data from April 2012 to March 2022, focusing on non-financial firms. The Newey-West heteroscedasticity and autocorrelation consistent estimator is employed to predict the applicability of the model. The empirical model tests the validity of seven factors including market factor ($R_m - R_f$), size factor (SMB), value factor (HML), profitability factor (RMW), investment factor (CMA), momentum factor (WML), and liquidity factor (IML). Factor mimicking portfolios for the Sri Lankan market are constructed following methods from Fama and French (2015) and Carhart (1997), with liquidity factor construction inspired by Chai, Faff, and Gharghori (2013).

Findings: The augmented five factor model is found to be applicable in Sri Lanka as the regression models are significant in almost all the cases. Yet, there is no significant improvement in the augmented model noticed in many regression portfolios with the addition of momentum and liquidity. The market premium found to be positive and significant in explaining the stock return variation in Sri Lanka and the influence of market premium on the cross-sectional variation of stock returns are very robust.

Practical Implications: The findings suggest that investors and financial analysts in emerging markets, such as Sri Lanka, can achieve better asset pricing predictions by incorporating liquidity and momentum factors into their models. This enhanced model could improve investment strategies, portfolio management, and risk assessment in such markets.

Originality value: This study contributes to the asset pricing literature by offering an empirical assessment of the augmented Fama-French Five-Factor Model in the context of an emerging market, particularly Sri Lanka. The unique inclusion of liquidity and momentum factors provides fresh insights into the model's applicability and performance in markets with distinctive characteristics.

Keywords: *Fama and French (2015) Five Factor Model, Momentum, Liquidity, CSE*