This study provide the comparison between traditional capital asset pricing model (CAPM) and downside risk-based CAPM (D-CAPM) developed by Estrada (2002) to assess whether downside beta better explains expected stock returns. For the application of CAPM model, one of the assumption is that expected returns follow the normal distribution, which usually not in case of emerging markets which are usually attributed as more volatile economies. In this case, semi-variance methodology seems more suitable and produce results that may be robust than traditional CAPM. For this purpose, study use monthly data of all listed stocks on BRICS and Pakistani stock markets, ranging from 2000 to 2017. Fama-Macbeth methodology has been used to drive the risk and returns relationship on all the stocks for both traditional CAPM and Semi-Variance CAPM. The results of study provides the evidence about the presence of positive relationship between the systematic risk (both traditional beta and downside beta) with expected return but downside beta is statistically more significant in most countries than traditional beta. Study recommend to apply downside CAPM for the estimation of cost of equity for these emerging countries but with more care as these models has still low prediction power and significant of residuals highlighted the importance of more factors than only beta.