

**AN ANALYSIS OF STOCK MARKET DATA TO PREDICT FUTURE
BEHAVIOUR**

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ABSTRACT

Equity markets throughout the world have now become one of the main forms of investment for many organizations and individuals ranging from large investment funds to the general public. As the performance of companies in general are tied to market conditions and the economic status of the country in which they operate, the price of shares of companies also fluctuate accordingly. As such, the very nature of the stock market is highly volatile.

Stocks are now a very popular form of investment as investors now tend to bear the additional risk for a higher return. Thus it is a matter of striking a balance between the risk undertaken, which is given by the volatility of the stocks that are invested in and the returns that are obtained.

The Sri Lankan market, though responsible only for a very small percentage in terms of the total equity traded globally, is no exception from world equity markets in terms of volatility. Therefore, it is important for the investor who's investing in the Sri Lankan stock market to make investment decisions to ensure a positive return for the risk he's undertaking.

This study has identified stocks that are responsible for the volatility in the market as a whole, thereby identifying them as more volatile, hence more risky stocks. Principal Component Analysis has been used in this study to reduce the dimensions of the data and also group stocks with similar behavioural patterns together.

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