5.2 Conclusion and recommendation

In present most of the investors tend to diversify their investments in order to mitigate the risk associated with the investments. Therefore, investors keen to exploit various ways to make accurate decisions. One of the objectives of the study is to analyse the interrelationship among stock returns, daily exchange rates and gold rates. as data collection was done in different points of time line it is recommended to use time series techniques to model the data. ADF unit root test provided sufficient evidence to use time series techniques on all three data sets. Subsequently ASPI return series was routed through Box-Pierce test and concluded that there are volatility clusters with asymmetry. Consequently, EGARCH and GJR GARCH model were used to derive the relationship among depended and independent variables whilst capturing leverage effect of the volatility clusters. As per the outcome of the model it is found that there is not relationship between stock returns and daily exchange rate in Sri Lankan stock market. In contrast existence of negative relationship between stock returns and daily gold prices was identified at 5% significant level. Moreover, it is shown that most recent past two days stock return values, have significant positive relationships with today's stock return value. Therefore, mean equation of the ERACH and GJR GARCH models comprise with three variables. As in reality most of the investors tend to use previous stock values in order to get a view on future behaviour of stock market. Thus output of the study depicted similarity with the actual scenario of the stock market. Further the relationship with previous day spot gold price emerged as significant in the model, because of the fact that investors tend to use previous day spot gold price in order to make decisions on today's investment. In addition, negative relationship between stock return and daily spot gold prices explained under general discussion. However, today's gold prices considered as a significant variable in measuring volatility as it appeared with a positive coefficient in variance equation of the GARCH models. Derived models are tested against its adequacy in order to forecast the future values of ASPI returns and found that three models naming Model I – EGARCH (1,1), Model III – EGARCH (1,1) (daily returns of spot gold price as a variable in variance equation) and GJR GARCH (1,1) are suitable to explain the behaviour of future stock returns.

Three models were tested in order to finalize the best model for forecasting with higher precision. Consequently, it was found that the forecast accuracy of model III is superior to other two models.

Further ASPI returns were forecasted for future data points using derived equations to prove the accuracy of the finalized model. In results, it was found, that the finalized EGARCH equation is capable of forecasting future ASPI returns with 60% accuracy.

5.3 Future Improvement Area

Subject research is to examine the stock market behaviour and derive a time series model, to forecast the behaviour of stocks using daily exchange rate and gold price. However, exchange rate and spot gold price are not only factors which impact on stock market behaviour, there can be many other factors such as company performance, industry performance, investor confidence, economic factors, political factors, financial factors and local and foreign investments. Hence, this research can be further developed by introducing above parameters in order to enrich the accuracy of forecasting stock returns.

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