

# ABSTRACT

The present study attempts to provide a systematic analysis of daily closing stock price of Fifteen Companies, Ibrahim Modaraba, Askari Commercial Bank, Nishat Mills, Ibrahim fibers, D.G.Khan Cement, Pak Tobacco, Shell, Sui Northern, PTCL, PIA, Fauji Fertilizer, I.C.I, Umer fabrics, Liver Brothers, Hub Power Co, by selecting each company from the different sectors which as fellows Modaraba COS, Textile Company, Poly Fiber, Cement & Building Prd, Tobacco, Petro & Oil Fields, Natural/Industrial Gas & LPG, Communication, Transportation, Fertilizer, Coating & Chemical, Textile Spinning, Food & Confect, Energy. In this analysis weekly averages of the daily prices are obtained and Box-Jenkins procedure is used. Stock Market Price prediction based entirely on past pattern of the stock prices. Different ARIMA models are used and better models are given. On the basis of different criteria one best model is selected for the short term forecasting of each company. The Box Jenkins Model building process of determining the final or best model is adopted. The assumption of stationarity is followed and to identify the best model two sets of statistic AC's and PAC's are used. At the next step estimates of the model parameters are derived. According to the process of validation, three components, residual diagnostic, parameter validation, and model validation are followed. To see the behaviour of residual the normal probability plot of residuals together with the plots of auto-correlation function and partial auto-correlation function are obtained which show that residuals are independently and normally distributed.

The basic objective of the study is to forecast the data under consideration by fitting the appropriate model. How can we bring some sense in the stock market and re-vitalize the confidence of the investing public? This will not come through statements but through real life acts. We have given a comparative study of these companies and provided a chance for planners of concerned companies to frame their future investment policies. Forecast should not be considered as being permanent or statistic. The dynamic nature of the market-place dictates that the forecast is always be subject to review, revision and discussion. Thus forecasting should be viewed as a multi step process.