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## FORECASTING BSE SENSEX MOVEMENT USING ARIMA MODELLING

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### ABSTRACT

*Forecasting the stock market movement is a challenging task the movement of stock market is influenced by many macroeconomic factors like GDP, inflation, exchange rate, unemployment rate. Beyond the performance of companies and investors sentiments will also influence the movement. The COVID 19 locks down scenario which prevailed all over the world and in India crashed the stock market. On 23<sup>rd</sup> March 2020 Sensex reached 25,981 points, which was the lowest during the year 2020 when first phase of lockdown was announced in India Global lockdowns, worldwide economic downturn and disruption in demand and supply affected financial markets all over the world. Indian financial market too experienced the same. On 30 May 2020 when nationwide lock down was lifted except in the containment zones, the gradual phase of recovery started from there on in the stock market movement. Given the unpredicted situation of stock market movement stock investors are badly losing their money in the stock market. Hence in this article an attempt has been made to forecast the stock market movement using (Auto Regressive Integrated Moving Average (ARIMA) modeling. To forecast the stock market movement BSE Sensex index data for the period from 1<sup>st</sup> January 2020 to 31<sup>st</sup> December 2020 has been taken. The data set taken for the study satisfied the ARIMA modeling conditions and provided a good forecast. Such forecasting modeling will enable the investors to make appropriate decision by gauging the stock market movement.*

**KEYWORDS:** *Stock Market Movement, Macro Economic Factors, Sensex, Arima Modeling, Forecasting.*

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