

**ABSTRACT** Inflation is the most discussed economic topic in professional circles and public debates since it affects everyone. Inflation is caused by a variety of factors, including an increase in aggregate demand, wage adjustments, exchange rates, increase in the budget deficit, expectations, consumption patterns, monopoly profits, and the price of imported commodities. If a price increase occurs across practically all goods and lasts for a long time, you may have grounds to believe inflation has arrived. Knut Wicksell was one of the first economists to propose the concept of stable pricing (1898). His concept arose from the growing relevance of prices as a metric for determining the value of a product. He claimed that if prices serve as a means of valuing commodities and services, then maintaining price stability is critical. The central bank, which has the ability to determine the interest rate, should supervise this. When the price level rises, the interest rate should be adjusted to counteract the rise in prices. In addition, when prices fall, the central bank should lower its interest rate. Currently Pakistan is facing a great fluctuations of inflation rate and it can be seen in the series employed in this thesis. As these instabilities are naturally non-stationary and deterministically chaotic, it is not a stress-free work to make a worthy forecast. We tried to model and forecast the monthly inflation rate of Pakistan with National spliced CPI (consumer price index) and we collect the data from the an authentic source —State Bank of Pakistan . Time series application is being used for forecasting from 2001M07 to 2021M02 with 236 observations in all. In the financial time series, the series mostly shows the non-stationarity and volatility of variance. Therefore to make the series stationary, difference transformation is employed and this impose ARIMA modeling then to remove volatility effect and presence of heteroscedasticity ARCH/GARCH time series procedures are being operated. When the volatility effect  $\sigma_t$  is removed, we operated ARCH model to predict the inflation rate as well as it established that the prophecy from 2002M08 to 2022M07 on the basis of ARCH modeling arrange for an enhanced outcome for Pakistan's inflation rate. The series deliver a good prophecy as its forecast observations has smallest difference with the actual values. One of the solution to inflation in Pakistan is the provision of autonomy to Pakistan's State Bank is also an optimistic step toward financial immovability and currency value reinstatement. The success of the recovery effort, confining monetary extension to the public sector for budgetary backing, and pulling down the loan rate through lowering the banking system's intermediation cost are all dynamics that influence the State Bank of Pakistan's performance.  (Ctrl) ▾