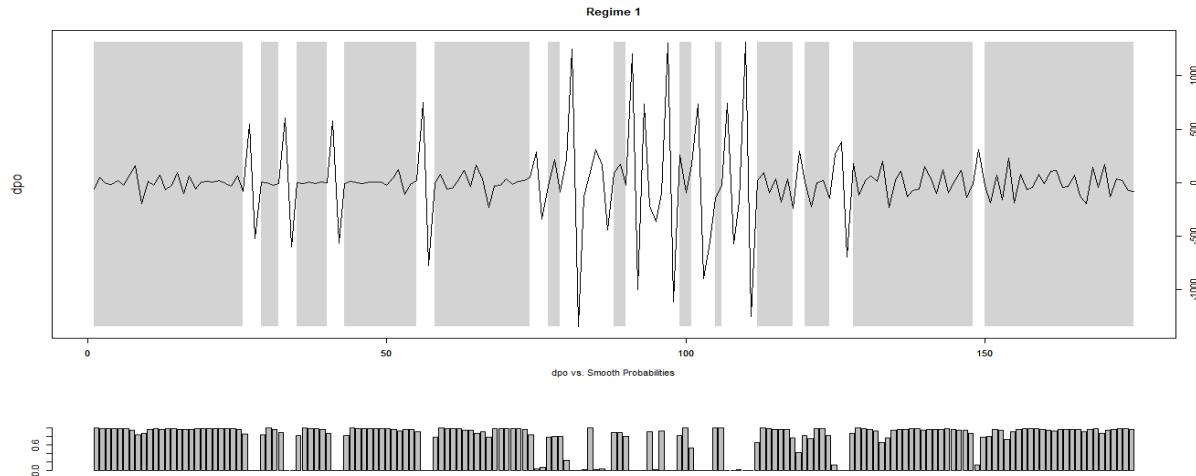Figure 4a: Figure 4b: Regime Classification Plot of violent deaths count based on regime 1.
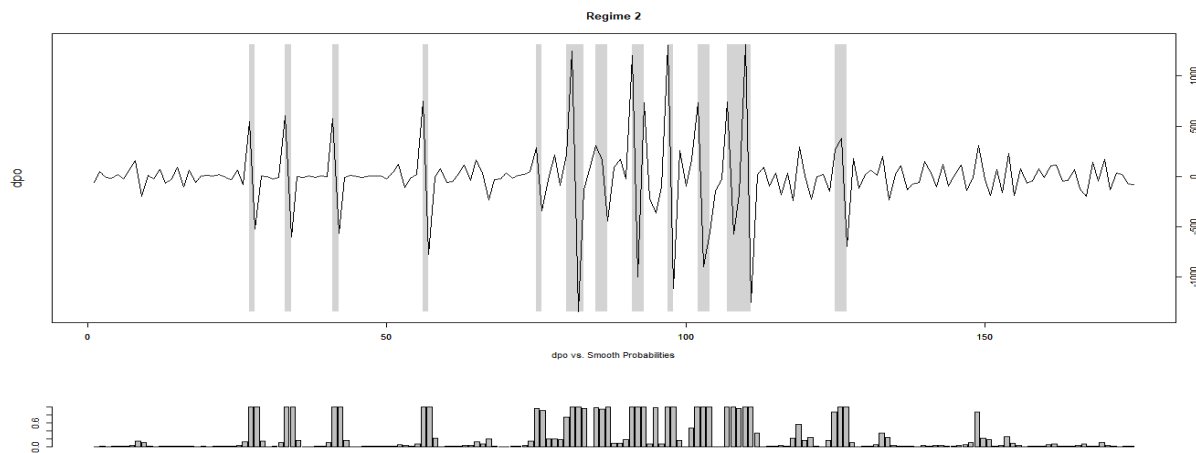

Figure 4b: Regime Classification Plot of violent deaths count based on regime 2.

Figure 4a,b reveal that over the period of study violent deaths count attributed to political issues have been more be classified by regime 1 suggesting a regular occurrence in the country. Hence, attention is expected to be drawn to this for assurance of citizens' safety for what has affected the economy in the past and present has every tendency to plaque the future of any economy, if adequate attentions are not drawn as and when due.

Predictive Analysis

The predictive analysis gives the diagrammatical representation of the ASHHM predictive plot which consists of the first differenced violent deaths series and its estimates (predicted).

For the prediction plots

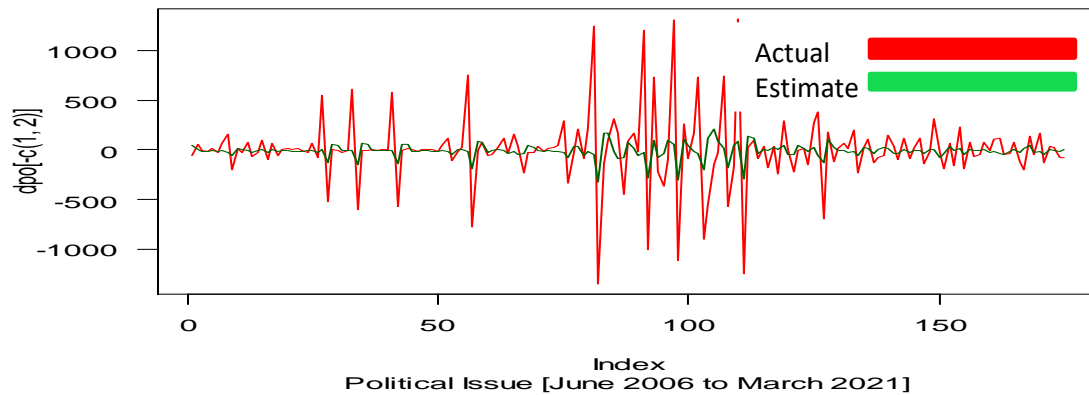**HMM Autoregressive Switching Prediction Plot [Regime 1]**

Figure 5a: Predictive Plot of violent deaths count attributed to regime 1 model.

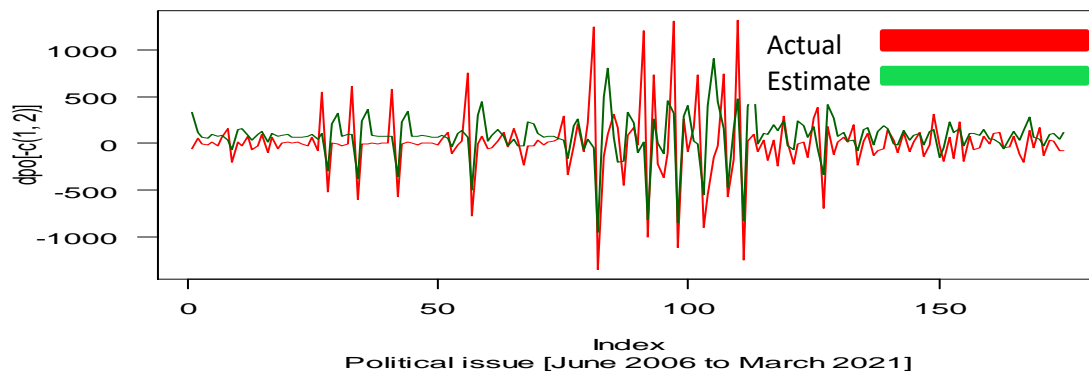**HMM Autoregressive Switching Prediction Plot [Regime 2]**

Figure 5b: Predictive Plot of violent deaths count attributed to regime 2 model.

Figure 5a,b give the predictive plot for violent death count attributed to political issue. Result shows that political issue could be better model with regime 2 due to its super-imposition on the actual death counts with almost the same fluctuation. This suggests that death count with respect to political issue is not just an illusion of regular but serious violence nature due to its peaks over the period of study. Hence, this helps draws the attention of the government and policy maker to ensure the rightful measures are in place for the safety of the citizens to be guaranteed before, during and after elections.

5.0   Discussion

Having carried out this research extensively on the basis of the underlying variable violent deaths count attributed to political issues, the following findings were discovered from the study. The time plot, trend analysis and ACF and PACF of violent deaths by causes established that the time plot for political issue suggests that the highest death count in this prospect was reported around 2014. From the trend estimation result, it is observed that for every one month step ahead the

number of violent deaths to be reported would increase by approximately 24 victims and this imply a significance positive trend with p-value (0.0006) > 0.05 level of significance on the basis of statistical test of individual parameter significance. The assumed order of the (AR, MA) is (1, 2) respectively.

Following from the test of normality using the Shapiro-Wilks and Jarque-Bera procedure, the observable violent deaths count was found non-normally distributed due to its nature as pre-known to be unforeseen and unintentional. The distribution of violent death on monthly basis was estimated using the Kruskal-Wallis test to be equally. On the basis of stationarity test, violent deaths by causes were found to be stationary using the ADF test and PP testing procedure.

The Hidden States and transition probabilities for individual observable deaths count using the Kalmar filter were estimated using the Gaussian mixture. All the estimated states were found to be feasible underlying the aforementioned mixture. The grand transition matrices for the states were estimated for violent deaths dynamics and result shows that the probabilities of transition for political issues are $P_{11} = 0.6010,\ P_{22} = 0.8674,\ P_{12} = 0.3990\ and\ P_{21} = 0.1326$ indicating that indicate that violence in Nigeria has higher chance of remaining in the non-regular but severe state due to estimation. Considering the HMMSA result, regime 2 explains a larger proportion of the variations in violent death attributed to political issues. The parameters of the HMMSA were found to be statistically significant at 0.05 level of significance except the case of [Regime 1, 2nd differenced series], which renders regime 2 a better model for monitoring the dynamics of variation inherent in violent death count attributed to political issue.

6.0   Conclusion

Violence deaths in Nigeria attributed to political issues have been established from this research to be more of being an irregular occurrence since it occurs with low magnitude majority of time though very fatal. In the light of this study, result has proven to us that the occurrence of violent death is non-normal and therefore should be monitored closely since it is seen as nothing but a social and economic problem. Political issues are identified to be threats to the lives of citizens since violence attributed to them are very likely to claim the lives of people unexpectedly in Nigeria and depletion of the human population is relatively depletion of the economy.

7.0   References

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