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Agriculture commodity price has a history of high degree of volatility, which posed continuing economic problems for commodity dependent countries. The global fluctuation in the pepper price brings uncertainty in the income of the farmers involved. The pepper price volatility causes uncertainty to producers causing a mismatch between supply and demand. Price fluctuation encourages unhealthy speculation among exporters and importers causing market inefficiency. The above problem motivates the study in this area so that some solution can be obtained to resolve the problem encountered by the pepper producers. This thesis, studies the price volatility of Sarawak pepper price at Kuching and New York spot market from 1977 to 2013 with the main objectives of selecting the best fit model to model Sarawak pepper price series at Kuching and New York spot markets and finally to determine the most accurate model used to forecast the pepper price series. This study analyses the pepper price volatility which is vital to understand the trend in the price cycle both at the domestic and international markets so that a well-planned and strategic marketing policy can be formulated to reduce the risks in the industry that will benefit the producers especially the small pepper farmers in the long run. ARIMA (1,1,1) model is a good model to model Sarawak black and white pepper at Kuching and New York spot markets. Unfortunately, this model failed to fulfill the white noise assumption which point to a higher order model to model all the four Sarawak pepper price series. The best fit model to capture the asymmetry effect and volatility persistence of Sarawak pepper price series black and white pepper at Kuching and New York spot market is the GARCH (1,1) model. The finding shows that positive shocks increase the volatility more than the negative shocks. This indicates that positive shocks have asymmetric effect on the volatility of Sarawak black and white pepper price at Kuching and New York spot market. In addition, the positive shocks have high degree of persistence on the volatility of Sarawak black pepper prices at Kuching and New York spot markets. This information is vital to sellers and producers in their marketing strategy and long term planning. The most accurate model to forecast Sarawak black pepper price at Kuching market is the GARCH (1,1) model while EGARCH model is the most accurate model to forecast Sarawak white pepper at Kuching spot market and Sarawak black and white pepper price at New York spot market. This thesis also analyses the effect of structural shock on all four Sarawak pepper price series. Based on the findings, it shows that structural shock influences the best fit model to accommodate the structural shocks brought in by the entry of new producers in the market. In addition, all four Sarawak pepper price series are found to have seasonal effect based on Seasonal ARIMA model. Based on these findings, traders and producers should take into account the seasonal influence on the price volatility in their marketing strategy. The release of stock from the different origin will influence the pepper price in the market.

This research attempts to create a model that establishes the crucial aspects that affect the adoption decision of home grown medical technology (HGRMT) in developing countries. In this study, the proposed integrated model includes four key groups of factors: organizational factors, technological innovation factors, environmental factors based on TOE model Tornatzky et al (1990) enhanced with IDT theory Roger (1983), and individual factors based on intention based theories, particularly, TAM by Davis et al. (1989). This model proposes that there is a direct relationship between the mentioned factors and the adoption of HGMT in healthcare firms. A quantitative research methodology was applied in this research, with SEM as a tool of data analysis. Some of 40 Malaysian hospitals were randomly selected to collect the data using questionnaire. The empirical findings obtained from this study revealed that five out of eight suggested variables in the model namely, organizational readiness, compatibility, social networks, government support, manager’s attitude were significant contributors to the adoption of HGRMT. The results concluded that there were no significant relationships between top management support, perceived ease of use, perceived relative advantages and adoption of home grown medical technology. Moreover, the mediating effect of manager’s attitude upon the technological attributes was tested and the findings revealed that the manager’s attitude mediates the relationship between the compatibility and the adoption of home grown medical technology. Similarly, the moderating effect of hospital size upon the relationship between manager’s attitude and the adoption of home grown medical technology was investigated and the findings showed that hospital size has no effect on the relationship between the two mentioned variables. This research provides critical theoretical and practical efforts within the field of technology adoption on developing counters by concentrating on the effect of technological, organizational, environmental and personal factors to the adoption locally produced medical technology.