

CHAPTER V

CONCLUSION

5.1 Conclusion

This study concludes that FOMC news has different effects on financial market volatility across asset classes. The S&P 500, IHSG, gold, and Bitcoin do not respond in the same way because each asset has different market characteristics, investor behavior, and sensitivity to global monetary policy information. The use of the EGARCH model is appropriate because the return data show non normal distribution, fat tails, ARCH effects, and time varying volatility. These characteristics indicate that volatility changes over time and reacts to previous shocks, so a volatility model is needed to capture the risk behavior of each asset.

The results show that FOMC news has a positive and significant effect on the volatility of the S&P 500 and gold. This means that FOMC announcements create higher uncertainty in the United States equity market and the gold market. The S&P 500 reacts because it is directly connected to United States monetary policy, especially through changes in interest rate expectations, discount rates, liquidity conditions, corporate earnings expectations, and market risk. Gold also reacts significantly because FOMC news affects investor expectations about real interest rates, inflation, and safe haven demand. These findings support the Efficient Market Hypothesis and information signaling theory because both markets respond to FOMC announcements as important public information and policy signals.

Meanwhile, FOMC news does not have a statistically significant effect on IHSG and Bitcoin volatility. For IHSG, the insignificant result suggests that the effect of FOMC news may be indirect and may depend on other factors such as foreign capital flows, rupiah exchange rate movements, domestic policy, and local market conditions. For Bitcoin, the insignificant result indicates that Bitcoin does not always behave like traditional financial assets when responding to monetary policy

announcements. Its volatility may be more strongly influenced by crypto specific factors such as market sentiment, liquidity, leverage activity, regulatory news, and internal cryptocurrency market dynamics. Overall, this study shows that FOMC announcements are important information events, but their impact depends on the characteristics of each asset class.

5.2 Research Implications

The findings of this study provide several implications. The findings of this study provide several theoretical, methodological, and practical implications. Overall, the results indicate that FOMC announcements do not affect all asset classes in the same way. The significant effects on the S&P 500 and Gold, combined with the insignificant effects on IHSG and Bitcoin, show that the impact of monetary policy information depends on the characteristics of each market, the type of asset, and the transmission channel through which investors process policy-related information.

From a theoretical perspective, this study contributes to the development of financial theory, particularly within the framework of Arbitrage Pricing Theory (APT). FOMC news represents a macroeconomic information factor that may influence financial-market risk through interest-rate expectations, liquidity conditions, and investor risk perception. The results show that the effect of FOMC news is not uniform across asset classes. The S&P 500 and Gold show significant volatility responses, while IHSG and Bitcoin do not. This finding indicates that the effect of macroeconomic information is contextual and asset-specific. Therefore, this study enriches the literature by showing that different financial assets may respond differently to the same macroeconomic information event.

From a methodological perspective, this study supports the use of EGARCH for analyzing financial-market volatility around policy announcement events. The descriptive statistics, ARCH-LM test, and EGARCH parameters show that the return series contain time-varying volatility, volatility persistence, and asymmetric

responses to shocks. These characteristics cannot be fully captured by a simple linear model. Therefore, EGARCH provides a more suitable framework for examining how market risk changes around information events such as FOMC announcements.

From a practical perspective, the findings imply that investors and portfolio managers should pay attention to FOMC announcement dates, especially when managing exposure to the S&P 500 and Gold. The positive and significant FOMC dummy coefficients indicate that these two assets experience higher conditional volatility around FOMC announcement periods. Therefore, investors in these markets may need to adjust position size, hedging strategies, leverage exposure, and risk limits when approaching scheduled FOMC announcements.

For S&P 500 investors, the significant result indicates that the United States equity market is sensitive to Federal Reserve monetary policy communication. This implies that equity investors should monitor FOMC announcement schedules because changes in interest-rate expectations, discount rates, liquidity conditions, and risk premiums can increase market uncertainty. For Gold investors, the result implies that Gold should not always be treated as a stable safe-haven asset during macroeconomic announcements. Although Gold may function as a hedge in certain conditions, its volatility can still increase when investors reassess real interest rates, inflation expectations, and future monetary policy direction.

For IHSG investors, the insignificant result suggests that official FOMC announcement dates alone do not directly explain IHSG volatility in this model. This does not mean that the Indonesian stock market is isolated from global monetary policy. Rather, it implies that the effect of FOMC news on IHSG may be indirect and may depend on other channels, such as foreign capital flows, rupiah exchange rate movements, global risk sentiment, domestic policy, and local market conditions. Therefore, investors in the Indonesian stock market should combine global monetary policy information with domestic market indicators when assessing volatility risk.

For Bitcoin investors, the insignificant result indicates that Bitcoin does not always respond to FOMC announcements in the same way as traditional financial assets. This suggests that the FOMC announcement dummy alone may not be sufficient to explain Bitcoin volatility during the observation period. Bitcoin volatility may also depend on crypto-specific factors, such as market sentiment, exchange liquidity, leverage activity, regulatory news, and internal digital-asset market dynamics. Therefore, Bitcoin investors should not rely only on macroeconomic announcements when assessing Bitcoin risk.

The findings also provide implications for market observers and policymakers. Since the S&P 500 and Gold show significant volatility responses to FOMC announcements, these markets can be monitored more closely around major policy communication events. For emerging markets such as Indonesia, the insignificant direct effect suggests that external monetary policy news should be interpreted together with domestic financial indicators. This implication is useful for understanding how global policy information may or may not translate into local market volatility.

The asymmetric volatility results provide practical implications for risk management. Investors in the S&P 500 and IHSG should assign greater attention to adverse return shocks because negative innovations generate stronger subsequent volatility than positive innovations of the same magnitude. In the gold market, positive return shocks may also be accompanied by relatively large increases in uncertainty, indicating that upward price movements should not automatically be interpreted as low-risk conditions. Although Bitcoin does not exhibit statistically significant directional asymmetry, it has the highest volatility persistence coefficient. Therefore, volatility shocks in the Bitcoin market may remain influential for a longer period, requiring more conservative position sizing, liquidity management, and risk limits.

The implications of this study show that FOMC news is an important financial information event, but its volatility effect is asset-specific. S&P 500 and Gold

investors need stronger event-based risk management around FOMC announcements, while IHSG and Bitcoin investors need to consider additional domestic or market-specific factors. Academically, the study strengthens the relevance of EGARCH as a model for analyzing conditional volatility in different asset classes.

5.3 Research Limitations

This study has several limitations that should be considered when interpreting the results.

- 1) This research uses daily closing price data. Daily data can capture general volatility movements, but it may not fully capture short term market reactions that happen within a few minutes or hours after FOMC announcements. This limitation is especially relevant for Bitcoin, because Bitcoin is traded continuously for 24 hours. As a result, intraday reactions to FOMC news may not be fully reflected in the daily return data.
- 2) This study measures FOMC news using a dummy variable. The dummy equals 1 on FOMC announcement days and 0 otherwise. This approach is useful to identify whether announcement days affect volatility. However, it does not distinguish the content of the announcement. The model does not separate hawkish announcements, dovish announcements, expected policy decisions, unexpected policy surprises, regular meetings, or emergency meetings. Therefore, the dummy variable only captures the presence of FOMC news, not the strength or direction of the information contained in the announcement.
- 3) This study does not include additional macroeconomic or market control variables. Variables such as inflation, interest rate changes, exchange rates, VIX, foreign capital flows, liquidity indicators, and domestic policy announcements may also affect volatility. This limitation is important for IHSG because the Indonesian stock market may respond to FOMC news through indirect channels, such as rupiah

exchange rate movements and foreign investor flows. Without these control variables, the model focuses only on the direct effect of FOMC announcement days.

4) The study uses an asset specific calendar approach. This approach provides a more accurate representation of each market because the S&P 500, IHSG, gold, and Bitcoin have different trading structures. However, this also means that the number of observations differs across assets. Therefore, the comparison across assets should be interpreted carefully. The results show how each asset responds based on its own market calendar, but they do not represent a perfectly identical observation window across all assets.

5) The study only uses the EGARCH(1,1) model. EGARCH is appropriate because it can capture volatility persistence and asymmetric responses to shocks. However, other volatility models such as GJR-GARCH, TGARCH, APARCH, or multivariate GARCH may produce different results. This study also estimates each asset separately, so it does not measure volatility spillovers or dynamic correlations between assets. Therefore, the results only explain the volatility response within each individual asset market.

5.4 Suggestion For Future Research

Based on the limitations of this study, several recommendations can be proposed for future research.

1) Future studies are recommended to use intraday data to capture immediate market reactions around FOMC announcements. Intraday data can provide a more precise understanding of how quickly financial markets respond to monetary policy information.

2) Future research should classify FOMC announcements into more specific categories, such as hawkish, dovish, expected, unexpected, expansionary, or contractionary announcements. This classification would allow researchers to

examine whether different types of FOMC information produce different volatility responses across asset classes.

3) Future research are encouraged to include additional macroeconomic and financial control variables. Variables such as inflation, exchange rates, VIX, interest-rate surprises, capital flows, and domestic market indicators may improve the explanatory power of the model. These variables can help distinguish the effect of FOMC announcements from other factors that also influence market volatility.

4) Future research may apply alternative volatility models, such as GJR-GARCH, TGARCH, APARCH, or multivariate GARCH models. In particular, DCC-GARCH or BEKK-GARCH can be used to examine volatility spillovers and dynamic correlations between assets. This approach would provide a broader understanding of whether volatility shocks in one market are transmitted to other markets.

5) Future studies can expand the asset sample by including other financial instruments, such as bonds, exchange rates, oil, sectoral stock indices, technology stocks, or other cryptocurrencies. A broader asset sample would allow researchers to compare the impact of FOMC announcements across more diverse financial markets.

