CHAPTER V
CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study analyzes the effects of Gross Domestic Product, the Real Effective Exchange Rate, inflation, and real interest rates on Indonesia's IHSG and Malaysia's KLCI using the ARDL approach with annual data from 1994 to 2024. Based on all estimation and testing stages conducted, this study yields the following conclusions.

There is a long-run equilibrium relationship (cointegration) between macroeconomic variables and stock indices in both countries. The results of the F-Bounds Test yielded an F-statistic value of 12.7792 for the IHSG model and 7.4451 for the KLCI model, both of which exceeded the critical upper bound for I(1) at a 5 percent significance level. These findings confirm that GDP, inflation, the REER, and the RIR have stable long-run relationships with the IHSG and the KLCI, meaning that short-run deviations from equilibrium will always be corrected toward equilibrium in the long run.

Based on the tests of H1a and H1b, both hypotheses are accepted: GDP has a positive and significant effect on the IHSG in the long run and on the KLCI in the long run. In the short run, GDP is significant only for the KLCI through D(GDP_LN), while it is not significant for the IHSG; this indicates that the transmission of economic growth to the IHSG is more long-term in nature. The long-term elasticity of GDP with respect to the IHSG is higher than that with respect to the KLCI, indicating that the Indonesian stock market responds to economic growth more than proportionally, consistent with the APT ((Ross, 1976) and Gordon's Fundamental Value Theory from 1962 (as cited in Guglielmo D'amico

and Blasis, 2020) , which explains that GDP growth increases expectations of future cash flows and drives an increase in the intrinsic value of stocks.

Based on the H3a test, the hypothesis was partially rejected: inflation has a significant effect on the IHSG in the long run, but the direction is positive contrary to the predicted negative effect. In the short run, D(Inflation) is not significant for the IHSG, so H3a was also rejected for the short run. Based on the H3b test, the hypothesis was rejected; the long-term coefficient of inflation on the KLCI was negative as predicted but did not reach statistical significance in the Levels Equation test. The positive long-term effect of inflation on the IHSG can be explained by the Fisher Effect, as proposed by Fisher in 1930 (as cited in Phiri, 2023) in the long run, companies in Indonesia are able to pass on the burden of inflation to consumers, thereby increasing nominal income, and stocks function as a hedging instrument. Meanwhile, the negative relationship between inflation and the KLCI remains conceptually consistent with the interest rate transmission mechanism of monetary policy (Mishkin., 2019) and Fama's Proxy Hypothesis proposed by Fama in 1981 (as cited in Neville et al., 2021). The difference in the inflation-IHSG and inflation-KLCI patterns remains one of the interesting comparative findings in this study, although the statistical evidence for the KLCI is not strong enough to conclude a definite relationship.

Based on the test of H2a, the hypothesis was rejected, indicating that the REER does not have a significant effect on the IHSG in either the long or short term. Based on the test of H2b, the hypothesis was rejected, indicating that the REER has a positive and significant e effect on the KLCI in the long term; this contradicts the hypothesis predicting the opposite direction, although the

significance is marginal and does not carry over to the short term. This difference reflects varying levels of economic openness: Indonesia, with a trade-to-GDP ratio of approximately 43 percent, has a more domestically oriented economy, so variations in the REER do not substantially translate into changes in the IHSG; conversely, Malaysia, with a trade-to-GDP ratio of approximately 132 percent, is more sensitive to changes in real competitiveness, consistent with the stock-oriented model by Branson and Frankel (1981), supported by research from the (Husni & Mustaffa, 2025) .

Based on the test of H4a, the hypothesis was rejected for the long term, indicating that the real interest rate (RIR) is not significant for the IHSG in the long term. However, H4a was partially accepted for the short term, where D(RIR) has a significant negative effect on the IHSG and D(RIR(-1)) is also significantly negative, suggesting that the impact of the real interest rate on the IHSG is more short-term in nature. Based on the H4b test, the hypothesis is rejected: RIR does not reach the 5 percent significance level for the KLCI in the long run, nor does it come close to the 10 percent significance threshold. In the short-term dynamics, only D(RIR(-1)) approaches significance at α=10 percent; however, its direction is positive, contrary to the predicted negative effect and thus cannot serve as a basis for accepting the hypothesis, even partially. The lack of significance of RIR for the IHSG in the long term is partly explained by the extreme volatility of Indonesia's real interest rates, which weakens the statistical estimates in the long-term time series data.

Based on the H5 test, there is a significant difference in the magnitude of the long-run elasticity of macroeconomic variables between the IHSG and the KLCI,

although the strongest statistical evidence is found for the GDP variable. The elasticity of GDP relative to the IHSG, at 1.4401, is more than 1.5 times the elasticity of GDP relative to the KLCI, at 0.8695, with both coefficients being statistically significant in both markets. Thus, the comparison of magnitudes for this variable is statistically the most robust and confirms that the Indonesian stock market responds to economic growth more than proportionally compared to Malaysia. For the REER and inflation, differences in magnitude must be interpreted with greater caution because neither coefficient is statistically significant in both markets: the REER is significant only for the KLCI, while inflation actually shows opposite directions of influence between the IHSG and the KLCI; thus, comparing the magnitude of the coefficients for these two variables is not an appropriate basis for strong conclusions. Meanwhile, the RIR does not provide a sufficient basis for comparing magnitudes because its two long-term coefficients are not statistically significant in either market. Thus, the acceptance of H5 primarily relies on the statistically robust difference in GDP elasticity, whereas for the REER, inflation, and RIR, caution is required in interpreting these differences in magnitude.

Based on the test of H6, there is a significant difference in the speed of adjustment between the IHSG and the KLCI. The IHSG's ECT of -0.6390 indicates a 63.90 percent annual corrected deviation with a recovery time of approximately 1.6 years, while the KLCI's ECT of -0.4117 suggests a slower recovery of about 2.4 years. The interpretation of the ECT is limited to the dimension of the speed of adjustment that is, how quickly each index returns to long-term equilibrium following a macroeconomic shock. The IHSG requires a shorter correction period

than the KLCI, indicating a significant difference in the structural dynamics of adjustment between the two capital markets.

Overall, based on the results of testing the six research hypotheses, it can be concluded that: (H1) GDP has a significant positive effect on both indices with different elasticities. (H2) The REER is significant only for the KLCI, not for the IHSG. (H3) Inflation has a positive and significant effect on the IHSG, but its effect on the KLCI although negative in direction as predicted is not statistically significant. (H4) The RIR has a significant negative effect on the IHSG only in the short term, not in the long term. Furthermore, (H5 and H6) there are substantive differences in the magnitude of elasticity and the speed of adjustment between the IHSG and the KLCI. All of these findings fall within the scope of the variables and hypotheses established at the outset of the study and confirm that the transmission mechanisms of macroeconomic variables operate differently on the IHSG and the KLCI, consistent with the differences in the structural characteristics of the Indonesian and Malaysian economies.

5.2 Recommendations

Based on the research findings, the following recommendations are presented for the three main stakeholder groups.

5.2.1 For Investors and Capital Market Participants

The study's findings have practical implications for investors in designing cross-market portfolio allocation strategies within ASEAN. The following recommendations can be drawn from the findings.

1) Investors allocating funds to the Indonesian stock market should pay attention to GDP growth data as a key indicator of long-term movements in

the IHSG, given that the elasticity of GDP relative to the IHSG is 1.44, a figure that is more than proportional. Quarterly economic growth reports from the Central Statistics Agency (BPS) and the World Bank can serve as anticipatory signals for investment decisions.

2) Investors in the Malaysian market should pay closer attention to REER data, as this variable has been shown to significantly influence the KLCI over the long term, albeit with marginal statistical strength. A significant appreciation of the REER could signal the need to monitor potential pressure on the export sector, which dominates the KLCI's composition.
3) The IHSG's faster adjustment speed compared to the KLCI indicates that the IHSG returns to equilibrium more quickly after a shock, but is also more vulnerable to short-term volatility. Investors with a moderate risk profile seeking long-term stability may consider diversifying their portfolios by combining exposure to the IHSG and the KLCI to take advantage of the differing volatility characteristics of the two markets.
4) The difference in the two indices' sensitivity to real interest rates needs to be examined in the context of changes in global monetary policy. The IHSG's higher responsiveness to real interest rates in the short term suggests that investors in Indonesia need to be more vigilant regarding short-term monetary policy changes, whereas for the KLCI's , this study did not find sufficiently strong statistical evidence that changes in real interest rates directly influenced its movements during the 1994–2024 observation period.

5.2.2 For Policymakers

The identified differences in macroeconomic transmission mechanisms have important implications for policy formulation in each country.

1) Bank Indonesia needs to consider that monetary policy through interest rate instruments has a more pronounced effect on the IHSG in the short term than in the long term. In the long term, sustainable GDP growth is the dominant factor determining the direction of the IHSG; therefore, policies that promote structural economic growth such as increasing investment, productivity, and industrialization will be more effective in maintaining the stability and growth of Indonesia's capital market.
2) Bank Negara Malaysia needs to continue maintaining price stability as part of its overall macroeconomic policy, even though this study did not find sufficiently strong statistical evidence that inflation directly affects the KLCI in the long term during the 1994–2024 observation period. A commitment to price stability is not only crucial for preserving public purchasing power but also contributes to capital market stability by managing investors' inflation expectations and maintaining a stable discount rate.
3) Given the significance of the REER for the KLCI but not for the IHSG, Malaysian monetary authorities need to focus on managing the real effective exchange rate as part of a financial market stabilization strategy, particularly in the context of export competitiveness and the attractiveness of foreign direct investment, which influence investor confidence in the Malaysian stock market.

4) For capital market authorities in both countries, the difference in the pace of ECT adjustment between the IHSG and the KLCI highlights the need for distinct market stabilization mechanisms. Indonesia requires more responsive circuit breaker mechanisms and volatility management, while Malaysia can leverage a more gradual adjustment process to design more planned stabilization policies.

5.2.3 For Further Research

This study has several limitations that open opportunities for further research.

1) This study uses annual data comprising 31 observations. Future research may consider using higher-frequency data, such as monthly or quarterly data, to obtain richer estimates of short-term dynamics and detect lag effects with greater precision, particularly in the context of stock market responses to macroeconomic data announcements.
2) The scope of the analysis could be expanded to include all member countries of ASEAN-5 or ASEAN-7 using the ARDL Panel or Pooled Mean Groups approach to capture cross-country heterogeneity more systematically and determine whether the differences in transmission mechanisms identified in this study represent a broader phenomenon across the ASEAN region.
3) Although CUSUM and CUSUM of Squares tests were conducted to verify the overall stability of the parameters, this study did not explicitly identify structural break points based on specific dates. Future research could apply the Chow or Bai-Perron tests to formally identify the dates of structural changes, particularly around the crisis periods of 1998, 2008, and 2020.

4) The independent variables in this study are limited to four macroeconomic variables. Future research could enrich the model by adding variables such as global commodity prices, investor confidence indices, foreign capital flows, and regional financial integration indicators to obtain a more comprehensive picture of the determinants of stock indices in ASEAN.
5) This study employs a single-country model approach. Further research could develop a system of simultaneous equations or a Global VAR model that explicitly models spillover interactions among ASEAN capital markets, thereby quantifying the extent to which macroeconomic shocks in one country are transmitted to the stock indices of other countries in the region