## **CHAPTER 5**

## CONCLUSION AND RECOMMENDATION

## 5.1 Conclusion

The research presents a detailed analysis of the Intra-Industry Trade (IIT) index and its determinants among the BRICS nations, focusing specifically on Indonesia's trade relationships. According to the Grubel-Lloyd (GL) index, industries with a GL index greater than 50% are classified as Intraindustry Trade. In 2018, the number of industries participating in IIT included 14 industries between Indonesia and Brazil, 11 between Indonesia and China, 29 between Indonesia and India, 10 between Indonesia and Russia, and 9 between Indonesia and South Africa. In total, 42 industries were engaged in IIT across Indonesia-BRICS partnerships. By 2023, the figures showed some changes: 20 industries between Indonesia and Brazil, 10 between Indonesia and China, 25 between Indonesia and India, 9 between Indonesia and Russia, and 12 between Indonesia and South Africa, totalling 41 industries involved in IIT. Although there is a slight decrease in the total number of industries engaging in intra-industry trade for Indonesia and BRICS, from 43 total industries to 41 total industries. However, for individual countries there is a slight increase in total industries, such as Indonesia to Brazil from 14 to 20 industries, highlighting the evolving trade conditions and potential economic integration among these countries. The industry that has the most intra-industry activities are on SITC 6 with 14 industries, which is manufactured goods in 2018. Whereas in 2023, the most number of industries classified as intra-industry trade is SITC 5 (Chemicals) with 16 industries.

When talking about the classification of intra-industry trade itself, there is Horizontal Intra-industry Trade (HIIT) and Vertical Intra-industry Trade (VIIT). What we are looking for is the IIT that is classified as HIIT, which

means that the traded imports and exports are composed of products of the same quality. In 2018, there were 8 industries that were classified as HIIT, with most being in SITC 0 (Food), SITC 6 (Crude materials), and SITC 7 (Machinery and Transport Equipment. The countries were mostly from India and China. By 2023, there was an increase of 17 industries with HIIT classifications, with 5 of the industries in SITC 5 (Chemicals).

Now let's look into the dynamic calculations of intra-industry trade, which is through Marginal Intra-industry Trade (MIIT). The dynamic analysis shows from the A index that during the study period, intra-industry trade between Indonesia and BRICS have been accelerated, with Indonesia increasingly integrated with BRICS. India is the most integrated with Indonesia with 28 industries classified as intra-industry trade from the MIIT A index calculations. For the B index, there were 55 industries categorized as intra-industry trade while there were 45 with inter-industry trade from the SITC double digits.

The study goes deeper into the factors that influence IIT in the BRICS nations, designating IIT as the dependent variable and average per capita income, relative difference in per capita income, average economy size, distance, trade imbalance, and trade orientation as the independent variables. The empirical results revealed that the average per capita income, relative difference in per capita income and average economy size do not significantly influence IIT or the Grubel-Lloyd index. However, distance and trade orientation were found to have significant effects on IIT. Consequently, the study confirms hypotheses 5, and 6, while rejecting hypotheses 1, 2, 3, and 4.

In conclusion, this research highlights the nature of intra-industry trade between Indonesia and the BRICS nations, demonstrating that while some economic factors do not significantly impact IIT, others such as economy size, distance, and trade orientation play crucial roles. The observed growth in the number of industries involved in IIT from 2018 to 2023 suggests an increasing trend in economic integration and trade diversification among these nations.

# **5.2 Implication of Research Results**

This research has several facets and yields important insights for policymakers, economists, and business strategists. Our findings point to a clear picture: to increase IIT among BRICS member countries, it is necessary to raise the average size of their economies; (in comparison with the average size of the economies of the developed countries); lower trade barriers among countries to allow for smoother trade; and, of course, dealing with the impact of distance on trade costs (in which we could possibly apply to join BRICS or increase trade agreements with other countries). ANDALA

The second significant finding is that relative differences in per capita income do not significantly influence IIT. This means that disparities in income between trading partners spread over a wide range are not as important as was previously thought for determining the nature of trade between those partners. That is, "rich" countries and "poor" countries can and do trade with one another in a way that is beneficial for both. And this finding can have a direct influence on trade policy, by encouraging countries with these kinds of income disparities to form trade partnerships.

The trend over the past several years shows the diversification of the Indonesian economy away from dependence on a limited number of industries. That diversification promises to ease Indonesia's integration into the global economy as cutting-edge global players become more and more involved in Indonesian industries. The past five years have seen the Indonesian economy become more and more attractive to the BRICS industrial nations (Brazil, Russia, India, China, and South Africa).

## 5.3 Research Recommendation

Several recommendations can be made to boost intra-industry trade (IIT) between the BRICS countries and, specifically, to direct Indonesia's trade policy and economic strategies, based on the findings from this research.

- (1) Indonesia needs to concentrate on enacting policies that will eliminate obstacles to economic growth and that will increase the economy size. That means some investments and some changes; the investments should be in infrastructure, education, and technology, and the productivity and competitiveness should be enhanced in those three areas.
- (2) Reducing trade barriers and enhancing trade orientation is crucial. Indonesia should work towards simplifying customs procedures, reducing tariffs, and negotiating trade agreements that promote market access.

In terms of Indonesia's potential BRICS membership, the research indicates a trend toward increasing economic integration and industrial diversification among BRICS countries. Indonesia could derive a number of benefits from potential membership in BRICS. The group is headed toward greater economic integration, and perhaps even better industrial cooperation, among its members. This trajectory could create for Indonesia an enhanced platform to utilize BRICS as a partner in accessing an array of economic benefits, such as larger market opportunities and more foreign direct investment, almost as if BRICS were a "gate opener" to the economies of countries in the group. The Indonesian government is crafting this perspective in the context of the country's current economic vision, which emphasizes greater trade and investment with partners not fully integrated into the global commons, and BRICS countries would fit the bill quite nicely.

## 5.4 Research Limitation

This study's major limitation is bounded by data constraints. Unfortunately, obtaining annual data from 2018 to 2023 wasn't possible because many relevant databases have access restrictions and are not open access. So, aggregate trade data for 2018 and 2023 served as the principal basis

for the analysis, rather than a comprehensive year-by-year breakdown. To address this limitation, it is recommend that future research seek either database access or collaboration with institutions that have database access to obtain the more continuous and granular data that would have made this study much richer. But even then, it would help if future researchers would expand the dataset to include different variables and time periods to analyze the accuracy of the study's principal argument.

