

CHAPTER 1

INTRODUCTION

1.1 Background

In the ever-evolving landscape of global trade, the phenomenon of intra-industry trade (IIT) has emerged as a constant trend shaping the economic interactions among nations. Globalization has reshaped global trade patterns, creating pathways for the internationalization of production networks that transcend borders. The exponential surge in trade is intricately tied to the concept of specialization, wherein consumers actively pursue "product variety" or indulge in a "love for diversity" (Vidya & Prabheesh, 2019). The IIT levels and performances are measured by Grubel & Lloyd (1975) index. Intra-industry trade involves international trade occurring within the same industry rather than between different industries. This type of trade is more advantageous than inter-industry trade because it encourages innovation and takes advantage of economies of scale (Ruffin, 1999).

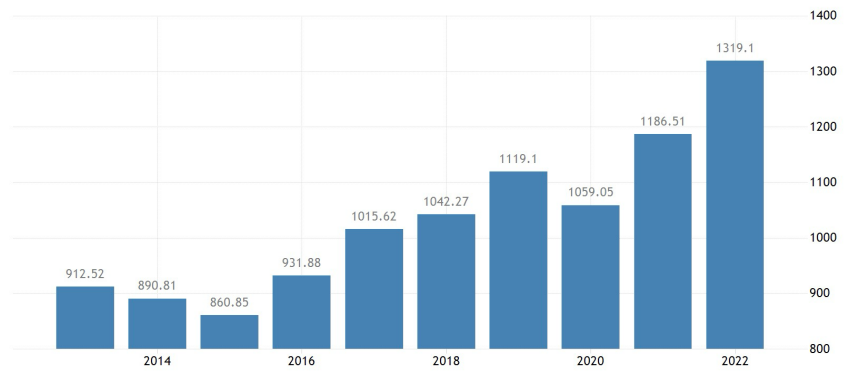
Commodities, as primary goods that form the backbone of global trade, serve as a vital lens through which we can examine the complex relationships between nations. As Indonesia stands as a key player in the Southeast Asian region, its economic fortunes are intricately linked to global trade trends. Geographically, Indonesia holds a strategic position, being situated between two oceans and two continents. This unique positioning renders the country strategically advantageous for initiating and facilitating trade. The BRICS (Brazil, Russia, India, China, South Africa) bloc, characterized by its diverse economic structures and resource endowments, holds a significant position in the global economic arena.

This thesis will explore the mechanisms by which intra-industry trade with BRICS nations influences Indonesia's commodity markets. By comprehensively analyzing the patterns of trade, market structures, and policy frameworks, this study seeks to provide a nuanced understanding of how the Indonesian economy navigates the challenges and harnesses the opportunities presented by intra-industry trade with the BRICS nations in the realm of commodities. As the world becomes increasingly interconnected, understanding the nuances of intra-industry trade and its implications for individual economies has become paramount.

1.1.1. Current Indonesia Economy Status

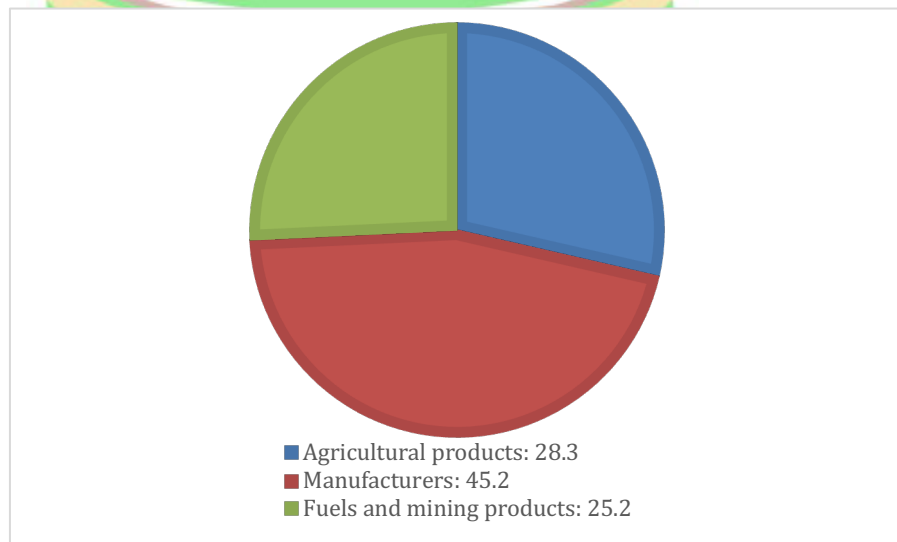
Indonesia is the largest economy in Southeast Asia and stands as one of the emerging market economies globally. As a member of the G20 and an upper-middle-income country, Indonesia holds the classification of a newly industrialized nation. As of 2022, its estimated GDP exceeds 1,319.10 billion US Dollars, ranking it as the 16th largest economy worldwide by nominal GDP, as illustrated in Figure 1-1 (World Bank). Indonesia's GDP accounts for approximately 0.57 percent of the global economy.

Figure 1-1 Indonesia's Real GDP size 2013-2022 (billion)



Source: World Bank

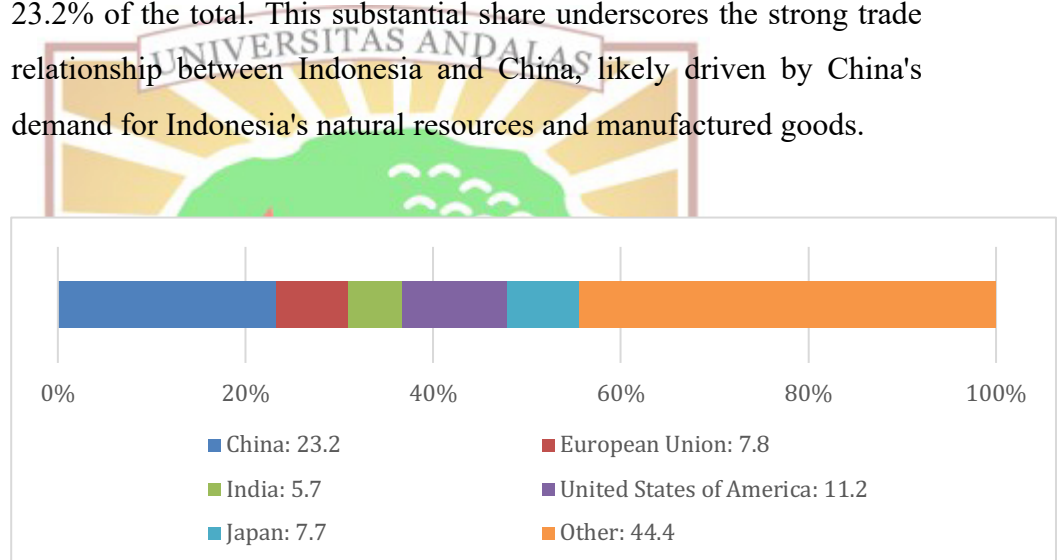
Examining Indonesia's exports reveals that nearly half consist of manufactured goods, accounting for 45.2% as shown in Figure 1-2. Agricultural products make up 28.3% of the total exports, with Indonesia's diverse agricultural output, such as palm oil, rubber, and coffee, significantly boosting its export revenues. Fuels and mining products make up over a quarter of the exports (25.2%), showcasing Indonesia's abundant natural resources like coal, natural gas, and various minerals, which are in high demand internationally.



Source: World Trade Organization

Figure 1-2 Indonesia's Total Export by Main Commodity Group, % (2021)

Countries that constitute BRICS have always been important trade partners for Indonesia. From Figure 1-3, you can see the two BRICS countries are the top 5 countries that Indonesia exports to. According to the data obtained at World Trade Organization, in 2021, China is the largest recipient of Indonesia's exports, accounting for 23.2% of the total. This substantial share underscores the strong trade relationship between Indonesia and China, likely driven by China's demand for Indonesia's natural resources and manufactured goods.



Source: World Trade Organization (WTO)

Figure 1-3 Indonesia's Total Export by main destination, % (2021)

India accounts for 5.7% of Indonesia's total exports, showing a growing trade relationship likely fuelled by India's increasing demand for Indonesian commodities and goods. Other countries outside the BRICS league such as the United States is another significant export destination, receiving 11.2% of Indonesia's total exports. This figure highlights the importance of the U.S. market for Indonesian products, which could include a mix of manufactured goods, agricultural products, and raw materials. The European Union, as a collective entity,

accounts for 7.8% of Indonesia's exports. This shows a significant but comparatively lower amount when compared to China and the US, illustrating the varied economic exchanges that exist between Indonesia and different EU members. Japan continues to be an important trading partner for Indonesia, making up 7.7% of its exports. Trade in both industrial and consumer items indicates the long-standing economic relations between Indonesia and Japan.

Due to its advantageous geographic location and wide range of economic sectors, Indonesia is becoming a more significant player on a global scale. In addition, as a group, the BRICS countries are a powerful force that has boosted global economic expansion. Gaining insight into the details of intra-industry trade between Indonesia and the BRICS nations is crucial to recognizing changing trade trends and identifying chances for mutual economic gain.

Indonesia's trade balance has been growing in relation to GDP, as Figure 1-4 illustrates, indicating a steady advancement in the country's economic integration. Indonesia's trade surplus dropped from USD 5.59 billion in October 2022 to USD 3.48 billion in October 2023, according to the Indonesian Central Agency of Statistics (BPS). The reason for this fall was that exports fell more than imports did. For six consecutive months, shipments decreased by 10.43 percent on a yearly basis to USD 22.15 billion; however, because commodity prices were declining, these declines were not as severe. The rupiah's depreciation caused imports to drop 2.42 percent year over year to USD 18.67 billion at the same period. With a 7.77 percent decline in imports and a 12.15 percent decline in exports, Indonesia's trade balance saw a USD 31.22 billion surplus in the first half of the year.

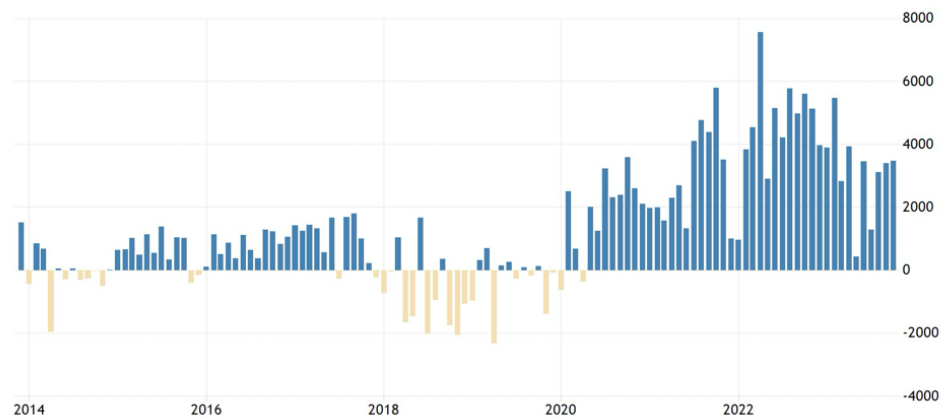
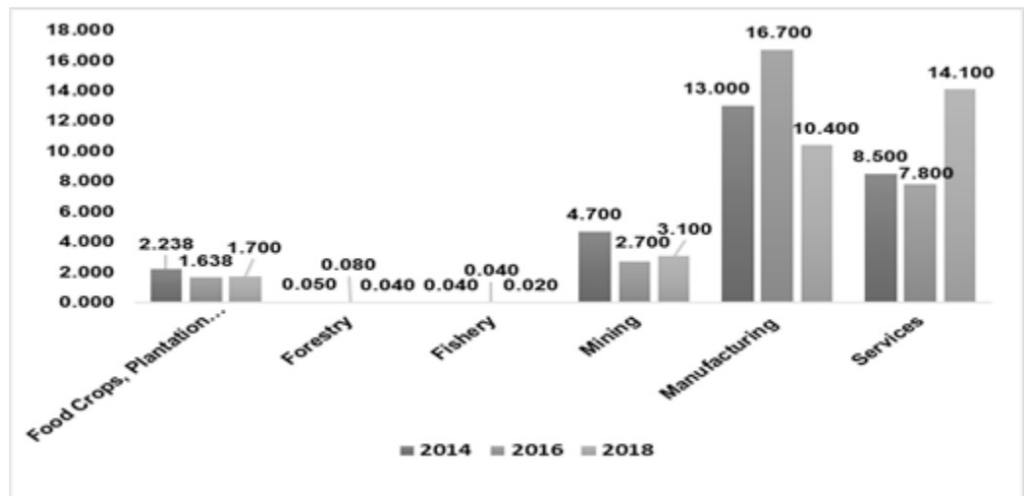


Figure 1-4 Indonesia's Balance of Trade

Indonesia's economic landscape has experienced a notable influx of Foreign Direct Investment (FDI) across diverse sectors, with a particular emphasis on manufacturing. This surge in FDI can be attributed to a confluence of factors that collectively foster a conducive environment for production activities. Notably, Indonesia boasts abundant natural resources, ranging from agricultural products to mineral reserves, providing a robust foundation for various industries. The availability of such resources not only facilitates manufacturing processes but also positions Indonesia as an attractive destination for investors seeking to capitalize on the nation's resource endowments. Under the Regulation of the Minister of Finance of The Republic of Indonesia Number 176/PMK.04/2013, there exists a provision concerning import facilities for exports (Marisa & Masaru, 2021). This regulation grants an exemption from import duty or taxes on goods and materials imported for the purpose of producing export goods.



Source: Indonesia Investment Coordinating Board, (Marisa & Masaru, 2021)

Figure 1-5 The Trend of Foreign Direct Investment in Indonesia by Sector in 2014, 2016, and 2018

As Illustrated in Figure 1-5, Indonesia predominantly channels its foreign direct investment into the manufacturing sector, with the services sector closely following suit. In Indonesia, trade is thought to be developed mostly through the export of natural resources, cheap labor, and other factors of production (Cheong & Yoo, 2020). As a result, exports do not depend on export commodities and advanced technology but rely on potential factors of production (Wahyuningsih, 2012). Hence, Indonesia and its trading partners trade mainly in different commodities (Jati et al., 2019). Consequently, price reduction and increased consumption are the only factors affecting the welfare of trade (Apriani et al., 2022). International trade, however, can also be viewed as a measure of welfare improvement as it allows consumers to choose from a greater variety of commodities.

1.1.2. BRICS

BRICS, an acronym for Brazil, Russia, India, China, and South Africa, collectively represents the world's fastest-growing developing economies. Together, Brazil, Russia, India, China, and South Africa (BRICS) make up one of the most important economic blocs in the world today, contributing about 25% of the global GDP and 42% of the world's population (UNCTAD, 2023). Notably, the BRICS have gained economic significance over the past few decades as drivers of global commerce, investment, and growth.

Interesting to note, the term did not originate from any of the BRIC countries; rather, it was created by a British economist, Jim O'Neil of Goldman Sachs in which he introduced the term in his 2001 paper titled "Building Better Global Economic BRICs." During that period, these economies were undergoing such rapid economic expansion that it was anticipated they would surpass the United States by 2018. Over time, the term has evolved to represent a significant shift in global power conditions, moving away from the advanced economies of the G-7 (U.S., Japan, Germany, France, UK, Italy, and Canada) and towards the four BRIC nations (Wie, 2012)

Siddiqui (2016) emphasizes the significance of scrutinizing the developments within the BRIC economies. It is expected that over the next two decades, their collective share of the global economy will nearly double from 25.6% to an estimated 40%, representing an average annual economic growth of over 6%. A report by the Economist estimates that the BRIC countries comprise 42% of the world's population, contribute 21.9% of global GDP, account for 15% of world trade, and hold 40% of global currency reserves (The Economist, 2015). From 16.4% in 2000 to 25.6% in 2015, the share of the BRIC economies in global GDP has experienced a substantial rise (United Nations

Development Programme (UNDP), 2013). Quoting The Economist (2015) which highlights that the developing world, constituting over half of the global economy in purchasing power parity terms, holds increased importance. Lower growth in emerging markets has notable implications, impacting the profits of multinational corporations and the cash flows of exporters. Despite being an informal arrangement lacking a formal charter, the BRICS bloc has evolved a more institutional character over time. The Contingent Reserve Arrangement (CRA) and the New Development Bank (NDB) are examples of this transformation (Vumendlini-Schallk, 2015). These developments have contributed to a more structured and organized framework within the BRICS alliance.

Sector/Industry	Value (billions of dollars)				Number			2020-2021 growth rate (%)
	2019	2020	2021	2020-2021 growth rate (%)	2019	2020	2021	
Total	44	65	15	-77	541	354	376	6
Primary	2	15	0	-98	26	32	9	-72
Manufacturing	10	18	4	-76	112	54	59	9
Services	32	32	10	-67	403	268	308	15
<i>Top 10 industries in value terms</i>								
Utilities	11	6	4	-26	14	18	28	56
Financial and insurance	4	9	4	-63	14	18	28	56
Transportation and storage	5	2	1	-39	28	15	23	53
Real estate	4	5	1	-69	45	19	18	-5
Basic metal and metal products	7	3	1	-65	9	5	3	-40
Entertainment	0	0	1	..	3	0	8	..
Administrative and support services	3	1	1	15	22	12	9	-25
Non-metallic mineral products	1	0	1	5.054	4	3	-4	..

Chemicals	0	-1	1	..	16	3	10	233
Pharmaceuticals	1	11	1	-94	16	19	15	-21

Source: UNCTAD

Table 1-1 BRICS: net cross-border M&A sales, by sector, 2019-2021 (billions of dollars and number)

The Indonesian economy demonstrated resilience by achieving robust growth after successfully navigating the challenges posed by the Global Financial Crisis (GFC) in 2008. The economy expanded by 4.5% in 2009 and is anticipated to continue its growth trajectory, with an expected growth rate of 6.0% in 2010 and 6.2% in 2011 (Wie, 2012). The performance of Indonesia has raised speculation among many Indonesians about the possibility of Indonesia joining the prestigious BRIC group of nations which includes Brazil, Russia, India, and China that are known for their significant economic influence.

Indonesia's potential accession to the BRICS alliance has been a prominent topic for some time. The notion was initially proposed more than a decade ago, and Indonesia's involvement in various BRICS meetings has been ongoing (Bonesh, 2023). Recently, there has been a resurgence of interest in Indonesia formally joining BRICS, notably supported by influential actors such as China. This renewed enthusiasm is particularly evident in the aftermath of this year's BRICS summit, held from August 22 to 24, 2023, in Johannesburg, South Africa. The summit, which extended invitations to leaders from 67 countries, included Indonesia among its participants. The focal point of this year's discussions among BRICS leaders was strategies to diminish reliance on the US dollar, emphasizing a shift towards increased use of local currencies in trade between member states (Bloomberg News, 2023). These objectives closely align with Indonesia's economic aspirations,

prompting many experts to view joining the BRICS group as a favorable step for the future growth of Indonesia's economy.

1.1.3. Benefits of joining BRICS

It is anticipated that Indonesia will gain numerous benefits if it were to have a membership in BRICS. These advantages result from the BRICS members' exclusive collaboration in the fields of trade, the economy, currency stability, development funding through bilateral and multilateral loans (NDB), and defence security (Ampri, 2023).

From an economic and trade perspective, Indonesia is poised to benefit in at least three ways. Firstly, there would be an increase in economic transactions, including both exports and imports, with new and existing markets. This boost in trade activities would likely diversify Indonesia's trade portfolio and open new avenues for Indonesian products and services. Secondly, the country would attract more foreign direct investment (FDI), leading to more job opportunities for Indonesians. Increased FDI would not only enhance employment but also bring in new technologies and expertise, further strengthening Indonesia's economic infrastructure. Thirdly, there would be an expansion in funding sources available to both the government and the private sector. Access to development funding through bilateral and multilateral loans from institutions like the NDB would provide crucial financial support for infrastructure and development projects, fostering sustained economic growth.

We can see this in countries that currently have the membership. For instance, South Africa has observed growth in trade, particularly with China and India with imported manufactured goods and exported commodity (The Department of Trade SA, 2023). Its overall trade has increased at an average of 10% over the year 2017-2021, with 14% of

exports from South Africa and 30% of imports coming from BRICS countries in 2022 (The Department of Trade, 2023).

Not only with trade, South Africa has seen improvement on industrialization through BRICS. With the access to development funding through the New Development Bank (NBD) that can only be accessed with the BRICS membership, it has enabled the country to secure financing for infrastructure projects and other developmental initiatives, fostering economic growth and development. Transnet, one of the leading state-owned businesses in South Africa, recently got a sizable loan from the Development Bank of China (Paton & Magubane, 2015).

The collaborative efforts within BRICS have also facilitated the establishment of bilateral and multilateral agreements that support co-financing agreements, thereby enhancing financial stability of member countries. Given that South Africa has the smallest economy in the bloc and would have had to ask the IMF and World Bank for these finances, which were obviously going to be issued with harsh conditions attended, this is significant and one of the major accomplishments of BRICS and South Africa in particular thus far (Asuelime, 2018).

1.2 Research Problem

The question of whether Indonesia is prepared to join the BRICS (Brazil, Russia, India, China, and South Africa) and the potential economic benefits of such membership has become an increasingly significant topic in international relations and economics. As the world's fourth most populous country and a rapidly emerging economy, Indonesia has drawn attention as a potential candidate to expand the BRICS grouping. President Joko Widodo is interested in joining BRICS but prefers a cautious approach. He believes that BRICS offers limited benefits for Indonesia, given the existing economic relationships with member countries (Ampri, 2023). Therefore, he feels that joining

BRICS may not significantly impact Indonesia's economy. However, he acknowledges that signing up for BRICS could provoke Western nations, particularly the United States, as BRICS aims to devalue the US dollar. This move might lead to threats of boycotts or blockades on Indonesian exports from Western nations.

This research aims to assess Indonesia's suitability and preparedness for joining BRICS by examining the industries engaged in Intra-Industry Trade (IIT) and identifying the factors influencing the IIT index. The study investigates which sectors in Indonesia participate in IIT with BRICS nations and analyzes various economic variables, such as average per capita income, relative income differences, economy size, distance, trade imbalance, and trade orientation, to understand their impact on the IIT index. This comprehensive analysis provides insights into Indonesia's economic integration with BRICS and evaluates whether the country is well-positioned to benefit from BRICS membership.

To what extent do the patterns, determinants, and implications of intra-industry trade between Indonesia and the BRICS nations align with or diverge from established theoretical frameworks, and how can a comprehensive understanding of these dynamics contribute to optimizing economic cooperation, identifying strategic industries, and informing policy recommendations for sustained and mutually beneficial trade relations?

Based on the problem presented, the author draws the following research question:

1. Which industries are categorized as Intra-industry Trade (IIT)?
2. Which industries are categorized as Intra-industry Trade (IIT) based on Marginal Intra-industry Trade?

3. How does average per capita income influence the levels of IIT?
4. How does relative difference in per capita income influence the levels of IIT?
5. How does average economy size influence the levels of IIT?
6. How does distance influence the levels of IIT?
7. How does trade orientation influence the levels of IIT?
8. Is Indonesia compatible with BRICS and should they apply for membership?

1.3 Research Objective

The points presented articulate the distinct and specific research objectives that serve as the focal points guiding the research:

1. To analyze and identify which industries are categorized as Intra-industry Trade (IIT).
2. To analyze and identify which industries are categorized as Intra-industry Trade (IIT) based on Marginal Intra-industry Trade.
3. To analyze the influence of average per capita income on levels of IIT.
4. To analyze the influence of relative difference in per capita income on levels of IIT.
5. To analyze the influence of average economy size on levels of IIT.
6. To analyze the influence of distance on levels of IIT.
7. To analyze the influence of trade orientation on levels of IIT.
8. To identify the compatibility of Indonesia with BRICS.

1.4 Research Advantage

The research advantage are as follows:

1. This study can contribute to academic knowledge by expanding the understanding of the economic conditions between Indonesia and the BRICS nations by providing strategic economic insights into the patterns, determinants, and implications of intra-industry trade.
2. Enhance comprehension of opportunities for enhanced collaboration between Indonesia and BRICS countries.

