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Comparison of Türkiye and BRIC In High-Tech Product Competition

Yüksek Teknolojili Ürün Rekabetinde Türkiye ve BRIC Karşılaştırması

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ABSTRACT

Especially since the beginning of the 21st century, global competition conditions have started to change and shape in a striking manner. The most important reason for this is that some of the developing countries, especially China, start to change the factor equipment in the production and exports in favor of technology. BRIC countries, which are the locomotive of China and China, which leads to developing countries, have recently increased their global added shares and becoming a stronger global actor in international trade. Considering the comparative advantages in the exports of these countries, these countries, which have a competitive advantage in the export of labor intensive and raw materials intensive products in advance, have now started to gain competitive advantage in the export of technology intensive products. The aim of this study is to compare the levels of competition in foreign trade between the BRIC (Brazil, Russia, India and China) economies, which are the most prominent among developing countries in terms of economic size and are expected to be at the forefront of the global competition league in future projections, and Türkiye's high-tech product groups. In this context, the competition levels of the countries mentioned in the 2000-2021 period were handled according to the International Standard Industrial Classification (ISIC Rev3) and calculated and interpreted using the Lafay Index (LI). The countries examined were able to gain competitive advantage only in certain product groups in the specified period. Most of the products added value is not a country with competitive advantage. These results show that the global competitiveness of the developing economies, especially in the foreign trade of high -added products, is weak.

Keywords: Foreign Trade, Competitiveness, Lafay Index, BRIC, Türkiye

ÖZET

Özellikle 21. yüzyılın başından itibaren küresel rekabet koşulları çarpıcı bir şekilde değişmeye ve şekillenmeye başlamıştır. Bunun en önemli nedeni başta Çin olmak üzere gelişmekte olan ülkelerin bir kısmının üretimindeki ve ihracatındaki faktör donanımını teknoloji lehine değiştirmeye başlamasıdır. Gelişmekte olan ülkelerin başını çeken Çin ve Çin'in lokomotifi konumunda olduğu BRIC ülkeleri son zamanlarda küresel katma değerdeki paylarını arttırmaya ve uluslararası ticarette daha güçlü bir küresel aktör olmaya başlamıştır. Söz konusu ülkelerin ihracatındaki karşılaştırmalı üstünlükler dikkate alındığında, önceden emek yoğun ve hammadde yoğun ürünlerin ihracatında rekabet avantajı olan bu ülkeler artık teknoloji yoğun ürünlerin ihracatında da rekabet avantajı elde etmeye başlamışlardır. Bu çalışmanın amacı, gelişmekte olan ülkeler arasında ekonomik büyüklük açısından en önde olan ve geleceğe yönelik projeksiyonlarda da küresel rekabet liginde ön sıralarda olacağı düşünülen BRIC (Brezilya, Rusya, Hindistan ve Çin) ekonomileri ile Türkiye'nin yüksek teknolojili ürün gruplarındaki dış ticaretindeki rekabet düzeylerini karşılaştırmalı bir şekilde ortaya koymaktır. Bu kapsamda bahsi geçen ülkelerin 2000-2021 dönemindeki dış ticaretindeki rekabet düzeyleri Uluslararası Standart Sanayi Sınıflandırmasına (ISIC Rev3) göre ele alınmış ve Lafay Endeksi (LI) kullanılarak hesaplanmış ve yorumlanmıştır. İncelenen ülkeler belirtilen dönemde sadece belirli ürün gruplarında rekabet avantajı elde edebilmiş ve uzmanlaşabilmiştir. Katma değeri görece yüksek ürünlerin çoğunda rekabet üstünlüğü olan bir ülke bulunmamaktadır. Bu sonuçlar söz konusu gelişmekte olan ekonomilerin özellikle katma değeri yüksek ürünlerin dış ticaretinde küresel rekabet güçlerinin zayıf olduğunu göstermektedir.

Anahtar Kelimeler: Dış ticaret, Rekabet gücü, Lafay Endeksi, BRIC, Türkiye

1. INTRODUCE

Today, economic activities in developed and developing countries have gone beyond the 20th century methods; It has become the activities based on information, where technological development, entrepreneurial activities increase, high -added value, striking, extraordinary works are done and new company formations are frequently experienced. This development in economic activities has increased its importance with foreign trade. Countries that are focused on technology and develop itself in technological products are constantly improving themselves in innovatively. In this respect, countries that are successful in foreign trade with technology intensive products have a more sustainable advantage in foreign trade. With the increase in R & D expenditures in the 21st century and the transition to the information economy, the production of technology intensive products has gained momentum. In this way, technology has increased intensive production and high value -added products have emerged by reducing the cost of the obtained product. This development has led to the emergence of information society, which is the 21st century paradigm. In this perspective, today the movement of goods and goods has gained even more speed in a global sense and this has led to the emergence of new opportunities and threats in foreign trade for countries.

Taking into account the new opportunities and threats that have emerged globally, it can be said that developed countries have not been alone in competition in recent years and will not be alone in the future. Because according to the projections for the coming years, developing countries, especially China and India, will be the main actors of the global competition league with the added values they will create. According to the projection made by Goldman Sachs, it is predicted that China and India will have the highest GDP score in the world in 2075 (Daly & Gedminas, 2022). Moreover, while there were only 4 developing countries in the highest GDP

ranking in 1980, it is thought that this number will be 10 in 2075 (Table 1). In addition, while all of the top 6 places were developed countries in 1980, it is projected that 5 of the top 6 places will be developing countries in 2075. It seems that developing countries, especially China and India, are now important global actors and will continue to be at the forefront of global competition more and more every year.

Table 1. The Largest Economies of the World (GDP Projection Relative to the US Dollar)

Ranking	1980	2000	2022	2050	2075
1	**United States**	**United States**	**United States**	**China**	**China**
2	**Japan**	**Japan**	**China**	**United States**	**India**
3	Germany	Germany	**Japan**	**India**	**United States**
4	France	United Kingdom	Germany	Indonesia	Indonesia
5	United Kingdom	France	**India**	Germany	Nigeria
6	Italy	**China**	United Kingdom	**Japan**	Pakistan
7	**China**	Italy	France	United Kingdom	Egypt
8	Canada	Canada	Canada	Brazil	Brazil
9	Argentina	Mexico	Russia	France	Germany
10	Spain	Brazil	Italy	Russia	United Kingdom
11	Mexico	Spain	Brazil	Mexico	Mexico
12	Netherlands	South Korea	South Korea	Egypt	**Japan**
13	**India**	**India**	Australia	Suudi Arabistan	Russia
14	Suudi Arabistan	Netherlands	Mexico	Canada	Philippines
15	Australia	Australia	Spain	Nigeria	France

Source: Daly, K., & Gedminas, T. (2022). The Path to 2075 — Slower Global Growth, But. New York: Goldman Sachs.

In this context, this study aims to analyze the level of competition between the BRIC countries, led by China and India, and Türkiye in the export of high-tech products in global Sundays in a comparative manner. In this context, LI, which is an important tool for performing sectoral analysis of the global competition level, has been used. According to the obtained LI scores, the competitive forces of the developing countries in question in the foreign trade of products with high added value against each other and the world have been analyzed.

2- LITERATURE REVIEW

There are many studies in the literature that examine and measure the competitiveness of countries with different sectors and different groups of goods. Some examples from the literature about LI that we used in our research are tried to be presented as a summary.

Erkan and Bozduman (2019a) analyzed the competitiveness of the member countries of the Shanghai Cooperation Organization in their studies related to the period 2000-2016. SITC Rev. 3 sectoral LI scores of countries were calculated according to product groups and it was examined in which product groups they have a global advantage. According to the obtained LI scores, Russia had a competitive advantage in organic and inorganic chemical products, Kazakhstan in inorganic chemical products, India in organic chemical products, plastics and medical-pharmaceutical products, China in office and automatic machines, communication and voice recorders, inorganic chemical products. Pakistan has a competitive advantage only in the group of control instruments and devices. Kyrgyzstan, on the other hand, has not been able to specialize in any R&D-based products.

Erkan and Bozduman (2019b) analyzed the level of specialization in foreign trade of MENA Countries using the LI in their studies covering the period 2000-2016. According to the results of the analysis, while countries provide specialization in the foreign trade of low-value-added products, they can not gain a competitive advantage in the foreign trade of high-value-added products. In addition, among the MENA countries, only Jordan, Morocco, Tunisia and Israel are specialized in foreign trade of high value-added products

Erkan and Bozduman (2019c) analyzed Türkiye's competitiveness and comparative advantages in foreign trade on a sectoral basis by using the LI in their studies covering the years 2000-2017. According to the results of the analysis, Türkiye has a competitiveness mainly in labor-intensive product groups. The result obtained indirectly shows that Türkiye cannot specialize in technology-intensive product groups.

Alessandrini and Batuo (2010) measured the specializations in the manufacturing industry foreign trade of South Africa, Nigeria, Egypt and Algeria in the period 1975-2005 using the LI. The countries in question are mainly specialized in foreign trade of raw materials and labor-intensive products. However, South Africa and Egypt can also specialize in foreign trade of products with high added value over time.

Reyes (2014) investigated which products the top six ASEAN (Association of South East Asian Nations) countries had a comparative advantage in during the period 2007-2011. At the end of the analyses, Brunei has a

comparative advantage in oil exports, Indonesia and Malaysia in animal, vegetable fats and oils exports, the Philippines in electrical and electronic equipment exports, Singapore in organic chemicals exports, and Thailand in business vehicles other than railways and trams.

Becuwe and Blancheton (2016) measured the level of specialization of the French textile industry between 1836 and 1938. The results of the analysis show that France has a comparative advantage in the international textile sector and that the French textile sector has a competitiveness.

Falkoski (2018) examined the levels of international specialization of Azerbaijani foreign trade using data from the period 2000-2015. According to the results of the analyses, Azerbaijan's competitiveness in foreign trade is at a low level and the country has not been able to specialize in high-value-added products.

Gerni et al. (2012) examined the relationship between the LI scores and economic growth in the foreign trade of the economies of Central Asia and the Caucasus in the period 1995-2010. In the short term, all index values are statistically meaningless. In the long term, competitiveness in the industrial goods and machinery transportation vehicles group also has an impact on economic growth.

Özyalçın (2022) analyzed the mobile telephone foreign trade competitiveness in Türkiye's 2007-2020 period. According to the scores obtained, Türkiye could not obtain a competitive advantage in mobile telephone foreign trade and could not specialize.

Platania et al. (2015) analyzed the export competitiveness of Italy in general and regional levels in its studies on 2011-2012 and 1991-1992. According to the LI scores, Italy generally has a competitive advantage in the export of agricultural sector. There are differences in regional specializations.

Luo et al. (2018) analyzed the export competitiveness against China's generation and road project with the export competitiveness. According to the results of the 1995-2014 period, China has a competitive advantage especially in textile, ready-made clothing, metal and leather sector. China has a disadvantage of competition in non -metal mineral and chemical product exports (Luo, Han, & Zhong, 2018).

When we examine some of the studies carried out in the literature, we see that different countries and/or groups of countries analyze the competitiveness in the foreign trade of different sectors. In this study, we aim to analyze the competitiveness of Türkiye and BRIC countries in the foreign trade of high -added products in foreign trade. In this aspect of the study, we think that it can contribute to the literature.

3. METHOD

There are many indices to measure competitiveness in the literature. Each index has its own disadvantage and advantage. One of the most well -known and frequently used in the literature is LI that measures the competitiveness and specialization level in foreign trade.

The LI allows not only export data but also import data, and allows the measure of specialization in the foreign trade of a country, internal trade and competitiveness in the foreign trade of a country (Desai, 2012). In this respect, it is superior to the index that measures many other competitiveness. The LI is formulated as follows (Ishcukova & Smutka, 2013).

$$LI=\left[\frac{X-M}{X+M}-\frac{\sum X-M}{\sum X+M}\right]\frac{X+M}{\sum X+M}$$

The index scores receive value between -0.5 and +0.5. If the scores are larger than scratches, the country in question is deemed to have specialized in the foreign trade of that sector and have gained a competitive advantage. On the contrary, if the index scores are smaller than zero, the country could not specialize in the foreign trade of that sector and could not provide a competitive advantage. From a utopian perspective, the fact that the score is equal to -0.5 means that there is no specialization and if it is equal to +0.5, it means that there is full specialization (Reyes, 2014).

In the study, it is aimed to measure the specialization levels of Türkiye's and BRIC economies in foreign trade in the period 2000-2021. For this purpose, it is used to analyze the specialization and competitive forces in foreign trade of high -tech products determined according to ISIC Rev3 classification. Isıc Rev3 products are divided into 4 according to the classification:

- ✓ High -tech industries,

- ✓ Industry with medium low technology,
- ✓ Medium High Technology Industry,
- ✓ Low technology industries.

In addition, high -tech industries are classified as "Manufacture of pharmaceuticals, medicinal chemicals and botanical products (ISIC Rev3 code 2423), Manufacture of office, accounting and computing machinery (ISIC Rev3 code 30), Manufacture of radio, television and communication equipment and apparatus (ISIC Rev3 code 32), Manufacture of medical, precision and optical instruments, watches and clocks (ISIC Rev3 code 33) ve Manufacture of aircraft and spacecraft (ISIC Rev3 code 353).

In this study, we obtained the annual net export and net import values of the products that are accepted as the pioneers of the developing countries as the foreign trade of the BRIC countries from the World Bank (The World Bank, 2023). According to these data, we calculated and interpreted the countries of the countries for high -tech product foreign trade. The results of our results ensure that the sectoral specialization levels of Türkiye and BRIC economies are comparatively analyzed on the basis of technology intensity.

4. THE FINDING

In the study, we made the specialization analyzes of the exports of high -tech product exports of Türkiye and the BRIC economies, which are seen as competitors in global markets, and showed them in the relevant graphs. However, we interpreted the differences, deficiencies and superiority of the foreign trade of high -tech industries of the concerned countries in terms of competitiveness in the general evaluation.

According to the results of the analysis, which is an indicator of specialization and competitive advantage of internal trade in foreign trade, 2 of the 5 high -tech products with high technology have specialized in the foreign trade and has a comparative advantage. Among these products, radio, television, communication equipment (ISIC Rev3 code 32) is generally specialized in foreign trade. Although there is a comparative disadvantage at certain times (2017, 2020 and 2021), there is a specialization and competitive advantage in the foreign trade of this product group as of the examination period. However, the scores of the LI are decreasing over the years and the competitive advantage continues to decrease. The appearance of aircraft and spacecraft (ISIC Rev3 code 353) in foreign trade is similar to radio, television and communication equipment. Türkiye has a comparative disadvantage in the foreign trade of this product group in 2010 and 2011. However, there is a competitive advantage in general as of the examination period in general.

Türkiye has not been able to provide specialization in the foreign trade of 3 of 5 products with high -tech products (The World Bank, 2023). However, the scores of these products, which have a comparative disadvantage are increasing. In particular, there are tremendous increases in the scores of drugs (ISIC Rev3 code 2423). Even Türkiye's score for 2020 is positive. This is promising in terms of specializations in Türkiye's pharmaceutical sector foreign trade. A similar appearance is also at the level of specialization of medical sensitive optical devices (ISIC Rev3 code 33). Because there are relative improvements in the scores of these products. In fact, Türkiye's scores in the foreign trade of this product are positive in 2020 and 2021. Türkiye's office, accounting, computer materials (ISIC Rev3 code 30) is stable in foreign trade. Türkiye has not been able to provide specialization in the foreign trade of these products with high added value.

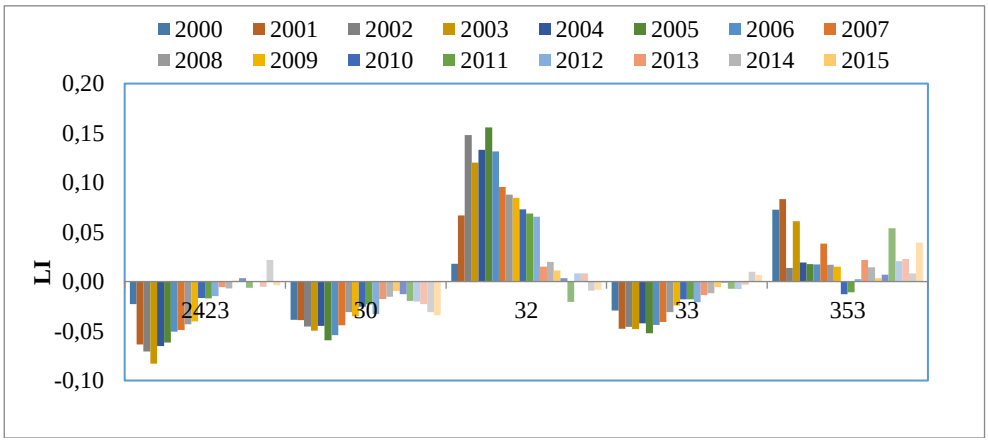

Figure 1. Türkiye's Lafay Index Scores (2000-2021)
Source: It is calculated by us using the data received from https://wits.worldbank.org/.

According to the results of the analysis, Brazil is generally not specialized in the foreign trade of high -tech products. The country is able to provide specialization in foreign trade only 1 of 5 products with high -tech products. The product group with a comparative competitive advantage of Brazil is aircraft and spacecraft (ISIC Rev3 code 353). In the period discussed, Brazil has a global competitive power in foreign trade. Although the scores in this product group decrease from time to time, there is a stability in the context of specialization.

Brazil can not specialize in the foreign trade of 4 other high -tech product groups (The World Bank, 2023). There is a high comparative disadvantage from these 4 product groups, especially in the foreign trade of radio, television communication equipment (ISIC Rev3 code 32). Although a very low level of comparative advantage was obtained in 2002 and 2003, there is a high level of disadvantage in other years. A similar situation has emerged in the scores of drugs (ISIC Rev3 code 2423). In 2012, a very low level of comparative advantage was obtained in the foreign trade of this product group, but in all other years, the scores of the LI was negative. In the foreign trade of office, accounting, computer materials (ISIC Rev3 code 30) and medical sensitive optical devices (ISIC Rev3 code 33), specialization could not be achieved in all years, and the scores of the LI were stable negative.

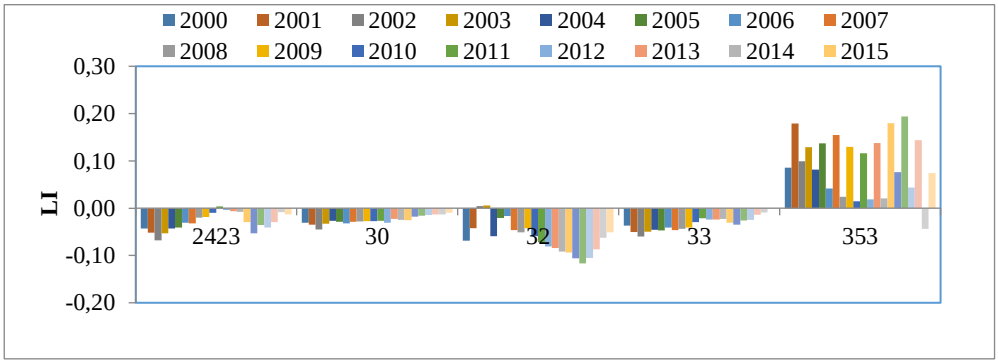

Figure 2. Brazil's Lafay Index Scores (2000-2021)
Source: It is calculated by us using the data received from https://wits.worldbank.org/.

Russia, whose comparative advantages are mainly known based on raw material intensive product groups, has been able to specialize in foreign trade of 1 out of 5 high-tech product groups (The World Bank, 2023). This product is aircraft and spacecraft (ISIC Rev3 code 353). During the period under review, Russia has a stable competitive power and comparative advantage in the foreign trade of this product group. Although there has been a decrease especially after 2004, the LI scores have consistently received positive values.

In addition, Russia has also been able to gain a comparative advantage in foreign trade of medical precision optical devices (ISIC Rev3 code 33) in certain periods. However, specialization in the foreign trade of this product group has not been fully achieved and the LI scores have followed an unstable course.

Russia has a low comparative disadvantage in foreign trade of office, accounting, computer machines (ISIC Rev3 code 30), another high-tech product group. The LI scores in the foreign trade of this product group have been negative except for the years 2014 and 2015. Although the LI scores were positive in 2014 and 2015, it cannot be said that Russia is able to specialize in the foreign trade of this product group. In addition, no comparative advantage is obtained in the relevant period in the foreign trade of medicines (ISIC Rev3 code 2423) and office, accounting, radio and television communication equipment (ISIC Rev3 code 32).

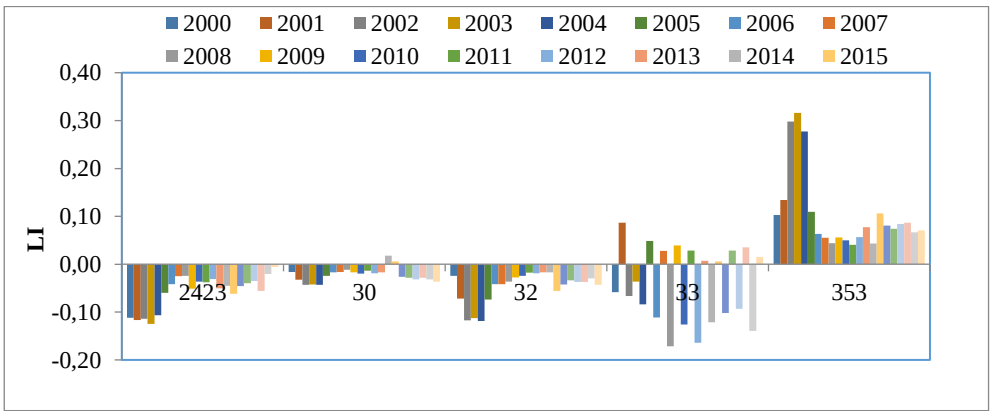

Figure 3. Russia's Lafay Index Scores (2000-2021)
Source: It is calculated by us using the data received from https://wits.worldbank.org/.

When the LI scores of India's high-tech product group in foreign trade are examined, it is seen that 2 out of 5 products provide specialization in foreign trade (The World Bank, 2023). India has been continuously specializing in foreign trade, especially pharmaceuticals (ISIC Rev3 code 2423), during the period under review. This result shows that the country has a significant comparative advantage in the foreign trade of this product group. However, the country has started to gain a competitive advantage in the foreign trade of aircraft and spacecraft (ISIC Rev3 code 353) since 2011 and has maintained this advantage. Although India has a comparative disadvantage in the foreign trade of medical optical precision devices (ISIC Rev3 code 33), which is another product group with high added value, the disadvantage in question is at low levels. In fact, in 2010, the country even gained a comparative advantage in the foreign trade of this product group.

India has a clear comparative disadvantage in foreign trade of offices, accounting, computer machines (ISIC Rev3 code 30) and radio, television, communication equipment (ISIC Rev3 code 32). The LI scores of the two high-tech product groups are also negative at significant levels. The LI scores have been gradually decreasing over the years and the comparative disadvantage situation is getting worse especially in the foreign trade of radio, television, communication equipment (ISIC Rev3 code 32).

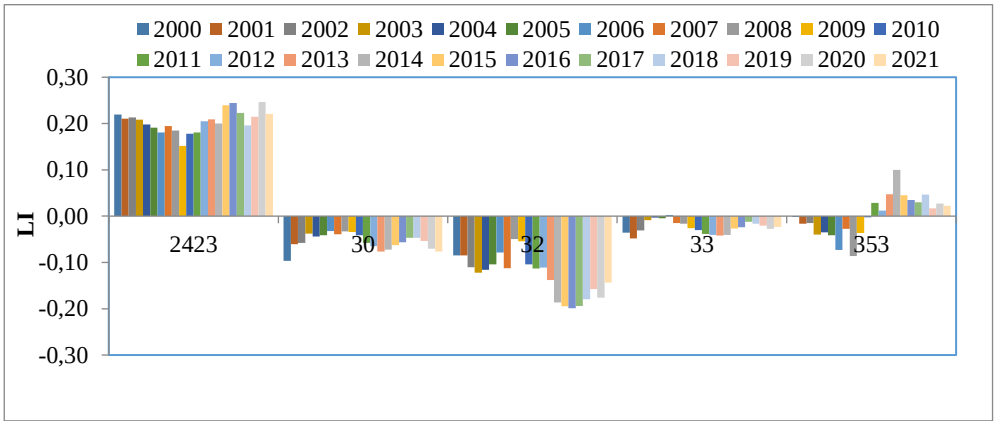

Figure 4. India's Lafay Index Scores (2000-2021)
Source: It is calculated by us using the data received from https://wits.worldbank.org/.

China, one of the largest economies in the world with macroeconomic indicators such as both economic growth and exports, is undoubtedly the locomotive of the BRIC countries. When the competitiveness and specialization levels of China in the export of high-tech products are examined, it is noted that they do not reflect its economic size. In other words, the quantitative magnitude in the Chinese economy does not manifest itself in terms of quality. Because China has been able to specialize in foreign trade of only 1 out of 5 high-tech products and has a comparative advantage (The World Bank, 2023). This product is office accounting computer machines (ISIC Rev3 code 30). When the LI scores of this product are examined, it is seen that China has been specializing at a high level in all years.

China has not been able to specialize in the foreign trade of other product groups with high added value. In this respect, China actually had a competitive advantage in the foreign trade of medicines (ISIC Rev3 code 2423) until 2011. However, the LI scores have decreased continuously as of the years and started to take a negative value with the year 2012. As a result, the comparative advantage that China had in the first years in the foreign trade of this product was replaced by a disadvantage, and its LI scores gradually worsened every passing year. It is observed that China can not specialize in the foreign trade of radio, television, communication equipment (ISIC Rev3 code 32), medical, sensitive optical devices (ISIC Rev3 code 33) and aircraft, spacecraft (ISIC Rev3 code 353) during the period studied. In all these three high-tech product groups, China's LI scores are consistently negative, and China has consistently been at a comparative disadvantage.

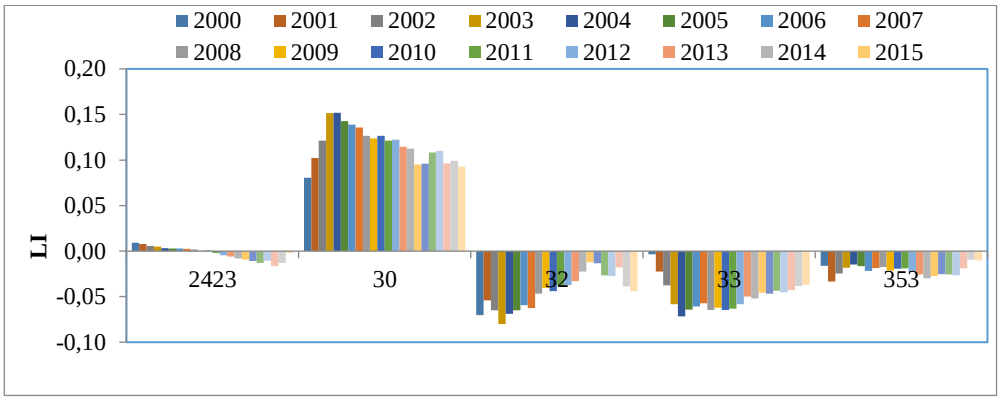

Figure 5. China's Lafay Index Scores (2000-2021)
Source: It is calculated by us using the data received from https://wits.worldbank.org/.

According to the results of the analysis obtained, countries were able to specialize in foreign trade of only one or two product groups in general and achieve comparative advantage between 2000 and 2021 (Table 2). From these countries, Türkiye has gained a competitive advantage and comparative advantage in foreign trade of radio and television communication equipment and aircraft and spacecraft. While this superiority continues to decrease in radio and television communication equipment, it is very unstable in aircraft and spacecraft.

Brazil and Russia have been able to specialize only in the foreign trade of aircraft and spacecraft. Brazil's degree of superiority is much higher than the general average and Russia. Although Russia's level of specialization in the foreign trade of aircraft and spacecraft is quite high, this superiority has been gradually decreasing over the years. India, one of the BRIC economies, has been able to specialize only in the foreign trade of medicines and has gained a comparative advantage. India has been steadily maintaining its superiority well above the overall average. China, which is the locomotive of the BRIC countries, has been able to gain a competitive advantage and specialize only in the foreign trade of office, accounting computer machines.

Table 2. General Assessment of the Competitive Forces of the BRIC Countries and Türkiye in the Foreign Trade of High-Tech Products

	Situation	Türkiye	Brasil	Russia	India	China
2423	Specialization	NO	NO	NO	YES	UNSTABLE
	Trend	POSITIVE	POSITIVE	POSITIVE	POSITIVE	NEGATIVE
30	Specialization	NO	NO	NO	NO	YES
	Trend	POSITIVE	POSITIVE	POSITIVE	STABLE	NEGATIVE
32	Specialization	YES	NO	NO	NO	NO
	Trend	NEGATIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE
33	Specialization	NO	NO	UNSTABLE	NO	NO
	Trend	POSITIVE	POSITIVE	NEGATIVE	POSITIVE	POSITIVE

353	Specialization	YES	YES	YES	UNSTABLE	NO
	Trend	NEGATIVE	NEGATIVE	NEGATIVE	POSITIVE	STABLE

5. CONCLUSION

The aim of this study is to determine the specialization levels of Türkiye and BRIC countries in foreign trade of products with high added value for the years 2000-2021 according to the coefficients of comparative advantage based on the ISIC Rev3 classification. In this context, the LI has been calculated and analyzed to determine the levels of specialization in the foreign trade of the high-tech product groups of the countries in question.

Today, it is very important to determine which product groups countries have a comparative advantage in and what is the main factor that increases their international competitiveness and to shape their foreign trade accordingly. What is important here is the technology intensity of the products they export and import and the level of added value they contain, rather than the amount of products that countries export and import. Also, the fact that countries have comparative advantages in the export of high-value-added product groups and import low-value-added products mainly is an important factor that increases the international competitiveness of countries. In this context, when the foreign trade of developed countries with high competitive power in global markets is examined, it is seen that an important part of their exports consists of information- and technology-intensive, innovative, R&D-based products.

According to the LI scores calculated to determine the levels of specialization in the foreign trade of high-tech products of the BRIC economies and Türkiye, it has been found that both Türkiye and all of the BRIC economies have not achieved significant specialization in the foreign trade of these high-value-added product groups. It can be said that usually only one of the five mentioned products containing high technology of countries can specialize in foreign trade, which is insufficient for the competitiveness of countries in the global arena.

Among the analyzed countries, Türkiye has been able to fully specialize in foreign trade of radio, television, communication equipment and aircraft, spacecraft, Brazil and Russia only aircraft spacecraft, India pharmaceuticals, and China office accounting computer machines. Especially the BRIC economies, which are seen as competitors of developed countries and are projected to rank high in the global league in terms of added value that they will create in future projections, and Türkiye need to focus on knowledge and technology intensive, innovative, R&D-based investments and production in order to gain more from their comparative advantages in foreign trade. In this process, policy makers should determine and prioritize economic and fiscal policies along this axis. Only in this case, the developing countries in question will be able to achieve the status of developed countries and take part in the champions league of the global economy.

In addition, these developing countries need to pay attention to the concept of economic complexity when diversifying their production and exports. Countries need to pay attention to the complexity level of the product in question first of all in production and export. Resources should not be transferred unnecessarily to products with a low level of complexity, and these products should not be produced. Because if products with a high level of economic complexity are exported, the added value to be obtained and the contribution of this added value to the current account balance and national income will be greater. Naturally, the terms of foreign trade will also help the development of the country.

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