

# **CUTS Dossier on Preferential Trade Agreements**

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## **1. Bangladesh Negotiations for FTA with ASEAN underway**

Bangladesh has formally initiated negotiations with the Association of Southeast Asian Nations (ASEAN) to sign a free trade agreement to enjoy greater market access in the bloc after graduating from the least developed country grouping. The country has launched the negotiations for mainly three reasons; firstly, ASEAN is a big market where Bangladesh can do well while the second is to safeguard the duty privilege after graduation. Lastly, if Bangladesh can sign an FTA with the ASEAN, it does not need to sign any bilateral agreement with any of the 10 member countries of the bloc.

(<https://www.thedailystar.net/business/news/negotiations-ftha-asean-underway-2011089>)

### **1.1 CUTS Comments**

Both Bangladesh and ASEAN are major export destinations of India. India's exports to Bangladesh are its ninth largest. India's total trade with Bangladesh was US\$ 9.46 billion in the year 2019. And, India had a positive trade balance of US\$ 7.03 billion in the same year. India's total trade with ASEAN was also significantly high at US\$ 91.29 billion in the year 2019. India had a negative trade balance of US\$ 22.79 billion.

In order to analyse the impact of this FTA on India, exports from India to each of these country/region have been examined and compared with exports between Bangladesh and ASEAN.

#### **a) Impact on India's exports to Bangladesh**

In 2019, India's exports to Bangladesh were worth US\$ 8.24 billion. ASEAN's exports to Bangladesh in the same year were US\$ 9.07 billion. Only one key export product, light petroleum distillates (HS code 271019), is found to be common among their export baskets to Bangladesh.

Other key exports of India to Bangladesh are mostly textile and automobile items such as cotton, not carded or combed, cotton yarn not swing thread, cotton yarn greater than 85 percentage single combed, denim cotton, motorcycles, spark ignition engine of 50 250 cc, and vehicles other than railway or tramway rolling stock, etc.

Other key exports of ASEAN to Bangladesh are palm oil or fractions simply refined; cement clinkers; coal except anthracite or bituminous; jewellery and parts of precious metal except silver; gold in unwrought forms non-monetary; chemical wood pulp, soda sulphate, non-conifer, bleached; telephones for cellular networks; gold, semi manufactured forms, non-monetary; and sewing machines.

In order to understand the impact on India's exports to Bangladesh, two Indices have been computed: FKI (Finger Kreinin Index); RECPI (Relative Export Competitive Pressure Index) (see Annexure I).

The FKI analysis measures the degree of similarity between product baskets of two source countries in export of goods to a given destination country. Table 1.A shows FKI values for India over a period of five years in Bangladesh's market while ASEAN as a competitor.

As shown in Table 1.A, FKI values are more or less same over the years, and very less similarity is found between export baskets of India and its competitor ASEAN to Bangladesh. The highest value of this Index was 0.27 in the year 2017, which is very low.

The RECPI analysis compares the degree of competitiveness between India and its competitor country (ASEAN) in exporting common products to a particular destination market, Bangladesh in this case. Table 1.B below presents findings of RECPI analysis of India in Bangladesh market with ASEAN as a competitor.

As shown in Table 1.B, RECPI values of the previous two years (in the years 2015 and 2016) were very low. Suddenly, RECPI value jumped to a significant value of 0.55 in the year 2017, and after that it increased further. In the year 2019, RECPI value was near one (0.92). It depicts that India will face significant competitive pressure from ASEAN in Bangladesh market. This seems to be the result of a large number of comparable products entered into the export baskets of either of these countries.

**Table 1: India's FKI and RECPI with ASEAN in Bangladesh Market**

<b>1.A. India's FKI with South Korea in Bangladesh's Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
ASEAN	0.20	0.23	0.27	0.26	0.23
<b>1.B India's RECPI with South Korea in Bangladesh's Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
ASEAN	0.14	0.24	0.55	0.93	0.92

*Source: TradeSift calculations using data from UN Comtrade via WITS 6-digit database*

In order to better understand possible trade diversion affecting India's exports to Bangladesh, a SMART analysis was conducted. A large set of affected products (23 in number) was found, exports of which will be reduced by more than one million US\$. Most affected top ten products are presented in Table 2 below. Indian Automobile, electronics, textile and clothing products will be affected.

**Table 2: Trade Diversion likely to be experienced by India**

<b>Product Code</b>	<b>Description</b>	<b>Trade Diversion (US\$ thousands)</b>
540233	Synthetic yarn	-5680.26
401120	New Pneumatic Tires of Rubber for Buses or Trucks	-3515.49
870421	Trucks of diesel engine	-3188.1
320416	Reactive dyes and preparations based thereon	-3177.36
520942	Woven Cotton Fabrics	-3019.37
330290	Mixtures of odoriferous substances	-2787.54
871120	Motorcycles (including Mopeds)	-2650.3
520523	Cotton yarn and sewing thread	-2297.06
760110	Non-alloyed aluminium unwrought	-1928.5
851712	Telephones for cellular networks	-1851.65

*Source: CUTS Calculations using data from UN Comtrade via WITS 6-digit database and using WITS SMART analysis tool*

## Food for Thought

This FTA can significantly affect India's exports to Bangladesh. We have seen that the RECPI value is approaching to maximum degree of competitiveness, and from SMART analysis, it has been observed that India will experience a significant reduction in its exports of a large number of products. India should take care of this fact seriously as Bangladesh is the India's ninth largest export destination.

India is already facing strong competition from ASEAN countries in its access to many external markets. The key of their success lies in strong participation in the global value chains of manufacturing, where India's performance is sub-optimal. ASEAN countries have succeeded in the participation of GVCs in automobiles, electronics, textiles and clothing, and processed food. While Malaysia and Thailand are in a strong position in automobiles, electronics, and processed food, Cambodia, Myanmar and Vietnam are in textiles and clothing.<sup>1</sup> We have found that India will experience a significant reduction in exports of these items to Bangladesh as a result of this FTA.

### b) Impact on India's exports to ASEAN

In 2019, India's exports to ASEAN were worth US\$ 34.25 billion, which was 10.59 per cent of India's total exports to the world in that year. Bangladesh's exports to ASEAN were very low at US\$ 0.46 billion. Only one product, medicaments (HS code 300490), is found to be common among India and Bangladesh's key export items to ASEAN.

Other key export products of India are light petroleum distillates; petroleum spirit for motor vehicles; floating docks, special function vessels; dredgers; not-alloyed aluminium unwrought; flat rolled prod coils; P xylene; and diamonds (jewellery).

Other key exports of Bangladesh are mostly textile products such as T shirts, singlets and other vests, of knitted cotton; men or boys' trousers of non-knitted cotton; women or girls' trousers of non-knitted cotton; knitted or crocheted T-Shirts, singlets and other vests; women or girls' shorts; men's, boys shirts, of non-knitted cotton; clothing accessories; and pullovers, cardigans of knitted cotton. FKI index values listed in Table 3.A show that there is very less similarity between the exports of India and Bangladesh in the ASEAN market. The RECPI index (Table 3.B) values were not high either, even negligible.

**Table 3: India's FKI and RECPI with Bangladesh in ASEAN**

<b>3.A India's FKI with UAE in South Korea Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Bangladesh</b>	0.10	0.11	0.10		0.10
<b>3.B India's RECPI with UAE in South Korea Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Bangladesh</b>	0.0017	0.0022	0.0023	0.003	0.0023

*Source: TradeSift calculations using data from UN Comtrade via WITS 6-digit database*

<sup>1</sup> Global Value Chains in ASEAN: A Regional Perspective, 2017, ASEAN-Japan Centre [https://www.asean.or.jp/ja/wp-content/uploads/sites/2/2017/08/GVC-in-ASEAN\\_paper-1 -A-Regional-Perspective.pdf](https://www.asean.or.jp/ja/wp-content/uploads/sites/2/2017/08/GVC-in-ASEAN_paper-1 -A-Regional-Perspective.pdf)

As before, in order to have a better understanding about possible trade diversion from India to Bangladesh, in the ASEAN market owing to favourable duties as a result of this FTA, a SMART analysis was carried out on ten ASEAN markets separately. A very less numbers of products were found in some of these markets, exports of which even will be reduced by more than 100 US\$ but not more than 300 US\$. Those products are listed in Table 4 below. In Vietnam, India's shrimp and prawn export will be affected most. Some textile and clothing items will be affected in Indonesia's market. Exports of pharmaceutical products will be affected mostly in Philippines and Myanmar.

**Table 4: Trade Diversion likely to be experienced by India**

<b>Vietnam Market</b>		
<b>Product Code</b>	<b>Description</b>	<b>Trade Diversion (US\$ thousands)</b>
30617	Shrimps and prawns	-112.09
<b>Indonesia Market</b>		
<b>Product Code</b>	<b>Description</b>	<b>Trade Diversion (US\$ thousands)</b>
530720	Jute yarn	-287.642
610910	T shirts, singlets and other vests	-265.478
611120	Babies garments, accessories of cotton	-234.339
<b>Philippines Market</b>		
<b>Product Code</b>	<b>Description</b>	<b>Trade Diversion (US\$ thousands)</b>
300490	Medicaments	-118.95
<b>Myanmar Market</b>		
<b>Product Code</b>	<b>Description</b>	<b>Trade Diversion (US\$ thousands)</b>
300490	Medicaments	-125.35

*Source: CUTS Calculations using data from UN Comtrade via WITS 6-digit database and using WITS SMART analysis tool*

### **Food for Thought**

Overall India's exports to the ASEAN market will not hamper significantly due to this FTA. India's exports to ASEAN are much higher than that of Bangladesh, and we have found less similarity in export baskets between them. However, India could face high competition from Bangladesh in textile and clothing, fishery, and pharmaceuticals.

A thorough revision of India's several agreements, and MoUs with individual ASEAN member countries, and India-ASEAN Comprehensive Economic Cooperation Agreement are needed to address these challenges.

## 2. Singapore and Britain ink free trade deal

Singapore signed a free trade agreement (FTA) with the United Kingdom on December 10, 2020 to ensure that companies from both countries continue to enjoy the same benefits that they are receiving under the Republic's FTA with the European Union. The FTA will provide Singapore and UK companies with certainty and clarity in trading arrangements between both countries by reducing non-tariff barriers in at least four major sectors - electronics, motor vehicles and vehicle parts, pharmaceutical products and medical devices, and renewable energy generation.

[\*\(https://www.thestar.com.my/aseanplus/aseanplus-news/2020/12/10/singapore-and-britain-ink-free-trade-deal\)\*](https://www.thestar.com.my/aseanplus/aseanplus-news/2020/12/10/singapore-and-britain-ink-free-trade-deal)

### 2.1 CUTS Comments

Both Singapore and Britain (the United Kingdom) are India's leading export destinations. India has an FTA with Singapore. India is also getting preferential treatment from Singapore under its Comprehensive Economic Cooperation Agreement with the Association of Southeast Asian Nations (ASEAN).

In 2019, India's total trade with Singapore was worth US\$ 25.63 billion. And, that of its total trade with Britain in this same year was US\$ 15.68 billion.

#### a) Impact on India's exports to the United Kingdom

In 2019, India's exports to the United Kingdom were worth US\$ 8.8 billion. Singapore's exports to the UK in 2019 were almost half of that of India's. It was US\$ 4.67 billion. Common products in India's and Singapore's export baskets to the UK include: a) aircraft parts and b) turbo jet engines of a thrust greater than 25 KN. India's other top exports to the UK include turbo jet engines, medicines, jewellery, aircraft parts and jewellery.

Singapore's major exports to the UK include turbo propeller engines, aircraft parts, semi-manufactured and non-monetary gold, light petroleum distillates and floating or submersible drilling or production platforms.

Our FKI analysis is shown in Table 5.A, which is an indicator of homogeneity in the export baskets of two countries and reflects that there is little similarity between the exports of India and Singapore in the UK's market. This is further confirmed by the values of RECPI (see Table 5.B), as India faces limited competition from Singapore in the UK's market.

**Table 5: India's FKI and RECPI with Singapore in the UK's Market**

<b>5.A India's FKI with Singapore in the UK Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Singapore</b>	0.16	0.18	0.19	0.15	0.18
<b>5.B India's RECPI with Singapore in UK's Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Singapore</b>	0.11	0.19	0.14	0.15	0.26

*Source: TradeSift calculations using data from UN Comtrade via WITS 6-digit database*

In order to better understand possible trade diversion, which is likely to be faced by India from Singapore in the UK's market, a SMART analysis has been carried out. Findings are presented in Table 6 below. It is observed that the most affected export product will be nucleic acids and their salts. It is expected to be reduced by a little more than US\$ 250,000.

**Table 6: Trade Diversion likely to be experienced by India**

Product Code	Description	Trade Diversion (US\$ thousands)
293499	Nucleic acids and their salts, whether or not chemically defined, n.e.s. het	-250.358
711319	Jewellery and parts of precious metal except	-196.385
902810	Gas supply production calibration meters	-126.446
293339	Heterocyclic compounds with unfused pyridine rings, nes	-113.661
902830	Electricity supply, production and calibrating meters	-65.683
293359	Comp with pyrimidine or piperazine ring, Nesoi	-50.413

*Source: CUTS Calculations using data from UN Comtrade via WITS 6-digit database and using WITS SMART analysis tool*

## Food for Thought

From our analyses, we have assessed that Singapore is not a major competitor of India for its access to the UK's market. However, India should be concerned by the fact that Singapore has already signed this FTA after the UK's post-Brexit trade pact, while India planned to do the same but not yet able to conclude. We have seen in our SMART analysis that exports of many Indian products such as chemicals, jewellery could be reduced as a result of this FTA. India can save those industries' from experiencing lower exports if it signs a similar FTA with the UK. Many trade experts also said about potential benefit that India could gain from such an FTA in service sectors like IT, architecture, research and development and engineering.<sup>2</sup>

## b) Impact on India's exports to Singapore

In 2019, the value of India's exports to Singapore was US\$ 6.37 billion. While that of the United Kingdom to Singapore was US\$ 11.95 billion. Turbo jet engines and jewellery and parts of precious metal except silver are two common products found in these countries' exports baskets to Singapore.

<sup>2</sup> <https://www.financialexpress.com/economy/india-should-now-aggressively-pursue-ftas-with-eu-uk-trade-experts/2157502/>

Other key products that India majorly exports to Singapore are light petroleum distillates; petroleum spirit for motor vehicles; floating docks for special function vessels; dredgers; floating or submersible drilling or production platforms; coal tar distillation products; non-alloyed aluminium unwrought; and Aircraft parts.

UK's key exports to Singapore are parts of turbo jet or turbo propeller engines; whiskies; gold in semi manufactured forms; transmission shafts and cranks; automobiles; and medicaments.

Our FKI analysis (see Table 7.A) over a period of last five years shows that there is no significant similarity between the exports of India and the UK to Singapore. RECPI (see Table 7.B) also reflects that India faces little to no competition from the UK in Singapore's market.

**Table 7: India's FKI and RECPI with UK in Singapore Market**

<b>7.A India's FKI with the UK in Singapore Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>UK</b>	0.14	0.12	0.13	0.14	0.17
<b>7.B India's RECPI with the UK in Singapore Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>UK</b>	0.01	0.01	0.02	0.01	0.03

*Source: TradeSift calculations using data from UN Comtrade via WITS 6-digit database*

Our SMART analysis reveals that India's exports to Singapore are expected to face not much competition due to this FTA. This is primarily because of an FTA between India and Singapore.

### **Food for Thought**

It came out from our analysis that there will not be much competition that India may face in Singapore's market. However, it has been observed that the UK's exports to Singapore were almost five billion dollars higher than that of India in the recent past, which indicates a strong penetration of the UK's businesses Singapore's market. It's natural that the UK's exports to Singapore will increase further due to this FTA and that increased export will be at the cost of reduction of exports of other countries. India may suffer some market access in Singapore as it is India's fifth largest export destination globally.

### 3. South Korea to step up FTA talks with Philippines

South Korea has expressed intention to step up the pace of the negotiations on the proposed Philippines-Korea Free Trade Agreement (FTA), the Department of Finance (DOF) said in a statement. Korea and the Philippines are also in the final stages of negotiations on an FTA, which will further expand trade and investment opportunities between the two countries, Han said.

([https://malaya.com.ph/index.php/news\\_business/sokor-to-step-up-fa-talks-with-ph/](https://malaya.com.ph/index.php/news_business/sokor-to-step-up-fa-talks-with-ph/))

#### 3.1 CUTS Comments

South Korea is the eighteenth largest export destination of India. A good trade relation also exists between India and the Philippines. In 2019, the value of India's total trade with South Korea was US\$ 20.77 billion. Also, India had negative trade balance (US\$ 11.46 billion) with South Korea in that year. India's total trade with Philippines was ten times smaller than its total trade with South Korea in that year. In 2019, total trade flows between India and Philippines were worth US\$ 2.19 billion. And, India had a positive trade balance of US\$ 1.08 billion in this year.

##### a) Impact on India's exports to the Philippines

Only one product (light petroleum distillates) is found to be common among the key exports of India and South Korea in the Philippines. India's key export items to the Philippines include medicaments; motorcycles; oil seeds and oleaginous fruits miscellaneous grains; pneumatic tyres new of rubber for buses or lorries; motor vehicle parts; semi-finished iron or non-alloy steel products; men and boys' garments; and tobacco.

South Korea's key exports to the Philippines consist of mostly electronics items and some chemical and natural resource products. Those key items are electronic integrated circuits of various types; parts and accessories of data processing equipment; electric capacitors, transistors; electronic printed circuits; copper wire, liquid lustres; and petroleum spirit for motor vehicles.

As there little similarity found between the products exported from India and South Korea to the Philippines, FKI values in Table 9.A corroborates this. However, the RECPI indicator is close to one (see Table 9.B), reflecting that India faces significant competition from South Korea in the Philippines market.

**Table 9: India's FKI and RECPI with South Korea in Philippines Market**

<b>9.A India's FKI with South Korea in Philippines Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>South Korea</b>	0.15	0.18	0.18	0.15	0.12

  

<b>9.B India's RECPI with South Korea in Philippines Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>South Korea</b>	0.81	0.91	1.48	1.48	0.71

*Source: TradeSift calculations using data from UN Comtrade via WITS 6-digit database*

Our SMART analysis has found that only few exports from India to the Philippines will be affected by this FTA. The most affected products are shown in Table 10 below. Lead acid electric accumulators will be the most affected and is expected to be reduced by approximately US\$ 70,000.

**Table 10: Trade Diversion likely to be experienced by India**

<b>Product Code</b>	<b>Description</b>	<b>Trade Diversion (US\$ thousands)</b>
850710	Lead acid electric accumulators	-69.586
870390	Motor cars and other motor vehicles principally designed for the transport of persons, including station wagons and racing cars	-56.546
870421	Trucks, Nesi, Diesel Eng, GVW 5 Metric Tons & Und	-17.672
870899	Motor Vehicle parts nes	-13.831

*Source: CUTS Calculations using data from UN Comtrade via WITS 6-digit database and using WITS SMART analysis tool*

## **Food for Thought**

As India is already enjoying duty free market access in the Philippines under India-ASEAN Comprehensive Economic Cooperation Agreement (CECA), there is less chance that India's exports will be reduced due to this FTA. This is reflected in our SMART analysis. However, very high RECIPI values indicate the possibility of highly competitive pressure from South Korea to India's access to the Philippines market. This competitive pressure will be strengthened further due to this FTA.

### **b) Impact on India's exports to South Korea**

India's key export items to South Korea include a mixture of metal, jewellery, and petroleum products. They are petroleum spirit; light petroleum; non-alloyed aluminium; ferro chromium; non-alloyed zinc; refined lead; oil cake; electrodes for graphite or for furnace; iron ore; and diamonds.

Majority of export items of the Philippines to South Korea are electronics items with some agriculture and tobacco products. They are storage units; electronic integrated circuits of various types; ignition or other wiring sets for vehicles; aircraft ship; electric inductors; electronic printed circuits; copper cathodes; edible fruits; and cigarettes containing tobacco.

There is hardly any common product in India's and the Philippines' exports to South Korea and our FKI analysis (see Table 10.A) confirm this. The RECIPI index (see Table 10.B) also highlights that India faces negligible competition from the Philippines in South Korea's market.

**Table 11: India's FKI and RECPI with Philippines in the South Korea market**

<b>10.A India's FKI with the Philippines in South Korea's Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Philippines</b>	0.06	0.07	0.08	0.09	0.05
<b>10.B India's RECPI with the Philippines in South Korea's Market</b>					
<b>Competitor</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Philippines</b>	0.04	0.05	0.07	0.06	0.02

*Source: TradeSift calculations using data from UN Comtrade via WITS 6-digit database*

Our SMART analysis depicts that very few exports from India could be affected in the South Korean market. All these products are different varieties of edible fruits and nuts. Top three most affected products are listed in the table below.

**Table 12: Trade Diversion likely to be experienced by India**

<b>Product Code</b>	<b>Description</b>	<b>Trade Diversion (US\$ thousands)</b>
80390	Edible fruit and nuts peel of citrus fruit or melons Bananas, including plantains, fresh or dried	-88.025
200899	Fruit & Edible Plant Parts Nesoi, Prep Etc	-41.459
80450	Guavas, mangoes and mangosteens, fresh or dried	-12.288

*Source: CUTS Calculations using data from UN Comtrade via WITS 6-digit database and using WITS SMART analysis tool*

## Food for Thought

India's trade with South Korea will not hamper much due to this FTA. However, the concern is about India's negative trade balance with South Korea. In the year 2019, India's imports from South Korea were four times larger than its exports. It is expected that India's exports will be reduced further, though not a significant manner, due to this FTA.

India is already concerned about this continuous growth in trade deficit with South Korea after the implementation of its Comprehensive Economic Partnership Agreement (CEPA) in January, 2010. In order to lower this trade deficit and for mutual benefits of both the countries, Indian Prime Minister Narendra Modi and South Korean President Moon Jae-in signed an Early Harvest Package in July, 2018 so as to upgrade this CEPA.<sup>3</sup>

South Korea has agreed to provide tariff concessions on 17 Indian products under this EHP. Among them, seven are fish products and others include alcoholic beverage beer; mango jams and jellies; corn; and maize.<sup>4</sup> However, this list is not comprehensive and not fully addressing India's concern. Hence, there is a need for further negotiation in order to expand the scope and coverage of this CEPA.

<sup>3</sup> <https://www.thehindubusinessline.com/news/world/india-s-korea-set-sights-on-50-billion-trade/article24382091.ece>

<sup>4</sup> <https://www.india-briefing.com/news/india-south-korea-cepa-investment-electronics-infrastructure-17425.html/>

## Annexure I

### FK Index

The Finger-Kreinin (FK) index provides a way of measuring how similar are two sets of numbers. In principle, it can be used to compare the similarity between either the structure of a country's imports or exports with any two partner countries, to indicate how similar is a country's export pattern to its import pattern, whether geographically or by product; or to compare the structure of production in two different countries.

#### FKI to a Destination Country

This version of the FK Index compares export patterns of two countries into a given market (for example, UK and Japan's exports to the world or to India). Another way of thinking about this is that it compares how similar are the imports of a given country from two different suppliers. This is useful if we want to consider overall similarity of exports of two countries and therefore, their degree of competitiveness/complementarity either with respect to particular markets or with respect to their trade with the rest of world.

The formula for the FK Index to a destination country is as follows:

$$FK_{i_1 i_2 j} = \sum_k \min \left[ \left( \frac{x_{i_1 j}^k}{X_{i_1 j}} \right), \left( \frac{x_{i_2 j}^k}{X_{i_2 j}} \right) \right]$$

In the FKI by destination,  $i_1$  and  $i_2$  are two source countries and  $j$  is a destination country.  $x^k$  refers to trade flow in product  $k$ ;  $X$  as total trade flow, so  $x_{i_1 j}^k/X_{i_1 j}$  is the share of product  $k$  in country  $i_1$ 's total exports to the destination partner ( $j$ ).  $x_{i_2 j}^k/X_{i_2 j}$  is the share of product  $k$  in the comparator country's ( $i_2$ ) total exports.

### RECPI

The Relative Export Competitive Pressure Index (RECPI) is about exploring average degree of competition country  $i_1$  faces in country  $j$ 's market from country  $i_2$ , by taking into account both the structure and level of competing countries' trade. Country  $i_1$  will be interested in the value of country  $i_2$ 's exports to country  $j$ , and also in the extent to which country  $i_2$ 's exports are in direct competition with country  $i_1$ 's exports.

The Relative Export Competitive Pressure Index (RECPI) is defined for exporter  $i_1$  with respect to competitor  $i_2$  in market  $j$  as:

$$RECPI = \frac{\sum_k s_{i_2 j}^k x_{i_2 j}^k}{\sum_k s_{i_1 j}^k x_{i_1 j}^k}$$

where  $k$  refers to the product,  $i_1$  to the reporting country,  $i_2$  to the competitor country, and the  $s$  and  $x$  data refer to a given export destination, country  $j$ .  $x_{i_1 j}^k$  is the value of country  $i_1$ 's exports to country  $j$  of good  $k$ , and  $s_{i_1 j}^k$  gives the share of good  $k$  in country  $i_1$ 's exports to country  $j$ .

The RECPI is a summary measure which aggregates information from across a range of sectors, subsectors or products. Hence, it can be calculated either for all trade, or for particular sectors - in all cases on the basis of more detailed sub-sectoral or product level detail.