REVEALED COMPARATIVE ADVANTAGE AND TRADE INTENSITY: AN ANALYSIS OF INDIA'S TRADE WITH ASEAN

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ABSTRACT

Under an umbrella of economic reforms and look east policy, India's trade and investment relations with ASEAN bloc has been growing rapidly. It is in this context, this paper aims to analyze India's trade potential and prospects with ASEAN bloc, by using RCA and intensity of trade index. RCA is calculated at 2-digit level mentioned in SITC revision-2 for the period 2001 to 2018 and trade intensity from 1991 to 2018. It is found from the study that India enjoys comparative advantage in exporting meat and edible meat, cotton, pharmaceutical products, cereals, salt, organic and inorganic chemicals, precious stones, etc to ASEAN and importing silk, vegetable products, tanning, dyeing, wood, papers, printed books, iron, zinc, etc from ASEAN. With this high value of RCA, India can diversify its trade basket, increase volume of trade, extend market and maintain its competitive in product. India has to maintain its specialization in products along with it have to develop specialization in other products. India has intensity of trade with ASEAN. India's export as well as import intensity with ASEAN is greater than 1 for all the years (1995-2018). India has strong trade potential and prospects with ASEAN.

KEYWORDS: Potential, Comparative Advantage, Trade Specialization, Intensity.

Introduction

India's focus on a strengthened and multi faceted relationship with Association of South-East Asian Nations (ASEAN)¹ is an outcome of the significant changes in the world's political and economic scenario since the early 1990s and its own march towards economic reforms. India's search resulted in the look east policy (LEP) presently renamed as act east policy (AEP) which led India to become a sectoral dialogue partner of ASEAN in 1992, a full dialogue partner in 1995, member of ASEAN Regional Forum (ARF) in 1996 and a Summit level partner in 2002. Thereafter, India and ASEAN signed a framework agreement i.e. Comprehensive Economic Cooperation Agreement (CECA)² on 8th October 2003 in Bali, Indonesia. This agreement served as legal basis to conclude further agreements include Trade in Goods (TIG), services and investment agreement that form the India-ASEAN FTA. Negotiations on TIG agreement between India and ASEAN started in March 2004 and continued for six years. Finally, a FTA in goods was signed between them on August 13, 2009 in Bangkok that came into force from January 1, 2010 and trade in services and investment in 2015.

India-ASEAN trade and investment relations have been growing rapidly. Bilateral trade continued to increase between India and ASEAN bloc. India's is a net importer of ASEAN and ASEAN is a net exporter to India (Figure-1). Percentage wise, share of ASEAN's trade with India as a proportion of total India trade with world is significant and also risen. Except trade, investment flows are substantial both ways. Both have celebrated a quarter of a century of their Dialogue Partnership, 15 years of Summit level interaction and 5 years of Strategic Partnership in 2017. Both have made substantial progress in other areas of cooperation such as human resource development, science and technology, people-to-people contacts, transport and infrastructure, small and medium enterprises, tourism, information and communication technology, agriculture, food security, climate change, energy, culture and arts and implementation for ASEAN integration. Both sides are also committed to organize a large number of programmes to boost people-to-people interaction with ASEAN such as inviting ASEAN students to India

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each year for the students Exchange Programme, Special Training Course for ASEAN diplomats, Exchange of Parliamentarians, Participation of ASEAN students in the National Children's Science Congress etc. Keeping in view the vast growing relation, it is pertinent to analyse India's trade prospects with ASEAN bloc.

Review of Literature

Yue (2001) used RCA index and revealed that pattern of comparative advantage are different in the coastal regions and interiors regions of China. Edwards and Schoer (2002) in their study revealed that South Africa has comparative advantage in natural resource based product by applying RCA. It also has strong RCA in non-traditional sectors. Balasubramanyam and Wei (2005) used RCA and Kreinin-Finger Similarity Indices and revealed that China has much higher trade specialization in the exports of textiles and clothing to world. While India has a comparative advantage in women's clothing of various sorts and men's shirts over the period (1996-2002). Smyth (2005) applied RCA and found that Ireland has trade specialization in foreign-owned sectors and chemical sector (1997-2002). Comparative advantage tended to decline in indigenous sectors with the induction of structural changes in the country. Kilduff and Chi (2007) assessed 27 Eastern European and former Soviet Union Nations' patterns of trade specialization in textile machinery, man-made fibre, textile and apparel sectors of the textile complex over a ten-year period (1995-2004) by using RCA and ANOVA.

Kumar, Raj and Raj (2008) analysed that India has tremendous progress in the export of cucumber and gherkin to world with high value of RCA and RCSA, by utilising export performance ratio (EPR), log linear type of demand function, RCSA and regression analyse using OLS respectively. Kumar (2009) applied RCA and Trade Intensity Index and found that SACs have trade potential and prospects but need to untapped it. Jackman, Lordeb and Alleynec (2011) employed RCA to analyze tourism competitiveness of 18 small island developing states (SIDS) over the period 2000-2007. Competitiveness in most SIDS increased but none of the SIDS displayed an improvement in comparative advantage. Bano and Tabbada (2012) utilized RCA, TII and TCI and assessed that New Zealand and Philippines have trade potential, prospects and complementary with each other. Mehmood (2012) applied Univariate Auto Regressive Integrated Moving Average (ARIMA) model and forecasted that Pakistan has full export potential and prospects with members of SAARC.

Babar and Bhise (2013) in their study found that India has more comparative advantage in agricultural commodity trades' with USA than the rest of world for the period 2006-2010. Ishchukova and Smutka (2013) used Balassa's RCA index, Vollrath Index and Lafay Index and revealed that Russia has specialization and competitive in number of agricultural products and food stuffs for the period 1998 to 2010. Kathuria (2013) calculated and compared comparative advantage of India and Bangladesh for the clothing sector in the world export trade over a period of time (1995-2003) at 4-digits level mentioned in SITC with the help of RCA and dynamic variant of RCA index. Jagdambe (2016) in his study assessed that India's total agricultural export as well as import intensity with ASEAN is greater than 1 for all the years (2001-2013) but III is higher than EII. India has comparative advantage in export of agricultural products to ASEAN but it tended to decrease gradually. Maryam, Banday and Mittal (2018) revealed that large extent of bilateral trade potential and prospects exist among BRICS and BRICS with EU by employing trade intensity index and RCA index.

Research Gap and Objectives of the Study

Various studies have analyzed trade specialization and intensity of trade between China region, South Africa, SACs, Ireland, New Zealand and Philippines, EU-28, Eastern European countries, Russia, India and Bangladesh, India and ASEAN agricultural products, BRICS, etc by taking one commodity only and using various models gravity model, augmented gravity model, Kreinin-Finger Similarity, ARIMA, ANOVA, aquino index, grubel lloyed index, revealed comparative advantage, trade intensity index and trade complimentarity index. To the best of best my knowledge, no study has been carried out to calculate India's India's trade potential and prospects with ASEAN bloc at 2-digit level. In order to fulfill this gap, present study attempts to analyze India's trade specialization and intensity of trade with ASEAN.

The objectives of the present study are listed below:

- To identify the comparative advantage in the exports and imports for commodities, at 2-digit level mentioned in Standard International Trade Classification (SITC) revision-2, in order to explore potential areas for further cooperation and
- To calculate India's trade intensity with ASEAN.

Database and Methodology

In order to explore potential areas for further cooperation, India's comparative advantage in the export/import of products to/from ASEAN is identified by applying Balassa's (1965) RCA. It has been calculated at 2-digit level mentioned in SITC revision-2, United Nations Conference on Trade and Development (UNCTAD) for the period 2001 to 2018. For this data has been sourced from the International Trade Centre (ITC) which is a joint agency of the WTO and the United Nations. To analyze India's trade prospects with ASEAN, intensity of India's trade with ASEAN bloc for total trade, exports by India to it and import from it is calculated for 28 years i.e., starting from 1991 to the year 2018 by using Kojima's (1964) intensity of trade index. The secondary data pertaining to trade has been collected from sources like wits, World Bank, Direction of Trade Statistics etc.

$$\mathsf{RCAX} = (x_{ij}^{k} \div X_{ij}) \, / \, (x_j^{k} \div X_j)$$

Where: x_{ij}^{k} = export of product k by country i (India) to another Region j; X_{ij} = total exports of country i (India) to the reference group j; x_{ij}^{k} = exports of product k by the reference group j; X_{ij} = total exports of reference group j.

The Revealed Comparative Advantage for Imports (RCAM) is calculated as below:

$$RCAM = (m_{ij}^{k} \div M_{ij}) / (m_{j}^{k} \div M_{j})$$

Where: $m_{ij}^{\ k}$ = import of product k by country i (India) from another Region j; M_{ij} = total imports of country i (India) from the reference group j; $m_j^{\ k}$ = imports of product k by the reference group j; M_{j} = total imports of reference group j.

$$T_{ij} = \frac{ \begin{bmatrix} (X_{ij} + M_{ij}) \div (X_i + M_i) \end{bmatrix} }{ \begin{bmatrix} (X_{wj} + M_{wj}) - (X_{ij} + M_{ij}) \div (X_w + M_w) - (X_i + M_i) \end{bmatrix} }$$

Where: T_{ij} = total trade intensity index of country i with country j; X_{ij} = exports of country i to country j; M_{ij} = imports of country i from country j; X_{i} = total exports of country i; M_{i} = total imports of country i; X_{wj} = total world exports to country j; M_{wj} = total world imports from country j; X_{w} = total world exports; M_{w} = total world imports.

$$X^{a}_{ij} = \frac{[X_{ij} \div X_i]}{[(M_i - M_{ji}) \div (M_w - M_i)]}$$

Where: X^a_{ij} export trade intensity index of country i with country j; X_{ij} exports of country i to country j; X_{ij} total exports of country i; M_{ji} total imports of country j; M_{ji} imports of country j from country i; M_w = total world imports; M_i = total imports of country i.

$$M^a_{ij} = \frac{[M_{ij} \div M_i]}{[(X_{j^-} X_{ji}) \div (X_w - X_i)]}$$

Where: M^a_{ij} import trade intensity index of country i with country j; M_{ij} imports of country i from country j; M_{ij} total imports of country i; X_{j} total exports of country j; X_{ji} exports of country j; X_{ij} to country j; X_{ij} total world exports; X_{ij} total exports of country i.

Interpretation of Index

A product with high RCA is competitive and can be exported to countries with low RCA. It tells about the relative trade performance of individual countries in particular commodities. Value greater than 1 for RCAX/RCAM indicates a comparative advantage while less than 1 for RCAX/RCAM indicates comparative disadvantage for the economy in the export/import of given product. After calculating RCAX and RCAM, products with RCA greater than 1 are chosen. When an economy is found to have total trade, export and import intensity index with a value greater than 1, then it reflects more trade prospects and a high degree of integration with partner. It tries to establish the relative trade performance of a trading partner in relation to a country's trade with the rest of the world.

Results and Discussion

• Results of Revealed Comparative Advantage for Exports: It is observed from Table-1 that India has sustainable comparative advantage in the export of products with code 2, 7, 9, 10, 12, 13, 23, 25, 28, 29, 30, 32, 36, 38, 41, 45, 50, 51, 52, 53, 54, 55, 57, 63, 67, 68, 71, 72, 73, 74, 76, 82, 86, 89 and 99(Annexure-1) to ASEAN since 2001.

Table 1: Products with Value of RCA Greater than 1 for Exports to ASEAN from India

Т	able 1: Pro	oducts with Value of RCA Greater than 1 for Exports to ASEAN from India	
Serial No	Product Code	RCA Characteristics	
1	2	India has sustainable and strong comparative advantage in this product since 2001.	
2	3	Except from 2006 to 2009, India has trade specialization in this product since 2001.	
3	4	There is RCA in the product since 2005 except for the years 2011 and 2012.	
4	5	There is sustainable RCA in this product since 2001 except for the years 2005 and 2006.	
5	7	This product has sustainable RCA since 2001.	
6	9	RCA is greater than 1 in this product since 2001.	
7	10	India has trade specialization in the export of this product to ASEAN since 2001.	
8	11	Except from 2006 to 2012, RCA is greater than 1 in this product since 2001.	
9	12	India has comparative advantage in the export of this product to ASEAN since 2001.	
10	13	India has strong RCA in this product since 2001.	
11	14	RCA is less than 1 in this product since 2007.	
12	17	The product has comparative advantage since 2001 except for the years 2013 and 2014.	
13	23	India has RCA in this product since 2001.	
14	24	The product has sustainable comparative advantage since 2003.	
15	25	There is RCA in this product since 2001.	
16	27	India has sustainable comparative advantage since 2002.	
17	28	This product has sustainable and strong RCA since 2001.	
18	29	India has sustainable and strong RCA in this product since 2001.	
19	30	There is sustainable RCA in this product since 2001.	
20	32	India has sustainable and strong RCA in this product since 2001.	
21	35	India has no comparative advantage in this product since 2002 except for the year 2014.	
22	36	India has sustainable RCA in this product since 2001.	
23	38	There is trade specialization in this product since 2001.	
24	41	India has comparative advantage in the export of this product to ASEAN since 2001.	
25	45	This product has RCA since 2001.	
26	50	India has RCA in this product since 2001	
27	51	RCA is greater than 1 in this product since 2001.	
28	52	India has trade specialization in the export of this product to ASEAN since 2001.	
29	53	There is sustainable RCA in this product since 2001.	
30	54	RCA is sustainable in this product since 2001.	
31	55	India has trade specialization (RCA>1) in this product since 2001.	
32	57	India has comparative advantage in the export of this product to ASEAN since 2001.	
33	58	Except from 2004 to 2007, India has comparative advantage in this product since 2001.	
34	63	India has sustainable RCA in this product since 2001.	
35	67	This product has sustainable RCA since 2001.	
36	68	India has comparative advantage in this product since 2001.	
37	69	RCA is greater than 1 in this product since 2018	
38	70	There is no RCA in this product since 2001 except for the years 2003 and 2004.	
39	71	India has strong comparative advantage in this product since 2001	
40	72	India has trade specialization in the export of this product to ASEAN since 2001.	
41	73	India has strong comparative advantage in this product since 2001	
42	74	The product has sustainable RCA since 2001	
43	75	There is trade specialization in this product since 2012.	
44	76	This product has sustainable RCA since 2001.	
45	78	India has sustainable and strong RCA since 2004 except for the years 2006 and 2007.	
46	79	India has RCA in this product since 2006.	
47	82	India has trade specialization in the export of this product to ASEAN since 2001.	
48	86	India has sustainable RCA in this product since 2001.	
49	87	RCA is greater than 1 in this product since 2010.	
50	88	India has comparative advantage in the export of this product to ASEAN since 2008.	
51	89	India has sustainable and strong RCA in this product since 2001.	
52	93	RCA is greater than 1 in this product since 2006 except 2007, 2010 and 2011.	
53	97	India has sustainable RCA in this product since 2002.	
	· · · · · · ·	ingo are based on the trade estatistics detabase of the International Trade Contro (ITC)	

Source: Author's calculations are based on the trade statistics database of the International Trade Centre (ITC)

• Results of Revealed Comparative Advantage for Imports (RCAM): As seen from Table 2, India's trade specialization in the import of numerous products from ASEAN. India has sustainable and strong RCA in the import of products with code 7, 13, 14, 15, 23, 26, 28, 29, 32, 38, 44, 47, 48, 49, 50, 54, 55, 59, 72, 73, 78, 79 and 89(Annexure-1) from ASEAN since 2001.

Table 2: Products with Value of RCA Greater than 1 for Imports by India from ASEAN

Serial No	Product Code	RCA Characteristics		
1	5	India has no sustainable RCA in this product since 2006 except from 2007 to 2014.		
2	7	India has sustainable comparative advantage in this product since 2001.		
3	8	There is no RCA in this product since 2001 except from 2003 to 2005.		
4	9	India has trade specialization in this product since 2001 except 2007 to 2013.		
5	12	India has no trade specialization in this product since 2001 except for the year 2004.		
6	13	There is sustainable comparative advantage in this product since 2001.		
7	14	The product has RCA since 2001.		
8	15	India has sustainable RCA in this product since 2001.		
9	17	India has no comparative advantage in this product since 2001 except for the year 2009.		
10	23	There is sustainable comparative advantage in this product since 2001.		
11	25	India has RCA in this product since 2005.		
12	26	India has sustainable RCA in this product since 2001.		
13	27	RCA is greater than in this product since 2006.		
14	28	India has sustainable RCA since 2001.		
15	29	RCA in this product is greater than 1 since 2001.		
16	31	India has no trade specialization in this product since 2014.		
17	32	The product has sustainable comparative advantage since 2001.		
18	34	RCA is greater than 1 since 2017.		
19	38	India has comparative advantage in the import of this product from ASEAN since 2001.		
20	39	India has RCA in this product since 2004.		
21	40	There is comparative advantage in this product since 2010.		
22	44	India has very strong RCA in this product since 2001.		
23	45	RCA is greater than 1 in this product since 2008.		
24	47	India has sustainable RCA in this product since 2001.		
25	48	India has trade specialization in this product since 2001.		
26	49	India has RCA in this product since 2001.		
27	50	This product has sustainable and strong RCA since 2001.		
28	51	There is no RCA in this product since 2002 except for the years 2004 and 2005.		
29	52	India has no trade specialization in this product since 2003.		
30	54	India has RCA in this product since 2001.		
31	55	India has sustainable RCA in this product since 2001.		
32	57	The product has RCA since 2003.		
33	59	India has sustainable RCA in this product since 2001.		
34	60	There is no comparative advantage in this product since 2005.		
35	63	There is no RCA in this product since 2001 except for the years 2002 and 2003.		
36	70	India has trade specialization in this product since 2001 except from 2006 to 2017.		
37	71	There is no RCA in this product since 2001 expect for the years 2011 and 2012.		
38	72	India has strong comparative advantage in this product since 2001.		
39	73	India has sustainable RCA in this product since 2001.		
40	74	There is trade specialization in this product since 2001.		
41	75	There is RCA in this product since 2014 except for the years 2016 and 2017.		
42	76	The product has sustainable comparative advantage in this product since 2001.		
43	78	India has sustainable RCA in this product since 2001.		
44	79	There is sustainable and very strong RCA in this product since 2001.		
45	80	RCA is greater than 1 in this product since 2001.		
46	81	India has no trade specialization in this product since 2002.		
47	82	There is no comparative advantage in this product since 2001 except for the year 2005.		
48	84	India has no trade specialization since 2002 except for the years 2004 and 2005.		
49	88	This product has no comparative advantage since 2001 except from 2003 to 2005.		
50	89	India has sustainable and strong RCA in this product since 2001.		
		ings are based on the trade statistics database of the International Trade Centre (ITC)		

Source: Author's calculations are based on the trade statistics database of the International Trade Centre (ITC)

• Results of Intensity of Trade Index: As shown in Table-3, India has intensity of trade with ASEAN bloc. For total trade, India has intensity of trade with it. The value of total trade is rotated around 0.6-2 since 1991. Intensity of trade for exports by India to it was less than 1 for the years 1991 and 1992. It is greater than 1 since 1993 except for the year 1994. Import Intensity Index (III) was less than 1 from 1991 to 1994. III is greater than 1 since 1995. India has trade prospects with ASEAN.

Table 3: Intensity of Trade Index of India with ASEAN

Year	Intensity of Trade Index for Total Trade between India and ASEAN	Intensity of Trade Index for Exports by India to ASEAN	Intensity of Trade Index for Imports by India from ASEAN
1991	0.65	0.68	0.61
1992	0.65	0.91	0.66
1993	0.62	1.06	0.62
1994	0.73	0.37	0.93
1995	0.85	1.30	1.13
1996	0.86	1.23	1.14
1997	0.82	1.08	1.27
1998	0.93	1.00	1.71
1999	0.93	1.21	1.66
2000	0.81	1.12	1.38
2001	0.91	1.39	1.54
2002	0.96	1.65	1.52
2003	0.96	1.63	1.68
2004	1.03	1.84	1.49
2005	0.96	1.85	1.28
2006	1.08	1.86	1.57
2007	1.09	1.75	1.69
2008	1.12	1.85	1.57
2009	1.00	1.72	1.58
2010	0.93	1.64	1.37
2011	1.02	1.78	1.06
2012	0.97	1.60	1.40
2013	1.01	1.61	1.48
2014	0.95	1.47	1.35
2015	1.93	1.21	1.07
2016	1.52	1.51	1.53
2017	1.45	1.59	1.33
2018	1.53	1.50	1.48

Source: Author Calculations

Discussion

In the present study, an attempt is made to analyze India's trade potential and prospects with ASEAN bloc. In order to explore potential areas for cooperation, RCA is applied to identify the comparative advantage in the exports and imports for commodities, at 2-digit level mentioned in SITC revision-2 from 2001-2018. India has comparative advantage (RCAX>1) in the export of meat and edible meat offal, edible vegetables and certain roots and tubers, coffee, tea mate and spices, cereals, oil seed, oleagic fruit, grain, seed, fruit, lac, gums, resins, vegetable saps and extracts, Residues, wastes of food industry, animal fodder, salt, sulphur, earth, stone, plaster, lime and cement, inorganic chemicals, precious metal compound, isotopes, organic chemicals, pharmaceutical products, tanning, dyeing extracts, tannins, derivs, pigments etc, Explosives, pyrotechnics, matches, pyrophorics, chemical products, raw hides and skins (other than furskins) and leather, cork and articles of cork, silk, wool, animal hair, horsehair yarn and fabric, vegetable textile fibres, paper yarn, woven fabric, manmade filaments, manmade staple fibres, carpets and other textile floor coverings, other made textiles articles, sets, worn clothing, bird skin, feathers, artificial flowers, human hair, pearls, precious stones, metals, coins, iron and steel and their articles, copper and their articles, aluminum, etc, products to ASEAN bloc.

There are numerous products in which India has comparative advantage (RCAM>1) in the imports from ASEAN. These products are edible vegetables and certain roots and tubers, lac, gums, resins, vegetable saps and extracts, vegetable plaiting materials, vegetable products, animal, vegetable fats and oils, cleavage products, residues, wastes of food industry, animal fodder, tobacco

and manufactured tobacco substitutes, ores, slag and ash, inorganic chemicals, precious metal compound, isotopes, organic chemicals, tanning, dyeing extracts, tannins, derivs, pigments, chemical products, wood and articles of wood, wood charcoal, pulp of wood, fibrous cellulosic material, waste, silk, manmade filaments, manmade staple fibres, impregnated, coated or laminated textile fabric, Iron and steel, articles of iron or steel, lead and articles, zinc and articles, ships, boats and other floating structures. Kojima's intensity of trade index for total trade, export and import is utilized to estimate intensity/prospects of India's trade and level of integration with ASEAN for the time period 1991 to 2018. The results indicate that overall intensity of trade values of India with ASEAN have been observed to be greater than 1 that mean India has sustainable trade prospects with ASEAN and help to enhance level of integration. The export intensity of India with ASEAN is greater 1 since 1992 and rotated around 1-2. India's intensity of import from ASEAN is also greater than 1 since 1995. The value of EII is higher than III during the whole years.

Conclusion

India's relationship with ASEAN has emerged as a key cornerstone of our foreign policy. The relationship has evolved from the LEP to ACP. Today ASEAN is India's 4th largest trading partner, accounting for 10.2% of India's total trade. From above discussion, it can be observed that India has sustainable trade potential and prospects with ASEAN bloc. The study has recommended many products in which India has comparative advantage and which can enhance India's trade prospects with ASEAN. By focusing its trade efforts on the products in which India has comparative advantage, India can not only achieve the key objective of diversification in its trade with ASEAN; but also endeavor to increase its volume of trade significantly with it. It will enlarge its market size and competitive in product. India has to maintain its specialization in products which have RCA>1 but also have to develop comparative advantage in other products. India has intensity of trade with ASEAN.

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Endnotes

- ASEAN which is a geo-political and economic organization with 10 member countries was set up on 8 August 1967 by Indonesia, Malaysia, Philippines, Singapore and Thailand in Bangkok. Later on, Brunei Darussalam joined the bloc in 1984, Vietnam in July 1995, Lao PDR and Myanmar in 1997 and Cambodia in 1999.
- CECA is an agreement signed by India with many countries to facilitate trade in goods where both the countries agree to offer some concessions to each other.

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Figure-1 Bilateral Trade between India and ASEAN bloc (Value in US\$ thousands)



Annexure 1: Product Codes-2 digit SITC, Revision 2

Product Code	Product Description	Product Code	Product Description
1	Live animals	50	Silk
2	Meat and edible meat offal	51	Wool, animal hair, horsehair yarn and fabric thereof
3	Fish, crustaceans, molluscs, aquatic invertebrates nes	52	Cotton
4	Dairy products, eggs, honey, edible animal product nes	53	Vegetable textile fibres nes, paper yarn, woven fabric
5	Products of animal origin	54	Manmade filaments
6	Live trees, plants, bulbs, roots, cut flowers etc	55	Manmade staple fibres
7	Edible vegetables and certain roots and tubers	56	Wadding, felt, nonwovens, yarn, twine, cordage, etc
8	Edible fruit, nuts, peel of citrus fruit, melons	57	Carpets and other textile floor coverings
9	Coffee, tea mate and spices	58	Special woven or tufted fabric, lace, tapestry etc
10	Cereals	59	Impregnated, coated or laminated textile fabric
11	Milling products, malt, starches, inulin, wheat gluten	60	Knitted or crocheted fabric
12	Oil seed, oleagic fruit, grain, seed, fruit, etc, nes	61	Articles of apparel, accessories, knit or crochet
13	Lac, gums, resins, vegetable saps and extracts nes	62	Articles of apparel, accessories, not knit or crochet
14	Vegetable plaiting materials, vegetable products nes	63	Other made textiles articles, sets, worn clothing etc
15	Animal, vegetable fats and oils, cleavage products, etc	64	Footwear, gaiters and the like, parts thereof
16	Meat, fish and seafood food preparations nes	65	Headgear and parts thereof
17	Sugars and sugar confectionery	66	Umbrellas, walking-sticks, seat-sticks, whips, etc
18	Cocoa and cocoa preparations	67	Bird skin, feathers, artificial flowers, human hair
19	Cereal, flour, starch, milk preparations and products	68	Stone, plaster, cement, asbestos, mica, etc articles
20	Vegetable, fruit, nut, etc food preparations	69	Ceramic products
21	Miscellaneous edible preparations	70	Glass and glassware
22	Beverages, spirits and vinegar	71	Pearls, precious stones, metals, coins, etc
23	Residues, wastes of food industry, animal fodder	72	Iron and steel
24	Tobacco and manufactured tobacco substitutes	73	Articles of iron or steel
25	Salt, sulphur, earth, stone, plaster, lime and cement	74	Copper and articles thereof
26	Ores, slag and ash	75	Nickel and articles thereof
27	Mineral fuels, oils, distillation products, etc	76	Aluminum and articles thereof
28	Inorganic chemicals, precious metal compound,	78	Lead and articles thereof
	isotopes		
29	Organic chemicals	79	Zinc and articles thereof
30	Pharmaceutical products	80	Tin and articles thereof
31	Fertilizers	81	Other base metals, cermets, articles thereof
32	Tanning, dyeing extracts, tannins, derivs, pigments etc	82	Tools, implements, cutlery, etc of base metal
33	Essential oils, perfumes, cosmetics, toiletries	83	Miscellaneous articles of base metal
34	Soaps, lubricants, waxes, candles, modeling pastes	84	Machinery, nuclear reactors, boilers, etc
35	Albuminoids, modified starches, glues, enzymes	85	Electrical, electronic equipment
36	Explosives, pyrotechnics, matches, pyrophorics, etc	86	Railway, tramway locomotives, rolling stock, equipment
37	Photographic or cinematographic goods	87	Vehicles other than railway, tramway
38	Miscellaneous chemical products	88	Aircraft, spacecraft and parts thereof
39	Plastic and articles thereof	89	Ships, boats and other floating structures
40	Rubber and articles thereof	90	Optical, photo, technical, medical, etc apparatus
41	Raw hides and skins (other than furskins) and leather	91	Clock and watches and parts thereof
42	Articles of leather, animal, gut, harness, travel goods	92	Musical instruments, parts and accessories
43	Furskins and artificial fur, manufactures thereof	93	Arms and ammunition, parts and accessories thereof
44	Wood and articles of wood, wood charcoal	94	Furniture, lighting, signs, prefabricated buildings
45	Cork and articles of cork	95	Toys, games, sports requisites
46	Manufactures of plaiting material, basketwork etc	96	Miscellaneous manufactured articles
47	Pulp of wood, fibrous cellulosic material, waste etc	97	Works of art, collectors pieces and antiques
48	Paper and paperboard, articles of pulp, paper and board	99	Commodities not elsewhere specified
49	Printed books, newspapers, pictures etc		
49	Finited books, newspapers, pictures etc		

Source: International Trade Centre, Geneva (ITC).

