



AN EMPIRICAL ANALYSIS OF INDIA'S MERCHANDISE TRADE RELATIONS WITH BELGIUM

KEYWORDS

Trade, trends, composition and intensity

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ABSTRACT

In contrast to most of the developing economies, India is regarded as a country with significant supply side capacity. The present paper explores the potentials of enhancing trade between India and Belgium and aims at identifying the possible gains that would accrue to each of the economies. In EU cadre, Belgium is strategically significant trading partner for India far as trade between two countries in the period of study is concerned. Analysis of data is done with the help of comparisons of tables and formula of intensity indices of trade.

Introduction

Since 1991, India's trade reforms have made significant improvement in India's bilateral trade. India's policy makers understood that increasing the openness of India's economy was key catalyst for sustaining faster and sustainable economic growth. In fact, India's international trade volume has grown faster than GDP due to increasing exports of goods and services. The Diaspora in both India and EU brings people and cultures together leading to enhancing economic policy and cooperation for developing trade and investment. India has embarked on a process of economic reform and progressive integration with the global economy that aims to put it on the path of rapid sustained growth. However, India's trade regime and regulatory environment remains uneasy and comparatively restrictive. In 1994 cooperation agreement signed between EU and India took bilateral relation which was set-up beyond trade and economic cooperation. The trade has multi-dimensional relationship in which India maintain one third of the exports reaching to EU destination.

Belgium is the third strategic nation in European Union as far as Indian bilateral trade relations are concerned. Recent MoU signed between National Bank of Belgium and Reserve Bank of India on 13 March, 2013 has added more advantage concerning mutual cooperation. Other agreements include MoU on cooperation for effective development and modernization of Railway sector in August 2012; Social Security Agreement in November 2006 (came into force in September 2009); Agreement on cooperation in the field of Science & Technology, signed in November 2006. Recent 13th Economic JCM between India and BLEU that was held in Brussels in 2013, potential for trade diversification, enhancing cooperation in investment, infrastructure, market access issues, diamond sector and higher education were the main points of agenda. Belgium is home to many Indian information technology companies, chemical etc whereas Belgium is most interested in dredging, engineering goods, electronics and software etc. In 2013, bilateral trade between Belgium and India declined by 1.15%. Global financial situation is being put as the reason for this. Compared to 2011, in 2012 there was 9% fall in the trade.

Business Standard(2014) reported that Belgium hopes to uplift trade with India after financial situation gets better. "The decline in trade is due to the contraction of Indian exports to Belgium while the exports from Belgium remained stable," said Pierre Vaesen, the ambassador of

Belgium to India at an interaction session with members of Utkal Chamber of Commerce of Industry(UCCI).

Objectives of the study

The following three objectives of this study are as follows:

- To analyze the trends in India's merchandise trade with Belgium.
- To analyze the composition of India's merchandise trade with Belgium.
- To analyze the exports and imports intensity of India's merchandise trade with Belgium.

Methodology.

To study the empirical analysis of trade relationship between India and Belgium most of the data have been retrieved from the official website of Business Portal (Directorate General of Commerce Intelligence & Statistics). The data used for the study has been retrieved as 2-digit code of grouped commodities. Other source of data information has been UN COM Trade & World Integrated Trade Solution (WITS).

In the trend analysis the study is to find the pattern of trend using the table illustrations of import-export. With construction of trend line we made the interpretations and analysis which actually talks about whether trade has negative or positive effect in the given period of time.

Composition of trade tables generated includes trade items /commodities included in the trade between these two countries. Top five major commodities in all cases, imports and exports are found based on the absolute value and percentage share from hundred of commodities.

The third method applied is intensity index which is more precise and most evident resulted in this study. The catalysed in import and exports in the manner of trade significant approve level of intensity is compared overall by applying the formula.

The intensity index is calculated to identify import and export pattern by using the formula,

a) For finding Export intensity.
 $(XIJ/XI) \div (MJ/MW-MI) \times 100$

Where, **XIJ** represents total exports of India to EU for all study period of years.

XI represents total exports of India to world for all study periods of years.

MJ represents total imports of EU from world for study periods of years.

MW represents total imports of world for all study period of years.

MI represents total imports of India from world for all period of years.

b) For finding Import intensity.

$$(MIJ/MI) \div (XJ/XW-XI) \times 100$$

Where, **MIJ** represents total imports of India from EU for all study period of years.

MI represents total imports of India from world for all study period of years.

XJ represents total exports of EU to world for all study periods of years.

XW represents total exports of world for all study periods of years.

XI represents total exports of India to world for study periods of years.

Analysis and Interpretation

Table 1 India's export to Belgium (\$ millions)

Year	exports	% share	
2001-2003	1,470.56	3.30	
2002-2003	1,661.84	3.15	13.01
2003-2004	1,805.72	2.83	8.66
2004-2005	2,509.71	3.00	38.99
2005-2006	2,871.23	2.79	14.40
2006-2007	3,478.18	2.75	21.14
2007-2008	4,207.08	2.58	20.96
2008-2009	4,480.32	2.42	6.49
2009-2010	3,759.26	2.10	-16.09
2010-2011	5,784.38	2.30	53.87
2011-2012	7,160.76	2.34	23.79
2012-2013	5,507.30	1.83	-23.09

Source: calculated from monthly statistics of Indian foreign trade

From the table 1.3, it shows that Indian export to Belgium from the year 2001 was initially increasing with \$1470.56 million. But in the year 2009 to 2010 it starts falling gradually from \$4480.32 million to \$3759.26 million. So in the year 2012 to 2013 the export decreases from \$7160.76 million to \$5507.30 million. This is evident from the growth percentage of -16.09% in beginning of 2009 and followed by -23.09% at the end of year 2013.

Table 2 India's import to Belgium (\$ millions)

Years	Imports	% Share	
2001-2003	2,763.00	5.37	
2002-2003	3,711.93	6.04	34.34
2003-2004	3,975.89	5.09	7.11
2004-2005	4,588.91	4.12	15.42
2005-2006	4,725.14	3.17	2.97
2006-2007	4,146.19	2.23	-12.25
2007-2008	4,349.93	1.73	4.91
2008-2009	5,776.77	1.90	32.80
2009-2010	6,019.20	2.09	4.20
2010-2011	8,609.82	2.33	43.04
2011-2012	10,401.43	2.13	20.81
2012-2013	10,046.87	2.05	-3.41

Source: calculated from monthly statistics of Indian foreign trade

From the table 1.8, it shows that Indian import to Belgium from 2001 was initially increasing with \$2763.00 million. But in the year 2006 to 2007 it starts falling gradually from \$4146.19 million. So in the year 2012 to 2013 the import decreases from \$10046.87 million from \$10401.43 million. This is also evident from growth percentage of -12.25% in beginning of 2006 and followed by -3.41% at the end 2013.

Composition of India's exports of top five commodities to Belgium

Table 3 India's export items to Belgium (\$ millions)

Commodities	NATURAL OR CULTURED PEARLS, PRECIOUS STONE,	APPAREL AND CLOTHING KNITTED,	APPAREL AND CLOTHING NOT KNITTED,	IRON AND STEEL	
2001-2002	862.12	36.44	44.10	32.75	28.21
% share	58.63	2.48	3.00	2.23	1.92
2002-2003	1025.78	49.50	36.83	21.39	29.89
% share	61.73	2.98	2.22	1.29	1.80
2003-2004	1054.56	48.65	42.04	33.68	31.45
% share	58.40	2.69	2.33	1.87	1.74
2004-2005	1349.81	43.60	50.14	321.73	49.99
% share	53.78	1.74	2.00	12.82	1.99
2005-2006	1492.21	48.10	84.80	185.92	73.36
% share	51.97	1.68	2.95	6.48	2.56
2006-2007	1471.55	64.93	102.72	582.55	112.15
% share	42.31	1.87	2.95	16.75	3.22
2007-2008	1964.36	75.86	112.98	573.86	164.00
% share	46.69	1.80	2.69	13.64	3.90
2008-2009	1908.81	97.76	131.73	633.87	205.83

% share	42.60	2.18	2.94	14.15	4.59
2009-2010	1645.32	96.44	116.56	107.04	170.77
% share	43.77	2.57	3.10	2.85	4.54
2010-2011	2393.83	148.54	156.54	594.81	231.62
% share	41.38	2.57	2.71	10.28	4.00
2011-2012	3829.80	170.04	169.49	484.24	307.27
% share	53.48	2.37	2.37	6.76	4.29
2012-2013	2435.61	122.60	132.25	360.41	360.24
% share	44.23	2.23	2.40	6.54	6.54
Total ex- port	20571.64	966.02	1136.08	899.50	1736.57
Total share	598.97	27.15	31.65	95.65	41.10

Source: calculated from monthly statistics of Indian foreign trade

From the table 1.13 the commodities natural and cultured and pearl, precious stone top the list with value of \$20571.64 million followed by share of 598.97% as total from the year 2001 to 2013. For all periods starting from 2000-2013, this commodity is dominating the rest of the items which is clearly seen from the respective total values.

Composition of India's imports of top five commodities from Belgium

Table 4 India's import item to Belgium (\$ millions)

Commodities	NATURAL PEARLS, PRECIOUS.	NUCLEAR REACTORS, BOILERS.	IRON AND STEEL	ELECTRICAL MACHINERY AND EQUIPMENT.	
2001-2002	2483.88	31.19	22.43	10.33	22.89
% Share	89.90	1.13	0.81	0.37	0.83
2002-2003	3226.46	50.60	37.45	36.44	28.57
% Share	86.92	1.36	1.01	0.98	0.77
2003-2004	3447.90	71.52	56.55	32.00	43.53
% Share	86.72	1.80	1.42	0.80	1.09
2004-2005	4001.98	123.09	90.63	28.67	53.21
% Share	87.21	2.68	1.97	0.62	1.16
2005-2006	3878.12	168.14	150.86	34.53	81.38
% Share	82.07	3.56	3.19	0.73	1.72
2006-2007	3316.13	158.67	154.39	31.55	83.38
% Share	79.98	3.83	3.72	0.76	2.01
2007-2008	3036.91	267.26	311.24	45.88	111.85
% Share	69.82	6.14	7.16	1.05	2.57
2008-2009	4068.44	362.22	328.15	60.45	139.54
% Share	70.43	6.27	5.68	1.05	2.42
2009-2010	4564.26	292.09	230.30	40.74	157.07
% Share	75.83	4.85	3.83	0.68	2.61

2010-2011	7061.29	257.75	198.07	62.89	156.07
% Share	82.01	2.99	2.30	0.73	1.81
2011-2012	8408.39	354.93	308.14	62.81	139.50
% Share	80.84	3.41	2.96	0.60	1.34
2012-2013	8313.06	319.10	258.14	137.27	
% Share	82.74	3.18	2.57	1.37	
Total import	52580.36	2405.96	2108.90	547.12	988.42
Total share	887.55	39.84	35.62	8.77	17.57

Source: calculated from monthly statistics of Indian foreign trade.

From the table 1.18, among these commodities natural and cultured pearl and precious stone list with the value of \$52580.36 million followed by share of 887.549% as total from the year 2001 to 2013. Next highest commodity is nuclear reactor products with the total value of \$2405 million with share of 39.84% as total. The electrical machinery and iron or steel are the least among top five least from twelve consecutive years from 2001 to 2013.

Trade Intensity Indices: import and export intensity indices

Table 5 Intensity index of India to Belgium

Year	Export intensity (% age)	
2001	110.32	148.19
2002	98.67	165.46
2003	95.46	146.26
2004	92.73	123.04
2005	89.27	105.02
2006	91.95	71.61
2007	90.96	66.03
2008	86.86	52.38
2009	67.71	63.68
2010	84.64	72.64
2011	90.83	77.99
2012	66.26	65.93

Source: Calculated from United Nations Commodity Trade Statistics Database

Table 1.23 shows evident that both import and export intensity shows significant in year 2001 as figures are above 100%. But export intensity falls from next consecutive years showing insignificant in trade volume and its pattern. But from the period 2006 it drastically sweep down indicating insignificant in the trade pattern and its volume.

CONCLUSION

It can be concluded that although export trend during the period of study has been found consistent but as far as imports are concerned, the pattern is highly inconsistent as can be analysed from the growth rate. Top five commodities in the trade composition exported to Belgium by Indian exporters are Natural pearls/Precious stones, Knitted

apparels, non-knitted apparels, Iron and steel and Organic chemicals. Major items imported from Belgium are Natural pearls, Nuclear reactors, Iron and steel, Electrical machinery and equipment and organic chemicals. Import intensity index was significant in 2001 whereas after that during the period of study it has become insignificant and the percentage is reducing year after year till 2012. As far as export intensity index is concerned, it is significant from 2001 to 2005 but after that it became insignificant.

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