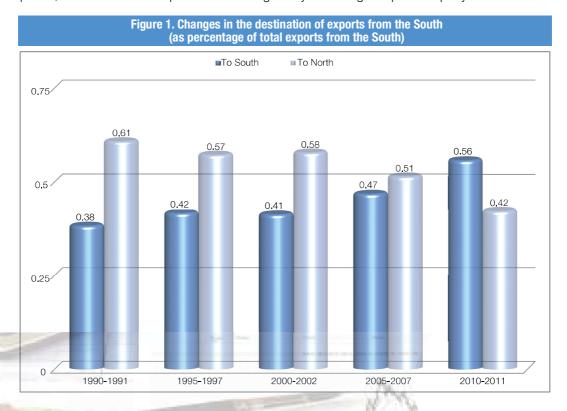


## A. General Trend

## 1. The weight of South-South exports in world trade continues to grow

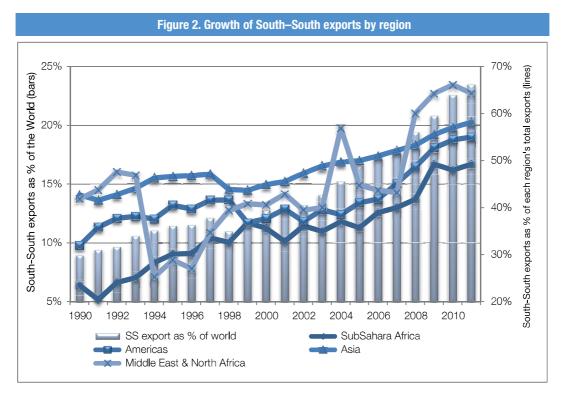
- **Total South-South trade:** In 2011, South-South merchandize exports reached \$4 trillion. Since 2008/2009, the South has been exporting more to other developing countries than to the North (figure 1).
- Consistent growth in every region: South-South exports accounted for nearly a quarter of world exports in 2011 compared with 13 per cent in 2001. All the developing regions significantly increased their exports to the South in the past two decades (figure 2). In 2011, for instance, around 65 per cent of total exports of the Middle East and North Africa (MENA) were sent to developing countries. During this period, the South-South exports as a whole grew by an average 16 per cent per year.



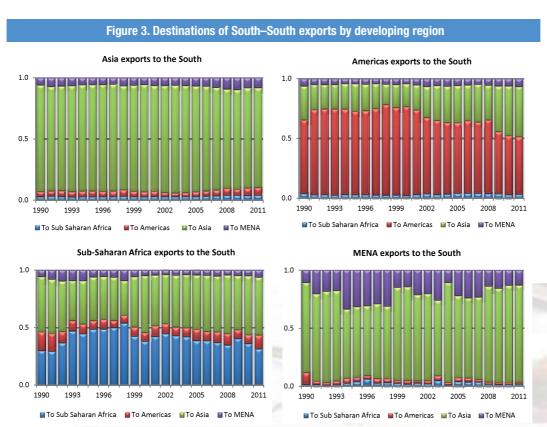
Note: This report can be freely cited provided appropriate acknowledgement is given to UNCTAD and UNCTAD's website is mentioned (unctad.org/tab).

Image: FreeDigitalPhotos.net



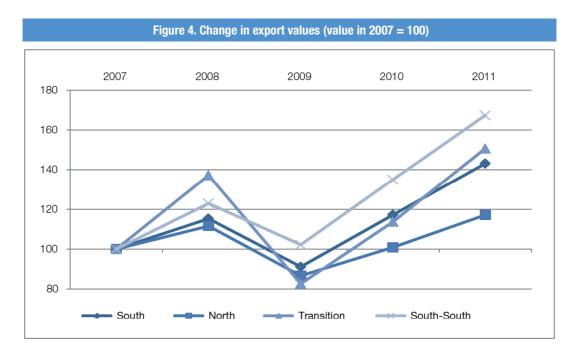


- Relevance of Asia: The developing Asia claimed 77 per cent of South-South exports in 2011. Sub-Saharan Africa, the Americas and the MENA each claimed 4 per cent, 10 per cent, and 10 per cent respectively. In 2003, Asia became the first export destination for every other developing region, except for the Americas (figure 3). Even in the Americas, the gap between intraregional (i.e. intra-Americas) exports and their exports to the developing Asia narrowed in recent years.
- Interregional trade among the Americas, sub-Saharan Africa and MENA remains to be exploited.



UNCTAD

• Resilience of South-South exports: After the initial plunge in exports following the 2008-2009 economic crises, the South-South exports recovered faster than the exports to the world from the South, the North, or the economies in transition (figure 4). The value of the South-South exports in 2010 has already exceeded the pre-crisis level.



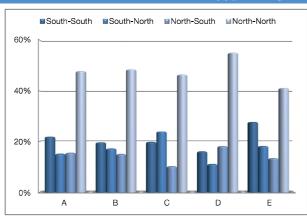
## 2. Skill and technology intensity in South-South export has grown

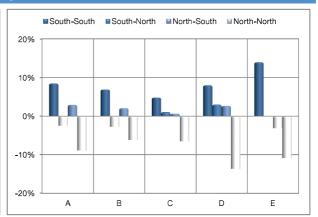
- Figure 5 provides the breakdown of the world exports into groups of products with different skill and technology intensity<sup>1</sup> as well as into different export flows. Mineral fuels are the product group that showed the highest share of South–South exports in the period 2009/2011.
- Relatively large weight of South–South exports in world manufacturing exports. South–South exports claimed a much higher share in manufacturing sector with a higher skill/technology intensity (E) average than the average of all product groups.
- North-North exports losing its share. In all product groups, the value of the North-North exports exceeded all other trade flows in 2009/2011. However, its share fell from the levels in 1999/2001 particularly in the manufactures with medium- to high-skill/technology intensities (D and E).

<sup>&</sup>lt;sup>1</sup> The products were grouped according to different skills and technology based on the study by S Basu and M Das (2011), *Export Structure and Economic Performance in Developing Countries: Evidence from Nonparametric Methodology*, UNCTAD.

UNCTAD

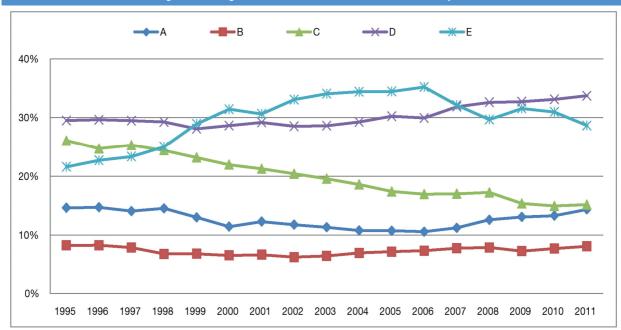
Figure 5. Skill and technology intensity of exports (excluding fuels): (i) Shares in 2009/2011 (three-year average) and (ii) percentage change from 1999/2001





• **Manufactures in South–South exports.** A shift from manufactures with low skill/technology intensity (C) to higher skill/technology intensity ones (D and E) in South–South exports is outlined in figure 6.

Figure 6. Change in the sectoral shares of South-South exports



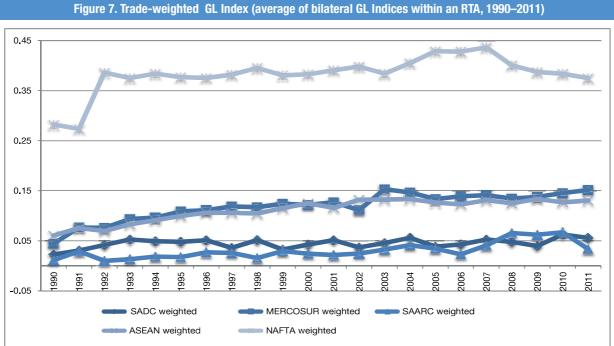
Α	Agrifood and raw materials	D	Manufactures with medium skill and technology intensity
В	Resource-intensive manufactures (e.g. textiles and clothing)	Е	Manufactures with high skill and technology intensity
С	Manufactures with low skill and technology intensity		



## **B.** Focus

## 3. Focus (a): Intra-industry trade within South-South regional trade agreements

- Volume 1 (2012) of the South-South Trade Monitor showed that South-South trade at the regional level was characterized by trade specialization. For example, Africa exports raw commodities and fuels to Asia, which in turn exports manufactured goods. Is this the case for intraregional trade?
- In this issue of the Monitor, we examine the degree of intra-industry trade within a South-South regional trade agreement (RTA) using the Grubel-Lloyd (GL) Index.
- The GL Index. This index varies between 0 (no intra-industry trade) and increases to the ceiling of 1 as two trade partners export the same products to one another. Higher values in the Index are typically associated with similarities in income levels and industrial structure. Thus, when combined with trade values, it can be a proxy to measure the degree of economic integration within a RTA.
- There is one caveat with respect to the use of the GL Index in this Monitor. The value of the Index is dependent on the level of product aggregation. The greater the aggregation level, the higher the resulting index value. Analysis in this Monitor is made at the HS 4-digit level. It can pick up vertical trade when a product that is an input factor to a final product falls within the same HS 4-digit code. In this case, a high GL Index does not necessarily imply convergence of economic structures of two trading partners, but it does imply a close trade relationship most likely through jointly participating in regional production sharing schemes.



- UNCTAD
- Figure 7 shows trade-weighted averages of bilateral GL Indices across the member countries of each RTA Association of Southeast Asian Nations (ASEAN), Mercosur, South Asian Association for Regional Cooperation (SAARC), and Southern African Development Community (SADC) from 1990 onwards.
- Rising GL Index in Mercosur and ASEAN. The GL Index increased in all the RTAs, though at a varying speeds. Mercosur and ASEAN showed an increase from 0.05 in 1990 to 0.15 in 2011, exhibiting the highest levels of intra-industry trade among the studied RTAs. Still, the GL Index of these RTAs lags far behind that of North America Free Trade Agreement (NAFTA).
- The GL Indices of SAARC and that of SADC showed a gradual upward trend but they remained low at around 0.05.
- Intraregional GL Index only a partial picture of the countries' economic structure. Intra-ASEAN exports account around 25 per cent of ASEAN's exports to the world, though they steadily increased from 20 per cent in 1990. Intraregional shares of total exports are much lower for the other RTAs: 15 per cent for Mercosur and 5 per cent for SAARC.

## 4. Focus (b): Bilateral intra-industry trade within regional trade agreements

- The figures in the tables are the GL Index of bilateral trade flows trade between two countries within an RTA in three time frames; 1990–1994, 2000–2004 and 2010–2011. SADC is excluded from the analysis in this section due to the insignificant level of its bilateral GL Index.
- The comparison of bilateral GL Indices across RTAs reconfirms the difference in the structure of trade integration within each RTA. ASEAN revealed a relatively high level of intra-industry trade initially among a few member countries, then expanded to include other countries within the RTA. Mercosur's intra-industry trade, though very high at the aggregated level, was a phenomenon limited to the trade between two members, Brazil and Argentina. SAARC was a clear case of the hub-and-spoke specialized trade flows with India at the centre.

### Table 1. The bilateral GL Index (2010/2011): ASEAN, Mercosur and SAARC

#### a. ASEAN

Thailand	Brunei	Indonesia	Cambodia	Lao People's Democratic Republic	Myanmar	Malaysia	Philippines	Singapore	Viet Nam
1990-1994	-	0.129	0.004	0.011	0.001	0.238	0.160	0.423	0.010
2000-2004	0.004	0.343	0.118	0.020	0.010	0.400	0.425	0.454	0.094
2010-2011	0.013	0.248	0.178	0.125	0.003	0.417	0.229	0.397	0.221
Viet Nam	Brunei	Indonesia	Cambodia	Lao People's Democratic Republic	Myanmar	Malaysia	Philippines	Singapore	Thailand
1990-1994	-	0.006	-	-	-	0.025	-	0.027	0.010
2000-2004	0.007	0.099	0.060	0.028	0.042	0.116	0.060	0.063	0.094
2010-2011	0.005	0.182	0.047	0.016	0.002	0.227	0.128	0.225	0.221



#### b. Mercosur

Argentina	Brazil	Paraguay	Uruguay	Venezuela (Bolivarian Rep. of)	
1990-1994	1990-1994 0.302 0.067		0.251	0.082	
2000-2004	2000-2004 0.429 0.135		0.328	0.184	
2010-2011 0.492 0.069		0.352	0.074		
Brazil	Argentina	Paraguay	Uruguay	Venezuela (Bolivarian Rep. of)	
	3			ronozaola (zonranan nopi ol)	
1990-1994	0.302	0.022	0.158	0.040	
1990-1994 2000-2004		0 3		. ,	

#### c. SAARC

India	Afghanistan	Bangladesh	Bhutan	Sri Lanka	Maldives	Nepal	Pakistan
1990-1994	0.016	0.044	0.015	0.090	0.000	0.035	0.012
2000-2004	0.010	0.071	0.038	0.139	0.008	0.141	0.171
2010-2011	0.002	0.239	0.067	0.197	0.005	0.078	0.106

#### <u>ASEAN</u>

• Thailand and Viet Nam: Bilateral GL Indices among the ASEAN-5 (Indonesia, Malaysia, Philippines, Singapore and Thailand) in 2010/2011 were much higher than in 1990/1994. Viet Nam (which became the full ASEAN member in July 1995) joined in the intra-industry network after 2000/2004: Their GL Indices with Viet Nam in 2000/2004 were all less than 0.1 but in 2010/2011 they were at around 0.2.

#### **Mercosur**

• Brazil and Argentina: Intra-industry within Brazil and Argentina, at the value of 0.49, represents the majority of intra-industry trade within Mercosur. Argentina also exhibited a relatively high GL index with Uruguay throughout the three time frames. The GL Index between the other members (Paraguay, Uruguay and the Bolivarian Republic of Venezuela) remained insignificant at the level below 0.1.

#### **SAARC**

• India: There was only a limited level of intra-industry within SAARC compared with the other two RTAs. In 2010–2011, Bangladesh showed the highest GL Index, with India at the value of 0.197. Excluding India, the GL Index between Bangladesh and Sri Lanka was the highest but still at 0.085.

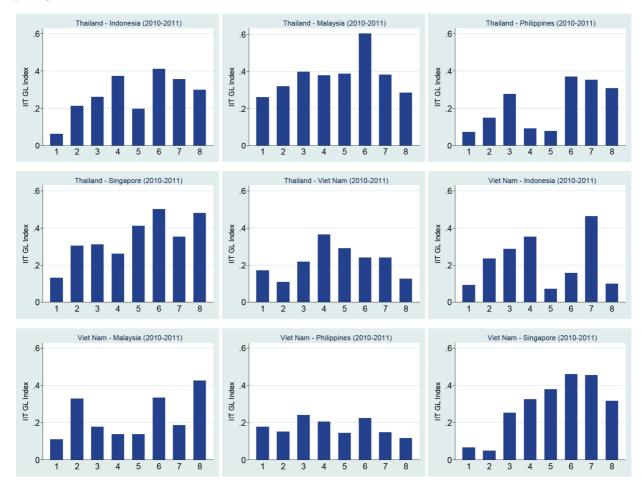
## 5. Focus (c): Sectors with high intra-industry trade

- The graphs in this section display sectoral breakdown of bilateral GL indexes in 2010–2011 of selected countries: Thailand and Viet Nam (ASEAN); Argentina (Mercosur); and India (SAARC).
- A sectoral view clarifies the characteristics of bilateral economic linkages through trade, thereby helping to identify the policy areas where supporting measures for further economic integration through trade could be effective.

1. Agrifood (HS 01-24);	5. Input materials (Stone, ceramic, glass products, precious and base metals (68-83));
2. Mineral and chemical products (25-38);	6. Machinery, electrical, electronics (84–85);
3. Plastic, leather, wood and paper products (39-49);	7. Automobiles (86–89),
4. Textiles and footwear(50-67);	8. Optical, photographic, precision, medical instruments, clocks (90–92),

# UNCTAD

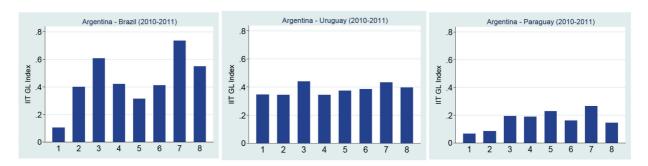
#### a. ASEAN



- **Thailand:** The machinery/electric/electronic (6) exhibited the highest GL Index with most of the other ASEAN-5 countries. The other manufacturing sectors (7 and 8) also showed relatively high GL Indices, which most likely resulted from evolving regional production sharing schemes in which Thailand actively participate.
- Among the ASEAN-5, intra-industry trade between Thailand and Malaysia occurred in most product groups ranging from agricultural products to intermediate products, in addition to the manufacturing sectors mentioned above.
- **Viet Nam:** Viet Nam exhibited high and growing GL Index with different bilateral trade partners, e.g. automobiles (7) with Indonesia, precision instruments (8) with Malaysia and the electric/electronic products (6) with Singapore. There appears a high degree of intra-industry trade in the agricultural-food sector with the ASEAN-5 countries (except with Philippines).
- Intra-industry trade between Thailand and Viet Nam increased most significantly in the past decade, particularly in the textile/apparel sector (4), the input material sector (5) and the agricultural food sector (1).

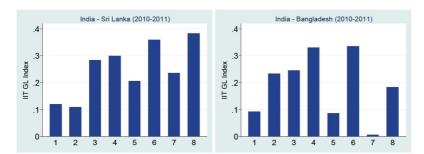
## UNCTAD

#### b. Mercosur



- **Argentina:** The GL Index of Brazil was high, standing at or above 0.4 in all sectors except agriculture (1) and plastic/leather/wood (3). The highest value was in the automobiles at around 0.7.
- Intra-industry trade between Argentina and Uruguay appeared more regular, with the GL Index in all sectors above 0.3. In Paraguay, only two sectors (5 and 7) showed a GL Index value above 0.2.

#### c. SAARC



• **India:** Intra-industry trade with Sri Lanka was the highest in sectors 6 and 8, both above 0.4. GL Indices in these sectors were showed a substantial increase in the past decade. The most dynamic increase, however, was found in India and Bangladesh, where the GL Index values of the sectors 2, 3, 4 and 6 more than doubled (tripling in sector 6) in the past decade.

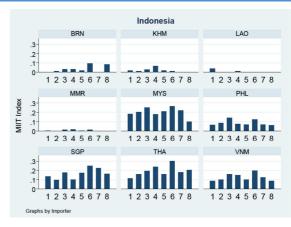


## 6. Focus (d): Changes in sectoral intra-industry trade

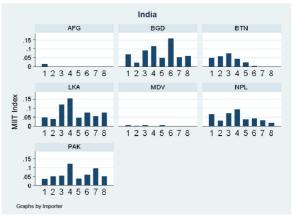
- Marginal intra-industry trade Index: GL Indexes in different time periods provide a situation specific to the trade flows of the time frame studied. The marginal intra-industry trade index shows how much of the changes in the value of trade between two parties is intra-industry trade, thus is a better measure for evaluating the changes through time.
- The figures below provide a bilateral marginal intra-industry trade index in different sectors during the period 1990–1994 and 2010–2011.
- It confirms that increase in intra-industry trade among ASEAN-5 was most significant in the manufacturing sectors, particularly in electric/electronics and automobiles. In the case of Mercosur (Argentina), changes in intra-industry trade took place in a wider group of sectors, but at a lower degree relative to the ASEAN countries, and the changes were even more subtle in the case of SAARC.

Figure 8. Marginal intra-industry trade index (1990/1994-2010/2011)









AFG	Afghanistan	MMR	Myanmar
BGD	Bangladesh	MYS	Malaysia
BRA	Brazil	NPL	Nepal
BRN	Brunei Darussalam	PAK	Pakistan
BTN	Bhutan	PHL	Philippines
IDN	Indonesia	PRY	Paraguay
KHM	Cambodia	SGP	Singapore
LAO	Lao People's Democratic Republic	URY	Uruguay
LKA	Sri Lanka	VEN	Venezuela (Bolivarian Republic of)
MDV	Maldives	VNM	Viet Nam

## For further information, please contact

### Ms. Miho Shirotori

Trade Analysis Branch
Division on International Trade in Goods and Services,
and Commodities
United Nations Conference on Trade and Development

Tel: +41 22 917 5556 Fax: +41 22 917 0044

www.unctad.org/tab