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Assesing the Potential for Growth of Intra-Regional  
Trade in South Asia

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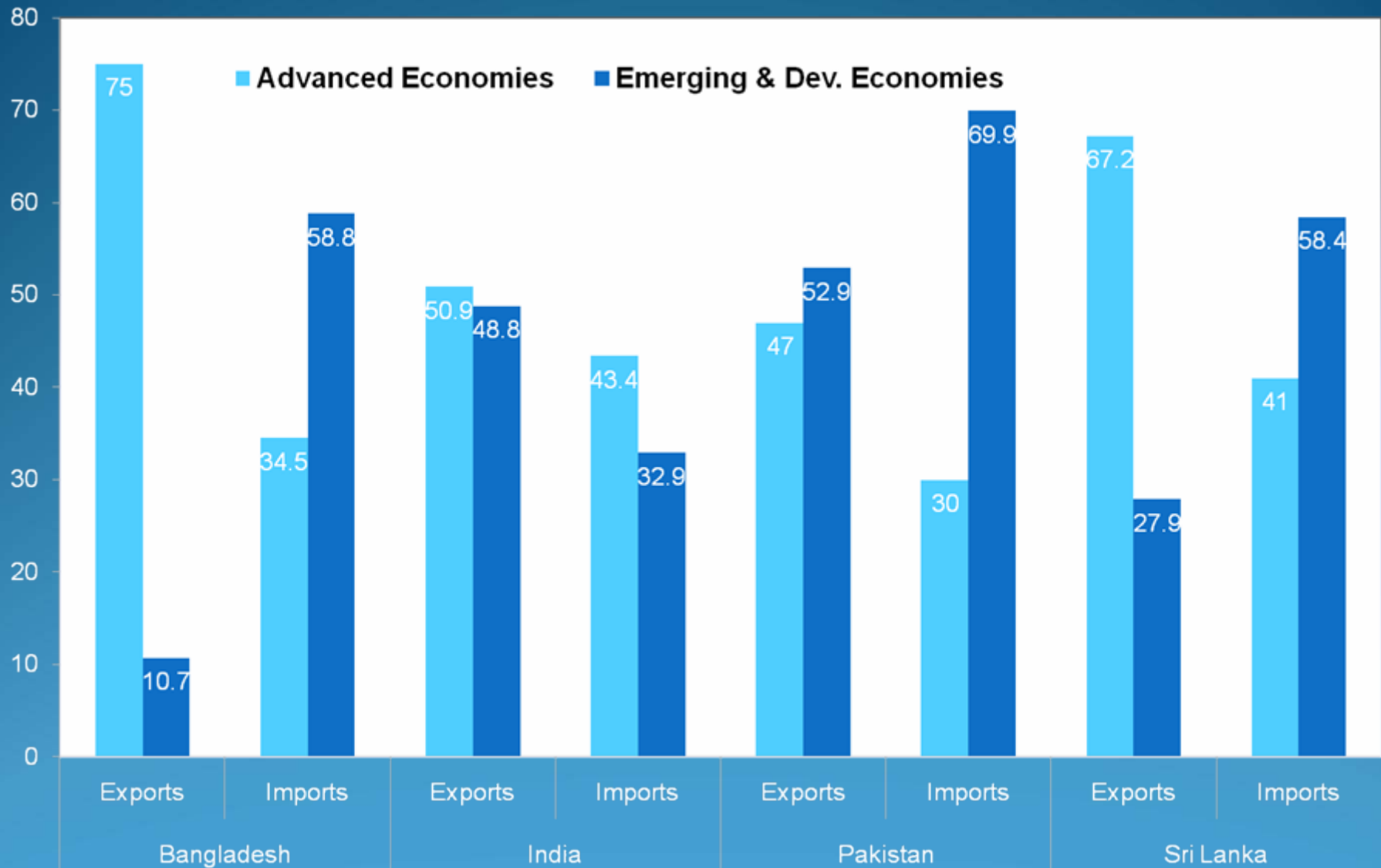
# Assessing the Potential for Growth of Intra-Regional Trade in South Asia

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# Context

- South Asia accounts for 24% of the world's population, but its share in world GDP is only around 2% and its share in world trade is less than 2%
- Trade has been a major channel through which the adverse impact of the *global financial crisis* got transmitted to the South Asian countries- since the Advanced Economies continue to be their most important destination for exports
- Hence, a case can be made for expansion of intra-regional trade in South Asia – which may help promote sustained growth and development of the countries in this region

## Direction of trade (in %)



# Objective and Scope of the paper

- To find- If there is any scope for enhancing intra-regional trade in South Asia?
- Where can we look for some possible answers?
  - the paper focuses on four countries of the region, namely, Bangladesh, India, Pakistan and Sri Lanka
  - analyze their comparative advantages
  - analyze changes in trade complementarities over time
  - intra-industry trade between these countries

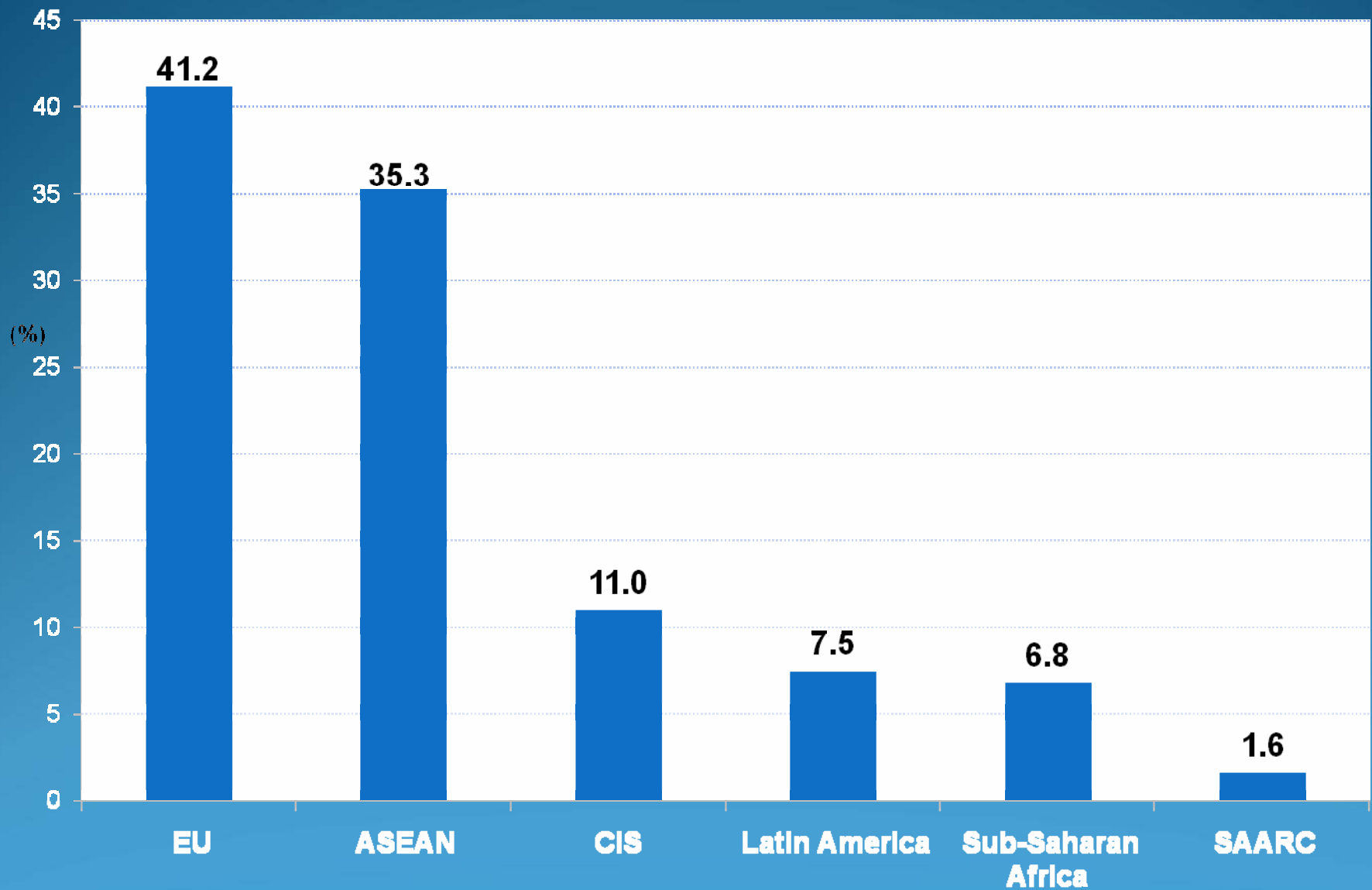
# 1. Important aspects of Intra-regional trade in South Asia

- Over the last two decades, intra-regional trade has grown rapidly in several regions, e.g. ASEAN, NAFTA and EU
- South Asia too has made attempts to promote intra-regional trade through bilateral agreements and multilateral agreements
- The seven South Asian countries initiated a multilateral framework for region-wide integration under the *South Asian Preferential Trade Agreement (SAPTA)* in 1995
- *South Asian Free Trade Agreement (SAFTA)* came into force in 2006, with full implementation completed between 2009 and 2013

## Intra Regional Trade (as a percent of total trade to the world)

Regional Block	Exports			Imports		
	1990	2000	2006	1990	2000	2006
ASEAN	18.9	23.0	24.9	15.2	22.5	26.3
CARICOM	8.0	14.6	11.3	5.8	8.5	8.5
EU	67.6	67.7	67.6	64.4	62.5	63.2
MERCOSUR	8.9	20.0	13.5	14.2	19.8	18.6
NAFTA	41.4	55.7	53.8	33.9	40.5	34.3
<b>SAARC</b>	<b>3.2</b>	<b>4.2</b>	<b>5.6</b>	<b>2.0</b>	<b>4.0</b>	<b>3.6</b>

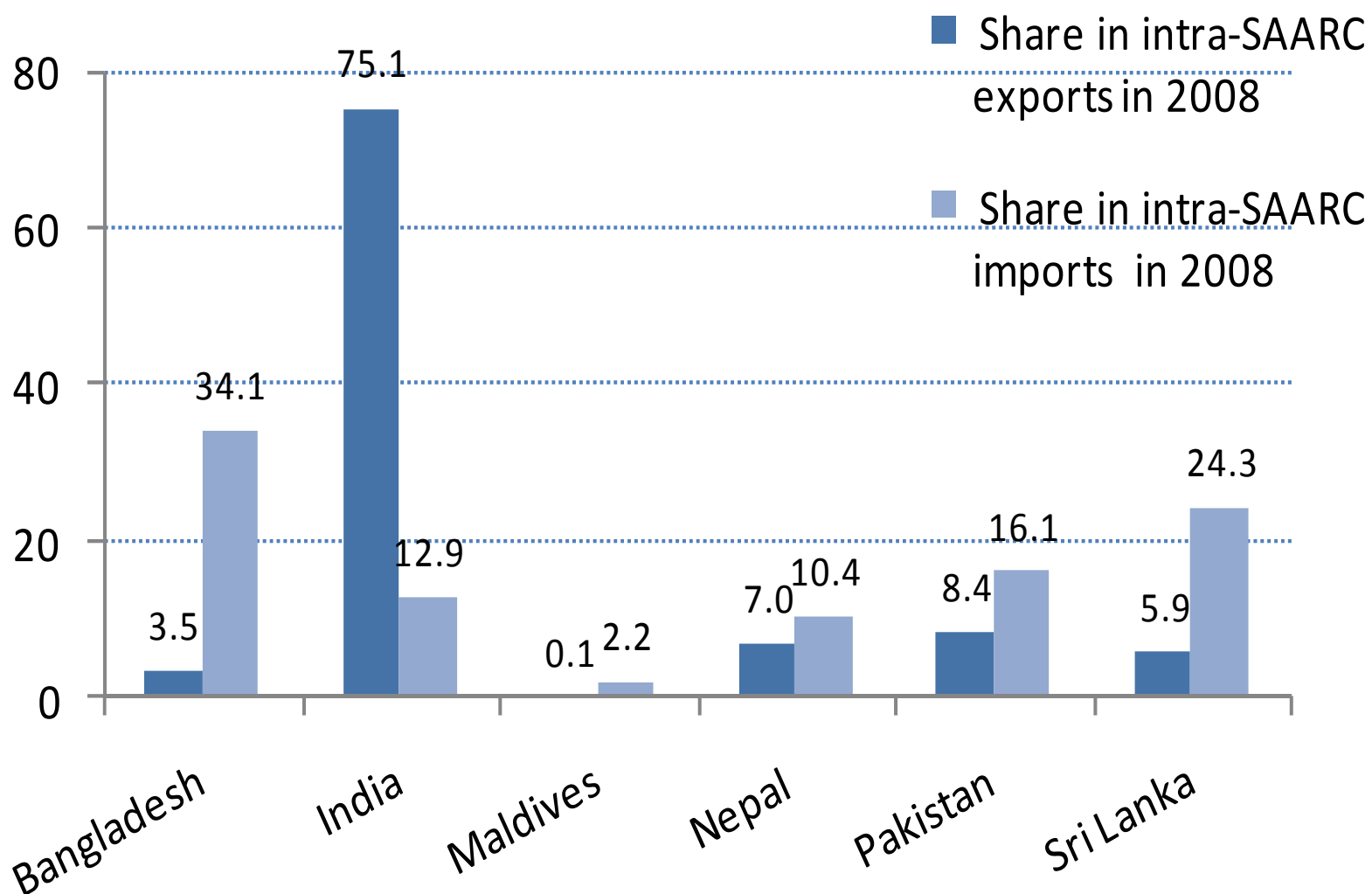
## Intra-regional trade as a share of GDP in 2006





- Despite these measures, intra-regional trade in South Asia has grown very slowly
- Increases in South Asia's trade share are based more on imports from the region rather than exports to the region
- Also, these small figures for growth of intra-regional exports in South Asia have been biased by the figures for India
- India has the largest share in the total intra-SAARC exports (75% in 2008)
- Bangladesh and Sri Lanka have the highest shares in the total intra-SAARC imports (34% and 24% respectively in 2008)

## Shares of Member Countries in Intra-SAARC Trade (2008)



## 2. What are the comparative advantages shown by Bangladesh, India, Pakistan and Sri Lanka?

- RCA indices for Bangladesh, India, Pakistan and Sri Lanka, using the United Nations COMTRADE trade flow data at the SITC (Rev 3) three-digit level
- RCA index for a country in any product or industry:  
*the product's (industry's) share in total exports of the country as a proportion of the same product's (industry's) share in total world exports*
- Trade theory postulates that countries with diverse RCA profiles would have more opportunities to trade with one another than those with similar RCA profiles
- **What do we find for the selected countries?**

- RCA indices for the selected countries for 2008 show that these countries have comparative advantage in similar products – mainly *primary goods* and *labour-intensive manufacture goods*
- Textiles, yarns and fabrics, leather and apparel and accessories, remain as the products with the highest RCA value for all four of the selected countries
- Yet, there should be scope for increasing intra-regional trade in South Asia as there are also some products where countries have exhibited diverse profiles of comparative advantage

## Country

## Products

India	Pharmaceuticals, chemicals, dyes, machinery and transport equipment and base metals
Sri Lanka	Pearls and precious stones, rubber products and tyres, electrical transformers
Pakistan	Medical instruments, toys and games, food processing machines etc
Bangladesh	Machine tools and telecommunication equipment etc.

### 3. Do these countries exhibit trade complementarities?

- Trade Complementarity Index tries to measure how well does the export profile of a country (or a group of countries) match with the import profiles of others
- Changes in the value of Trade Complementarity Index over time can help determine whether the trade profiles of some countries are growing more or less compatible
- Trade Complementarity Indices for the selected South Asian countries have been computed in two ways – amongst themselves as well as between a country and the SAARC region as a whole
- Based on the UN COMTRADE data at the SITC (Rev 3) four-digit level for 1990 and 2008

# Trade Complementarity Indices: 1990 and 2008

Exporting Country	Importing Country					
	Year	Bangladesh	India	Pakistan	Sri Lanka	SAARC
Bangladesh	1990	-	10.0	6.2	4.1	8.7
	2008	-	9.4	15.0	14.3	11.8
<b>India</b>	<b>1990</b>	<b>23.4</b>	<b>-</b>	<b>20.0</b>	<b>27.6</b>	<b>31.7</b>
	<b>2008</b>	<b>35.3</b>	<b>-</b>	<b>44.4</b>	<b>46.0</b>	<b>42.1</b>
Pakistan	1990	15.2	12.5	-	11.8	12.4
	2008	23.8	12.3	-	25.1	14.7
Sri Lanka	1990	7.6	20.3	9.6	-	18.7
	2008	15.4	16.3	18.8	-	17.3
SAARC	1990	24.3	30.6	18.2	26.3	-
	2008	41.3	37.6	42.8	45.6	-

- Only India's exports show relatively high ability to fulfil the region's import demand for goods, especially those of Sri Lanka and Pakistan, to a significant extent
- On the whole, trade complementarities in the region have increased over time, but they are still at relatively low levels
- Thus, it becomes imperative to think of specific processes/ mechanisms through which intra-regional trade in South Asia could be expanded
- Experiences of some of the other regions in the world (e.g. the EU) suggest that intra-industry trade could be one possible way for promoting intra-regional trade



## 4. What is the scenario of intra-industry trade between these countries?

- Intra-industry trade (IIT) occurs when a country simultaneously imports and exports similar types of products within the same 'industry' or 'sector'
- The level of intra-industry trade for any two countries can be measured by the Grubel–Lloyd Index
- The Grubel–Lloyd Index varies between 'zero' (implying pure inter-industry trade) and 'one' (indicating pure intra-industry trade)
- Grubel–Lloyd Index of intra-industry trade (for the selected South Asian countries) has been computed at a both aggregate and disaggregate level

- However, the Grubel–Lloyd Index has also been criticized for lacking desirable dynamic properties (it has been shown that an increase or decrease in this Index over time is not necessarily associated with corresponding increases or decreases in intra-industry trade)
- Therefore, the Brühlhart Index of marginal intra-industry trade (MIIT) has been computed to analyse intra-industry trade between the selected countries during 2000 to 2008, using trade data at the 5-digit level of product categories
- The Brühlhart Index of MIIT takes on values between ‘zero’ (representing the scenario where new trade flows over a period of time are entirely due to inter industry trade) and ‘one’ (indicating a scenario where new trade flows over a period of time are purely because of intra-industry trade)

Reporter-Partner	High and Moderate IIT 2008 ( Products with High Bilateral Trade)
<b>India and Bangladesh</b>	Telecommunications equipment; elements, oxides and halogen salts (inorganic chemicals); soaps, cleansing and polishing preparations; men/boys' woven textile fabrics; special yarns and fabrics; and leather
<b>India and Pakistan</b>	Carboxylic acid compound (organic chemicals); polyacetals/polyesters (plastics in primary forms); textile yarns; special yarns and fabrics; and floor coverings (textile products).
<b>India and Sri Lanka</b>	Spices; rubber tyres; lime, cement and construction material; glassware (non-metallic mineral manufactures); veneer and plywood; paper and paper board and articles; made-up textile articles; tulles, lace, and embroidery; and electric power machinery and parts.
<b>Pakistan and Bangladesh</b>	Food processing machines was the only product category reporting a high extent of IIT between Pakistan and Bangladesh in 2008; while intra-industry trade of a moderate level was observed in made-up textile articles; base metal manufactures; crude vegetable materials; and rotating electrical plant.
<b>Pakistan and Sri Lanka</b>	Electrical distribution equipment; mineral manufactures; headgear and non-text clothing; miscellaneous chemical products; base metal manufactures; and miscellaneous manufacturing articles. Special yarns and fabrics; other crude minerals; elements, oxides and halogen salts; and electrical equipment.
<b>Sri Lanka and Bangladesh</b>	printed matter; and spices, paper and paper board and articles; textile yarn; and special yarns and fabrics

- Intra-industry trade seems to have played a relatively important role only in case of a few product categories such as, *spices; chemicals and chemical products; textile yarns, fabrics and made-up textile articles; leather; rubber manufactures, wood and paper products; base metals and mineral manufactures; and basic machinery and transport equipment*
- The level of intra-industry trade is high only for a few among these limited product categories
- It's mainly in case of India's trade with Sri Lanka and Bangladesh, where we observe noticeable levels of intra-industry trade across a number of product categories
- During 2000 to 2008, intra-industry trade has accounted for a high or moderate share of the marginal trade only in case of the trade between India and Sri Lanka and trade between India and Bangladesh
- Bilateral trade liberalization measures between India and Sri Lanka and those between India and Bangladesh could have encouraged the expansion of intra-industry trade among them

## 5. Concluding Remarks and Policy Recommendations

- Product categories or sectors, such as, chemicals and chemical products; textile yarns, fabrics and made-up textile articles; leather; rubber manufactures, wood and paper products; base metals and mineral manufactures; and basic machinery and transport equipment etc, where intra-industry trade has shown an increase among the South Asian countries, the scope for enhancing intra-regional trade remains high
- Product categories or sectors, in which the South Asian countries have shown high RCA's and trade complementarity to some extent with other member countries, could also be considered for elimination from the sensitive list of selected member countries of SAFTA for enhancing intra-regional trade.

- At the same time, dealing with major constraints to expansion of intra-regional trade, such as, removal of non-tariff barriers and various trade facilitation measures will augment intra-industry trade in South Asia
- Liberalization of the investment regime among member countries will further enhance intra-regional trade
- India, relatively the most industrialized country as well as the largest market in the region, could play a major role through further unilateral as well as bilateral trade liberalization measures
- Also, India can play a pro-active role in leading production networks involving the other countries in the region, which would allow regional trading partners to strengthen their trade ties as well as reap economies of scale and this in turn could lead to an expansion of intra-regional trade in South Asia

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