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Measuring Value in Global Value Chains

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GLOBAL COMMODITIES FORUM 2014:
"Global value chains, transparency and commodity-based development"

- The trade-led-development debate has become even more complex with the rise of global value chains (GVCs)

- Fragmentation of production processes across countries and continents has led to faster growth of trade in intermediate products as compared to final products

- Higher exports no longer assure higher production and commensurating ‘production-linked’ gains like employment generation and industrialisation.

	Manufacturing Exports in Total Exports (%)			Manufacturing Value Added in GDP (%)		
Country	**1980-89**	**1990-99**	**2000-11**	**1980-89**	**1990-99**	**2000-11**
China	30	80	82	36	33	32
Colombia	15	24	28	22	17	15
Ecuador	2	6	8	19	20	10
India	45	57	44	16	16	15
Kenya	6	17	17	12	12	11
Mexico	26	64	74	23	21	19
Morocco	27	38	37	18	18	16
Peru	13	14	15	27	17	16
Philippines	18	46	72	25	24	23

‘ Gross Export’ Vs ‘Value-Added Exports’

- ‘Domestic value-added exports' can be estimated by subtracting foreign value-added, i.e., value added created in other countries that is imported and enters exports

- Correspondingly, global value-added exports can be arrived at by summing domestic value-added exports of all countries.

- This sum also nets out double counting in global trade, which is caused by export and re-exports of intermediate products in network trade.

Measuring *Value in GVCs*

- In 2013, New OECD-WTO dataset on Trade in Value Added (TiVA) was launched.
- Years covered -1995, 2000, 2005, 2008 and 2009, **58 countries** including 34 OECD countries; the BRICS; newly industrialised Asian countries (NICs) – 8 countries; and for the category of the **'rest of the world'** which comprises all other LDCs and developing countries.

(In USD million)	2005	2008	2009
World Gross Exports	11'087'513	16'771'072	13'470'927
World Value-Added Exports	8'311'208	12'488'836	10'319'465
World Gross Exports are	25%	25.5%	23.3%

Measuring 'Participation in GVCs' '

- “Participation of in GVC”- most of the studies use the measure- sum of
- ***Backward Linkages*** (Foreign Value Added in Exports of a country) and
- ***Forward Linkages*** (domestic value added of a country in other countries’ exports)

- **participation in GVCs =(BL +FL)/Gross Exports**

- **Alternative Measures of *participation in GVCs*** is to estimate the share of a country in total value added created by trade in GVCs

- ***Participation in GVCs*** = BL + FL of a country / Total Value Added created by Trade in GVCs

- This measure will also provide **distribution of value in GVCs**

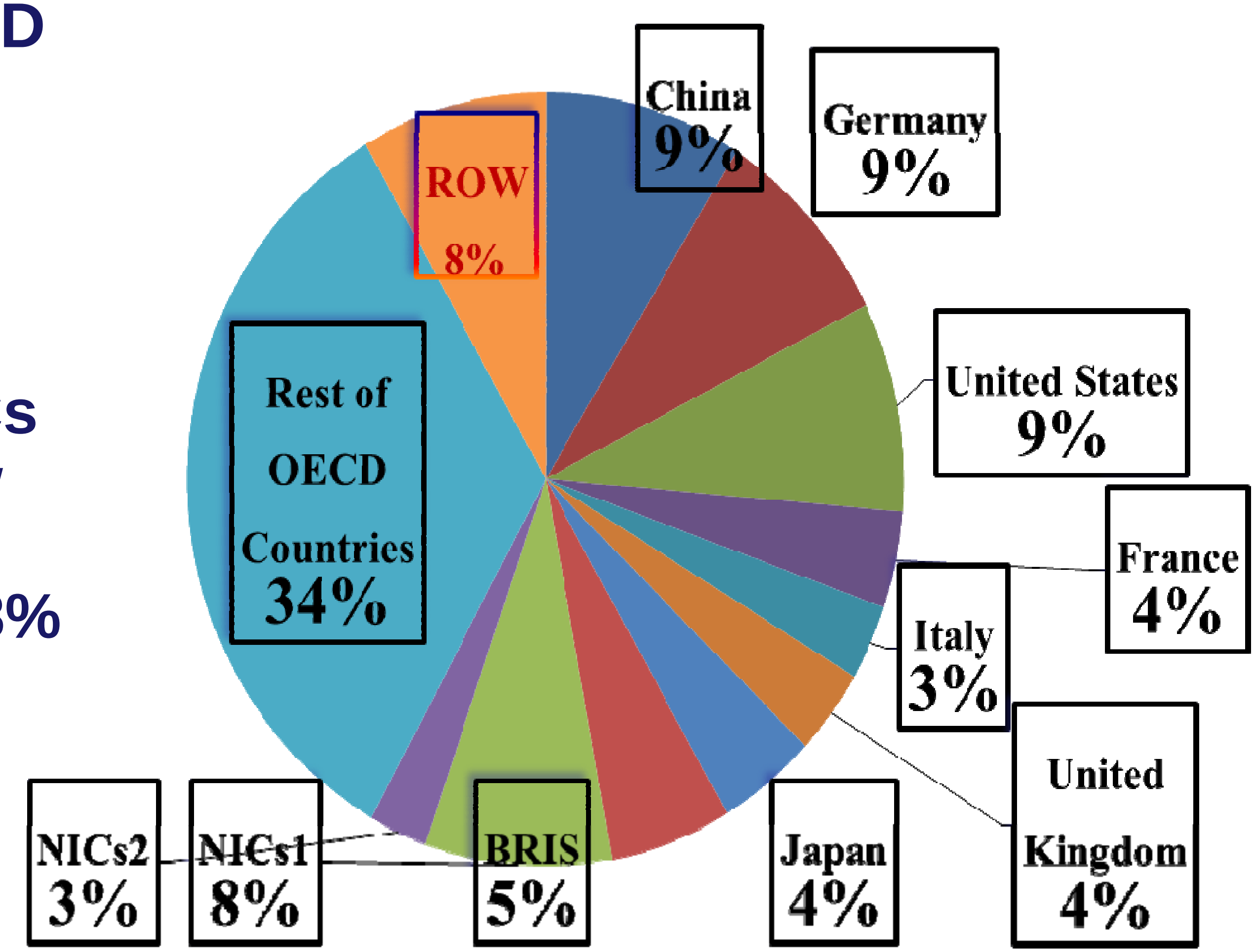
Share of countries in Global Value Added created by GVCs: 2009

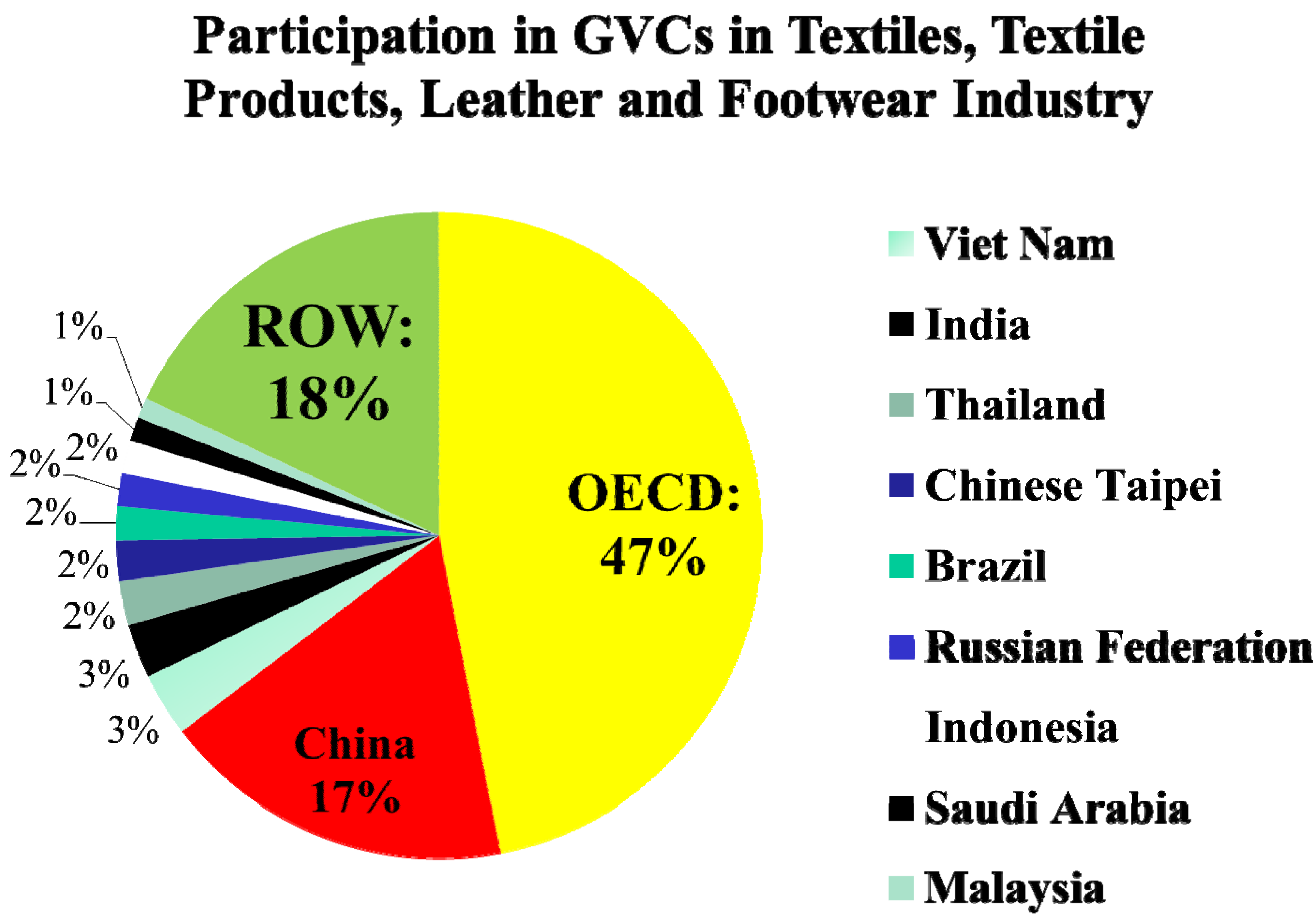
Share of OECD countries = 67%

NICs = 11%

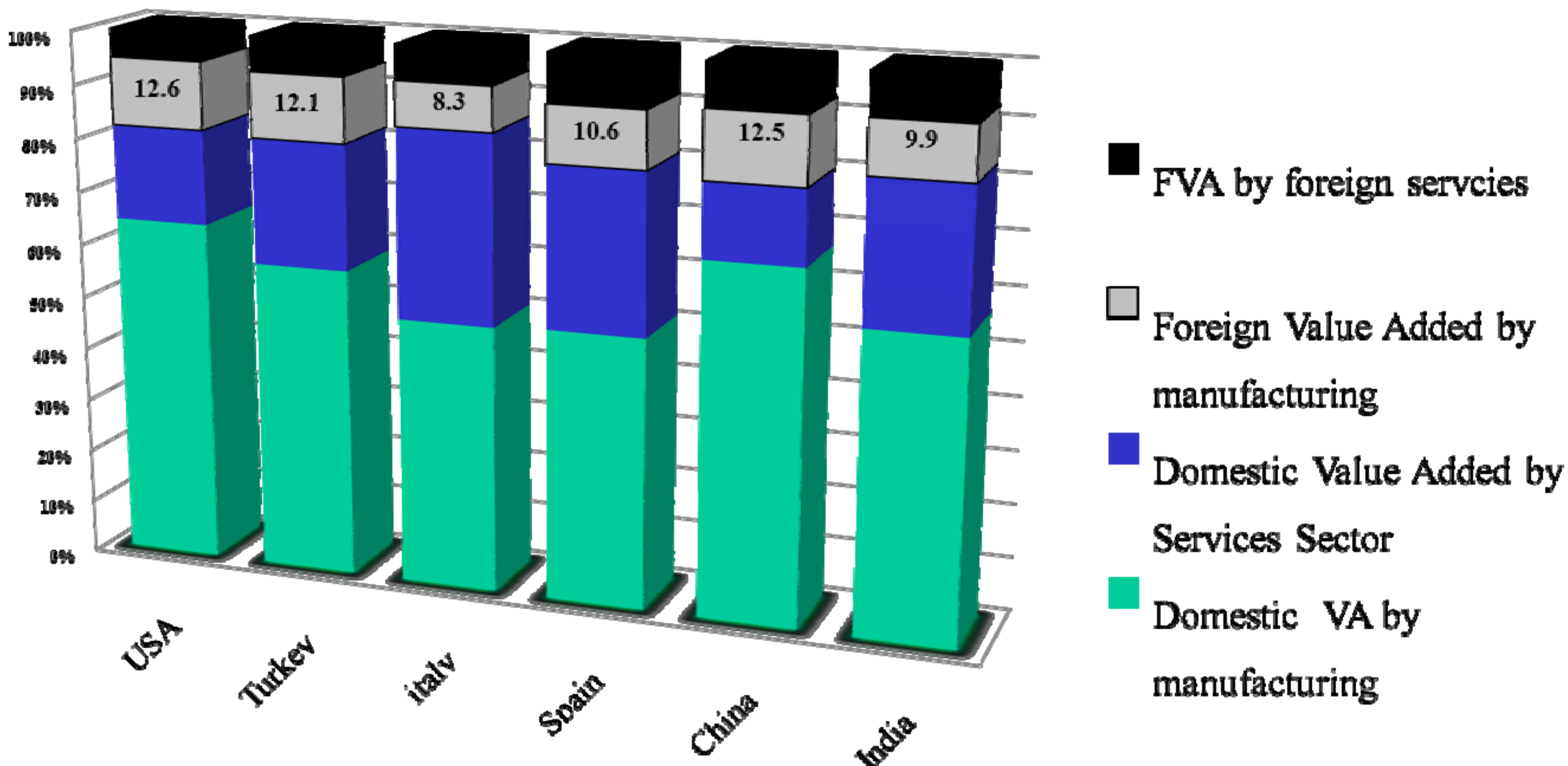
BRICS = 14%

ROW (all LDCs and other low income countries) = 8%



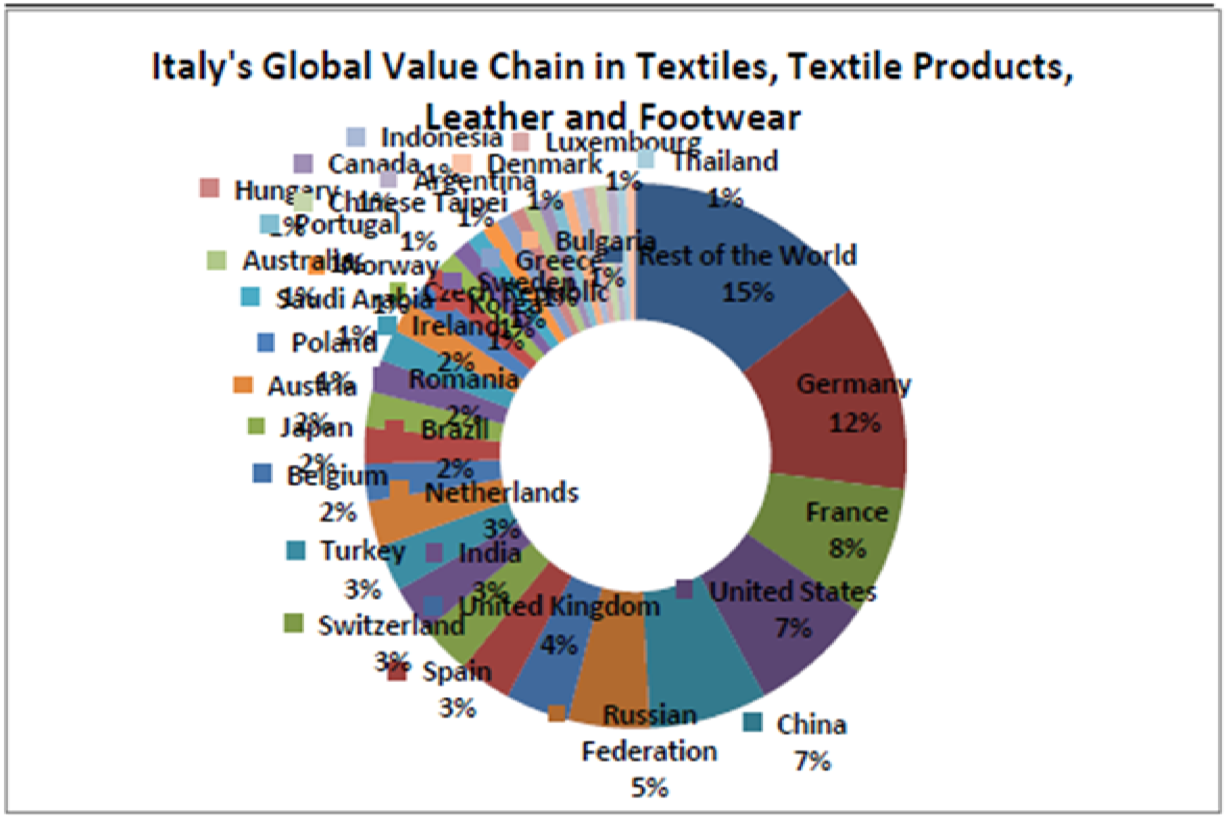

Participation in GVCs in Textiles, Textile Products, Leather and Footwear Industry
ROW: 18%
OECD: 47%
China 17%
1%
1%
2%
2%
2%
2%
2%
3%
3%
Viet Nam
India
Thailand
Chinese Taipei
Brazil
Russian Federation
Indonesia
Saudi Arabia
Malaysia

Distribution of Value in GVCs: 2009



Foreign value added by manufacturing sector contributes less than 13% of total value in global exports of top exporters.

Even in Low-Tech Industries like Textiles, Leather and Footwear- Competition in Global Value Chains is high for commodity dependent and other low income countries



- ***Measuring whether a country is 'Gainfully' linked into GVCs***

- **If Ratio of FL to BL is > 1** implies positive gains, i.e., net domestic value added created by linking into GVC is positive as export of domestic value added is greater than import of foreign value added.

	Share in Forward Linkage (%)	Share in Backward (%)	Ratio of Forward Linkages to Backward Linkages
China	5.2	12.6	0.41
United States	12.6	5.0	2.53
Germany	8.0	9.3	0.86
Japan	6.1	2.8	2.23
France	3.7	4.4	0.85
Korea	3.0	4.9	0.60
United Kingdom	4.2	2.9	1.45

	Share in Forward Linkage (%)	Share in Backward (%)	Ratio of Forward Linkages to Backward Linkages
Chinese Taipei	2.0	2.8	0.71
Viet Nam	0.3	0.7	0.40
Mexico	0.8	2.1	0.38
Australia	1.8	0.7	2.50
Norway	1.8	0.7	2.54
Hong Kong, China	0.8	0.8	0.95
South Africa	0.4	0.4	1.05
Brazil	1.4	0.5	3.01
Singapore	1.3	3.2	0.42
Thailand	1.0	1.8	0.53
Malaysia	1.5	2.1	0.73
Indonesia	1.1	0.5	2.03
Philippines	0.4	0.6	0.74
India	1.6	1.7	0.93

Some facts of GVCs

- Value-Added Gains in GVCs are asymmetrically distributed
- *Commodity exporters and other LDCs are either '**locked-in'** at bottom of GVCs are **'locked-out'** of GVCs*
- ***Smiley Curve in GVCs*** where Pre and post manufacturing services capture more value added than actual manufacturing.
- In upper end of GVCs, most of the countries are developed countries that have competitive advantage in providing services like R&D, designing, branding, marketing, distribution, etc
- Corporate control of the production process is far more profitable than manufacturing activity itself- *lead firms*
- The longer the value chains, the higher are the rents for the lead firms

How to Add Value to GVCs?

- UNCTAD through ECIDC unit of GDS has completed projects (2012-14) on ‘Promoting ***Regional Value Chains*** in Textiles; Leather; and Agro-Processing industries in South Asia and Sub-Saharan Africa’

- Funded by Asian Development Bank, African EXIM Bank and Commonwealth Secretariat

Conclusions

- Commodity dependent countries and other Low income countries are unable to **“*gainfully*”** link into GVs.

- Need to focus on ‘***create more***’ rather than ‘***trade more*’.**

- Improving trade facilitation in itself may not be sufficient in gainfully linking countries to GVCs.