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Institutional barriers and potential for trading services in South Asia compared to the world

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Presentation Outline:

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Introduction

- Trade in services drives technology and exchange of ideas. Service trade is nowadays one of the strongest ingredients for integration of nations and for raising growth as well.
- For trade negotiators, service trade liberalization is now one of the top agendas in both multilateral and bilateral level. General Agreement on Trade in Services (GATS) under WTO is considered as framework in negotiating service trade liberalization in multilateral level.
- The growing behavior of service sectors has contributed more to the GDP's of South Asian nations. Relatively better performance of South Asian service trade is noticed mainly from the early years of the last decade. Policy reforms and deregulations played a great role in this purpose. However, South Asia still faces restrictions in this regard. For South Asia there's a long way to go for this purpose.

Objectives

- To examine service trade behavior with barriers and restrictions among countries
- To compare the South Asian service trade behavior with the world



Literature Review

- Large part of South Asia's service trade is done informally due to high regulations and trade barriers suggested by Arindam Banik and Pradip K. Bhaumik (2014).
- Low skilled labor exporting is one of the major impediment of service trade here (Rupa Chanda, 2011).
- Ethier and Horn (1991) suggested services are special as they are customized to meet the needs of individual purchasers.

Literature Review

- Dihel and Shepherd (2007) said it is useful to disaggregate the sector-wise trade restrictiveness indexes by modes.
- There are four modes studied:
Mode1 is Cross-Border Supply which is supply of a service from supplier's country to consumer's country.

Mode2 is Consumption Abroad that involves purchase of a service while the consumer moves to supplier's country.

Mode3 is Commercial Presence that is the sell and buy of a service at a foreign based establishment in consumer's country.

Mode4 is the movement of natural persons which means a third person providing service from supplier's country to consumer's country.

Data Source and Type

- Panel data of 185 countries for 5 years (2010 to 2014)
- Data for total annual service trade, per capita GDP, real effective exchange rate, net enrolment in secondary education, population density per square km were taken from World Development Indicator from World Bank.
- Overall Distance to Frontier (DTF) – Doing Business indicators of World Bank
- Service Trade Restriction Database (STRI) -Development Economics Research Group, the World Bank

Methodology

- PANEL MODEL:

Distance to Frontier (DTF):

The Distance to Frontier helps to determine the absolute level of regulatory performance over time. The higher the DTF value the better is the nation in lessening the barriers and lower DTF value suggests the opposite.

$$\log X_{it} = \beta_0 + \beta_1 Y_{it} + \beta_2 G_{it} + \beta_3 E_{it} + \beta_4 \text{Educ}_{it} + \varepsilon_{it}$$

Where, X=total annual service trade (aggregating export and import), Y= overall DTF, G= per capita GDP in current US\$, E= Real effective exchange rate in current US\$, Educ= net enrolment in secondary education, ε = stochastic error term, i= individual nation and t= time

Methodology

- By introducing dummy for seven different South Asian Countries--

$$\log X_{it} = \beta_0 + \beta_1 Y_{it} + \beta_2 G_{it} + \beta_3 E_{it} + \beta_4 Educ_{it} + \beta_5 DSA + \varepsilon_{it}$$

Where, DSA=1, if Bangladesh, India, Pakistan, Nepal, Bhutan, Sri Lanka and Maldives and DSA=0 for countries except these seven.



Methodology

- CROSS SECTION MODEL:

- Service Trade Restrictiveness Index (STRI):

STRI value ranges from 0 to 100, where 0 is completely open market and 1 is completely closed market. Higher value expresses higher restrictions and lower value shows the opposite.

- Calculated on the basis of information in the STRI database which reports regulations currently in force.

- $$X = \beta_0 + \beta_1 Y_i + \beta_2 G_i + \beta_3 P_i + \varepsilon_{it}$$

Where, X= trade in service (% of GDP in current US\$), Y= overall STRI, G= per capita GDP in current US\$ and P= population density per square kilometers and i= individual nations.

Methodology

- After getting rid of heterokcedasticity problem with the help of robust standard error, we generate a dummy variable again for South Asian countries.

$$X = \beta_0 + \beta_1 Y_i + \beta_2 G_i + \beta_3 P_{it} + \beta_4 DSA + \varepsilon_i$$

It includes dummy variable for South Asian countries that is DSA=1 for Bangladesh, India, Nepal, Sri Lanka and Pakistan and DSA=0 for countries other than these five.

Empirical Findings

	Pooled OLS	RE	GLS	LSDV
Variables	In of service trade	In of service trade	In of service trade	In of service trade
Overall DTF	0.019**	0.018**	0.018**	0.019**
Real Effective exchange rate	-0.019*	-0.019*	-0.019*	-0.019*
DSA	2.77***	2.776***	2.776***	2.78*
Per capita GDP	0.00004***	0.00004***	0.00004***	0.00004*
Net Enrolment in Secondary Education	0.039***	0.039***	0.039***	0.039*
Constant	24.56***	24.56***	24.56***	24.56**
Observations	206	206	206	206
R- squared	0.525	0.535	0.535	0.5350

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Empirical Findings

- Variables are significant having coefficient signs consistent with priori
- The coefficient of overall DTF is positive as higher DTF values shows less restrictions resulting higher volume of trade.
- As overall DTF value increases by 1, service trade increases 1.8% on average, holding other things constants.
- South Asian dummy is significant suggesting the abatement of barriers, percentage of service trade increases more in South Asia compared to non South Asian countries.

Empirical Findings

Variables	With DSA	Without DSA
STRI	-1.22*	-0.09*
Population Density(People per square kim)	0.01*	0.018*
GDP per capita (current US\$)	0.0002*	0.0002*
DSA		-15.69
Constant	19.3*	18.78*
no. of observations	71	71
R squared	0.08	0.12

Empirical Findings

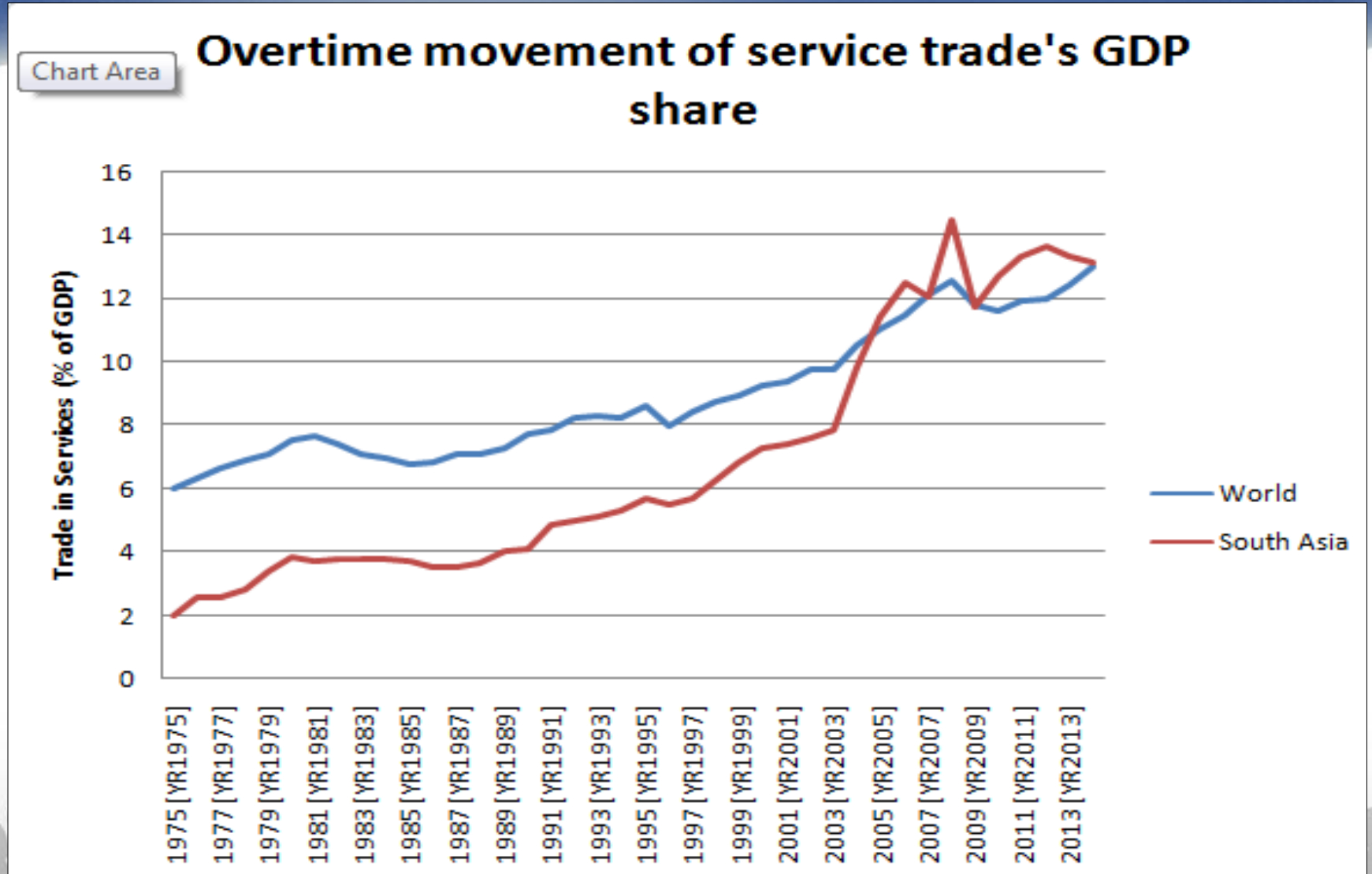
- The variables are significant with expected signs consistent with the literature.
- Overall STRI variable is significant with negative coefficient indicating with the increase in restrictions, service trade value abates.
- When STRI increases by 1, trade is services percentage of GDP decreases by .122unit on average, holding other things constants.
- The South Asian dummy is insignificant suggesting for specifically in 2015 there was no major difference in South Asian countries' relationship between STRI and trade in service.

Analytical Finding

- The study finds results consistent with anticipation and literature that is total amount of trade in service moves negatively with restrictions.
- For South Asia the relationship is quite significant. When barriers are lowered South Asian GDP grows more than the non South Asian countries.



Trade in Services (% of GDP) Overtime: Comparing South Asia to the World



Trade in Services (%of GDP) Overtime: Comparing South Asia to the World

- From 1975 to 2014 service trade share of GDP has risen from 6% to 12.98% for the world, while the South Asian service trade share of GDP has risen from 2% to 13.08% in these years. (Source: The World Bank).
- Service trade is outperforming overall gross domestic product (GDP) growth and helping to the growth of these economies.



Service Trade Restriction Index(STRI) in South Asia

Country	Overall	Mode 1	Mode 3	Mode 4
Bangladesh	44.2	46.19	33.83	70
India	65.7	70.75	69.34	70
Nepal	42.9	36.66	42.06	85
Pakistan	28.3	38.54	26.68	85
Sri Lanka	38.3	23	38.25	80



Conclusion

- South Asia service trade has grown more than the most non South Asian countries.
- Though the service trade has emerged as a major growth driver in South Asia from the last decade, South Asian nations has not yet shown much progress in dispelling domestic regulations and other barriers.
- Vocational and technical training programs should be made vigorous to develop human resource and make the region much strongly competing with the non South Asian nations in trading services.
- The governments should work hand in hand and build trust to dispel the barriers and encourage service trade in South Asia to fasten economic growth and integration of the nations here.

Thank you

