

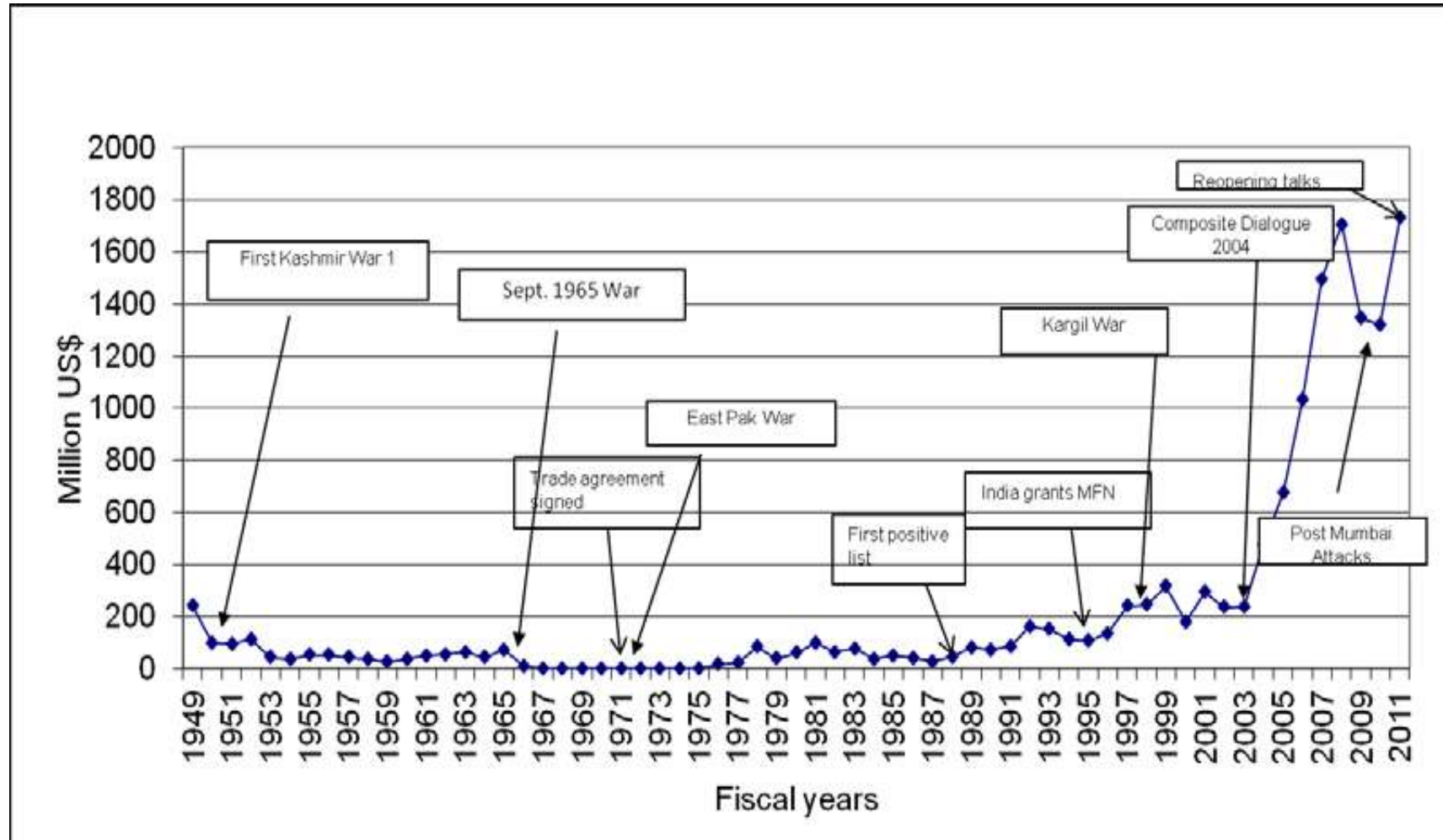
# PAKISTAN-INDIA BILATERAL TRADE IN SPORTS GOODS SECTOR

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# Pakistan - India Trade

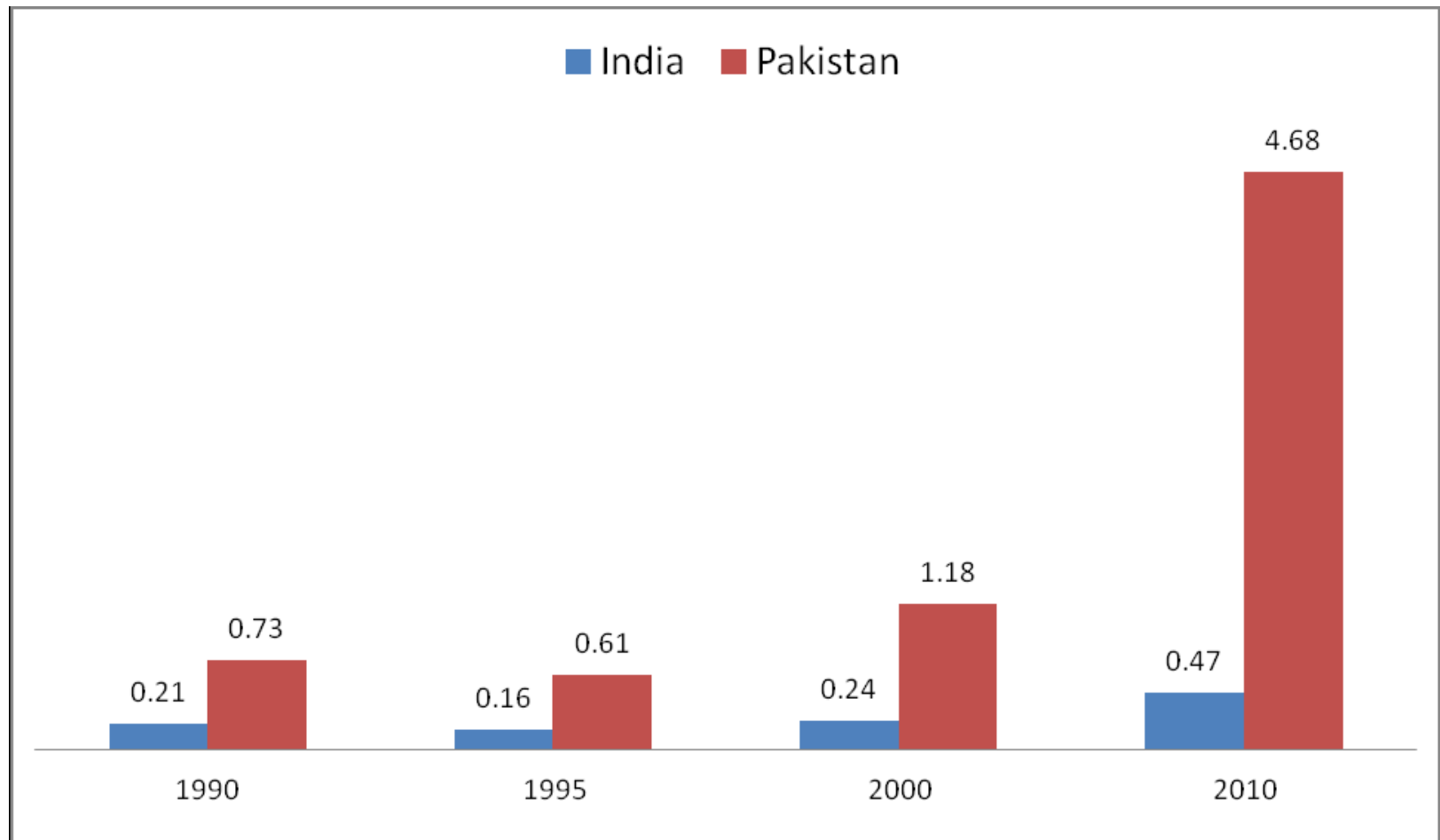
- Pakistan shares its second largest border with India, however, the countries have never been devoted trading partners
- Trade has increased during the last couple of years but a huge gap with the potential level still remains
- India granted the Most Favored Nation (MFN) status to Pakistan in 1995
- Pakistan has been reluctant in reciprocating so far

# Pakistan-India Trade from 1949-2011 (million USD)



Source: World Bank's Report 2011

# Indo-Pakistan Trade as Percentage of Each Country's Total Trade



Source: World Bank's Report 2011

# Sports Goods Sector

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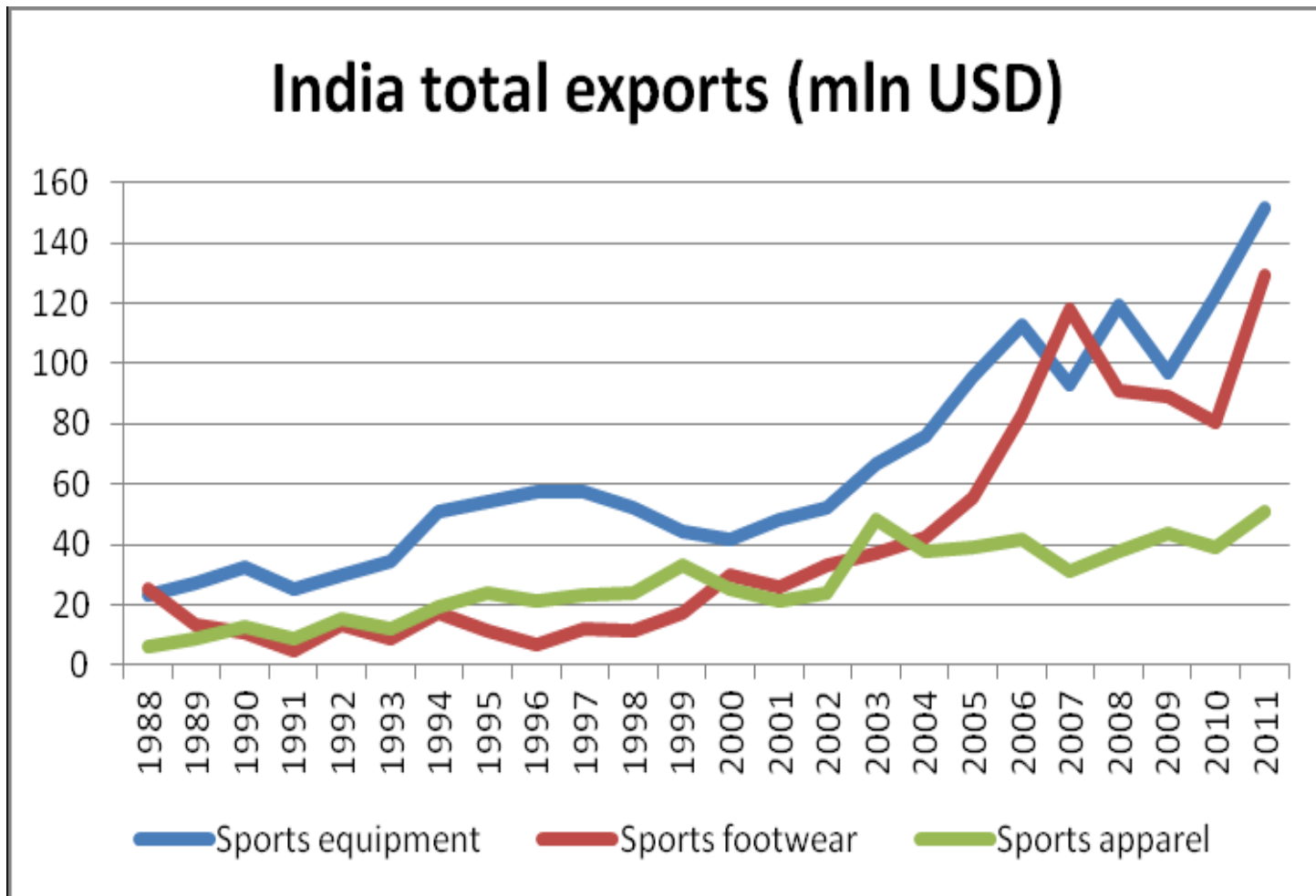
- Three main categories:
  - Sports Equipment
  - Sports Apparel
  - Sports Footwear

# Existing Patterns of Trade



Source: COMTRADE Data

# Existing Patterns of Trade



Source: COMTRADE Data

# Existing Patterns of Trade



Source: COMTRADE Data



# Revealed Comparative Advantage

- Out of the total 38 product lines in the sports goods sector
  - ▣ India has a comparative advantage in 15 categories
  - ▣ Pakistan has a comparative advantage in 10 categories
- Advantage in similar product categories, except for India's advantage in sports footwear

Top product lines based on Revealed Comparative Advantage - 2011					
Product lines in which India has RCA			Product lines in which Pakistan has RCA		
Rank			Rank		
1	621112	Swimwear (excl. knitted/crocheted), women's/girls'	1	621112	Swimwear (excl. knitted/crocheted), women's/girls'
2	950699	Articles & equip. for sports, n.e.s. in Ch.95 (exc...	2	950699	Articles & equip. for sports, n.e.s. in Ch.95 (exc...
3	950639	Golf equip. other than golf clubs, complete/golf b...	3	950691	Articles & equip. for general physical exercise/gy...
4	950691	Articles & equip. for general physical exercise/gy...	4	950639	Golf equip. other than golf clubs, complete/golf b...
5	950629	Water-skis, surfboards & other water-sport equip. ...	5	420321	Gloves, mittens & mitts, of leather/composition le...
6	950669	Balls other than golf/table-tennis/lawn-tennis/inf...	6	950662	Inflatable balls
7	611220	Ski suits, knitted/crocheted	7	611219	Track suits, knitted/crocheted, of textile materia...
8	420321	Gloves, mittens & mitts, of leather/composition le...	8	950669	Balls other than golf/table-tennis/lawn-tennis/inf...
9	611239	Men's/boys' swimwear, knitted/crocheted, of other ...	9	611211	Track suits, knitted/crocheted, of cotton
10	611211	Track suits, knitted/crocheted, of cotton	10	621111	Swimwear (excl. knitted/crocheted), men's/boys'
11	640319	Sports footwear other than ski-boots/cross-country...			
12	950790	Line fishing tackle (excl. of 9507.10-9507.30); fi...			
13	950662	Inflatable balls			
14	611219	Track suits, knitted/crocheted, of textile materia...			
15	640319	Ski-boots, cross-country ski footwear &			

# Revealed Comparative Advantage

- Trade is driven by RCAs
- India to Pakistan: Inflatable Balls (13<sup>th</sup> rank)
- Pakistan to India: Articles and Equipment for Outdoor Sports (2<sup>nd</sup>) followed by Inflatable Balls (5<sup>th</sup>) and Sports Gloves (6<sup>th</sup>) – Mittens & Mitts
- Both countries are NOT trading in goods with the highest RCA
- More diversified for Pakistan

# Trade Concentration Index

- Trade Concentration Index
  - Falling for Pakistan's exports to India
  - India's exports to Pakistan are still highly concentrated

**Trade Concentration Index (TCI)**

	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Pakistan's exports to India</b>	0.44	0.35	0.32
<b>India's exports to Pakistan</b>	0.22	0.58	0.56

# Intra-Industry Trade

- Existence of intra-industry trade - balls and other sports equipment

Intra-Industry Trade (IIT) Index												
	2003		2004		2005		2006		2007		2008	
	Product code	IIT	Product code	IIT	Product code	IIT	Product code	IIT	Product code	IIT	Product code	IIT
Intra-industry trade	950662	0.05	950669	0.13	950662	0.53	950662	0.80	950669	0.88	950669	0.58
			950662	0.07	950699	0.04	950699	0.20	950699	0.54	950699	0.40
									950662	0.28	950662	0.33
											950691	0.19
Inter-industry trade	950640	0.00	950611	0.00	950659	0.00	950659	0.00	950629	0.00	950619	0.00
	950669	0.00	950699	0.00			950669	0.00	950691	0.00	950629	0.00
	950691	0.00					950691	0.00			950639	0.00
	950699	0.00									950659	0.00

# Gravity Model

- To study whether the current levels of exports between the two countries are what would be expected for two similar countries:

$$\ln X_{ijt} = \beta_0 + \beta_1 \ln Y_{it} + \beta_2 \ln Y_{jt} + \beta_3 \ln D_{ijt} + \beta_4 \ln y_{jt} + \beta_5 \ln y_{it} + \delta_1 \text{con}_{ijt} + \delta_2 \text{clang}_{ijt} + \delta_3 \text{same}_{ijt} + \sigma_1 \text{Pak\_Ind}_t + u_{ijt}$$

$X_{ijt}$  - monetary value of exports from country i to country j in year t

Y – GDP

clang – Common Language

D – Distance

con – Contiguity

y – Per capita income

Pak\_Ind – Pakistan India dummy

# Data

- Trade figures from COMTRADE database
- GDP and Population from World Development Indicators
- Distances and Dummies from CEPII
- 10 trading partners of both Pakistan and India
  - ▣ Australia, China, France, Germany, Italy, Japan, Republic of Korea, Singapore, UK and USA

# Gravity Model

## □ Simple Gravity Model

	Pooled OLS	Fixed Effects	Random Effects
<b>Distance</b>	-0.532***	-	-0.594***
	(-5.73)		(-5.33)
<b>GDP importer</b>	0.554***	0.915	0.707***
	(6.21)	(0.98)	(5.08)
<b>GDP exporter</b>	1.142***	-3.057***	0.867***
	(10.31)	(-3.31)	(5.56)
<b>GDP per capita importer</b>	0.710***	1.090	0.841***
	(10.16)	(0.95)	(8.57)
<b>GDP per capita exporter</b>	-0.450***	4.430***	-0.218*
	(-3.58)	(4.08)	(-1.85)
<b>Constant</b>	-29.51***	23.19	-28.97***
	(-7.67)	(1.27)	(-5.76)
<b>Observations</b>	2643	2643	2643
<b>Adjusted R<sup>2</sup></b>	0.6381	0.9148	0.602

*t* statistics in parentheses

Standard errors are robust

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



# Augmented Gravity Model

	Pooled OLS	Fixed Effects	Random Effects
<b>Distance</b>	<b>-0.619***</b>	-	<b>-0.642***</b>
	<b>(-5.58)</b>		<b>(-4.82)</b>
<b>GDP importer</b>	<b>0.592***</b>	<b>0.915</b>	<b>0.711***</b>
	<b>(6.37)</b>	<b>(0.98)</b>	<b>(5.17)</b>
<b>GDP exporter</b>	<b>1.184***</b>	<b>-3.057***</b>	<b>0.887***</b>
	<b>(11.40)</b>	<b>(-3.31)</b>	<b>(5.72)</b>
	<b>0.707***</b>	<b>1.090</b>	<b>0.840***</b>
	<b>(10.70)</b>	<b>(0.95)</b>	<b>(8.86)</b>
<b>GDP per capita exporter</b>	<b>-0.456***</b>	<b>4.430***</b>	<b>-0.233*</b>
	<b>(-3.53)</b>	<b>(4.08)</b>	<b>(-1.88)</b>
<b>Contiguity</b>	<b>0.181</b>	-	<b>0.518</b>
	<b>(0.36)</b>		<b>(0.90)</b>
<b>Common official primary language</b>	<b>0.695**</b>	-	<b>0.727**</b>
	<b>(2.44)</b>		<b>(2.35)</b>
<b>Were or are the same country</b>	<b>0.657**</b>	-	<b>0.741**</b>
	<b>(2.26)</b>		<b>(2.29)</b>
<b>Pak-India bilateral trade</b>	<b>-2.881***</b>	-	<b>-2.493***</b>
	<b>(-4.40)</b>		<b>(-2.77)</b>
<b>Constant</b>	<b>-31.03***</b>	<b>23.19</b>	<b>-29.28***</b>
	<b>(-7.92)</b>	<b>(1.27)</b>	<b>(-5.84)</b>
<b>Observations</b>	<b>2643</b>	<b>2643</b>	<b>2643</b>
	<b>0.6525</b>	<b>0.9148</b>	<b>0.6175</b>

*t* statistics in parentheses  
Standard errors are robust

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

# Conclusion & Recommendations

- India is exporting more sports goods
- Limited product lines
- Diversified product range for Pakistan
- Very low level of trade estimated by the Gravity Model
  - ▣ Presence of NTBs on both sides
- Need for focus on product lines with higher RCAs
- Need for disaggregated analysis of specific product lines



*Thank You.*