



Measuring Commodity-Level Trade Costs in Asia:

The Basis for Effective Trade Facilitation

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Outline



- The Issue
- Review of Doing Business (DB)
- Trade Cost Measurement using Trade Statistics
- Complementarity between DB and Statistics-based Trade Cost
- Alternative Indicators of Trade Facilitation Reforms
- Some Analysis using Statistics-based Trade Cost

The Issue



- Lowering trade cost is critical to increase trade
 - MFN of Asian countries declined: 12.4% in 2000 > 8.4% in 2009; The problem is non-tariff barriers
 - Developing countries cannot export, not because of low competitiveness but because of high trade cost
- How to measure trade cost?
 - Many studies estimate level and impact of trade cost
 - Only a limited number of studies measure trade cost
- Long-term commodity-level indicator is necessary:
 - To draw up trade facilitation reform policy
 - To assess the impact of trade facilitation reform

Overview of Doing Business



- Widely used survey-based trade facilitation measurement
 - Financial cost, time, number of documents
- Designed for cross-country comparison, not for time series analysis
- Historical data set always revised/updated
- Time lag: DB 2011
 - Released in November 2010
 - Data collection completed by June 2010
 - Responses to questionnaire by February 2010

Major Problems of DB



- Beauty contest
- Survey contributors
 - local freight forwarders, shipping lines, customs brokers, port and customs officials, and banks
 - Exporting firms themselves do not contribute any information
- Inconsistency between WB Doing Business and WB Enterprise Survey (Baker 2010)
 - Both surveys include the question on number of days exports take to clear ports and customs, but correlation between the two is very low (0.13)

Procedures and Costs Covered by DB



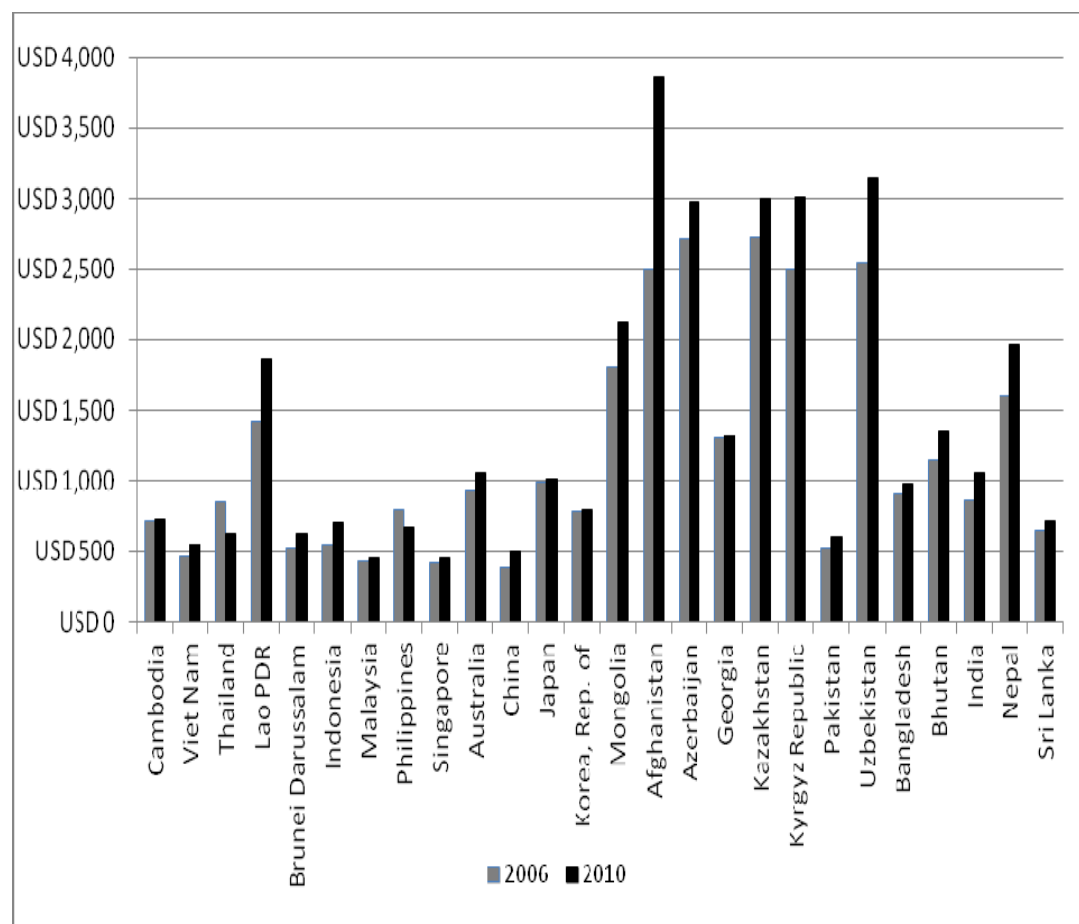
- Procedures (Pre-shipment activities)
 - Packing of goods in seller's warehouse
 - Inland carriage and handling
 - Terminal (port) handling, including storage if a certain storage period is required
 - Customs, inspections, and technical control
 - All other services performed until departure from port of exit
- Costs
 - Documentation fees
 - Administrative fees for customs clearance and technical control
 - Customs broker fees
 - Terminal handling fees
 - Inland transport costs
 - Other costs of required services until departure from port of exit

Assumptions Employed by DB



- Assumptions regarding cargos
 - Dry cargo
 - 20-foot container
 - 10-ton container
 - Value at US\$20,000
 - Leading trading item chosen from six commodity groups (but no commodity level data)
 - Textile; Coffee; Electrical equipment; Industrial equipment; Telecommunication equipment; Metal
- Assumptions regarding trading firms
 - More than 60 employees
 - Exports at least 10 percent of the sales
 - Domestically-owned
- Assumptions regarding the route
 - Ocean transport
 - From most populated city
 - Through the main port (in the case of landlocked: a port in a neighbor country)
 - To the country's largest overseas trading partner

DB Data



- Landlocked countries' poor performance
- Southeast Asia's performance is good
- Deterioration in most countries
- Pakistan better than Korea?
- Philippines better than Japan?

Trade Cost using Trade Statistics: Traditional Mirror Comparison



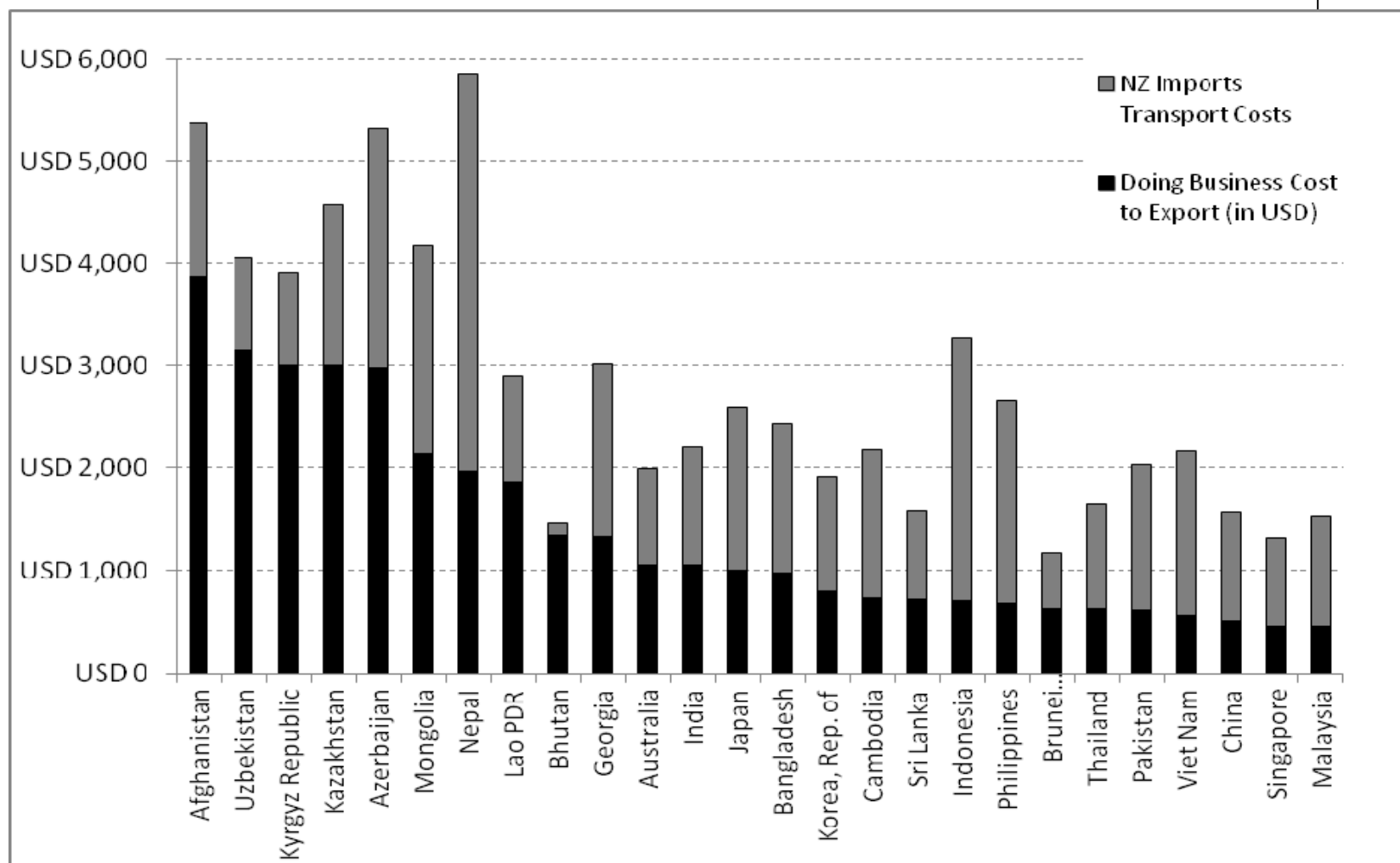
- The traditional mirror method compares:
 - Country A's FOB export figures to Country B
 - Country B's CIF import figures from Country A
- Difference is regarded as trade costs
- Very problematic because quantity of mirror statistics does not match
 - Transit trade
 - Informal trade (smuggling)
- Difference includes not only trade costs (transport, insurance) but also includes various statistical discrepancy

Same-side CIF-FOB Ratio



- Several countries publish import figures in both CIF and FOB
 - Those include: US; Australia; Chile; Brazil; New Zealand
 - Only New Zealand data is free
- There is no “quantity problem” because data is from one customs office
- Trade Cost
 - = $(\text{CIF import} - \text{FOB import}) / \text{FOB import}$
- Both aggregate-level and commodity-level
- International sectors only

Domestic + International Trade Costs



Alternative Indicator of Reforms



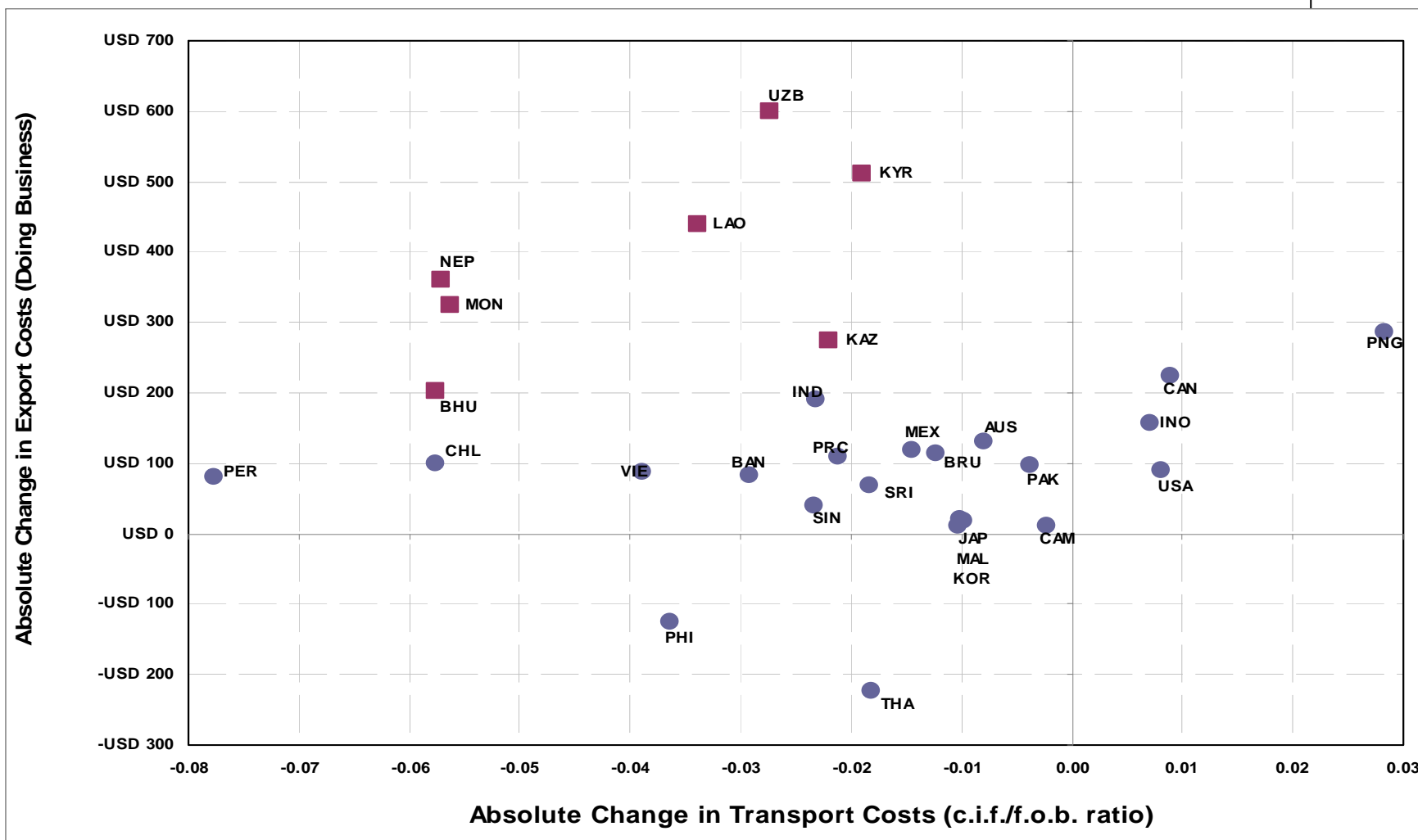
- Good performers in terms of DB are good performers in statistics-based trade cost
- Why: If a port is congested, both international and domestic processes are prolonged, which has financial implications
- Airport analogy: When an airport is congested--
 - Airplanes need to circle around before landing
 - Takes long time to arrive at a pier
 - Long immigration
 - Long baggage claim
 - Long customs clearance etc.

Factors that Affect Doing Business and Trade Cost

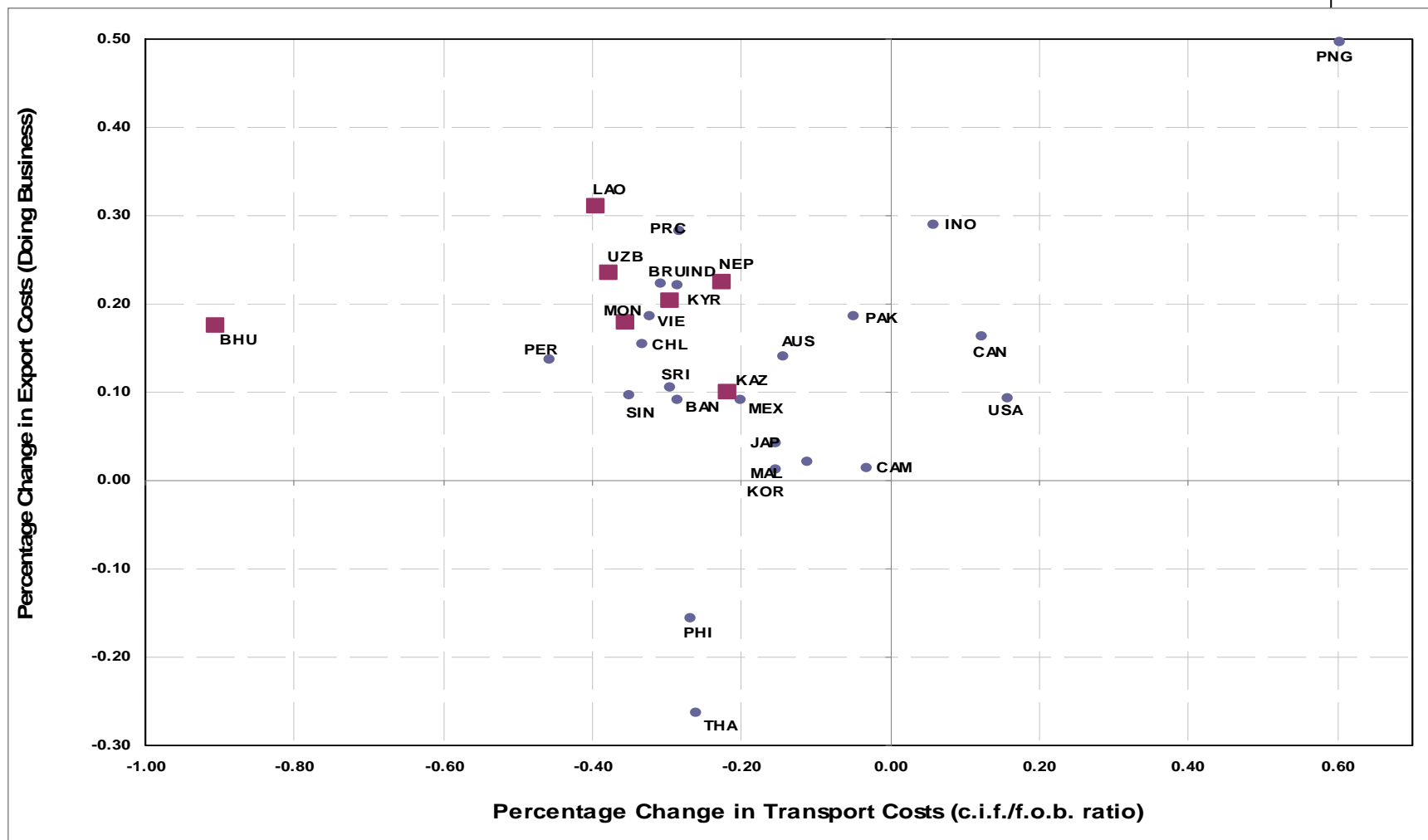


	Factors that affect all countries	Factors that affect only limited countries
Factors that affect both DB and trade costs	<ul style="list-style-type: none">• Global recessions	<ul style="list-style-type: none">• Trade facilitation reforms
Factors that affect trade costs only	<ul style="list-style-type: none">• Changes in international freight rates• Price shocks	<ul style="list-style-type: none">• Modal shift in transport• Construction of international highways
Factors that affect DB only	<ul style="list-style-type: none">• USD fluctuation (change)	<ul style="list-style-type: none">• USD fluctuation (level)• Methodological change of Doing Business

Absolute Change



Percentage Change

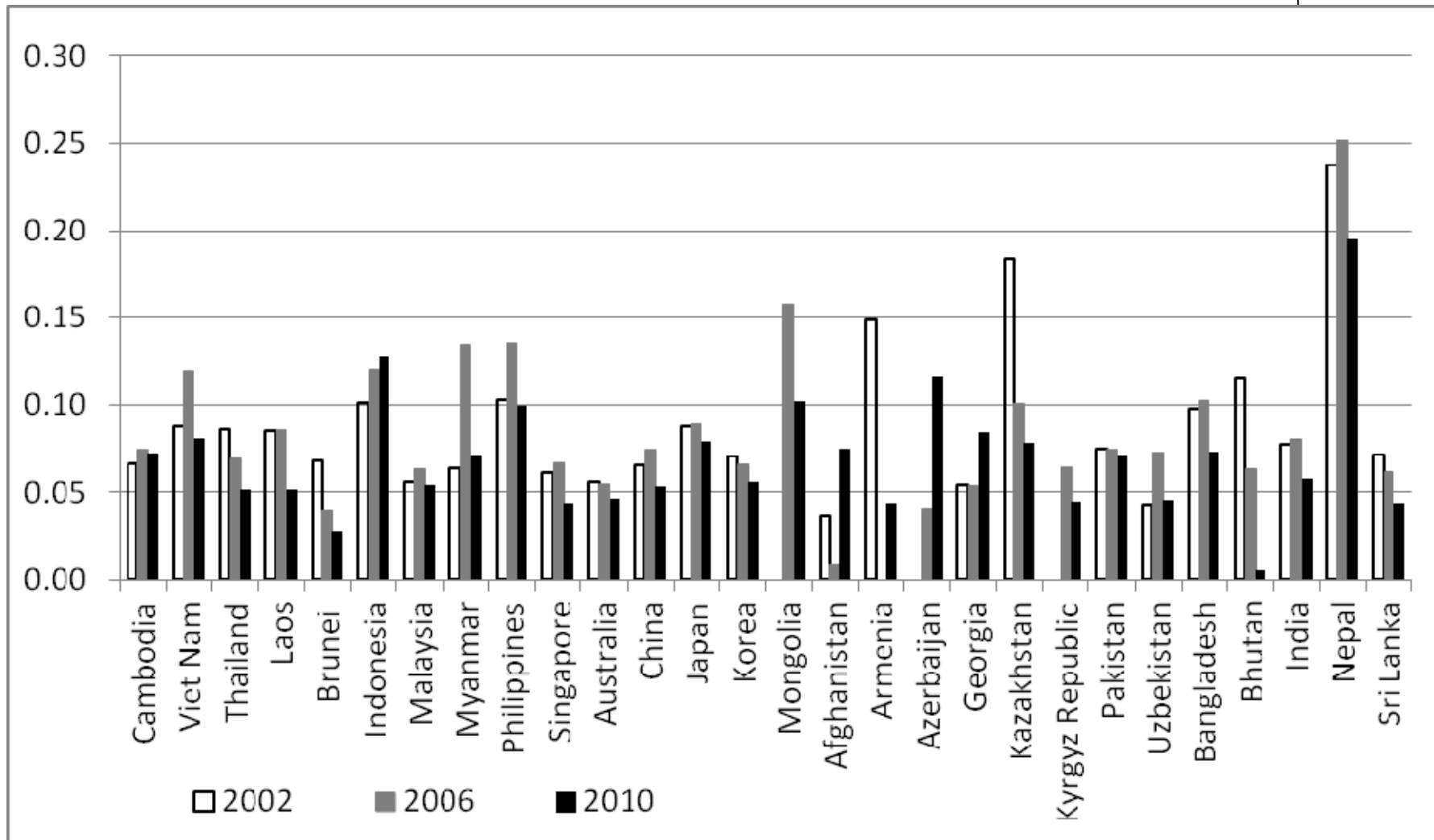


Use of Statistics-Based Trade Cost in Conjunction with DB



- Trade Facilitation reforms can be captured not only by DB but also by statistics-based trade cost
- Advantage of using statistics based trade cost
 - Longer time series
 - Doing Business is not suitable for time series analysis
 - Doing Business started in 2006
 - Commodity-level figures

Statistics-based Trade Cost

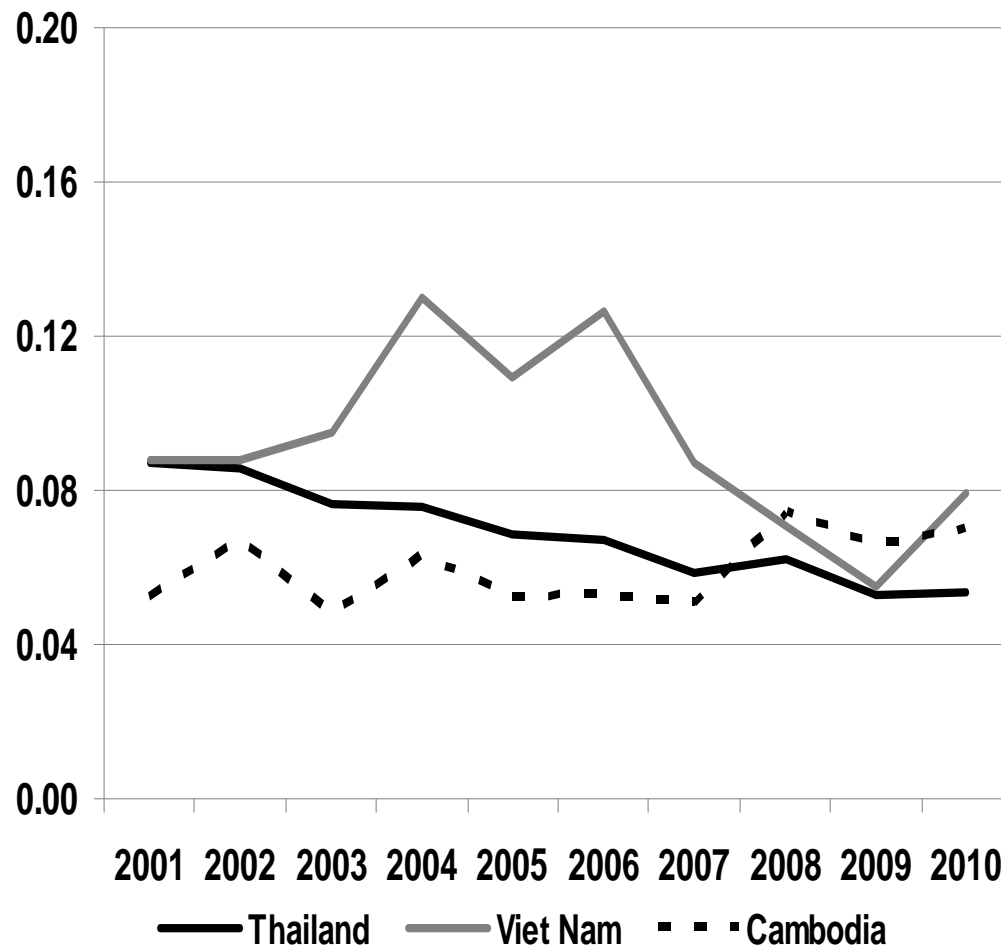


Declining Trend of Trade Cost



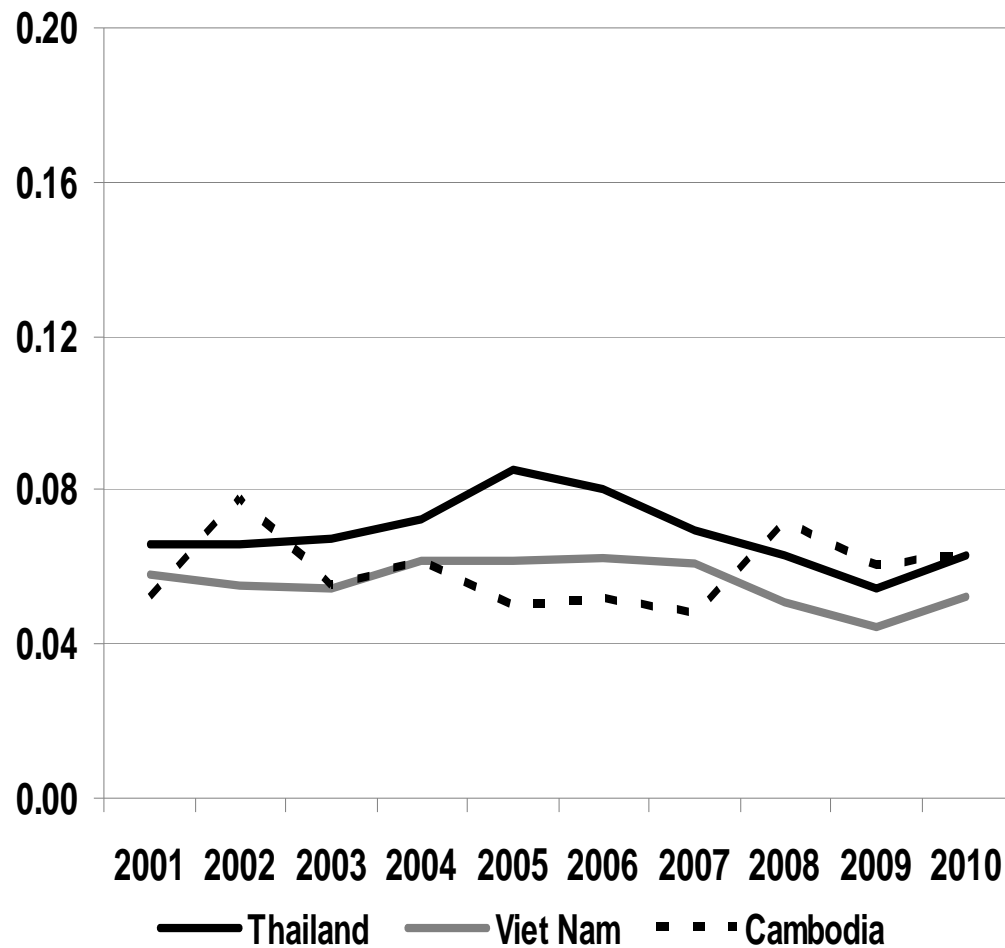
2002	2006	2010	No. of countries
Highest	2 nd highest	Lowest	9
Highest	Lowest	2 nd highest	0
2 nd highest	Highest	Lowest	9
2 nd highest	Lowest	Highest	2
Lowest	2 nd highest	Highest	1
Lowest	Highest	2 nd highest	3
No data in at least one year			4
Total			28

Aggregate level



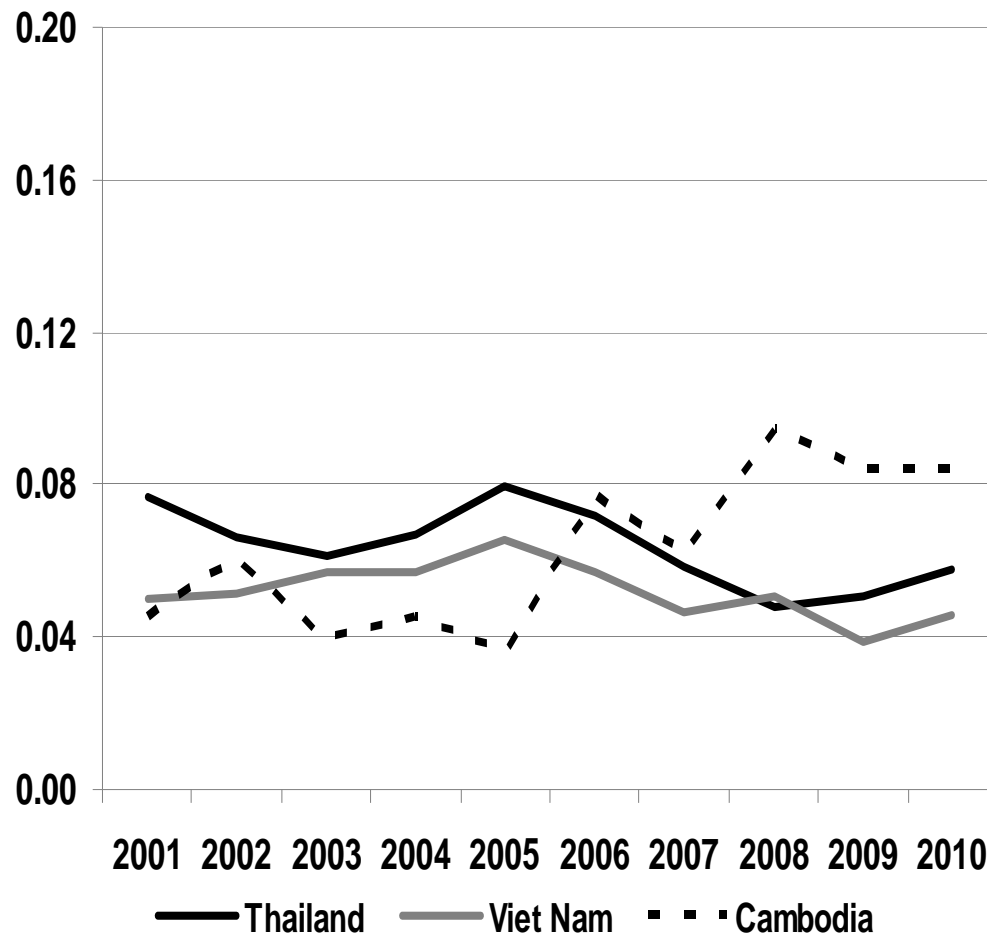
- Very different trend and level.
 - This is partly because the composition of exports are different
- Only Thailand has a clear trend
 - Perhaps trade amount does matter

Textile



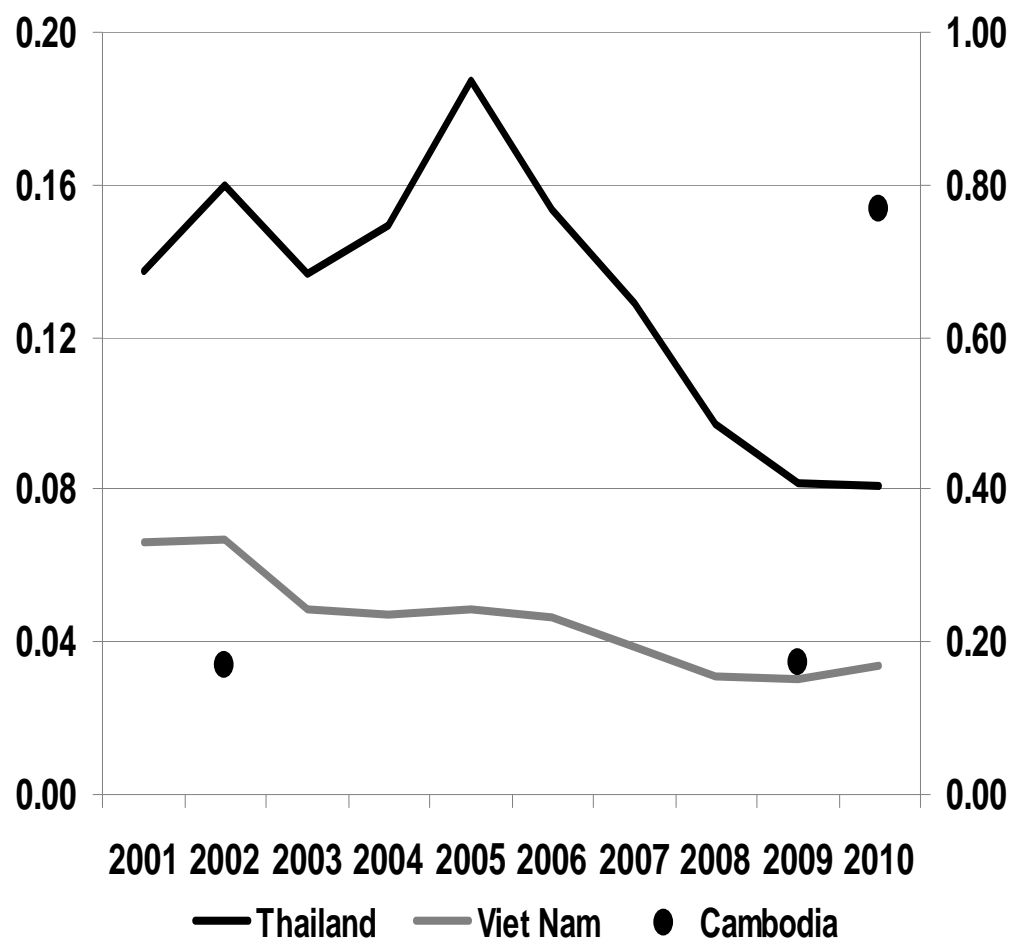
- Thailand and Viet Nam: Very similar trend
 - Due to production network?
- Higher level does not seem to imply higher trade costs due to inefficiency
 - Perhaps high-end products

Footwear



- Thailand and Viet Nam: Very similar trend
- Cambodia: Increasing trend

Vegetables



- Levels are very different
- Perhaps very different kind of vegetables.
 - The more disaggregated level, the more likely we compare different products

Conclusion



- DB has several inherent weaknesses
- Statistics-based trade cost also reflect trade facilitation reforms
- Longer time series and commodity-level trade cost is available in the case of statistics-based trade cost
- In using Statistics-based trade cost, we should bear in mind that:
 - Change in trend (not level) should be compared across countries
 - The lower the breakdown is, the more likely different products are compared

Future Issues



- Further research
 - Further detailed analysis on the comparison of DB data and statistics-based trade cost in terms of change
 - Examination of factors that affect DB and/or statistics-based trade cost
 - Use of trade statistics compiled by countries other than New Zealand
 - More commodities to be studied
 - What explains the variation of discrepancy?
- Construction of database on trade costs?
 - Specific commodity-level actual trade costs seems to be useful for policy making.

Further Details



- Article in *Journal of International Commerce, Economics and Policy* (JICEP), 3(2). 2012 May
- ADB Working Paper Series on Regional Economic Integration No. 95: Measuring Commodity-Level Trade Costs in Asia - The Basis for Effective Trade Facilitation Policies in the Region