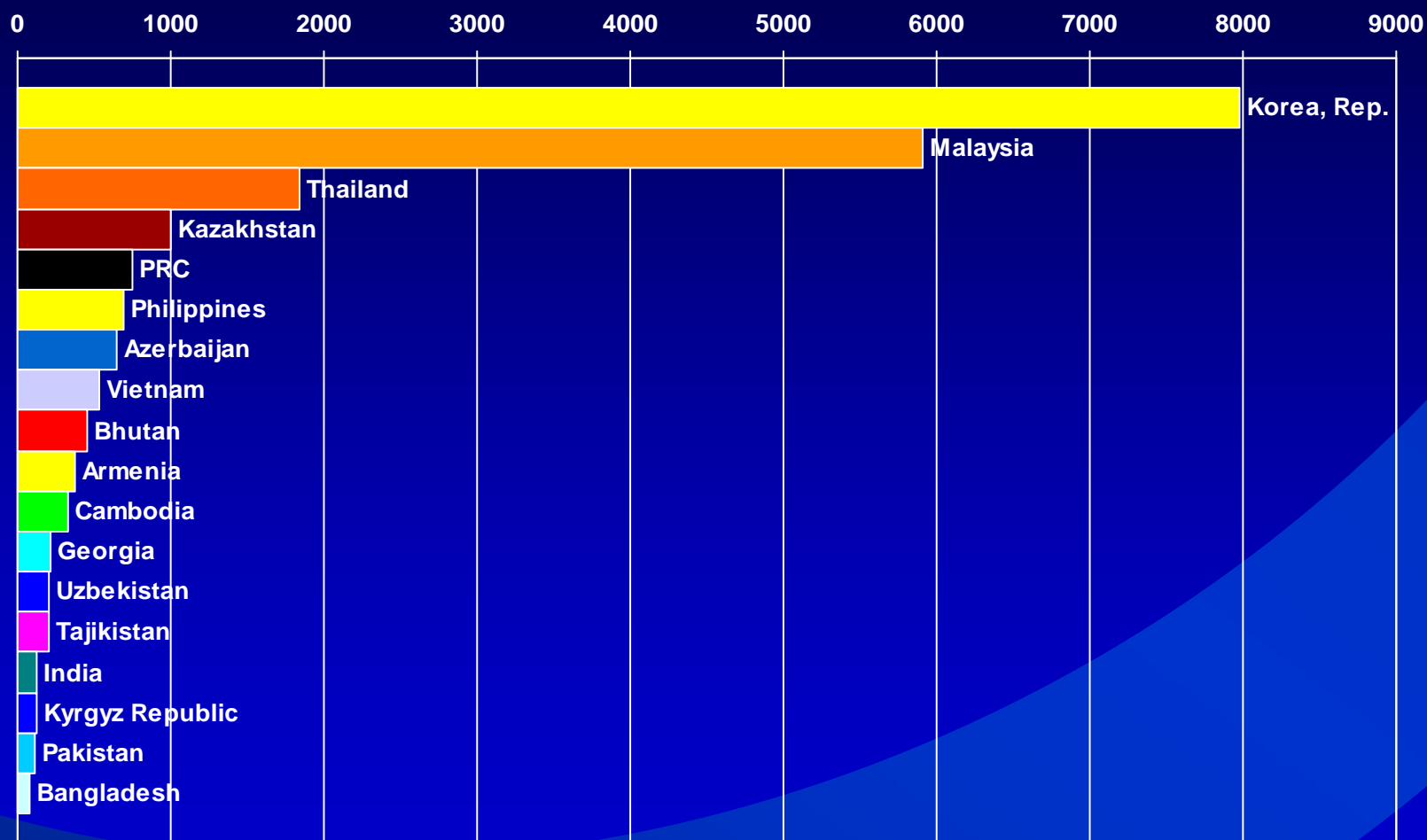


Role of Trade Facilitation in the CAREC Region

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Central Asian countries lag behind in trade

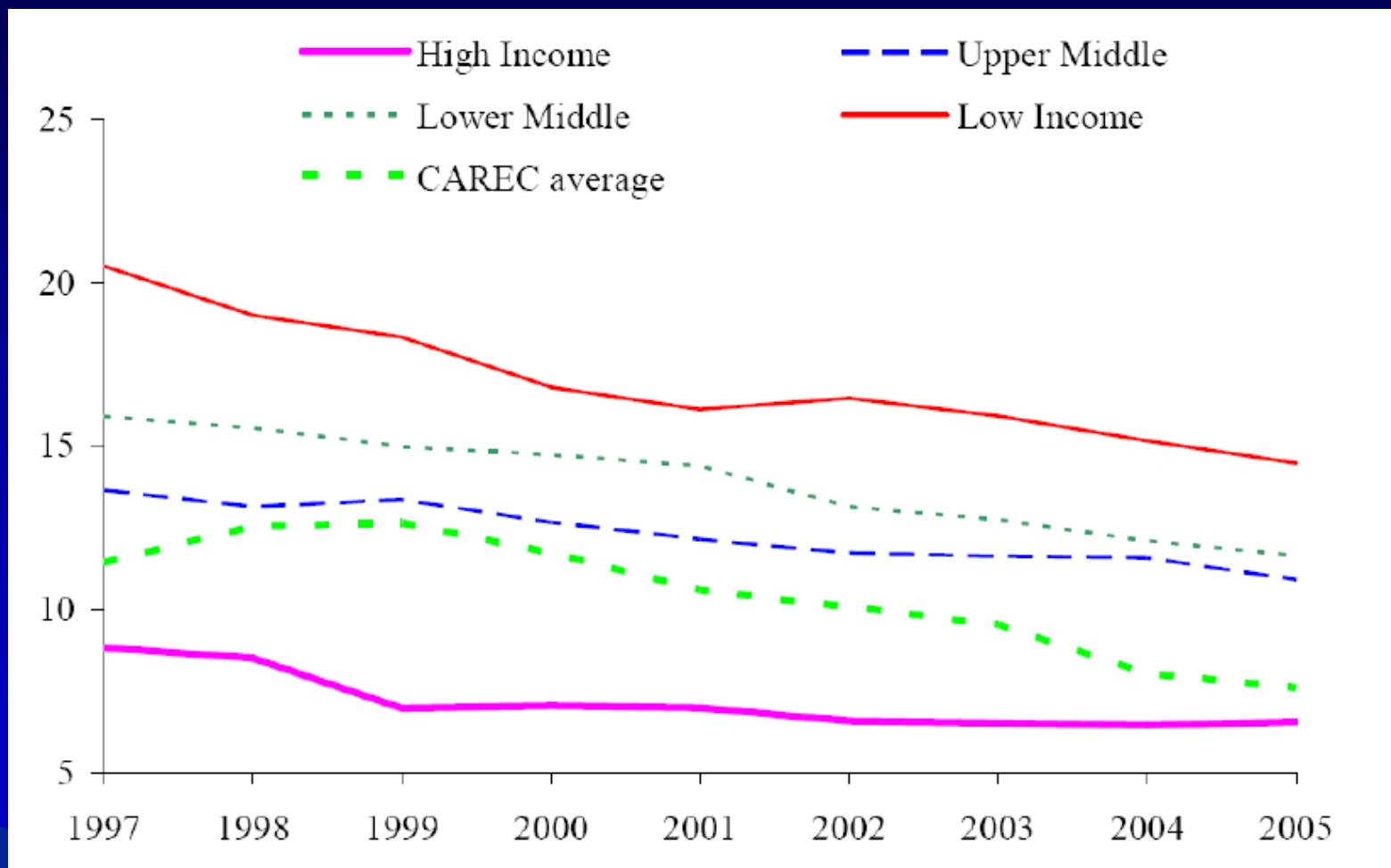


Per Capita Exports, (constant 2000 US\$), 2006

note: data not available for Afghanistan and Mongolia

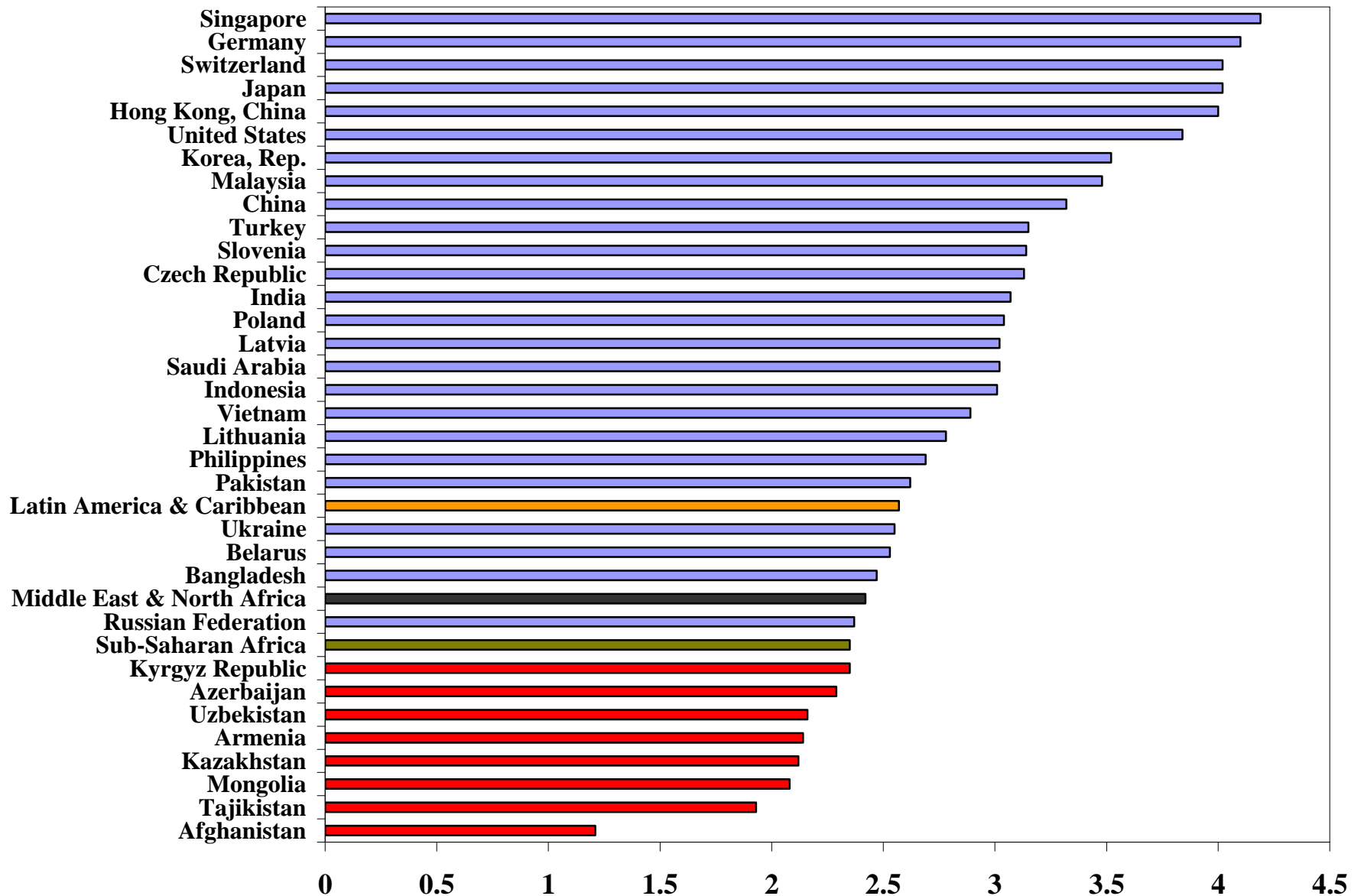
Source of raw data: World Bank, World Development Indicator, accessed : February 3, 2009.

Average import tariff in CAREC countries is low



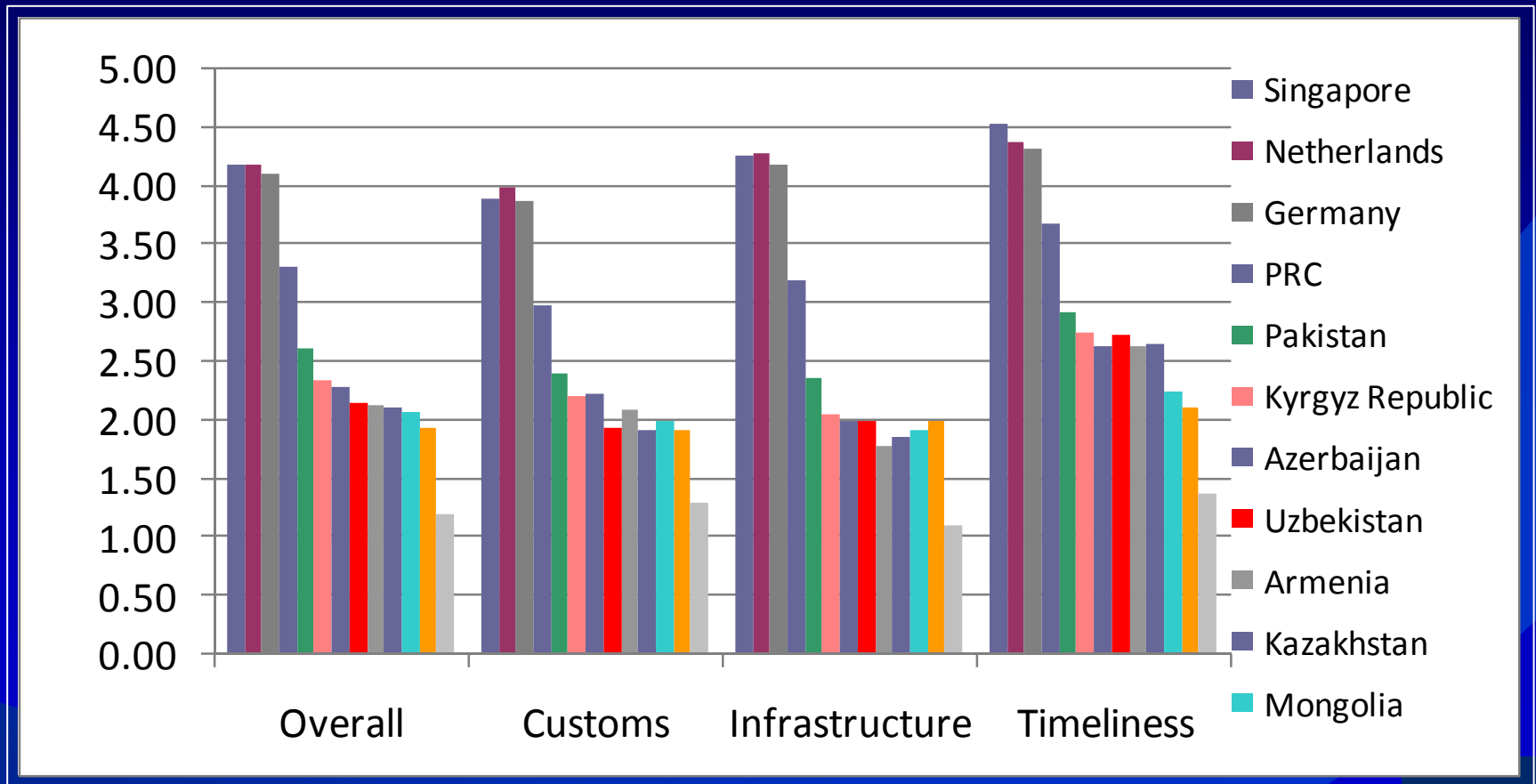
Source: van der Ploeg and Venables (2009)

CAREC countries are ranked lowest in terms of logistics performance

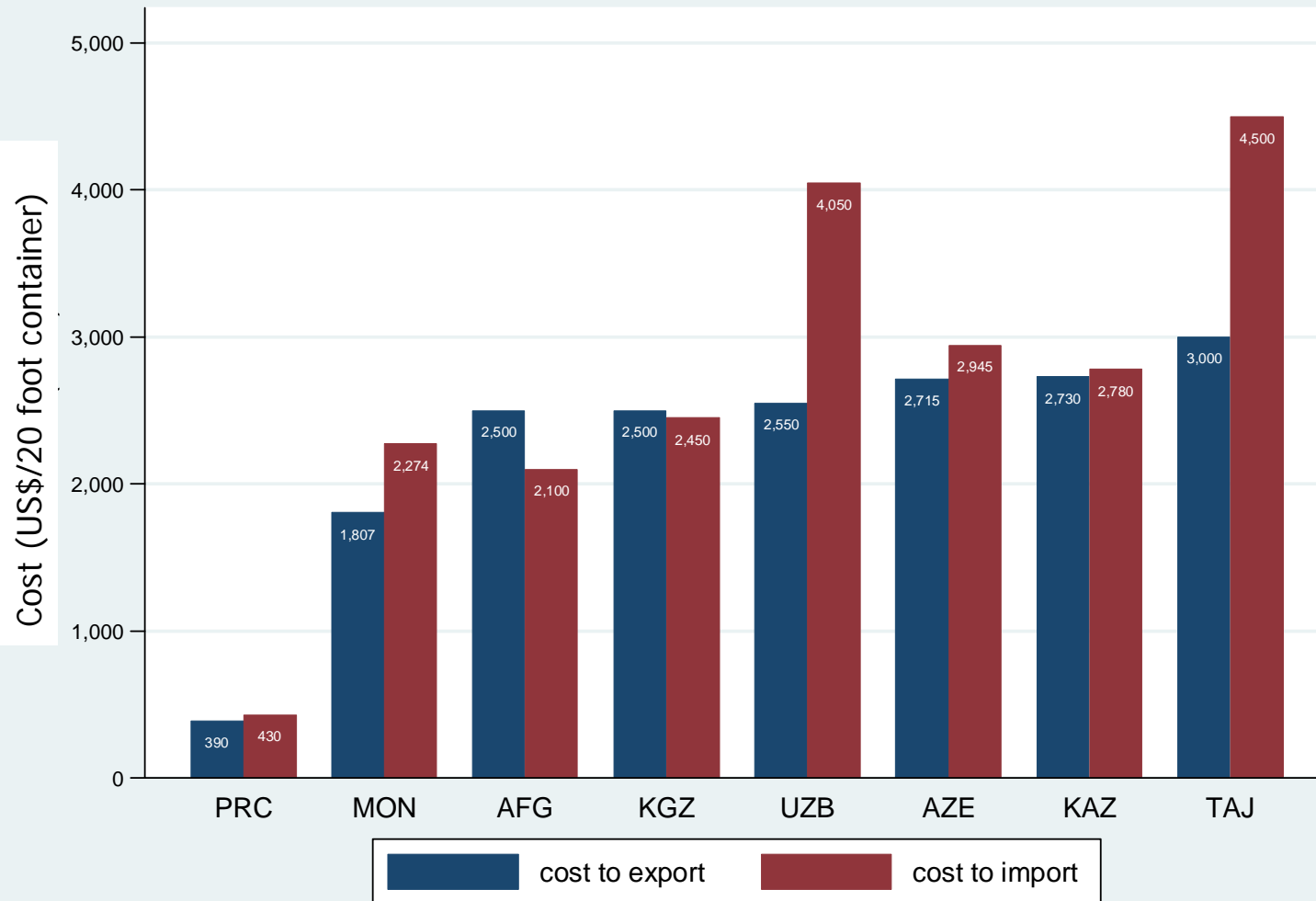


CAREC countries need to improve customs procedures and infrastructure...

Trade Facilitation Index



...as well as lower trade costs



source: Doing Business (WB)

Questions

- Does trade facilitation (TF) boost trade? If so, how much?
- Do landlocked countries trade less?
- What is the impact of distance on trade flows?
- What is the effect of common language and common border on trade?
- Do improvements in different components of trade facilitation increase trade in varying degrees?
- How much is the increase in trade for the CAREC countries from greater trade facilitation?

Framework

Use the standard gravity model

$$\begin{aligned} \ln(T_{ij}) = & \beta_0 + \beta_1 \ln(d_{ij}) + \beta_2 \ln(GDP_i) + \beta_3 \ln(GDP_j) + \\ & \beta_4 \ln(GDPpc_i) + \beta_5 \ln(GDPpc_j) + \beta_6 LPI_i + \beta_7 LPI_j + \\ & \beta_8 Landlocked_i + \beta_9 Landlocked_j + \beta_{10} Border_{ij} + \\ & \beta_{11} Commonlang_{ij} + CAREC_{exp} + CAREC_{imp} \\ & + Interactionterms + \varepsilon_{ij} \end{aligned}$$

- Estimated for the year 2005 (using BACI bilateral data)
- Bilateral trade data for 140 countries
- Estimation using OLS and Tobit

CAREC Countries Trade More Than Expected!

- 1% improvement in TF of an exporting country increases exports by 5.3%
- 1% improvement in TF of an importing country boosts imports by 3%
- Decrease in distance by 1% increases trade by 1.3%
- Landlocked exporters (importers) trade 0.6% (0.4%) less than coastal exporters (importers)
- Countries with a common language and a common border trade 1% more than countries that do not share a common language and a common border
- Components of LPI have a differing impact on trade

Components of TF impact trade differently

	Exporter	Importer
Customs	0.18	0.63**
Infrastructure	3.04***	1.57***
Ability to track	1.21***	0.77***
Timeliness	0.79***	-0.3

***, **, * indicates statistical significance at 1%, 5% and 10%. Other components of LPI are ease of arranging international shipments, domestic logistic costs, and competence of the local logistics industry

Simulation Design: Calculating gains from improving logistics

Procedure follows Wilson, Mann, Otsuki (2003)

- OLS estimates from the most general specification for manufacturing trade are used
- Question: What is the percentage increase in exports and imports from improving TF in the CAREC countries to *halfway* of the average of all the countries in the estimation sample?
- Estimate the increase in trade flows from a country's own improvement in TF as well as that of the trading partner
- Most of the gains are from own improvements in TF
- Proportionate gains in intra-regional trade flows are greater

Policy Implications

- Improvements in TF leads to significant gains in trade
- Some measures such as customs efficiency and ability to track are relatively easier and less costly to implement
- Infrastructure improvements lead to biggest gains in trade. CAREC countries are landlocked and developing regional infrastructure will provide transport corridors for trade within the region and outside the region

Things to Do

- Include measure of tariffs
- Measure gains in trade from improvements in different components of LPI
- Measure impact on commodities by level of sophistication (i.e. high PRODY versus low PRODY) and time-sensitivity.
- Explore alternative measures of trade facilitation
- Address endogeneity issues by using instrumental variables to explain trade facilitation

Thank you

Components of LPI

- Efficiency of customs and other border agencies
- Quality of transport and IT infrastructure
- Ease and affordability of international shipments
- Competence of local logistics industry
- Ability to track and trace
- Domestic logistic costs
- Timeliness of shipments in reaching destination