

Logistics and Multimodality: Pending Agenda

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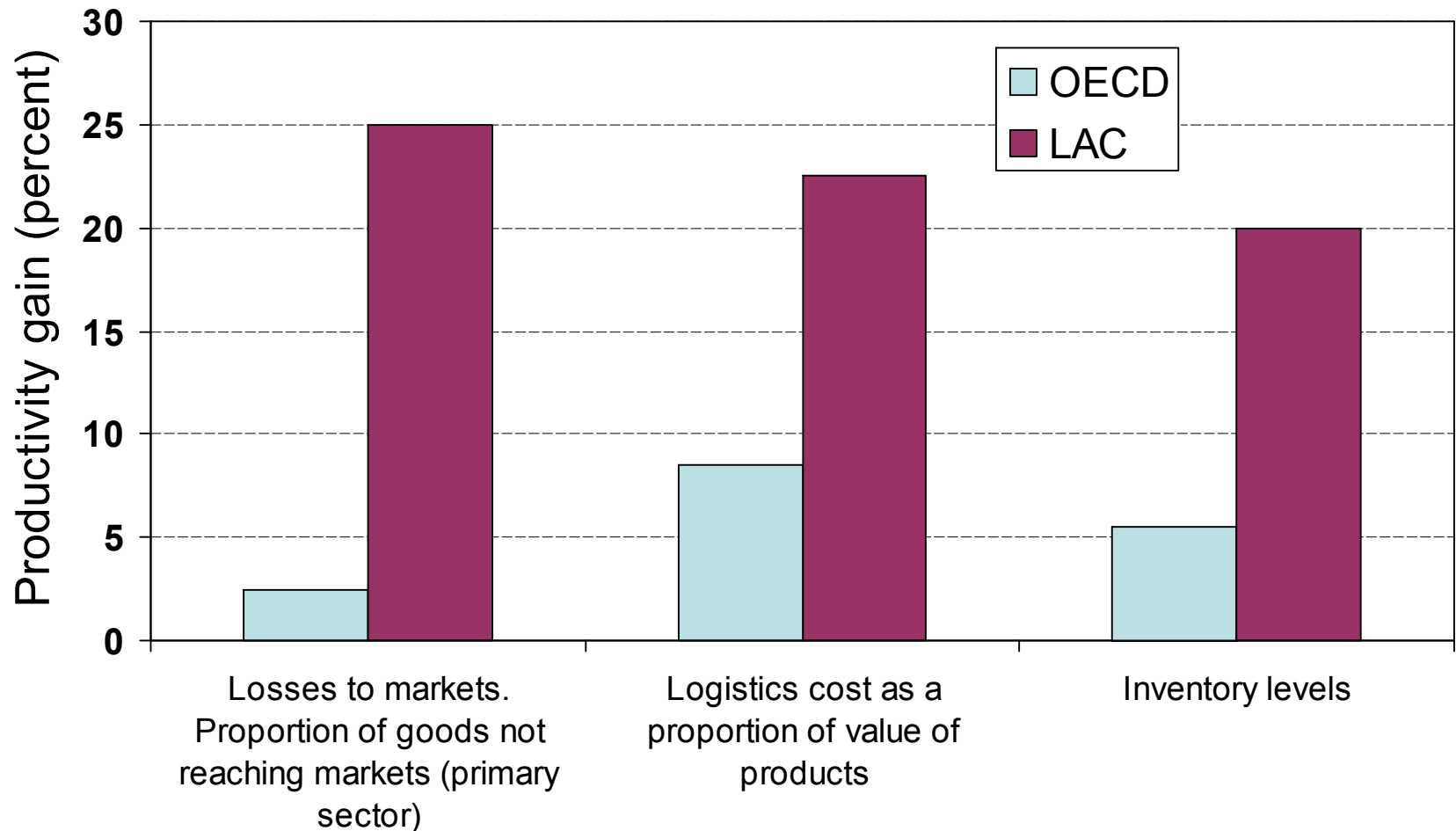
World Bank

Transport Forum, March 2009

A Story Line

- I am and SME I just closed a deal to sell my product to a client
- What do I do:
 - Packaging?
 - Bill of landing?
 - Cold chain?
 - Trucking service?
 - Insurance?
 - Custom agent?
- Multimodal operator?

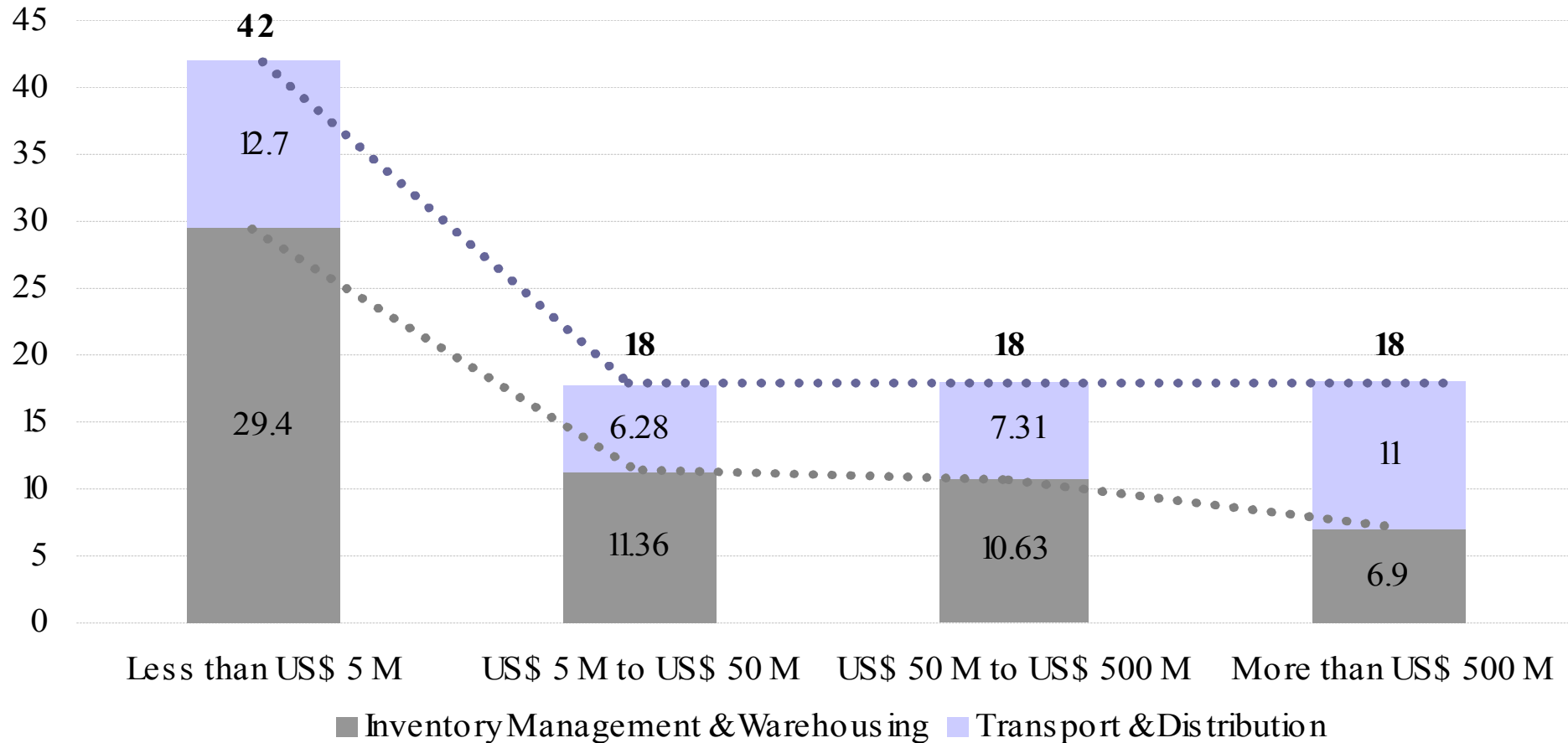
Deteriorating and Insufficient Infrastructure Contributes to Uncompetitive Industries, 2004



Issues

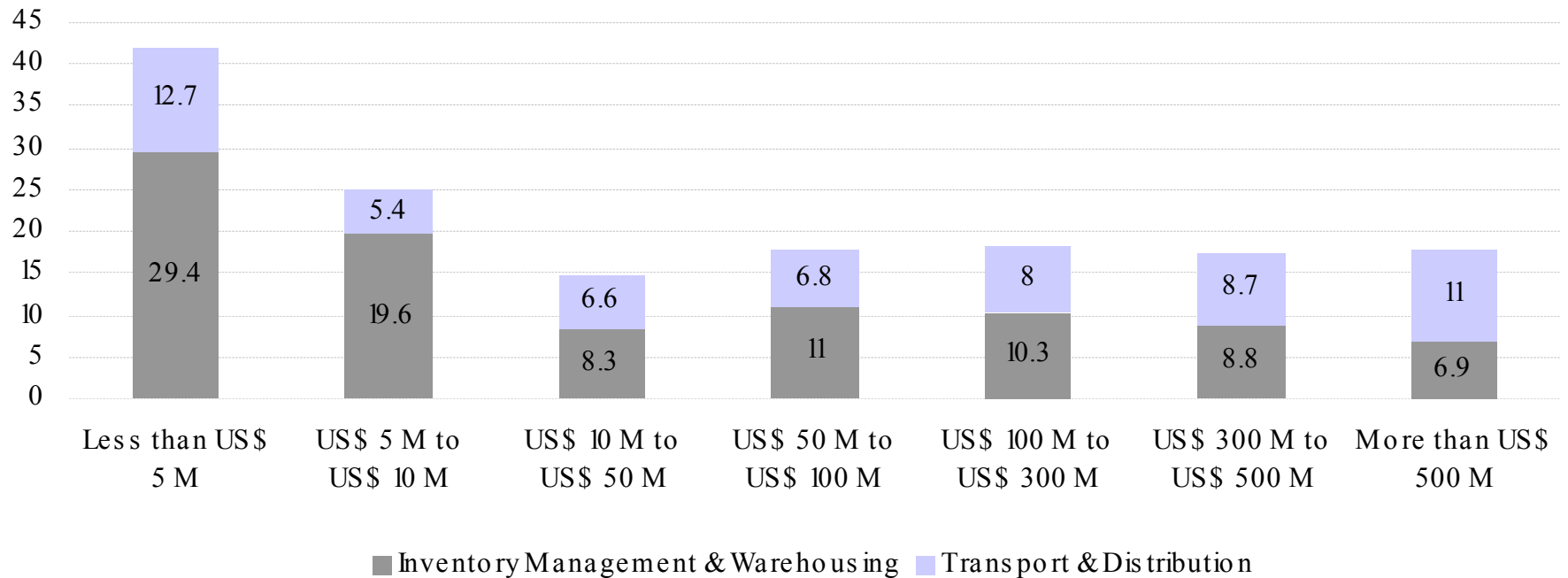
- Port Efficiency/Connectivity
- Cold Chain supply services: warehouses, trucks, containers
- Packaging
- Multimodality
- Transport integrated planning/vision
- Scale-consolidation
- Time to market

Latin America: Average Logistics Costs by Component as % of Sales as Affected by the Total Volume of a Company's Sales

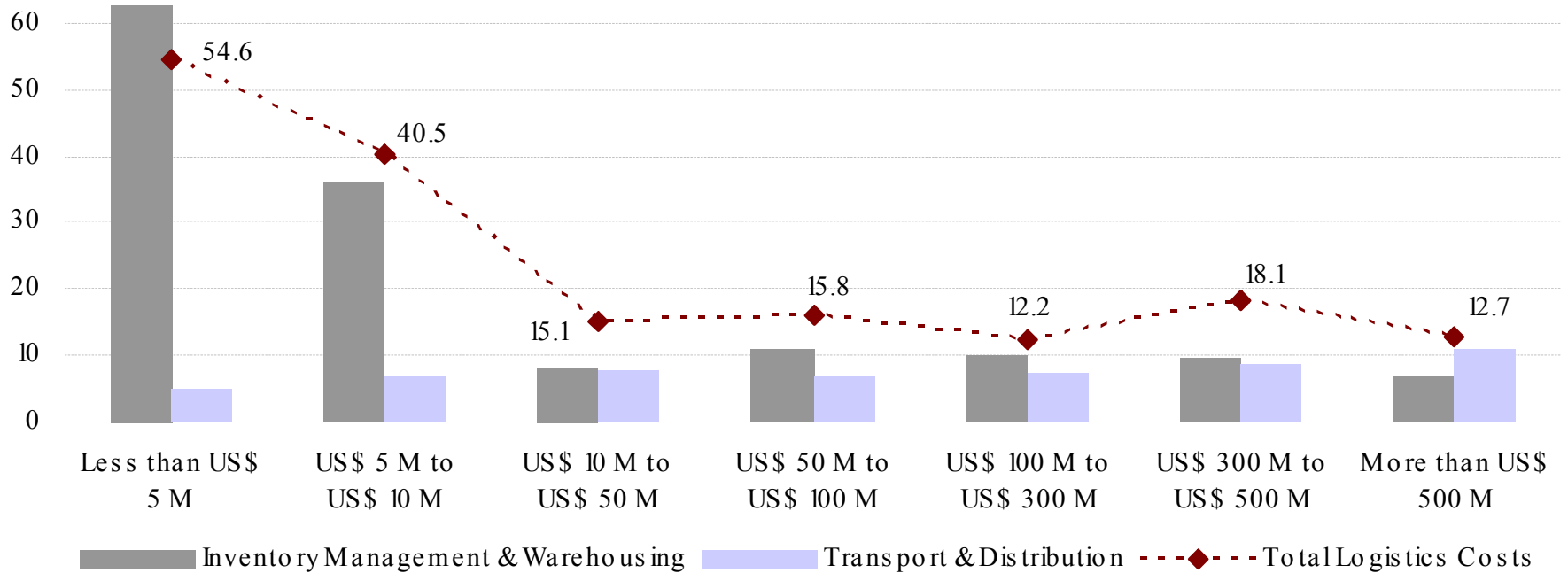


Source: Centro Logístico de Latinoamérica, Bogotá, Colombia. Benchmarking 2007: Estado de la Logística en América Latina Anexo, María Rey Logistic Summit 2008

Latin America: Average Logistics Costs by Component as % of Sales, depending on the Total Volume of a Company's Sales



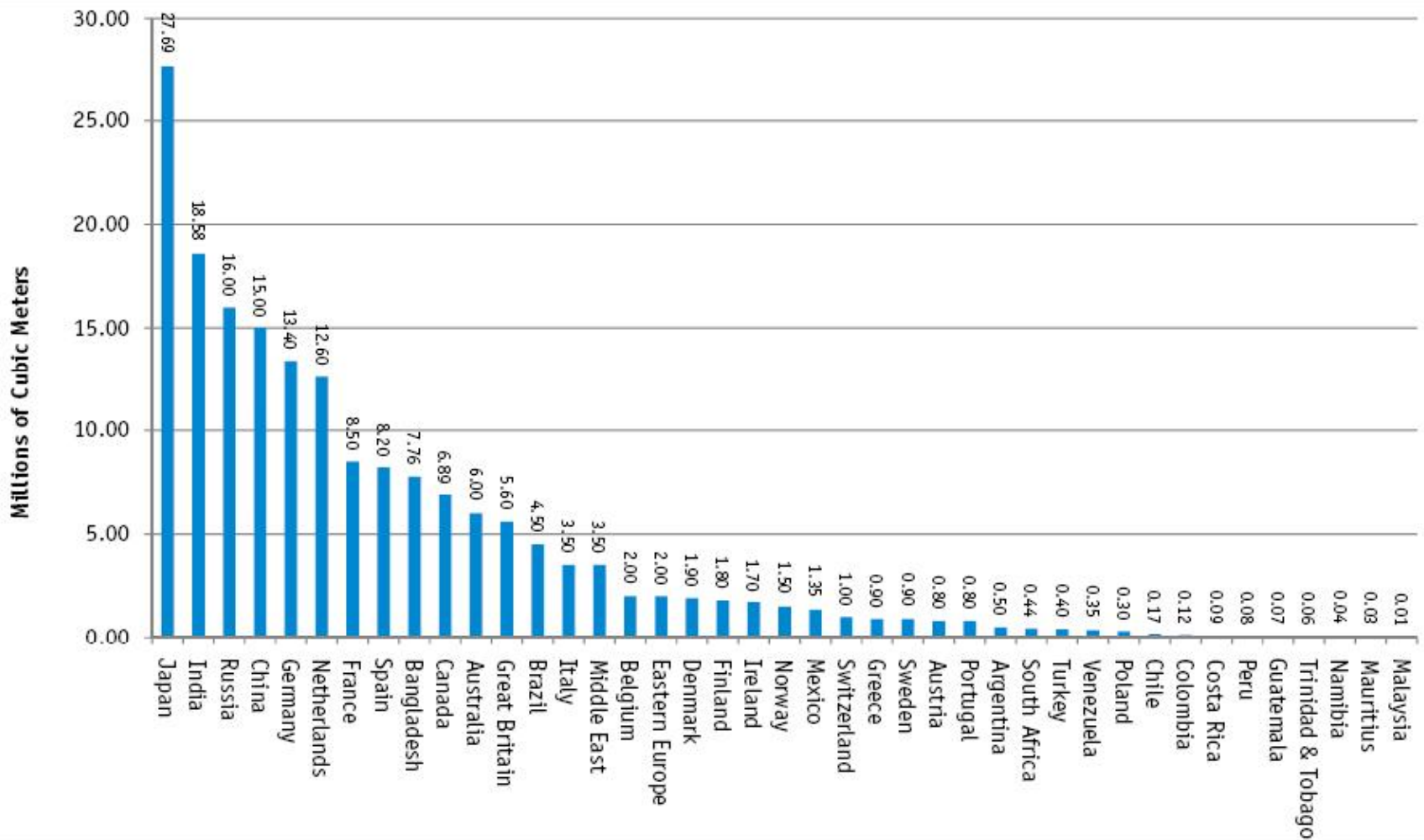
South America: Average Logistics Costs by Component as % of Sales, depending on the Total Volume of a Company's Sales



Note: "Total Logistics Costs" as a share of Sales does not always equal the sum of the two separate cost component shares, because not all firms in the sample reported on all logistics cost components.

Source: Benchmarking 2007: Estado de la Logística en America Latina Anexo a la Presentación de Maria Rey LogisticSummit 2008

Global PRW Capacity in 2008



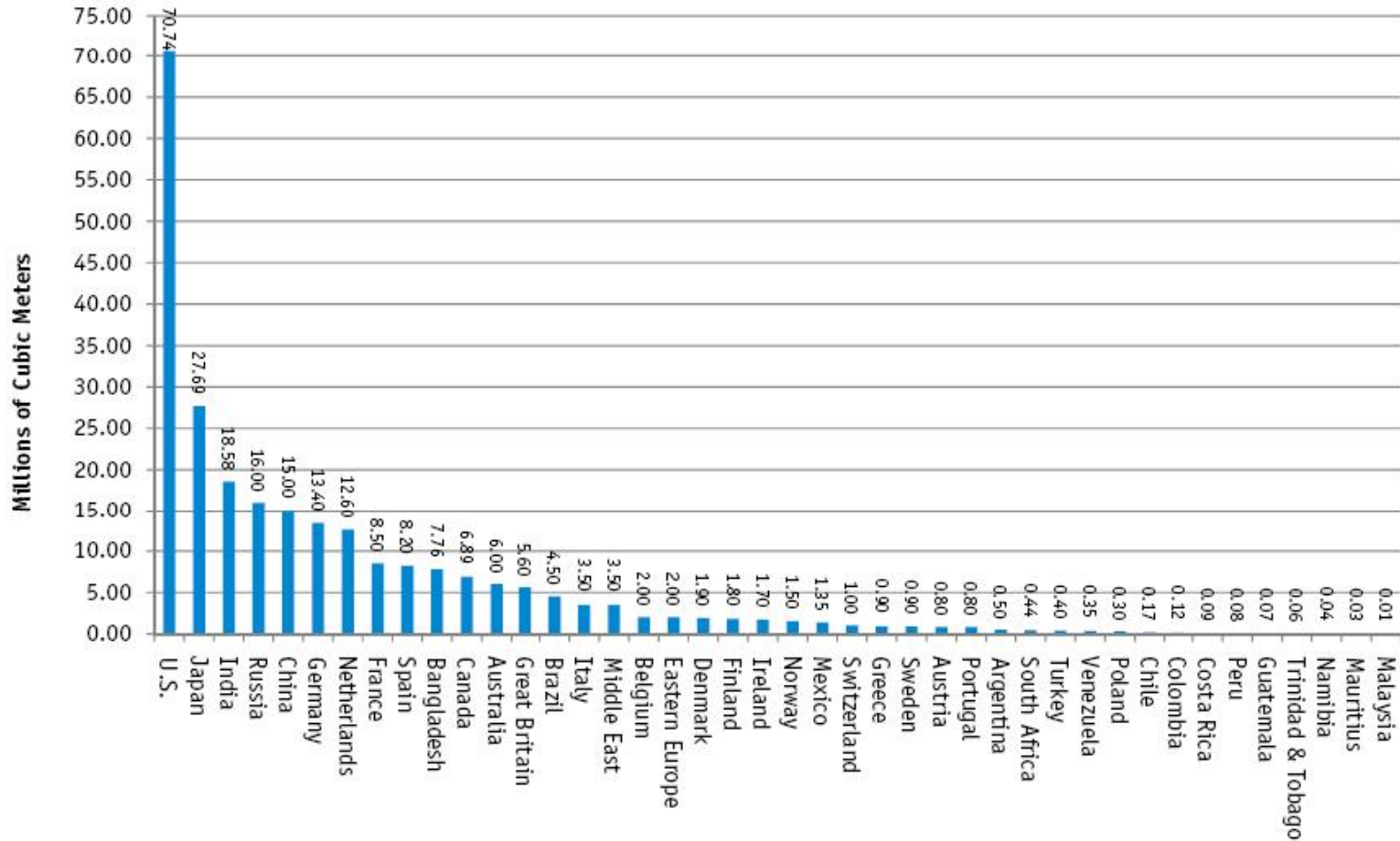
Source: IARW

Global PRW Capacity by Region, 1998-2008

Region	Country	1998		2,008.00	
		Mn cub metres	MN cub feet	Mn cub metres	Mn cub feet
Americas	U.S.	57.88	2,044.00	70.74	2,498.20
	Trinidad y Tobago			0.06	2.00
Latin America	Brazil	2.1	74.16	4.50	158.92
	Mexico			1.35	47.67
	Argentina			0.50	17.66
	Venezuela			0.35	12.36
	Chile			0.35	12.36
	Colombia			0.35	12.36
	Costa Rica	0.04	1.41	0.09	3.18
	Peru			0.08	2.83
	Guatemala			0.07	2.50
Eastern Europe	Russia			16.00	565.03
Asia	China	12.5	441.43	15.00	529.72
	Malaysia			0.01	0.46
India	India	7.28	257.09	18.58	656.15
Africa	South Africa			0.44	15.54

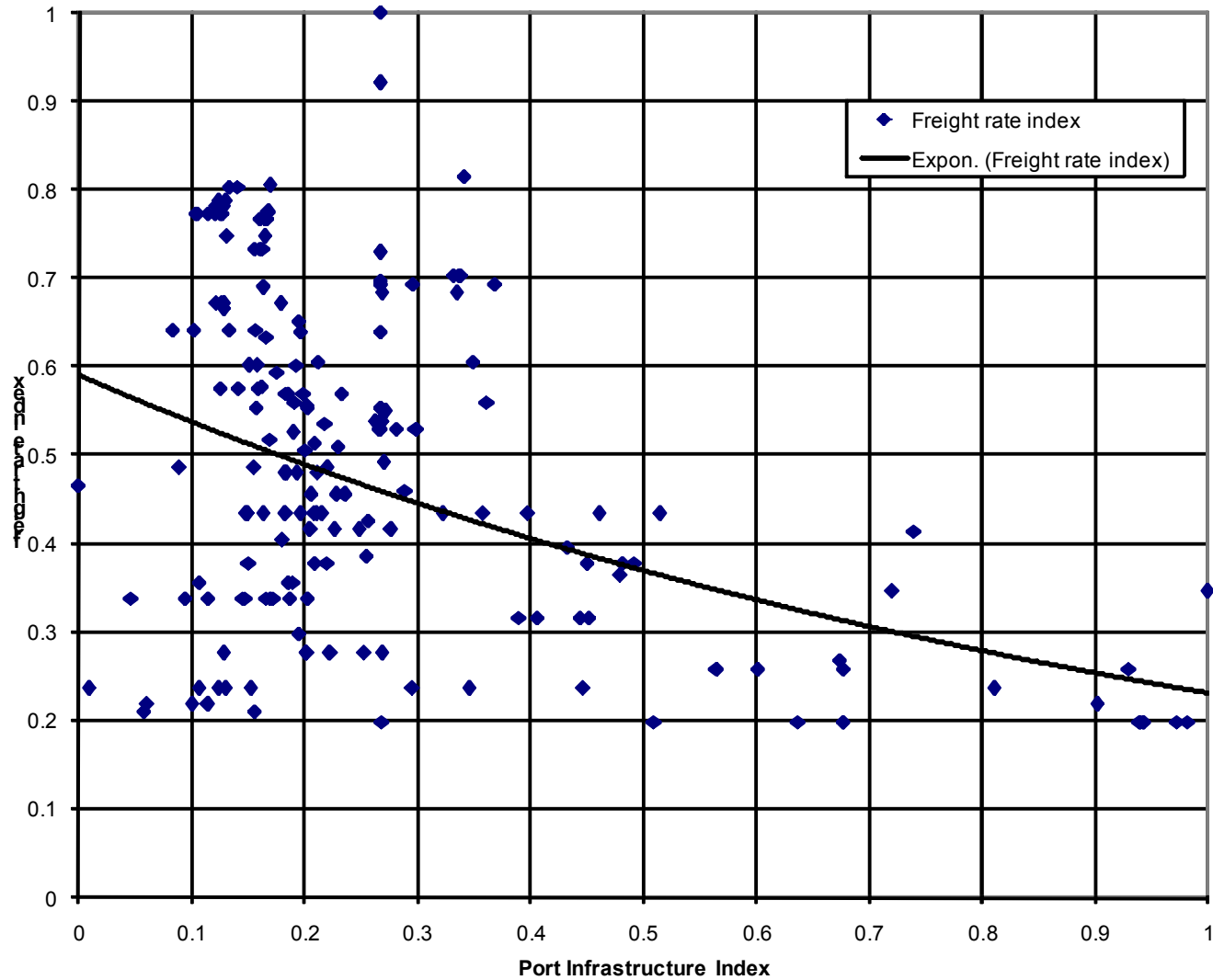
Source: IARW

Global Capacity Compared to U.S. Capacity, 1998-2008



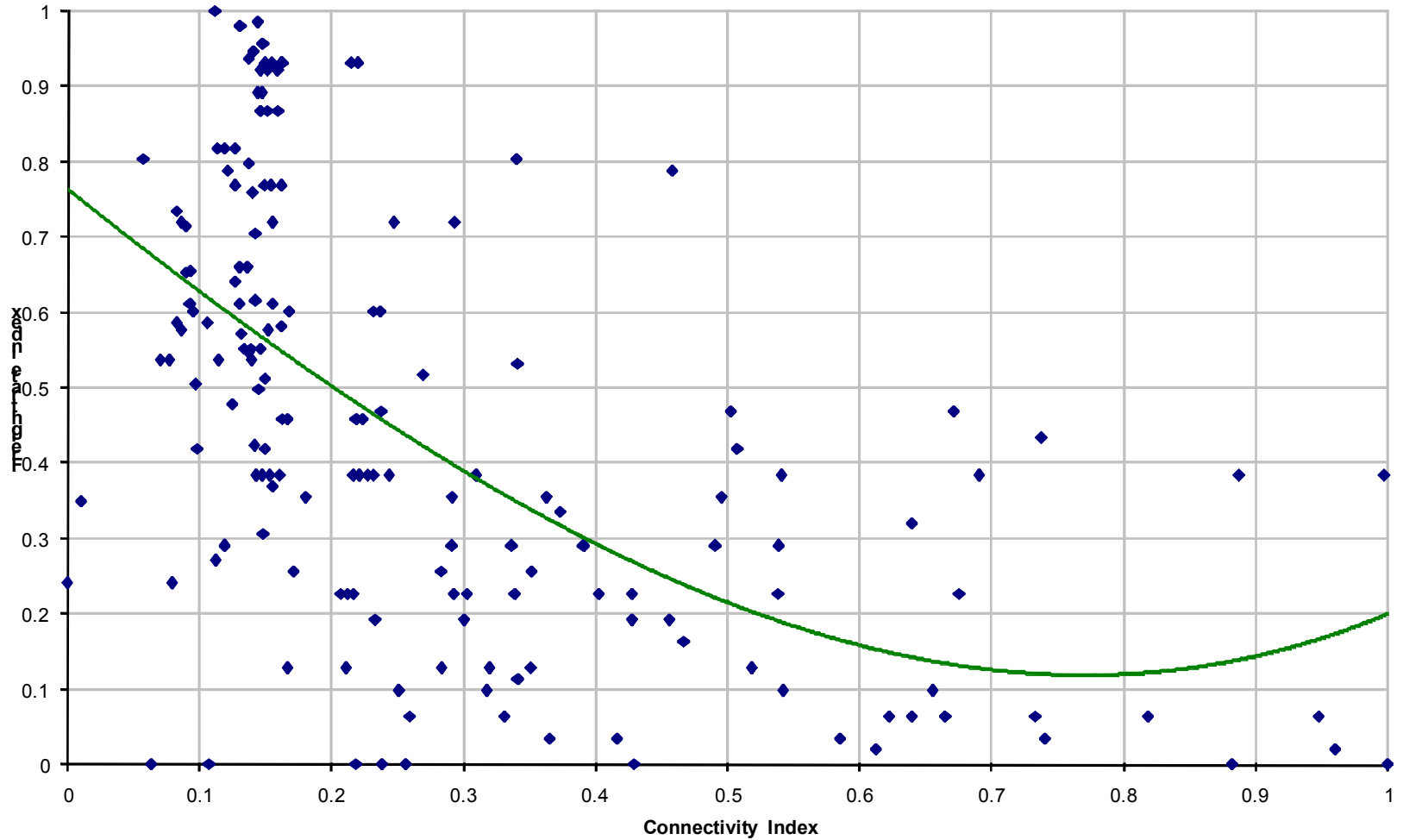
Source: IARW

Relationship between Port Infrastructure Endowment and Freight Rates in the Caribbean



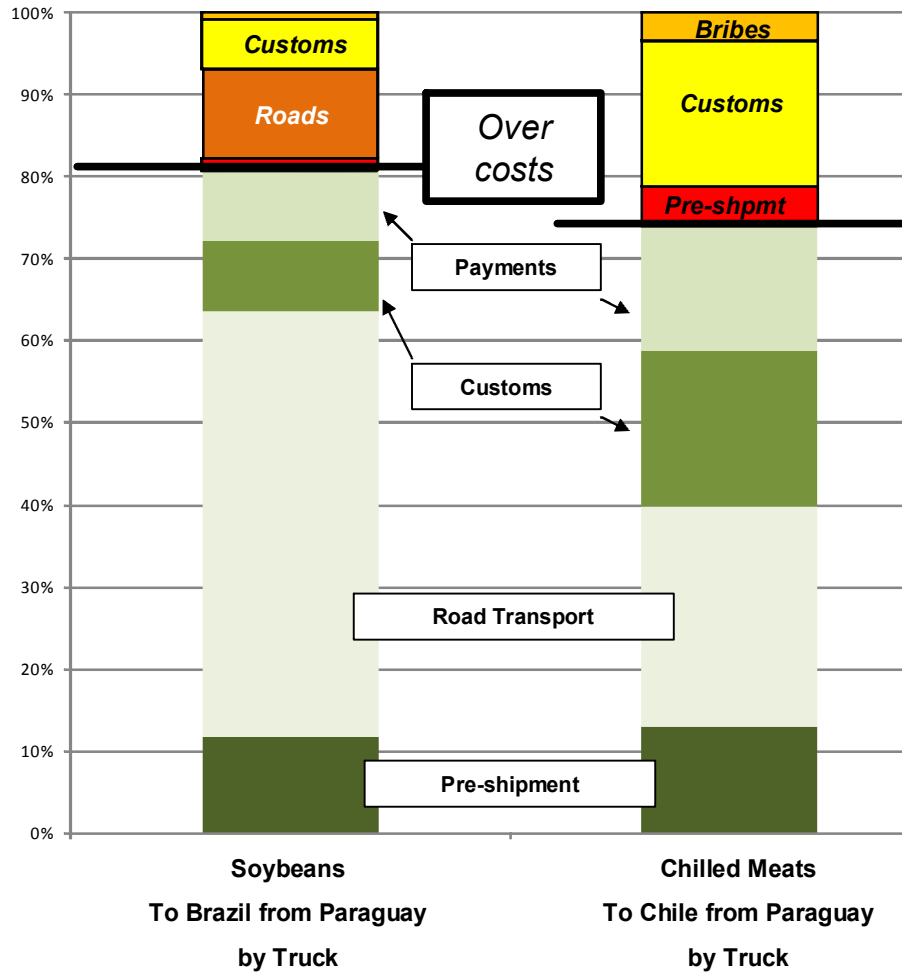
Source: Wilmsmeier (2008)

Relation between Freight Rates and Connectivity, Container Shipping Caribbean Basin, 2006



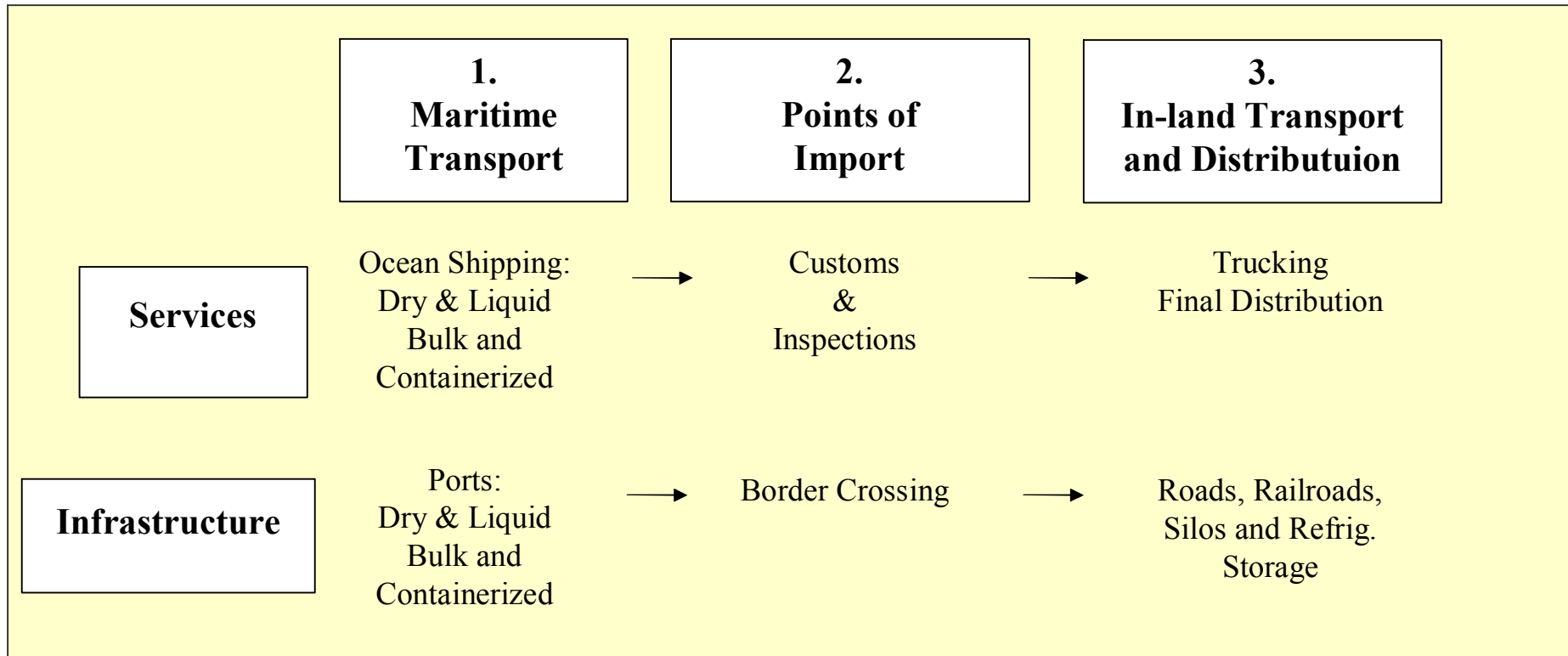
Source: Wilmsmeier (2008)

Logistics Costs of Intra-Regional Food Imports and Additional or “Over Costs” due to Inefficiencies, Losses, Time Delays and Bribery

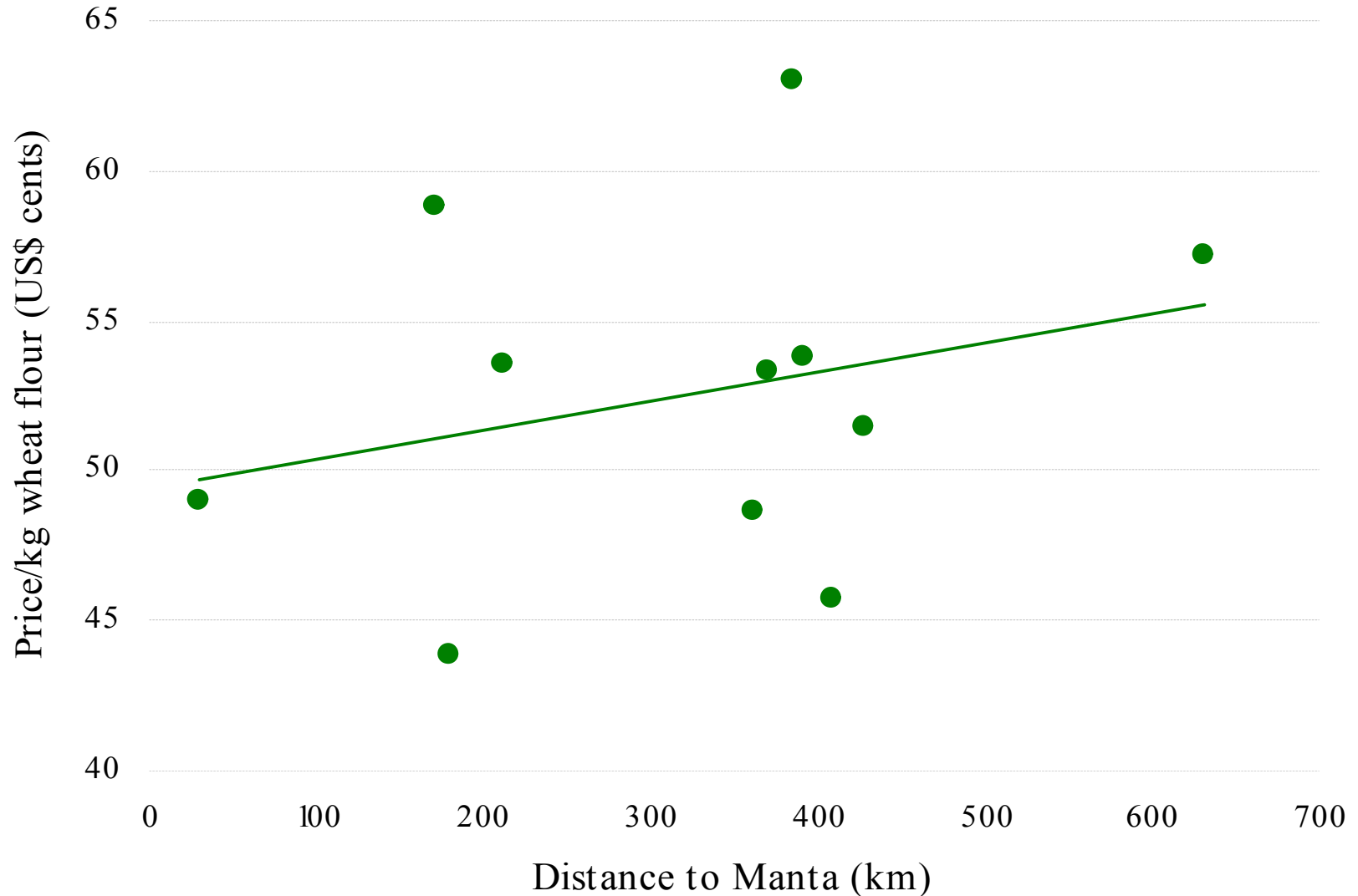


Source: CARANA 2006, Authors' calculations

Logistics Chain for Food Shipments

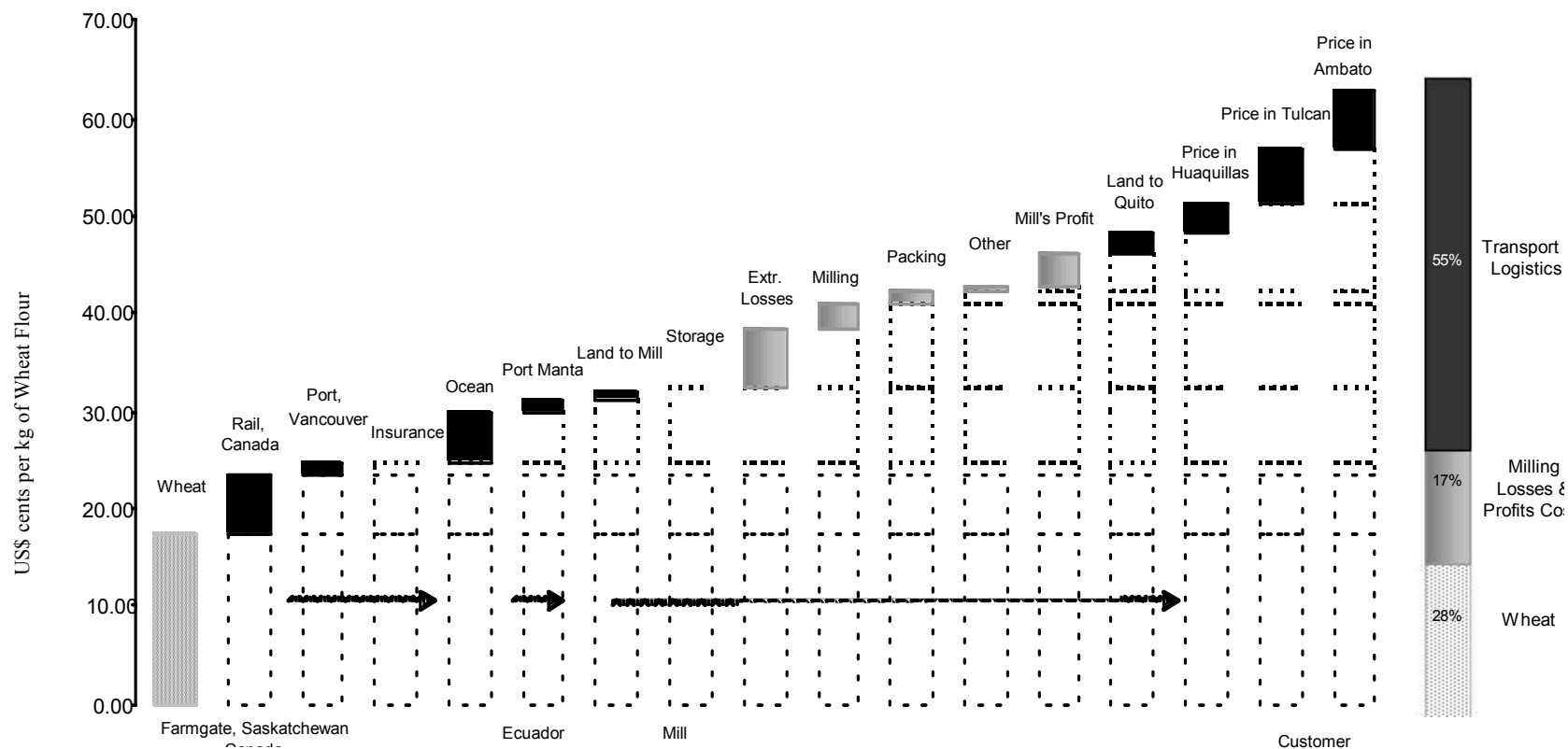


Relationship between a City's Distance from Port Manta and the Delivered Cost of Wheat Flour



- Sources: Authors' calculations, Ecuador National Institute of Statistics and Census, interviews with Ecuadorian millers, Ecuadorian Ministry of Agriculture's Commodity Prices Statistics Unit.

Supply Chain Analysis and Cost Contributions to the Average Price of Wheat Flour Sold in Quito and other Ecuadorean Cities

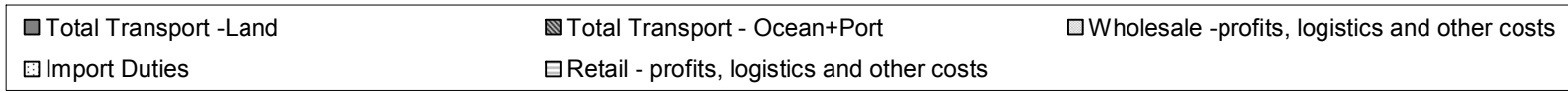
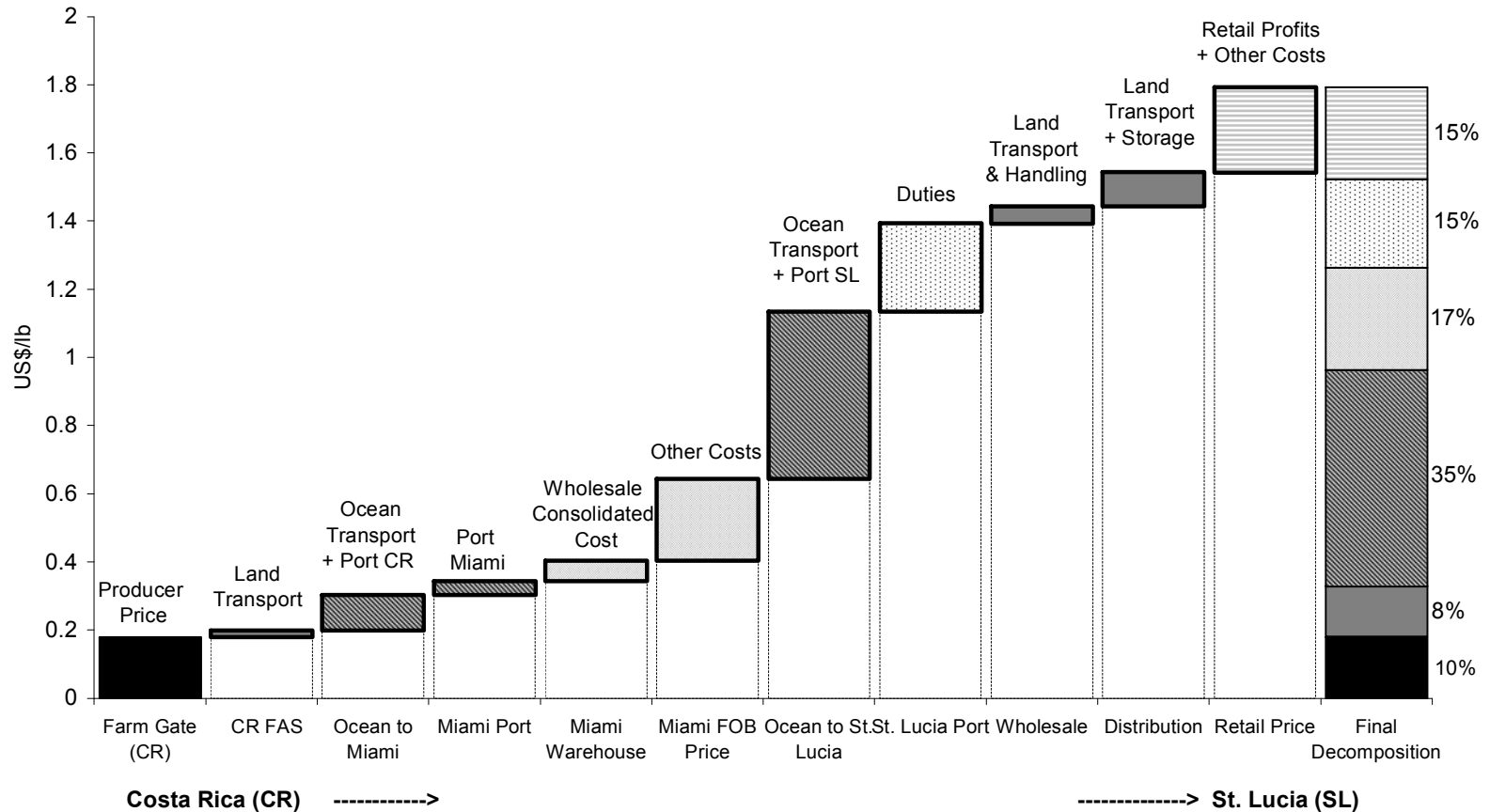


Source: Authors calculations, data from Manifiestos, Ec. millers, interviews, Winnipeg Bd. of Wheat

Note: Wheat cost includes local elevator costs. Vancouver port costs are estimates.

Supply Chain Analysis of Pineapples Imported into St. Lucia

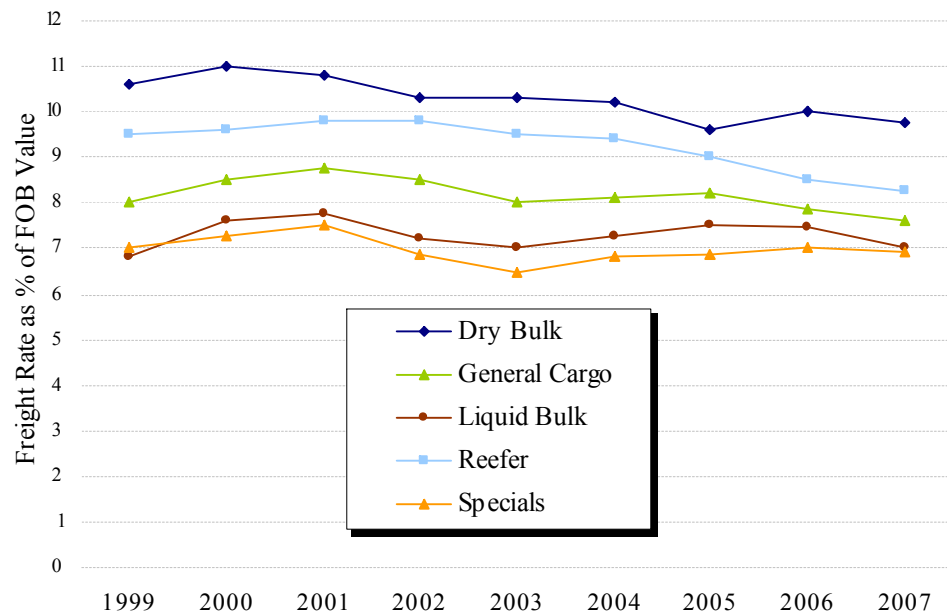
Price Decomposition



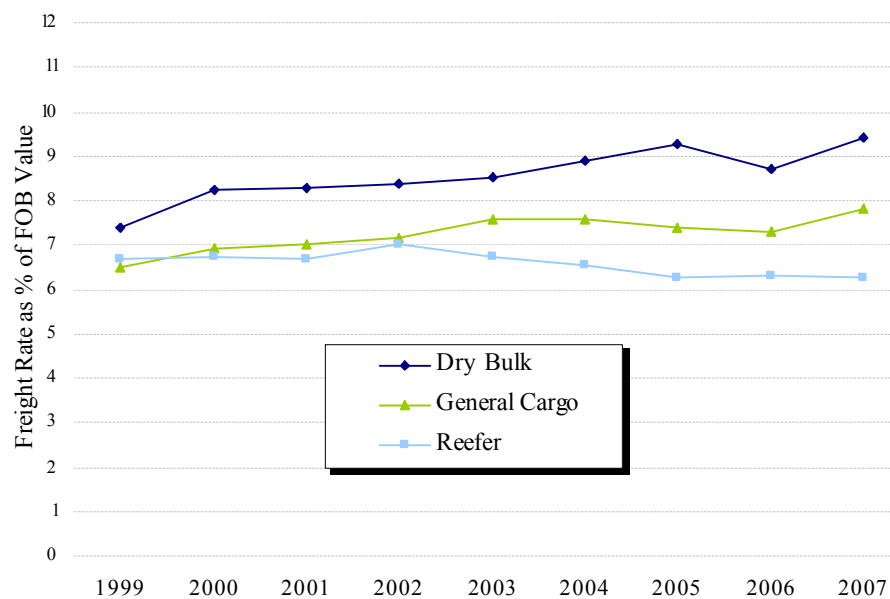
Source: Authors, freight forwarder and shipper interviews; and OECS Backward Linkages Study (2008)

Transport Costs as Share of FOB Prices of Imported Foods By Cargo Type, 1999 – 2007

2.1.a Maritime



2.1.b Road Haulage



Multimodality

- Proven hard to crack
- So far at most two countries in LAC have passed Multimodality laws
- Impact significant

Port Reforms in LAC: LAC Governments have undertaken port efficiency gains through institutional reform in most countries over the last 18 years. These reforms have ranged from the implementation of Electronic Data Interchange systems all the way to the full concessioning of port authorities.

- Following the implementation of electronic processing of information at the Port of Callao in Peru in May 2008, cargo clearance time was reduced by about 70 percent. While previously it was necessary to allow about 52 minutes to process paperwork before and after importing, current times are between 15 and 16 minutes.

- Concessions: In the case of Cartagena, Colombia average ship waiting times dropped from 10 days to no days, and ship turnaround time fell from 72 to 24 hours after the “contraprestaciones” for the general cargo ports were signed with private management and investors in 1993 and 1994. The latter improvement is a result of increased berth productivity reached by an increase of container movements per ship hour from 7 to 52. The average time for cargo to sit at the port dropped to 2 days from 30+ days before private operations. These improvements were accompanied by a reduction of the Terminal Handling Charge (THC) from \$US984 to US\$222. Kent, et al (2004).