



Logistics Overview: Indonesian Context

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Typical Logistics Costs

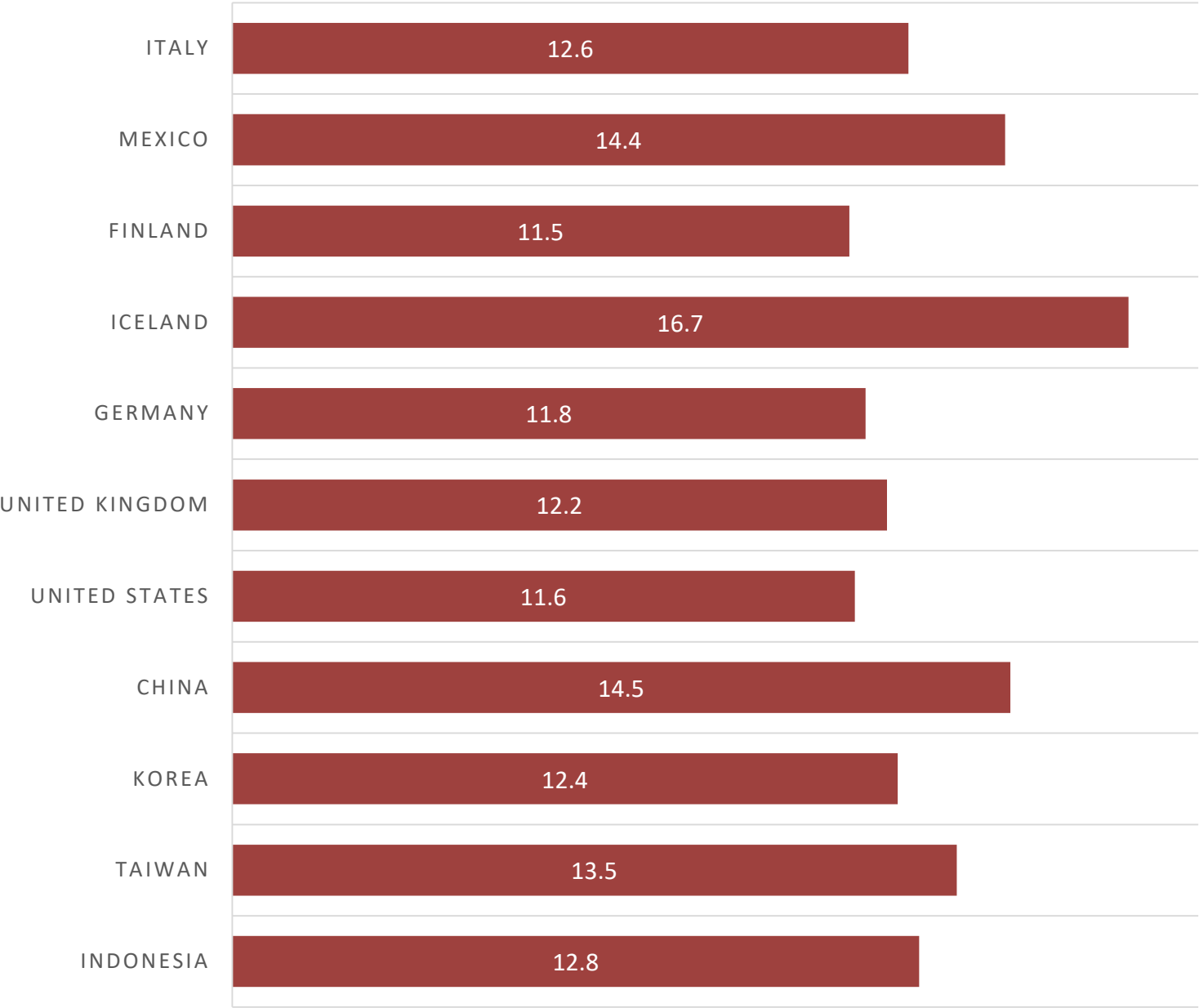
Measuring Logistics costs

- A complex issue
- May use different approach: I/O, Direct Costs, Survey, etc.

- Developed Countries: Typical range 8% to 10% of GDP.
- Emerging Economies: Typical range from 12% to 15% or more.

Above 17% can be considered extremely high.
If there is a real change, +/- 2% change is significant.

LOGISTICS AS % OF GDP

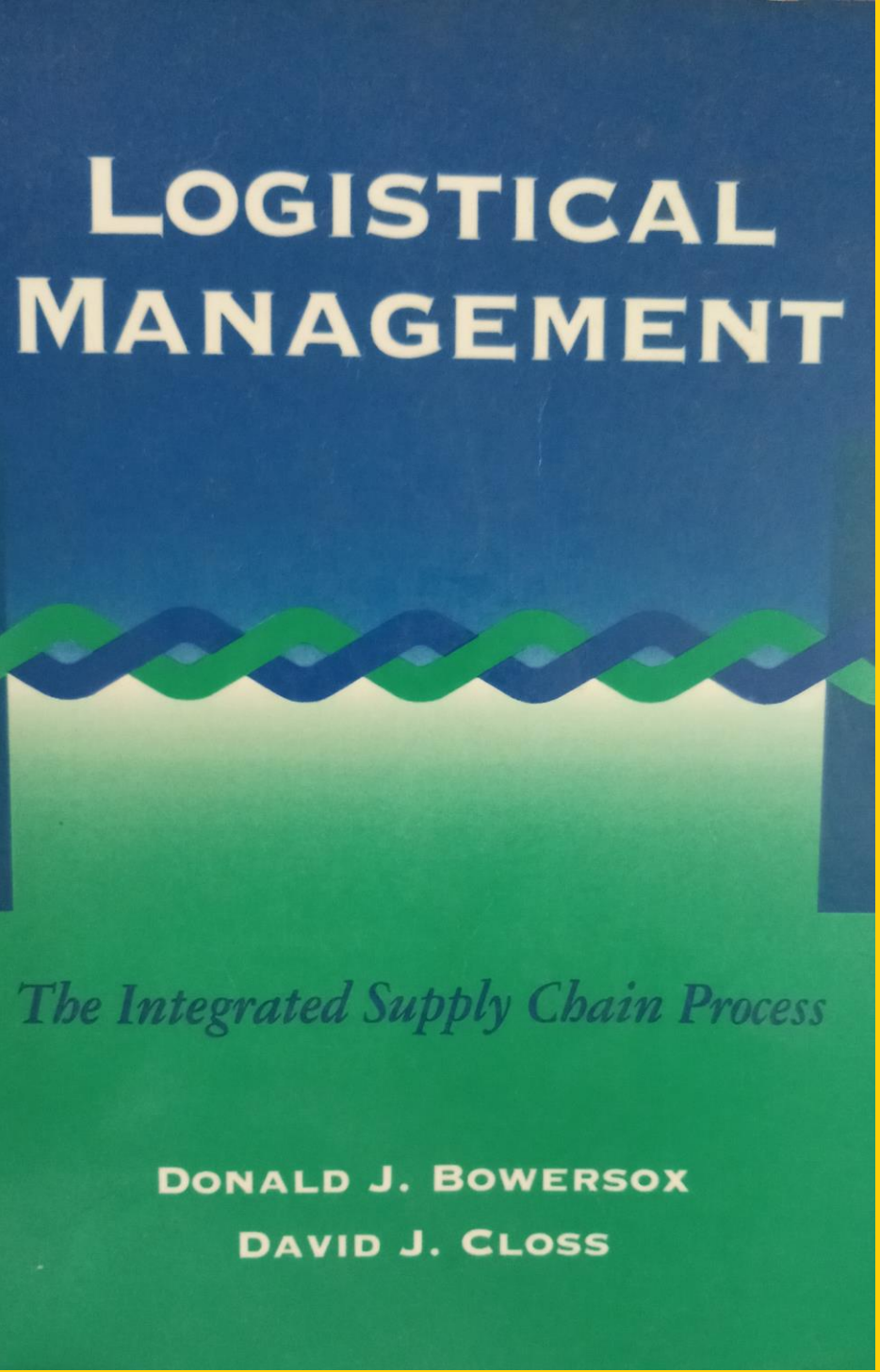


Biaya Logistik di Indonesia 12.8% dari GDP menurut buku ini (data 1992)

Country	Gross domestic product (billion \$)	Estimated total logistics bill (billion \$)	Logistics as % of GDP
Asian region	483	54	11.2
Australia	345	50	14.5
China*	63	10	15.9
Hong Kong*	94	12	12.8
Indonesia*	3,363	340	10.1
Japan	283	35	12.4
Korea	45	6	13.3
Philippines	40	8	20.0
Singapore	148	20	13.5
Taiwan*			11.0
Asian total	4,864	535	
European region			
Austria	164	20	12.2
Belgium	193	25	13.0
Denmark	125	16	12.8
Finland	130	15	11.5
France	1,200	140	11.7
Germany	1,566	185	11.8
Greece	57	8	14.0
Iceland	6	1	16.7
Ireland	42	6	14.3
Italy	1,151	145	12.6
Netherlands	286	35	12.2
Norway	106	14	13.2
Portugal	59	8	13.6
Spain	527	64	12.1
Sweden	237	30	12.7
Switzerland	228	30	13.2
United Kingdom	1,015	124	12.2
European total	7,092	866	12.2
North American region			
Canada	593	70	11.8
Mexico	208	30	14.4
United States	5,673	658	11.6
North American total	6,474	758	11.7
Industrial total	18,430	2,159	11.7

*1990 data used for countries not having 1991 data.
Source: Adapted from International Financial Statistics, Washington, D.C., International Monetary Fund.

These unique challenges complicate development of an efficient and effective global logistics system. However, in today's economy, globalization cannot be avoided. As such, logistics must resolve these concerns and complications. Fortunately, there are forces that both motivate and facilitate globalization and necessitate borderless logistics operations.



Changes in logistics costs

Decrease

- Contribution of services increases
- Improvements in infrastructure
- Volume of goods increases
- Better information visibility

Increase

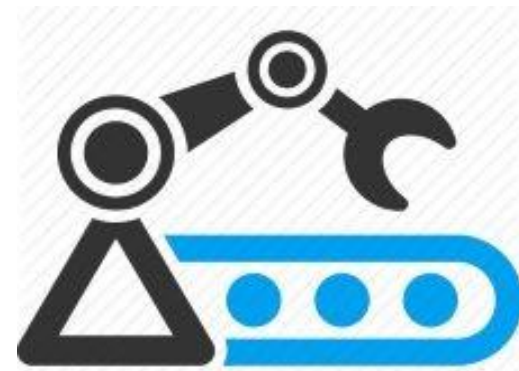
- More heavy traffic
- Higher uncertainty and lead time (higher holding cost)
- Increase in last-mile delivery
- Directional imbalance



Improvements ahead


- Measuring cost at aggregate level does not provide much information about where improvements need to be done and how it will be done.
- Logistics performance should be measured based on costs and other criteria

Logistics Systems (by Nyoman Pujawan)



PRODUCTION

Production of
Goods

 Volume
Geographic spread
Type of goods

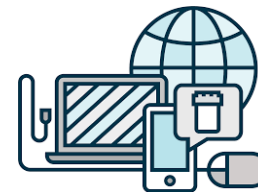
Demand



People



 **Technology**



**Logistics
Industry**



 **Regulation**



 **Infrastructure**



Processes

Transport
Warehousing
Packaging
Material Handling
Custom Clearance
Reverse logistics



 **Performance /
Control Tower**

Logistics costs
Reliability
Speed
Agility & Resilience



Agenda Ahead

- Better infrastructure
- Better intermodal connection
- Long-term economic development to reduce directional imbalances
- Better information visibility (demand supply matching, resource sharing, reduce uncertainty)