

The importance of measuring manufacturing logistics performance

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Outline

- 1. Why care about logistics?
- 2. Why is it important to measure logistics performance?
- 3. What is the WB's Logistics Performance Index?
- 4. The LPI's role in policy dialogue
- 5. ASEAN LPI Results
- 6. Initial results for Cambodia
- 7. Next steps for Cambodia...

1. Why care about logistics?

- Logistics is recognized as a key opportunity to improve profitability and firms' competitive performance.
- It is important for firms to be able to assess their logistics performance as a starting reference.
- Obtaining industrial sector logistics performance is necessary for country to improve overall logistics capability.
- Logistics costs increase with decreasing logistics performance. Most of this increase comes from lower reliability and the need to increase inventory ("other costs").

Logistics Cost/GDP vs Logistics Cost/Sales

- Logistics Cost/GDP is an aggregate indicator based on national accounts and cannot reflect sector specific details
- Logistics Cost/Sales is more precise and enable comparisons within industrial sectors
- Countries using logistics cost/sales are Japan, Finland, Germany, etc.
- Thailand is using both logistics cost/GDP and logistics cost/sales for industrial firms and specific agricultural produce
- Logistics cost should not be the sole performance indicator.

2. Why is it important to measure logistics performance?

- Most firms do not comprehensively measure logistics performance,
- Even the best performing firms fail to realize their productivity and service potential available from logistics performance measurement, and;
- Logistics competency will increasingly be viewed as a competitive differentiator and a key strategic resource for the firm.

3. What is the WB LPI?

6 LPI dimensions along a supply chain framework **Timeliness Ease of arranging** shipments **Customs Tracking and Tracing** Customs Infrastructure Customs **Unloaded Delivery Alongside** on Dock Vessel to Dock Point of Origin **Seller's Factory Delivered to Buyer's Frontier Warehouse Border Services** Quality **Importing Country Exporting Country**

3. LPI outline

Partnerships



Published every 2 years



Built on >5,000 country assessments
 by > 1,000 logistics professionals



 Respondents rate logistics performance of own country and 8 other countries on a scale of 1 to 5



Coverage: over 160 countries in LPI
 2016



4. What is the role of the LPI?

The LPI

- Is an overall metric of supply chain efficiency.
- Provides information of where a country stands and a broad indication of problem areas.
- Is <u>not a diagnostic tool</u> and needs to be supported by specific tools designed to perform that function.

The LPI has had a significant impact in raising awareness and pushing for comprehensive "connectivity" and logistics policies, e.g. in Kazakhstan, APEC and ASEAN.

4. Policies matter to Logistics Performance

Infrastructure

- Ports
- Road/rail corridors
- Airports

Procedures and Trade Facilitation

- Customs & payments
- Simplification & automation
- Harmonization & standardization

Services

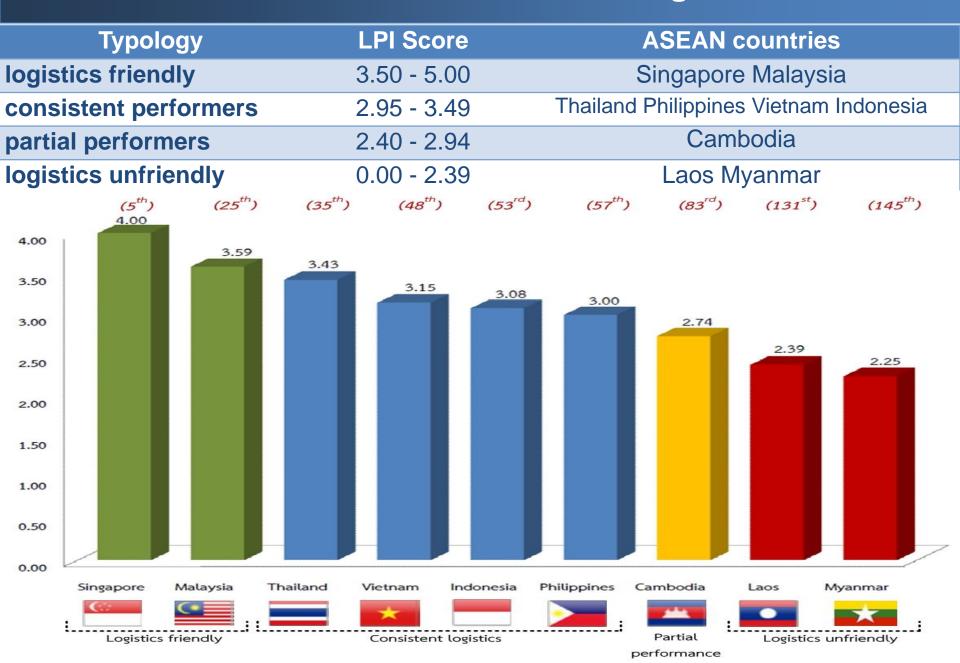
- Forwarders, truckers, brokers etc.
- Regulation of entry
- Market structure and competition

Sustainable Logistics

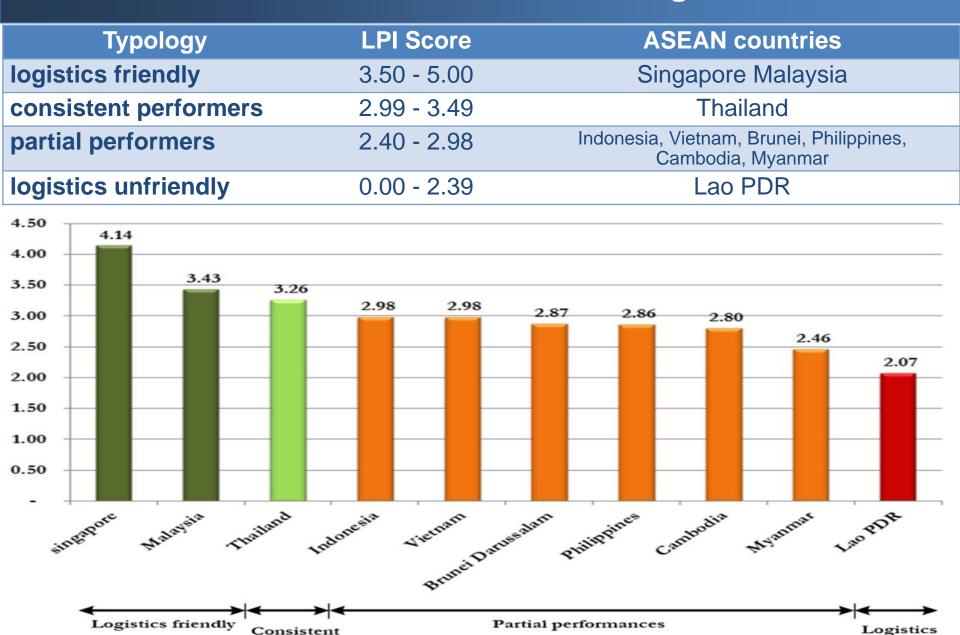
- 'Green Logistics'
- City Logistics

Regulations (customs, services) are increasingly regional, but implementation is national.

5. ASEAN LPI 2014 Ranking



5. ASEAN LPI 2016 Ranking



performances

unfriendly

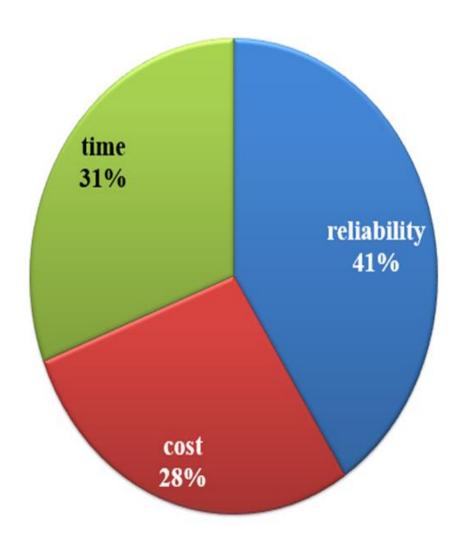
6. Cambodia's initial results

| Cost/sales | Cambodia | Thailand | Vietnam | Indonesia | Philippines |
|----------------------------|----------|----------|---------|-----------|-------------|
| Transport | 9.58% | 5.57% | 7.04% | 8.81% | 10.71% |
| Warehouse | 3.69% | 2.49% | 3.78% | 3.45% | 5.20% |
| Inventory | 6.18% | 2.04% | 4% | 7.19% | 8.78% |
| Administration | 1.95% | 1.01% | 1.48% | 1.95% | 2.47% |
| Total Logistics Cost/Sales | 21.40% | 11.11% | 16.3% | 21.40% | 27.16% |

6. Comparative Logistics Cost/Sales by Sector

| Logistics Cost/Sales | Cambodia | Philippines | Vietnam | Indonesia | Thailand |
|------------------------|----------|-------------|---------|-----------|----------|
| Automotive | 15.83% | 23.08% | 33.55% | 16.84% | 14.75% |
| Chemical products | 16.50% | 43.30% | 27.14% | 27.01% | 10.09% |
| Construction materials | NA | 16.44% | 28.60% | 35.13% | 10.46% |
| Electronics | NA | 13.57% | 4.40% | 34.43% | 12.14% |
| Food | 21.30% | 32.72% | 17.60% | 20.97% | 10.32% |
| Furniture & Decors | NA | 18.07% | NA | 45.32% | 11.44% |
| Jewelry | 18.70% | 16.87% | NA | 20.47% | NA |
| Textile & Garments | 14.14% | 20.35% | 14.30% | 16.01% | 8.55% |

6. Cambodia Logistics Performance issues

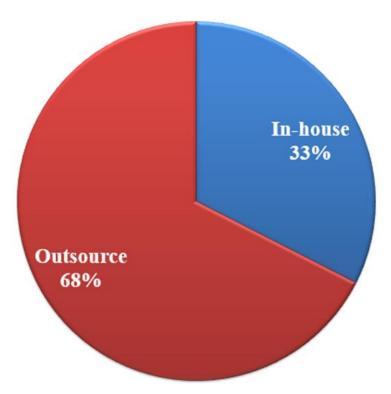


- Reliability is the most important logistics performance dimension
- The symptoms of low reliability is high logistics cost
- Manufacturers consider that reliability of the logistics system in Cambodia need to be improved

6. Cambodia vs other ASEAN countries

| | | Mean | | | |
|-------------------------------|----------|---------|-------------|-----------|----------|
| KPI | Cambodia | Vietnam | Philippines | Indonesia | Thailand |
| Delivery In Full On Time | 83.78% | 90.99% | 89.62% | 81.92% | 87.84% |
| Damage rate | 3.84% | 2.18% | 3.70% | 2.01% | 4.16% |
| Cash Conversion Cycle (days) | 7.79 | 20.29 | 21.77 | 19.00 | NA |
| Customer Complaint Rate | 6.33% | 6.65% | 5.97% | 6.61% | 2.64% |
| Forecasts Accuracy | 80.34% | 75.53% | 80.15% | 81.68% | 84.40% |
| Ratio of Returns | 4.19% | 2.26% | 5.15% | 3.55% | 3.58% |

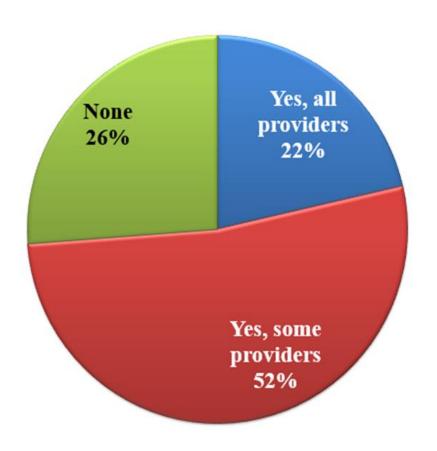
Logistics outsourcing in Cambodia



| | In-house | Outsource |
|-------------|----------|-----------|
| Indonesia | 51% | 49% |
| Vietnam | 32% | 68% |
| Philippines | 51% | 49% |

- Most outsourced activities are:
 - Domestic transport
 - International transport
 - Customs brokerage
- Most in-house activities are:
 - Warehouse
 - Inventory management
 - Logistics IT system
 - Value-added services

Logistics Service Level Agreements (SLAs)



- It is interesting to note that not all providers are under SLAs.
- More than 1/4 of outsourcing is done with no SLAs.
- Only 1/5 respondents have SLAs with <u>ALL</u> their service providers.

Comparative manufacturing logistics costs/sales

| Country | Logistics Cost/Sales |
|-------------|----------------------|
| Vietnam | 16.3% |
| Thailand | 11.11% |
| Estonia | 16% |
| Cambodia | 21.40% |
| Finland | 12.1% |
| Germany | 9% |
| Indonesia | 21.48% |
| Philippines | 27.16% |

Source: TU Berlin; Turku Finland; Thammasat Thailand; FTU Hanoi; WB Indonesia; IFC Philippines

Some initial thoughts....

- Logistics cost/sales in Cambodia is equivalent to Indonesia (21.40%)
- Reliability is key logistics performance dimension and negatively impacts logistics cost in the country
- Limited understanding of the importance of logistics
- Logistics is considered more operational than strategic
- On the job training reflect lack of formalized logistics know-how

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Summary

- Baseline logistics performance assessment is critical
- WB's LPI is an external perceptual assessment
- Important to develop own LPI to guide national logistics policy
- Benchmarking with neighbouring countries will enable enhanced development within the ASEAN Economic Community (AEC)

Next steps for Cambodia...

- What is the current situation for industrial logistics in Cambodia?
- What is the current logistics capability of manufacturers in Cambodia?
- What are the issues related to logistics in Cambodia?
 - Service levels?
 - Institutional environment?
 - Infrastructure?
- What should/can the RGC do?