



Latest Developments in Supply Chain and Logistics

The Changing Face of the Logistics Manager

October 2007



Who We Are

- Supply Chain Research
- Supply Market Forecasts
- Supply Chain Consulting



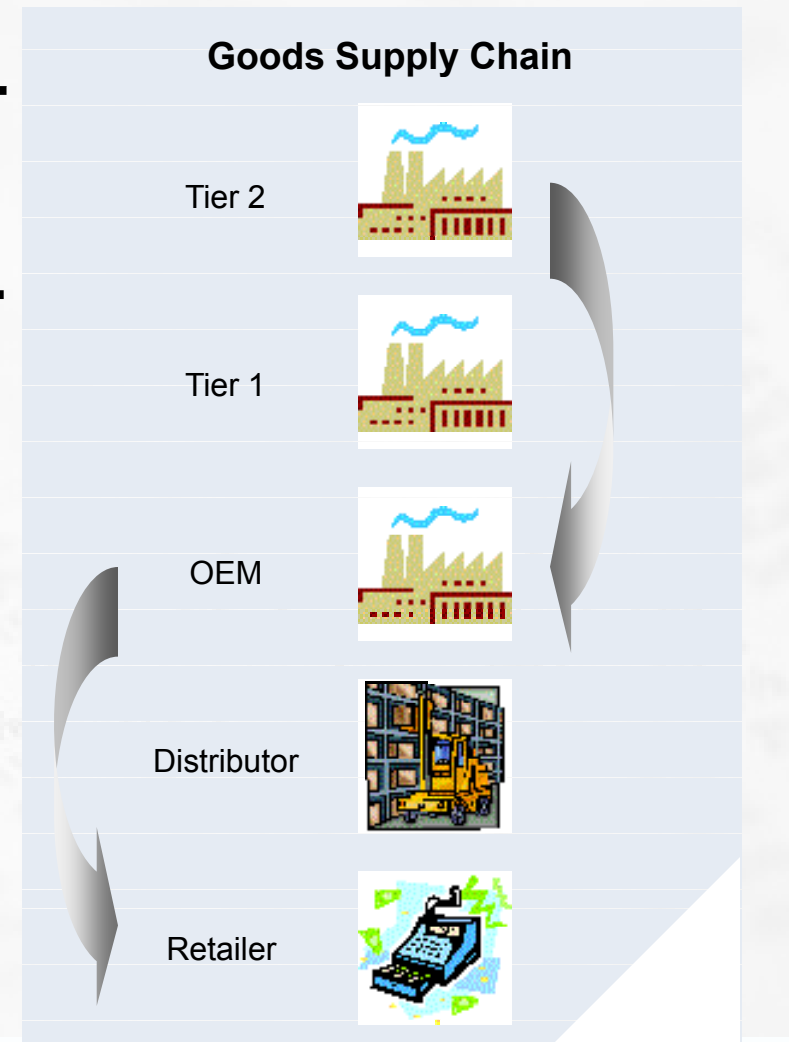
Agenda

- Sourcing – where it starts
- Transport and logistics constraints
- Supply chain management imperatives
- Skills requirements
- Discussion

Sourcing – where it starts

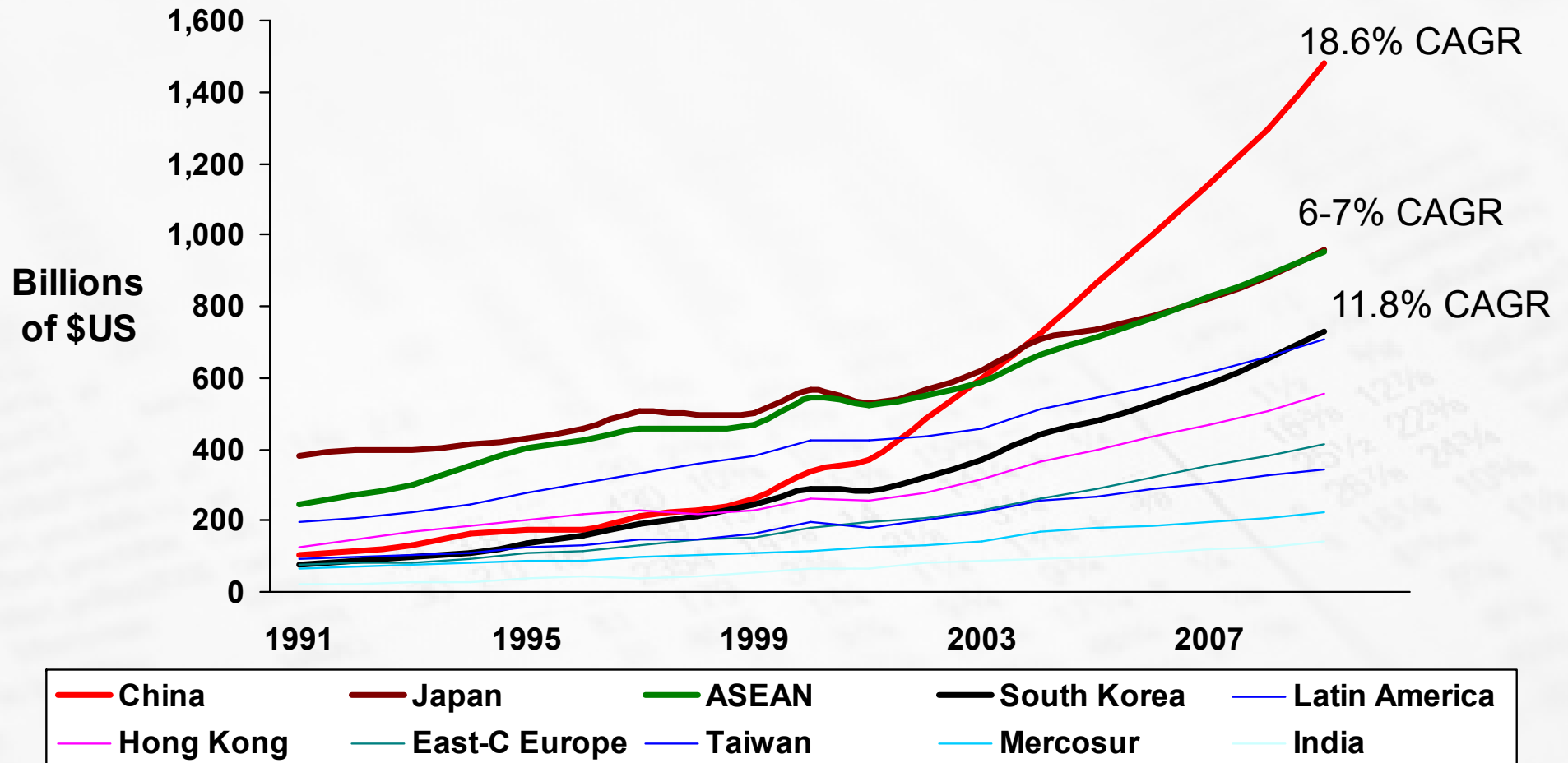
Extended supply chain visibility, management

- **From the supplier's supplier...**
 - Collaborative forecasting
 - VMI/auto-replenishment
- **To the customer's customer...**
 - Postponement
 - Direct ship
- **Transparency between levels**
 - Visibility
 - CRM-SRM linkage
- **Custom supply chains**
 - End-to-end, worldwide, segmented
 - Adaptive, sense-and-respond
 - Learning organization



Asian External Growth

Exports from Selected Low-Cost Countries

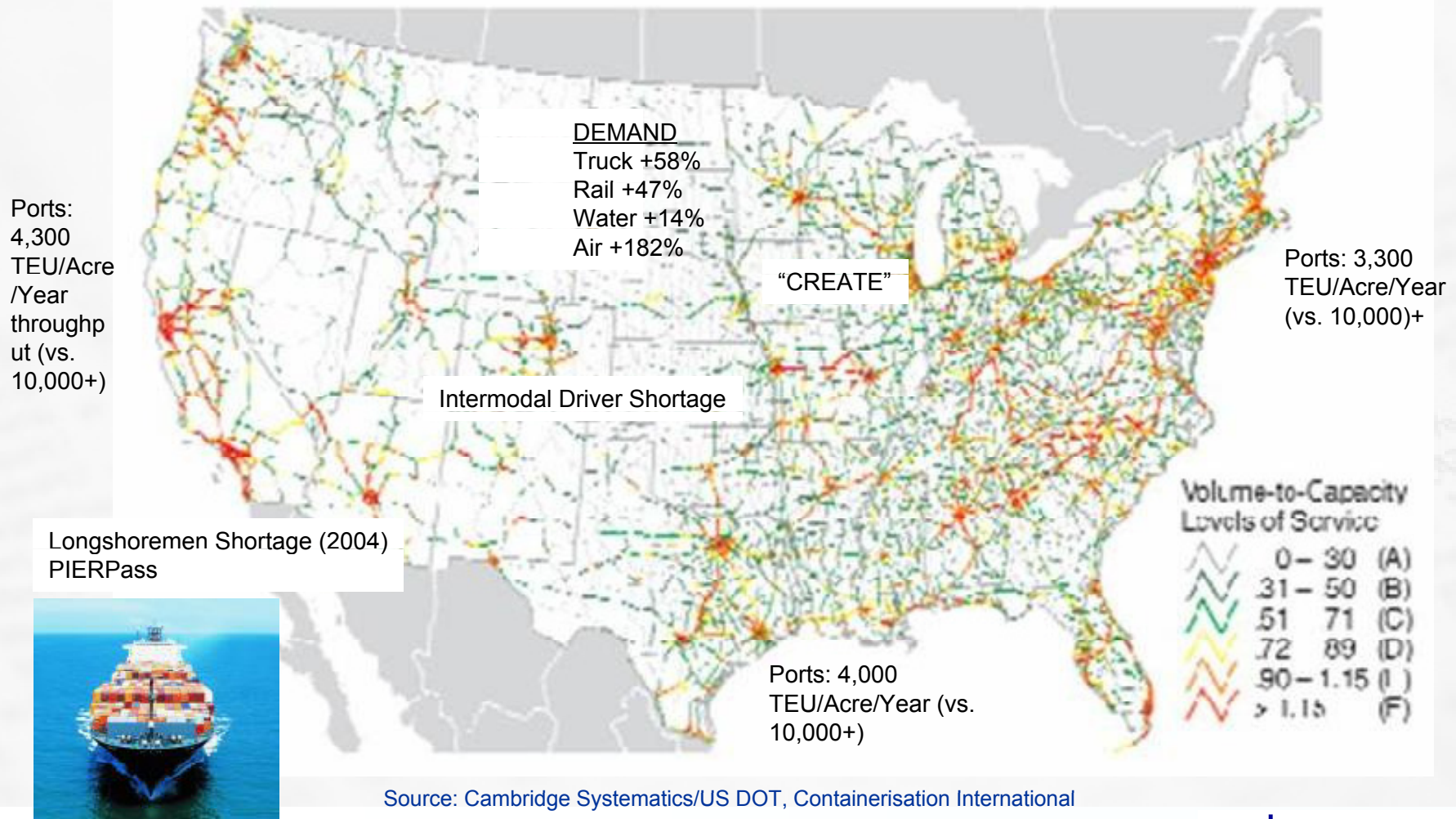


Source: Economist Intelligence Unit; growth rates based on 1998-2009.

Transport and logistics constraints

U.S. Bottlenecks: Long-Term View

Congestion Points, 2020, with Selected Remediation Measures



Secondary Ports & Modes

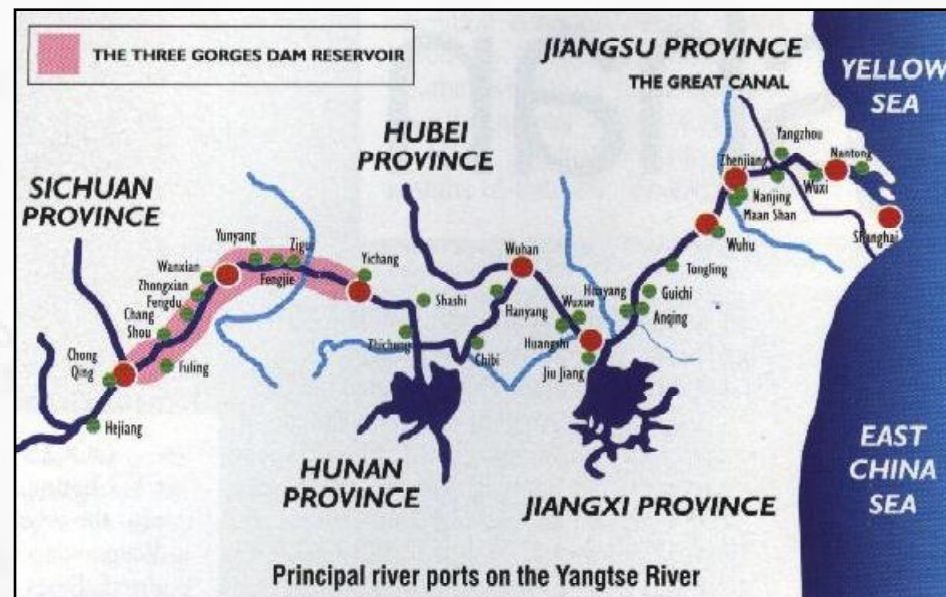
U.S.

- Northern Pacific
- All-water via Panama Canal
- Trans-shipment via “feeder” port

Asia

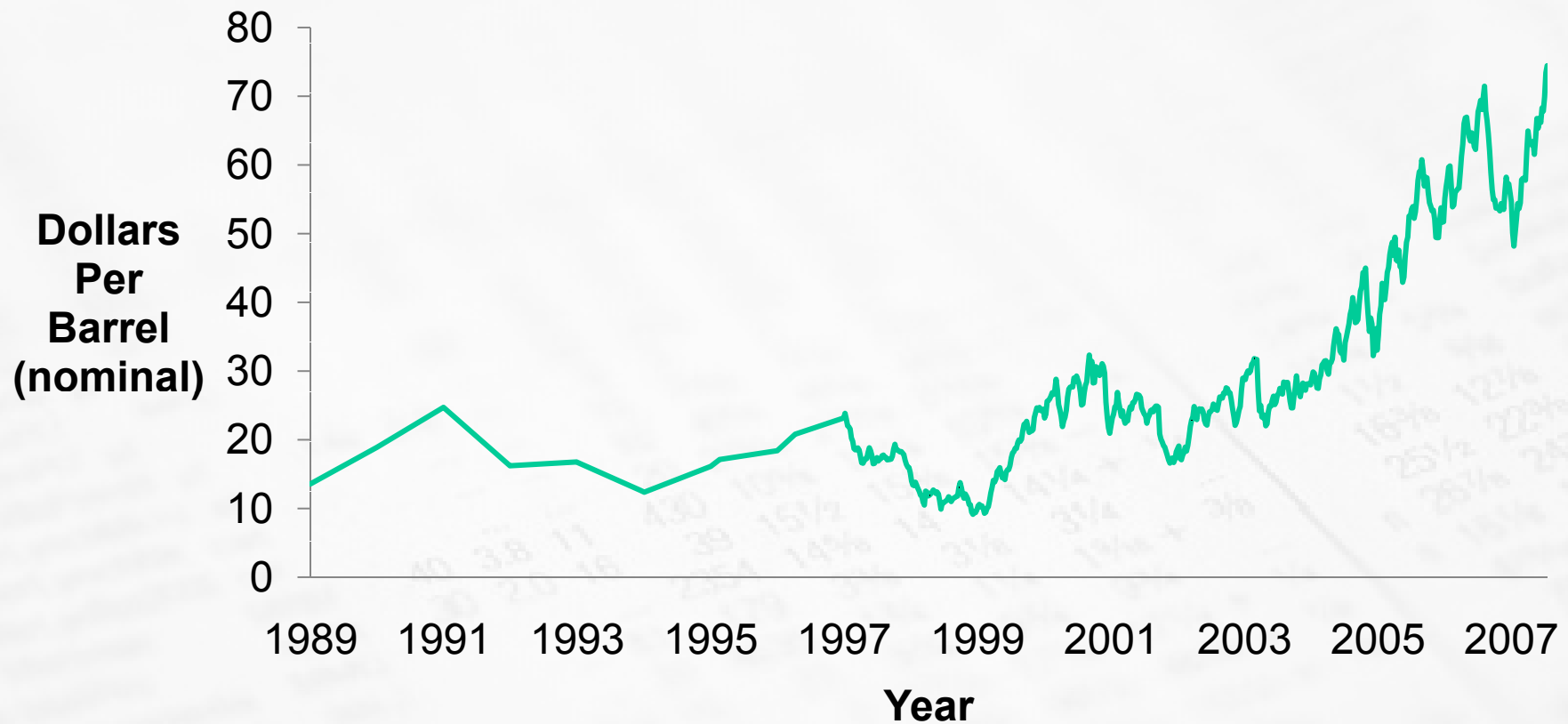
- Shanghai vs. Hong Kong
- Inland vs. “waterfront”

Inland Ports on the Yangtse River



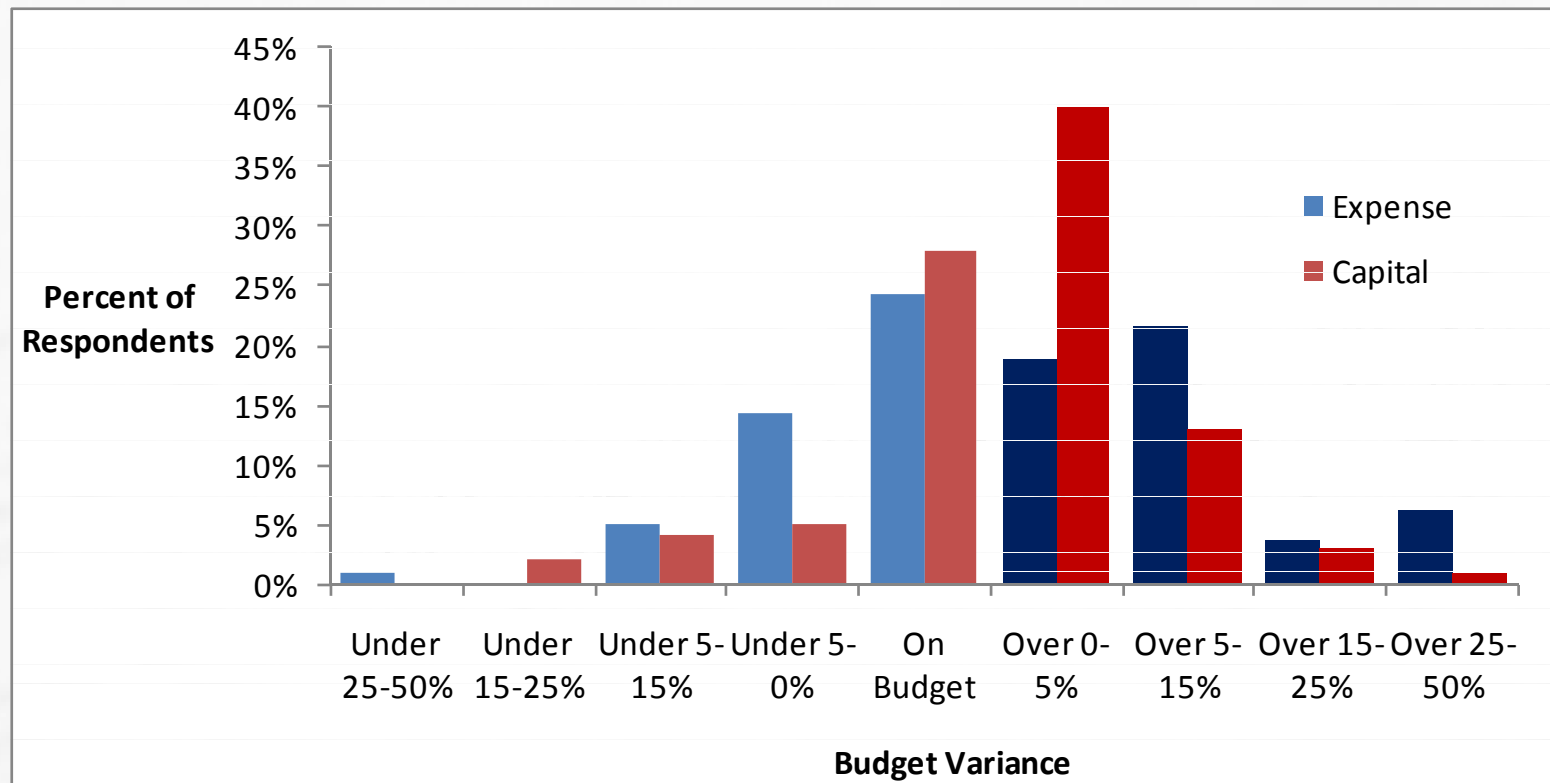
Fuel prices and surcharges

Weighted Average World Oil Spot Prices 1989-2007



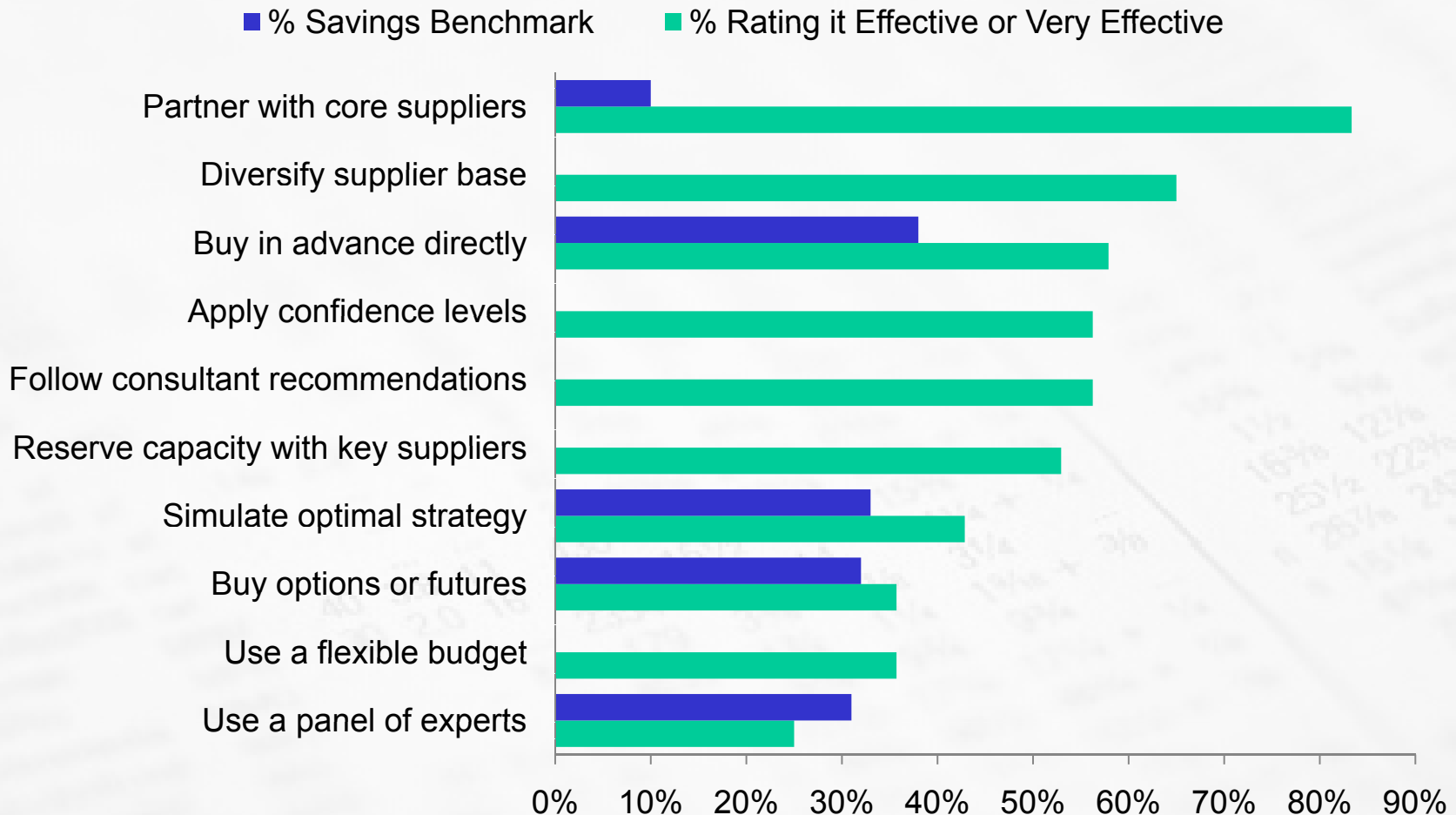
Budgets are off; variance is increasing

- Expense: 50% are over-budget, 62% worsening
- Capital: 60% are over-budget, 73% worsening



The planning method makes a difference

Effectiveness, by Method



SCM Imperatives

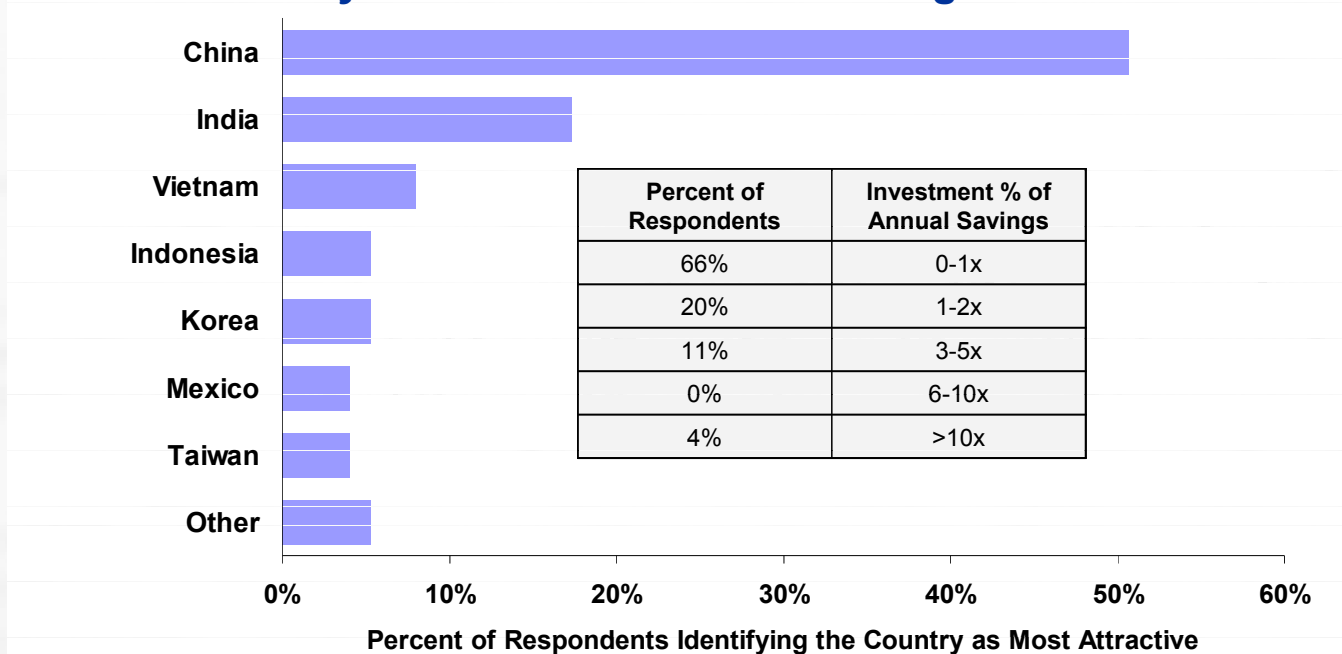
Imperatives for 2007

1. Leverage Asian sourcing opportunities
2. Actively manage fuel expenditures
3. Make “e-freight” a reality
4. Decide to lead (or follow) in RFID
5. Stay lean despite delays and congestion

Leverage Asian sourcing

- 18% savings on largest categories
- 70% increase in sourcing by 2011 for some
- China twice as attractive as other countries

Country Attractiveness as a Sourcing Platform in 2011



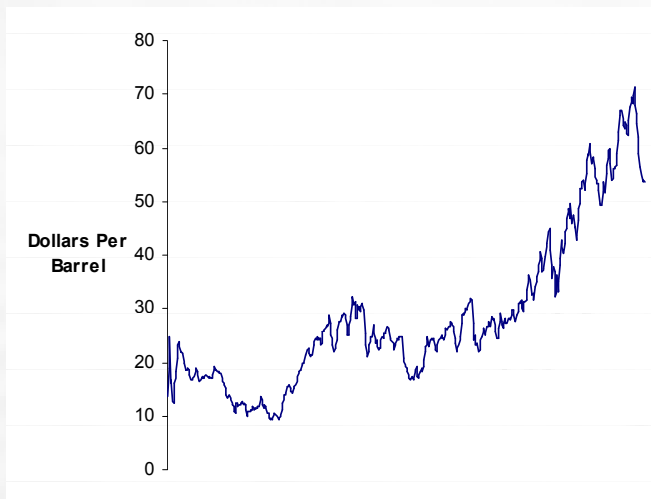
Source: Boston Logistic

Actively manage fuel expenditures

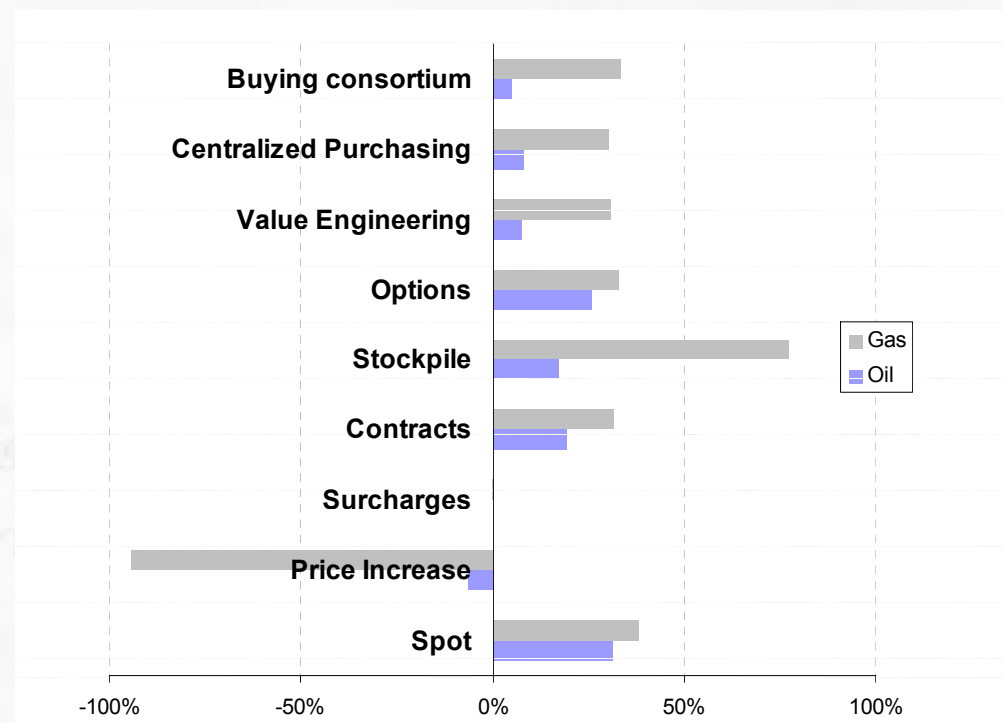
- 10-100% savings from actively managing fuel spend

Energy Costs Under Alternative Buying Strategies, October 2005 - November 2006

Weighted Average World Oil Spot Prices 1989-2006



Source: US Energy Information Administration



Percent Change from Baseline Cost

Source: Boston Logistic

Make “e-freight” a reality

| Supply Chain Trends | Logistics IT Requirements | Applications Checklist |
|--|--|---|
| <ul style="list-style-type: none"> ▪ Customer Interaction ▪ Value-Added Services ▪ Global Networks ▪ Supply Chain Security ▪ Data Exchange ▪ Wireless Transmission | <ul style="list-style-type: none"> ▪ Driver Communication ▪ Vehicle Tracking ▪ Telecom Network Infrastructure ▪ Call Center/Customer Support | <ul style="list-style-type: none"> ▪ Communications Equipment ▪ VPN Security ▪ VOIP ▪ Click to talk ▪ Mobile Solutions ▪ Call Center Management ▪ Network Management |



Decide to lead or follow in RFID

- ROI: -38% to 107% in 161 case studies
- 153% industry growth by 2010
- Fertile ground for some applications

Range of Potential RFID Applications and Benefits

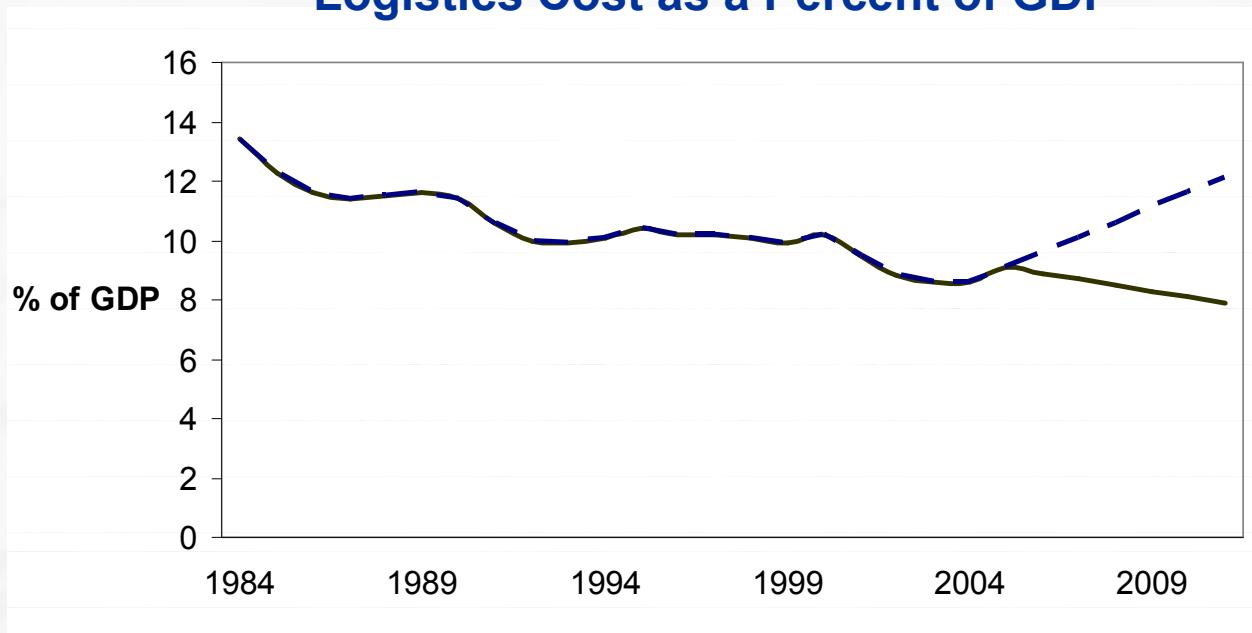
| Application | Benefit | Financial Metric |
|------------------|----------------|-------------------|
| Track Equipment | Utilization ↑ | ROA ↑ |
| Track Inventory | Turns ↑ | Working Capital ↑ |
| Deploy Labor | Productivity ↑ | Profits ↑ |
| Track Production | Cycle time ↓ | Revenues ↑ |
| Track Devices | Availability ↑ | Performance ↑ |
| Monitor Access | Violations ↓ | Claims/damages ↓ |
| Speed X-Actions | Throughput ↑ | Revenues ↑ |

Source: Boston Logistic

Stay lean despite delays and congestion

- Congestion accounts for 34% of recent increase in inventories
- Postponement, dynamic routing strategies

Logistics Cost as a Percent of GDP



Source: Rosalyn Wilson/CSCMP State of Logistics Report, Boston Logistic

Skills Requirements

Acquiring New Skill Sets

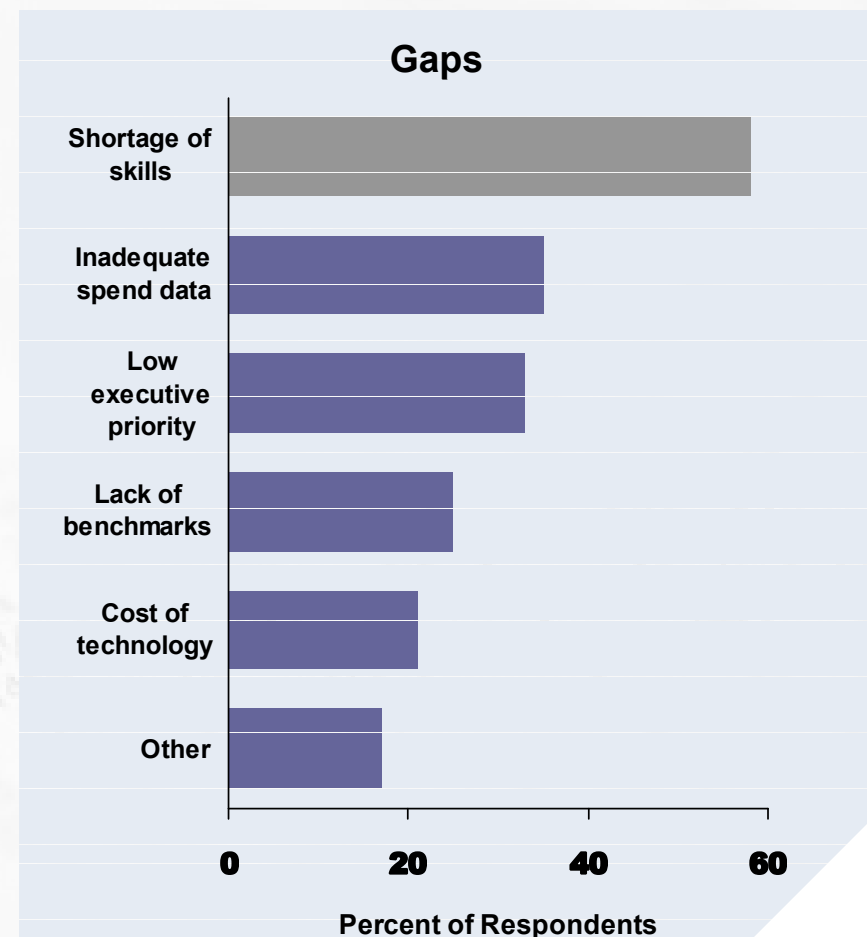
“What are the greatest challenges to achieving maximum efficiency within your company’s purchasing practices?”

Applicants must possess...

- Leadership
- Creativity
- Aggressiveness
- Financial acumen
- Problem-solving skills
- Drive for results

Need not apply:

- Lifetime purchasing career
- Individual contributors
- Win-lose negotiators



Source: SAP and Economist Intelligence Unit, April 2005

Thank you!

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Boston Logistic helps supply chain executives make critical supply chain decisions that involve investment and risk by forecasting the evolution of supply markets and technologies. Our mission is to help our clients develop globally competitive supply networks that maximize Supply Chain Value.™ Our products and services include:

- **Research** that help investors and policy makers quantify the benefit of emerging technologies and decide whether or not to invest in them
- **Forecasts** that help purchasing managers decide how, where, and when to buy critical externally-purchased materials and services
- **Consulting** that supports high-stakes decisions such as acquisitions, outsourcing, off-shoring, and make-or-buy

Industries Served:

- Discrete Manufacturing: Machinery, Equipment, Vehicles, Parts, Mechanical and Electrical Devices
- Process Manufacturing and Conversion: Paper, Pulp, Energy, Packaging, Processed Minerals/Aggregates, Plastics, Metals, Chemicals
- Transportation: Railroads, Ocean Shipping Lines, Airlines, Trucking Companies, Package Delivery, Intermodal
- Logistics: Dedicated and Third Party Logistics, Ports, Stevedoring, Storage, Material Handling, Distribution, Maintenance, Retail