



The Suez Canal and the Changing Face of Middle East Logistics

3rd Trans Middle East Conference

Cairo, Egypt

November 2007



Who We Are

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



Agenda

- Global supply chain trends
- Trade and shipping through the Suez Canal today
- Panama vs. Suez?
- Key success factors for a supply chain strategy

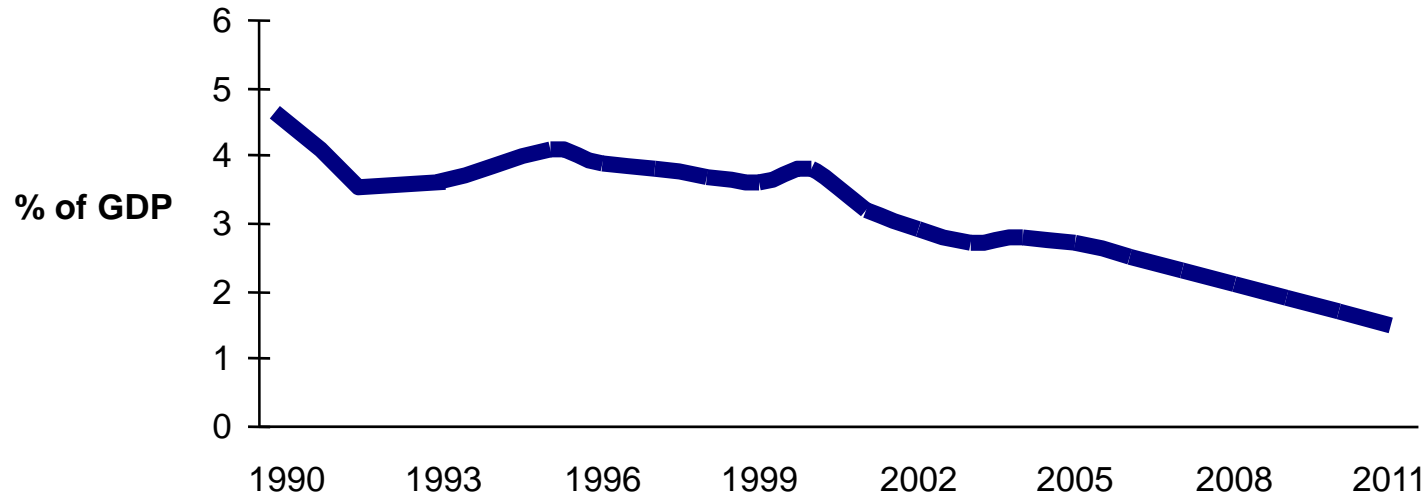
Global supply chain trends

Supply Chain Perspective



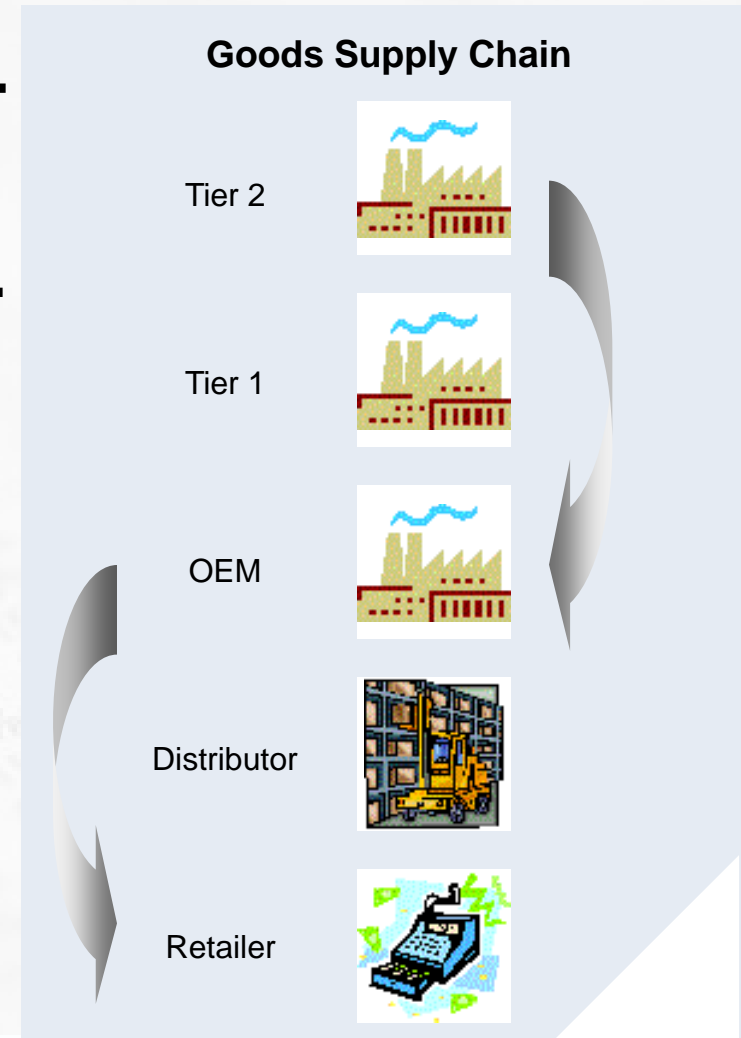
Lean manufacturing and distribution

Inventory as a Percent of GDP (US)

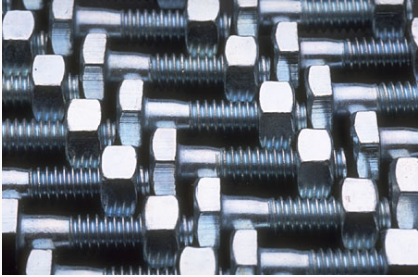


Extended supply chain visibility, management

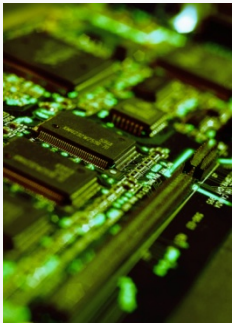
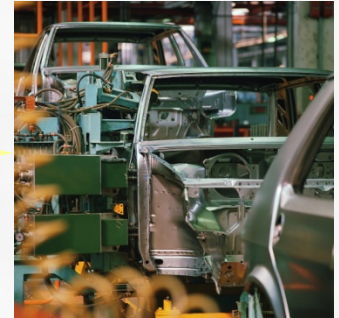
- **From the supplier's supplier...**
 - Collaborative forecasting
 - VMI/auto-replenishment
- **To the customer's customer...**
 - Postponement
 - Direct ship
- **Transparency between levels**
 - Visibility
 - CRM-SRM linkage
- **Custom supply chains**
 - End-to-end, worldwide, segmented
 - Adaptive,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



Customer-Supplier Linkage



- Delphi Automotive
 - Consider the whole supply chain first
 - Establish suppliers close to manufacturing, and assembly close to customers
 - Target the lowest-cost supply chain



- IBM
 - On-demand supply chain
 - Two-tier mentality
 - Visibility and reactivity

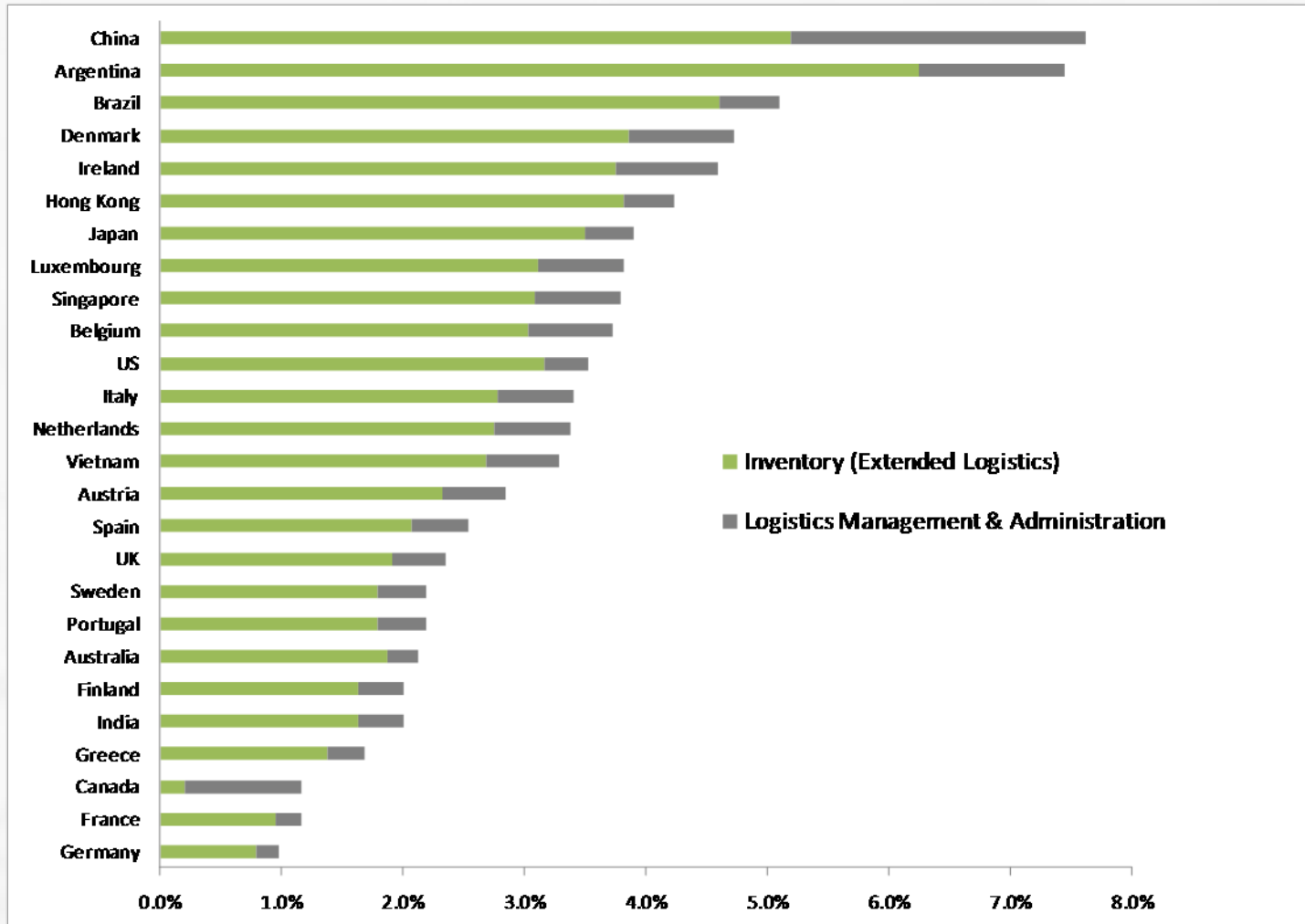


- Exxon-Mobil
 - Call-center via SAP
 - Payables via SAP
 - Providing suppliers visibility to customer's orders



The race to “lean”

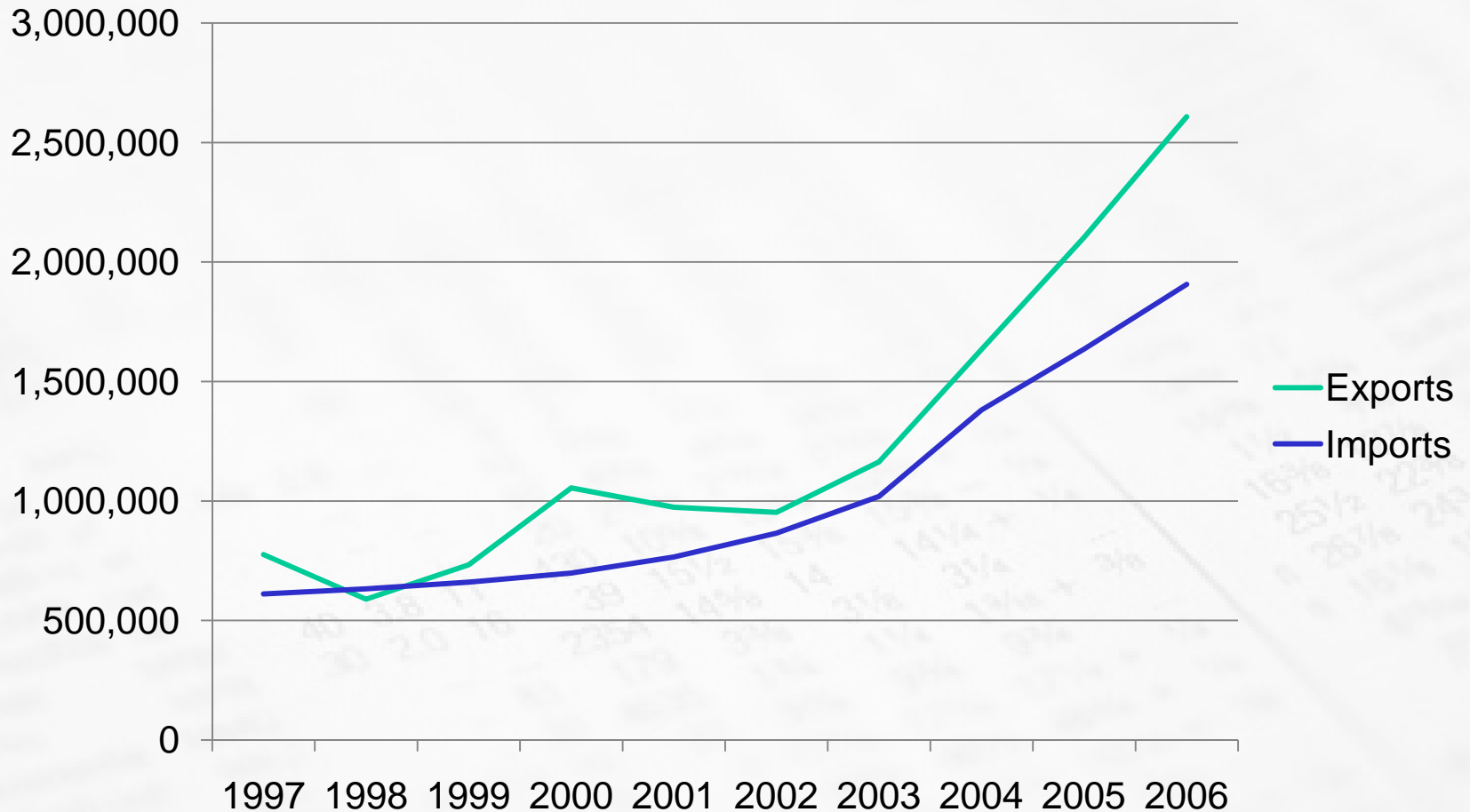
Inventory and Logistics Administration Costs as a Percent of GDP



Trade and shipping through the Suez Canal today

Middle East trade is booming

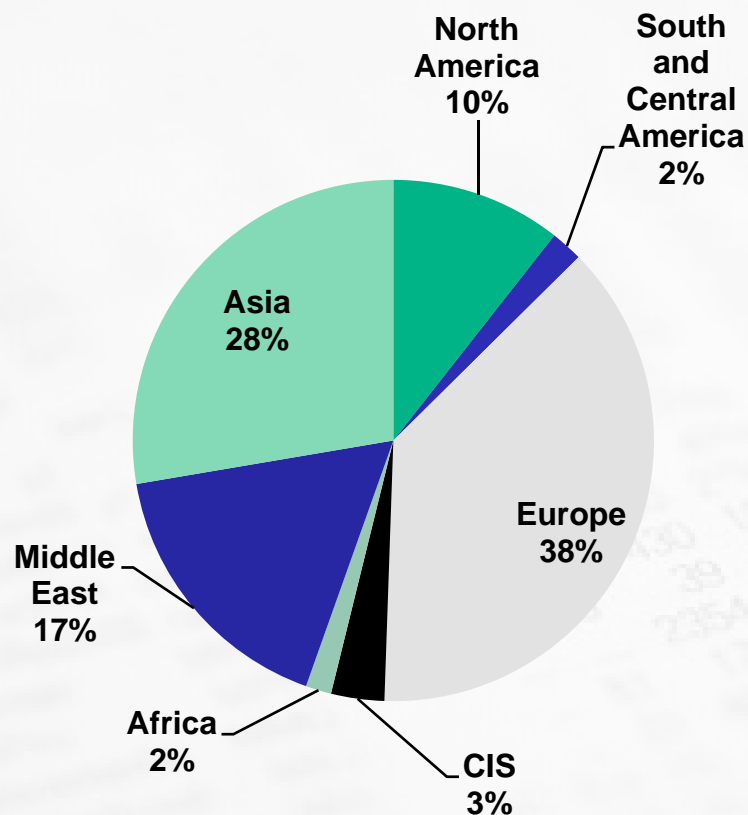
Trade to and from the Middle East



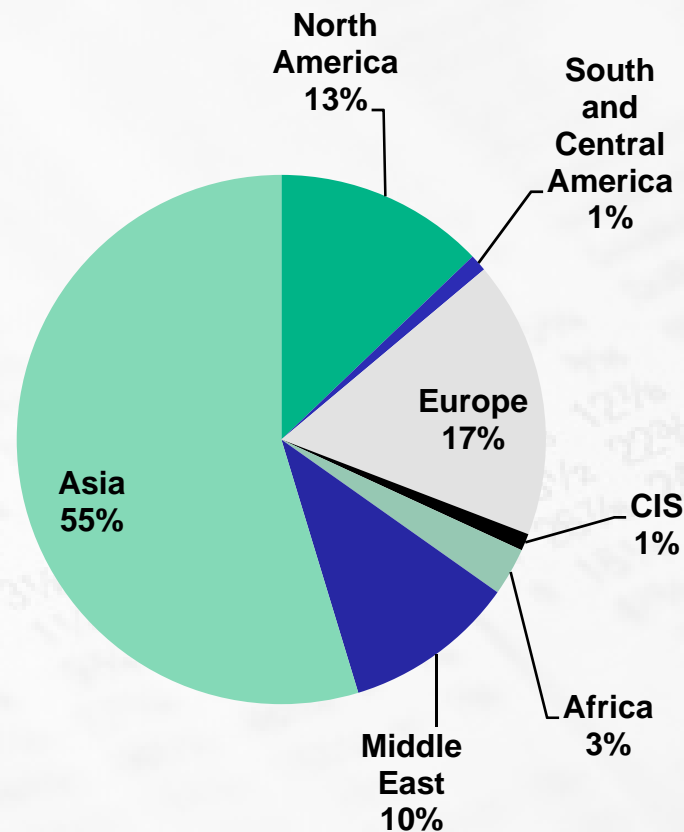
Source: Boston Logistics analysis of IMF data

The majority of Middle East trade is conducted with Asia and Europe

Merchandise imports of the Middle East by region



Merchandise exports of the Middle East by region



Source: World Trade Organization

The Suez Canal handles mostly this Asia-Europe traffic

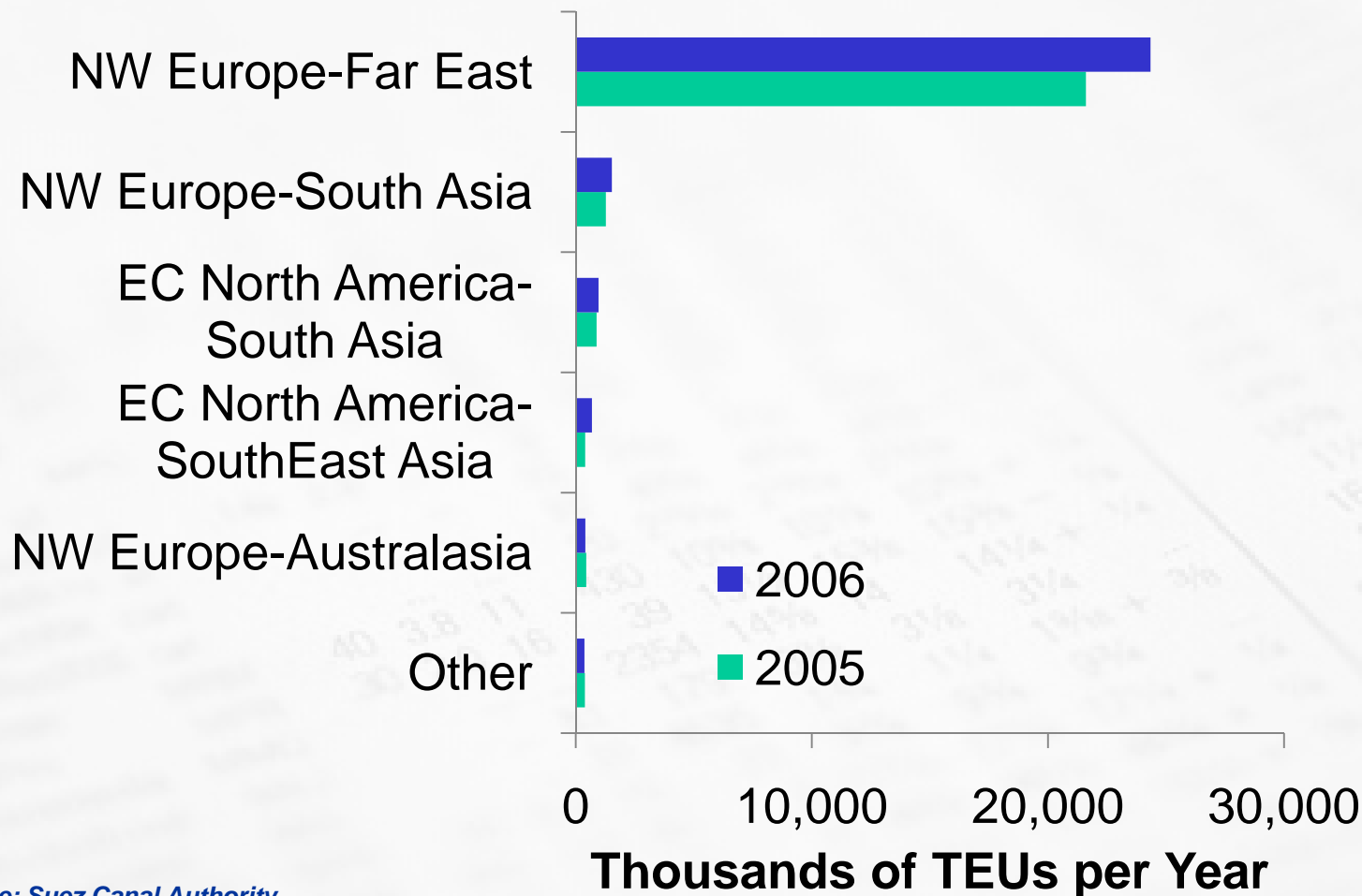
Suez Canal Traffic Flows



Source: Suez Canal Authority

95% of traffic through the Suez Canal is on the Europe-Asia trade

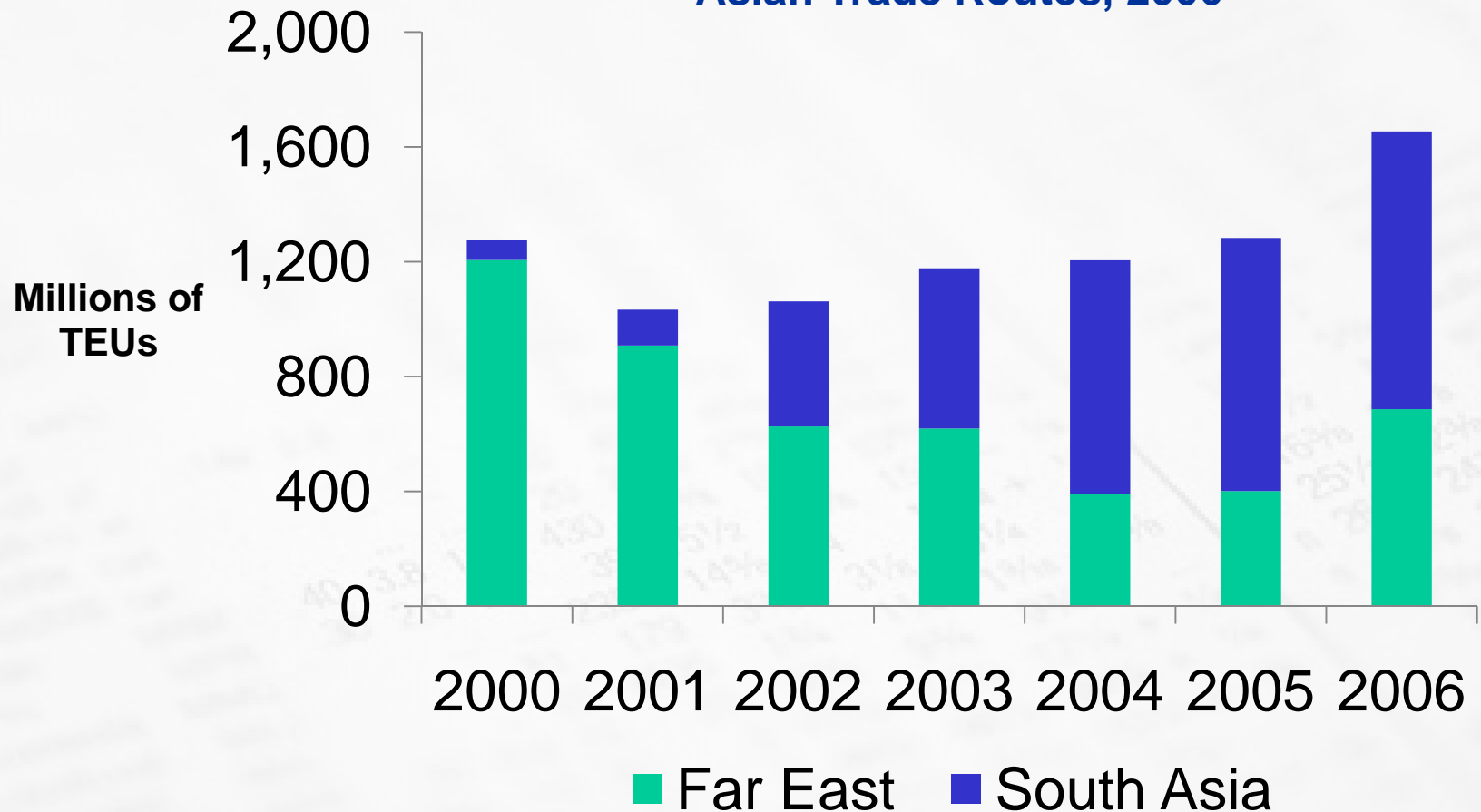
Suez Canal Traffic by Trade Route



Source: Suez Canal Authority

Suez traffic is increasing as Far East volume shifts to South Asia

Traffic through the Suez Canal for Asian Trade Routes, 2006

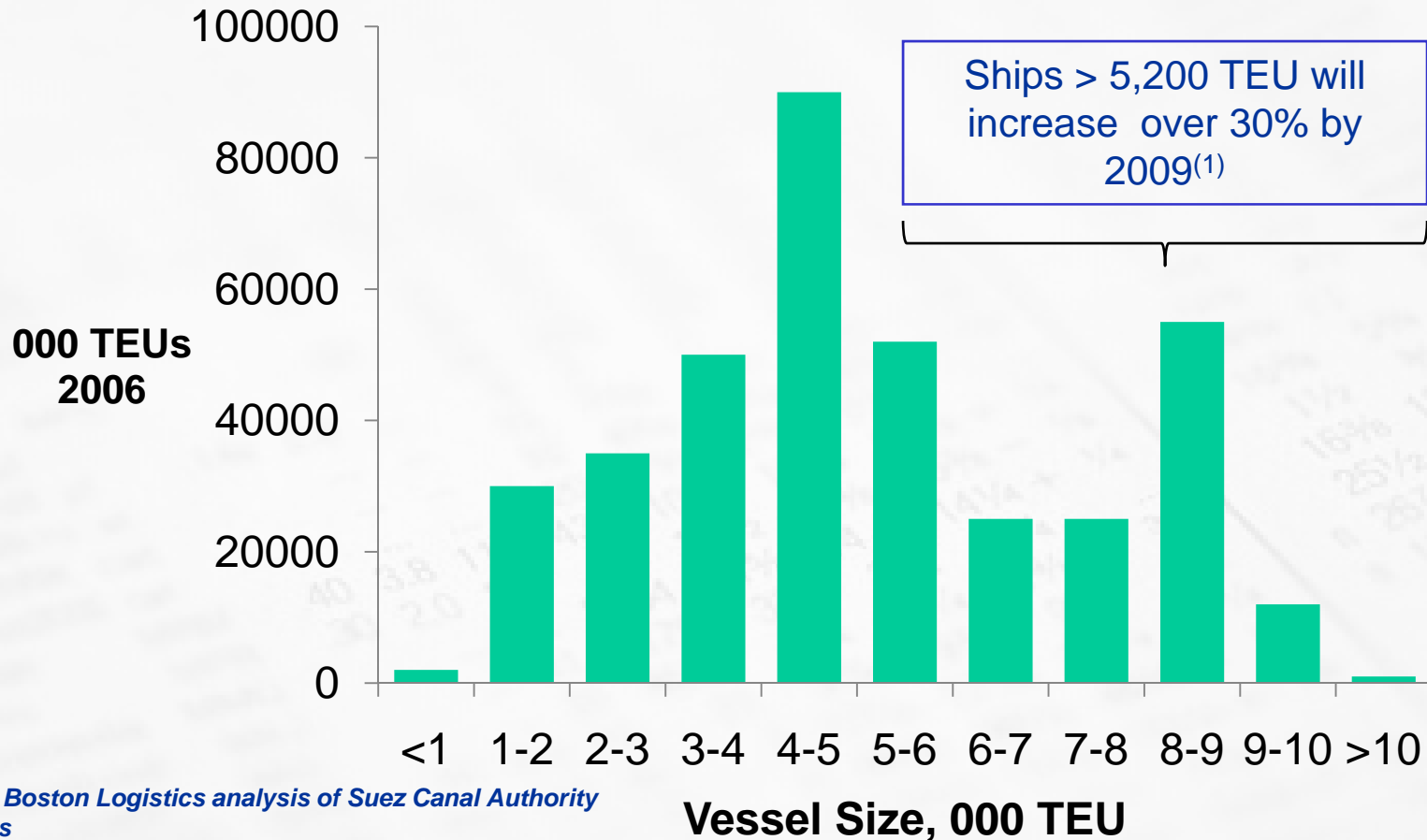


Source: Suez Canal Authority presentation to China Trade conference, July 2007



And larger ships are ordered

**Distribution of Suez Canal Transits by
Size of Vessel, 2006**



Source: Boston Logistics analysis of Suez Canal Authority statistics

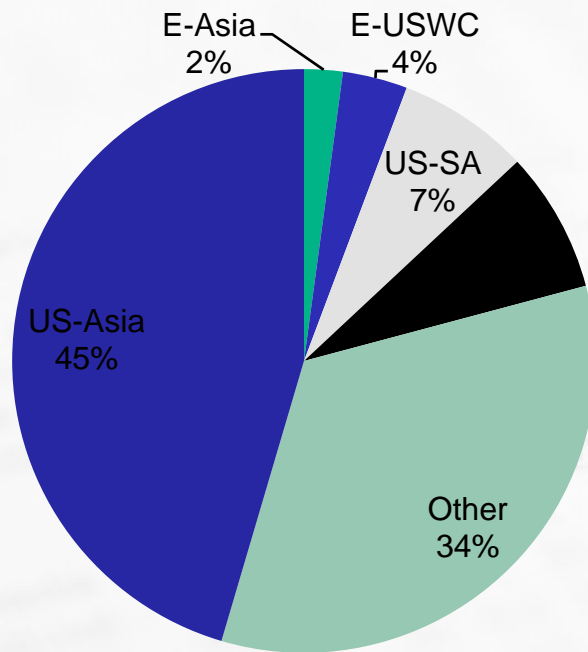
⁽¹⁾ This estimate is from the Household Goods Forwarders Association of America

Panama vs. Suez?

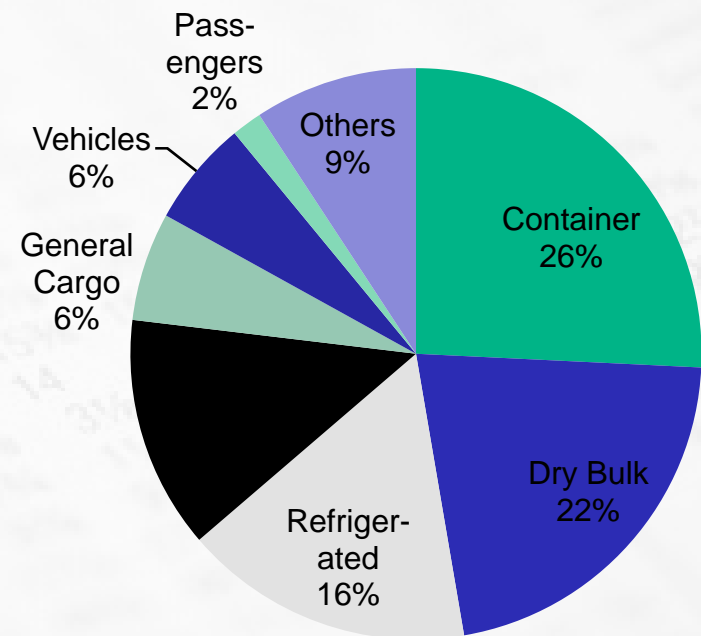
Panama largely serves the USEC-Asia trade

- 25% of total Asia-USEC container traffic
- Grains out of the US Gulf

By Trade Lane



By Commodity Type



Source: Boston Logistics analysis

Panama is constrained



Panama is constrained (cont'd)



The Panama Canal expansion program

- \$5.25b+ expansion
- Toll increases will increase rates by 69% over three years ⁽¹⁾

Before and After the Expansion

Dimension	Before (2007)	After (2014)
Capacity (transits/year)	17,000	34,000
Max Vessel Size (TEUs)	4,400	12,000

⁽¹⁾ Household Goods Forwarders Association of America

The Suez Canal can offer shippers lower cost for some traffic

- Breakeven line may extend as far north as Hong Kong
 - Hong Kong-USEC
 - 11,207 nautical miles via Suez
 - 11,593 via Panama
 - Hong Kong-Halifax
 - 11,101 nautical miles via Suez
 - 11,533 via Panama
- Large vessels will be the most economical
 - Smaller vessels require too many in a string to achieve target frequencies
 - Can amortize higher operating costs across more containers

Source: Suez Canal Authority presentation to China Trade conference, July 2007

Major players are taking an interest in this

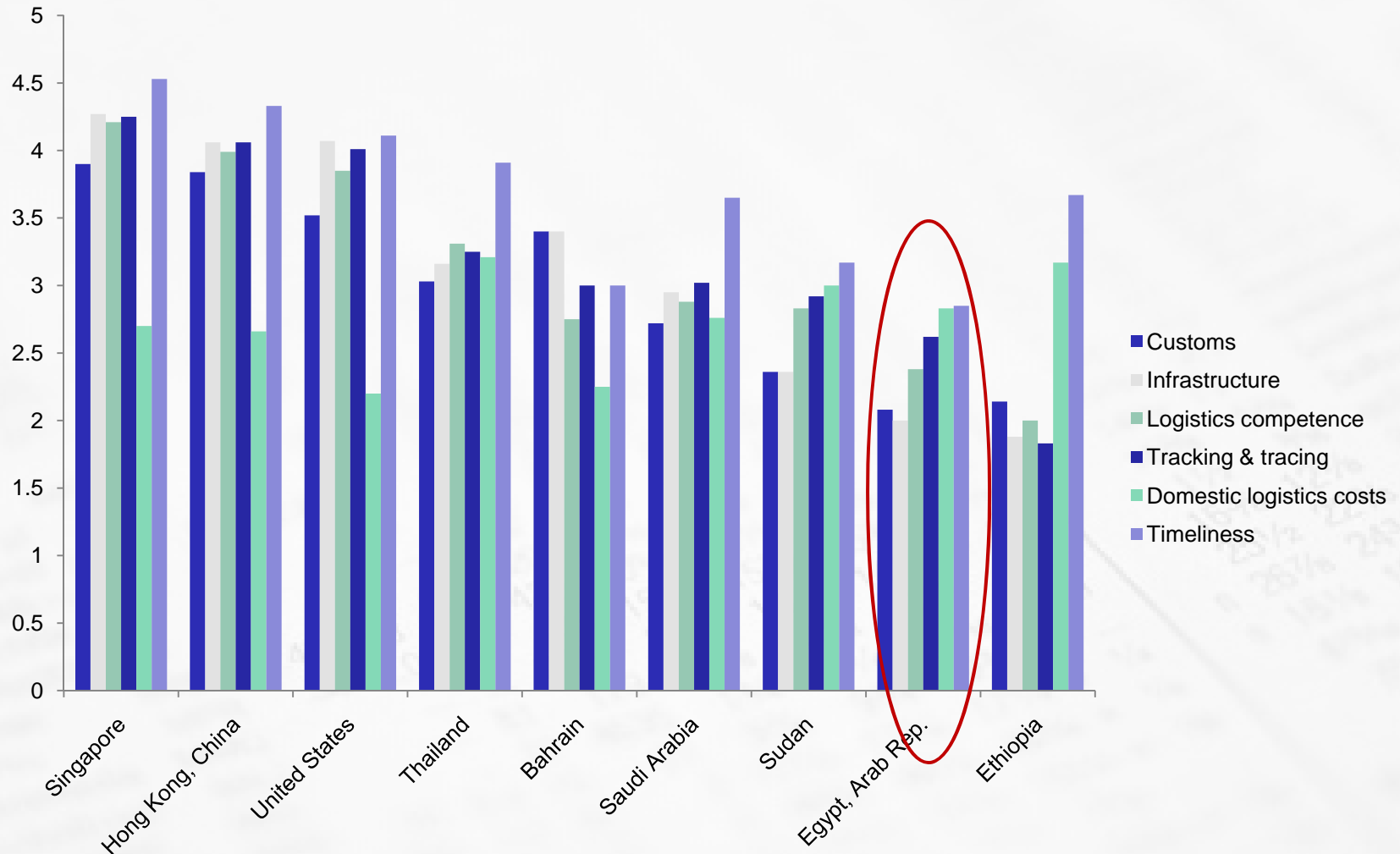
- Current carriers: CMA/CGM, Maersk, COSCO
- COSCO is making a \$730m investment
 - From 2.5m to 5.1m TEUs/year
 - Double the employment at the port
 - New ownership structure
 - APM Terminals of The Hague, Netherlands (55%)
 - COSCO Pacific (20%)
 - Suez Canal Authority 10%
 - National Bank of Egypt 5%
 - Egyptian Private Sector 10%
- DP World has bought 90% of the controlling shareholder at Sokhna Port.
 - Projections indicate 1.2 million TEU by the end of 2009

Key success factors for a supply chain strategy

Window of opportunity for new routes

- Extend the range of eligible Asia-US traffic
 - Hong Kong-USEC
 - Hong Kong-Halifax
- Exploit rising rail and Panama Canal rates to introduce an alternative for Post-Panamax vessels
- 7-year window until Panama Canal expansion is complete

But performance has room for improvements



Source: World Bank

Performance will make the difference in capturing traffic that is part of companies' lean global supply chains

The
Supply Chain
advantage is
about more
than cost!



- Reliability
- Flexibility
- Total transit time
- Inventory visibility
- Value-added services
- Product-services
- Intermodal links

Thank you!

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- **Research** that help investors and policy makers quantify the cost and benefit of infrastructure and technology investments
- **Forecasts** that help supply chain executives decide how, where, and when to buy critical purchased materials and services
- **Consulting** that supports high-stakes decisions such as acquisitions, outsourcing, off-shoring, and make-or-buy