The Asian Sourcing Boom

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Boston Logistics Group, Inc.

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Boston Logistics Group

*Supply Chain Economists*SM

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Who we are

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

Our Clients

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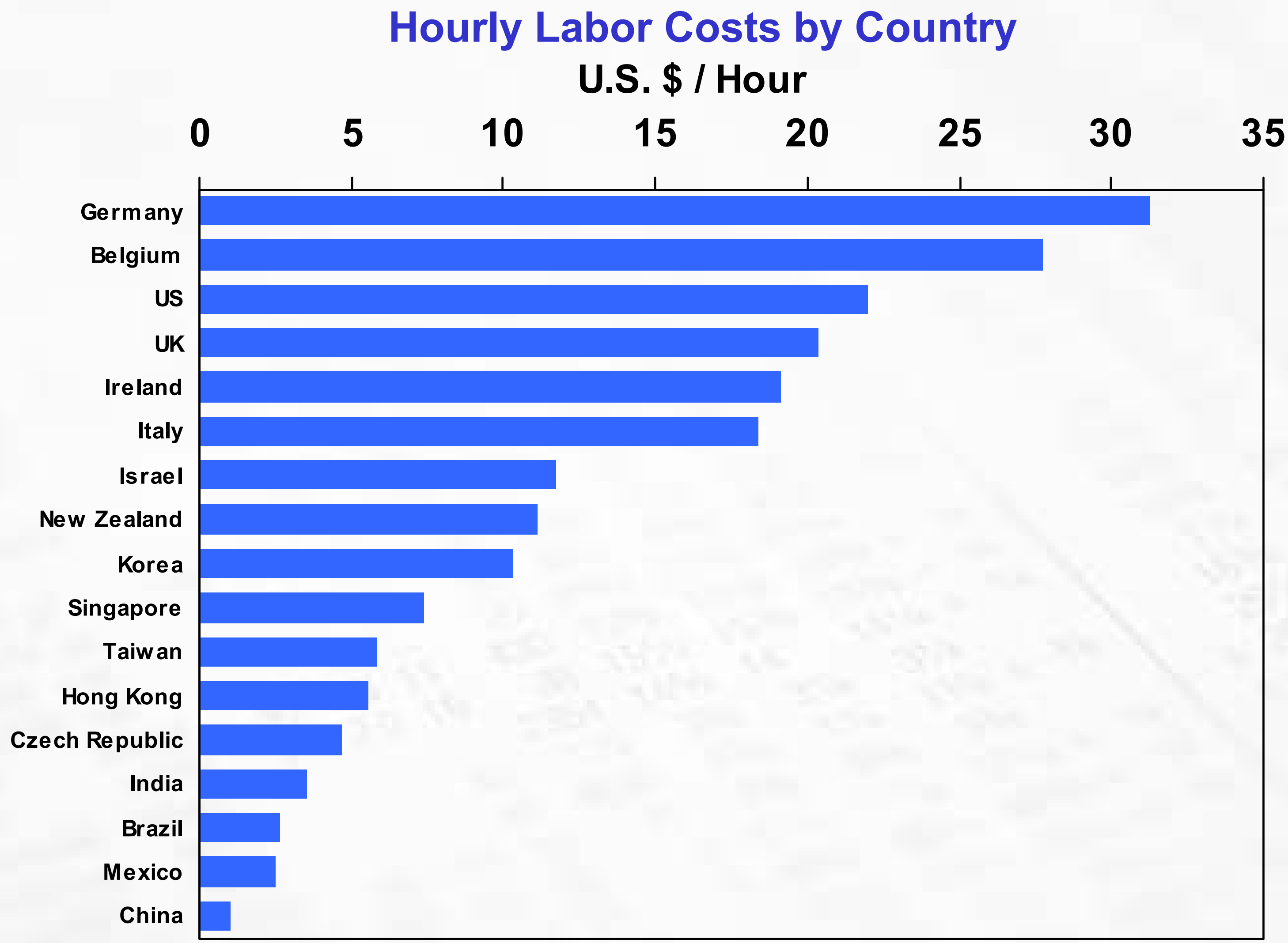
- Mercedes-Benz
- massport
- Snecma Groupe SAFRAN
- Canadian Pacific
- DuPont The miracles of science

Agenda

- The Obvious
- The View to 2050
- Study Results
- Implications

The Obvious

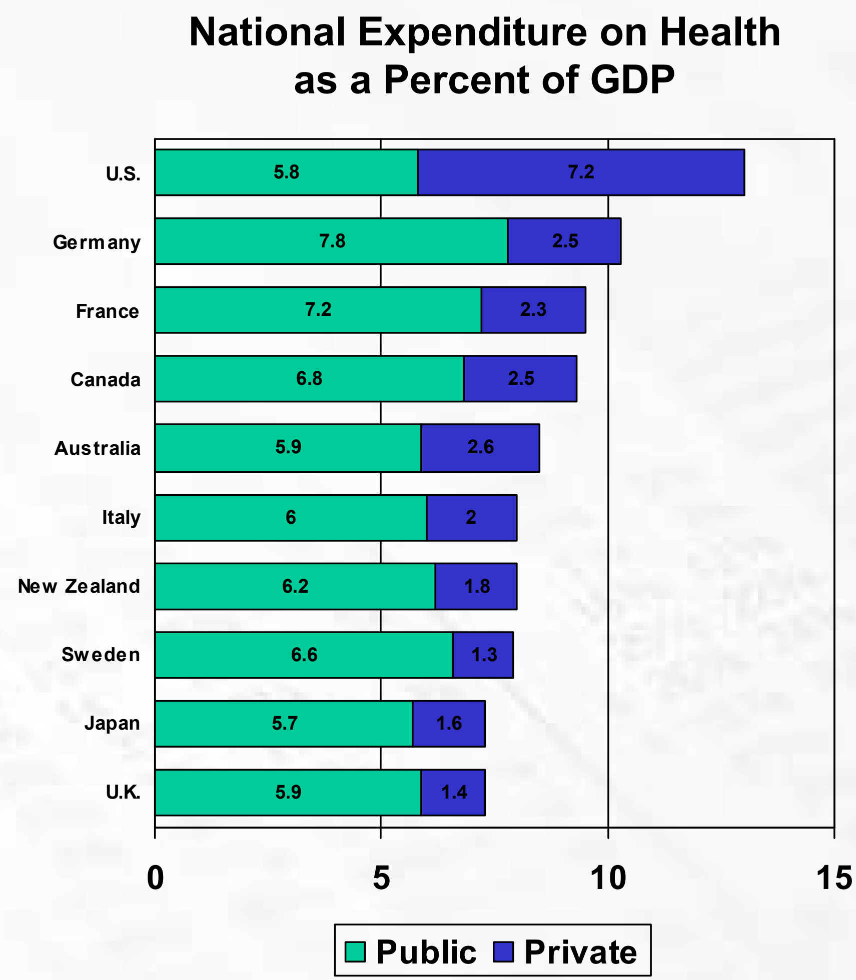
Large Labor Cost Differentials



Sources: Bureau of Labor Statistics, Computerworld

Structural Underpinnings

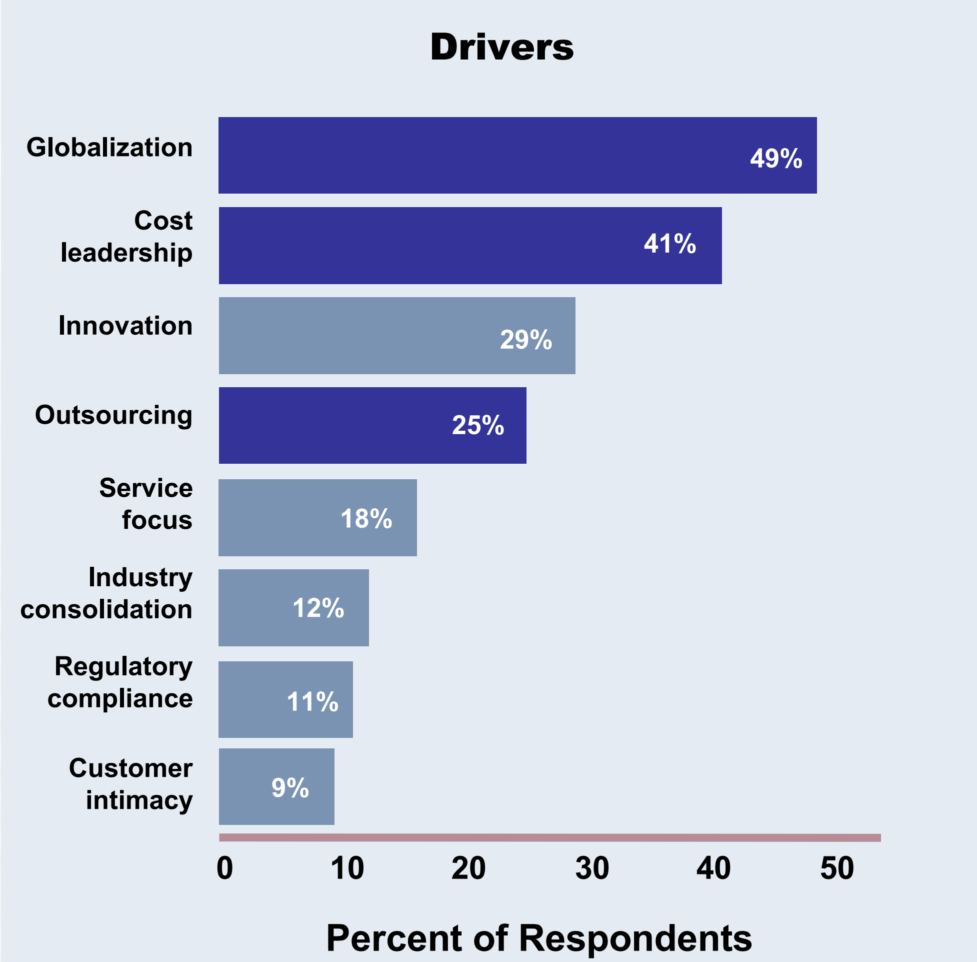
- **Standard of living**
- **Age**
- **Health costs**
- **Human rights**
- **Legal protections**
- **Environmental values**
- **Plus:**
  - Exchange rates



Source: U.K. Committee on Public Accounts

Low-Cost Sourcing a Top Priority

"Which business drivers are likely to have the most influence on your company's purchasing strategies in the next 10 years?"

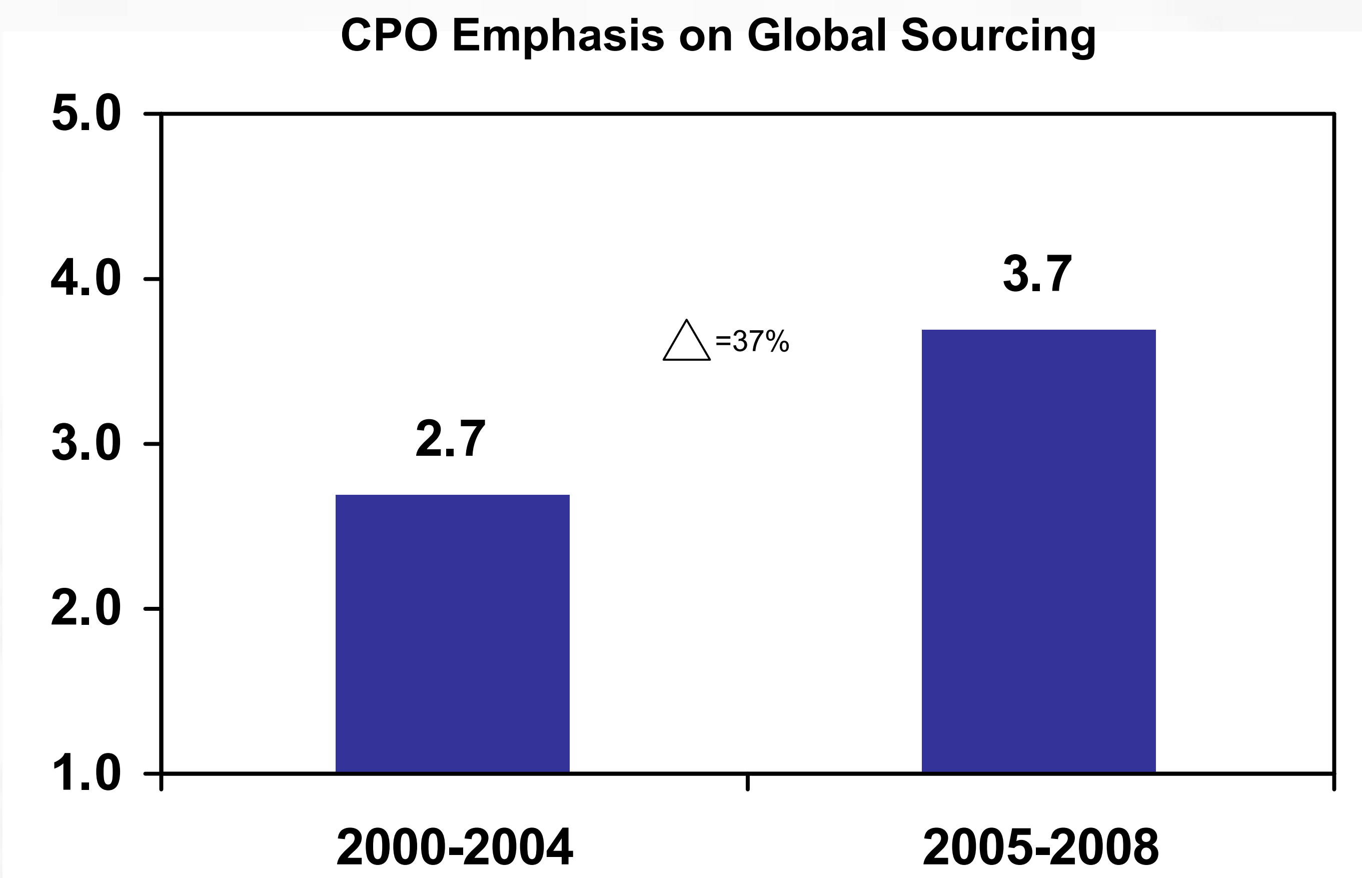


Source: Economist Intelligence Unit data, April 2005

- Globalization
  - Low-cost country sourcing
  - Growth markets
- Cost leadership
  - A bid qualifier, not an order winner
  - Even the high-end
- Innovation
  - Shorter product lifecycles
  - Technology / R&D
- Outsourcing
  - Core competency
  - Faster time to market

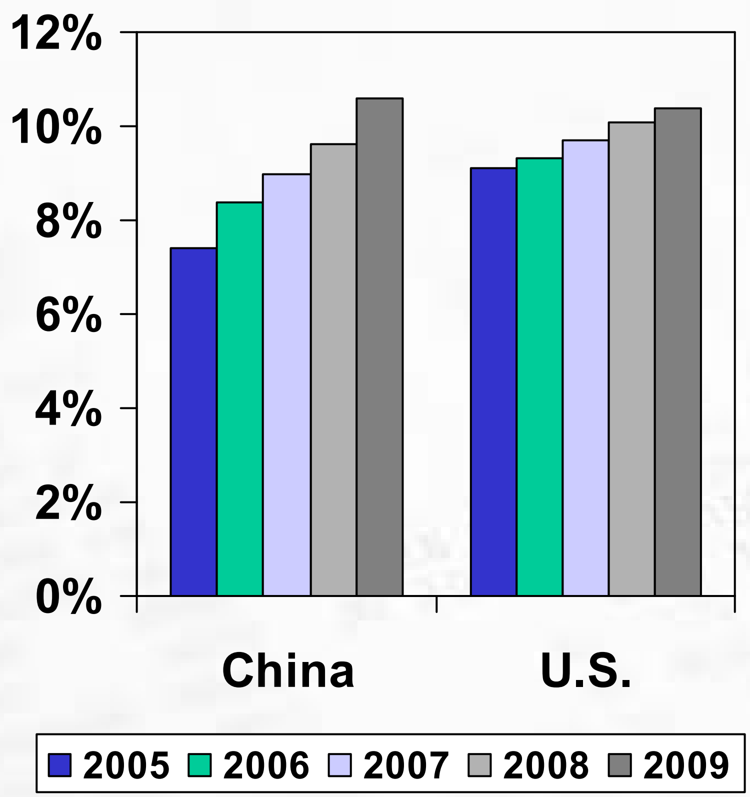
Sharply Rising Emphasis

- **37% increase in CPO interest**

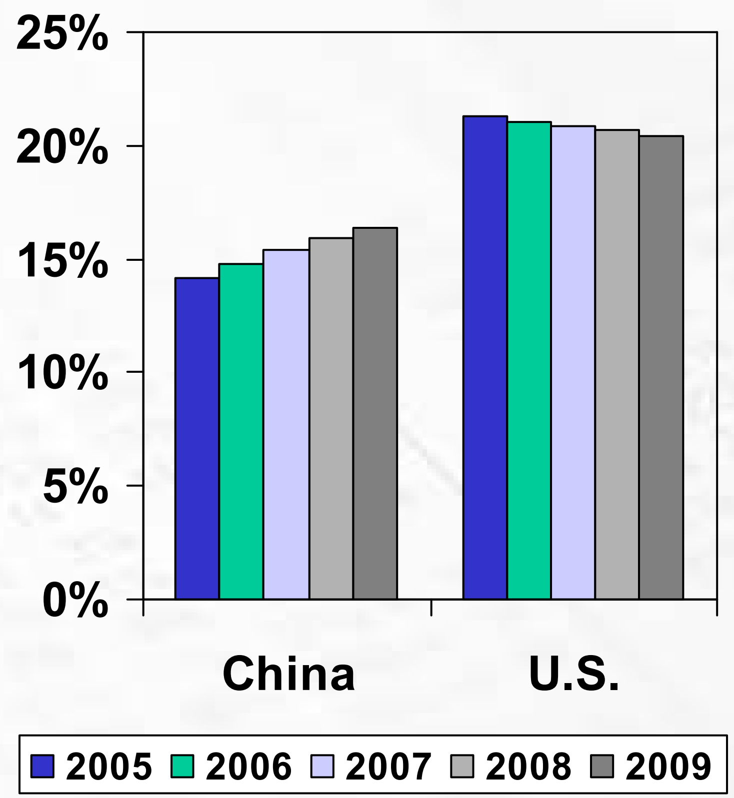


Offshoring of Production

Share of World Consumption

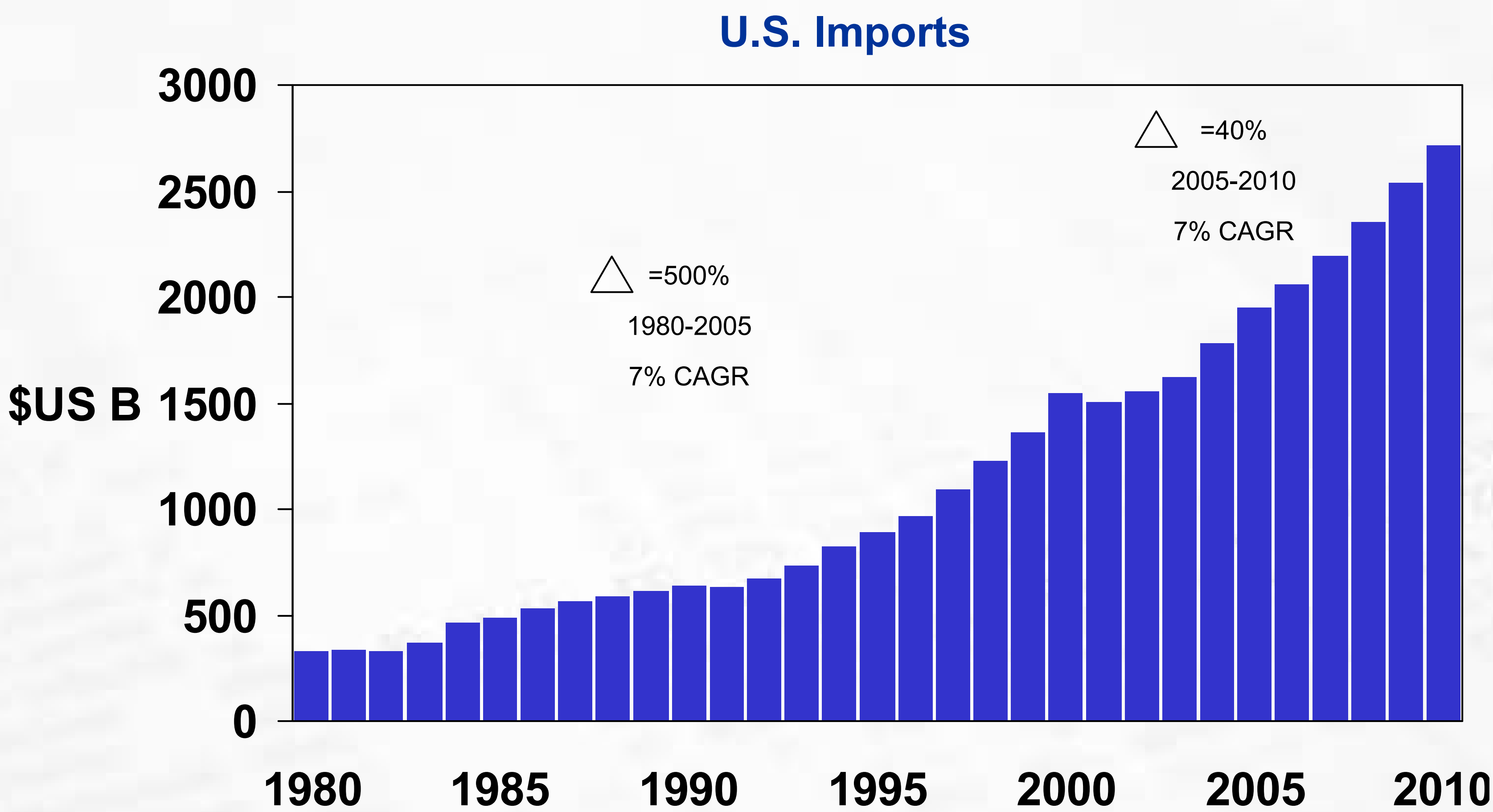


Share of World Production



Source: Economist Intelligence Unit

…Which is Driving More Imports



Sources: EIU WorldData

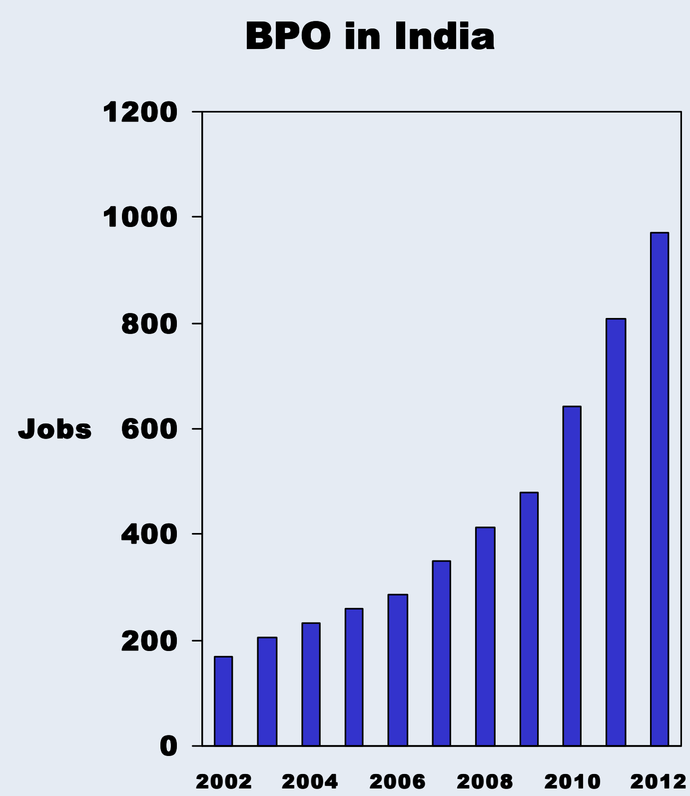
Business Process Outsourcing

Increasing the amount of external spend

- **Traditional outsourcing**
  - Call Centers
  - Logistics
  - Manufacturing
  - I.T.
- **Emerging off-shoring models**
  - Research & Development
  - Diagnostic testing
  - Lab services
  - Procurement

"This transforms Purchasing's job from transacting orders to running virtual factories"

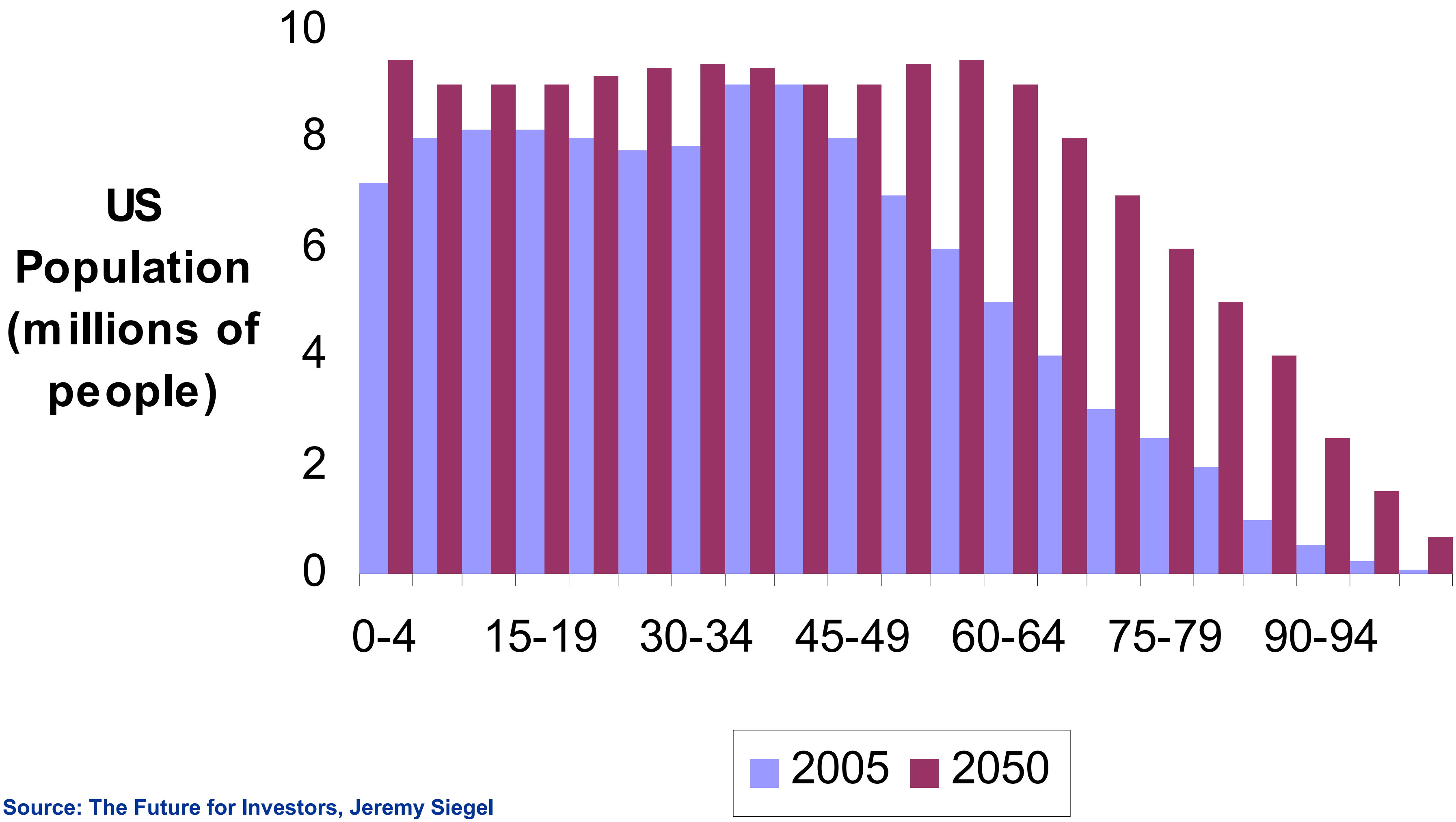
– Barbara Kux, CPO Royal Philips



Sources: EIU, Nasscom

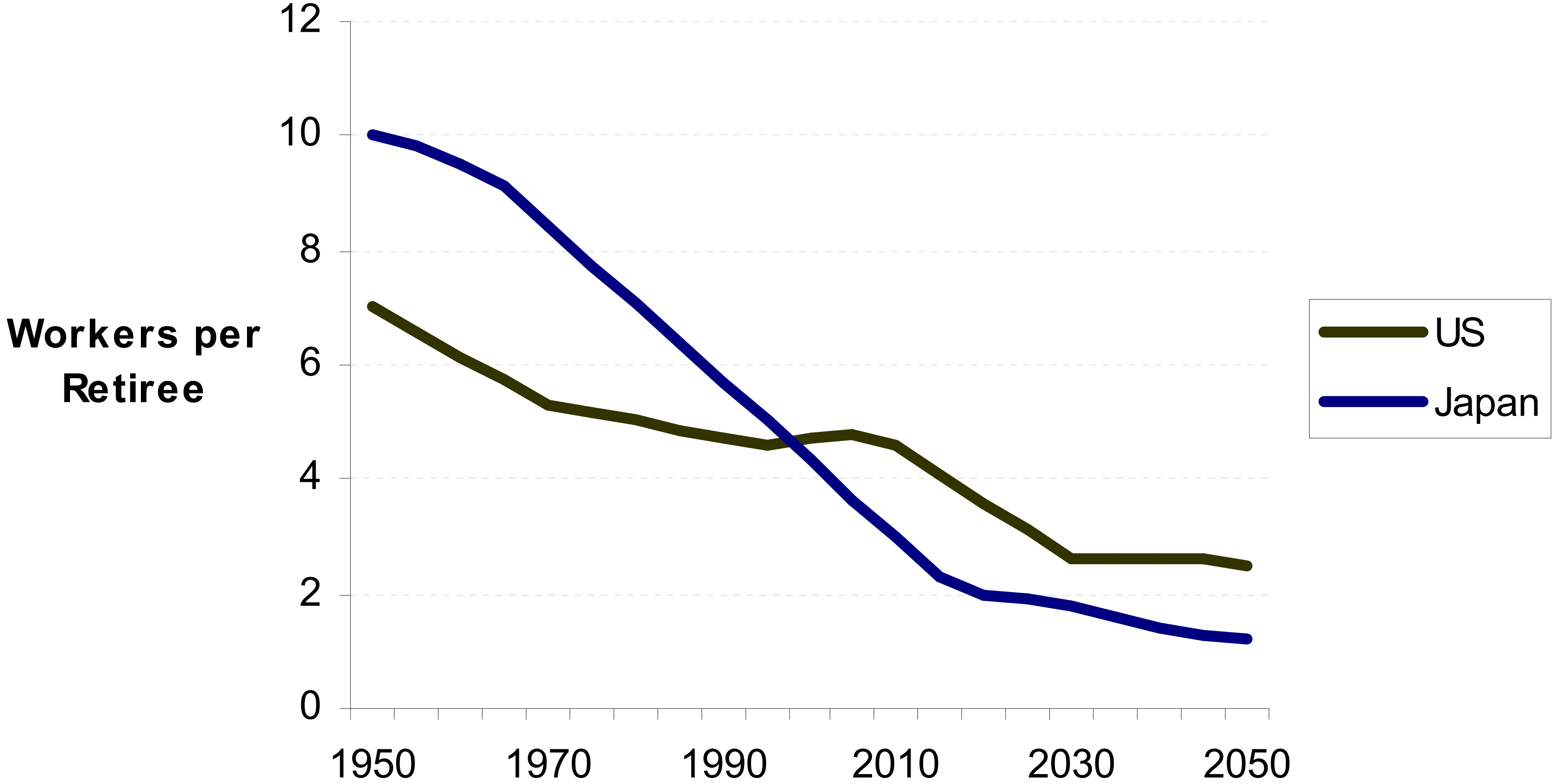
The View to 2050

Major Demographic Shift



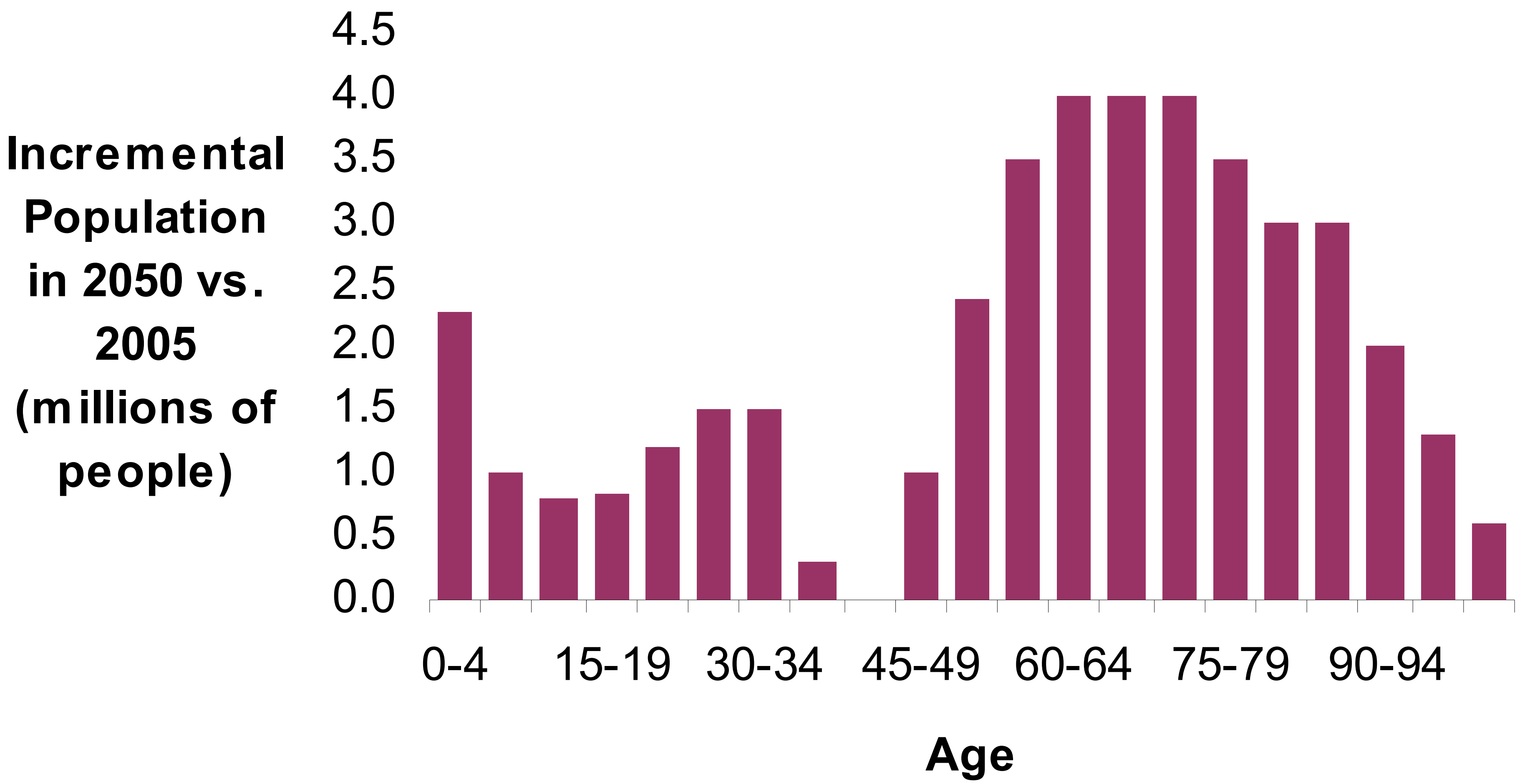
Source: The Future for Investors, Jeremy Siegel

Too Much Retirement



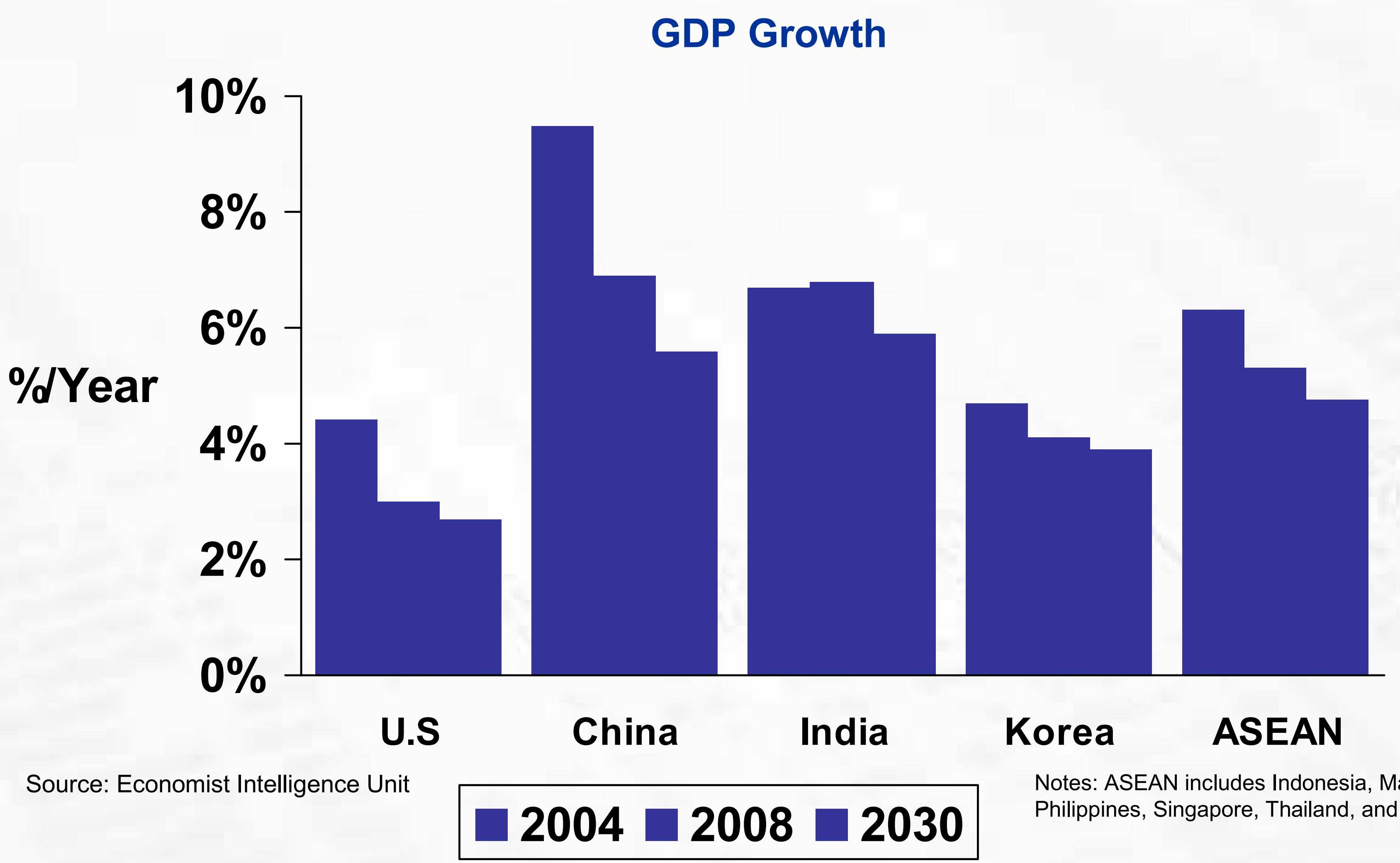
Source: The Future for Investors, Jeremy Siegel

Excess Liquidity



Source: The Future for Investors, Jeremy Siegel

Shift of Economic Growth to Asia



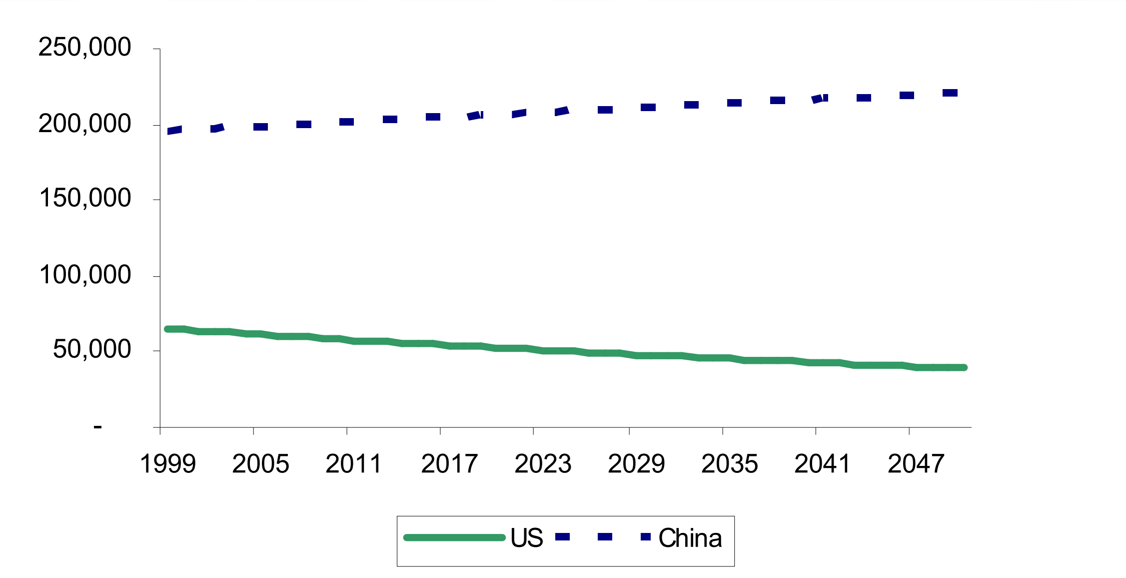
Source: Economist Intelligence Unit

Notes: ASEAN includes Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam.

Transfer of Know-How

- China graduating 3 times as many engineers as the U.S. (44% of undergraduates vs. 2% in the US)
- Chinese population growth: 3.3M/year
- US engineering graduates declining by 1%/year

U.S. vs. Chinese Engineering Graduates



Sources: National Science Foundation, CIA Factbook, Boston Logistics Group analysis of UN data

Study Results

3rd State of Strategic Sourcing Study

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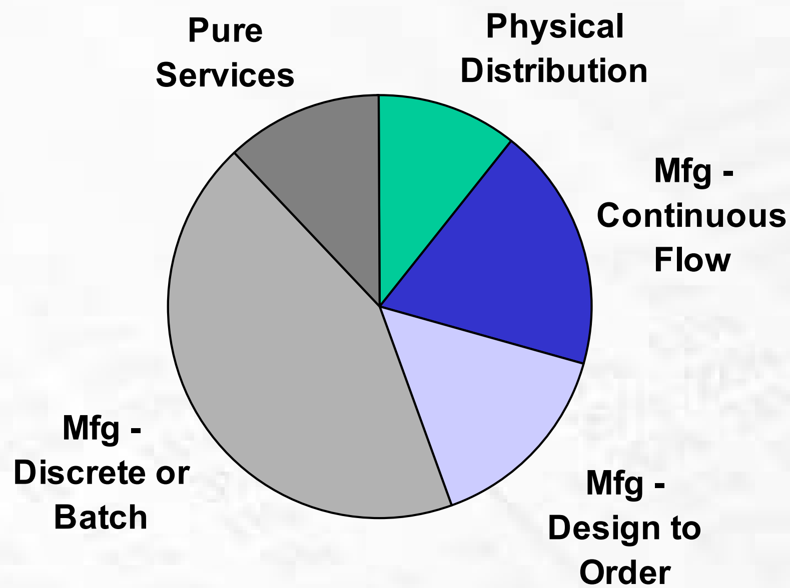
Study Background

- **92 respondents**
- **14 countries**
- **Supply chain & procurement focus**
  - 50% in procurement
  - 47% in supply chain
  - 3% other C-level
- **Broad representation**
  - $3.7 billion average revenue
  - Mix of small, medium and large enterprises
- **Interviews**

Respondents by Supply Chain Type™



Participating Companies

- **Aerospace & Defense**
  - Avionics manufacturer
  - Shipbuilder
  - Aircraft parts manufacturer
- **Automotive & Transport Equipment**
  - Automaker
  - Tire manufacturer
  - Power transmission manufacturer
- **Contract manufacturing**
  - Contract electronics manufacturer
  - Construction company
  - Electro-coating company
- **Chemicals & Plastics**
  - Plastics company
  - Agribusiness manufacturer
  - Smelting and recycling company
- **Consumer Products**
  - Spirits producer
  - Processed food manufacturer
  - Home accessories company
- **Distribution & Wholesaling**
  - MRO distribution company
  - Wholesale grocer
  - Logistics company
- **Electrical & Electronics**
  - Instrument manufacturer
  - Consumer electronics company
  - Lighting and wiring manufacturer

Participating Companies

- **Machinery & Equipment**
  - Semiconductor equipment mfr.
  - Electronic circuit machinery mfr.
  - Printing press manufacturer
- **Instrumentation & Devices**
  - Particle analysis equipment mfr.
  - Spectrometer manufacturer
  - Lab equipment manufacturer
- **Paper, Pulp, and Packaging**
  - Paper manufacturer
  - Lumber products distributor
  - Office supplies manufacturer
- **Pharmaceutical & Life Sciences**
  - Pharmaceutical manufacturer
  - Biopharmaceutical research firm
  - Drug dispenser solution company
- **Professional Services**
  - Financial services company
  - Insurance company
  - I.T. outsourcing firm
- **Retail**
  - Multinational grocery chain
  - Wireless technology retailer
  - Department store holding company

Extent of LCCS Today

- **54% are seriously engaged**
- **A way of life for about 30%**

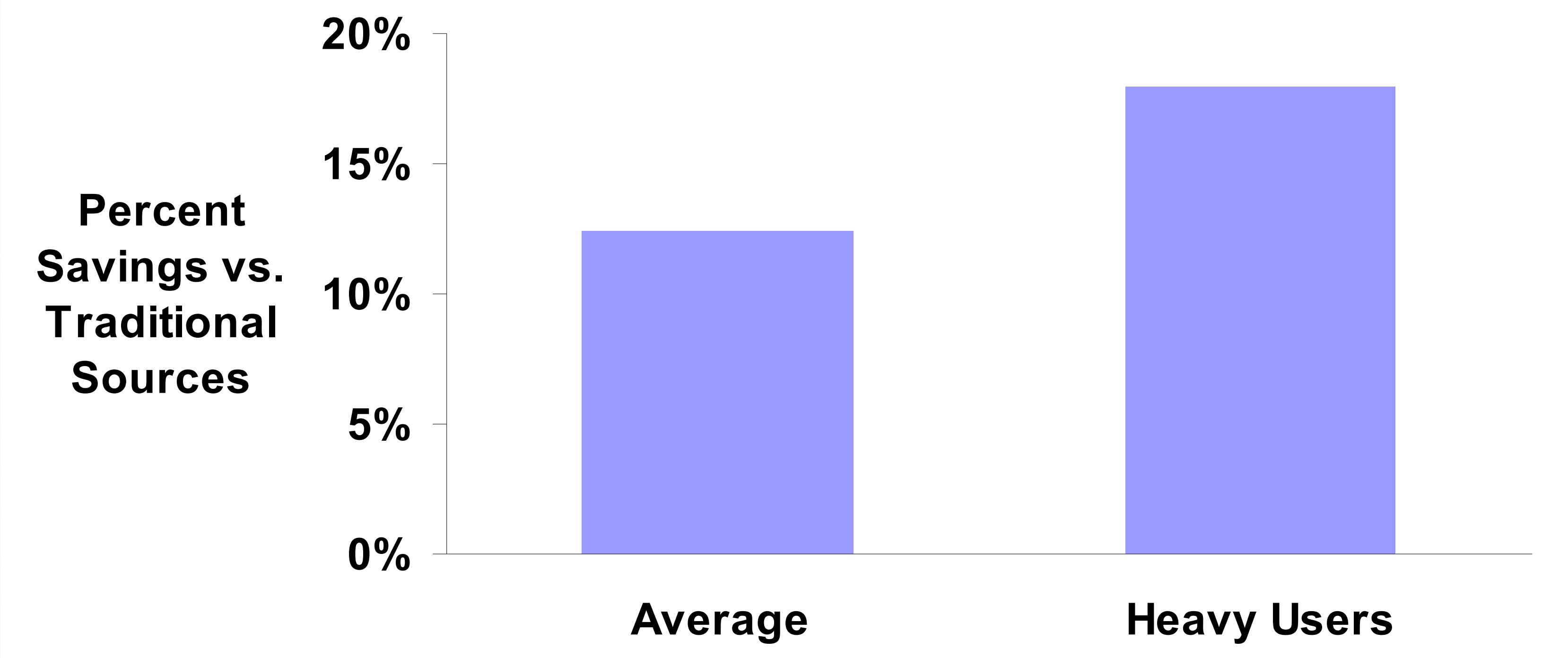
Extent of LCCS

Percent of Spend in Low-Cost Countries	Percent of Respondents
More than 50%	6%
40-50%	5%
30-40%	8%
20-30%	9%
10-20%	23%
0-10%	46%
Average	**20%**

Savings Realized

- **13% average net savings**
- **50% "experience premium"**

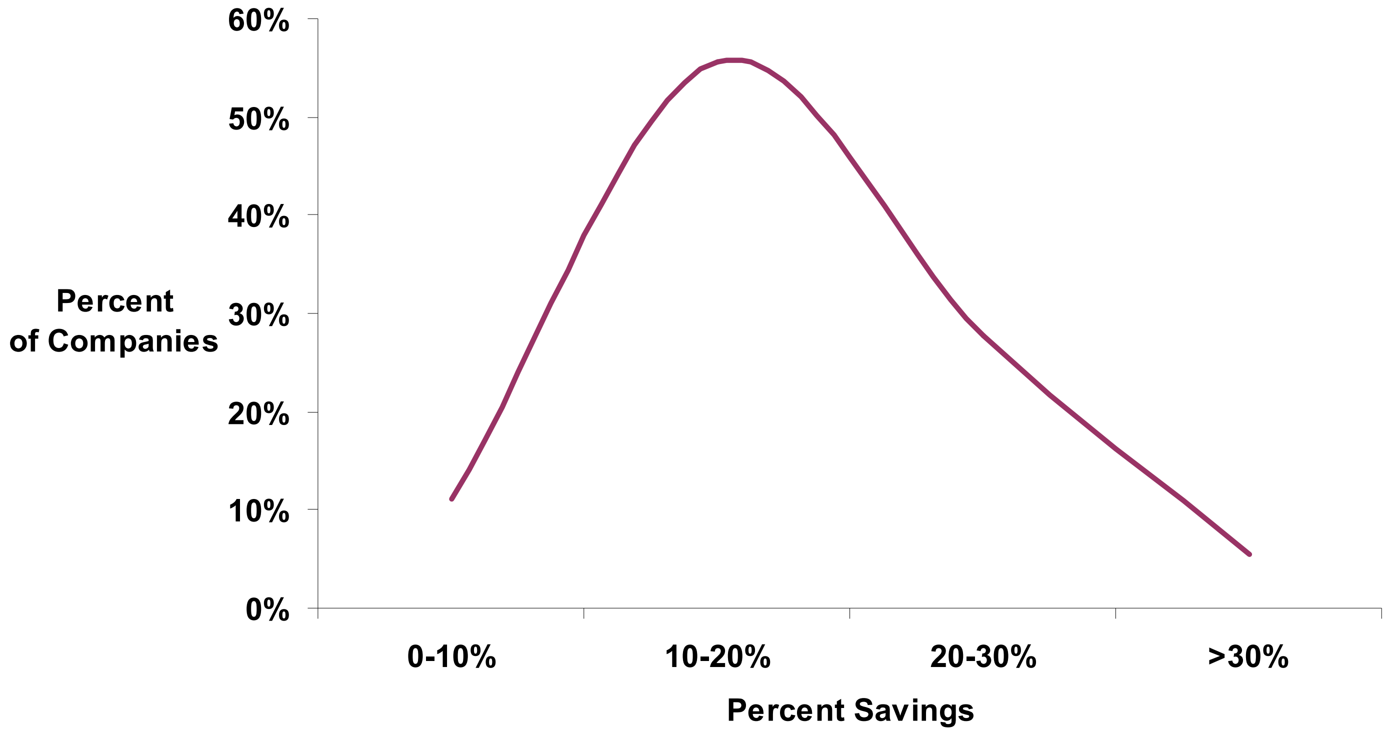
Average Savings Realized from LCCS



Distribution of Savings

- **Wide range of savings**
- **Little correlation by industry or commodity**

Distribution of Savings from LCCS



Investment in LCCS

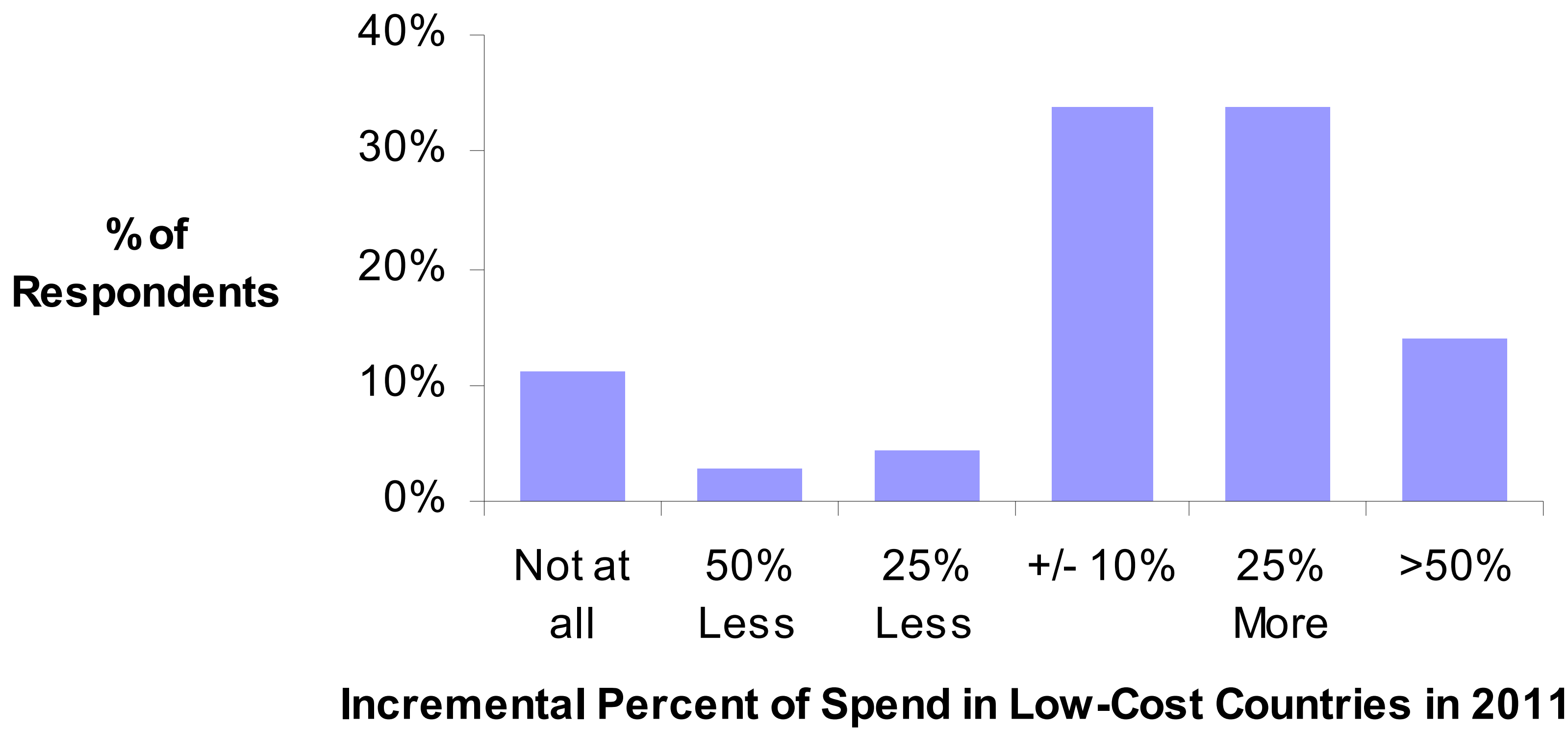
- Few are investing in LCCS
- However, 2.3x investment for those sourcing 20% or more from LCCS today

Investment in LCCS

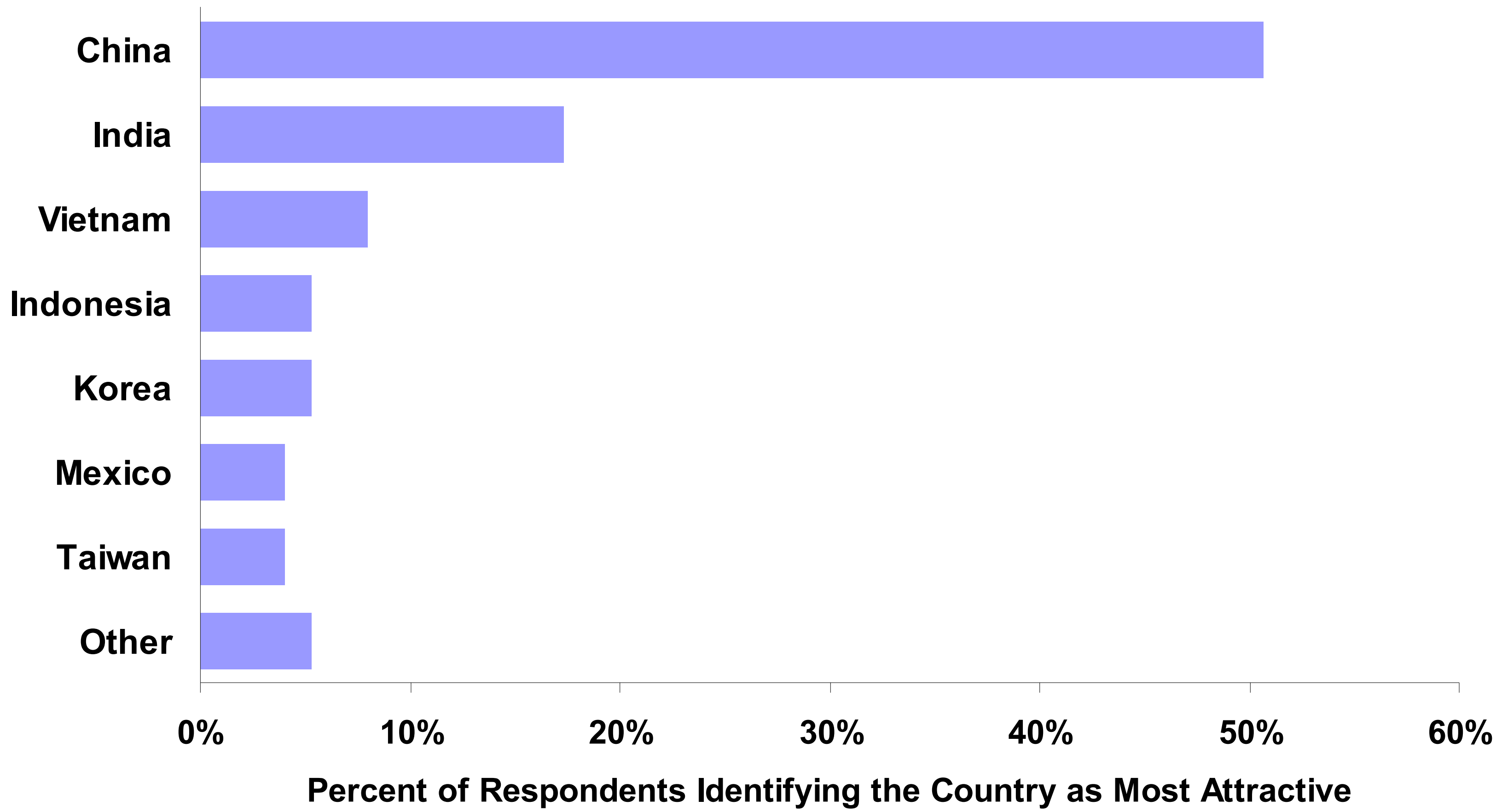
Percent of Respondents	Investment
66%	0-1x
20%	1-2x
11%	3-5x
0%	6-10x
4%	>10x

LCCS in 5 Years (2011)

- **14% more spend going to LCCS by 2011**
- **Few companies "half-pregnant"**



China, China, China



Industry in China, by Region

- **Northeast**
  - Beijing
  - Qingdao
  - Dalian
  - Tianjin
- **Central**
  - Shanghai
  - Nanjing
  - Suzhou
  - Hangzhou
- **South**
  - Guangzhou
  - Shenzhen
  - Hong Kong

Largest Challenges

1. **Developing a global sourcing process and staff**
2. **Managing the communication, culture, or geographic knowledge gap**
3. **Ensuring product or service quality**
4. **Maintaining visibility and control over logistics and inventory**

Implications

Ask the Right Questions

Supply Market Outlook

- Capacity (Utilization)
- Leadtime (Availability)
- Costs (Prices)
- Supplier concentration

Sourcing Decisions

- Best suppliers?
- Best contract term?
- Right price?
- Optimal supplier split?

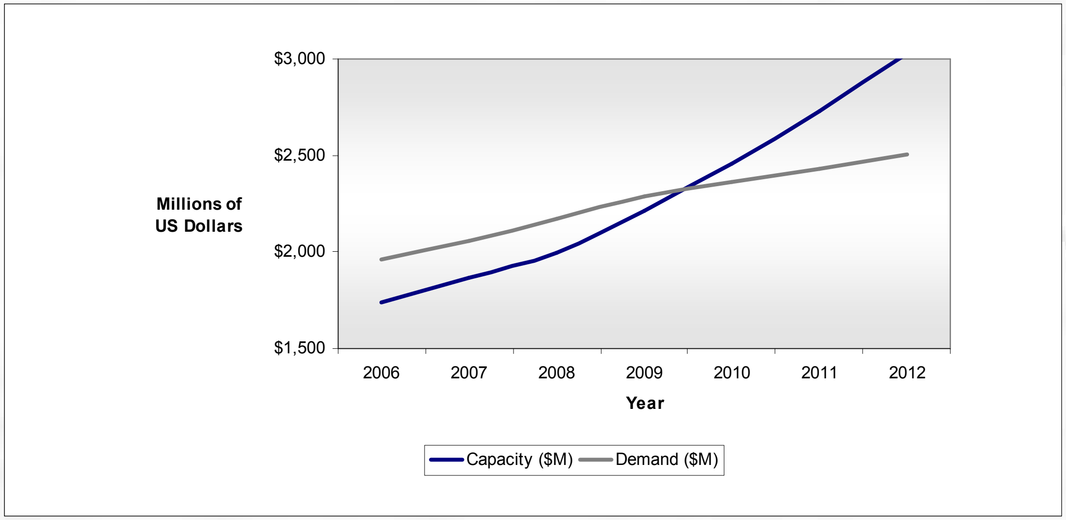
Analytical Logic

Ideal contract term?
Right price?
Best supplier split?

Get Reliable Supply Market Intelligence

- How much to offshore or outsource?
- Optimal contract term
- Optimal number of suppliers

Example of Supply and Demand Imbalance for an Industrial Capital Purchase



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Form a Bold Supply Chain Vision

- **New business models**
- **Innovation & creativity**
- **Relationships**

Don’t sacrifice the innovation engine for low cost!

Our Research Products

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

Shape the Future

David Jacoby: tel: (781) 283-5788; djacoby@bostonlogistics.com

Boston Logistics Group 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:

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

Industries Served:

- Supply Chain Solutions Providers: Advanced Planning and Scheduling (APS), Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), Location-Based Services (LBS), Transportation Management Systems (TMS), Warehouse Management Systems (WMS)
- 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