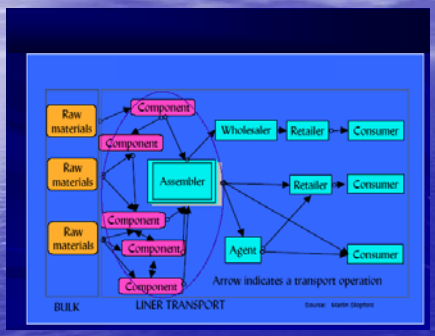
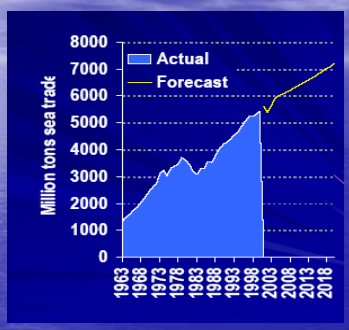
Trends in the International Shipping and Port Industries

Prof. Kevin Cullinane
School of Marine Science and Technology
University of Newcastle

The International Transport System

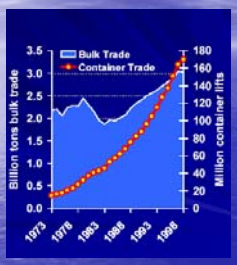


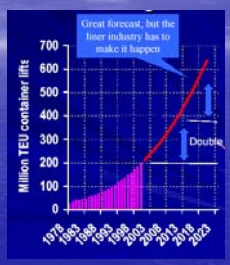
Trade Forecast



Growth Rate = 2~3% p.a.

Growth of Container Trade





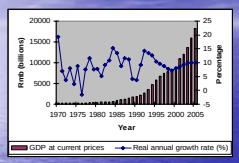
Bulk Growth Rate = 2% p.a.

Container Growth rate = 8% p.a.

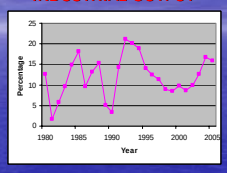
Forecast Container Growth Rate = 6% p.a.

The China Factor

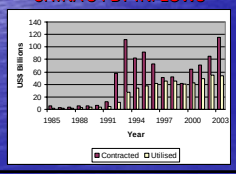
CHINA'S GDP GROWTH



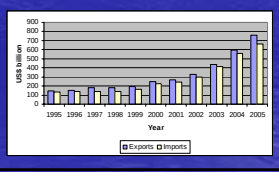
CHINA'S REAL GROWTH IN INDUSTRIAL OUTPUT



CHINA'S FDI INFLOWS



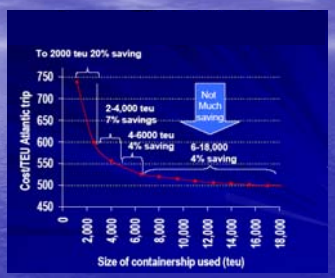
CHINA'S INTERNATIONAL TRADE



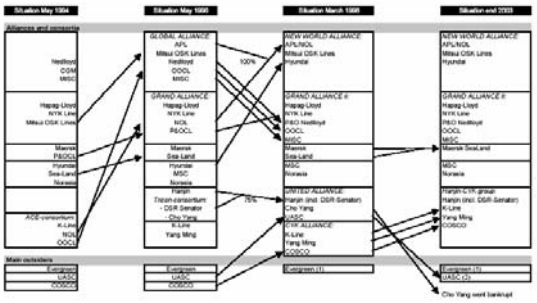
Major Trends in Container Shipping

- **Larger Containerships**
  - Maintain load factors
  - Load centring/ Hub and spoke systems
- **Increased concentration**
  - Alliances
  - M & A
- **Vertical integration**
  - **Dedicated terminals**
  - **Port operations**

Economies of Scale



Concentration and Cooperation in Liner Shipping



Implications for Ports

- Greater Transhipment and Hub Competition
  - Good location = mainlines + hubs
  - Mainlines + hubs = transhipment business
  - Transhipment business = feeder services
  - Feeder services = mainlines + hubs
- Increased Buying Power of Shipping Lines
- Globalisation and Concentration of Terminal Operators
- Vertical Integration

World Container Throughput (Millions of TEUs)

Port	2005	2004	2003
Singapore	23.20	21.34 (2)	18.10 (2)
Hong Kong	22.43	21.99 (1)	20.10 (1)
Shanghai	18.08	14.55 (3)	11.28 (3)
Shenzhen	16.20	13.66 (4)	10.60 (4)
Busan	11.84	11.50 (5)	10.40 (5)
Kaohsiung	9.47	9.71 (6)	8.84 (6)
Rotterdam	9.30	8.30 (7)	7.10 (8)
Hamburg	8.10	7.01 (8)	6.14 (9)
Los Angeles	7.50	7.32 (9)	7.18 (7)
Long Beach	6.70	5.78 (10)	4.69 (13)

Hutchinson Port Holdings

China	Hongkong International Terminals, Jiangmen International Container Terminals, Nanhai International Container Terminals, Ningbo Beilun International Container Terminals, Shanghai Container Terminals, Shanghai Pudong International Container Terminals, Shantou International Container Terminals, Xiamen International Container Terminals, Yantian International Container Terminals, Zhuhai International Container Terminals (Gaolan), Zhuhai International Container Terminals (Jiuzhou)
Other Asia	Hutchison Korea Terminals, Jakarta Container Port, Karachi International Container Terminal, Korea International Terminals, Myanmar International Terminals Thilawa, Thai Laemchabang Terminal, KMT - Westport, Port Klang
The Americas	Buenos Aires Container Terminal, Ensenada International Terminal, Freeport Container Port, Internacional de Contenedores Asociados de Veracruz, Panama Ports Company – Balboa, Panama Ports Company – Cristobal, Port of Lazaro Cardena, Terminal International de Manzanillo
Europe	Europe Container Terminals, DeCeTe Duisberger Containerterminal, Trimodal Container Terminal Belgium, Gdynia Container Terminal, Harwich International Port, Port of Felixstowe, Thamesport
Africa	International Port Services – Saudi Arabia, Tanzania International Container Terminal Services

PSA International

- Singapore Terminals
- Antwerp and Zeebrugge ports in Belgium
- Hesse-Noorde Natie in Rotterdam
- Voltri Terminal Europa (Genoa) and Venice Container Terminal in Italy
- Muara Container Terminal in Brunei
- Dalian, Tianjin, Fuzhou, Dongguan and Guangzhou Container Terminals in China
- Tuticorin Container Terminal in India
- Incheon Container Terminal and Busan New Port in Korea
- Hibiki Container Terminal in Japan
- Sines Container Terminal in Portugal
- Laem Chabang Terminal, Thailand
- Hong Kong

A Return to the China Factor

- Continued trade growth
- Impact of China's accession to the WTO
  - Changes to customs procedures etc
  - Impact on FDI and trade
  - Port Law 2004
  - Opening up of port and logistics market

Corollary

- China will continue to grow and will lead world trade
- Asia becomes even more of a focus for container shipping industry
- In shipping, service rationalisation and the deployment of large containerships will continue in phases
- Hinterlands of load centre ports must expand
- Mega-terminals will be further developed

Example Megaport Yangshan in Shanghai

A New Logistics Perspective

- Vertical integration of Independent port operators into the inland logistics market
- Traditional shipping lines will increasingly diversify into shore-based logistics
- This is supported by, and will contribute, to inland transport infrastructure investment and more efficient logistical systems
- Hinterlands increasingly overlap and ports compete for the same cargo base
- Greater industrial concentration in shipping and in ports is a complication, as is vertical integration into logistics and land transport
- A further complication is the increasing role of 3PLs in port and carrier choice
- A greater appreciation of the role of shipping and ports in international logistics and supply chains emerges

Conclusions

- The price vs Efficiency (quality of service) trade-off for ports remains very important
- Shipping lines face greater regulation
- Shipping lines will provide an important source of competition for the dedicated port operator
- Facilitated by continuing port/terminal privatisation
- The role of a port as a planning instrument for national or regional economic development has been completely undermined

Thank You