WHICH WAY TO THE SEA?
Landlocked Countries, Sea Transport and Port Competition

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WHY THIS MARITIME TOPIC?

- Landlocked, i.e. no coastline, no seaports
- The specific Swiss situation
  * not a member of EU
  * important transit flows, linked to ports
  * headquarters of shipping companies
- Existing scientific research (e.g. Rudel & Taylor)

Rudel and Taylor (1999)

- “For many years transalpine freight traffic has been at the centre of political debate and many research projects in Switserland, while sea transport logically remained a black spot.”
- “...interest in container traffic across the Alps grew with the liberalisation of the European transport markets, the projects for the new transalpine railway infrastructures across the Alps and the unexpected development in the Italian ports.”

THE MESSAGE

- The competitive position of a country and its companies will depend on the competitiveness of logistic chains
- Therefore: know that logistic chain!
- Try to influence elements under your control

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CONTENT

- Introduction
- Maritime transport: an overview
- The port as an economic entity
- The primary product of a port
- Globalization and ports: some unmistakable trends
- An attempt at channelling uncertainty

STARTING POINT

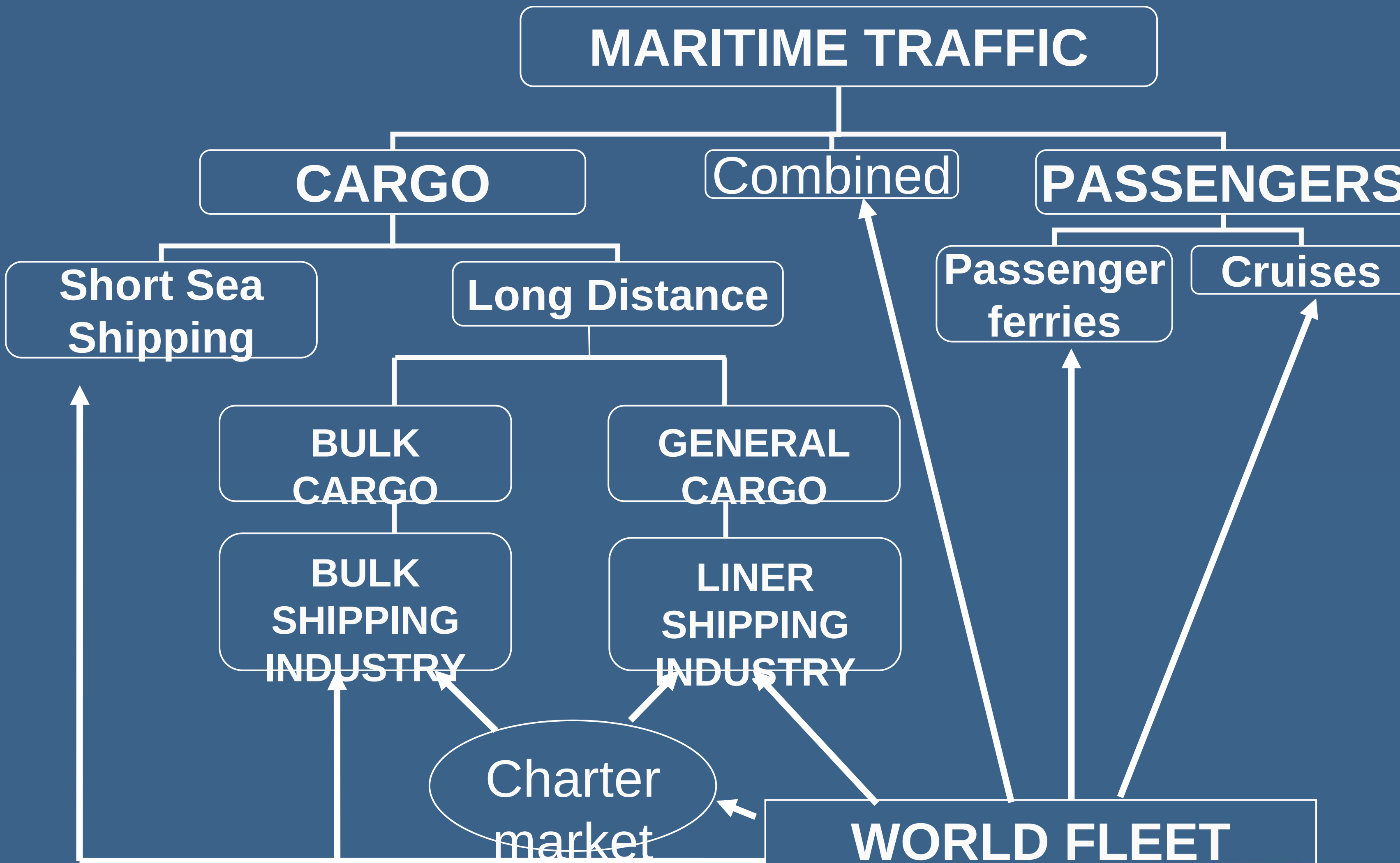
GLOBALISATION

International mobility of

- goods
- labour
- capital
- technology

GLOBALISATION AND PORTS

- there is more than goods flows
- a systematic shift in ownership structures
- who receives the benefits of public investments?

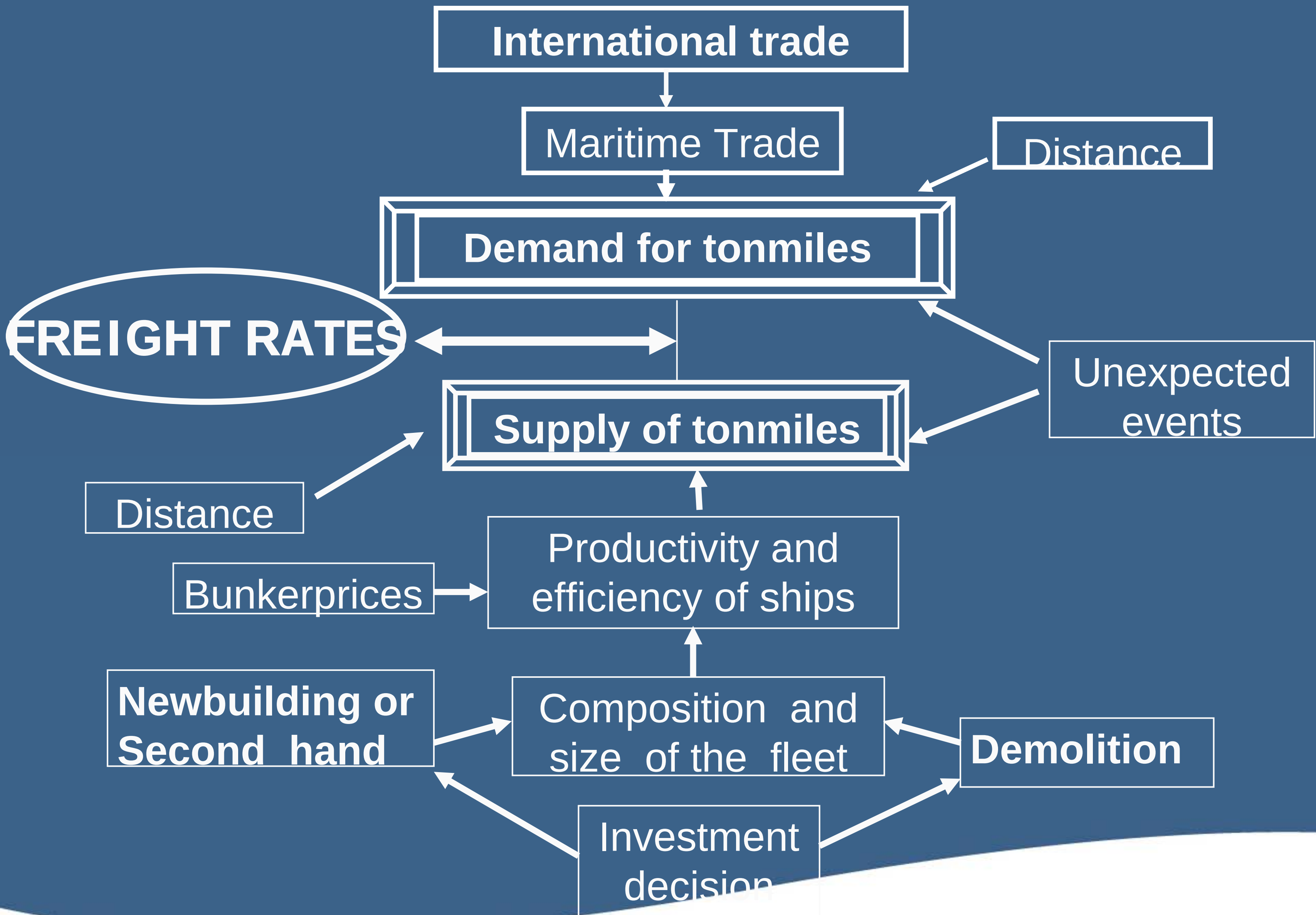

MARITIME TRAFFIC
CARGO
Combined
PASSENGERS
Short Sea Shipping
Long Distance
Passenger ferries
Cruises
BULK CARGO
GENERAL CARGO
BULK SHIPPING INDUSTRY
LINER SHIPPING INDUSTRY
Charter market
WORLD FLEET

CHARACTERISTICS

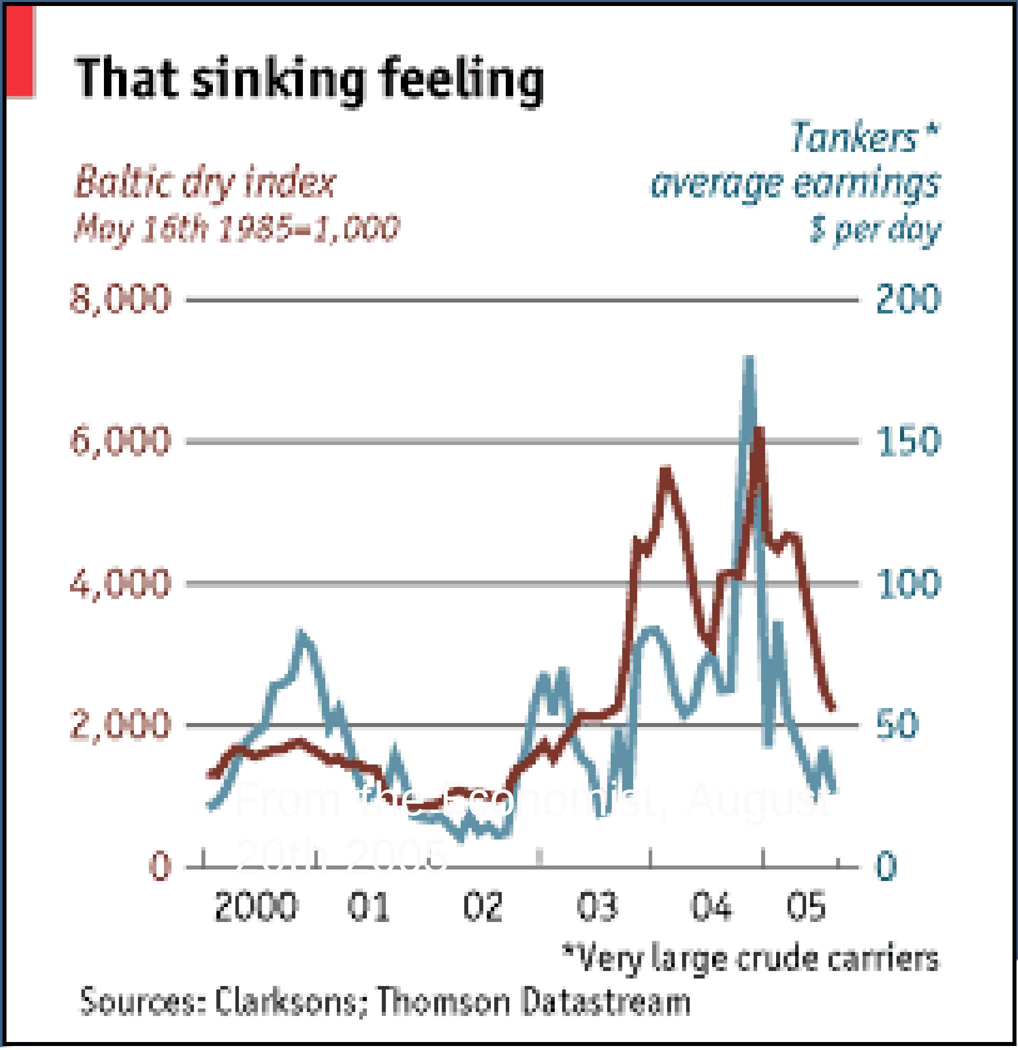
- Price of ships – large investments
- Volatility

VESSEL PRICES

Vessel prices (July 2005)		
	New	*2nd hand (10yr)*
Dry bulk	29 – 60 $m	25 – 54 $m
Tanker	44 – 120 $m	30 – 70 $m
Containership	27 – 125 $m	24 - .... $m
Train engine prices		
Bombardier	ca 5.6 $m	
Truck prices		
	ca 0.12 $m	


International trade
Maritime Trade
Distance
Demand for tonmiles
FREIGHT RATES
Unexpected events
Supply of tonmiles
Distance
Productivity and efficiency of ships
Bunkerprices
Newbuilding or Second hand
Composition and size of the fleet
Demolition
Investment decision

- Volatility reflected in freight rates and average earnings



From the Economist, August 20th 2005

STRATEGIES OF THE BULK SECTOR

- Cost-reduction strategies:
  - Economies of scale – optimal scale
  - Economising on staffing costs through the recruitment of seamen from low-wage countries
  - Reducing the tax burden by flagging out a large part of the fleet
- Multi-purpose vessels
- Attracting private investors

LINER SHIPPING

Volatility

⇔

Stability and service

⇒Conferences

⇒Strategic alliances

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THE PORT AS AN ECONOMIC ENTITY

A port is

- a chain consisting of consecutive links
- a link in a global logistics chain

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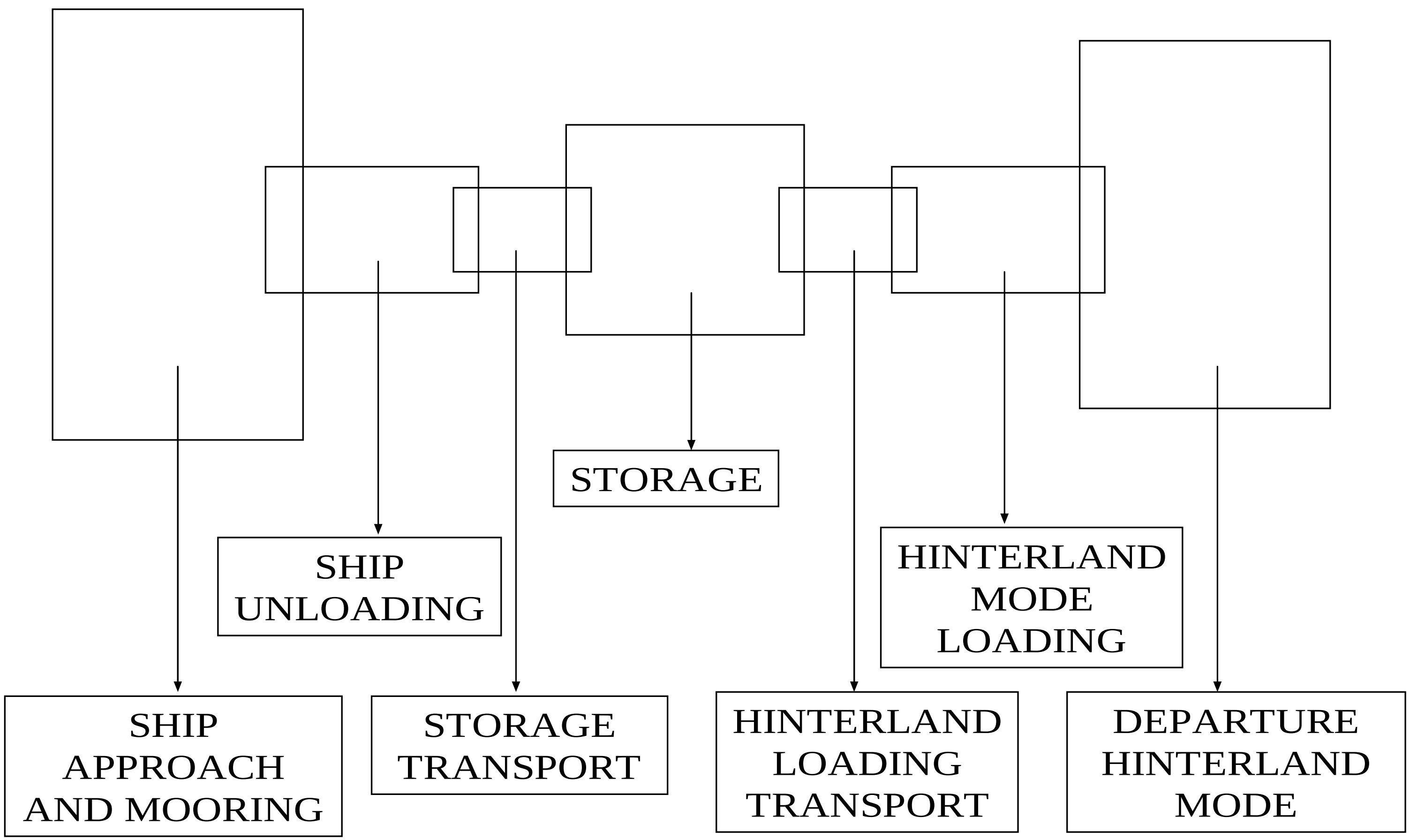
SUB-PROCESSES OF CARGO THROUGHPUT



Source: Vanelslander, 2005

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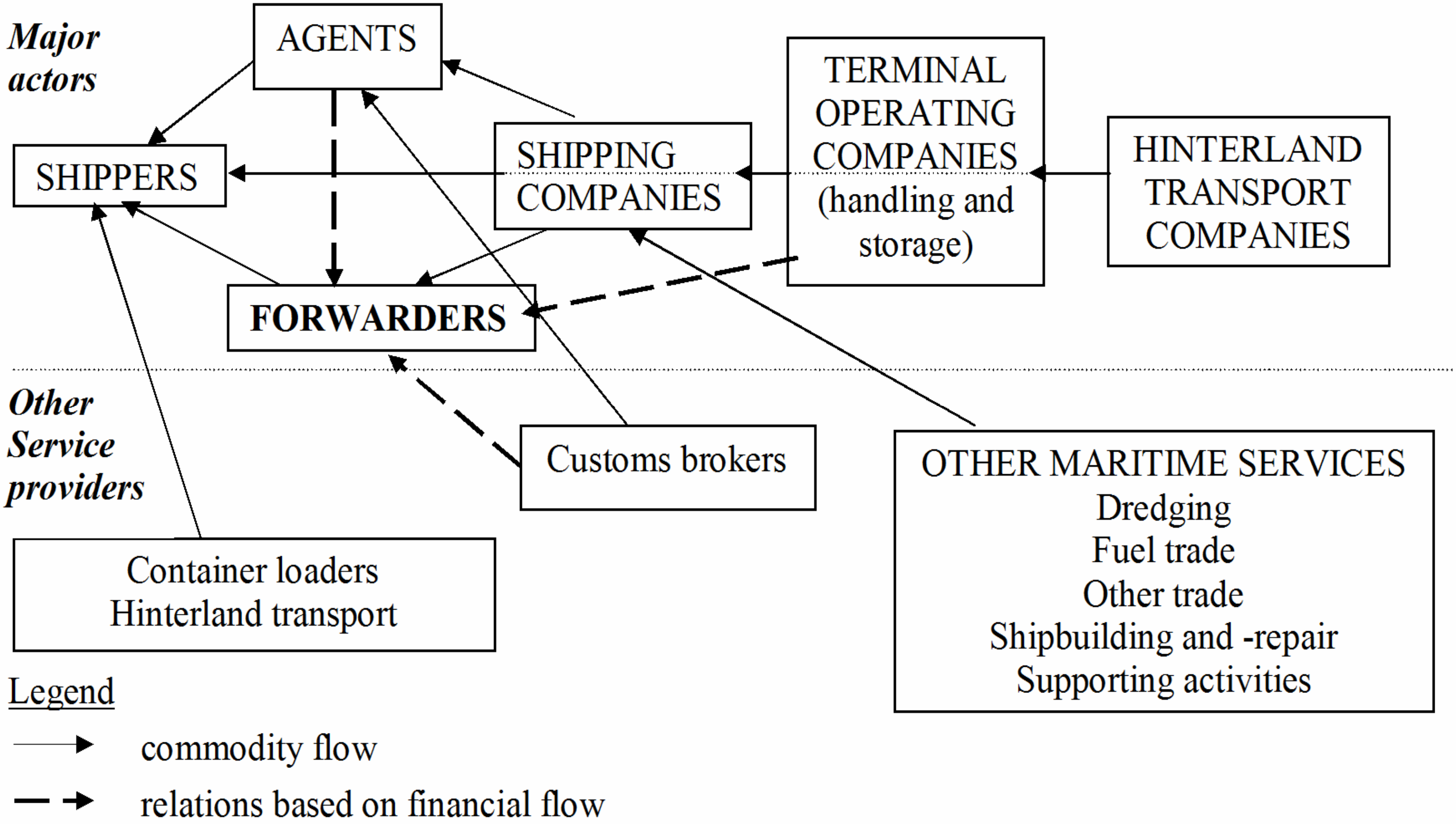
PORT ACTORS



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PORT ORGANISA-TION	PUBLIC			PRIVATE
	Type I	Type II	Type III	Type IV
Ownership	Public	Public	Mixed	Private
Autonomy of Port Management	very restricted	limited	High	complete
External public funding	extensive	important	very limited	no public aid
Access to provide services	open tender/ direct agreement	direct agreement pre-dominant	direct agreement	normally Closed
EU states employing organisation types I-IV	Dk, Gr, F, P, D, I	B, Dk, Fin, F, D, Gr, NL, P, E, S, I	Dk, Ir, S, UK	mostly UK, but also in other member states

PORT ORGANISATION STRUCTURE

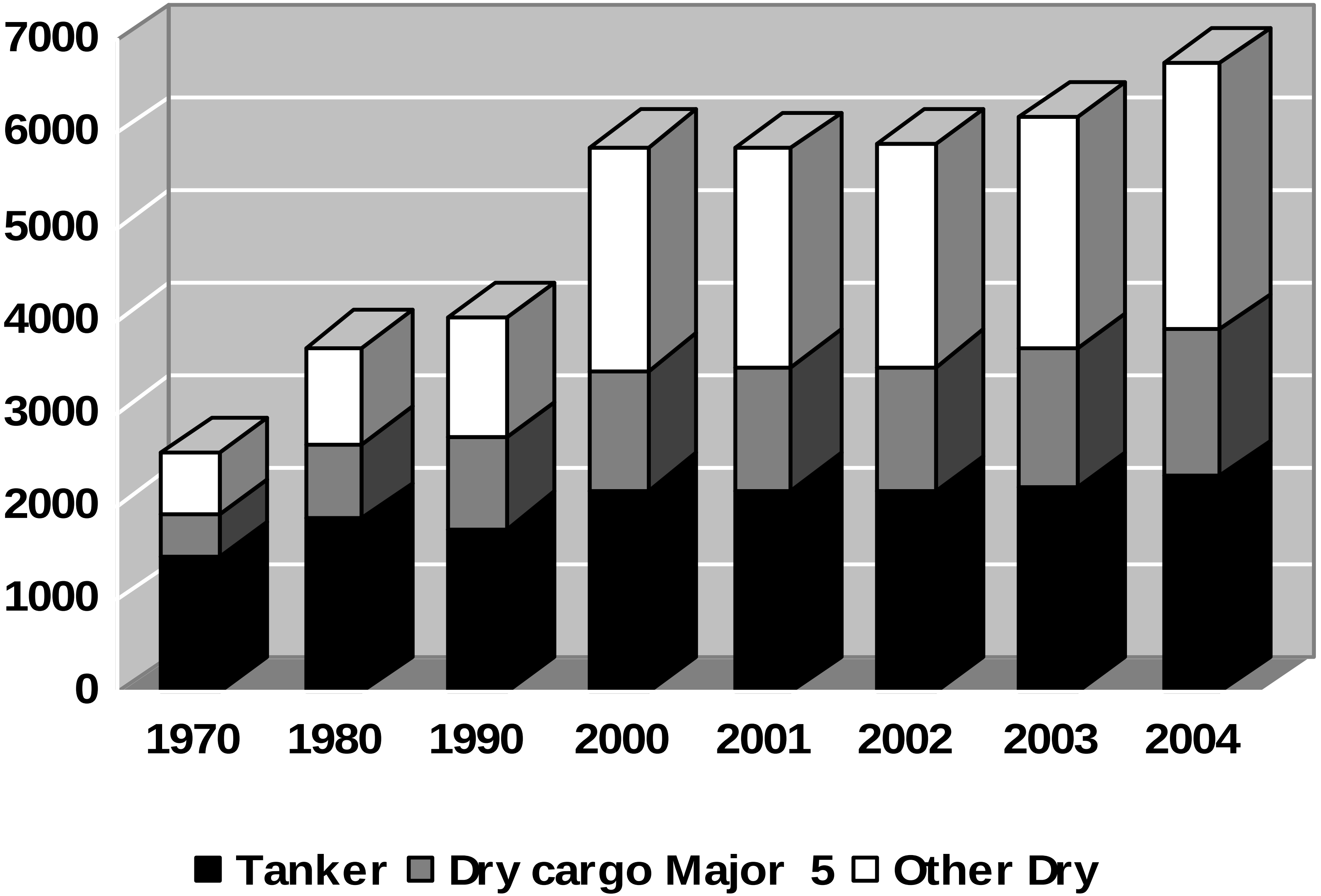
- Landlord ports
  - Public authority owns and manages basic infrastructure
  - Co-ordinates port development
- Limited-operating ports
  - Public authority provides basic infrastructure and facilities to port operators
- Operating ports
  - A port operating company runs port entirely

PRIVATE PARTICIPATION IN PORTS

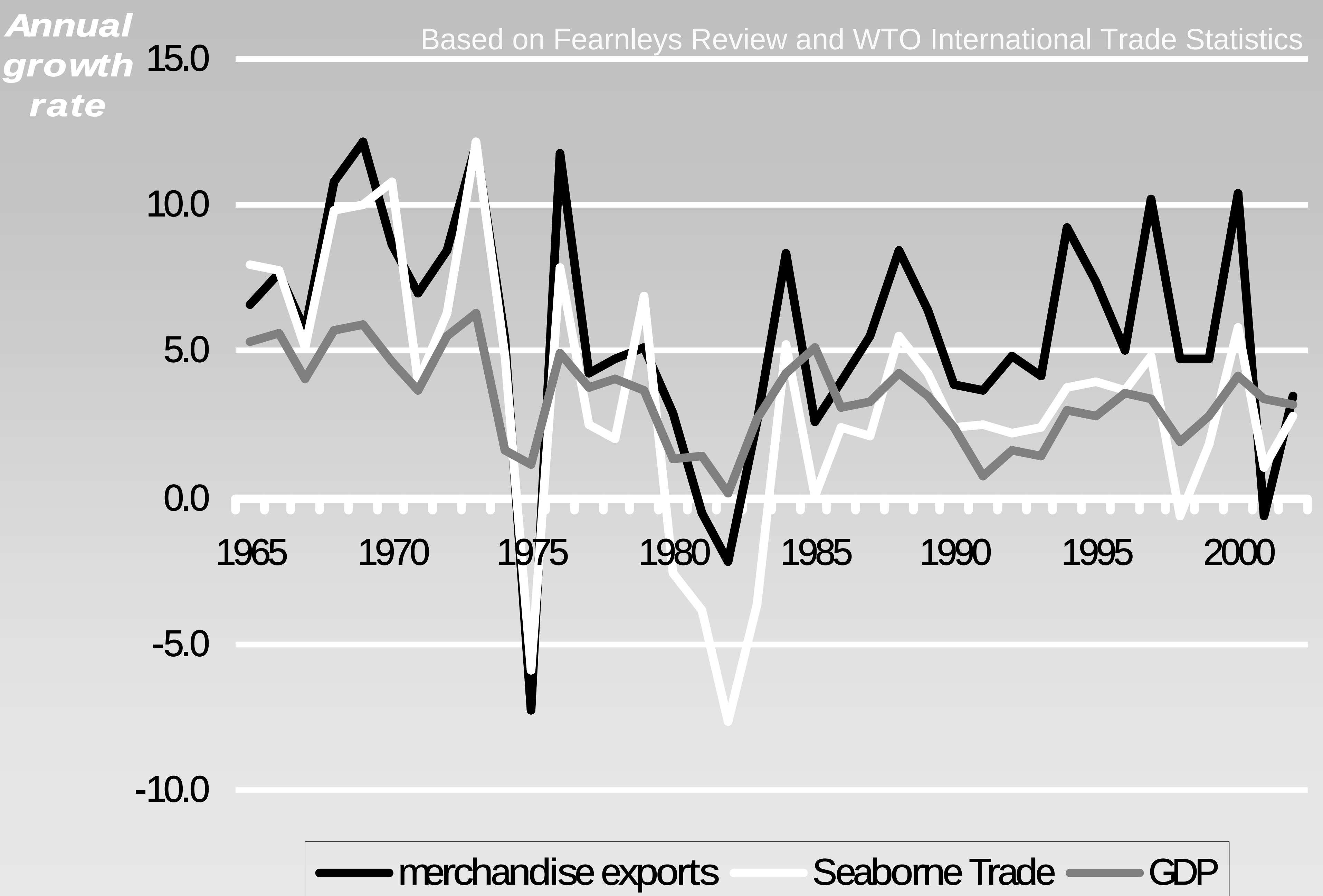
- Full privatisation
- Concessions
- Joint ventures
- Leasing
- Licensing
- Management contracts

THE MARITIME GOODS FLOWS

Source : UNCTAD, Review of Maritime Transport 2005



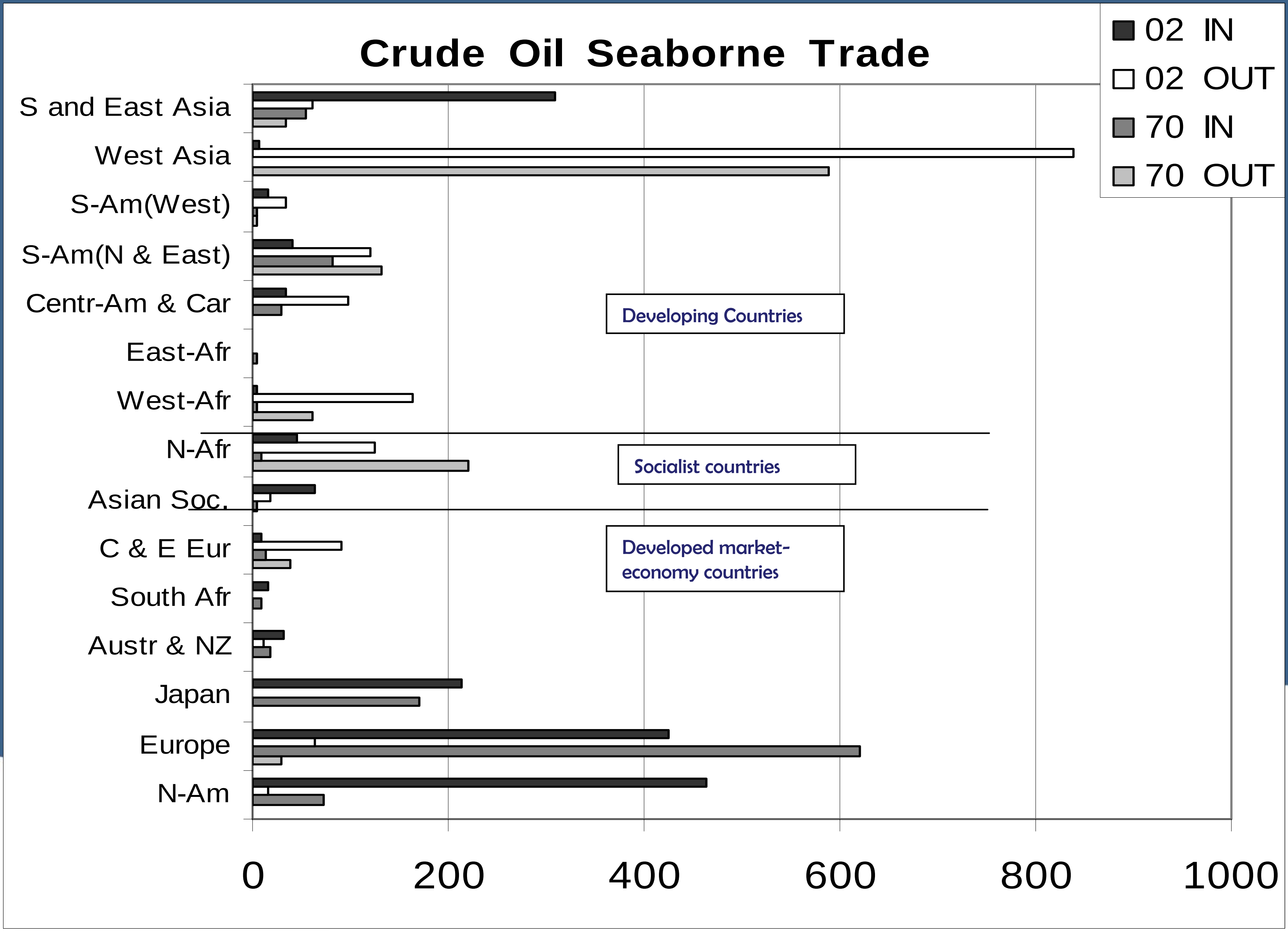
THE MARITIME GOODS FLOWS (ctd)



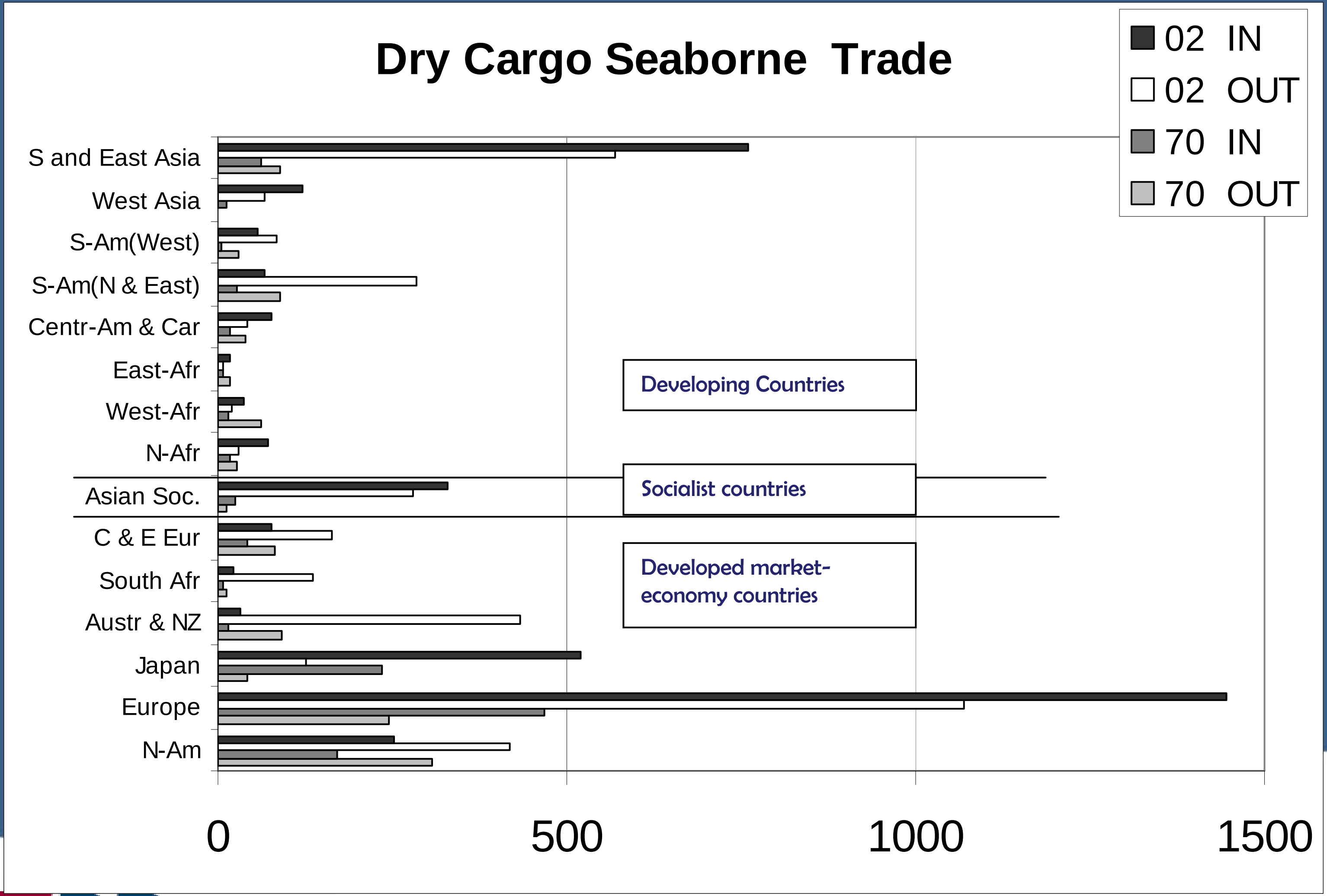
THE MARITIME GOODS FLOWS (ctd)

- Seaborne trade has shifted very strongly
- Increasing market share for developing countries (China, India, NIEs)
- Imbalances
- Strong effect on ports

EVOLUTION OF SEABORNE TRADE FOR SELECTED COUNTRY GROUPS



EVOLUTION OF SEABORNE TRADE FOR SELECTED COUNTRY GROUPS



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GLOBALISATION AND PORTS: SOME TRENDS

- Shipowners: a constant striving for scale expansion
- Terminal operating companies: the ‘free capacity’ game
- Port authorities: safeguarding the control of infrastructure

STRATEGIC CO-OPERATION IN THE MARITIME SECTOR

Market actors	**Shipowners**	**Terminal operating companies**	**Port authorities**
Shipowners	• vessel-sharing agreements • joint-ventures • consortia • alliances • mergers/acquisitions • conferences		
Terminal operating companies	• joint-ventures • dedicated terminals • capital participation • consortia	• mergers/acquisitions • joint-ventures	
Port authorities	• concessions concerning dedicated terminals	• concessions • joint-ventures	• alliances

Source: Heaver et al., 2001

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THE ISSUES

- Will this evolution continue in the future?
- What are the consequences?
- Which time path will shipowners follow?
- What kind of strategy might the other market players adopt?
- Will shipowners become the dominant players?

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SHIPOWNERS: SCALE EXPANSION

- Investments in additional capacity
- Strategic alliances, new partnerships and rerouting of vessels
- More concentration
- More control of logistics chains means more market power
- Bigger vessels?

Medium/large containership deliveries and orders

(position at 1 January 2006; number and nominal TEU capacity)

	No. of vessels	Teu
Deliveries of new vessels in 2005	214	901,000
Total fleet (1 January 2006)	2,586	7,671,700
On order for delivery in:		
2006	324	1,295,500
2007	362	1,355,600
2008	289	1,287,900
2009	67	348,800
Total on order	1,042	4,287,700

Note: Table only includes cellular vessels with a nominal capacity of 1,000 TEU

Source: LSE/Boxfile Containership Database

TERMINAL OPERATING COMPANIES

- Concentration movements as a buffer against vertical integration
- Investments in additional (over)capacity
- Entry of international capital
- Reaction of shipowners?

NEW AND PLANNED CONTAINER CAPACITY

Port	Terminal	Additional capacity / planned introduction
Amsterdam	CERES Paragon Containerterminal (Amerikahaven)	1,250,000 TEU / 2008
Antwerp	Deurganckdock terminals	6,400,000 TEU / 2007-2008
Bremen	CTIV	950,000 TEU / 2007 950,000 TEU / 2009
Flushing	Westerschelde Container Terminal	2,000,000 TEU / no date specified
Hamburg	Eurogate container Terminal Hamburg CTH HHLA Container Terminal Burchardkai CTB HHLA Container Terminal Altenwerder CTA HHLA Container Terminal Tollefort CTT	1,900,000 TEU / 2010 2,400,000 TEU / 2010 600,000 TEU / 2010 1,050,000 TEU / 2010
Le Havre	Port 2000	Phase 1: four berths at a tidal terminal / 2005-06 Phase 2: two berths at a tidal terminal / 2008-09 Phase 3: six berths at a tidal terminal / depending on traffic increase
Rotterdam	EUROMAX Terminal Tweede Maasvlakte	3,000,000 TEU / 2007 up to 16,000,000 TEU / no date specified
Zeebruges	Albert II dock	1,000,000 TEU / no date specified

Sources: various port authorities

PORT PROJECT FINANCE DEALS IN 2005

Project	Date	Value	Arranger	Lenders
Gangavaram	December 2005	$260m	State Bank of India Capital Markets	State Bank of India, Punjab National Bank, Canara Bank, DBI Bank, Central Bank of India, Union Bank of India and State Bank
DCT Gdansk	October 2005	€180m	Macquarie	Macquarie, DVB Bank
Antwerp Gateway	May 2005	€143m	Barclays Capital, KfW IPEX-Bank	Barclays Capital, KfW IPEX-Bank, DNB Nor Bank, KBC Bank
Sodrugestvo Group, soya bean terminal, Kaliningrad	March 2005	$75m	Standard Bank London	Standard Bank London
Pusan Newport offshore tranche	February 2005	$465m	ANZ, Banca Intesa, BTM, Calyon, DZ Bank, Kookmin Bank	ANZ, Banca Intesa, BTM Calyon, DZ Bank, Kookmin Bank, ABN Amro, WestLB, KfW, SMBC, Standard HVB Chartered
Pusan Newport onshore tranche	February 2005	W350bn ($354m)	Kookmin Bank, Samsung Life Insurance, Woori Bank	Kookmin Bank, Samsung Life Insurance, Woori Bank
Multi-Link Terminals' port project in Kotka, Helsinki and StPetersberg	January 2005	€71m	DVB Bank	DVB Bank

Source: Lloyds Shipping Economist, based on Cargo Systems, Jan/Feb 2006

PORT AUTHORITIES

- Decreasing market power
- One important trump card: concession policy
- Avoid conflict of interests
- More concentration?

ADDITIONAL FACTORS

- Safety aspects (e.g. containers as a potential target)
- Environmental aspects
- Maritime incidents

The new playing field:

Drastic scale expansion by shipowners and terminal operating companies, coupled with horizontal and vertical integration

CONSEQUENCES FOR MARKET STRUCTURE AND PRICING STRATEGY

- Justifications to deviate from pure competition (e.g. the conference system)
- Strong market concentration (e.g. alliances and dedicated terminals)
- Creating and financing (over)capacity
- Concession policies

THE SWISS CASE

Transferability of experiences, e.g. control of the supply chain:

- A chain approach to operations
- Vertical integration: companies becoming takeover targets of other companies
- Initiatives to increase customer loyalty

In combination with the own strengths (e.g. financial issues)

TO CONCLUDE

- ⇨ The scenarios are more or less fixed
- ⇨ Their timeframe remains uncertain

Timing and optimal speed of action will determine who ultimately comes out on top