

How to maximise port property values and convert it into your most strategic asset ©

AAPA Port Property Management & Pricing Seminar
Toronto



27 June 2008

www.aegirports.com

Aegir Port Property Advisers

Summary

- Where is the industry today?
- Increasing ship size
- Ports, logistic chains and intermodality
- Regionalisation
- Port property
- Port property asset management
- Investment demand for your assets
- Valuation & appraisals of port properties
- Opportunities & solutions
- Conclusions



Revolution not evolution

WHERE IS THE INDUSTRY TODAY?



27 June 2008

AAPA Port Property Management Seminar

www.aegirports.com

Aegir Port Property Advisers

Objectives for presentation

- Goals:
 - Offer a comprehensive overview of the port property sector within 60 minutes
 - Introduce some property issues and to thinking strategically in this regard
 - Exchange of ideas and concepts – there is a wealth of knowledge and experience in this audience
 - Identify critical areas to be further addressed



21st century market dynamics

Dynamic

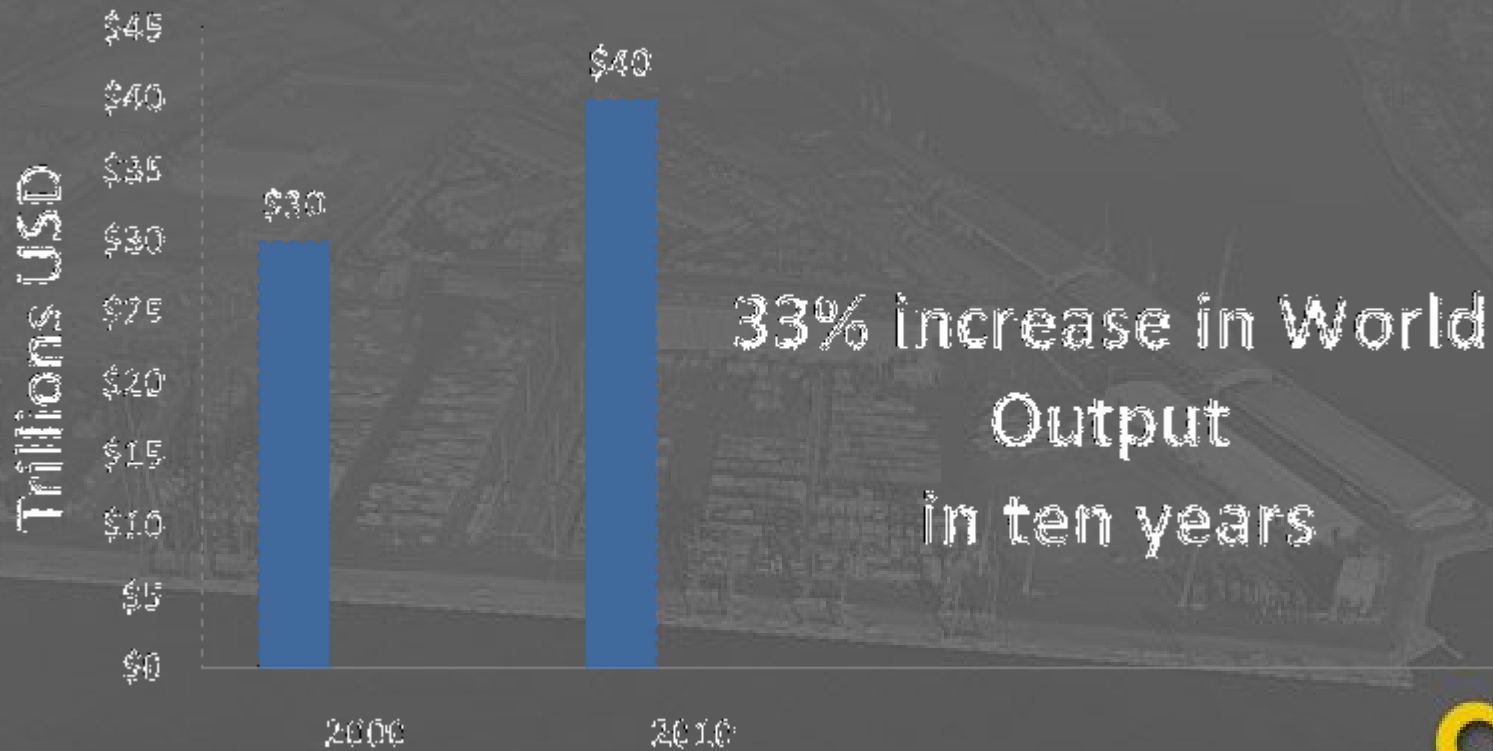
- Global trade growth
- Global Carriers
- Ship size
- Sea trade, logistics
- Political & social constraints
- Changing role of ports

Impact

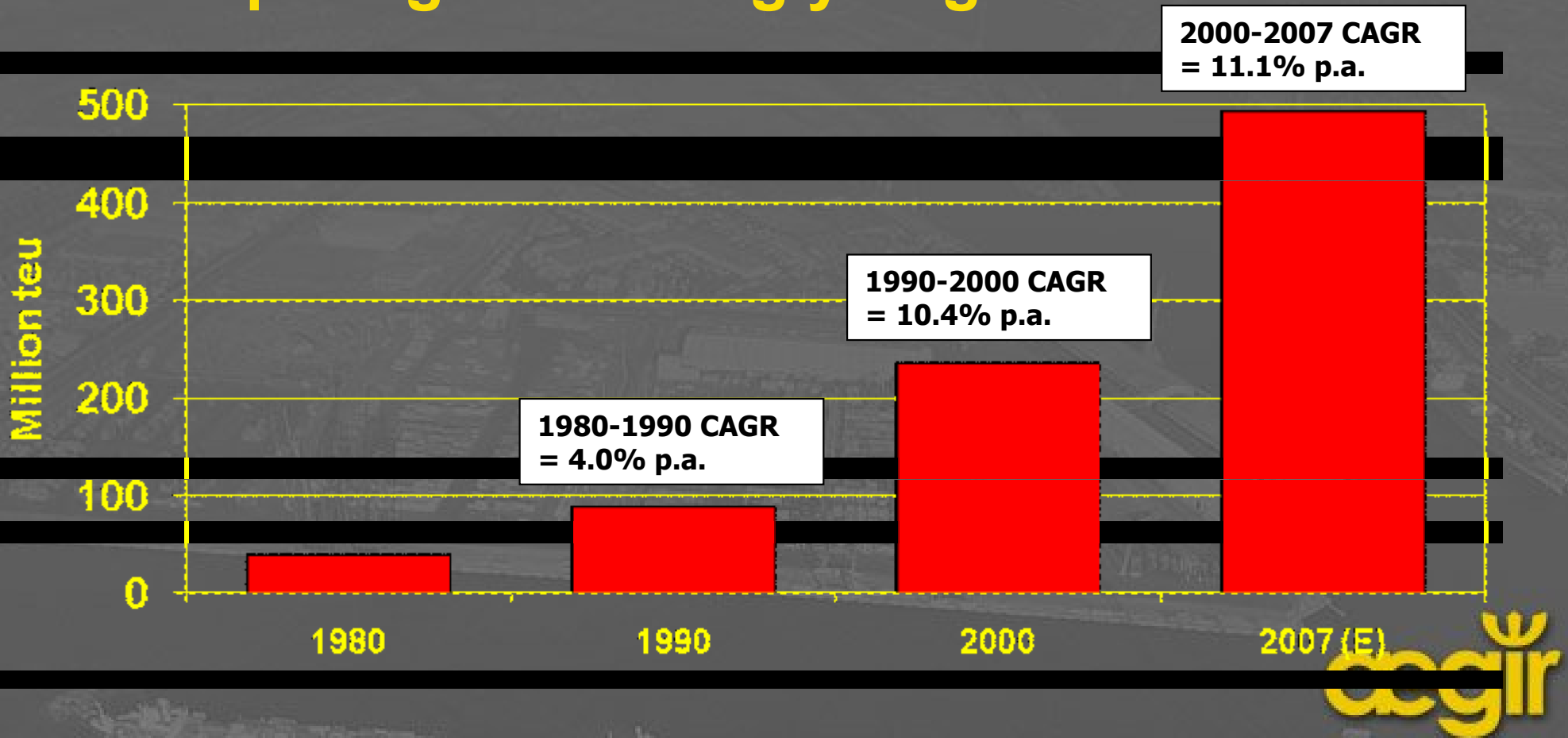
- Expansion, modernisation of infrastructure and ports for more capacity requires massive capital = release tied up equity in port properties
- Increasing vertical integration of global carriers in the logistics chain and their growing influence and control at the cost of both cities and ports and from local /regional to global.
- Deeper reach into the hinterland; integration of logistic chain; specialised facilities = more property
- Integrating supply chains = more real estate throughout hinterland
- Congestion & contamination = remove truck traffic, transfer non throughput activities off port
- Increasingly becoming property asset managers = shift business model



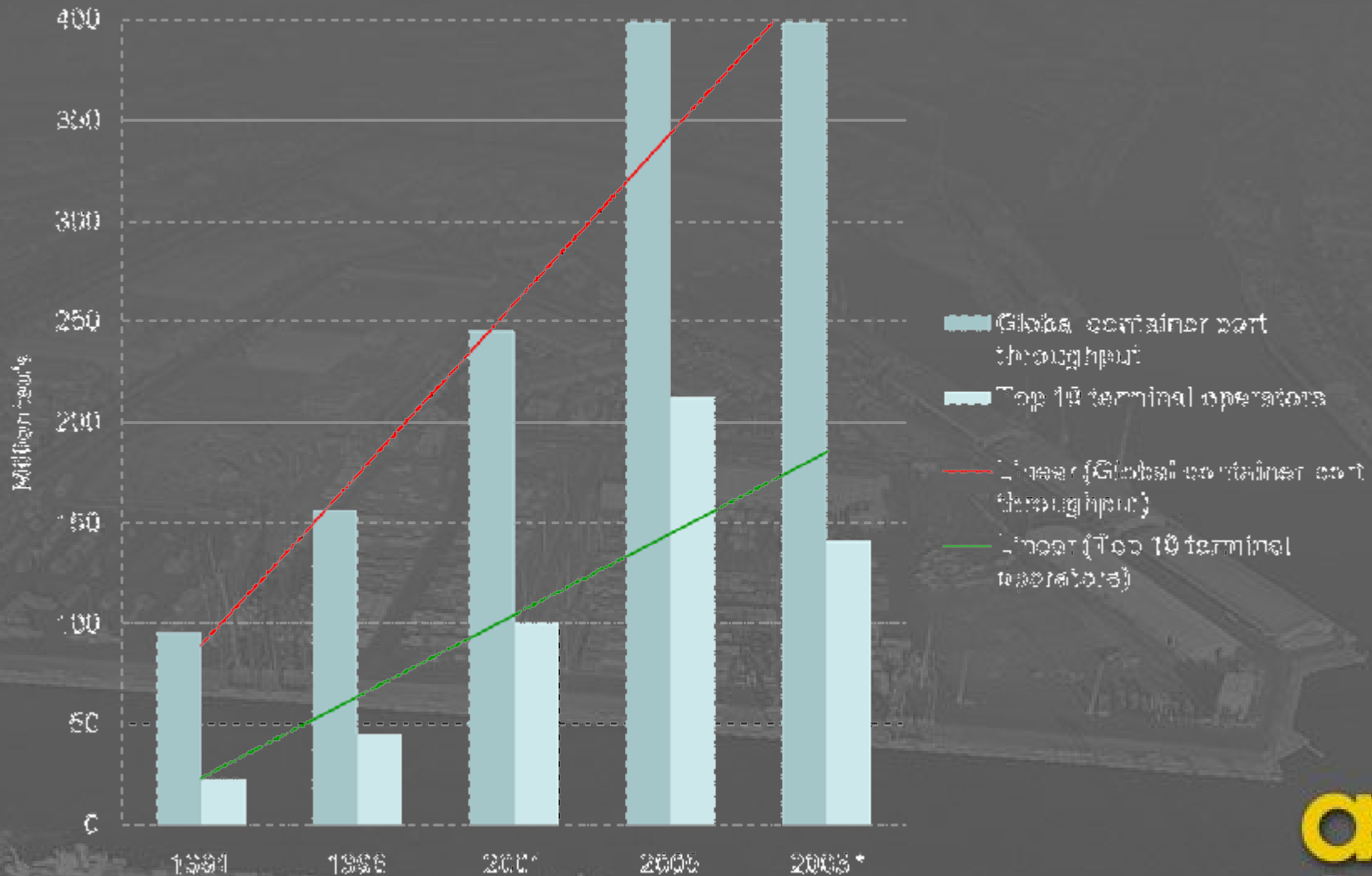
World Bank's 2010 Global Economic Prospects – 90% of Global trade by sea – but the savings are now on land



Global container ports: Relentless growth to slow down but cargo needs to be processed requiring increasingly larger land banks



Rise in global throughput = Rise in demand for ports & port properties

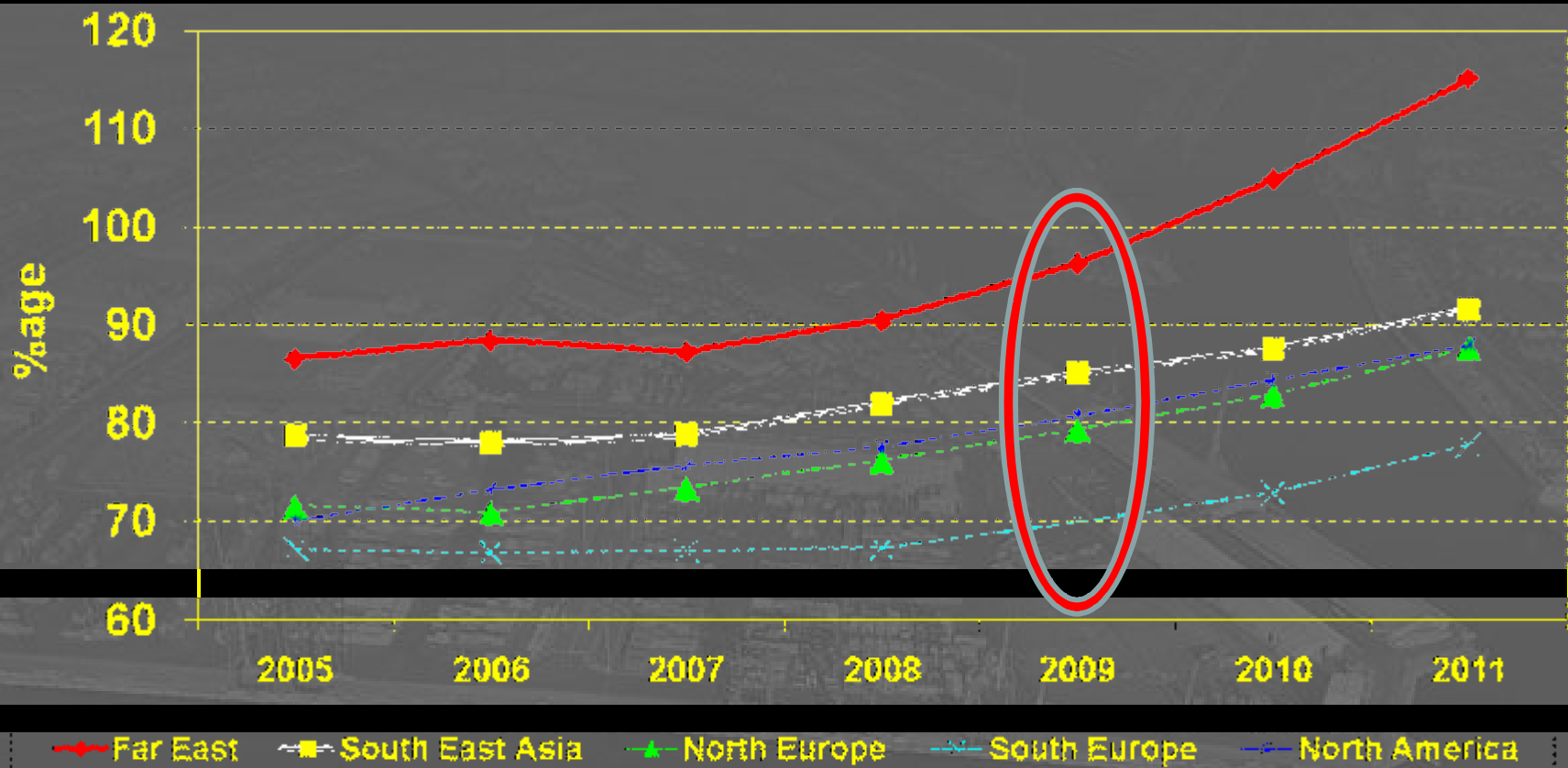


Terminal capacity

- Strong focus on optimising the capacity of existing terminals due to lack of land with such concepts as dry and inland ports, intermodal facilities
- Greenfield and brownfield terminal development face many obstacles (e.g. legal, environmental etc)
- Demand side of the equation quick to react/dynamic, capacity side generally very slow due to massive capital requirements
- 2006 global capacity = 614 million teu pa; forecast confirmed expansion to 2012 = 159 million teu
- 2012 total forecast confirmed capacity = 773 million teu pa; total forecast demand by 2012 = 774 million teu



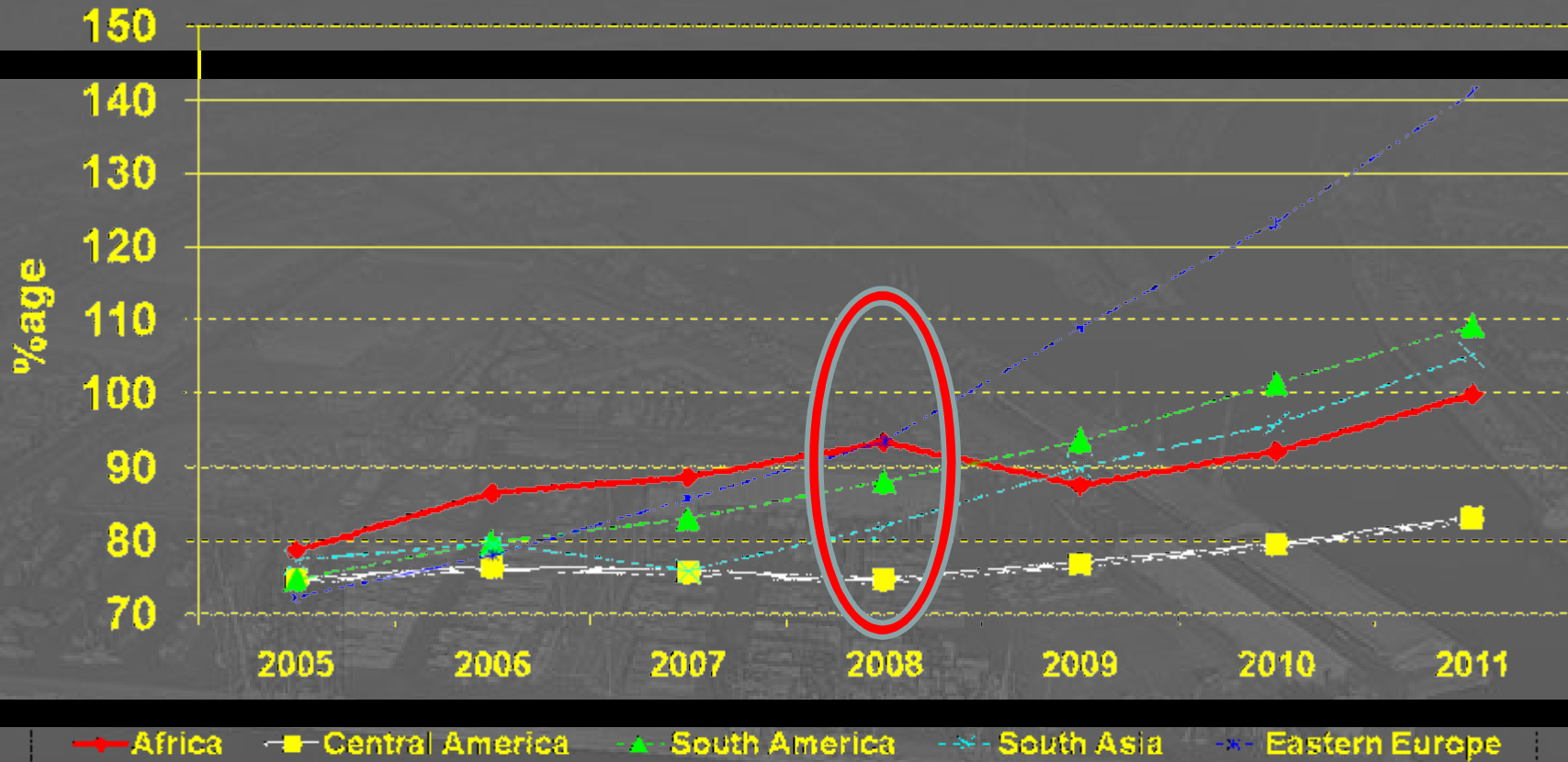
Forecast average capacity utilisation - developed nations



Note: Excludes unconfirmed capacity additions Source: Drewry Shipping Consultants Ltd



Forecast average capacity utilisation – emerging nations



Note: Excludes unconfirmed capacity additions

Source: Drewry Shipping Consultants Ltd



27 June 2008

AAPA Port Property

www.aegirports.com

Aegir Port Property Advisers

Need to reach ever deeper into the hinterland

INCREASING SHIP SIZE



27 June 2007

AAPA Port Property

www.aegirports.com

Aegir Port Property Advisers

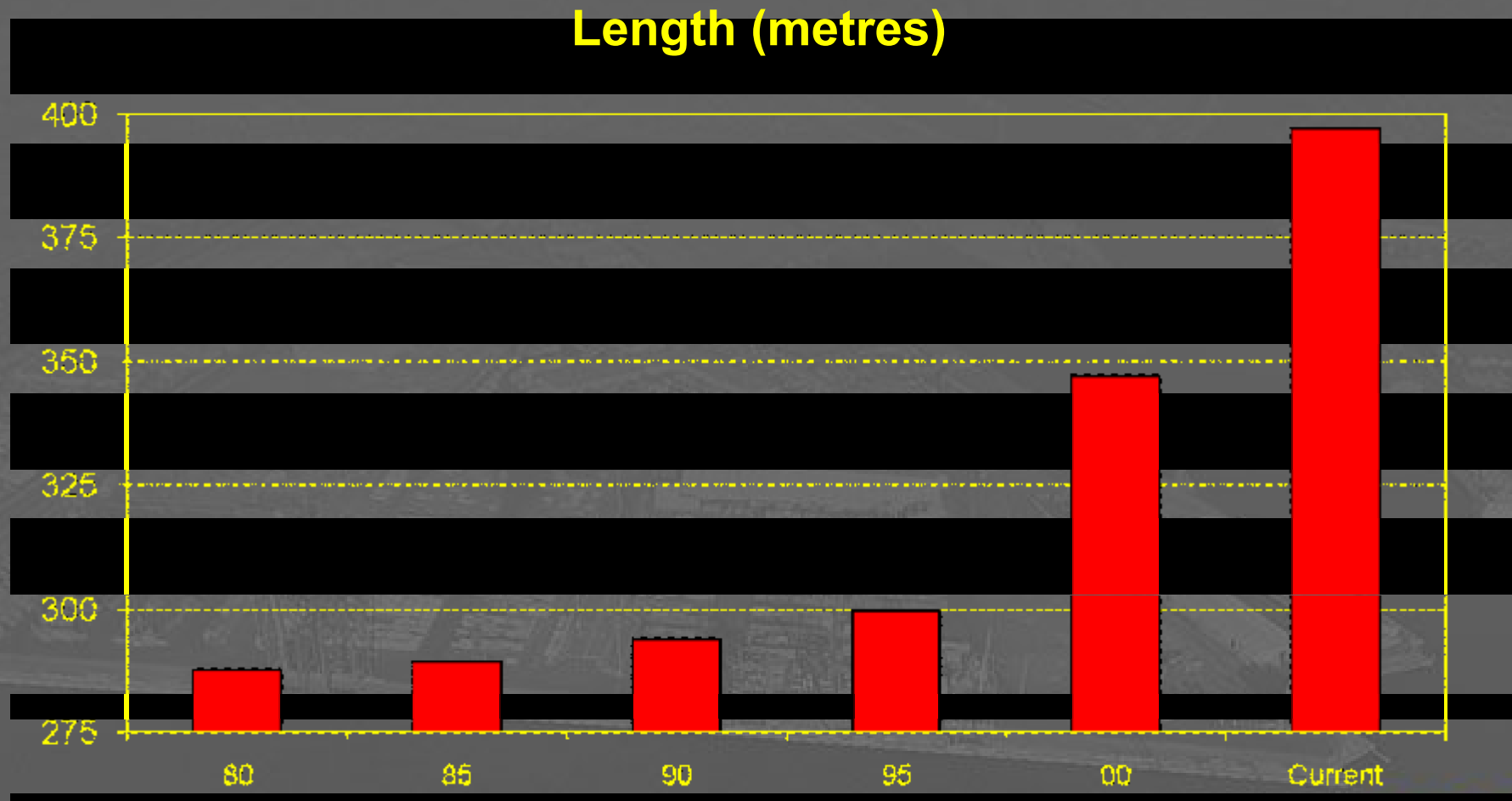
Growth in container ship size

Year	Average ship size (teu)	Largest ship in world fleet (teu)
1980	375	3,057
1990	1,355	4,409
2000	1,741	7,200
Current	2,191	13,500+

Source: Drewry Shipping Consultants Ltd



Growth in containership size



Source: Drewry Shipping Consultants Ltd

■ Largest Ship in Fleet



27 June 2008

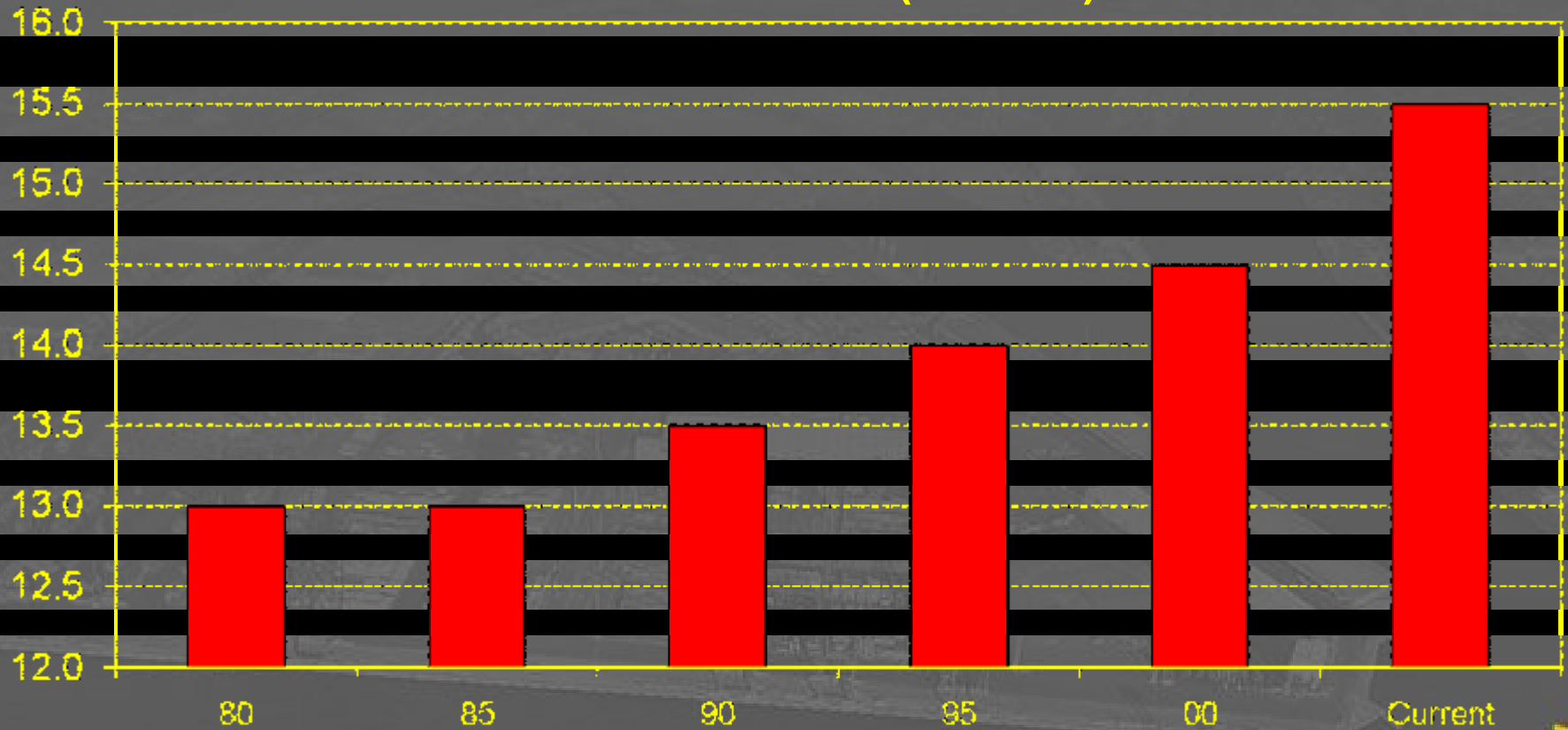
AAPA Port Property

www.aegirports.com

Aegir Port Property Advisers

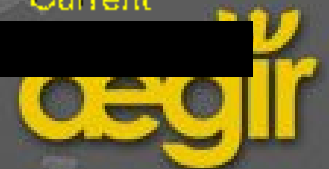
Growth in containership size

Maximum draft (metres)



Source: Drewry Shipping Consultants Ltd

■ Largest Ship in Fleet



27 June 2008

AAPA Port Property

www.aegirports.com

Aegir Port Property Advisers

Emma Maersk (PS) class



- 397 metres long
- 15.5 metres maximum draft
- 22 boxes wide (Post-New-Panamax)
- 13,500 teu (est)
- 157,000 dwt
- 25 knots

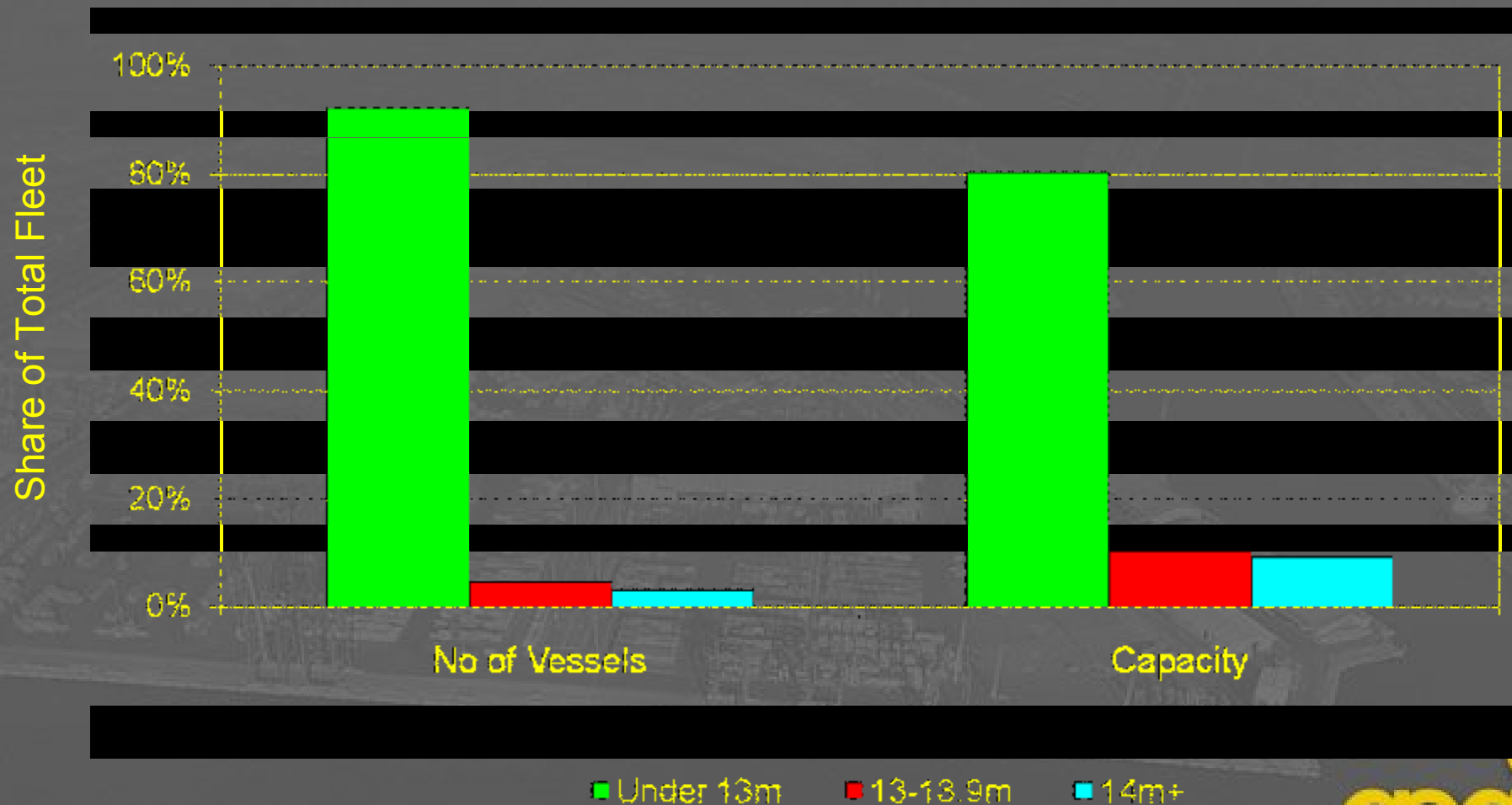


Maximum ship size

- Big ships can only work as part of a global network. They need to reach deep into the hinterland to be financially viable.
- Big ships are inflexible. Could be a serious liability in a downturn.
- Even bigger ships = even bigger risk.
- Big ships need deeper water, bigger cranes, longer berths, bigger container yards.
- Increased time in port can quickly outweigh economies of scale.
- Big ships require large amounts of infrastructure facilities and large amounts of land throughout the supply chain.



Draft – the needs of the few to be paid by the many?



Source: Drewry Shipping Consultants Ltd



Who's got the deep water?

Global Context

Port	Maximum water depth alongside berth (m)
Salalah	16.0
Hong Kong	15.5
LA/LB	15.5
Shanghai	15.0
Singapore	16.0
New York	14.0
Dubai	15.5



Shifting to the land side of the 'sea-land' equation

PORTS, LOGISTICS CHAIN, INTERMODALITY



27 June 2008

AAPA Port Property Management

www.aegirports.com

Aegir Port Property Advisers

No longer business as usual



Due to:

- Escalating property costs
- Land shortages
- Threatening economic obsolescence
- Security and ecological constraints
- Profitability & productivity demand
- Regionalisation



27 June 2008

AAPA Port Property

www.aegirports.com

Aegir Port Property Advisers

Port Authorities

- Market demands forcing structural Port Authority changes – is more corporatisation coming?
- Port Authorities now major asset managers – need to start acting this way to obtain maximum financial performance
- New challenges like proper lease structuring, asset management practices and port property values need to be addressed.

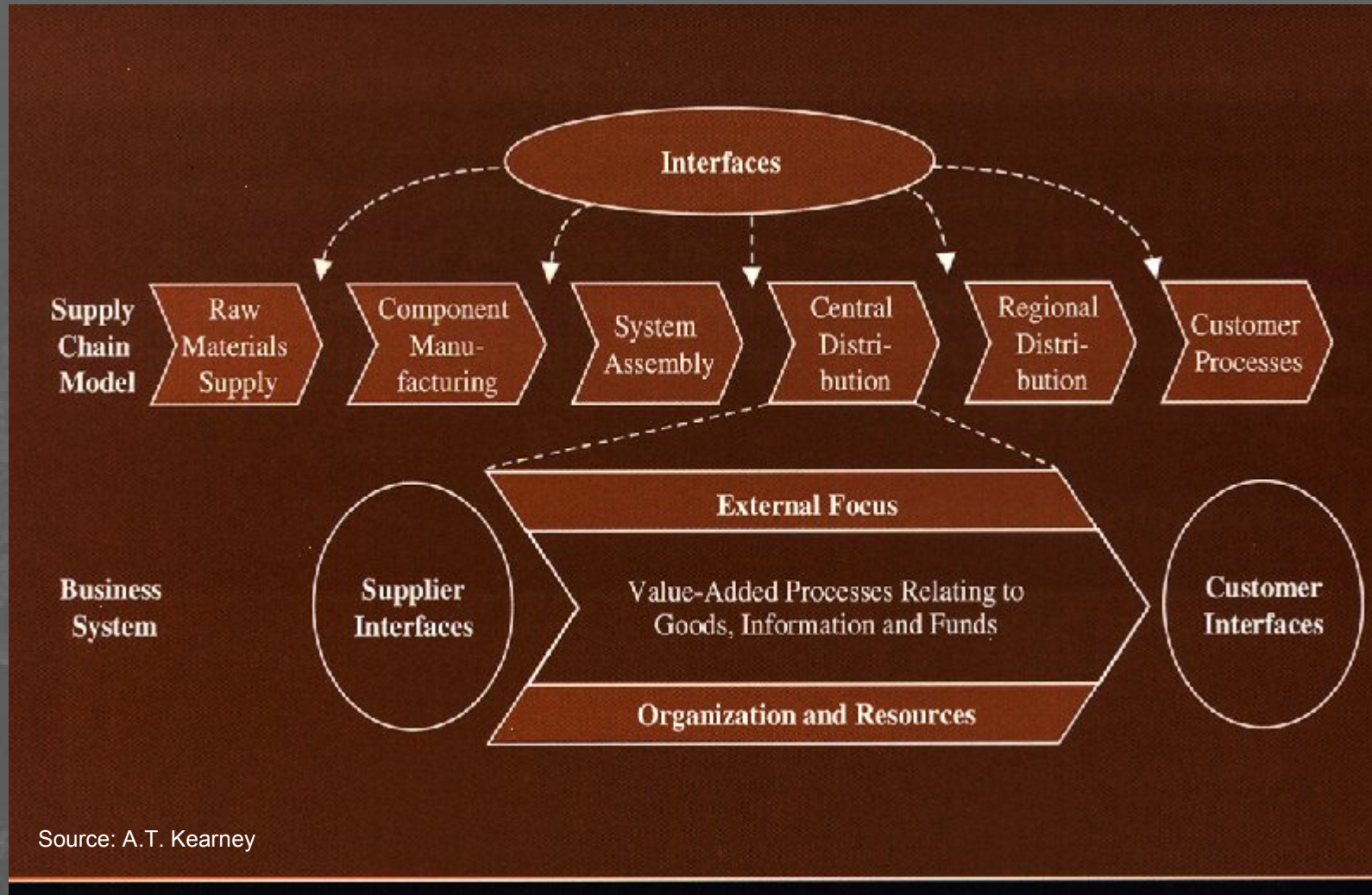


Ports – now nodes in an ever expanding and integrating global supply chain

- Within present supply chain weakest link are the ports and their inability to process more throughput and increase capacity.
- Urban functions considered secondary factors, if at all, by port operators; their focus: time, efficiency, transport systems, profits.
- Just in time is now ‘integrated time’, requiring more specialised facilities such as ‘fast buildings’.
- Property and its management at, near and related to ports is key to addressing these issues.



The logistical supply chain's new boss: 3PL's; All heavily property based



Source: A.T. Kearney



Extending the port's sphere of influence

REGIONALISATION



27 June 2008

AAPA Port Property

www.aegirports.com

Aegir Port Property Advisers

Port Life Cycle

- Establishment, development, maturity, demise
- Functional obsolescence
- Economic obsolescence



Port's Functional Obsolescence

- Changing market dynamics
 - Local, feeder, transshipment ports
- Changing industry requirements
 - Ship size requiring deeper harbours & more land
 - Intermodal requirements and pressures
 - Expansion ie Regionalisation



Port's Economic Obsolescence

- Older ports strategically located, original growth catalyst for mature cities
- Real estate values have appreciated making port operations economically unviable
- Environmental constraints
- Example: London Docks – Canary Wharf



Regionalisation

- Ports will integrate into new freight paradigm – major impact on land usage
- Inland distribution cost - now savings area eg cheaper to ship container from Asia to Europe than Southampton to Felixstowe
- Constraints (political, ecological, economic) will force hinterland expansion and access
- 3PL heavy users of real estate facilities



Regionalisation (cont.)

- Corridors and inland terminals – cornerstones in port regionalisation
- Inland ports critical to in maintaining major seaport efficiency, attractiveness and competitive advantages (eg velocity/productivity)
- All of which is heavily dependent on strategic management and development of land usage

(excerpts from: Notteboom T E, Rodrigue J E, 2005 (revised), Port Regionalization: Towards a New Phase in port Development, Maritime Policy & Management

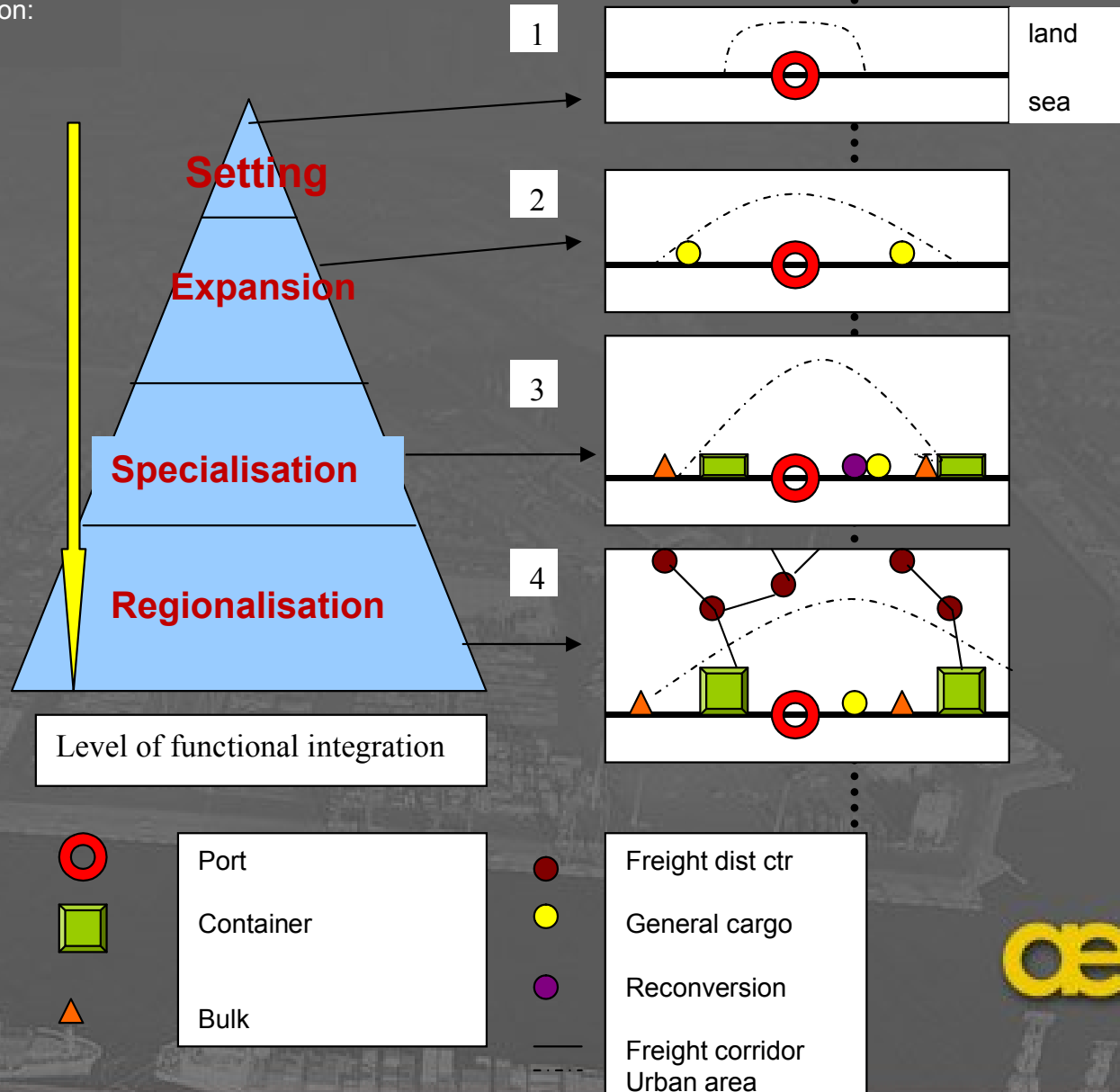


Evolution of a Port

James Bird, Anyport, Notteboom, TE, Rodrigue, J P, Port Regionalisation: Towards a New Phase in Port Development, Maritime Policy & Management, 2005

**Regionalisation:
heavily
dependent on
property**

Regionalisation



27 June 2008

Altering the basic function of container ports

PORT PROPERTY



27 June 2008

AAPA Port Property Management

www.aegirports.com

Aegir Port Property Advisers

Port Property

Port Authorities (PA's) control significant strategically located waterfront **property**, which typically:

- Is the largest asset on their balance sheet
- Financially underperforms
- May operationally be underutilised
- Is viewed as an administrative function - not a strategic asset



Why PA's need to manage port properties professionally?

- Changing role: operators to asset managers
- Congestion pressures, supply chain compression, requirements of 'big' ships, regionalisation
- Land constrained ports must improve productivity and 'velocity' to remain 'economically' viable
- Better manage security, ecological, logistical and quality of life constraints
- Now profit centres - must maximise revenues & values to facilitate access to private capital to modernise & expand



To maximise profit and asset values PA's must:

- Develop 'asset management' skill sets
- Manage 'property' as a strategic asset
- Be financially disciplined with property to optimise land usage based on economic value eg, increasing velocity by moving distribution and warehousing to hinterlands, closer to intermodal access points



PA's property management challenges

- Overarch property objectives with port's overall business strategy and mission
- Asset management Procedures (EVA)
- Financial engineering to access available, lower cost, private capital and financial markets



EVA: Benefits from managing for value - refocus, reconfigure, re-engineer

Shareholders:
•Higher value
•Higher returns

Port:
•Enhanced viability
•Inward investment
•More competitive
•More profitable
•More valuable

Clients:
•Better service
•Better price
•Better productivity

Community:
•Sustainability
•Economic contribution
•Jobs

VALUE

You're in the real estate business now

PORT PROPERTY ASSET MANAGEMENT



27 June 2008

AAPA Port Property Management

www.aegirports.com

Aegir Port Property Advisers

Asset Management

“The acquisition, administration, re-development, re-use and disposition of real property assets in such a manner that the owner’s business mission, goals and objectives are supported and achieved in the long run and add economic value.”



Effective asset management requires:

- Property **asset management plan**
- Operational **controls** to execute plan
- ‘**Market driven**’ property decisions
- Ability negotiate and structure complex property decisions – **financial engineering**
- Benchmarking



Benchmarking: The Key to Performance

- **Execute:** Crucial element to developing, executing and managing an effective asset management plan
- **Measure:** Required to attain any reasonable performance goals
- **Collaborate:** High level collection, dissemination and sharing of key data between major executive & managerial elements: Senior management, Finance, IT, Operations



Benchmarking Requires

- Aggregation of properties
- Lease administration
- Accurate market values for port properties (challenging as like kind comparables may be worldwide - not across the street), which are highly specialised



Financial Engineering

Facilitates releasing tied up equity in property for port modernisation & expansion.

Requires:

- ‘Financiability’ (ie, standardisation) of leases
- Proper structuring of leaseholds for tenants/PA to finance facilities eg, security, collateral, safeguards
- Disciplined asset and property management
- Benchmarking
- Economic Value Added decision making



Overarching port property objectives with the port's

Port property strategies need to:

- Support the port's core business
- Create synergies and competitive advantages with port operations
- Increase port's operational efficiency, address client needs
- Make most of existing logistical infrastructure and changes - regionalisation



Potential impact of strategically used port properties

- Higher integration of hinterlands with quayside, increase port efficiency and viability
- More effectively meet port client needs to better retain and attract them
- Compress the supply chain, reduce costs
- Requires bridging best practices



Bridging dynamics between maritime, transportation & property industries

- To obtain maximum operating efficiencies
- Create major competitive advantages - developing special use facilities to attract clients
- Maximum property asset performance - enhance overall port value
- Release equity tied up in port lands for port modernization and expansion



Cooling off now but will come back with a vengeance

INVESTMENT DEMAND FOR YOUR PORT ASSETS



27 June 2008

AAPA Port Property Management

www.aegirports.com

Aegir Port Property Advisers

Property market dynamics – take advantage of opportunities

- Supply & demand (industrial vacancy rates in port city markets) – time leases with cycles
- Yields & Capitalisation rates (ie, alternative investment product)
- Risk (what is the real risk in emerging market ports? Strength of covenant, dollar denominated rent, global trade)
- Inflation
- Cost of Capital



Lender/investor considerations

- Security, collateral, particularly of leaseholds
- ‘Market Value’ of collateral, is it assignable
- Political risk
- Standardisation of leases, are they assignable
- Lease models – what are they based on?



Reasons for investing in Port Properties?

- Stable low risk Income (higher yields with strong covenants)
- Appreciation (industry expanding)
- Upside ((alternative future uses)
- Diversification (appreciation and rents based on global trade not competitive properties)
- Preferential Tax



Key investment factors

- Vacancy rates
- Rental rate growth
- Barriers to entry
- Capitalisation rates for comparable and competitive properties
- Functional obsolescence, changing market demands
- Port Life cycle



Record prices being paid

Merger & acquisition – Unprecedented levels of activity and prices being paid at present eg,

- 2005 - DP World – CSX World Terminals **14 x EBITDA**
- Early 2006 - PSA – 20% stake in HPH **17 x EBITDA**
- Mid 2006 - DP World – P&O Ports **19 x EBITDA**
- Late 2006 - Teachers – OOIL terminals **23.5 x EBITDA**
- End 2006 - AIG - P&O Ports North America **24 x EBITDA**
(reputedly)

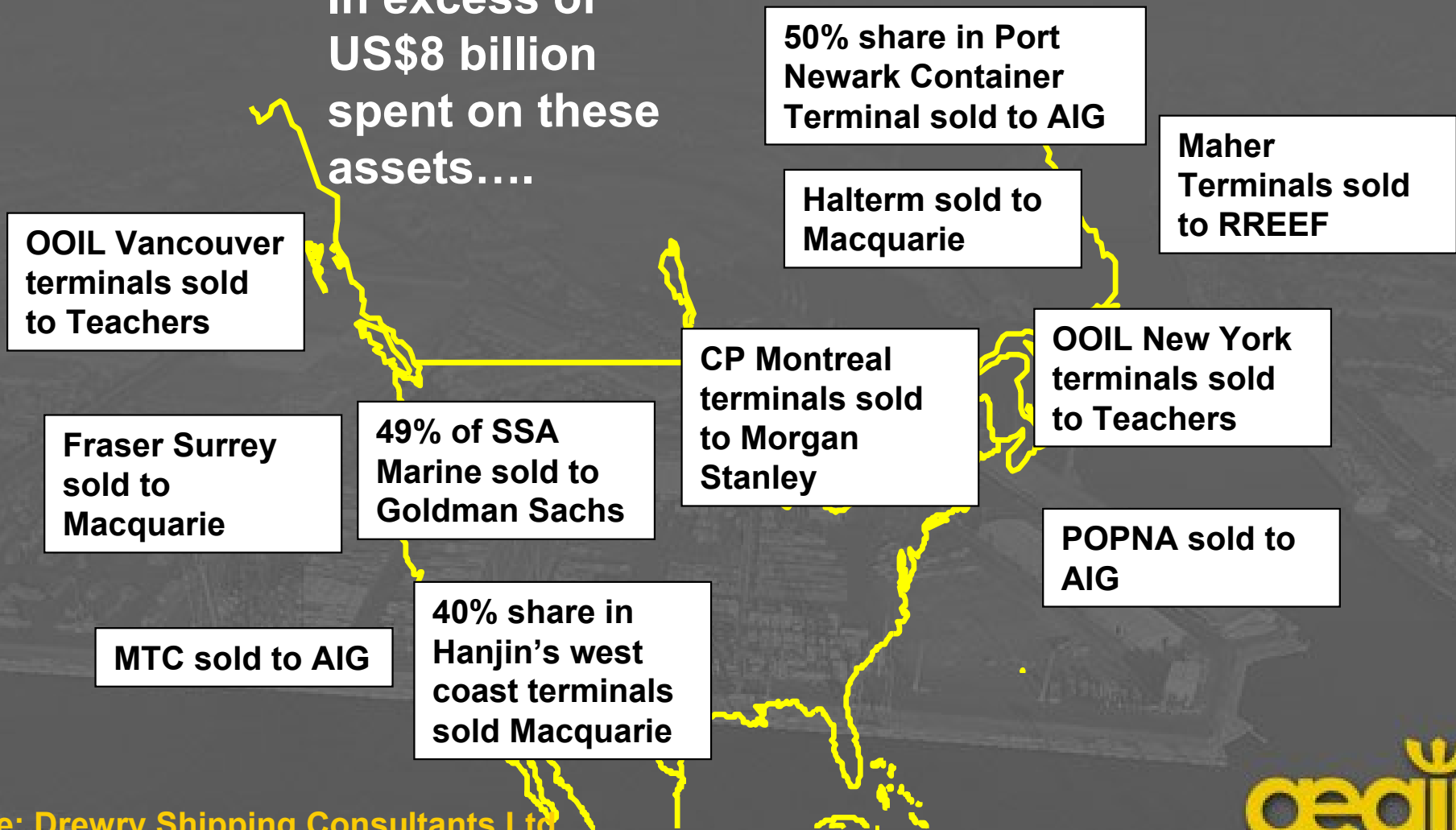
Multiples are no substitute for discounted cash flows though...

Source: Drewry Shipping Consultants Ltd



M&A Hotspot 2006-7:North America

In excess of
US\$8 billion
spent on these
assets....



Source: Drewry Shipping Consultants Ltd



A decidedly different exercise

VALUATION & APPRAISAL OF PORT PROPERTY



27 June 2008

AAPA Port Property Management

www.aegirports.com

Aegir Port Property Advisers

On what basis do you value income property?

- On its ability to generate a cash flow
- The strength of the lease covenant
- Lease terms and conditions eg, rent reviews, pass throughs, etc



What property rights can be valued

- Fee Simple -freehold
- Leased Fee Estate – leasehold
- Both can represent substantial equity
- At ports typically one sees leasehold interests as land continues to be owned in freehold by the port authority



What are the approaches used to value real property?

- Sales Comparison or Market
- Income
- Cost

Note: Market Value according to the Royal Institution of Chartered Surveyors: 'is the Valuer's opinion of the **best price which would have been obtained in the market on the date of valuation** (subject to the exclusion of any additional bid by a prospective purchaser with a special interest): **not a 'fair' price**, or an average price or the price which the vendor thinks ought to be achieved.'



Valuation Challenges

- Valuations of port properties need to be benchmarked for like kind properties which are most probably not found 'across the street' but across the world
- Valuations need to concentrate on the specific economic use of both the port and the location of the subject property at the port, along with commensurate risk levels



Underestimating the Value of the Land

- PA's underestimate value of landholdings by structuring leases based on throughput, outdated 'rules of thumb' and uncorroborated benchmarks for property values and yield rates
- PA's lease properties as **incentives** rather than sound business practice – short sighted.
- PA's must understand the challenges and needs of private capital and financial markets so as not to undercut themselves, for example:



What is driving high port valuations?

context of residential development. Of course, it is unclear how much of ABP's acreage is actually on the seabed. And building waterfront housing in, for instance, Ayr and Aberdeen, it as the Scottish rivers may be a bit of a stretch.

For Goldman, however, there is a simpler consideration. ABP may not make big returns, but it is not terribly high risk either. It would also be the first UK purchase for Goldman's infrastructure fund at a time when good targets are scarce and the bank has added bit on other recent opportunities. Sometimes, winning is everything.

Google/Baidu

Google wants direct search junkies to democracy in China, but it has managed to make a profit there – at least for now. The US search engine nixed out its tiny stake in Baidu.com, a Chinese peer, making a 126.5 return on its \$50 investment in the space of two years.

That was the easy money. By covering equity ties, Google is now signalling its readiness to go it alone in China, a market bigger on promise than profit. Baidu.com, which leads the domestic search market, made less than \$8m last year, although admittedly rates it expected to rise steadily.

Baidu is also a pretty formidable competitor. It has a particular stronghold over the wealthier and more tech-savvy pockets of China, such as Beijing.

Yet it is far from complacent: it added 600 workers in the first quarter, most of whom joined Baidu's sales force in the big cities. Nor is it the only competitor. In addition to China's Sogou.com, most of the international names are making inroads into China's search market.

That does not leave a huge amount for Google. According to iResearch, a Shanghai consultancy, the rest of its search revenues will be worth \$450m this year, while online ad sales will add another \$570m – a fraction of the US market. Google investors should not count on reaping another chunky profit from the world's second biggest internet market, anytime soon.

MORE LEX NOTES ON FT.COM

For POCW/Manquarie, exploration bonuses and Italian football go to www.ft.com/lex. New Lex live analysis of breaking stories available online throughout the day.

24 JUNE 2006

ABP Sale

Underestimating the value of land – not everyone is.

- Eg, GS acq of ABP UK
- By conv measures – GS overpaid
- But, 1/4 ABP's 12.5K acres could be used for other purposes
- If so, £100k/acre was cheap by any measure
- Ports: stable and safe investments but with great upside if land holdings strategically managed

ABP

Bid battles often resemble a pricing prize fight. Two developments yesterday following the \$10-a-share bid for Associated British Ports from a Goldman Sachs-led consortium suggest the final bell is close. First, A1 Group has bowed out from the rival bidding group. Second, ABP's shares floated in London the bid – not even enough to cover the new bank fees.

On any conventional measure, Goldman's consortium is overpaying. Arundel Securities, London, highlights the option value of ABP's land. Of its 11 ports, just four account for the bulk of profits.

Compared with Goldman's earlier offer of \$10, the new bid offers an extra \$20m. Say a quarter of ABP's 12,500 acres could be turned over for other uses. If ascribed to that option, the extra cash works out at under \$100,000 an acre – cheap in the

27 June 2008

AAPA Port Property

www.aegirports.com

Aegir Port Property Advisers



Measures of Investment performance?

Capitalization Rate: NOI/Price
Equity Div. Rate: BTCF/Equity
Debt Coverage: NOI/Mtg Pmt
Net Present Value
Internal Rate of Return
Modified IRR
Profitability Index
Cash Flow from Operations
Cash Flow from Resale



Value creation through income producing property, how?

- Direct Sale (leaseholds) to investors
- Build-to-suits
- Mortgage Backed Bonds
- Real Estate Investment Trusts
- Property Companies



What's in a lease?

Gross Lease (expenses paid by lessor owner)

Net Lease (expenses paid by lessee tenant)

Term, options, rent reviews, expansion, cancellations



What should be in a lease?

Costs

- Cost of capital?
- Inflation?
- Capital sinking fund for renovations and updates?
- Repair & maintenance?
- Operating costs eg, common area maintenance, security, electricity?
- Insurance, taxes, etc?

Revenue

- Return on investment?
- Return on equity?
- Developers profit?
- Demand/supply balance?
- Throughput charges?

Without consideration of the above will you really be making any money on a capital asset?



Building a better mousetrap

OPPORTUNITIES & SOLUTIONS



27 June 2008

AAPA Port Property Management

www.aegirports.com

Aegir Port Property Advisers

Opportunities

- Maximise value of a port through increasing value of land banks
- Creation of new revenue streams
- Releasing tied up capital
 - Raising off balance sheet debt & equity through:
 - **PPP – Public Private Partnerships**
 - **L-T ground leases**
 - **Build-to-suits**



Opportunities

- Create competitive advantages through:
 - Integration of hinterlands with port operations to shorten supply chain – intermodal platform
 - Creative re-development of existing facilities (Greece)
 - Development of specific use, non-traditional port properties eg, strip & stuff, distribution, office
 - Address growth challenges – Valparaiso ChileAll of which are heavily property based



Potential impact of more strategically used port properties

- Higher integration of hinterlands with port, increased port efficiency and viability; need for more land
- Compress the supply chain, only area of cost reduction now
- Requires disciplined approach managing port properties eg, EVA assessments



The end is near!

CONCLUSIONS



27 June 2008

AAPA Port Property Management

www.aegirports.com

Aegir Port Property Advisers

Conclusions

Effective management of a port's real property holdings can:

- Maximise a port's value to its stakeholders
- Create additional revenue streams
- Better retain and attract clients through creative land use port lands and facilities to meet client need
- Release needed capital from tied up equity in land holdings
- Extend a port's economic life cycle by better integrating it into regional logistics chains



*‘Navigating the World of Port Properties –
To Maximise the Value of Ports’*

Thank You



Aegir Port Property Advisers
www.aegirports.com

Drewry Shipping Consultants
www.drewry.co.uk



27 June 2008

www.aegirports.com

Aegir Port Property Advisers