

# Port Finance: The port property view from a public and private perspective ©

AAPA Port Finance  
Norfolk Virginia



# Summary

- Ports' sector performance
- Evolving supply chain
- Port's changing role
- Port property asset management
- Opportunities – a concrete example

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How resilient an industry?

# PORTS' SECTOR PERFORMANCE



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# Today the focus is on the negative

- **World Bank:**  
this recession was first decline in Global trade in 80 years.
- **IMF:**  
first contraction in global GDP since WWII.



**But as Winston Churchill  
once said:**

**‘If you are going through hell, ...**



...keep going!

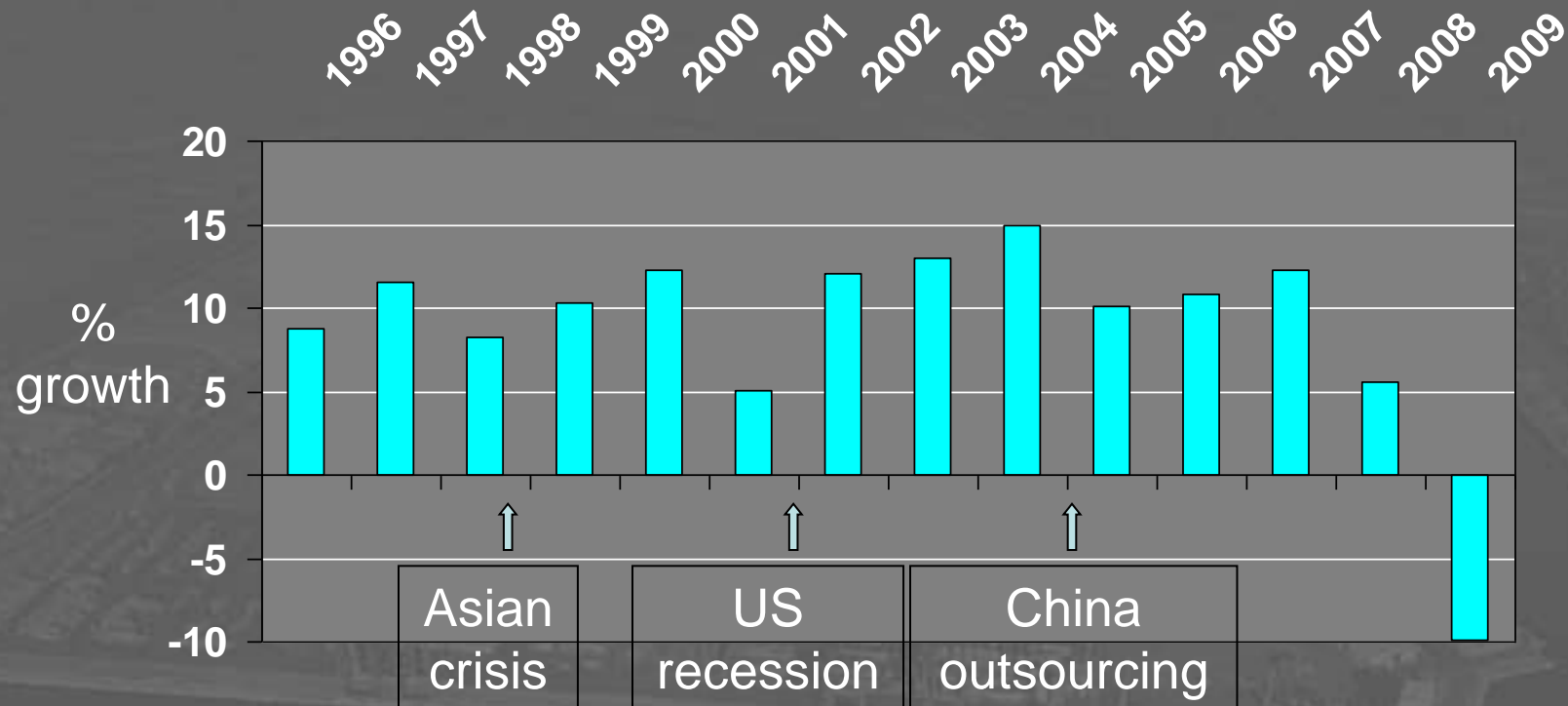


# What happened?

- A restructuring of massive cheap debt and bloated organisations - but work out process well underway.
- Question: Have we been too harsh with the port sector though in our negative estimates and short sightedness going forward?



# The industry's silver lining: Riding out recessions...



Source: Drewry Shipping Consultants Ltd

The global container port industry has shown resilience against recessions in the past – 2009 was different though; but its forecasted turnaround indicates a resilient sector.

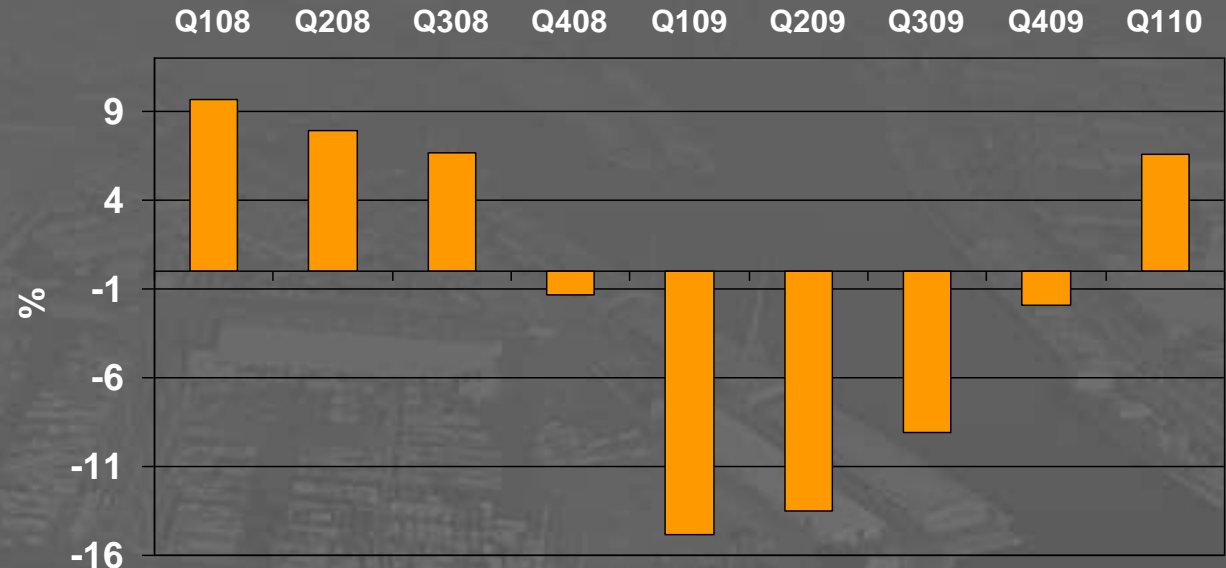




# Last quarter of 2008, first quarter 2009

- US sub-prime mortgage crisis hit mid 2007!
- Recession started to bite the last quarter of 2008 and hit hard in 1H 2009
- But the banking crisis in the second half of 2008 was the really critical factor

Quarterly global container port volume  
Growth/decline

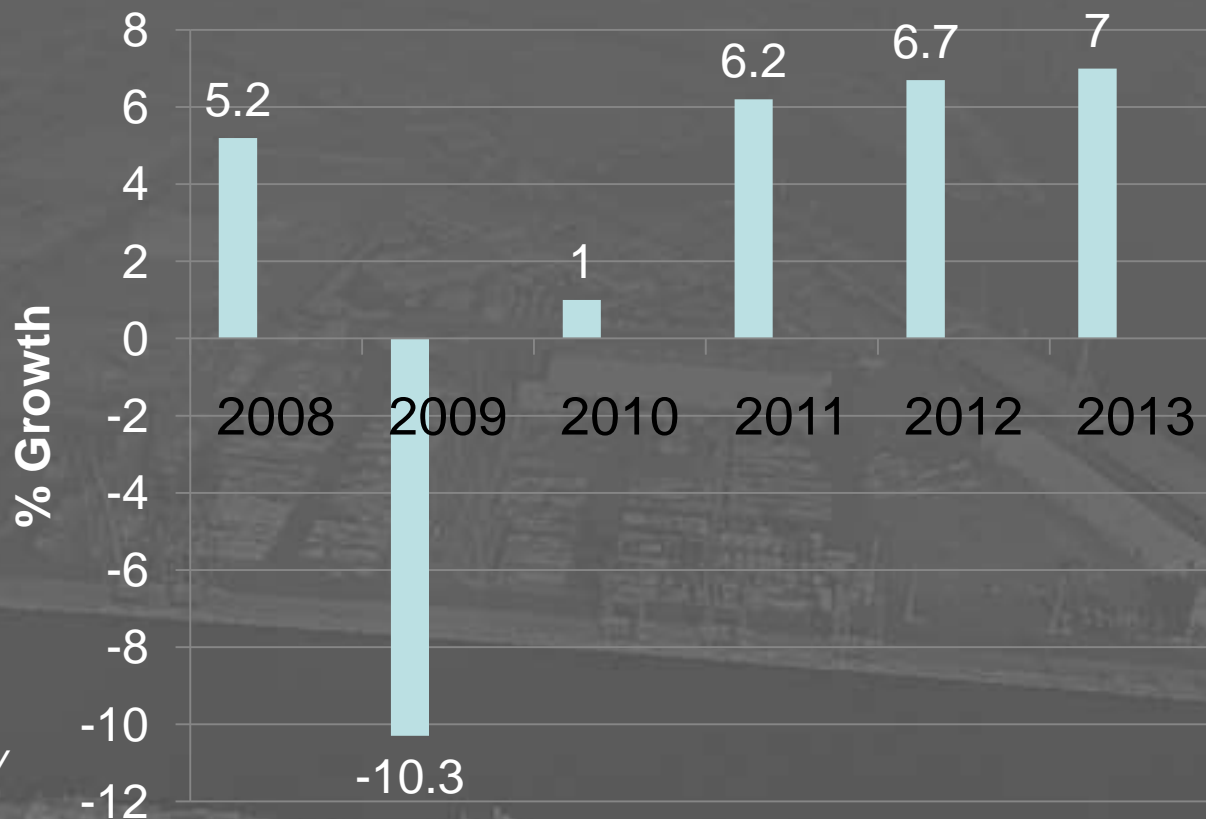


Source: Drewry Shipping Consultants Ltd



# The port industry's resiliency

- 1982 worst year prior to this recession with 4.2% annual growth. By 2012 TEU traffic volumes will exceed 2008.

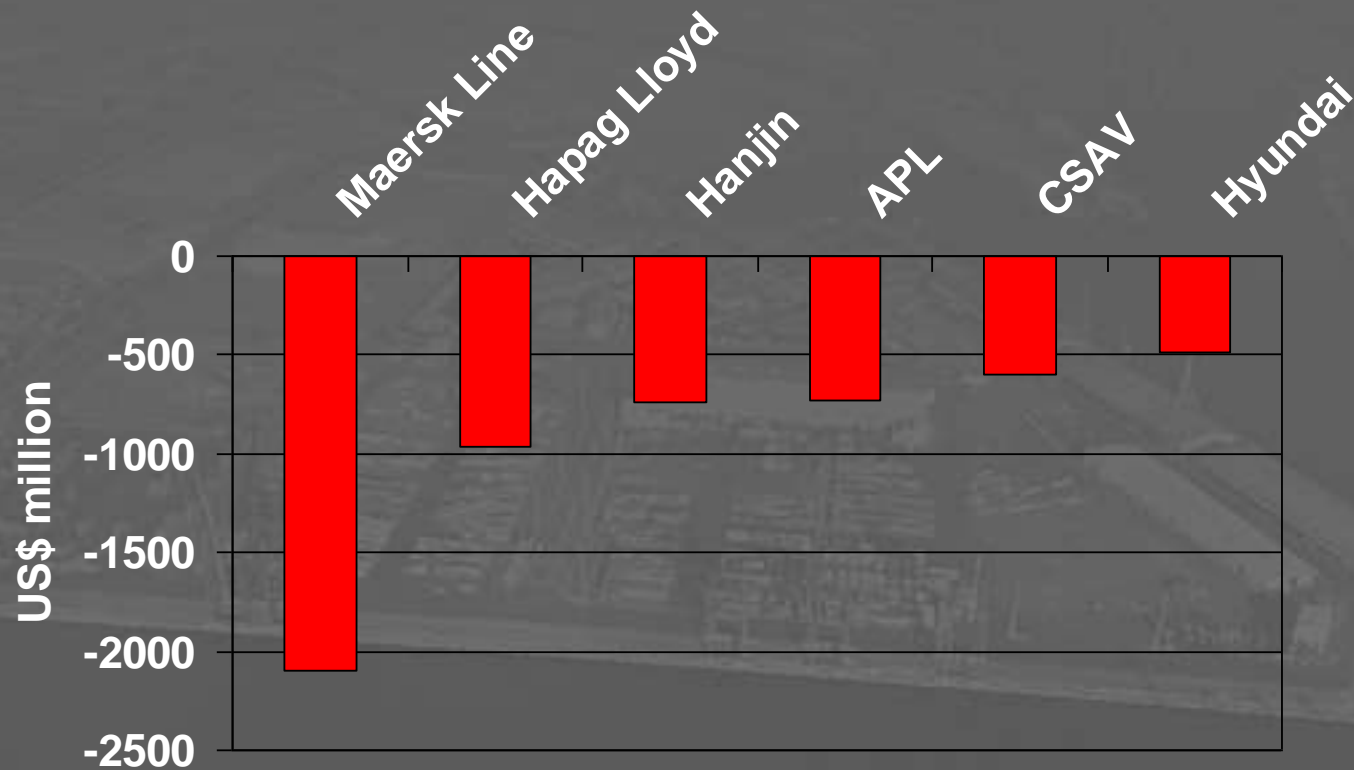


Source: Drewry



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# Contrast with liner shipping margins – examples of 2009 losses

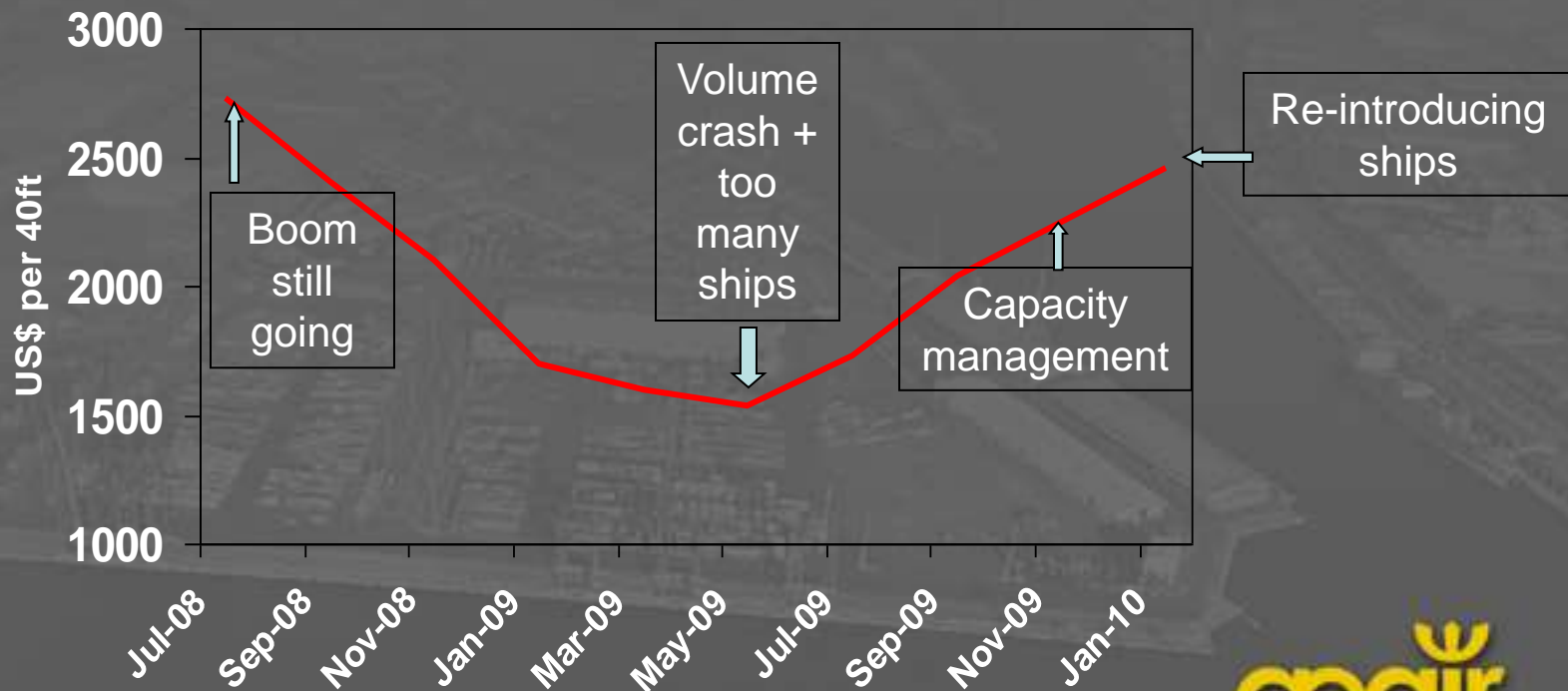


Source: Drewry Shipping Consultants Ltd



# But freight rates recovering – for now...

## Drewry Global Freight Rate Index



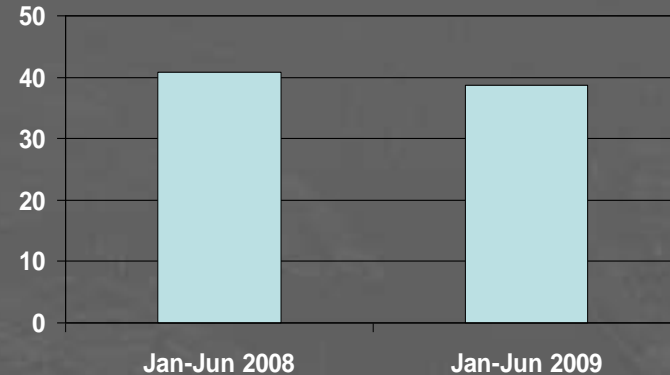
Source: Drewry Shipping Consultants Ltd



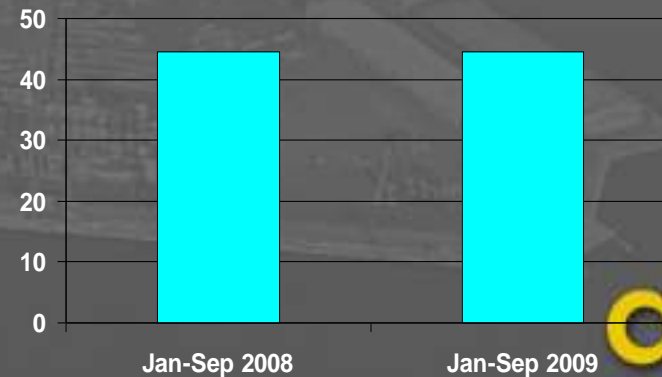
# Defending container terminal profit margins

- Volumes, revenue and absolute profitability were down in 2009
- Margins were generally maintained though, e.g.
  - DP World
  - ICTSI
- A profit margin was still there – in the worst year the container port industry has ever experienced

DP World EBITDA % margin



ICTSI EBITDA % margin

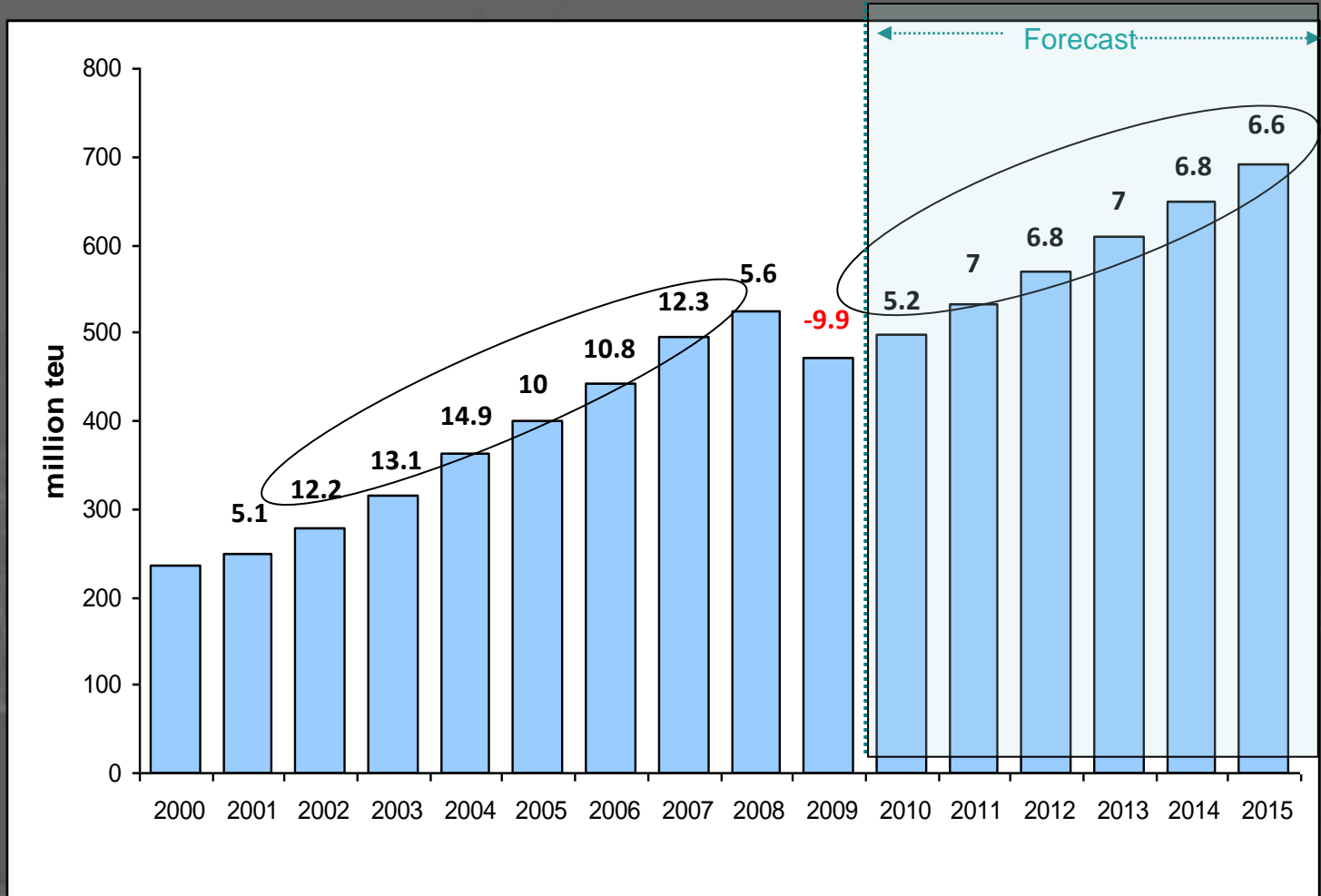


Source: Drewry Shipping Consultants Ltd

# Forecast global container port demand growth to 2015: 3 year comeback - now that's industry resilience

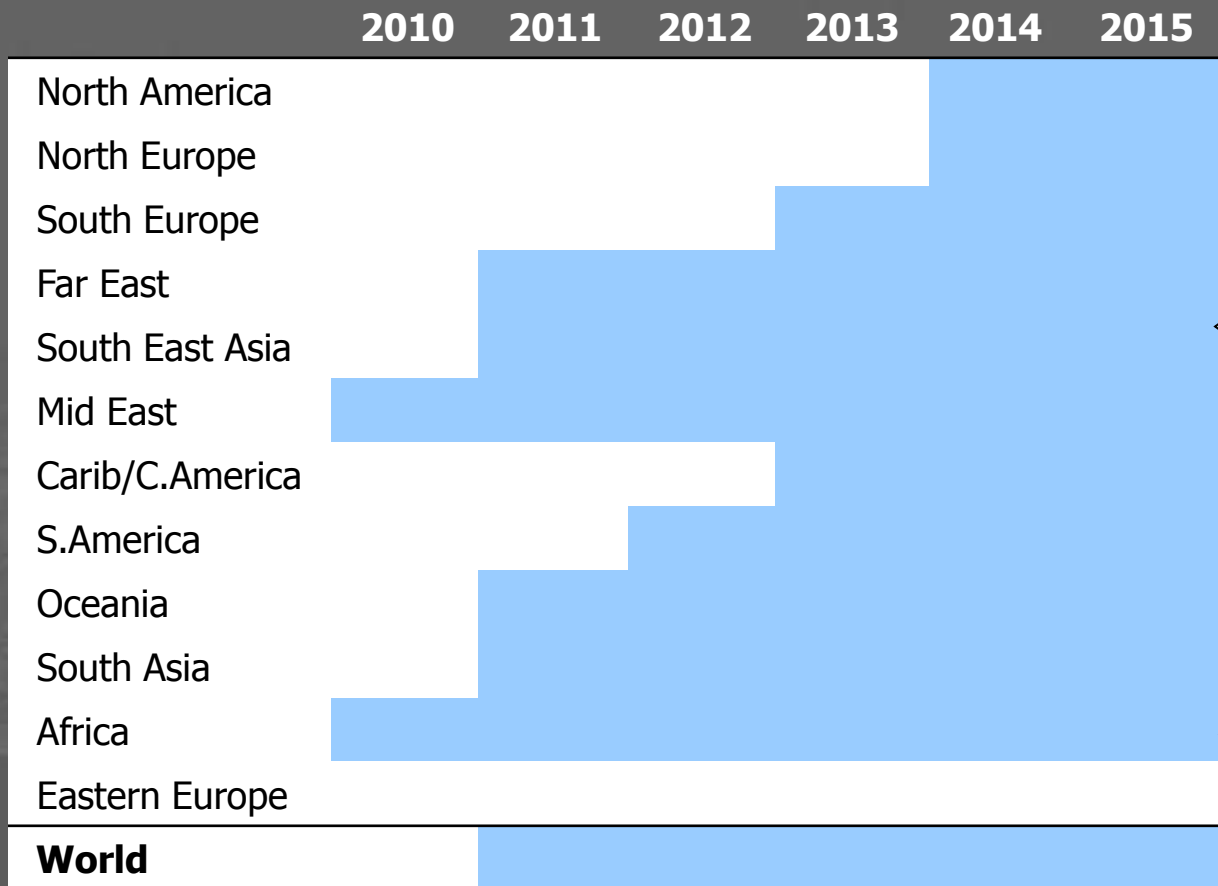
Numbers on top of bars indicate percentage y-o-y growth

What is the “new normal”?



Source: Drewry Shipping Consultants Ltd

# Forecast demand highlights



Shaded cells show when throughput levels are expected to return to peak of 2007/08

Eastern Europe may be beyond 2015

Source: Drewry Shipping Consultants Ltd



And the continuing need to compress it

# EVOLVING SUPPLY CHAIN



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# Growth in container ship size

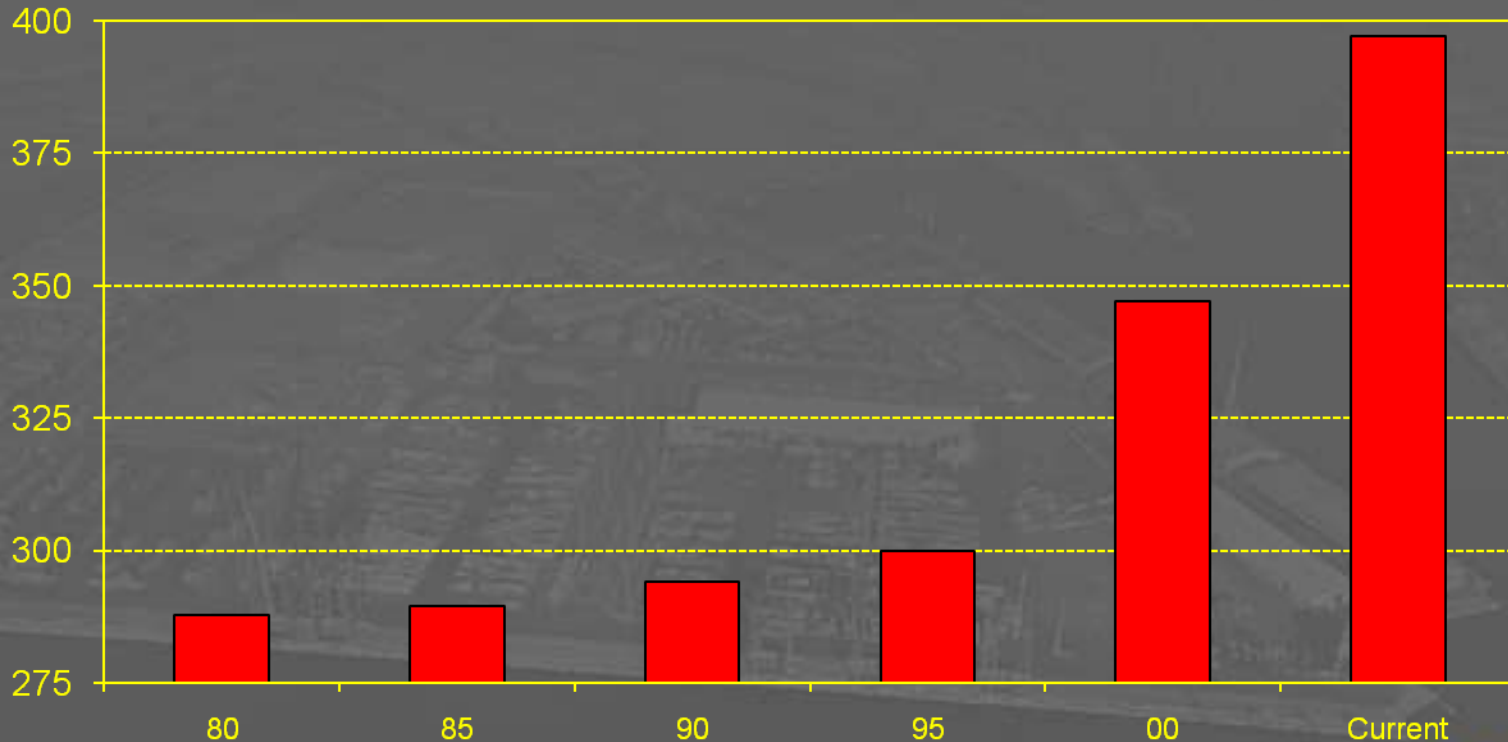
Year	Average ship size (teu)	Largest ship in world fleet (teu)
1980	375	3,057
1990	1,355	4,409
2000	1,741	7,200
Current	2,191	13,500+

Source: Drewry Shipping Consultants Ltd



# Growth in containership size

Length (metres)



Source: Drewry Shipping Consultants Ltd

■ Largest Ship in Fleet



27 June 2008  
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# Emma Maersk (PS) class



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# Hinterland reach

- Big ships 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; the bigger the ship the larger the risk.
- Big ships need deeper water, bigger cranes, longer berths, bigger container yards, in short – more port infrastructure and land in the port and throughout the logistics chain.
- Increased time in port can quickly outweigh economies of scale.



# Port property – the new strategic asset

- 8,000 TEU ship requires 100 acres to keep container flow inbound smooth; most large ports are land constrained.
- Throughput per acre is key to making customers happy and money eg, in US about 4,000 – 5,000 TEU/acre yet in Europe and Asia 10,000 TEU/acre and higher is not unusual

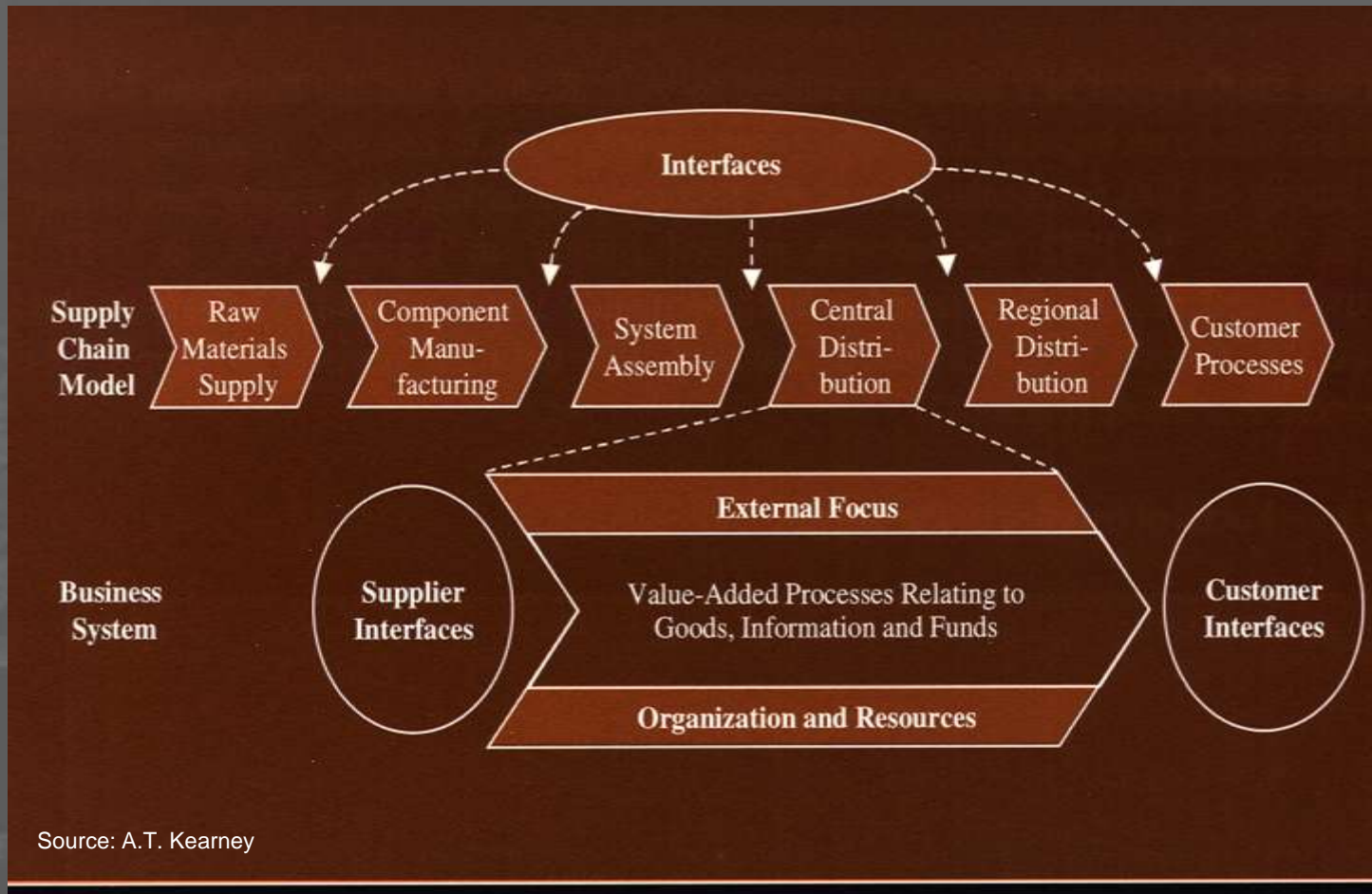


# Role of Property Today in Ports and Logistics Properties

- Property: largest asset on port's balance sheet - typically financially underperforming.
- Port property: from admin function to strategic asset.
- Governments: lack capital, ports now stand alone profit centres.
- Ports: now asset managers.
- Port property: needs to be leveraged at market value to release needed equity.



# Shortening the logistical supply chain: Requires intermodality and real estate



Source: A.T. Kearney



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To address the new realities

# PORTS' CHANGING ROLE



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# Port Authorities

- Specialisation → Regionalisation
- Transport node → Transport nexus
- Port operator → Asset manager



# Ports: No longer business as usual



Due to:

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



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# Port Life Cycle

- Establishment, development, maturity, demise
- Functional obsolescence
  - Eg, ship size requiring deeper harbours & more land
  - Intermodal requirements and pressures
- Economic obsolescence
  - Increasing values of waterfront urban land



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

- Within present supply chain weakest link are ports and their inability to process more throughput.
- 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.



# Regionalisation

- Ports will integrate into new freight paradigm (major impact on land usage).
- Inland distribution cost - now savings area as over water transport now a commodity.
- Constraints (political, ecological, economic) will force hinterland expansion and access
- All requires substantial use and need for real estate facilities



# Regionalisation (cont.)

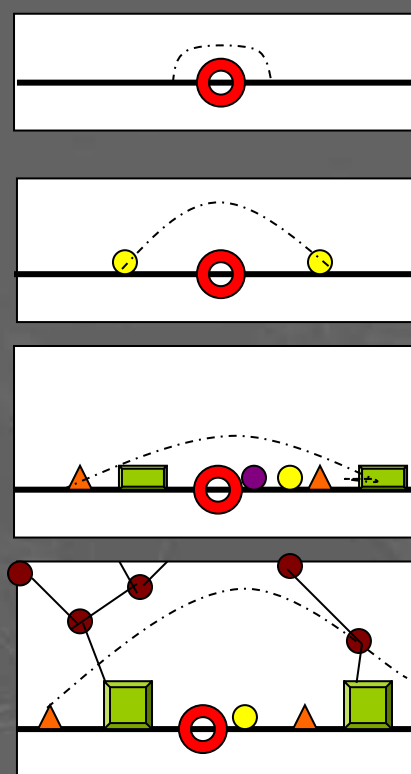
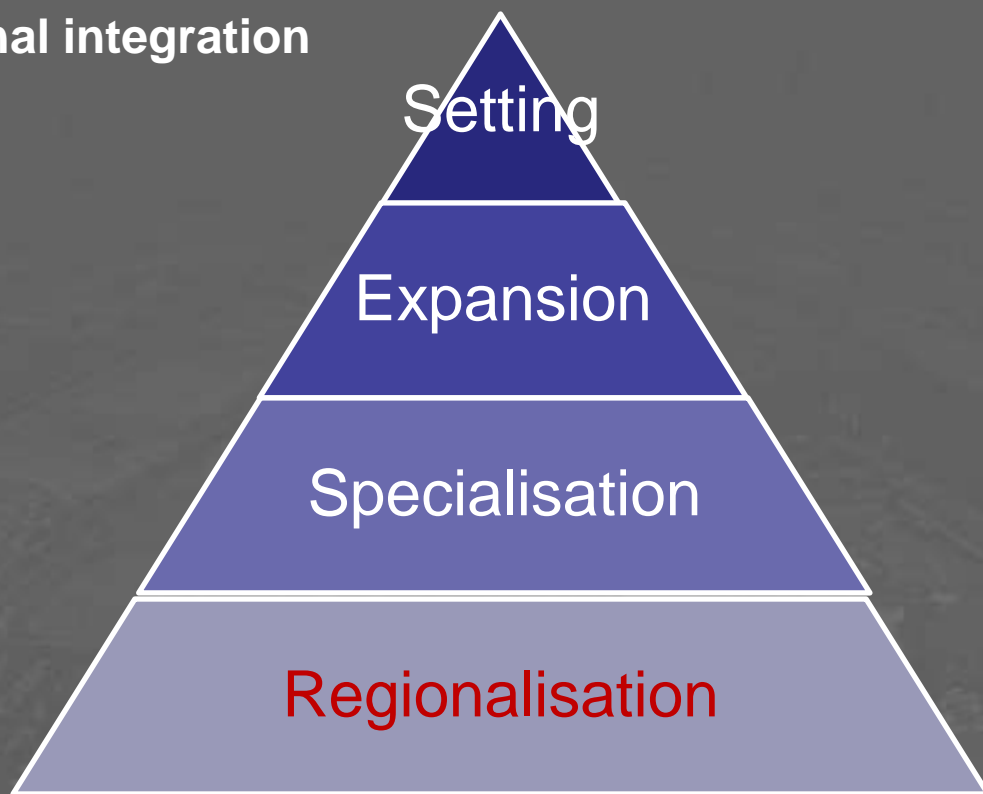
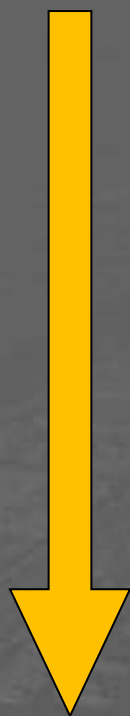
- Corridors and inland terminals – cornerstones in port regionalisation.
- Inland ports critical to in maintaining major seaport efficiency, attractiveness and competitive advantages (eg velocity/productivity).

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



# Regionalisation: heavily dependent on property

Level of functional integration



land

sea

## 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

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Port



Container



Bulk



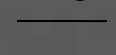
Freight dist centre



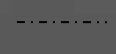
General cargo



Reconversion



Freight corridor



Urban area



Minding a port's largest asset

# PORT PROPERTY ASSET MANAGEMENT



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# Port Property

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

- Is largest asset on balance sheet.
- Financially underperforms
- Operationally 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 added' contributions eg, increasing velocity by moving distribution and warehousing to hinterlands, closer to intermodal access points

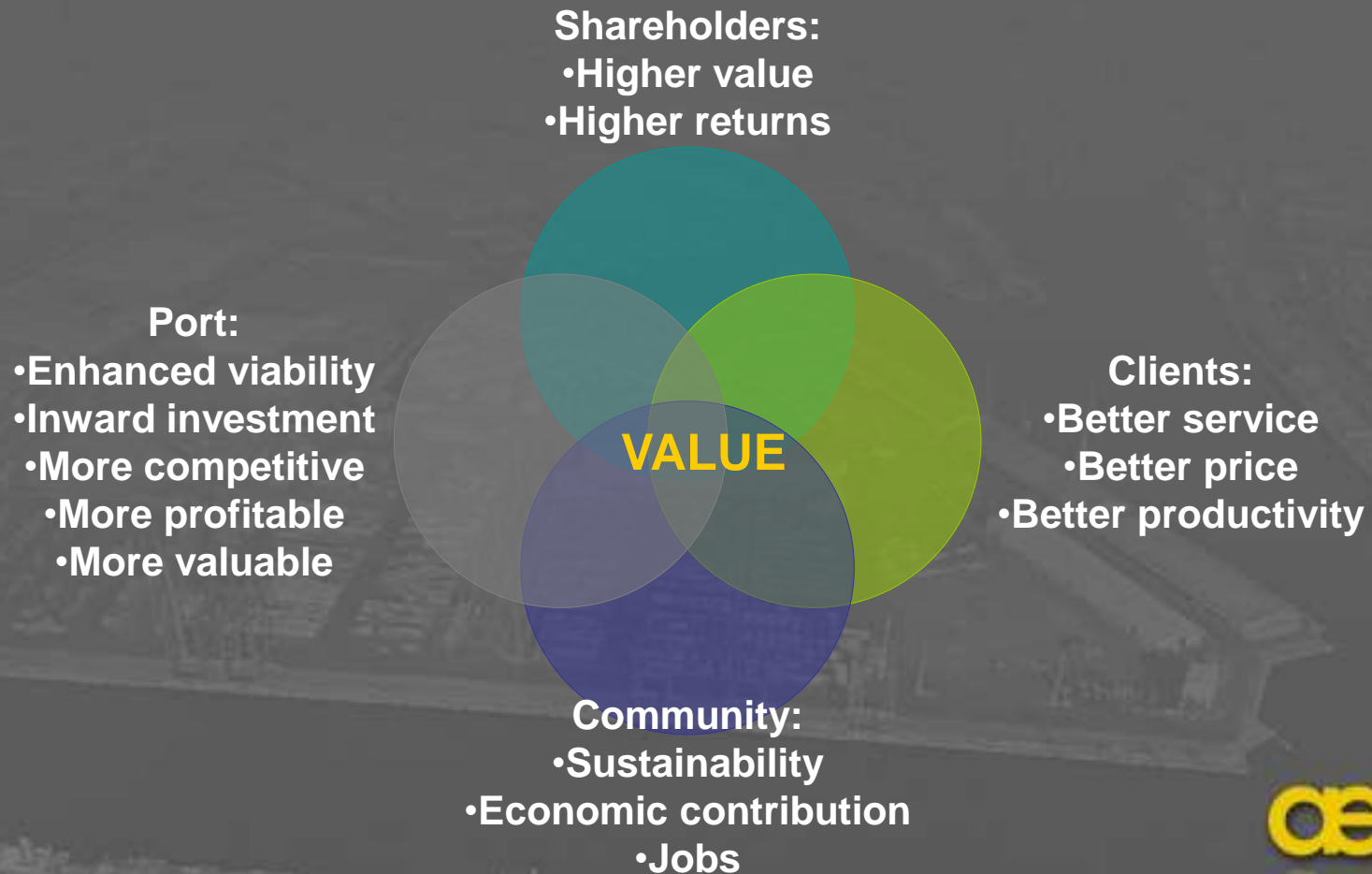


# PA's property management challenges

- 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



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# 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.”



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# Effective property 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
- Overarching core business mission



# 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





Cooling off now but will come back with a vengeance

# INVESTMENT DEMAND FOR YOUR PORT ASSETS



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# Infrastructure trends and opportunities – the money is there

- OECD estimates **US\$70 trillion** required for **infrastructure development and improvement – 2030.**
- Average size of infra fund now US\$3.3b from US\$159m in '03; 'Dry Powder' for 2012 – US\$100b.
- Current financial crisis has resulted in less debt - opening door for more equity participation.
- Although assets are priced at more realistic levels there are also lower return (IRR) expectations as well in the 15%-18% from 18%-20% in the 2006-2008 period.



# The interest by the sector for PPP's and direct investment is there...

- 'Private/Public financing of freight transportation infrastructure is a compelling need that is being inadequately addressed.'  
*Critical Issues Impact in the Freight Transportation in the Southeast Region, CIFTS, Issue 4 – Fall 2009*



# Comparative infrastructure yields with port investments

Asset segment	Risk	Avg cash yield (yrs 1-5)	Avg leveraged IRR	Capital appreciation potential
Toll roads	Low	4%-9%	8%-12%	Limited
Seaports	Medium	4%-7%	15%-18%	Yes
Merchant power stations	High	4%-12%	15%-25%	Yes

Source: JP Morgan



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# Container terminal valuations

- The days of port business valuations at over 20x EBITDA are over – at least for the time being
- No real new benchmark deals yet; sentiment is 8-12x EBITDA is now the ballpark (but no substitute for a full DCF analysis)
- Share prices of quoted port companies still seem low relative to the companies' earning power and resilience e.g.
  - o DP World floated at \$1.36 per share in Nov 2007, fell to under 20 cents a share in Q109 before recovering to around 50 cents recently (04 10)
  - o ICTSI was at over 30 Pesos per share a year ago and fell as low as to around 10 in Q109. Has since improved to around 22 (04 10)



A decidedly different exercise

# VALUATION & APPRAISAL OF PORT PROPERTY



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# On what basis do you value port 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
- Income versus comparable as there are very few port properties sold.



# What property rights can be valued

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





# Valuation Challenges

- Valuations of port properties need to be benchmarked with like kind properties, most probably not found 'outside of the fence' but across the world
- Valuations need to concentrate on the specialised economic use of both the port and its location therein, 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.



## Measures of Investment performance?

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



# 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?



Where ports and the private sector meet

# OPPORTUNITIES – A CONCRETE EXAMPLE



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# Opportunities

- Maximise port's value through land banks
- Create new revenue streams focused on value added activities
- Release tied up capital to expand/modernise port
  - Raise off balance sheet debt & equity with:
    - PPP – Public Private Partnerships
    - L-T ground leases
    - Build-to-suits



# Opportunities

- Create port competitive advantages by:
  - Integration of hinterlands and port to shorten supply chain eg, intermodal platform
  - Address client specific needs for specialised RE facilities.
  - Develop specific use, non-traditional port properties eg, distribution, to support core business.

All of which are property based





# Challenge for East coast load centres post Panama Canal widening

- Depth, bridge clearance and terminal capacity.
- Deep reach into the hinterlands.
- Efficiency, velocity and throughput requiring intermodal capabilities.



# Port property – intermodal and value added services

- As transport costs increase (fuel, manning, etc – about US\$ 50,000 to \$60,000/day for an 8,000 TEU ship), local, value added service become increasingly attractive to shippers – requires land and facilities.
- Intermodal capabilities increasingly critical for viability of port transport nodes and larger ships to access hinterlands deeper.



# Charleston South Carolina



Proposed  
intermodal  
facility

New  
1.5m  
TEU  
terminal

Proposed  
intermodal  
facility

Historic  
Charleston

Image © 2008 DigitalGlobe

©2008 Google™



# Intermodal Concept Charleston South Carolina



Access Road Realignment  
Bridge Alternative

SCALE 1"=100' OF  
AS SHOWN  
MAY 11, 2009

# Private sector participation in this case:

- Private sector can deliver imperative competitive advantage to a port.
- Both projects represent an investment in excess of US \$600m, which will not have to come from either the port's or state's coffers or balance sheets.
- Projects will have largest positive ecological impact on the region.
- Will create the platform necessary for a viable gateway port.



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# Conclusion

Port Property:  
a port's largest strategic asset



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

**Thank You**



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