Infrastructure, sustainability and logistics challenges in Latin America met through:

The more strategic use of port property assets ©

AAPA Latin American & Caribbean Executive Management Conference

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Summary

- Market factors affecting ports and their property portfolios
- Latin American challenges
- Ports, logistic chains and intermodality
- Regionalisation
- Port property
- Port property asset management
- Investment demand, and values of port properties
- Opportunities & solutions
- Conclusions
Revolution not evolution

MARKET FACTORS AFFECTING PORTS AND THEIR PROPERTY PORTFOLIOS

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

33% increase in World Output in ten years

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## Forecast container port demand growth

<table>
<thead>
<tr>
<th>Region</th>
<th>CAGR 2007-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>5.5% p.a.</td>
</tr>
<tr>
<td>North Europe</td>
<td>7.1% p.a.</td>
</tr>
<tr>
<td>South Europe</td>
<td>6.6% p.a.</td>
</tr>
<tr>
<td>South East Asia</td>
<td>7.2% p.a.</td>
</tr>
<tr>
<td>Far East</td>
<td>9.5% p.a.</td>
</tr>
<tr>
<td>Latin America</td>
<td>7.0% p.a.</td>
</tr>
<tr>
<td>Africa</td>
<td>11.2% p.a.</td>
</tr>
<tr>
<td><strong>Global</strong></td>
<td><strong>8.4% p.a.</strong></td>
</tr>
</tbody>
</table>

*Will need to be watched closely*

*Reducing, depending on extent of global recession*

Source: Drewry
Terminal Capacity

- Strong need to optimise capacity of existing terminals
- Numerous challenges for Greenfield and Brownfield terminal development (e.g. legal, environmental etc)
- Demand side of the equation quick to react/dynamic, capacity side generally very slow
- 2006 global capacity = 614 million teu p.a.
- Forecast confirmed expansion to 2012 = 159 million teu
- Total confirmed capacity by 2012 = 773 million teu p.a.
- 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
Invest in both the ‘hardware’ and ‘software’ of logistics

LATIN AMERICAN CHALLENGES
Logistics challenges faced by Latin America

• Vast geography – larger than the US
• Underdeveloped transport infrastructure
• Concentration of population 200 km’s from the coastal areas
• Major hinterlands dispersed eg, Mexico City, Sao Paulo, Lima, Buenos Aires
• Lack of economic integration
• Security and cheap labour challenge supply chain development
Developing effective supply chains in Latin America

- Look at ports as interchangeable links in system; not independents components – the ‘nexus’ of the transport network? Regionalisation?

- Port development needs to be ‘holistic’ ie, concurrent with logistics, regional distribution systems, ‘value added services and ‘market dictated’ balancing of port and terminal capacity.

- Note that investment in infrastructure and capacity expansion doesn’t guarantee throughput; yet the lack of it will guarantee the absence of growth.

- To accomplish this ports will need to become adept at securing the private sector’s capital and know how for infrastructure development. The Chinese model of Sinotrans?
Why logistics, transport and port development is critical to Latin America

• ‘If infrastructure is the hardware of a productive nation, then logistics services is the software that drives it.’

• Lack of transport infrastructure in LA results in uncompetitive position for most LA companies due to slower turnover of goods and requiring higher capital reserves.

• The world has reduced logistics costs since 1980; LA’s has risen.

Why logistics, transport and port development is critical to Latin America

• ‘The World is Flat’; developing countries who trade freely grow their GDP and reduce poverty faster than those who don’t. To do this requires:

• Adoptable technology and low cost mfg centres (which now can be amortised in 5 years).

• Reliable, low cost transport as an imperative to obtain and increase a country’s competitive advantage.

• Reducing the ‘tax’ on the private sector with tying up capital with slow turnover times of inventory.

INCREASING SHIP SIZE

Need to reach ever deeper into the hinterland

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### Growth in container ship size

<table>
<thead>
<tr>
<th>Year</th>
<th>Average ship size (teu)</th>
<th>Largest ship in world fleet (teu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>375</td>
<td>3,057</td>
</tr>
<tr>
<td>1990</td>
<td>1,355</td>
<td>4,409</td>
</tr>
<tr>
<td>2000</td>
<td>1,741</td>
<td>7,200</td>
</tr>
<tr>
<td>Current</td>
<td>2,191</td>
<td>13,500+</td>
</tr>
</tbody>
</table>

Source: Drewry Shipping Consultants Ltd
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 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, as we are seeing: bigger ships = 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 and specialised facilities requiring large amounts of land through the supply chain. Where will the capital come from???
Shifting to the land side of the ‘sea-land’ equation

PORTS, LOGISTICS CHAIN, INTERMODALITY

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

• But weakest link in the supply chain due to their inability to process more throughput and increase velocity: Transport versus Logistics is their challenge.
• ‘Just in time’ is now ‘integrated time’, requiring more specialised facilities such as ‘fast buildings’.
• The private sector and the strategic use of port related property is key to addressing these issues.
The logistical supply chain’s new boss: 3PL’s; All heavily property based
The focus on shifting US transport market

- Panama canal widening – 2014
- Winners and losers: Gulf and East coast ports, West cost respectively
- Intermodality is key going forward

Key Population per square mile:
- 250 or more
- 50 – 249.9
- 10 – 49.9
- less than 10

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Extending the port’s sphere of influence

REGIONALISATION

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Regionalisation

- Ports integrating into new freight paradigm = major land usage
- Inland distribution cost - now major savings area as water transport is now a commodity
- Constraints (political, ecological, economic) will force hinterland expansion and access
- 3PL in control, heavy users of real estate facilities
Regionalisation (cont.)

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

Evolution of a Port

Regionalisation: heavily dependent on property

Regionalisation

Level of functional integration

1. Setting
2. Expansion
3. Specialisation
4. Regionalisation

Level of functional integration

- Port
- Container
- Bulk
- Freight dist ctr
- General cargo
- Reconversion
- Freight corridor
- Urban area

Evolution of a Port

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Altering the basic function of container ports

PORT PROPERTY

25 November 2008  Brazil Ports Seminar

www.aegirports.com
Port Property

Port Authorities (PA’s) control significant strategic waterfront property, which:

• Is largest asset balance sheet
• Financially underperforms
• May be 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, e.g., 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

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Cooling off now but will come back with a vengeance

INVESTMENT DEMAND FOR YOUR PORT ASSETS

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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
Property market dynamics – take advantage of opportunities

• Port properties have strong demand
• Yields & Capitalisation rates (ie, alternative investment product) may be higher
• Risk (what is the real risk in emerging market ports? Strength of covenant, dollar denominated rent, global trade)
• Inflation?
A decidedly different exercise

VALUATION & LEASE STRUCTURING FOR PORT PROPERTIES

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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
Valuation Challenges

• Valuations of port properties need to be benchmarked for like kind properties (most probably found across the world)
• Valuations need to concentrate on specific economic use/benefit of both the port and the location of the subject property
• Understand the port industry dynamics
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.
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
• Area or volume? Rent, percentage or both?
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 considering the above do you know if you will be making money?

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CONCLUSIONS

The end is near!

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Conclusions

• Marketplace is dynamically changing; Latin America needs to access private capital to expand its infrastructure.
• Capacity utilisation levels are beyond critical stage; use downturn to plan expansion.
• LA’s challenge for private capital can be overcome by leveraging hard assets.
• Regionalisation and LA’s challenges requires holistic approach to expansion of port and its sphere of influence.
‘Navigating the World of Port Properties –
To Maximise the Value of Ports’

Thank You

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