The Dynamics of the US Container Market and Shifting Trade Patterns – Implications for the Florida Ports

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Growth in Containerized Cargo

![Chart showing growth in containerized cargo from 1990 to 2010. The chart compares TEU's (Twenty-foot Equivalent Units) for the Pacific, Atlantic, and Gulf regions. The data shows a steady increase over the years, with the Pacific region consistently leading in TEU's.](chart_url)

Legend:
- **Red**: Pacific
- **Blue**: Atlantic
- **Yellow**: Gulf
Over the past 10 years, TEUs at US ports have grown at a compound annual growth rate (CAGR) of 4.1%. Over the 1990-2010 period, the TEUs grew at CAGR of 5.1%

<table>
<thead>
<tr>
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<th>CAGR 2000-2010</th>
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<tbody>
<tr>
<td>Pacific</td>
<td>4.36%</td>
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<tr>
<td>Atlantic</td>
<td>3.49%</td>
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<tr>
<td>Gulf</td>
<td>6.25%</td>
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<tr>
<td>Total US</td>
<td>4.11%</td>
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From a sub-regional perspective, Southern California ports (PSW) handle about 35% of all import tonnage, peaking in 2001 – this share has been falling since 2002.

Source: US Maritime Administration
Shocks Have Occurred in the Existing Logistics Patterns of Importers and these Changes Occurred Between 2002 and 2007

• Consolidation of imports via San Pedro Bay (Los Angeles and Long Beach) Ports -- mid 1990’s:
  – Distribution center growth
  – Cross-dock operations
  – Rail investments in S. Cal to Midwest routings

• But then ..........
  – 9/11
  – West Coast Shutdown
  – Capacity Issues – Land and labor shortages
  – Rail and truck shortages
  – High Intermodal rates
  – Search for alternatives
  – Shifting production centers
  – Economic crisis
All Water Routings are Growing
All Water Services to the East and Gulf Coasts are Growing

• Panama Canal:
  – Current size limitations (-)
  – New, bigger canal (+)
  – Transit time issues (-)
  – Carriers can internalize rail revenue (+)

• Suez Canal:
  – Accommodates larger vessels (+)
  – Better transit to SE Asia/India (+)
  – Political instability/Piracy (-)
  – Transit time issue to Midwest (-)
  – Shifting Production to India/SE Asia (+)
    • New India-Med direct express services (+)
    • $110 billion port infrastructure investment in India
    • Growth in terminal development in Vietnam
  – Transshipment operations in Med (+)
All Water Services are Growing

- Significant growth in distribution centers in Gulf and Atlantic Port Ranges

- Proximity to Southern Asia/India is a positive – Suez Canal:
  - Growth in Indian port infrastructure
  - Growth in production centers and port infrastructure in Vietnam

- With direct services, transit time differentials are narrowing

- Port infrastructure investment on East and Gulf Coasts has responded
Impact of Development of All-Water Service
Imported Asian Container Tonnage - US North Atlantic Port Range
Imported Asian Container Tonnage – South Atlantic Port Range – FL Ports have Limited Participation in this Market
Imported Asian Container Tonnage – Gulf Coast Port Range

Source: US Maritime Administration, Foreign Trade Statistics
China Has Been Responsible for Nearly 40% of Imported Containerized Tonnage

US Maritime Administration

2006 data reflects new data base by MARAD
Asian Supply Sources are Shifting, Favoring Suez Routing. However, China Remains the Major Trade Source

![Bar Chart](chart.png)

- **Cambodia**: 5% (6-Year CAGR), 10% (Change 2009-2010)
- **China**: -5% (6-Year CAGR), 0% (Change 2009-2010)
- **India**: 20% (6-Year CAGR), 15% (Change 2009-2010)
- **Other Asia**: 10% (6-Year CAGR), 5% (Change 2009-2010)
- **Pakistan**: 15% (6-Year CAGR), 0% (Change 2009-2010)
- **Sri Lanka**: 15% (6-Year CAGR), 5% (Change 2009-2010)
- **Thailand**: 5% (6-Year CAGR), 0% (Change 2009-2010)
- **Vietnam**: 20% (6-Year CAGR), 15% (Change 2009-2010)
Expansion of the Panama Canal and Growth in Suez Canal—Implications on Changing Trade Patterns

• After 2014, the composition of the fleet will likely change, as 6,500 TEU plus vessels will be deployed.

• Actual volume increases through the Panama Canal may be less than anticipated:
  – Factors that have impacted growth in all water services are now in place.
  – Growth in trade with areas that are more efficiently served via Suez Canal.
  – Caribbean Transshipment Centers will likely compete with mainland for import distribution center locations.

• East and Gulf Coasts will have to compete to handle the larger sized vessels that will be deployed on both Suez as well as Panama Canal based on infrastructure:
  – Channel depth to accommodate larger vessels (both Suez as well as enlarged Panama Canal).
  – Berth capacity to handle 1,000 ft plus vessels.
  – Crane outreach capability.
  – All require capital investment.

• East and Gulf Coast ports will also need to compete based on:
  – Local market.
  – Access to discretionary cargo for both truck and rail.
IMPLICATIONS FOR FLORIDA PORTS
Concentration of Container Export/Import Local Market Locations Reflect Population Centers – Jacksonville, Tampa, Palm Beach, Fort Lauderdale and Miami
Container Exports from FL Origins
Top-10 FL Counties

75% of Exports from Florida handled via Florida Ports
Container Imports to FL Destinations
Top-10 FL Counties

50% of Imports Into Florida move via Florida Ports
Import Container Market – Asia
Florida Ports Under Serve the Asian Import Market – The Key Growth Market Served by the Growing All Water Trade
The Florida Ports Must Compete For Discretionary Cargo

• Asia is the major trading partner for Florida for containerized imports
• In 2009, the Florida ports handled 38% of the 2.2 million tons of Asian imported containerized cargo into Florida:
  – This represents a potential of 1.4 million tons imported from Asia into Florida that are not now moving via Florida Ports:
    • 39% moves via West Coast Ports (36% via Los Angles and Long Beach)
    • 13% moves directly via Savannah
    • 4% from New York
    • 2% from Charleston
• In 2009, the Florida Ports handled about 70% of the 3.1 million tons of non-Asian imported cargo moving into Florida:
  – This represents an additional 945,300 tons of potential TEUs:
    • 7% moves via New York
    • 6% via Los Angeles and Long Beach
    • 3% from Savannah
    • 3% from Charleston
    • 2% each from New Orleans, Houston, Philadelphia, Norfolk
• This excludes international cargo moving via truck into Florida from distribution centers in Savannah and Atlanta – 8.8 million tons or 1 million TEUs
• Total 11.1 million tons of potential import cargo – 1.3 million TEUs
• 1.8 million TEUs of export and empties
• 3.1 million total TEUs potential currently
Implications for the State

• Increasing international waterborne cargo provides an economic stimulus to the State:
  – Capturing cargo from outside ports and redirecting that cargo via Florida ports is key
  – 1.2 million TEUs is the current identified potential Asian cargo moving into Florida from other Ports
  – Export loads and empties associated with this potential provides a total 2.8 million TEU potential
  – This represents a potential to create 21,500 direct, induced and indirect jobs within the state port system:
    • Under a 25% capture rate, this would generate 5,400 direct, induced and indirect jobs, while a 50% capture rate would create about 10,800 direct, induced and indirect jobs
Investment in Port Infrastructure will be Required to Capture a Share of the Potential Market

- Investment in deeper channels - 50 ft has been funded by the State for Miami:
  - Jacksonville under study
  - PEV under study
- Rail investment will be required:
  - FEC on-dock at Miami
  - Near dock ICTF at Port Everglades
  - Investment in rail along State 27
  - Winter Park ICTF by CSX
- Attraction of import distribution centers – competition with Savannah/Atlanta
- Crane outreach capacity must be increased
- Berth length is needed
- Highway congestion must be minimized
- How to fund???
Implications - Infrastructure Funding is the Critical Issue

• Deepwater ports have lost funding for system preservation projects, none-the less major infrastructure projects:
  – After 9/11 - security investments competing with system preservation investments
  – Downturn of trade drastically reducing port revenues
  – Economic crisis reducing state/municipal public funding
  – US Army Corps of Engineers/Federal Government cannot fund the dredging/deepening projects
  – *Private sector participation becomes necessary*
Trends in Seaport Financing

- Increased use of municipal bonds on behalf of private entity where private party is responsible for debt service:
  - Jacksonville
  - Baltimore

- Public-private partnerships and the increase in concessions:
  - Lump sum up front payments - traditional concession i.e., Maher Terminals in New York
  - Combination of up front payments and annual payments and MAGS, and identified private party infrastructure investment --
    - Ports America – Oakland
    - Maryland Ports Administration (Baltimore) concession with Ports America/Highstar Capital
Public-Private Partnerships are Growing: 2005 - 2007 was the Peak of Public Private Partnerships

- July, 2007 – Goldman Sachs acquires minority stake in Carrix -- SSA:
  - Multiple not known
- March, 2007 - AIG Investment Group acquires MTC terminals - $800 million:
  - Multiple not known
- March, 2007 – RREEF purchases Maher Terminals:
  - $2.1 billion (445 acre terminal in NYC and the Fairview Terminal in Prince Rupert, BC
  - (34.2 multiplier against enterprise value to last 12 months of earnings before interest, taxes, depreciation, and amortization)
- February, 2007 Morgan Stanley purchases Montreal Gateway Terminals -- $480 million:
  - 80% share of 2 terminals in Montreal – 1.1 million TEUs
  - Hapag-Lloyd has balance
- December, 2006 – AIG purchases P&O Ports North America - $1.0 billion plus
- December, 2006 – Ontario Teachers Pension Fund purchases OOIL Terminals:
  - 2 in NYC
  - 2 in Vancouver, BC
  - 21.9 multiple
- November, 2006 - RREEF purchases Peel Ports:
  - 16.0 multiplier
2005 - 2007 was the Peak of Public Private Partnerships

- November, 2006 – Macquarie purchases 72 acre Halterm terminal in Halifax:
  - 17.0 multiplier
- September, 2006 – Macquarie purchases 40% share of Hanjin’s terminals in Oakland, Long Beach and Seattle:
  - Multiple not known
- June, 2006 - Admiral Consortium purchases Associated British Ports that handle 25% of the UK cargo:
  - $6.4 billion
  - 16.2 multiplier
- April, 2006 – PSA purchases Hutchinson Port Holdings:
  - $7.5 billion
  - 14.0 multiplier
- January, 2006 – DP World purchases P&O Ports:
  - $8.9 billion
  - 15.2 multiplier
- December, 2005 - Babcock & Brown purchases PD Ports:
  - $1.1 billion
  - 13.2 multiplier
Recently, there has been Increased Public-Private Partnership Activity in the US

- 2008-2011 - Diamond State Corp. (Port of Wilmington, DE) requests valuation of marine terminal for concession
- 2008-2009 - MOL/TraPac invests in Port of Jacksonville
- 2009-2010 - Port of Portland Terminal 6 Concession with ICTSI
- 2009 - Ports America enters into Port of Oakland Concession
- 2010 - Port of Baltimore Seagirt Marine Terminal Concession with Ports America and Highstar Capital
Recently, there has been Increased Public-Private Partnership Activity

- 2009-2011 - Philadelphia Regional Port Authority issues RFP for Southport Container Terminal
- 2010-2011 – Port of Lake Charles considering concession of City Docks
- 2009-2011 – Private land owner on Ship Channel markets land for future terminal development to terminal operators
- 2011 - Port of Galveston looking for private partner
Economic Value of the Marine Transportation System

• 16.2 million jobs supported cargo and passenger activity:
  – 13.2 million jobs supported by deepwater port activity
  – 2.5 million jobs supported by inland waterways
  – 354,000 jobs supported by US cruise activity

• More than $3.2 trillion economic value – 25% of the US Gross Domestic Product
Economic Value of Waterborne Cargo Moving Florida Seaports

• 554,347 total jobs in Florida

• $23.3 billion in wages and salaries and consumption impacts

• $66.3 billion in economic value to the State – 9% of state GDP
Economic Impact of Cargo and Cruise Activity at the Port of Miami

- 176,420 direct, induced, indirect and related jobs in Florida
- $6.4 billion of wages and salaries
- $16.9 billion of total economic impact on the State
- $603.2 million state and local taxes
The Port of Miami Master Plan Projects are Proactive and will Strengthen the Port’s Role as an Economic Catalyst for the Region and the State

• The deepening project is approved and funded
• On-dock rail will enhance the ability of the Port to compete not only in Florida but also in the Southeastern US
• The tunnel will enhance the flow of trucks to and from the Port, improving the retrieval and delivery time of local and regional container traffic
• Development of an ICTF and distribution center will increase the Port’s competitive position to serve the regional economy
• Private sector partnerships will be key in growing port infrastructure investment
Implications

• The Global Economy is here!
  – Trade restrictions must be avoided

• The port system has become integral in the world’s logistics systems:
  – Ports must provide dependable service – labor/management issues at West Coast ports
  – Destructive competition between ports must be avoided

• Infrastructure funding needs are reaching critical shortfalls

• What other sectors of the US Economy represent such a major catalyst for economic development and growth?

• The Marine Transportation System represents a key market for future stimulus funding, and cannot be ignored as the economic development dividends have been well documented -- Ports and maritime activity create jobs