Port Finance Observations

- Port and related infrastructure needs are large
- Public funding is constrained and competition for it is high
- Traditional tax-exempt financing provides a low cost of funds for most ports
- Private equity and taxable debt financings provide an attractive alternative
- Costs and benefits need to be evaluated in light of port objectives
Port Financing Alternatives

Traditional U.S. Model – Public Authorities

- Leverages all port cash flow (may include taxes)
- Government department or independent port authority issues tax-exempt bonds
- Economic development goals often drive financing and investment decisions
- No equity sold

Project Finance Model – Special Facility Financing

- Leverages project cash flows
- Port issues tax-exempt debt on behalf of private entity
- Single purpose entity created as a public-private partnership
- Limited number of port projects

Emerging U.S. Model – Long-Term Concession

- Aggressively leverages projected cash flows
- Port facilities leased to private operator under long-term concession
- Likely to involve private equity
- Market discipline imposed
- Government gives up control

This material is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument (or related derivative) or to participate in any trading strategy. This material was not prepared by the Morgan Stanley research department. Please refer to important information and qualifications at the end of this material.
Port Financing Alternatives (cont’d)

- Debt
  - General Obligation
    - (Government Supported)
  - Tax-Exempt Revenue Bonds / Taxable Bonds
    - (Enterprise Supported)

- Equity
  - Direct Investment / Private Equity
  - Public Floatation
History of Restricted Private Sector Participation

**Federal Funds**
- Dredging funds
- Port security grants
- Highway tax funds for related roadway infrastructure

**State / Local Funds**
- Property taxes, such as WA, OR, FL
- State appropriations, such as VA, SC, GA, FL

**Project Funds**
- Tariffs
- Rent
- Clean Trucks Fee
- TEU Infrastructure Fee

Design → Bid → Build

Finance

This material is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument (or related derivative) or to participate in any trading strategy. This material was not prepared by the Morgan Stanley research department. Please refer to important information and qualifications at the end of this material.
Ports Enjoy Strong Credit Ratings

Moody’s U.S. Ports Portfolio by Rating Category

<table>
<thead>
<tr>
<th>Rating Category</th>
<th>U.S. Port Debt Outstanding by Rating Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaa</td>
<td>700</td>
</tr>
<tr>
<td>Aa2</td>
<td>2,000</td>
</tr>
<tr>
<td>Aa3</td>
<td>1,700</td>
</tr>
<tr>
<td>A2</td>
<td>1,600</td>
</tr>
<tr>
<td>A3</td>
<td>400</td>
</tr>
<tr>
<td>Baa1</td>
<td>200</td>
</tr>
<tr>
<td>Baa2</td>
<td>350</td>
</tr>
<tr>
<td>Baa3</td>
<td>100</td>
</tr>
<tr>
<td>Ba1 or below</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: Moody’s Investors Service

This material is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument (or related derivative) or to participate in any trading strategy. This material was not prepared by the Morgan Stanley research department. Please refer to important information and qualifications at the end of this material.
Recent Interest Rate Movements

January 10, 2007 to January 22, 2008

<table>
<thead>
<tr>
<th>Interest Rates</th>
<th>BBRBI</th>
<th>30 Yr Treasury</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>4.89%</td>
<td>5.36%</td>
</tr>
<tr>
<td>Low</td>
<td>4.38%</td>
<td>4.28%</td>
</tr>
<tr>
<td>Average</td>
<td>4.64%</td>
<td>4.81%</td>
</tr>
<tr>
<td>Current</td>
<td>4.63%</td>
<td>4.23%</td>
</tr>
</tbody>
</table>

Recent Interest Rate Movements

Source: Morgan Stanley

Current Rates

4.63%
4.23%

3.50  4.00  4.50  5.00  5.50

Jan-07 Feb-07 Apr-07 May-07 Jun-07 Jul-07 Sep-07 Oct-07 Nov-07 Jan-08

BBRBI  30 Yr Treasury

This material is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument (or related derivative) or to participate in any trading strategy. This material was not prepared by the Morgan Stanley research department. Please refer to important information and qualifications at the end of this material.
Changing Needs of Players in U.S. Infrastructure

State and Local Catalysts
- Budget crises – States are struggling to balance their General Fund budgets and may look to monetize value of profitable state owned enterprises, including ports
- Container volumes are growing at an unprecedented rate
- Large scale capital investments require high degree of leverage

Federal Catalysts
- Federal legislation is far more accommodative toward the private sector
- Inadequate public sector transportation funding continues to drive focus on private sector alternatives

Private Sector Catalysts
- Private equity seeking stable and reliable long-term investment opportunities
- “Investor patience” and essentiality of port assets allows for maximizing value over long concession term

This material is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument (or related derivative) or to participate in any trading strategy. This material was not prepared by the Morgan Stanley research department. Please refer to important information and qualifications at the end of this material.
Strong Interest from Infrastructure Funds in Ports Sector

• Container throughput growth, paired with a finite amount of coastal land allocated to shipping terminals, has lead to significant pricing power resting with the port operators

• Financial and strategic buyers have been able to lever the assets in a considerable fashion and pay attractive purchase prices

• AIG Global Investment Group has been particularly active, acquiring Dubai Ports World’s interest in Port Newark Container Terminal, AMPORTS, MTC Holdings

• Transactions involving the transfer of leasehold interests at strategically important ports demonstrate
  – High market valuations of port assets
  – Willingness of investors to make upfront and ongoing investments in these terminals

Morgan Stanley

This material is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument (or related derivative) or to participate in any trading strategy. This material was not prepared by the Morgan Stanley research department. Please refer to important information and qualifications at the end of this material.
Strong Interest from Infrastructure Funds in Ports Sector (cont’d)

- Ports emerged as a viable infrastructure asset in the U.S.
- Infrastructure buyers have looked towards ports and terminal operating companies as having many similar characteristics to toll roads
  - Steady volumes
  - High barriers to entry
  - Inflationary annual price increases
- Ports have slightly higher competitive and operating risks, and tend to have lower debt levels than toll roads
- Understanding what pricing power exists at the port will be a critical diligence point
Infrastructure Assets Have Not Caught Up With the Supply of Infrastructure Equity and Debt Capital

Total Available Infrastructure Fund Equity \( \approx $100Bn \) (1)
Total Leveraged Purchasing Power \( \approx $500Bn \)

Supply of Investor Capital

Available Resources
- Large sums of uninvested equity and debt capital
- Increased competition for scarce resources
- Focus on U.S. as growth market
- Proven global track record of successful projects
- Willingness to team with experienced operators

Demand of Municipalities

Significant Capital Needs
- Looming large maintenance and expansionary capital expenditure requirements
- Unfunded projects
- Tax increases as a funding mechanism increasingly unpalatable

(1) Source: Morgan Stanley

This material is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument (or related derivative) or to participate in any trading strategy. This material was not prepared by the Morgan Stanley research department. Please refer to important information and qualifications at the end of this material.
Port Operators Are Expanding Their Global Presence and Appetite for Strategic Investments

Leading Global Port Operators
2005 TEUs Throughput (MM)

Maersk: 14.6
MSC: 6.5
Evergreen Group: 5.3
CMA CGM: 4.7
CSCL: 4.6
COSCO: 4.5
NYK: 4.0
APL: 3.9
OOCL: 3.5
Hapag-Lloyd: 3.1

2003 – 2005 % Growth
Maersk: 36
MSC: 47
Evergreen Group: 12
CMA CGM: 67
CSCL: 62
COSCO: 50
NYK: 17
APL: 28
OOCL: 31
Hapag-Lloyd: 43

1996 Market Share
By Type of Port Operator

Global Operators: 24%
Other Public: 37%
Other Private: 18%
Top 4 (1): 21%

2005 Market Share
By Type of Port Operator

Global Operators: 37%
Other Public: 23%
Other Private: 19%
Top 4 (1): 21%

Source: The Drewry Container Market Quarterly
(1) Top 4 players include HPH, PSA, APM Terminals and P&O Ports.

This material is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument (or related derivative) or to participate in any trading strategy. This material was not prepared by the Morgan Stanley research department. Please refer to important information and qualifications at the end of this material.
Strategic and Financial Buyers Looking Closely At Port Opportunities

**Strategic Investors – Shipping Lines, Terminal Operators**
- Ports will be viewed as an opportunity to solidify or break into competitive market
- Key investment questions
  - Does port provides good rail connection and capacity to the residential and manufacturing centers of the U.S. mid-west?
  - How well established is the inter-modal service?
  - How accessible to roads and interstate systems?
  - Can existing management structure and systems be leveraged to achieve cost savings?

**Infrastructure Funds – Financial Firms**
- Ports are viewed as a very attractive opportunity relative to other asset classes in North America
- Lots of equity looking for assets to invest in
- Funds will focus on positioning within the market
- Key investment criteria include:
  - Significant capacity constraints
  - Barriers to entry
  - Pricing power

Morgan Stanley
Ports Have a Number of Available Strategic Alternatives to Both Maximize Value and Achieve Policy Objectives …

<table>
<thead>
<tr>
<th>Description</th>
<th>Long-Term Concession Lease</th>
<th>Conventional Landlord Lease</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Full sale of equity via competitive bidding process</td>
<td>• 100% control of the asset retained by the Port</td>
</tr>
<tr>
<td></td>
<td>• Private investors who are experienced operators and/or major infrastructure funds</td>
<td>• Continues to access tax-exempt financing markets on its own</td>
</tr>
<tr>
<td></td>
<td>• Governance retained by the Port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Operator assumes throughput risk</td>
<td></td>
</tr>
<tr>
<td>Considerations</td>
<td>• Complete transfer of operating risk</td>
<td>• More conservative growth rates, term limits and leverage targets likely in tax-exempt</td>
</tr>
<tr>
<td></td>
<td>• Proceeds collected by the Port upfront at closing, or over time</td>
<td>• Port retains operating risk and control</td>
</tr>
<tr>
<td></td>
<td>• Detailed operating manual ensures maintenance at or above Port standards</td>
<td>• The Port retains ability to monetize equity over time but takes market and financing risk</td>
</tr>
<tr>
<td></td>
<td>• Asset reverts back to the Port at no cost at the end of the concession</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating Control</th>
<th>Private Operator</th>
<th>Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Morgan Stanley*
## Ports Should Evaluate Value and Policy Considerations to Determine the Optimal Approach

<table>
<thead>
<tr>
<th><strong>Long-Term Concession Agreement</strong></th>
<th><strong>Conventional Landlord Lease</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benefits</strong></td>
<td></td>
</tr>
<tr>
<td>- Creates maximum present value proceeds to the port if successful</td>
<td>- No substantial change in functions</td>
</tr>
<tr>
<td>- Off-shoulders future capital and operating risks to a private operator</td>
<td>- May be shorter-term in nature</td>
</tr>
<tr>
<td>- Current market conditions create favorable bidding environment</td>
<td>- Could finance certain capital projects</td>
</tr>
<tr>
<td><strong>Considerations</strong></td>
<td></td>
</tr>
<tr>
<td>- Long-term nature of lease requires strong win-win partnership</td>
<td>- Counterparty risk drives up cost</td>
</tr>
<tr>
<td>- U.S. port privatization has never been accomplished</td>
<td>- Lease payments are tied to operating risks</td>
</tr>
<tr>
<td>- Lack of established process and legal documentation</td>
<td>- Capex may be required in future to support lessee</td>
</tr>
<tr>
<td>- Market conditions could worsen</td>
<td>- Time and resources are similar to Concession Lease with less potential PV proceeds</td>
</tr>
</tbody>
</table>

Source: Morgan Stanley

This material is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument (or related derivative) or to participate in any trading strategy. This material was not prepared by the Morgan Stanley research department. Please refer to important information and qualifications at the end of this material.
Case Study: Jacksonville Port Authority

<table>
<thead>
<tr>
<th>Jacksonville Port Authority</th>
<th>Transaction Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>• $100 million Special Purpose Facilities Revenue Bonds for the Mitsui O.S.K. Lines, Ltd. (“MOL”) Project</td>
<td>• The bonds are backed by an irrevocable direct-pay Letter of Credit issued by Sumitomo Mitsui Banking Corporation (New York Branch) and carry the bank’s ratings of A1 / VMIG-1 and A / A-1</td>
</tr>
<tr>
<td>• The bonds were issued as weekly VRDBs to finance the acquisition, construction and installation of a container terminal to be located at the Dames Point Marine Terminal facilities</td>
<td>• Morgan Stanley worked closely with the Authority, its financial advisors, MOL and the Bank to help structure a new trust indenture and bond covenants that were acceptable to all parties to the transaction</td>
</tr>
<tr>
<td>• Facilities will be leased to MOL and its wholly owned subsidiary, TraPac</td>
<td>• Morgan Stanley serves as remarketing agent for the bonds</td>
</tr>
<tr>
<td>• The bonds are payable from rent to be paid to the Port under an operating and lease agreement with MOL</td>
<td></td>
</tr>
</tbody>
</table>

Source: Jacksonville Port Authority Series 2007 Official Statement

This material is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument (or related derivative) or to participate in any trading strategy. This material was not prepared by the Morgan Stanley research department. Please refer to important information and qualifications at the end of this material.
Port of Portland is Exploring P3 Alternatives for Terminal 6

**T-6 Facility Overview**
- Deep-draft container terminal, with 200 acres for containers
- 400,000 TEU capacity, with significant dock extension possibilities
- Length / Depth of Berths: 2,850 feet/43 feet
- Stevedore Services: MTC
- Non-container tenants include AWC, Oregon Steel Mills, and American Honda Motors

**Historical Container Volume ($MM)**

<table>
<thead>
<tr>
<th></th>
<th>FY02</th>
<th>FY03</th>
<th>FY04</th>
<th>FY05</th>
<th>FY06</th>
<th>FY07</th>
<th>FY08E</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-6 Container Volume</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>100</td>
<td>50</td>
<td>150</td>
<td>200</td>
</tr>
</tbody>
</table>

**Rail, Shipping and Inland Barge Connectivity**
- Railroads with Direct Access to On-Dock Intermodal Yard include BNSF and UP
- Shipping lines calling on T6 include CKYH Alliance, China Shipping, and Hapag Lloyd
- Container barging serving the hinterland provides significant cost savings vs. trucking

This material is not a solicitation of any offer to buy or sell any security, commodity or other financial instrument (or related derivative) or to participate in any trading strategy. This material was not prepared by the Morgan Stanley research department. Please refer to important information and qualifications at the end of this material.
Conclusion

- Ports have access to the capital markets based on
  - Steady, predictable cash flows
  - Essentiality
  - Economic and demographic strength
  - Financial structuring
- Debt financing has evolved to monetize a port’s aggregate or discrete cash flows on an overall basis or project basis
- Taxable debt markets at the moment are strong for infrastructure asset transactions
- Equity will focus on operational and capital efficiency
- 2008 will continue to test P3 market for U.S. ports
Disclaimer

This material was prepared by sales, trading, banking or other non-research personnel of one of the following: Morgan Stanley & Co. Incorporated, Morgan Stanley & Co. International PLC, Morgan Stanley Japan Limited, Morgan Stanley Capital Group Inc. and/or Morgan Stanley Dean Witter Asia Limited (together with their affiliates, hereinafter “Morgan Stanley”). Unless otherwise indicated, these views (if any) are the author’s and may differ from those of the Morgan Stanley fixed income or equity research department or others in the firm.

This material has been prepared for information purposes only and is not a solicitation of any offer to buy or sell any security, commodity or instrument or related derivative (hereinafter “instrument”) or to participate in any trading strategy. Any such offer would be made only after a prospective participant had completed its own independent investigation of the instrument or trading strategy and received all information it required to make its own investment decision, including, where applicable, a review of any prospectus, prospectus supplement, offering circular or memorandum describing such instrument or trading strategy. That information would supersede this material and contain information not contained herein and to which prospective participants are referred. If this material is being distributed in connection with or in advance of the issuance of asset backed securities, information herein regarding any assets backing any such securities supersedes all prior information regarding such assets. We have no obligation to tell you when information herein is stale or may change. We make no representation or warranty with respect to the accuracy or completeness of this material, nor are we obligated to provide updated information on the instruments mentioned herein.

This material may have been prepared by or in conjunction with Morgan Stanley trading desks that may deal as principal in or own or act as market maker or liquidity provider for the instruments mentioned herein. Where you provide us with information relating to your order or proposed transaction (“Information”), we may use that Information to facilitate the execution of your orders or transactions, in managing our market making, other counterparty facilitation activities or otherwise in carrying out our legitimate business (which may include, but is not limited to, hedging a risk or otherwise limiting the risks to which we are exposed). Counterparty facilitation activities may include, without limitation, us taking a principal position in relation to providing counterparties with quotes or as part of the ongoing management of inventories used to facilitate counterparties. Trading desk materials are not independent of the proprietary interests of Morgan Stanley, which may conflict with your interests. Morgan Stanley may also perform or seek to perform investment banking services for the issuers of instruments mentioned herein.

Any securities referred to in this material may not have been registered under the U.S. Securities Act of 1933, as amended, and, if not, may not be offered or sold absent an exemption therefrom. In relation to any member state of the European Economic Area, a prospectus may not have been published pursuant to measures implementing the Prospectus Directive (2003/71/EC) and any securities referred to herein may not be offered in circumstances that would require such publication. Recipients are required to comply with any legal or contractual restrictions on their purchase, holding, sale, exercise of rights or performance of obligations under any instrument or otherwise applicable to any transaction.

The securities, commodities or other instruments (or related derivatives) discussed in this material may not be suitable for all investors. This material has been prepared and issued by Morgan Stanley for distribution to market professionals and institutional investor clients only. Other recipients should seek independent investment advice prior to making any investment decision based on this material. This material does not provide individually tailored investment advice or offer tax, regulatory, accounting or legal advice. Prior to entering into any proposed transaction, recipients should determine, in consultation with their own investment, legal, tax, regulatory and accounting advisors, the economic risks and merits, as well as the legal, tax, regulatory and accounting characteristics and consequences, of the transaction. You should consider this material as only a single factor in making an investment decision.

Morgan Stanley
Options are not for everyone. Before purchasing or writing options, investors should understand the nature and extent of their rights and obligations and be aware of the risks involved, including the risks pertaining to the business and financial condition of the issuer and the underlying instrument. A secondary market may not exist for certain of these instruments. For Morgan Stanley customers who are purchasing or writing exchange-traded options, please review the publication 'Characteristics and Risks of Standardized Options,' which is available from your account representative.

The value of and income from investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities, prices of instruments, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in instruments (or related derivatives) transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. Actual events may differ from those assumed and changes to any assumptions may have a material impact on any projections or estimates. Other events not taken into account may occur and may significantly affect the projections or estimates. Certain assumptions may have been made for modeling purposes only to simplify the presentation and/or calculation of any projections or estimates, and Morgan Stanley does not represent that any such assumptions will reflect actual future events. Accordingly, there can be no assurance that estimated returns or projections will be realized or that actual returns or performance results will not materially differ from those estimated herein. Some of the information contained in this document may be aggregated data of transactions executed by Morgan Stanley that has been compiled so as not to identify the underlying transactions of any particular customer.

Notwithstanding anything herein to the contrary, Morgan Stanley and each recipient hereof agree that they (and their employees, representatives, and other agents) may disclose to any and all persons, without limitation of any kind from the commencement of discussions, the U.S. federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including opinions or other tax analyses) that are provided to it relating to the tax treatment and tax structure. For this purpose, "tax structure" is limited to facts relevant to the U.S. federal and state income tax treatment of the transaction and does not include information relating to the identity of the parties, their affiliates, agents or advisors.

In the UK, this communication is directed in the UK to those persons who are market counterparties or intermediate customers (as defined in the UK Financial Services Authority’s rules). In Japan, this communication is directed to the Qualified Institutional Investors as defined under the Securities Exchange Law of Japan and its ordinances thereunder. For additional information, research reports and important disclosures see https://secure.ms.com/servlet/cls. The trademarks and service marks contained herein are the property of their respective owners. Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages of any kind relating to such data.

This material may not be sold or redistributed without the prior written consent of Morgan Stanley.