Shifting International Trade Routes
A National Economic Outlook

February 1, 2011
Today’s Objectives

Endeavor to provide a broad context for today’s program by briefly touching on:

- Some good news
- Some not so good news
- A few industry developments

- **But most importantly, finish on time!**
Some Good News
The US economy is projected to experience solid growth in 2011.

United States Change in Real GDP: 2004-2011 (projected.)

Source: BEA for 2004-2010; WSJ for 2011 forecast (survey of 56 economists, Jan 2011); Norbridge Analysis
US manufacturing sector is showing signs of improvement

Institute of Supply Management (ISM)
Manufacturing Index, 1990-2011

Source: Institute for Supply Management
Likewise, US durable goods orders improved significantly in Q3 & Q4 2010

US Durable Goods Purchases, year-to-year percent change, 12 month rolling average

Source: US Census Bureau’s Manufacturers’ Shipments, Inventories, and Orders (M3) survey
Business is modestly increasing investment


Source: BEA; Norbridge Analysis
Consumers are still saving despite a holiday spending spree.

Index of US Personal Consumption, Personal Income, and Personal Savings (1980=100)

Source: BEA; Norbridge analysis
Atlantic Coast Port volumes rebounded in 2010....

YTD North American East Coast Port Volumes Increase/Decrease
Jan-Nov. 2010 vs. Jan-Nov. 2009 (Measured in TEUs)

<table>
<thead>
<tr>
<th>Port</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>VPA</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>SCSPA</td>
<td>25%</td>
<td>20%</td>
</tr>
<tr>
<td>PANYNJ</td>
<td>30%</td>
<td>35%</td>
</tr>
<tr>
<td>Halifax</td>
<td>45%</td>
<td>40%</td>
</tr>
<tr>
<td>Montreal</td>
<td>10%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Note 1: PANYNJ is loaded only; PANYNJ data available through October
Note 2: Halifax data available through September
Source: Port Websites; Press Releases; Norbridge research
…..as did most Pacific Coast ports

YTD North American West Coast Port Volumes Increase/Decrease
Jan-Nov. 2010 vs. Jan-Nov. 2009 (Measured in TEUs)

-30%
-20%
-10%
0%
10%
20%
30%
40%
50%
60%

POLA
POLB
Oakland
Seattle
Tacoma
Vancouver

Imports
Exports

Note 1: POLB is loaded TEUs only
Note 2: Seattle is international TEUs only
Note 3: Tacoma is international loaded TEUs only
Source: Port Websites; Press Releases; Norbridge research
The North American Rail industry also experienced significant improvements.
Container lines have achieved dramatic financial turnarounds during 2010.

Container Carrier Operating Profit
1st half 2010 & 1st Half 2009

<table>
<thead>
<tr>
<th>Company</th>
<th>H1 2010</th>
<th>H1 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maersk</td>
<td>$2,100</td>
<td>$403</td>
</tr>
<tr>
<td>Hyundai*</td>
<td>$322</td>
<td>$305</td>
</tr>
<tr>
<td>APL/NOL*</td>
<td>$145</td>
<td>$600</td>
</tr>
<tr>
<td>MOL</td>
<td>$300</td>
<td>$0</td>
</tr>
<tr>
<td>K-Line</td>
<td>$600</td>
<td>$900</td>
</tr>
<tr>
<td>Hanjin</td>
<td>$1,200</td>
<td>$1,500</td>
</tr>
</tbody>
</table>

Hyundai and APL/NOL are through 3Q as the data was available
Source: Various publications; Containerization International; Norbridge Analysis
…..despite a 14% increase in capacity.

Global Container Fleet Capacity Scrapped/Added During 2010

Source: Fairplay World Register of Ships. December 2010
Some Not So Good News
US unemployment remains high

US Unemployment Rate, 2000-2010

Source: US Census Bureau
While consumer savings has improved, consumer debt remains substantial.
Foreclosures are a triple challenge: eroding household wealth, depressing housing prices & banks’ balance sheets

Number of Consumers with New Foreclosures

Source: Federal Reserve Bank of New York
U.S. household net worth has declined by about $10 trillion from the 2006/2007 peak.
Driven in part by a significant erosion of homeowners’ equity

Owner's Equity in Household Real Estate

Driven in part by a significant erosion of homeowners’ equity

Source: Federal Reserve Flow of Funds Report
INFLATION
The gross Federal debt approximates $14 trillion

US Gross and Public Debt: 1940-2010

Source: USGovernmentSpending.com; Norbridge analysis
Crude oil prices have increased dramatically as Asia economies recover & political volatility remains. As of Monday (1/31) it surpassed $100

World Crude Oil Prices 1990-2011 (US$/Barrel)

Source: EIA; Norbridge analysis
The Dollar has declined nearly 20% against the Yuan, despite the Chinese governments currency policies.

Source: U.S. Federal Reserve
A Few Industry Developments
Very large container ships: it is all about fuel savings


Source: Norbridge analysis
While slow steaming lowers fuel consumption at the expense of additional travel time....

Transit Time in Voyage Days by Ship Speed for China-PSW and China-USEC Routes

Notes on the analysis:
- Shanghai is the last port of call in China
- Long Beach is the first US port of call for China - PSW service
- New York is the first US port of call for China - USEC service

Source: Norbridge Analysis
…..slow steaming absorbs significant amounts of excess capacity....

Number of Vessels Required for Weekly Service for China-PSW and China-USEC Routes

Number of Vessels Required for Weekly Service

China-PSW | China-USEC

Ship Speed: 24 knots, 20 knots, 16 knots, 12 knots

Source: Norbridge Analysis
which will be important given 2011 projected deliveries of very large containerships

![Bar chart showing vessel sizes and number of vessels in 2009 and 2010.](chart.png)

**Source:** Alphaliner
## 2011 Shipping: An Outlook

### Container
- Capacity challenged
- Demand remains a big question mark
- Slow steaming & extended routes
- Inflation and fuel prices will likely escalate
- Rates and profitability will likely face significant pressures

### Breakbulk & Bulk
- Raw materials, agriculture products & project cargoes are strengths
- Project cargoes, driven by Asia (China) & Brazil are also positives
- Capacity will be fairly balanced
- Rates & profitability should continue to recover
Shifting International Trade Routes Conference
The International Economic Outlook

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Norbridge