U.S. REEFER TRADE & OUTLOOK

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Economist, JOC
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Reefer Shipping Landscape: The Cold, Hard Stats
U.S. REEFER IMPORTS ADVANCED TO NEW HIGH

- Volume of U.S. reefer imports via ocean totaled 17.5 million metric tons – new peak
- Trade was supported by rising disposable income, and unfolding demographic trends
- Over 2004-13, imports volume grew 2.3% a year (CAGR) – almost triple the average annual U.S. population growth rate

**U.S. Imports of Reefer Goods via Ocean**
*In Millions of Metric Tons*

<table>
<thead>
<tr>
<th>Year</th>
<th>04</th>
<th>05</th>
<th>06</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>13.5</td>
<td>14.0</td>
<td>14.5</td>
<td>15.0</td>
<td>15.5</td>
<td>16.0</td>
<td>16.5</td>
<td>17.0</td>
<td>17.5</td>
<td>18.0</td>
</tr>
</tbody>
</table>

2013 Growth: +2%

Data: PIERS
U.S. IMPORTS OF FRUITS AND VEGETABLES GREW MARKEDLY IN 2013

- Fruits and vegetables combined amounted to $24.2 billion in 2013, up more than 8% over 2012
- Total value of U.S. fruit and vegetable imports has more than tripled since the 90s
- Fruits and vegetables from most leading suppliers enter the U.S. duty-free or at preferential duty rates
- By ocean transport volume, fruits and vegetables accounted for 60% of all U.S. reefer imports in 2012-13, up from 54% percent during 2002-03

U.S. Reefer Imports of Top Commodity Groups
In Millions of US Dollars

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2012</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>8.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetables</td>
<td>8.3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DATA: USITC
MEXICO IS TOP SUPPLIER WITH 37% OF THE U.S. FRESH FRUITS MARKET

- Mexico is leading supplier: 37% sourcing share in 2012-2013, up from 24% in 1998-99

- Warm climate, long growing season, proximity to U.S., NAFTA, helped Mexico

- A growing and culturally diverse population will boost consumption of fruits over the next decade

- Bananas and grapes are fruits most consumed in the U.S., but demand for other fruits is growing fast

![U.S. Imports of Fresh or Chilled Fruit by Source](Image)
Demand for imported mangos growing at remarkable pace

The Philippines and Ecuador gained most sourcing share over last 15 years

U.S. Ocean Imports of Mangos
In TEUS

Data: PIERs
HS code: 080450

Sourcing Shares of the Dollar Value of U.S. Mangos Imports

Data: USITC

Mexico 72%
Ecuador 56%
Peru 10%
Brazil 9%
Philippines 7%

Mexico
Ecuador
Peru
Brazil
Philippines

MANGOS
(Fresh or Dried)
PERU, CHINA GAIN MOST SHARE OF U.S. FRESH VEGETABLES MARKET

- Mexico is leading supplier: 68% sourcing share in 2012-2013, merely unchanged from 1998-99
- China: lower costs of producing and packing; labor intensive on a small scale
- Increasing promotion of healthy nutrition
- The tomato is the most imported fresh vegetable, but demand for other veggies is growing fast
Growing Latino population boosting demand for peppers, pimento

Mexico is top supplier, while Canada gains significant sourcing share in last 15 years

U.S. Ocean Imports of Peppers
In TEUS

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>1,000</td>
</tr>
<tr>
<td>1999</td>
<td>2,000</td>
</tr>
<tr>
<td>2000</td>
<td>3,000</td>
</tr>
<tr>
<td>2001</td>
<td>4,000</td>
</tr>
<tr>
<td>2002</td>
<td>5,000</td>
</tr>
<tr>
<td>2003</td>
<td>6,000</td>
</tr>
<tr>
<td>2004</td>
<td>7,000</td>
</tr>
</tbody>
</table>

Data: PIERS
HS code: 070960

CAGR 1999–13: 8.9%

Sourcing Shares of the Dollar Value of U.S. Peppers Imports

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>71%</td>
<td>72%</td>
</tr>
<tr>
<td>Canada</td>
<td>10%</td>
<td>21%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>14%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Data: USITC

PEPPERS
(Fresh or Chilled)
By Major Trade Lanes, in Thousands of TEUs

<table>
<thead>
<tr>
<th>Trade Lane</th>
<th>2012</th>
<th>2013</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central America - US</td>
<td>498</td>
<td>509</td>
<td>1%</td>
</tr>
<tr>
<td>South America - US</td>
<td>251</td>
<td>260</td>
<td>4%</td>
</tr>
<tr>
<td>Eastbound Transpac</td>
<td>229</td>
<td>240</td>
<td>4%</td>
</tr>
</tbody>
</table>

Data: PIERS

2013e vs. 2012
C America: 1%
S America - US: 4%
EB Transpac: 3%
U.S. REEFER IMPORTS IN TEU VOLUME TO ADVANCE MODESTLY IN 2014

- U.S. reefer imports by ocean transport volume to grow by 1%, (95% confidence interval of –8% to +10%), and total 1.2 million reefer containers

- Between 2010 and 2014, reefer imports will have grown at a CAGR of 3.7%

- Improving economy in 2014

- U.S. population growth rate is highest among developed economies: 0.8% a year
U.S. REEFER EXPORTS FELL TO LOWEST VOLUME IN 2 YEARS

- Volume of U.S. reefer exports via ocean may have totaled 13.9 million mt. – lowest level in 2 years
- Trade faced significant challenges
- Over 2004-13, exports volume slid 0.1% a year (CAGR)
Further growth will be challenged by an expected 5% drop in production this year.

Exports to Japan and Hong Kong gained the most in 2013.

**U.S. Ocean Exports of Beef**
*In TEUS*

- 4.7%
  - CAGR 2009–13

**Top Markets for U.S. Beef Exports**
*In millions of US Dollars*

- Japan: 31%
- Canada: -1%
- Hong Kong: 138%
- Mexico: 14%
- Korea: 3%

Data: PIERS
HS code: 0201-0202

Data: USITC

**BEEF**
*(Fresh, Chilled, and Frozen)*
Dairy exports have grown exponentially as incomes in developing economies rise.

Value of dairy exports to China doubled last year.

Top Markets for U.S. Dairy Export

In millions of US Dollars

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>1,200</td>
<td>1,600</td>
<td>16%</td>
</tr>
<tr>
<td>China</td>
<td>1,000</td>
<td>1,100</td>
<td>9%</td>
</tr>
<tr>
<td>Philippines</td>
<td>300</td>
<td>500</td>
<td>75%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>300</td>
<td>400</td>
<td>33%</td>
</tr>
<tr>
<td>Korea</td>
<td>200</td>
<td>250</td>
<td>25%</td>
</tr>
</tbody>
</table>

Data: USITC

U.S. Ocean Exports of Dairy

In TEUS

9.0%
CAGR 1999–13

Data: PIERS
HS code: 0401-0406

2013 vs. 2012
Mexico: 16%
China: 99%
Philippines: 20%
Indonesia: 75%
Korea: 37%
By Major Trade Lanes, in TEUs

Data: PIERS

2013e vs. 2012
WB Trans-pacific: -5%
EB Trans-atlantic: -7%
US-Caribbean: -4%
U.S. REEFER EXPORTS IN TEU VOLUME TO REBOUND MODESTLY IN 2014

- U.S. reefer exports by TEU volume to edge up 0.4% (95% confidence interval of –10% to +11%), and total 0.94 million reefer containers

- Between 2010 and 2014, reefer exports will have grown at a CAGR of 4.2%

- Global economic growth assumed to average 3%/year over next 5 years

- World population growth continues to slow, while dollar’s value will moderately increase
Global population growth to average 1%/year vs. 1.2% in last decade

Value of U.S. Dollar to moderately increase over the next 5 years

Trade Weighted U.S. Dollar Index: Broad
Forecast 2014 - 2018

1.2% CAGR (2014-2018)

Data: Board of Governors of the Fed.
Forecast developed by JOC economist Mario O. Moreno

Population growth continues to slow

Key Takeaways

- U.S. imports via reefer container forecast to grow 1% in 2014 due to modestly improving economy, slowing population growth rate
  - Positive outlook for fruits and vegetables imports partly due to changing ethnic makeup of the US population
- U.S. exports via reefer container to just edge up 0.4% in 2014 on still global competition, world income rising, modest appreciation of US dollar
  - Horticultural products sensitive to changes in the dollar’s value
  - World population growth slowing: challenges in the long run
THANK YOU!

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