IS THE OUTLOOK REALLY THAT BLEAK?
Global reach, local experience

Port Master Planning & Land Use
Environmental focus
Asset management in ports
Construction management

Who is Cardno?

<table>
<thead>
<tr>
<th></th>
<th>GLOBAL</th>
<th>AMERICAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>6500+</td>
<td>3500+</td>
</tr>
<tr>
<td>Offices</td>
<td>200+</td>
<td>150+</td>
</tr>
<tr>
<td>Countries</td>
<td>100+</td>
<td></td>
</tr>
</tbody>
</table>

Cardno has completed projects in 100+ countries.
THE WORLD – Is there growth out there?

WHAT ARE THE THREATS?

BIG SHIPS AND THE CANAL EXPANSION

A NEW CANAL IN NICARAGUA?
The WORLD outlook is . . .

Steadily improving

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP (%)</td>
<td>2.3</td>
<td>2.4</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Source: Economist Intelligence Unit
Trade’s share of the economy is still climbing.

Globalization trend is *long-term* and has not reversed or stopped.

*Source: IHS Global Insight*
TEU trade will continue to grow – Long term view

6.0% = long term potential

- Container Trade: 1.0%
- Total Trade: 1.5%
- Real GDP: 1.0%
- World Population: 2.5%

Source: Cardno
Europe is suffering ‘malaise’

2015 TEUs, millions

Baltic: -1.32
NW Europe: -.616
All of Europe: -2.3

Source: Drewry
Closer to home, in the short term, the economic outlooks are mixed.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>4.6%</td>
<td>3.1%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Chile</td>
<td>4.6%</td>
<td>2.5%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>3.5%</td>
<td>3.7%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.9%</td>
<td>2.5%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Panamá</td>
<td>7.0%</td>
<td>5.8%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Perú</td>
<td>5.5%</td>
<td>3.3%</td>
<td>3.3%</td>
</tr>
<tr>
<td>USA</td>
<td>2.4%</td>
<td>2.5%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Canada</td>
<td>2.3%</td>
<td>1.2%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Argentina</td>
<td>-1.6%</td>
<td>2.1%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Brazil</td>
<td>1.3%</td>
<td>-3.8%</td>
<td>-3.4%</td>
</tr>
<tr>
<td>Venezuela</td>
<td>-3.0%</td>
<td>-5.7%</td>
<td>-7.2%</td>
</tr>
</tbody>
</table>

Is the Pacific Alliance working?
Is the *Pacific Alliance* working?

In the last 3 years, the Pacific Alliance has accomplished more than the other free-trade efforts in the last 30 years.

Combined the stock markets
Lowered tariffs to near zero
Free movement of people

Will the US join?
THE WORLD – Is there growth out there?

WHAT ARE THE THREATS?

BIG SHIPS AND THE CANAL EXPANSION

A NEW CANAL IN NICARAGUA?
Too much idle capacity

- There are 325 ships not working = 1.5 million TEUs
  - 8% of the fleet capacity

- 200 of these idle ships are >3000 TEUs (61%)

- 100 Panamax ships will be idle at the end of the summer
  - Effect of the opening of the expanded Canal locks

- Some bigger, younger ships are being scrapped (6500 TEUs)
  - Only 12 years old

- Freight rates have crumbled!

*Source: Alphaliner Newsletter No 15, 2016 and more recent*
Some carriers might not make it

Hanjin Shipping - Corporate Bond Credit Rating

Source: Alphaliner Monthly, May, 2016
Desperately seeking a financial restructuring to save it

Merger with Hanjin – in line with consolidation trend

Source: Alphaliner 2016, Issue 15
For every positive, there is a negative

+ Lower fuel costs - bunker
  Lower costs per TEU
  Lots of available capacity

- Lower ship utilization
  Freight rates too low to make money
  Not enough demand
But the solution to the low rates is clear

Cut capacity!!!!

Example

Asia-ECSA capacity has been cut by 40%
Rates have soared!

Good news for the future

New shipbuilding is down (only 71 new ships in Q1 2016)

Source: BIMCO “The Road to Recovery”
THE WORLD – Is there growth out there?

WHAT ARE THE THREATS?

BIG SHIPS AND THE CANAL EXPANSION

A NEW CANAL IN NICARAGUA?
Larger Vessels: Maersk Triple E

Too big for the expanded Canal.
Larger Vessels: Maersk Triple E

New shoes for:
- Guatemala
- El Salvador
- Honduras
- Nicaragua
- Costa Rica
- Panama
- Colombia
- \( \frac{1}{2} \) Venezuela

Even Bigger: MSC Oscar
Mitsui order: 20,000+ TEU ships
Mega Ships - Who will dominate?

Ships 18,000 – 21,000 TEUs

Current and on order for 2020

2020
Maersk 31
COSCOCS 22
MSC 20
Others 36

Source: The Loadstar & Alphaliner Monthly, May 2016
The mega-ships are for -

- Asia – North Europe  69%
- Asia – Mediterranean  19%
  - Transpacific (Asia – USWC)  7%
  - Asia – Mid East  5%

Source: Drewry, 2015
We are starting to see upsizing on the Transpacific

- Used to be just Asia-Europe
- Effect of the Canal Expansion
- Maersk expanding its service
  - Direct calls to Chile

Source: Alphaliner, May 2016, Clarksons Research
Another triangle is forming - Pacific
Shipping lines all seem to be thinking the same thing!

“Put the biggest ships possible through the expanded Canal”

But the phase-in will be gradual because of weak demand.
The Mega Ships bring higher risks for shippers

➤ Shippers could spread their risk
  • Multiple ships
  • Multiple shipping lines
  • Multiple ports

➤ Now, the risks are greater
  • FEWER lines, ships, and ports (but bigger ones)
THE WORLD – Is there growth out there?

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BIG SHIPS AND THE CANAL EXPANSION

A NEW CANAL IN NICARAGUA?
What could happen if the Nicaragua Canal becomes a reality in 2020?

**Prediction**
- No Canal will be built

**But money will be made**
- New international airport
- Casinos
- Golf courses
- 5-star resorts

**How will the Panama Canal react?**
- Already reacting!!
THE WORLD – Is there growth out there?

WHAT ARE THE THREATS?

BIG SHIPS AND THE CANAL EXPANSION

A NEW CANAL IN NICARAGUA?

OH YES!! POLITICS
Socialist USA: the Sanders - ization process

- The transportation industry NATIONALIZED!
- The energy industry NATIONALIZED!

Trump “wall” around the USA: +35% tariff on imports

- Assured recession
- Reduced international trade
- More respect?
Conclusions