The Panama Canal: A Continued Leadership in the Region

Presented by: Dr. Ricaurte Vásquez M.
The interoceanic waterway has improved world trade, transportation and connectivity by reducing times, distances and costs between production and consumption centers.

Panama’s maritime hub
- 144 trade routes
- 1,700 ports
- 160 countries
The Panama Canal: Between Numbers and Performance

Fiscal Year (FY) 2019 ended with a record tonnage: +6.2% increase compared to FY 2018

<table>
<thead>
<tr>
<th>Transits</th>
<th>PC/UMS tons</th>
<th>Avg. vessel size (PC/UMS)</th>
<th>TEU capacity</th>
<th>TEU loaded</th>
<th>Cargo tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.1%</td>
<td>13,785</td>
<td>34,070</td>
<td>16.7M</td>
<td>10.6M</td>
<td>252.4M</td>
</tr>
<tr>
<td></td>
<td>469.6M</td>
<td>+6.2%</td>
<td>+6.3%</td>
<td>+4.3%</td>
<td>-1.0%</td>
</tr>
<tr>
<td></td>
<td>324.6</td>
<td>442.1</td>
<td>227.8</td>
<td>241.8</td>
<td>226.5</td>
</tr>
</tbody>
</table>

PC/UMS tons by lock type

Source: Panama Canal database
A Canal at the Service of the World Maritime Trade

- Grains are a major component of dry bulk cargoes. In FY 2019, 22.0 million tons of grain transited the Panama Canal from the USA.
- Market share for the Panama Canal was 21% destined mainly to Northeast Asia.
- Total cargo movement: 252.4 million long tons.
- 67.1% of the cargo originates in or is destined to the USA.

Market share for containerized cargo in TEU for the Panama Canal route Northeast Asia – USA was 55% in FY 2019, when 16.6 million TEU of capacity were deployed through the waterway.

- LPG total cargo through the Panama Canal accounted for 20.0 million metric tons in FY 2019; the Canal has a 48% market share.
- LNG cargo volumes accounted 13.3 million metric tons. The Canal has 38% market share.
- Both type of cargo transited mainly through the Neopanamax locks, to Asian ports – Japan and South Korea.

Source: Panama Canal database
1. Economic growth has moved to Asia.
2. Eurasia has been commercially strengthened with intra-regional routes that have gained 60% of participation with respect to traditional transcontinental routes.
3. 70% of the financing for startups in Asia comes from regional funds.
4. By 2030, the region is expected to contribute roughly 60% of global growth.
5. Asia-Pacific will also be responsible for the overwhelming majority (90%) of the 2.4 billion new members of the middle class entering the global economy.

*Sources:
  - KPMG: Davos 2020: The seven tendencies that guide the new capitalism.
  - Forbes: The 21st century belongs to the Asian continent.
  - World Economic Forum: In 2020 Asia will have the world's largest GDP.
Global Changes and the Waterway

The following global risks* have relevance for the Panama Canal:

- **Geopolitical**: Interstate conflict with regional consequences.
  - Although USA and China recently signed a first phase to reduce the tariff war, the level of uncertainty is 78% for 2020, according to the Global Risks Perception Survey.
  - Together, USA and China account for over **40% of the global GDP**.
  - Both countries are the two main users of the Panama Canal.

- **Economics**: A slow world economy growth.
  - The WTO determined that growth in merchandise trade has slowed to **1.2% in 2019 from 3.0% in 2018**.
  - The World Bank plans for 2020 a modest rebound in global economic activity: **2.5% due to the gradual recovery of trade and investment**.

- **Technological**: Intended or unintended consequences of technological advances.
  - Artificial Intelligence (AI) is a pillar for the plan **Made in China 2025**.
  - The United States Department of Defense requested that its budget be tripled to **US$268 million**, citing the rapid AI development of China and Russia.
  - These countries are designing **their own tech systems** and developing **their own supply chains**.

- **Environmental**: Actions from governments and businesses to enforce or enact effective measures to mitigate climate change: **IMO 2020 regulations; 2015 Paris Climate Agreement; Panama Canal water conservation measures**.
  - The next **10 years will shape the outlook for climate risk** for the rest of the century.
  - Global emissions need to peak almost immediately and decline by **7.6% each year between 2020 and 2030**.
  - Cost: **US$460 billion a year** of clean energy investment
  - The Panama Canal is taking action to face rainfall variations and to ensure draft level for ships.

*Sources:
- KPMG: *2030 Keys for the new decade*
- KPMG: *Davos 2020: The seven tendencies that guide the new capitalism*
The Panama Canal Faces a Challenge:
Variation in Rainfall Patterns

**Historical Monthly Precipitation 2013 - 2019 (millimeters)**

<table>
<thead>
<tr>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.0</td>
<td>13.0</td>
<td>5.9</td>
<td>77.8</td>
<td>429.8</td>
<td>358.0</td>
<td>203.4</td>
<td>227.8</td>
<td>188.3</td>
<td>199.9</td>
<td>141.8</td>
<td>262.9</td>
</tr>
<tr>
<td>28.6</td>
<td>43.7</td>
<td>72.6</td>
<td>92.8</td>
<td>170.4</td>
<td>153.0</td>
<td>262.2</td>
<td>290.1</td>
<td>349.0</td>
<td>321.3</td>
<td>218.1</td>
<td>291.1</td>
</tr>
<tr>
<td>25.0</td>
<td>28.6</td>
<td>8.2</td>
<td>38.8</td>
<td>92.8</td>
<td>92.8</td>
<td>92.8</td>
<td>92.8</td>
<td>92.8</td>
<td>92.8</td>
<td>92.8</td>
<td>25.0</td>
</tr>
</tbody>
</table>

**Volume million cubic meter (Mm3)**

<table>
<thead>
<tr>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,325</td>
<td>4,444</td>
<td>4,565</td>
<td>4,687</td>
<td>4,811</td>
<td>4,937</td>
<td>5,064</td>
<td>5,193</td>
<td>5,323</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Panama Canal database
1. **Quantity**
   - Guarantee optimal levels for human consumption and for ship transits.

2. **Quality**
   - Strengthen the operational sustainability
   - Offer a transit service according to customer needs.

3. **Control**
   - Increase the freshwater economic value.

The Panama Canal needs to reconsider the economic value of the water resource, specifically through a fee for freshwater consumption in transits applicable to high draft vessels.

This charge will consist of a fixed component and a variable component:

- **Fixed component**: US$10,000 for each transit, without distinction.

- **Variable component**: Percentage of the toll established on the basis of the daily level of Gatun Lake. This percentage will fluctuate between 1% and 10%.

A new electronic platform will be enabled for customers to have information regarding the draft level allowed in a certain period of time.

- **Transit itinerary registration fee**: Consists of an advance payment at the time of reservation, which will not be refundable if the transit is canceled.
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