North Atlantic Performance Trends

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Presented By: David Chin, Thea Graham

Prepared By: Tony Choi

FAA - Air Traffic Organization

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Key NAT Performance Trends

- Increased Global Uncertainty
- Divergent Monetary Policy
- Safety and Security
- Growth in Uncertain Times
Economic Outlook
Increased Global Uncertainty

- June 23 “Brexit” vote surprised global financial markets
- Global outlook worsened for 2016-17, reflecting increased uncertainty (political and economic) that lowered business confidence and investment
- Negative GDP impact has been mostly on UK, selected European countries
- Impact is limited (so far) for U.S., China, and other emerging markets
- “Brexit” is still unfolding; downside risks (more severe outcomes) are possible

Real GDP Forecast
(Annual Percentage Change)

<table>
<thead>
<tr>
<th>Country</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>1.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Denmark</td>
<td>1.6</td>
<td>1.8</td>
</tr>
<tr>
<td>France</td>
<td>1.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Germany</td>
<td>1.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Iceland</td>
<td>4.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Ireland</td>
<td>5.0</td>
<td>3.6</td>
</tr>
<tr>
<td>Norway</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Portugal</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td>UK</td>
<td>1.7</td>
<td>1.3</td>
</tr>
<tr>
<td>US</td>
<td>2.2</td>
<td>2.5</td>
</tr>
<tr>
<td>Euro area</td>
<td>1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>World</td>
<td>3.1</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Source: IMF, World Economic Outlook – July 2016
Leading Economic Indicator – US

The Conference Board Leading Economic Indicator (2010=100)

Source: The Conference Board, August 2016
The Conference Board Leading Economic Indicator (2010=100)

Euro Area

Source: The Conference Board, August 2016; Last CEPR Meeting: October 2015*
Policy Challenges
Policy Challenges

- U.S. Monetary Policies
  - 1st rate hike (since 2006) in Dec 2015
  - None since then, complicated by:
    - Timing of U.S. Presidential election
    - Volatility in financial markets (Jan/Feb, Jun)
    - Strength of the US dollar
  - Softening economy: 2016Q2 GDP 0.3% (below expected)

- Euro Area – post-Brexit Uncertainty
  - Economic Growth: 2016Q2 GDP 0.3% (decelerated)
  - Inflation stable (low): 0.2% in August 2016
  - ECB Stimulus: QE continue to Mar 2017, beyond if needed
  - Impact of security threats and on-going refugee crisis
Post 6-23 Decline (13%

Source: U.S. Federal Reserve Board, September 2016
Industry Outlook
Challenges for the Industry

• Security Threats Persist
  – “Aviation security needs to evolve in step with changing threats.”
    - Dr. Fang Liu, ICAO Secretary General (Sep 12, 2016)
  – Airport security and threats; Notable tragic incidents
  – Regional instabilities (Turkey in July, ongoing ME)

• Economic Opportunities
  – Profits forecasted for 2016 is $39 billion, following 2015 record of $35 billion
  – Earnings (ROI) in 2016 is 9.8%, another record
  – Opportunities to invest; Lower airfares
US – European Crude Oil Price Spread

Source: Energy Information Administration, August 2016

Update: North Atlantic Trends (September 2016)
Low Oil To Stay A While Longer

- **Oil prices** reached 13-year lows around $30 in early 2016 before **recovering to around mid $40 recently** (mid Sep) for both the WTI Cushing and European Brent.


- High volatility continues: Supply/demand factors, geopolitical events, exchange rate movements.

- **→ Expectation:** Low oil (<$55/bbl) in the foreseeable future.

- **Airline fuel hedge:** Light hedging for now.

“As for the markets return to balance - It looks like we may have to wait a while longer.”

- The International Energy Agency, Sep 13, 2016
Operational Outlook
## US to Europe: Top Ten Scheduled Departures (Jan – Dec 2016)

<table>
<thead>
<tr>
<th>Destination Country</th>
<th>2015</th>
<th>2016</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>44,740</td>
<td>47,509</td>
<td>2,769</td>
<td>6.2%</td>
</tr>
<tr>
<td>Germany</td>
<td>22,909</td>
<td>23,671</td>
<td>762</td>
<td>3.3%</td>
</tr>
<tr>
<td>France</td>
<td>15,840</td>
<td>16,350</td>
<td>510</td>
<td>3.2%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>12,111</td>
<td>12,614</td>
<td>503</td>
<td>4.2%</td>
</tr>
<tr>
<td>Italy</td>
<td>7,471</td>
<td>7,853</td>
<td>382</td>
<td>5.1%</td>
</tr>
<tr>
<td>Spain</td>
<td>7,180</td>
<td>7,659</td>
<td>479</td>
<td>6.7%</td>
</tr>
<tr>
<td>Ireland</td>
<td>6,278</td>
<td>7,019</td>
<td>741</td>
<td>11.8%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>6,025</td>
<td>6,275</td>
<td>250</td>
<td>4.1%</td>
</tr>
<tr>
<td>Iceland</td>
<td>3,412</td>
<td>4,724</td>
<td>1,312</td>
<td>38.5%</td>
</tr>
<tr>
<td>Belgium</td>
<td>4,277</td>
<td>4,154</td>
<td>(123)</td>
<td>-2.9%</td>
</tr>
<tr>
<td><strong>All US-Europe</strong></td>
<td>143,775</td>
<td>153,163</td>
<td>9,388</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

Source: Innovata, September 1, 2016
2007-2016Q2 Economy and Traffic, U.S. and Canada

Source: ICAO, BTS, Global Insight, August 2016
2007-2016Q2 Economy and Traffic, NAT*/Euro Area

Source: ICAO, Global Insight/Eurostat, September 2016

*Denmark, Ireland, Iceland, Norway, Portugal, UK, France, and Germany

“A Brexit” Not yet Reflected
2005-2016 US and Europe Operations

**US vs Europe: Total Scheduled Flights**
(Source: Innovata, Sep 1, 2016)

- Increase from “floor” (2016 growth)
- 14 Consecutive US Growth (trend last seen during 2010-11 recovery)

**US vs Europe: Percent Change in Scheduled Flights**
(Source: Innovata, Sep 1, 2016)

Update: North Atlantic Trends
(September 2016)
2005-2016 US and Europe Load Factors

Source: BTS and AEA (Association of European Airlines), September 2016
Passengers Demand (2007-2016Q2)
Year-over-Year Change

Europe to US - RPM
US to Europe - RPM

Source: BTS, T100-Segment Data, September 2016
Air Cargo Demand (2007-2016Q2)
Year-over-Year Change

Europe to US - RTM
US to Europe - RTM

Source: BTS, T100-Segment Data, September 2016
2016 Global Regional Trends (Year-to-Date July)

Regional Traffic Statistics
Change in RPK and FTK: (Jan-Jul) 2016 vs. 2015

Source: IATA, August 2016
The Challenges Continue:

• Global outlook for 2016-2017 worsened among uncertainties following the “Brexit” vote
• Volatility in oil and financial markets continues
• Divergent monetary policies (U.S. vs. Europe)
• How long will low fuel prices stay?
• Aviation security threats persist, among global security and terrorism concerns
• Operational trends: Will both US and Europe continue recent growth?
• Passenger and air cargo demand growth:
  – Both face headwinds, among uncertain global outlook