Jim Power is an accomplished economist who comes from a farming background and has experience in aquaculture.

As owner-manager of Jim Power Economics Ltd., Power conducts economic and financial consultancy projects in Ireland and overseas.

Power was formerly treasury economist at AIB and chief economist at Bank of Ireland Treasury, and he has taught at the University College Dublin’s Michael Smurfit Graduate School of Business and Dublin City University. He writes a weekly column in the Irish Examiner and Sunday Business Post online edition.

Power is chairman of Three Rock Capital, chair of Love Irish Food and a board member of Agri-awar. In 2013, the Minister for Agriculture, Food and the Marine appointed Power a member of the Aquaculture Licences Appeals Board.
Keynote Address

Jim Power
Jim Power Economics Ltd.
To Be Discussed

- Global Economic Context
- Global Risks and Challenges
- Some Demographic Trends
- Food Industry Issues
- Issues Affecting Aquaculture
Global Backdrop

- Global economy has come through tough decade
- The Great Recession has left significant legacy
- Global growth cycle now on upward path
- U.S. growth reasonable; inflation moderate
- UK held up well post-Brexit; Sterling weakness has helped exports, but consumer and business investment coming under some strain
- Euro Zone growth recovery becoming more compelling
- Chinese growth has stabilised
- Global growth story reasonably compelling
UK GDP (YoY)
Euro Zone GDP (YoY)
### Global Growth Forecast

(IMF JULY 17) | 2016 | 2017f | 2018f |
--- | --- | --- | --- |
World Output | +3.2% | +3.5% | +3.6% |
Advanced | +1.7% | +2.0% | +1.9% |
US | +1.6% | +2.1% | +2.1% |
Euro Zone | +1.8% | +1.9% | +1.7% |
Germany | +1.8% | +1.8% | +1.6% |
France | +1.2% | +1.5% | +1.7% |
UK | +1.8% | +1.7% | +1.5% |
Japan | +1.0% | +1.3% | +0.6% |
Emerging | +4.3% | +4.6% | +4.8% |
China | +6.7% | +6.7% | +6.4% |
India | +7.1% | +7.2% | +7.7% |
Global Risks and Challenges

- Rejection of Conventional Politics in 2016
- Politics — Netherlands and France OK; Germany Sept 24th OK; Italy May 2018 — cause for concern
- Migration — causing dangerous tensions in EU particularly
- Global terrorism
- Trump and growth of protectionism
- Brexit
- Equity markets have come a very long way since 2009
- China – financial imbalances still a concern
- Global monetary policy turning
## Population Projections (Millions)

<table>
<thead>
<tr>
<th>Region</th>
<th>2015</th>
<th>2030</th>
<th>2050</th>
<th>% 2015-2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>7,349</td>
<td>8,501</td>
<td>9,725</td>
<td>+32.3%</td>
</tr>
<tr>
<td>Africa</td>
<td>1,186</td>
<td>1,679</td>
<td>2,478</td>
<td>+109%</td>
</tr>
<tr>
<td>Asia</td>
<td>4,393</td>
<td>4,923</td>
<td>5,267</td>
<td>+19.9%</td>
</tr>
<tr>
<td>Europe</td>
<td>738</td>
<td>734</td>
<td>707</td>
<td>-4.2%</td>
</tr>
<tr>
<td>Latin Am. &amp; Caribbean</td>
<td>634</td>
<td>721</td>
<td>784</td>
<td>+23.7%</td>
</tr>
<tr>
<td>North America</td>
<td>358</td>
<td>396</td>
<td>433</td>
<td>+20.9%</td>
</tr>
<tr>
<td>Oceania</td>
<td>39</td>
<td>47</td>
<td>57</td>
<td>+46.2%</td>
</tr>
</tbody>
</table>
## 50% Growth in Nine Countries

<table>
<thead>
<tr>
<th>(000s)</th>
<th>2015</th>
<th>2030</th>
<th>2050</th>
<th>% 2015-2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>1,311,051</td>
<td>1,527,658</td>
<td>1,705,333</td>
<td>+30.1%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>182,202</td>
<td>262,599</td>
<td>398,508</td>
<td>+118.7%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>188,925</td>
<td>244,916</td>
<td>309,640</td>
<td>+63.9%</td>
</tr>
<tr>
<td>DR of Congo</td>
<td>77,267</td>
<td>120,304</td>
<td>195,277</td>
<td>+152.7%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>99,391</td>
<td>138,297</td>
<td>188,455</td>
<td>+89.6%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>53,470</td>
<td>82,927</td>
<td>137,136</td>
<td>+156.5%</td>
</tr>
<tr>
<td>USA</td>
<td>321,774</td>
<td>355,765</td>
<td>388,865</td>
<td>+20.9%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>257,564</td>
<td>295,482</td>
<td>322,237</td>
<td>+25.1%</td>
</tr>
<tr>
<td>Uganda</td>
<td>39,032</td>
<td>61,929</td>
<td>101,873</td>
<td>+161%</td>
</tr>
<tr>
<td>China</td>
<td>1,376,049</td>
<td>1,415,545</td>
<td>1,348,056</td>
<td>-2.0%</td>
</tr>
<tr>
<td>France</td>
<td>64,395</td>
<td>68,007</td>
<td>71,137</td>
<td>+10.5%</td>
</tr>
<tr>
<td>Germany</td>
<td>80,689</td>
<td>79,294</td>
<td>74,513</td>
<td>-7.7%</td>
</tr>
<tr>
<td>UK</td>
<td>64,716</td>
<td>70,113</td>
<td>75,361</td>
<td>+16.4%</td>
</tr>
</tbody>
</table>
Some Issues in the Food Sector

- At global level climate change, retail concentration, energy dependency, global population growth the key drivers

- In Ireland:
  - Consumers want cheap food
  - Retail concentration
  - Viewed as a ‘license to print money’ by some
  - Reality is that it is a competitive, low-margin business that is very vulnerable to imports and retail domination
  - Dilemma between price, quality and uniqueness and by implication safety
Global Food Production

- Population projections to 2050 will translate into 60% increase in agricultural consumption
- Feeding the world and nurturing the planet key challenges
- Sustainability the big theme
- Weather disrupting production
- Food security will become more important
The Future of Food

- Demographics very positive

- Increased income inequality?

- Strong investment in production

- Greater price volatility as barriers to production come down

- Sector with good future, but in an environment of limited pricing power and more volatile prices, efficiency in production will be key to success
Consumer Food Prices in Ireland
Aquaculture — Key Issues

- Climate change impact on production
- Environmental issues
- Health benefits
- Food safety issues
- Impact on tourism
- ‘NIMBYism’
- Licensing process
Thank You!