PLANNING FOR SHIFTING TRADE
PANEL: New Challenges in Trade Policy

Scott Sigman, Transportation and Export Infrastructure Lead
Illinois Soybean Association
January 30, 2019
A Case Study: New Challenges in Trade Policy

- Overview of the Illinois Soybean Association (ISA)
- Present global change is dynamic
- Commodity Economics: Drivers of supply decisions and demand pulls
  - Importance of scale;
  - Changes in direction; and,
  - Market segmentation.
Illinois Soybean Association (ISA)

**Vision:** The Illinois Soybean Association strives to enable Illinois *soybean producers* to be the most knowledgeable, sustainable and profitable in the global marketplace.

**Mission:** To ensure Illinois *soy* is the highest quality, most dependable, sustainable and competitive in the global marketplace.

**GOALS:** To achieve maximum profitability and global competitive positioning for soy from Illinois.

- Utilize 600 million bushels of Illinois soybeans by 2020.
- Produce the highest quality soybean, soybean oil and soybean meal products.
- Implement best management practices to maximize profitability.
- Increase soybean production in a sustainable manner to meet global market needs.
Soybean Price Components

**Meal Share of Soybean Price**
- Domestic 78%
- Exports 22%
  - Aquaculture 1%
  - Pet Food 2%
  - Broilers 36%
  - Hogs 22%
  - Dairy Cattle 15%
  - Hens & Pullets 12%

**Oil Share of Soybean Price**
- Livestock Components based on distribution of Protein Animal Consuming Units as a proxy of soybean meal (represents > 85% of all meal consumed in the US)
- Hens and Pullets are used for eggs
- Chickens are breeding stock
- Other Cattle include non-feedlot, bulls, cows, heifers and steers

The soybean value or price is for Central Illinois.
The individual components for meal or oil are related to national volume consumption patterns.
Livestock components based on distribution of Protein Animal Consuming Units as a proxy of soybean meal (represents > 85% of all meal consumed in the US).
Hens and Pullets are used for eggs.
Chickens are breeding stock.
Other Cattle include non-feedlot, bulls, cows, heifers and steers.
Changing Markets and Changing Trade Policy

➢ **U.S. Economic Expansion**
  ➢ Appears to be slowing after 114-months, remaining on trajectory.
  ➢ Some elements that drove growth are slowing.

➢ **New tax law:** Costs and benefits have not yet been fully quantified

➢ **Trade tariffs:** Hurt producers from the start
  ➢ Consumer goods - nominal adverse effects, overall consumer spending negatively impacted
  ➢ Trade still supports the general economy.

➢ **Illinois Soybean Production:** 14.9% of the U.S.; More than Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, the Carolinas, Tennessee & Virginia ...combined.

➢ **Corn carryover:** ~1.9 to 2.1 billion bushels - High feed/residual estimate and corn for ethanol.

➢ **Census of Agriculture:** Farm structures and farmers are changing.
Projected global life expectancy 1990-2100
Diminishing Cropland 1990 - 2015

Life expectancy at birth in years
1990-2020 Δ = +11.3%  2020 – 2100 Δ = +14.9%


95.3%
U.S. and Illinois Soybean Farmers Really Do Care

National Harvest 2017

89.52 million acres of Soybeans (10.55 IL = 11.8%)
82.70 million acres of Corn (10.95 IL = 13.24%)

• 2017 Record IL Soy Crop with 58 Bu./Acre (49.1 US 118.1%)
• 611.9 Million Soy Bushels Produced in Illinois
  • 20.3 Million Metric Tons of Soy
• 950 bu = 17 ac./container 26-28 MT ~$8730 @$9.19 each
• 52,500-57,000 Bu. / Barge = 1,600 Acres ~$500K
• ~24K Tons = ~800,000 Bu./15 barge tow ~$7.5MM
• ~50K Tons = 30,000 Acres per Panamax Load 45ft

Source: USDA, Illinois Soybean Association analysis
## Soybean Yield & Production

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<td>4,411</td>
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* USDA, November estimates

**Soybean Yield & Production**

Yield (bu/ac) Production (mil bu)

122.8%
# 10 Surplus States’ Corn & Soybean Container Potentials

(Twenty-Foot Equivalent Units (TEUs))

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<tr>
<th>State</th>
<th>CORN</th>
<th>SOYBEANS</th>
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<tr>
<td>Illinois</td>
<td>1,723,529</td>
<td>547,059</td>
</tr>
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<td>Iowa</td>
<td>247,059</td>
<td>211,765</td>
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<td>Minnesota</td>
<td>1,176,471</td>
<td>341,176</td>
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<tr>
<td>Wisconsin</td>
<td>123,529</td>
<td>182,353</td>
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<td>Missouri</td>
<td>464,706</td>
<td>182,353</td>
</tr>
<tr>
<td>Kentucky</td>
<td>270,588</td>
<td>76,471</td>
</tr>
<tr>
<td>Tennessee</td>
<td>(194,118)</td>
<td>129,412</td>
</tr>
<tr>
<td>Arkansas</td>
<td>(52,941)</td>
<td>217,647</td>
</tr>
<tr>
<td>Mississippi</td>
<td>(17,647)</td>
<td>170,588</td>
</tr>
<tr>
<td>Nebraska</td>
<td>664,706</td>
<td>347,059</td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td><strong>4,670,588</strong></td>
<td><strong>2,405,882</strong></td>
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Note: Assumes 17 short tons per TEU

Source: Agribusiness Consulting
Distribution of U.S. Soy Sales, 2017

• In 2017-18 market year Asia accounted for 85% of U.S. soybean share through Nov 30

• China’s share alone was 67%

Source: USDA Foreign Ag Service
Shifting Trade for U.S. Soy Sales, 2018

- In 2018-19 Asia’s market share fell to 36% through Nov 30
- China’s share has slipped to just 3%
- YTD Sales to the Asia Pacific Region are down 19.2 million MT
- Sales to regions outside of Asia increased 7.7 million MT Y/Y with the America’s and Europe leading the redistribution

Source: USDA Foreign Ag Service
1201-Soybeans U.S. Exports Monthly History ($Millions)

Year to Date October 2018 vs. 2017
China -63%
Other +59%

Source USDA and WSP
### Top 10 US Soy Export Markets

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<td>China</td>
<td>36,463,334</td>
<td>25,394,468</td>
<td>69.64%</td>
<td>2,875,550</td>
<td>67,446</td>
<td>2.35%</td>
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<tr>
<td>EU-28</td>
<td>4,602,530</td>
<td>6,204,259</td>
<td>134.80%</td>
<td>216,252</td>
<td>704,799</td>
<td>325.92%</td>
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<tr>
<td>Mexico</td>
<td>3,903,910</td>
<td>4,292,946</td>
<td>109.97%</td>
<td>274,951</td>
<td>362,612</td>
<td>131.88%</td>
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<tr>
<td>Egypt</td>
<td>939,218</td>
<td>2,652,124</td>
<td>282.38%</td>
<td>0</td>
<td>320,792</td>
<td>100.00%</td>
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<tr>
<td>Indonesia</td>
<td>2,570,998</td>
<td>2,572,186</td>
<td>100.05%</td>
<td>214,734</td>
<td>232,681</td>
<td>108.36%</td>
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<tr>
<td>Japan</td>
<td>2,409,644</td>
<td>2,214,379</td>
<td>91.90%</td>
<td>119,870</td>
<td>142,676</td>
<td>119.03%</td>
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<tr>
<td>Taiwan</td>
<td>1,509,335</td>
<td>2,085,996</td>
<td>138.21%</td>
<td>57,349</td>
<td>123,001</td>
<td>214.48%</td>
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<tr>
<td>Pakistan</td>
<td>689,350</td>
<td>1,798,914</td>
<td>260.96%</td>
<td>131,161</td>
<td>204,715</td>
<td>51.08%</td>
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<tr>
<td>Thailand</td>
<td>1,114,172</td>
<td>1,469,564</td>
<td>131.90%</td>
<td>100,053</td>
<td>61,548</td>
<td>61.52%</td>
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<tr>
<td>Vietnam</td>
<td>676,509</td>
<td>1,154,780</td>
<td>170.70%</td>
<td>147,392</td>
<td>95,276</td>
<td>64.64%</td>
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<tr>
<td>World Total</td>
<td>59,676,982</td>
<td>56,716,508</td>
<td>95.04%</td>
<td>4,465,443</td>
<td>3,237,309</td>
<td>72.50%</td>
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Source: USDA Foreign Ag Service
Soybean Price Basis 3-year average (2014/15 to 2016/17)

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<tr>
<th>Location</th>
<th>Price $/bu</th>
<th>Basis</th>
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<td>Albany</td>
<td>9.46</td>
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<td>Mapleton</td>
<td>9.59</td>
<td>(0.13)</td>
</tr>
<tr>
<td>Meredosia</td>
<td>9.60</td>
<td>(0.12)</td>
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<tr>
<td>Mt. Vernon</td>
<td>9.57</td>
<td>(0.14)</td>
</tr>
<tr>
<td>Rockford</td>
<td>9.44</td>
<td>(0.28)</td>
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<tr>
<td>SB Futures</td>
<td>9.72</td>
<td>-</td>
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November 2018 Soybean Futures per bushel

Source: CME
Origin Export Price Divergence, then Equilibrium
(JAN – NOV 2018)

Source: US Soy Export Council
U.S. Container Share of Grains and Soybean

Source: USDA Export Inspections
Illinois Share of US Containerized Soybean Export Inspections

Source: USDA, Informa Economics Vantage
SEASONALITY: Monthly Share of Containerized Soybean Export Inspections in Illinois (since 2006/07)

Source: USDA, Informa Economic Vantage
Top U.S. Port Market Shares for Soybean Container Exports (‘18-’19 YTD and ‘15-’16 Marketing Year)

Source: IHS Markit PIERS, Informa Economics Vantage
Top Destinations for US Ag Container Exports (in TEUs)

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<td>228,298</td>
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<td>145,146</td>
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<td>104,366</td>
<td>111,256</td>
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<td>21,709</td>
<td>27,758</td>
<td>37,525</td>
<td>35,400</td>
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<td>24,339</td>
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<td>16,760</td>
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<td>3,640</td>
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<td>7,003</td>
<td>7,003</td>
<td>7,003</td>
</tr>
<tr>
<td>OTHER</td>
<td>94,311</td>
<td>163,575</td>
<td>142,923</td>
<td>148,971</td>
<td>225,992</td>
<td>270,566</td>
<td>259,577</td>
<td>241,553</td>
<td>299,903</td>
<td>239,107</td>
<td>224,050</td>
<td>168,739</td>
</tr>
</tbody>
</table>

Grand Total: 318,598 550,232 591,524 457,171 617,440 732,426 720,928 675,592 848,410 728,907 659,263 500,430

Source: PIERS, IEG Vantage
Inland Waterway Competitive Pricing vs. Intermodal

**Total Landed Cost to Asia Markets**

Projected Price Differences via Inland River Container-on-Vessel (COV) to Gulf Coast routings

Compared Exports via Rail to LA/LB vs. All Water Routing COV to Plaquemines Port
- Transportation Savings from Memphis, St. Louis, and Kansas City - ~30%

Compared Imports via LA/LB Rail to MidSouth/Midwest vs. All Water Routing - Plaquemines inland via COV
- Transportation Savings to Memphis, St. Louis, and Kansas City - ~40%

Source: Informa Economics Vantage

RECAP
A Case Study: New Challenges in Trade Policy

• Overview of the Illinois Soybean Association (ISA)
• Present global change is dynamic
• Commodity Economics: Drivers of supply decisions and demand pulls
  • Importance of scale;
  • Changes in direction; and,
  • Market segmentation.
Thank you!

Follow us on social media:
Twitter and Instagram: @ILSoybean
Facebook: Illinois Soybean Association

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Transportation and Export Infrastructure Lead
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Impact of Soy in Illinois

- The soybean value chain provided **$28.3 billion in sales output** in 2017
  - Raising soybeans
  - Crushing beans to meal and refining soybean oil
  - Associated industries
    - Manufacturing animal feed
    - Raising livestock
    - Producing biodiesel, soy ink, lubricants, soy based plastics, and other allied goods

- The soybean value chain also contributes:
  - Nearly 99,000 FTE jobs, with 57,200 in Illinois
  - $7.48 billion in gross state product, value added via economic processes
ISA Leadership

Board of Directors Set Priorities and Budgets

• 24 volunteer Illinois farmers
  • 18 directors from districts throughout the state
  • 6 at-large directors who represent the state as a whole
• Manage ISA use of checkoff and non-checkoff funds.
• Each serves on Production & Outreach OR Marketing Committee
ISA Strategic Direction FY19-20

Marketplace
Farmer Profitability
Stakeholder Value – Efficient Product Delivery
Organizational Excellence
Top Container Carriers Handling US Soybean Meal Container Market Exports Share (in TEUs)

Source: IHS Markit PIERS, Informa Economics Vantage
U.S. Soy Meal Container Exports: Top Country Destinations (2018-19 Marketing Year)

- **Taiwan**: 436, 41%
- **Japan**: 147, 14%
- ** Republic of Korea**: 30, 3%
- **Sri Lanka (Ceylon)**: 224, 21%
- **Other**: 141, 13%
- **Bangladesh**: 79, 8%

Source: IHS Markit PIERS, Informa Economics Vantage
U.S. Soybean Container Exports: Top Country Destinations (Sept-Oct-Nov ‘18-’19 Marketing Year)

- TAIWAN, 3,980, 33%
- INDONESIA, 1,519, 13%
- MALAYSIA, 1,637, 13%
- THAILAND, 2,018, 17%
- CHINA, 309, 3%
- VIETNAM, 529, 4%
- JAPAN, 538, 4%
- REPUBLIC OF KOREA, 445, 4%
- OTHER, 1,109, 9%

Source: IHS Markit PIERS, Informa Economics Vantage