Agricultural Opportunities in the Pacific Rim

Daniel A. Sumner

University of California Agricultural Issues Center and UC Davis Department of Agricultural and Resource Economics
Introduction and objectives

• **Objective:** Better understand how agricultural export opportunities in the Pacific Rim, especially Asia, are likely to shape agriculture in the United States and globally
• NAFTA partners (Canada and Mexico) are top export destinations and they count as Pacific Rim
• Of course, we also import from Canada and Mexico and, especially off season, from the Pacific Rim of South America
• But, Asia is the big story and especially for the future.
• Asia seems to be growing to be the dominant importer of farm value of agricultural exports from the United States
• (Europe will continue to be important and buy lots of wine and other products with high value added past the farm gate)
Introduction and objectives

• I am a huge booster for farm trade, but let’s keep it in perspective.

• Exports are vital, but remember the U.S. market is huge and the most important market every major commodity group. (About 80 to 90% of U.S. production stays in the United States).

• In the long run, U.S. agriculture gains when the U.S. and the world economy grows and open markets contribute to growth.

• Overall growing demand for U.S. farm output is good no matter what its source.

• Economic bottom line: More demand means larger quantities, higher prices and upward pressure on land rents (until supply catches up through productivity growth)
US Agricultural Export Value by Commodity

**Fiscal 2012**
(Total $136 Billion)

**USDA Forecast 2022**
(Total $176 Billion)

Source: USDA, Economic Research Service, *Long-Term Agricultural Projection Tables*
US Agricultural Export Destination Value Shares, 2012

Source: United States International Trade Commission, DataWeb
U.S. Agricultural Exports to China

Export value, billion dollars

China entered WTO

China began subsidies

China began raising price supports

Other agricultural exports
Meat and dairy
Corn and feeds
Hides and skins
Cotton
Soybeans

WTO = World Trade Organization.
Source: USDA, Economic Research Service using data from USDA/Foreign Agriculture Service, Global Agricultural Trade System.
California Export Value by Destination, 2012

Source: University of California Agricultural Issues Center, California Export Data
Value of California Agricultural Exports to Asia

Source: United States International Trade Commission, DataWeb
The Big Story: Population is soon going to stop growing. In % terms population is growing more slowly.
Population Density
Asian Population

Source: USDA, Economic Research Service, *International Macroeconomic Data Set*
Short term Asian Economic Growth:
The poor economies Grow, but more slowly

Source: IMF, *World Economic Outlook*
Asia Per Capita Income: Income of the poor grow rapidly but they stay poor by our standards.
The Big story is continued rapid income growth in the Asia
Projection of the Urban Share of China’s Population

Source: FAOSTAT
Income Gap Between Urban and Rural Residents

China Urban and Rural per Capita Income, 2011

[Bar chart showing the comparison of mean and median income between urban and rural areas.]

Urbanization Boosts Demand for Animal Products

Source: FAOSTAT
# Changing Composition of Asian Diets

**kg/person/year**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>82.3</td>
<td>88.7</td>
<td>89.2</td>
<td>86.0</td>
<td>84.1</td>
<td>78.0</td>
</tr>
<tr>
<td>Wheat</td>
<td>54.3</td>
<td>62.5</td>
<td>65.8</td>
<td>69.8</td>
<td>66.7</td>
<td>64.3</td>
</tr>
<tr>
<td>Milk</td>
<td>26.1</td>
<td>30.2</td>
<td>32.1</td>
<td>37.5</td>
<td>41.6</td>
<td>48.6</td>
</tr>
<tr>
<td>Meat</td>
<td>11.4</td>
<td>14.0</td>
<td>17.1</td>
<td>22.4</td>
<td>26.3</td>
<td>28.0</td>
</tr>
<tr>
<td>Vegetable oil</td>
<td>4.6</td>
<td>5.8</td>
<td>6.9</td>
<td>7.8</td>
<td>9.0</td>
<td>8.5</td>
</tr>
<tr>
<td>Vegetables</td>
<td>57.1</td>
<td>70.2</td>
<td>76.4</td>
<td>96.3</td>
<td>124.4</td>
<td>139.6</td>
</tr>
<tr>
<td>Fruits</td>
<td>27.8</td>
<td>30.1</td>
<td>32.2</td>
<td>40.8</td>
<td>46.0</td>
<td>54.1</td>
</tr>
<tr>
<td>Calories/day</td>
<td>2286</td>
<td>2463</td>
<td>2550</td>
<td>2637</td>
<td>2680</td>
<td>2624</td>
</tr>
<tr>
<td>% from cereals</td>
<td>65.5%</td>
<td>64.7%</td>
<td>63.3%</td>
<td>59.7%</td>
<td>56.3%</td>
<td>54.9%</td>
</tr>
<tr>
<td>% from animal</td>
<td>7.9%</td>
<td>8.9%</td>
<td>10.0%</td>
<td>12.1%</td>
<td>13.7%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

*Source: FAOSTAT*
US Export Projections for Corn, Wheat and Coarse Grains

Source: USDA, *Long-Term Agricultural Projection Tables*
Figure 2. The Chinese Soybean Sector: 1990 to 2012

- Blue line: Production (1000 MT) China
- Red line: MY Imports (1000 MT) China
- Green line: Crush (1000 MT) China
- Purple line: Food Use Dom. Cons. (1000 MT) China

Thousand Metric tons

"Acres" Imported by China

- Cotton
- Oilseed, Soybean
- Total
China Meat and Poultry Imports

Source: USDA, PSD database
China has already had an enormous impact

From Dermot Hayes, Iowa State

• If China did not import soybeans, we would be growing continuous corn
• When China buys our variety meats the value of a live pig goes up by almost $20 per animal
• This reduces the breakeven price of loins and tenderloins

• If China frees its people to move to the city it will need as much as 140 million tons of corn (more than 5 billion bushels)
“Protectionism is a "blind alley."

Comment of the new Chinese Premier Li Keqiang reported in the China Daily.

Li has a doctorate in economics and was a pupil of the leading “free-market” economist Li Yining.
US Meat Export Projections

Source: USDA, Long-Term Agricultural Projection Tables
US Pork Export Share of Production

Source: USDA, Economic Research Service, Long-Term Agricultural Projection Tables
Figure 1. Tons of Pork Produced per Sow in Inventory
Figure 2. Pork and Broiler Consumption in the US and China

- Pork (China)
- Pork (United States)
- Broiler (China)
- Broiler (United States)
Major Pork Importers

Source: USDA, Economic Research Service, Long-Term Agricultural Projection Tables
Figure 3. South Korea Import Index

- Corn
- Soybeans
- Beef, Pork, Poultry

Index = 100 in 93/94

Indian Beef Exports

Source: USDA, PSD database
India Becomes Number 1 Beef Exporter

USDA Dairy Trade Projections
(Billion pounds)
Asia Dairy Imports

Source: USDA, PSD database
Indonesia Dairy Imports

Source: USDA, PSD database
China Milk Consumption

Source: USDA, PSD database

Bar chart showing the consumption of milk in China from 2000 to 2012, with data divided into fluid products and processed products. The chart indicates an increase in consumption over the years, with fluid products and processed products showing different trends.
China Dry Non-fat Milk Powder Supply

Source: USDA, PSD database
Will Wine Consumption in China Resemble Korea or Hong Kong and Japan?
Policy: Governments can open or block trade

• Trade agreements have continued to spread rapidly over the past 5 years, just not with the U.S.
• Agreements like TransPacificPartnership (TPP) can have small positive impacts by lowering some barriers and harmonizing some rules
• But, if members can each make exceptions (say for dairy or rice or sugar) any agreement will be worth much less
• The U.S. is a major farm exporters so U.S. agriculture gains from the broadest possible agreements
• A framework or set of incentives and the trust to solve inevitable trade frictions is perhaps most valuable
BSE issues with Canada and Korea (starting almost a decade ago) were resolved in technical and policy discussions. No “dispute settlement” process was used.
Policy: Governments can open or block trade

- The World Trade Organization (WTO) is now mature and mostly opening markets by resolving disputes and settling what the rules mean
- The U.S. generally wants to open markets but does not have a great reputation of playing by the rules
- COOL rules, which every country has, can discriminate more or less, and U.S. lost its WTO argument that U.S. COOL for meats met the global standards
- The current COOL stalemate where Canada and Mexico have been frustrated that the U.S. response to losing the WTO case was to make the rules more trade distorting not less.
• Growth fundamentals mean strong demand for U.S. farm products derived mainly by income growth as the new middle class emerges and wants to consume what we sell
• Animal products and the feeds for those animals have continued growth prospects and the U.S. has a strong comparative advantage
• High quality fruits, vegetables and tree nuts also meet the profile of food that will have growing demand as incomes rise above the most dire poverty
• We should hope that productivity growth continues to allow the poor to continue to eat better and spend smaller shares on food as has been true for most of the past 70 years
• Then, so long as U.S. productivity growth does not lag, agriculture here is poised to benefit.