Rice: Global Competitiveness of the U.S. Rice Industry

October 7, 2015

Disclaimer:
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Agenda

- Overview of the Global Rice Market
- Competitiveness: Cross-country Comparison
- Competitiveness: Country-specific Findings
- Competition in Export Markets
- Assessment of the Impact of Government Programs

Overview:
Global Rice Market
Global White Rice Production

- Asia: 90%
- South America: 3.6%
- Africa: 3.5%
- North America: 1.5%
- RoW: 1.6%
- All other: 10%

Asia: 409 million mt
All other: 46 million mt

Source: USDA, PSD Online (average for 2007/08-13/14)

Most Rice is Consumed Locally

- Domestic Consumption and Residual: 92%
- Annual addition to Stocks: 1%
- Exports: 7%

Source: USDA, PSD Online (average for 2007/08-13/14)
Major Global Trade Flows: 2011-13

Source: GTIS, Global Trade Atlas database (1,000 mt product weight)

Competitiveness: Cross-country Comparison
### Highlighted Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Export</th>
<th>Import</th>
<th>Consumption</th>
<th>Production</th>
<th>Global ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
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<tr>
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<tr>
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<tr>
<td>Pakistan*</td>
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<tr>
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<td>13</td>
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<td>Uruguay</td>
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* Additions to the countries listed in request letter

Source: USDA, PSD Online (rankings based on 2013/14 data).

### Highlighted Country Groupings

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<td>1</td>
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<tr>
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<td>2</td>
<td>2</td>
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Source: USDA, PSD Online (based on 2013/14 data).
## Comparison of Factors of Competitiveness

<table>
<thead>
<tr>
<th>Country</th>
<th>Delivered cost</th>
<th>Product differentiation (quality)</th>
<th>Reliability of supply</th>
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<td>Domestic</td>
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</tr>
<tr>
<td>Cambodia</td>
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<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>China</td>
<td>High</td>
<td>Low</td>
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<tr>
<td>India</td>
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<td>Medium</td>
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<tr>
<td>Indonesia</td>
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<td>Low</td>
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<td>Pakistan</td>
<td>Low</td>
<td>Medium</td>
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<td>Philippines</td>
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<tr>
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<tr>
<td>Vietnam</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

## Competitiveness: Country-specific Findings

- Rice Exporting Countries
Factors Affecting Competitiveness: India

- Low cost of production
- Supportive government policies
- Innovation benefits Indian rice farmers
- Poor storage and milling infrastructure

Factors Affecting Competitiveness: Pakistan

- Government assistance for inputs lowers production costs
- Investment in processing facilities improves quality
- Lack of innovation keeps crop yields low
- Water
  - Extensive resources create favorable growing conditions
  - . . . but poor water management raises delivered costs and reduces supply
- Road infrastructure also hinders competitiveness
Factors Affecting Competitiveness: Thailand

- Regionally high cost of production
- Reputation for premium quality
- Reliability of supply
  - Historically highly reliable...
  - ... but recent problems with reliability

Factors Affecting Competitiveness: Vietnam

- Low cost of production
- Natural resource endowments
- Better seed varieties and crop management increase yields and quality
- Poor government data & lack of market information
Factors Affecting Competitiveness: Burma

- Low cost of production
- Abundant natural resources favor rice production
- Inefficient milling infrastructure and poor quality
- Poor road and port infrastructure

Factors Affecting Competitiveness: Cambodia

- Low cost of production
- Poor irrigation, utility, and transportation infrastructure
- The inefficient milling sector reduces quality and reliability of supply
- Efforts to improve quality and reliability
- Tariff preferences benefit the export sector
Factors Affecting Competitiveness: Brazil

- High cost of production
- Improved yields
- Participation in paddy rice market
- Competition from other crops

Factors Affecting Competitiveness: Uruguay

- Cost competitive producer
- High quality
- Product well suited to certain export markets
- Constraints on expanding capacity
Factors Affecting Competitiveness: USA

- Production costs limit U.S. exports in price-sensitive markets
- Ability to supply various rice types and forms
- Developments in long grain rice breeding research
- Reputation for high quality
- Inability to meet certain customer specifications

Competition in Export Markets
U.S. Competition in Long Grain Exports

Mexico

- Main competitors: Vietnam, Pakistan*, Uruguay
- Loss of market share owing to:
  - extension of (temporary) tariff preferences
  - quality problems in the U.S. starting in 2011
  - lower-cost, reasonable quality, alternative supplies
U.S. Market Share in Mexico

Central America

-- U.S. market share:
  - White: 75% (2007) → 30% (2013)

-- Main competitors: Brazil & Uruguay

-- Loss of market share owing to:
  - quality problems in the U.S. starting in 2011
  - Brazil shipping paddy rice
European Union

– Main competitors: India, Cambodia, Thailand, and Pakistan
– Owing to:
  • Discovery of GE traits in U.S. rice in 2006
  • EU tariff rate quotas
  • EBA preferences for Cambodia

Haiti

– U.S. market share: near 100%
– Main competitor: Vietnam (2013)
– Loss of market share owing to:
  • shipping delays ↑ US price and delivery times, 2012
  • G2G contract with Vietnam 2012/13
Ghana

— U.S. market share: peaked in 2012 at 23%
— Fell to 16.5% in 2013
— Main competitors: Vietnam, Thailand
— Loss of market share owing to:
  • lower priced aromatic rice from Vietnam

U.S. Competition in Long Grain Exports

Traditional U.S. markets
- Box A
  - Mexico
  - Central America
  - European Union
  - Haiti
  - Ghana

U.S. competitive, restricted trade
- Box C
  - Canada
  - Jordan
  - Saudi Arabia

U.S. competitive, restricted trade
- Box E
  - Japan
  - South Korea
  - Taiwan

Declining U.S. competitiveness

Nontraditional U.S. markets
- Box B
  - China
  - Nigeria

U.S. competitive, restricted trade
- Box D
  - Iran
  - Iraq
  - Venezuela

U.S. competitive, restricted trade
- Box F
  - Senegal
  - Philippines
  - Malaysia
  - South Africa

U.S. competitive, restricted trade
Impact of Government Programs: Modeling Results

Measurable Policies & Programs Affecting Rice

- Price Support
- Production Support
- Consumer Support
- Tariffs/Export Taxes
Other Policies & Programs Affecting Rice

- Seed Research
- Infrastructure Projects
- Extension Services
- Export Market Development

Global Simulations Modeling Results

<table>
<thead>
<tr>
<th>Policy Instrument</th>
<th>United States</th>
<th>Global total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production</td>
<td>Consumption</td>
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<tr>
<td>Removal of</td>
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<tr>
<td>Producer price support</td>
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<td>Factor input support</td>
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<td>support</td>
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<tr>
<td>Consumption support</td>
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<td>&lt;0.5</td>
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<tr>
<td>Tariffs</td>
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<tr>
<td>Export tax</td>
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<td>&lt;0.5</td>
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<tr>
<td>All except tariffs</td>
<td>182</td>
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<tr>
<td>All including tariffs</td>
<td>1,359</td>
<td>-7</td>
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### Average Marginal ad Valorem Equivalent Tariffs on Rice

<table>
<thead>
<tr>
<th>Country/region</th>
<th>Average %</th>
<th>Country/region</th>
<th>Average %</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>33.9</td>
<td>Malaysia</td>
<td>23.5</td>
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<tr>
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