RAPID DEVELOPMENT OF BRAZIL’S PROCESSING AND SUPPLY CHAIN SYSTEM: IMPLICATIONS FOR BRAZILIAN PROCESSED FOOD TRADE

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The Rapid Development of Brazil’s Processing and Supply Chain System

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Issues for Discussion

1. What are the factors behind the performance of Brazilian agriculture?
2. What makes the supply chain competitive?
3. Contribution of sector and macro policies
4. Role of the input supplying industry
5. The role of FDI
6. Is growth sustainable?
7. Demand constraints and their impact on trade
8. Prospects for the future
General Profile of Brazil:

- 11th Economy in the World
- GDP of 1 Trillion (PPP)
- 5th in Territory (8.5 million sq km) and Population (182 million)
- 3rd in Agricultural Area (3/4 in pasture land)
- 4th in Agribusiness Exports in the World
- Stable Economy: in 1994 Inflation dropped from 80% mo to 12.5 year
- The Country Risk Dropped From 1,300 to 271 points (2002-2006)
- A Bright Prospect for the Domestic Market in the Near Future – Slow Growth in Income
GDP Growth Rate Broken Down by Components: 1998/2003 (%)
Net Trade Balance of the Agribusiness Sector

From November 2004 to 2005.

Source: MAPA
Exports and Imports of the Agribusiness Sector

(US$ billions)

Source: MAPA
Brazil's Exports of Primary and Processed Food Products

SOURCE: GTIS Data, ERS calculations.
<table>
<thead>
<tr>
<th>Product</th>
<th>2005</th>
<th>Main Destinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybeans</td>
<td>5,345</td>
<td>Netherlands, China, France, Germany, Iran and Spain.</td>
</tr>
<tr>
<td>Sugar</td>
<td>3,919</td>
<td>Russia, Nigeria, United Arab Emirates, Canada and Egypt</td>
</tr>
<tr>
<td>Poultry meat</td>
<td>3,496</td>
<td>Saudi Arabia, Japan, Netherlands, Germany and Russia.</td>
</tr>
<tr>
<td>Soybean meal</td>
<td>2,865</td>
<td>Netherlands, China, France, Germany, Iran and Spain.</td>
</tr>
<tr>
<td>Coffee</td>
<td>2,533</td>
<td>USA, Germany, Italy and Japan</td>
</tr>
<tr>
<td>Beef</td>
<td>2,419</td>
<td>Chile, Netherland, Russia, Egypt, United Kingdom and Italy</td>
</tr>
<tr>
<td>Soybean oil</td>
<td>1,267</td>
<td>Netherlands, China, France, Germany, Iran and Spain.</td>
</tr>
<tr>
<td>Orange and fruit juices</td>
<td>1,185</td>
<td>Belgium, Netherland, USA and Japan</td>
</tr>
<tr>
<td>Pig meat</td>
<td>1,123</td>
<td>Russia, Hong Kong, Argentina, Singapore and Netherlands</td>
</tr>
<tr>
<td>Prepared meats</td>
<td>806</td>
<td>na</td>
</tr>
<tr>
<td>Other products</td>
<td>2,863</td>
<td>na</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27,821</strong></td>
<td>-</td>
</tr>
</tbody>
</table>
THE SUPPLY CHAIN

Key Issues
What is Behind the Efficiency of the Supply Chain

Internal:
1. Trade liberalization and tariff cuts
2. Fiscal discipline and tight monetary policy
3. Adoption of a floating exchange rate regime
4. Reduction of subsidies to the farm sector (credit)
5. Reduction of farm support (MP)
6. Investment in agricultural research
7. The role of the input-supplying industries

External:
1. Favorable world prices
2. Increased foreign demand
Growth of Brazilian Agriculture led to the Rapid Development of the Supply Chain (1990 to 2005)

Basic Crops: cotton, peanuts, rice, oats, barley, edible beans, sunflower, castor seed, maize, soybeans, sorghum and wheat.

Source: Conab / MAPA
THE FOOD INDUSTRY

Key Issues
The Farm Sector is a Reliable Source of Cheap Commodities

Benefits came from capital, technology and management primarily from FDI

• Economies of Location of the Supply-Oriented Food Industries
• Re-location of Industries: Value Added in the Frontier – to “By Pass” the Problem of Poor Roads – a Platform to Exports
• Among the Top 10 Most Important Food Industries 8 are Foreign
• M&As: 309 operations in the 90s (US, EU, IT, AR).
Major Sectors of the Food Industry in Brazil. Participation of Each Sector in the Total Sales of the Sector.

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Participation in Total Sales (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy products</td>
<td>17.8%</td>
</tr>
<tr>
<td>Coffee &amp; grain processing</td>
<td>16.9%</td>
</tr>
<tr>
<td>Meat byproducts</td>
<td>15.5%</td>
</tr>
<tr>
<td>Oil &amp; fats</td>
<td>11.5%</td>
</tr>
<tr>
<td>Wheat byproducts</td>
<td>9.8%</td>
</tr>
<tr>
<td>Fruit &amp; vegetable preserves</td>
<td>9.6%</td>
</tr>
<tr>
<td>Sugar</td>
<td>6.5%</td>
</tr>
<tr>
<td>Chocolate</td>
<td>5.3%</td>
</tr>
<tr>
<td>Other Products</td>
<td>7.3%</td>
</tr>
</tbody>
</table>

Source: ABIA.

The Sales of the Processed Food in Brazil is US$168 Billion
FDI: A Major Competitive Advantage

- FDI: Assets and Acquisitions (81%).
- Portfolio Investments (5.8%).
- Investments on a “Green Field Basis” (13.2%).
- An Important Market: Brazil + Mercosul
- Many National Companies With Undervalued Stock Prices

HOWEVER

- Tight Competition After Consolidation
- Tight Cost and Price Competition
- Food Prices Declined 31% and Processed Food Prices 42%

Conclusion: FDI brought consolidation, more competition, more consolidation and even more competition. Exports will be a natural solution.
Why Have the Food Industries Invested in Brazil?

✓ Stabilization of the economy eliminated the inflation tax – a regressive tax on consumers

✓ The effect has been the lifting of the poorest of the poor: income increased by 21%;

✓ Consumption of food after implementation of the *Real Plan*: + 24%

✓ Mercosul (without Chile and Bolivia) has 248.3 million consumers with a *per capita* income of US$ 5,000

✓ It has become a platform for exports: good prospects for the future
Prospects for the Future

- The *Real Plan* brought in 23 million consumers but there are still 30 million more potential consumers.
- 52 million consumers will join the market of processed food.
- A booming market for meat and dairy and all processed food.
- Opportunity cost for women’s time (23 to 42%).
- Prospects for food services, industrial kitchen restaurants, catering, ... 

Conclusion: A market that will attract FDI even more in the future. A friendly environment for foreign investment. Macro stabilization.
## 10 Most Important Imports of Food.

Participation of Each Product in Total Imports of the 10 Products.

<table>
<thead>
<tr>
<th>Products</th>
<th>Participation in Imports* (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>26.95</td>
</tr>
<tr>
<td>Fruit vegetables</td>
<td>19.05</td>
</tr>
<tr>
<td>Dairy products</td>
<td>14.51</td>
</tr>
<tr>
<td>Rice</td>
<td>8.91</td>
</tr>
<tr>
<td>Fisheries</td>
<td>9.33</td>
</tr>
<tr>
<td>Fats &amp; oils</td>
<td>8.13</td>
</tr>
<tr>
<td>Cocoa &amp; tea</td>
<td>4.73</td>
</tr>
<tr>
<td>Meat &amp; byproducts</td>
<td>3.14</td>
</tr>
<tr>
<td>Maize</td>
<td>2.85</td>
</tr>
<tr>
<td>Garlic</td>
<td>2.40</td>
</tr>
</tbody>
</table>

Source: Abia.

(*) Total of the ten most important imports.

**Food Imports Will Probably Boom in the Near Future**
Importance of the Food Processing Sector as an Export Platform

A few foreign companies gave a “strategy” to Brazil: Core Competence

- Management, Innovation and Strategies
- Improved Competition and Innovation in the Industry
- Are Opening Distribution Channels Abroad
- They Have Market Access
- All is Needed is a Reduction in Tariff Escalation
### Largest Food Companies in Brazil

#### Degree of Openess of Domestic Market for Foreign Investment

#### Total Sales

**Total Sales (US$ million)**

<table>
<thead>
<tr>
<th>Companies</th>
<th>Total Sales 2003 (US$ million)</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bunge Alimentos (AR)</td>
<td>3866</td>
<td>16.2</td>
</tr>
<tr>
<td>Cargill (US)</td>
<td>3164</td>
<td>13.3</td>
</tr>
<tr>
<td>Nestlé (SW)</td>
<td>2917</td>
<td>12.2</td>
</tr>
<tr>
<td>Unilever (UK)</td>
<td>2319</td>
<td>9.7</td>
</tr>
<tr>
<td>Sadia (BR)</td>
<td>1996</td>
<td>8.4</td>
</tr>
<tr>
<td>Perdigão (BR)</td>
<td>1483</td>
<td>6.2</td>
</tr>
<tr>
<td>Copersucar (BR)</td>
<td>1448</td>
<td>6.1</td>
</tr>
<tr>
<td>Coinbra (FR)</td>
<td>1407</td>
<td>5.9</td>
</tr>
<tr>
<td>Kraft (US)</td>
<td>925</td>
<td>3.9</td>
</tr>
<tr>
<td>Friboi (BR)</td>
<td>796</td>
<td>3.3</td>
</tr>
<tr>
<td>Seara (US)</td>
<td>642</td>
<td>2.7</td>
</tr>
<tr>
<td>Quaker (US)</td>
<td>547</td>
<td>2.3</td>
</tr>
<tr>
<td>Other</td>
<td>2332</td>
<td>9.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23832</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
What are major obstacles facing the supply chain and the food industry?
TAXATION ON FOOD INDUSTRY

- The Tax Burden: From 28% (1994) to 38% (2005)
- Workers up to 3 million (72% of labor force): spend 35% of income in food, pay 37% of taxes on food!

- Tax incidence on production processes:

  Biscuits and pasta: 25.71
  Tomato concentrated pulp: 36.6%
  Mayonnaise: 26%
  Bread and bakery: 14.7%
  Milled rice: 14.7%
  Sugar: 40.5%
  Eggs: 21.8%
  Milk and dairy: 33.5%
  Margarine: 38.1%

Conclusion: Alarming overburden, but tax reform will come
Situation no longer sustainable... Growth rates are mediocre.
Another Limiting Factor to the Export Performance is Domestic Consumption

Food Industry Rates of Growth of Exports and Domestic Consumption

<table>
<thead>
<tr>
<th>Years</th>
<th>Exports</th>
<th>Domestic Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>12.21</td>
<td>3.5</td>
</tr>
<tr>
<td>2000</td>
<td>10.46</td>
<td>2.5</td>
</tr>
<tr>
<td>2001</td>
<td>31.17</td>
<td>4.3</td>
</tr>
<tr>
<td>2002</td>
<td>6.93</td>
<td>2.8</td>
</tr>
<tr>
<td>2003</td>
<td>21.30</td>
<td>2.1</td>
</tr>
<tr>
<td>2004</td>
<td>29.77</td>
<td>4.3</td>
</tr>
<tr>
<td>2005</td>
<td>17.67</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Source: ABIA and O GLOBO (18/01/2006)

Note: Exports excluded commodities. Only agro-processed food.

Brazil has 182 million inhabitants but 36 percent of the population (33 million) are in low levels of income (and consumption).
Other Limiting Factors to the Development of Agriculture, Exports and the Food Industry:

- **Infrastructure**
  - Bottlenecks – highways, railways, ports, storage facilities.
  - Public-Private Partnership: no implementation

- **Brazil’s Costs**
  - High interest rates
  - Labor costs also very high
  - Agriculture is still unduly overly taxed
  - Small scale capacity affects competitiveness
Concluding Remarks

- The Role of the input supplying industry has been critical to the performance of the supply chain.
- The supply chain is a key factor to the success of the food industry.
- Sales of processed food in Brazil is over US$168 billion: a large and growing sector.
- FDI brought competitiveness to Brazil’s food industry.
- More FDI in the future with friendly environment for investment and macro stabilization.
- 36 percent of the population (33 million) are in low levels of income (and consumption).
- Improvement in income distribution will push domestic demand and food imports.