Lecture outline

- Characteristics of ag production that make agricultural marketing different from manufacturing.
- Nature of product and production
- Cycle and season
- Location
- Farmer marketing problem

Characteristics of ag products

- Raw material
- Bulky, perishable products
- Quality variation
- Examples:
  - Fresh produce
  - Cattle
  - Grains

Implications for markets

- Location relative to consumers
  - Weight reducing processes
  - Perishable
- Degree of handling
  - Assembly, sorting, grading
- Price elasticity
  - Substitutes
  - Perishable
Characteristics of production

- Upward trend in output
  - Increasing productivity
- Annual variation in production
  - Supply and demand implications
  - Capacity utilization problem
  - Weather risk
  - Market risk

Variability in Yield and Price

<table>
<thead>
<tr>
<th></th>
<th>Corn</th>
<th>Soybeans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield</td>
<td>97.35</td>
<td>29.98</td>
</tr>
<tr>
<td>Price</td>
<td>1.94</td>
<td>4.94</td>
</tr>
<tr>
<td>Std Dev</td>
<td>23.04</td>
<td>5.00</td>
</tr>
<tr>
<td>Stdev/Avg</td>
<td>24%</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>36%</td>
<td>36%</td>
</tr>
</tbody>
</table>
Weekly Average Steer Carcass Weights

Average: 782
Std Dev: 26
CV: 3%

Texas-OK Live Steer Prices

Average: 70.01
Std Dev: 7.31
CV: 10%

Characteristics of production

◆Cyclical variation in production
  ✓Psychological lag in production
  ✓Biological lag in production

◆Seasonal variation in production
  ✓Grain crops
  ✓Livestock marketings
**Time from decision to market**

- **Beef cattle**
  - 3.5 yrs Retain heifer to slaughter steer
- **Hogs**
  - 1 yr Retain gilt to slaughter hog
- **Grains**
  - Annual crops
- **Tree crops**

**Annual variation in production**

![Cobweb Model](chart)

**U.S. Cattle Inventory**

![Graph showing U.S. Cattle Inventory from 1867 to 2012](chart)
Estimated Farrow-Finish Returns and Change in Swine Breeding Herd Lagged One Year

Iowa S. Minnesota Barrow and Gilt Seasonal Price Index

Monthly Average Iowa Corn Prices, 1979-80 Through 1999-00 Marketing Years
Characteristics of production

- Geographic concentration
  - Regional advantages
- Varying cost of production
  - One selling price

US Top 10 Beef Cow States
Million Beef Cows, 2005
1.43
1.72
1.90
1.55
2.05
2.16
5.43
1.01
1.09
1.72
1.07
10 States 58% of Total

US Top 10 Cattle Feeding States
Million head on Feed, 2005
290
120
240
140
535
400
400
.400
.290
.535
10 States 89% of Total
US Top 10 Corn States, Million Bushels, 2004

US Top 10 Soybean States, Million Bushels, 2004

US Top 10 Hog States, Million Head, 2004

10 States 84% of Total

10 States 81% of Total

10 States 84% of Total
Iowa

◆ #1 producer of
  ✔ Corn, Soybeans, Hogs, Eggs

◆ Significant producer of
  ✔ Feedlot cattle #5
  ✔ Beef Cows #11
  ✔ Milk #12
Characteristics of production

- Scale of production
  - Economies of scale
  - Narrow margins
  - Market assembly problems
  - Differing quality

Input sector

- Farmers are buyers and sellers
- Increasing reliance on purchased inputs
- Cost-price squeeze
- Move to direct purchases of large volume

Percent of Input purchases

- Livestock 9%
- Fuel 3%
- Feed 14%
- Supplies, repairs 10%
- Machinery 6%
- Chemicals Fert. 14%
- Rent 10%
- Int & Taxes 10%
- Farm Service 14%
- Labor 10%
**Farmer marketing problems**

- Disaggregate decision making
- Weather and disease risk
- Inability to adjust supplies
- Price takers/hard to organize
- Free rider problem

**Farmer marketing problems**

- Cost-price squeeze
  - Implications for scale
  - Self induced as output prices increase
- Buyer market power
- Changing food market efficiency
- Price differentials for quality
  - Livestock grid marketing
  - Wheat protein
  - Component pricing of milk

**So what?**

- Increasing economies of scale
- Production and cost risk
- Competition for inputs
- Single selling price