Market Analysis and Outlook at USDA

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USDA Speaks With One Voice

- Interagency process develops official data and forecasts
- Published data has clear inflexible deadlines
- Everyone has access to the information
- Policy analysis has common basis

Commodity Market Analysis at USDA

- Purpose: Timely, reliable, and objective information is essential if a market economy is to operate efficiently
- Analyze and explain
  - Current market situation
  - Short term forecast of supply, demand and prices
The Building Blocks of the USDA Market Information System

- **NASS**—collection of basic statistics
  - Area, yield, production of crops
  - Stocks surveys
  - Livestock data—cattle on feed,
  - Average farm prices
- **AMS**—collection of market prices
  - Daily reports on cotton, dairy, feedstuffs, fruit, vegetables, grains, hay, livestock, meat, and poultry markets.

The Building Blocks of the USDA Market Information System, cont.

- **Foreign Agricultural Service**
  - Supply and utilization estimates of major commodities in foreign countries
- **Economic Research Service**
  - Analysis and forecasting
  - Commodity situation and outlook reports
  - Research
  - Databases
The Building Blocks of the USDA Market Information System, cont.

- Farm Service Agency
  - Running the Farm Programs (paying subsidies and program compliance)
- World Agricultural Outlook Board
  - Chair Committees on commodity forecasting
  - Clear reports
  - Databases

Market analysis covers a wide range of commodities, countries, and topics

- Wheat
- Rice
- Corn and other feed crops
- Oil crops
- Cotton and wool
- Fruit and tree nuts
- Aquaculture
- Sugar and sweeteners
- Livestock, dairy & poultry
- Vegetables & specialties
- Agricultural Trade Reports—Europe, China, Brazil, India, Transition economies, etc.
- Food Security Assessment
- Agricultural income and finance
Dissemination

- World Agricultural Supply and Demand and NASS Production in Lockup
- Monthly “e-outlook” newsletters and Circulars
- Annual year-in-review reports
- Databases, tables, indicators
- E-outlook reports on special topics

Why do commodity market reporting?

- Basic investment by society in information.
- To project future market conditions in a timely manner
- To ensure that information is equally available to all, so that no one person or group has an unfair market advantage
- To provide basic data that is not developed by the private sector, but which can be tailored to the specific needs of various users.
Who uses market analysis:

Public sector

- Policymakers use market analysis to make policy decisions.
  - Operation of commodity programs
  - Drafting of farm legislation
  - Anticipating and reacting to important market developments
- Farm advisory services use market information and analysis to help farmers.
  - To make planting decisions
  - To identify potential markets
  - To develop business plans.

Who uses market analysis:

Private sector

- Farmers—to make planting and marketing decisions;
- Food processors—to time purchases of raw materials and devise marketing strategies
- Exporters—to time purchases and devise marketing strategies
- Input suppliers—to forecast sales
- News media
What makes a commodity market reporting program effective?

- Information needs to be timely and available to everyone
- Information must be regarded as objective
- Analysts need to become specialists
- Good commodity analysts are good economists
- The successful analyst understands the commodity market

Quality assurance

- Quality assurance is an essential part of an effective outlook program.
- Forecasts must be free from political bias
- The Department speaks with one voice
- Interagency committees are involved in all estimates and review of all market outlook publications released by USDA.
- World Agricultural Outlook Board approves all forecasts
- Political appointees do not dictate forecasts or conclusions.
How the short-term forecasting process works...

**USDA Interagency Commodity Estimates Committee Process**

**Data:**
- International
- Domestic

**Information:**
- Attaché reports
- Wire service stories

**Commodity Forecasts Appear in:**
- WASDE
- Newsletters
- Circulars

**Other Forecasts:**
- Farm Income
- Food Prices
- Trade

**Policy Decisions:**
- Short term
- Long term

The supply and use table: the basic tool for analysis

- The supply and use table has three main components:
  - **SUPPLY**
  - **USE**
  - **PRICE**

- Describes the marketing year outcome for a single commodity
- Summarizes market behavior of all buyers and sellers
- Organizes information about a crop
- Provides framework for analysis
An example of supply and use table with a short-term forecast

**U.S. Wheat Supply, Use, and Price**

<table>
<thead>
<tr>
<th>Item</th>
<th>2001/02 Est.</th>
<th>2002/03 Projections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>August</td>
<td>September</td>
</tr>
<tr>
<td>Million bushels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning stocks</td>
<td>876</td>
<td>772</td>
</tr>
<tr>
<td>Production</td>
<td>1,958</td>
<td>1,686</td>
</tr>
<tr>
<td>Imports</td>
<td>108</td>
<td>105</td>
</tr>
<tr>
<td>Supply, total</td>
<td>2,941</td>
<td>2,563</td>
</tr>
<tr>
<td>Food</td>
<td>928</td>
<td>940</td>
</tr>
<tr>
<td>Seed</td>
<td>81</td>
<td>81</td>
</tr>
<tr>
<td>Feed and residual</td>
<td>199</td>
<td>175</td>
</tr>
<tr>
<td>Exports</td>
<td>961</td>
<td>906</td>
</tr>
<tr>
<td>Use, total</td>
<td>2,169</td>
<td>2,096</td>
</tr>
<tr>
<td>Ending stocks</td>
<td>772</td>
<td>467</td>
</tr>
<tr>
<td>Avg. farm price ($/bu) 2/</td>
<td>2.78</td>
<td>3.20, 3.80, 3.45 - 4.05</td>
</tr>
</tbody>
</table>

Note: Totals may not add due to rounding. 1/ Marketing year beginning June 1. 2/ Marketing-year weighted average price received by farmers. 3/ Includes imports.

Why use a marketing year?

- It spans the crop harvest and marketing through the subsequent year
- It allows data users and analysts to track one crop from harvest to harvest
- Supply and use data are consistent
- Examples:
  - Wheat -- June to May
  - Corn -- September to August
Basic elements of supply

- **Beginning stocks**
  - What is left over from the previous year and available for use in new marketing year
  - Include quantities in transit

- **Production**
  - Fluctuates with weather
  - Can be influenced or adjusted through government policies

- **Imports**

Use

- **Feed**
  - Determined by size of livestock herds and prices and availability of alternative feeds

- **Food, seed, and industrial use**
  - Determined by population and income, prices of alternative goods, farmers’ planting intentions

- **Exports**
  - Highly variable and difficult to forecast
  - Fluctuate from year to year with production shifts and policy changes in foreign countries

- **Residual**
  - Those uses which cannot be directly measured
  - Statistical and measurement errors
Supply minus Use = Ending stocks

- These become the beginning stocks for the next year.
- Ending stocks help smooth out fluctuations in year to year supplies. Because stocks can be adjusted to make up for wide wings in production, they help keep total supplies stable.
- Either buyers or sellers will have incentive to hold stocks if they believe prices will rise in the coming year.
- How much a seller or buyer withholds from the market depends on the current and expected market situation and storage costs.

USDA Also Develops 10-Year Agricultural Baseline Projections

- Prepared using similar interagency process.
- Based on:
  - Specific policy assumptions which may or may not turn out to be accurate.
  - Composite of models and judgmental analysis.
- Published in USDA annual report distributed at the February Agricultural Outlook Forum.
Some words about forecasting

- Forecasting is an essential part of our analysis
  - But forecasts have limits
- The basic tool is a model
  - A way of organizing and elaborating the relationships
  - Based on assumptions
- Forecasts can be wrong
  - Mistaken assumptions
  - Wrong information
  - Poor model specification

“Expert judgement” plays a critical role

- Outlook analysts understand the markets
  - They understand the structure of the industry and how it is changing
  - They keep abreast of domestic and international market developments
- Analysts have contacts in the industry
  - Email and the telephone are essential tools
USDA Forecasting and Research Programs Are Strongly Intertwined

**Forecasting**
- Short-term Forecasts
- Long-term Baseline
- Analytical Systems
- Draw on Each Other

**Special Studies**
- Policy Analysis
- Trade Analysis
- Staff Analysis

**Research**
- Issues Draw from Forecasts and Special Studies
- Results Feed Back to Forecasts and Studies

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**Useful websites**

- **AMS Market News Reports**
- **FAS: foreign attache reports**
- **FAS: World Market and Trade Reports**
- **FAS: Foreign supply and utilization database**
Useful websites

- ERS Website
  - www.ers.usda.gov

- Outlook pages
  - www.ers.usda.gov/publications/outlook