

# Four Types of Price Variation:

## Applications for Marketing and Risk Management

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Profitable & Sustainable  
AGRICULTURAL SYSTEMS  
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## Price Patterns

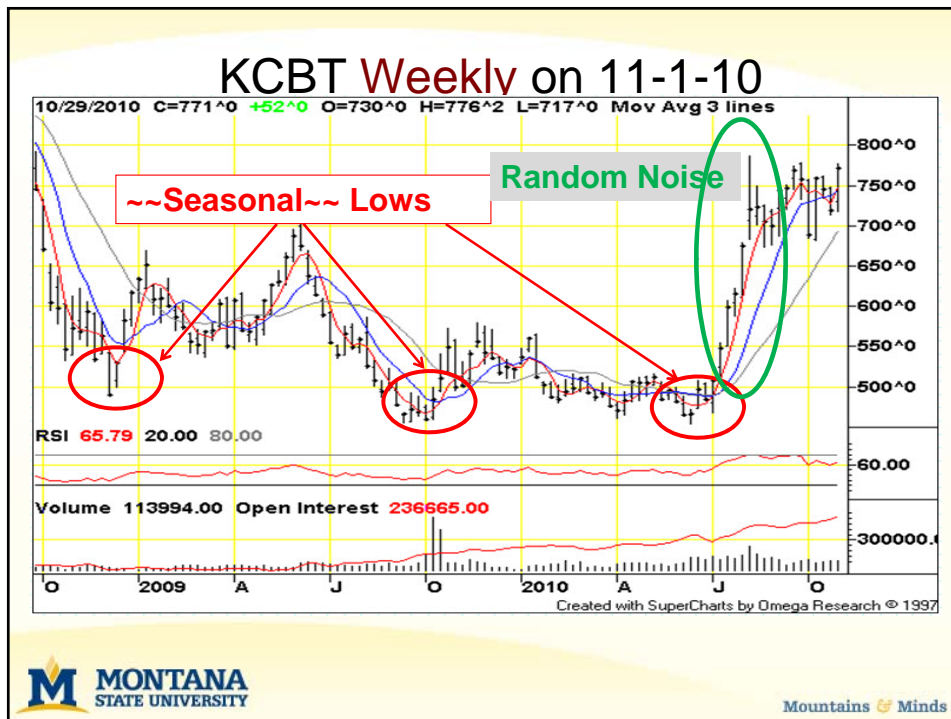
- Those caused primarily by fundamental conditions in the market/industry
  - Annual nature of production systems
- Those caused by uncertainty in the markets
  - The markets hunting for a direction
  - Technical charting patterns

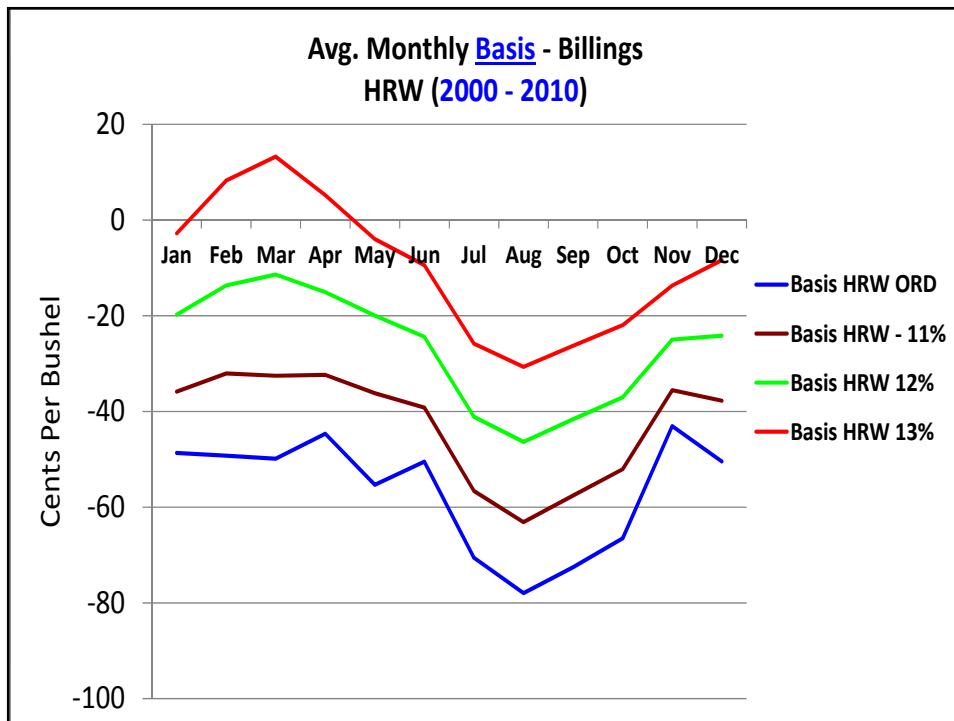
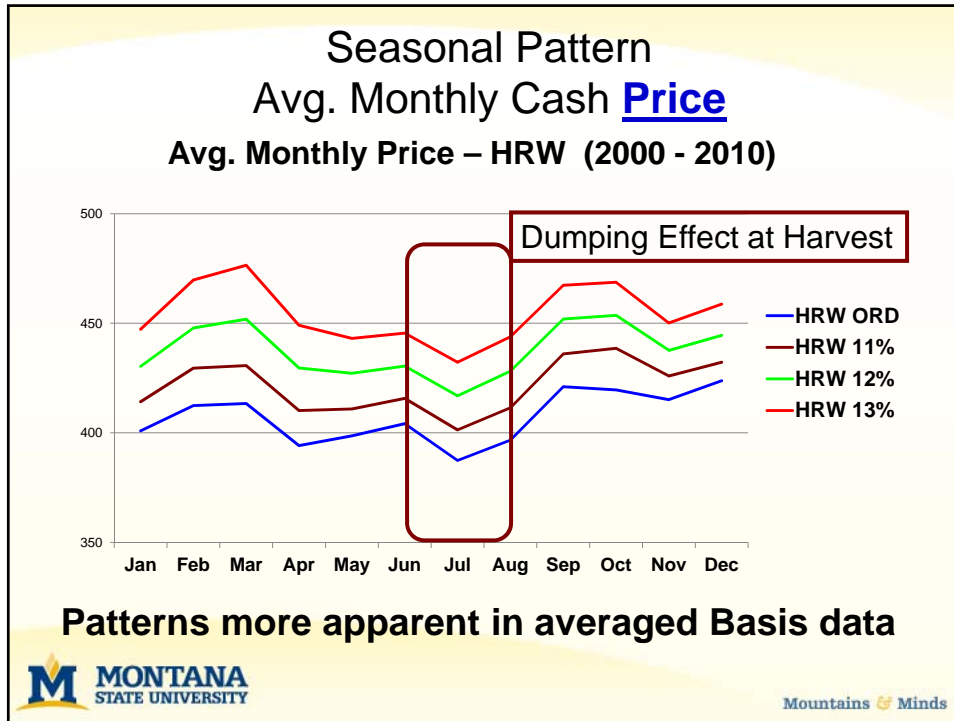


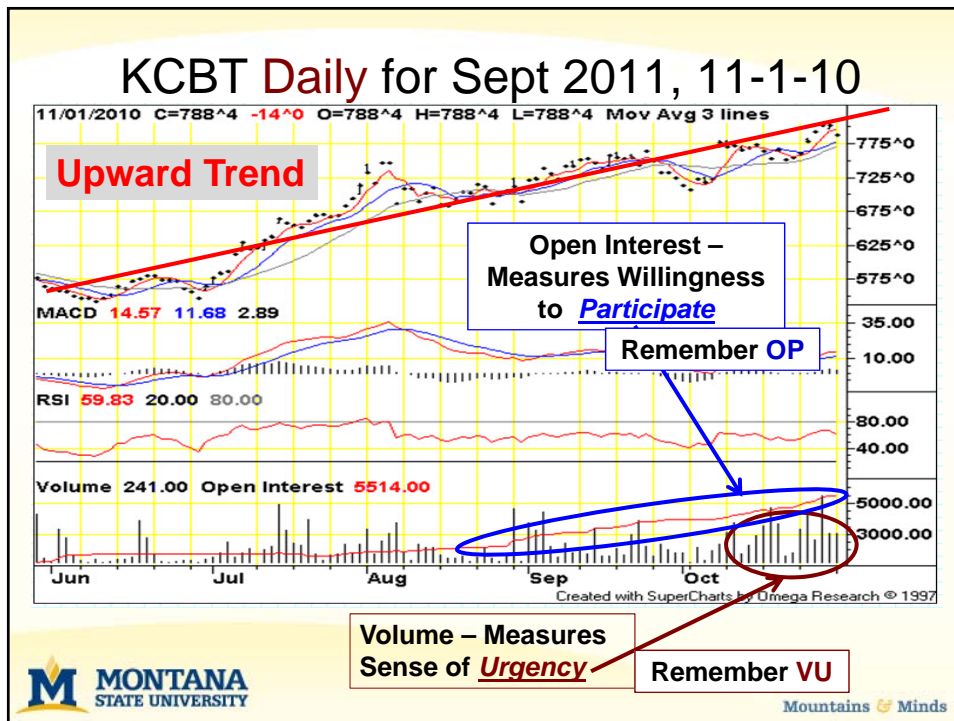
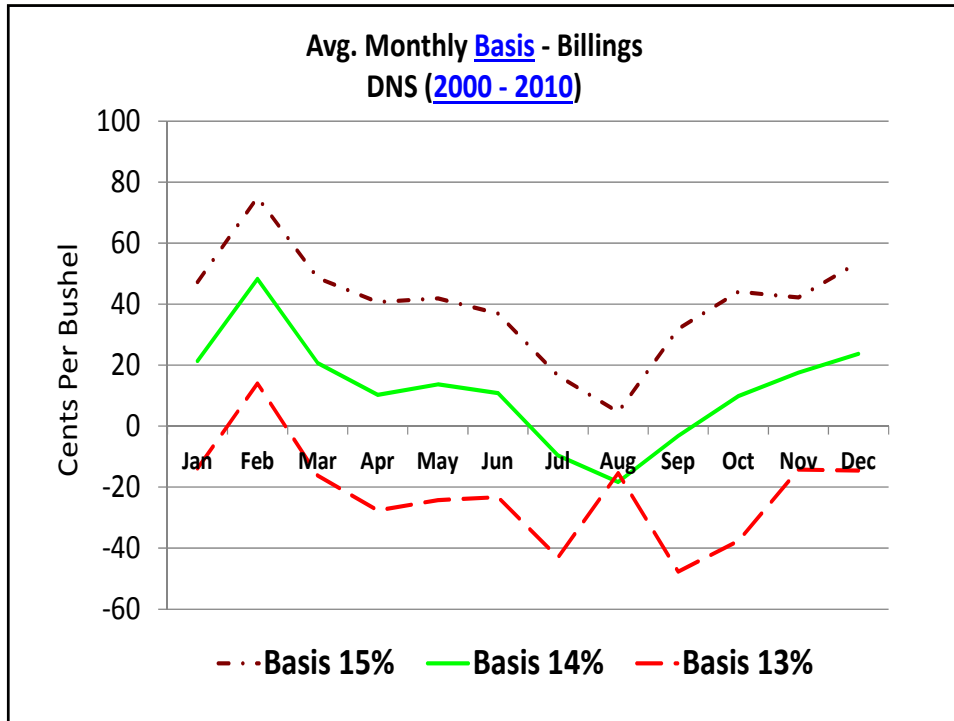
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## Patterns Help Predict Price Variation

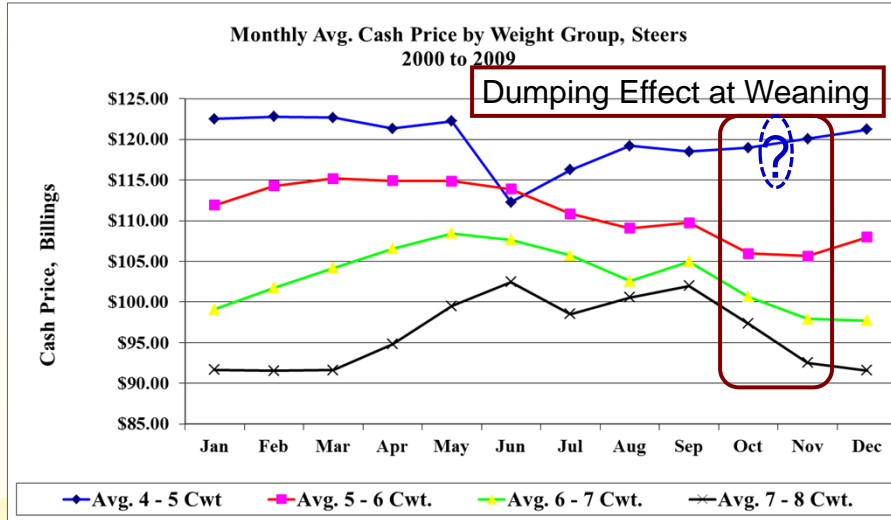
- Types of Price Variation/Market Expectations
  - **Seasonal**
    - Occur due to nature of commodity being marketed
      - Small grains harvest, weaned calves
      - Dumping effect
      - Carry markets that allow storage of commodities
  - **Cyclical**
    - Similar to seasonal but over a **longer period** of time
      - Cattle cycle
  - **Trend**
    - Major price moves in the same direction for a significant amount of time & based on fundamentals
  - **Random = Noise**
    - Imperfect knowledge; Short lived
    - Another type of variation will eventually prevail to establish price/patterns
- These Basic Patterns are driven by Fundamentals





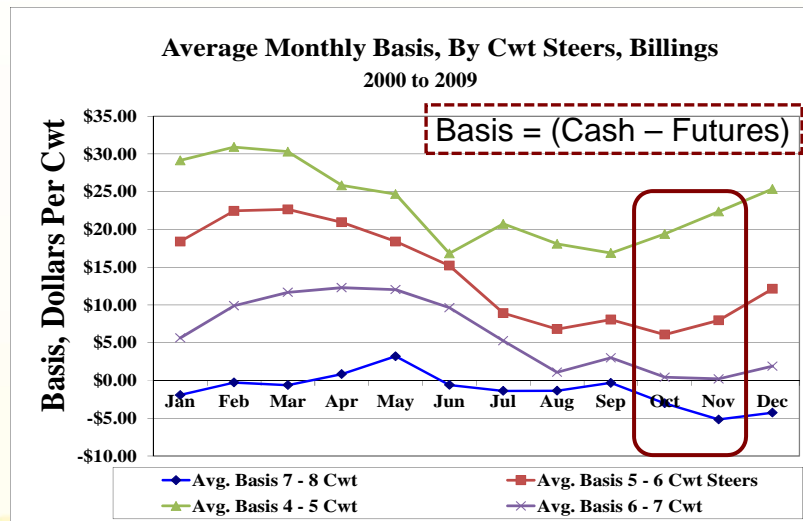


## Seasonal Pattern Montana Monthly Avg. Steer Prices by Weight



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## Montana Monthly Avg. Basis by Weight, Steers



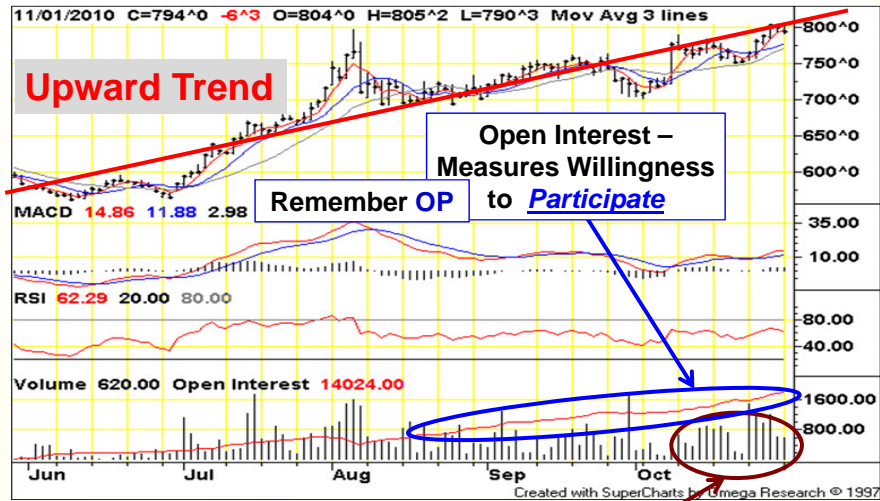
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## CBOT Weekly, Nov. 1, 2010



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## CBOT Daily, Sept 2011, on 11-1-10



Volume - Measures Sense of Urgency

Remember VU

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## Information From Grain Markets

- Markets often display seasonal patterns for commodities that can be stored
- They help measure the **Willingness to participate** with high **Open Interest**
  - Increasing and “traders” want in
- Provides a measure of **Urgency**, high **Volume** of contracts traded
  - I think I am where I need to be
- Identify Trends based of fundamentals



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## Trends Defined

- Major price moves in the same direction for a **significant** amount of time
- Trends can be up, down, or sideways
- Trends are almost always based on **fundamentals**
  - Demand and supply
  - Relates to local, regional, global markets
    - Long term issues related to basic harvest, storage, transportation, handling, global markets, weather,...
    - Combinations of several factors at the same time



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## Random Price Variation

- Random price variation occurs with imperfect knowledge
  - Uncertainty in fundamentals
- Short term weather **scares**
  - Yields, harvest difficulties
- These variations are relatively short lived
- One of the other three types of price variation will eventually prevail to **establish price**



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## Sept. 2013 – KCBT – HRW

### Commodity Exchange KCBT

<b>HRW – Billings</b>	Ord.	11%	12%	13%
Futures Price <sup>1</sup>	\$8.08	\$8.08	\$8.08	\$8.08
Avg. Basis <sup>2</sup>	\$.-73	\$.-58	\$.-42	\$.-26
Predicted Local Cash Price	\$7.35	\$7.50	\$7.66	\$7.82
Basis Standard Dev.	\$.66	\$.48	\$.36	\$.28
Price Range Forecast <sup>3</sup>	<b>\$6.69 – \$8.01</b>	<b>\$7.02 – \$7.98</b>	<b>\$7.30 – \$8.02</b>	<b>\$7.54 – \$8.01</b>

<sup>1</sup> On February 20<sup>th</sup> for Sept of 2013

<sup>2</sup> Billings Average Basis for 2000 through 2010

<sup>3</sup> Predicted Local Cash Price +/- one Standard Deviation of the basis = range of prices = (68% chance of price being in this range)



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## Contents of the CD

- Marketing-March2013
  - 1\_Introduction
  - 2\_UnderstandingBasis
  - 3\_TraditionalMarketingTools
    - ForwardContracting
    - Futures
    - Options
  - 4\_Insurance\_RiskManagement
    - Grains
      - Combo-PreimumCalculations
    - Livestock
      - LGM
      - LRP
  - 5\_RiskManagementStratgies
  - 6\_Cost-of-Production
    - ERS Budgets
  - 7\_ReferenceMaterial



## Questions

