

**GENERAL SESSION IV**  
***Whither the Cattle Cycle? Drought or Something Else?***  
**Dr. Gary Brester**  
**Montana State University**

Dr. Gary Brester is a Professor in the Department of Agricultural Economics and Economics at Montana State University. He was raised on an irrigated sugarbeet and malting barley farm near Laurel, MT. He has two degrees from MSU - a BS in Agricultural Business and an MS in Applied Economics. He received his PhD in Economics from North Carolina State University. Dr. Brester was a faculty member in the K-State Department of Agricultural Economics from 1990-1997. Brester's applied research program includes livestock and grain, risk management, international trade, agribusiness, and farm management issues. Dr. Brester's annual beef consumption is three times the national average.

***Abstract/Summary***

*Current record-high calf prices have occurred (in inflation-adjusted terms) three times since 1920 -- in 1951, 1973, and 1979. In each case, price spikes were caused by a combination of low cattle numbers and demand side factors. However, each of these record-high price events was short-lived -- less than three years. In general, prices declined by 50% as macroeconomic conditions reversed themselves (e.g., Korean War era purchases and incomes declined, and OPEC oil shocks permanently increased production costs and substantially reduced beef demand). But, cattle inventories also increased for a short time in response to high prices in each of these cases. If history repeats itself, then record high cattle prices will not exist for an extended period of time. However, if the factors that have caused current high prices do not reverse themselves, and cattle inventories do not increase substantially, then cattle prices are likely to remain at relatively high levels provided that negative demand side shocks do not occur. Specifically, increased labor, grazing, and feed costs along with crop production profitability, land use issues, and drought will likely hamper supply responses.*

# Whither the Cattle Cycle: Drought or Something Else?

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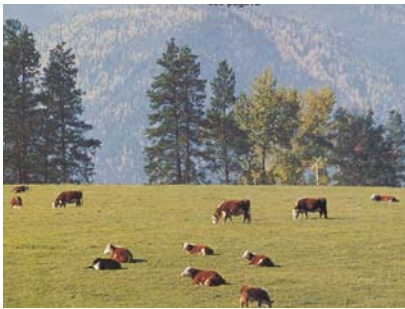
**Gary Brester**

MSU Department of Agricultural Economics and Economics

2015 Risk and Profit Conference

Department of Agricultural Economics

Kansas State University



Manhattan, KS

August 21, 2015



## OUTLINE

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1. **Cattle Market Fundamentals**
2. **Demand Impacts**
3. **Supply Response**
4. **Long Term Price Outlook**
5. **Questions**

# OUTLINE

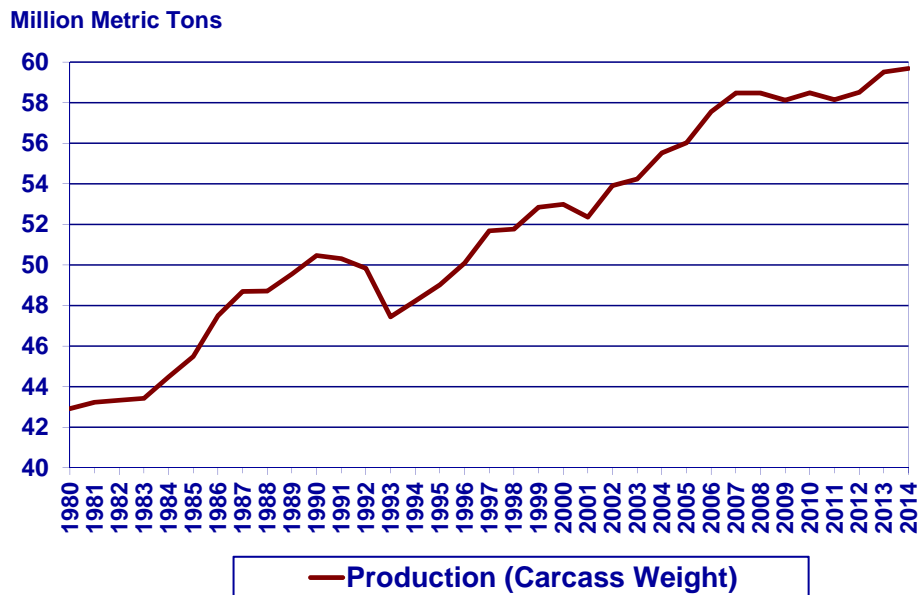
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## World Beef Production

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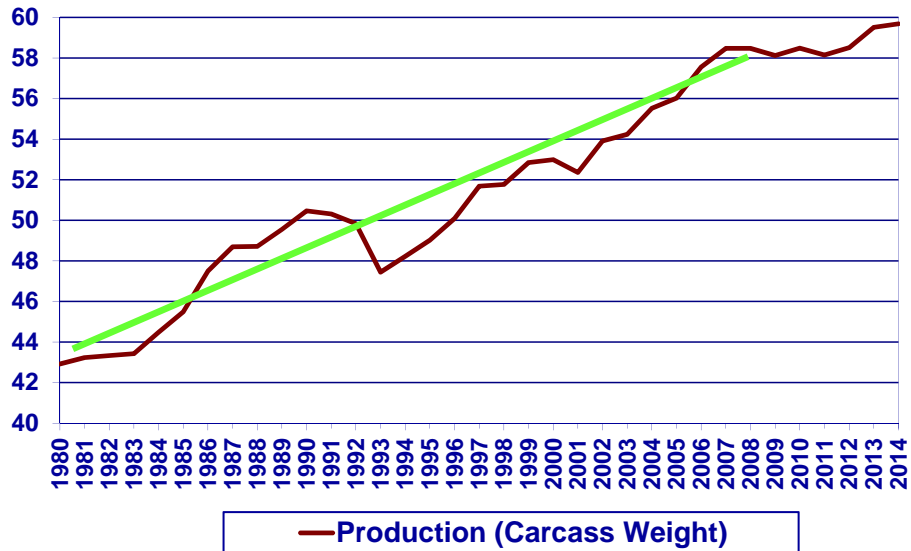


Source: Foreign Agricultural Service

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# World Beef Production

Million Metric Tons

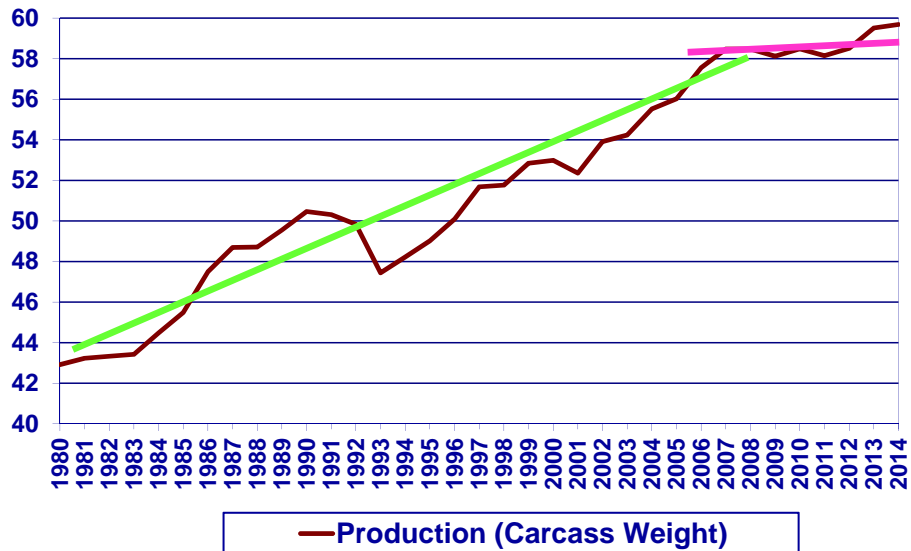


Source: Foreign Agricultural Service

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# World Beef Production

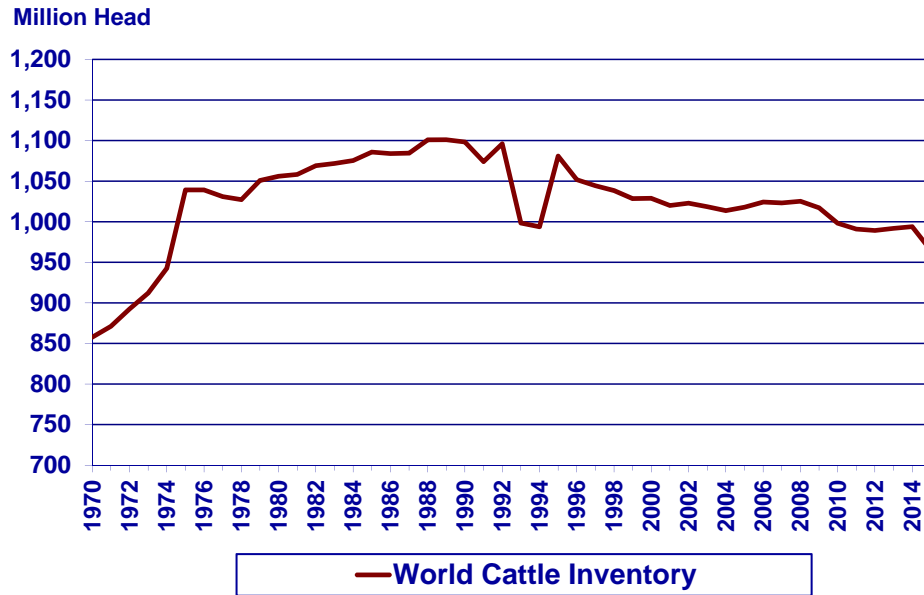
Million Metric Tons



Source: Foreign Agricultural Service

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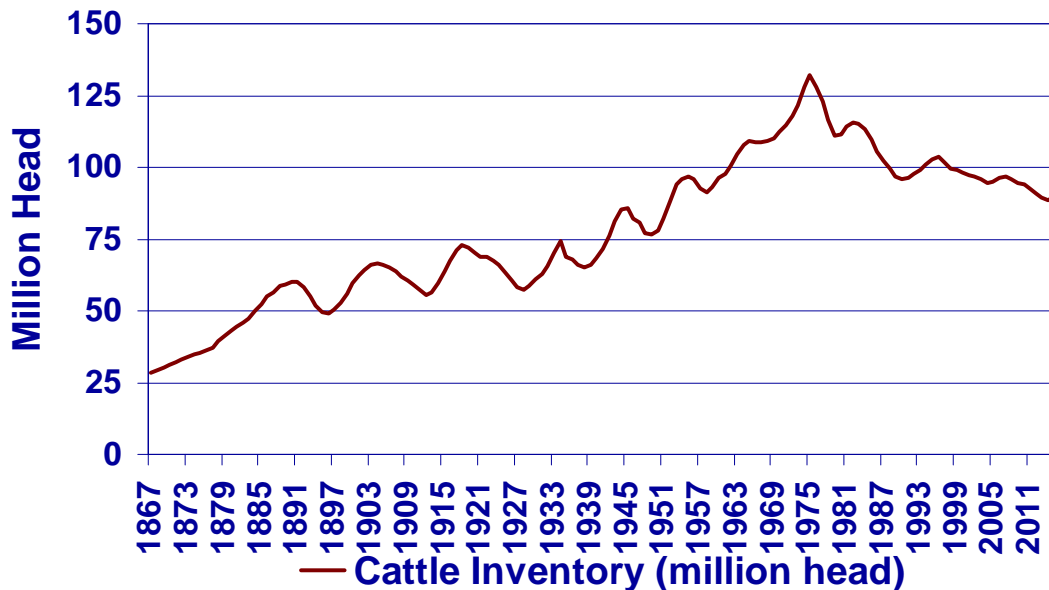
# World Cattle Inventories



Source: Foreign Agricultural Service

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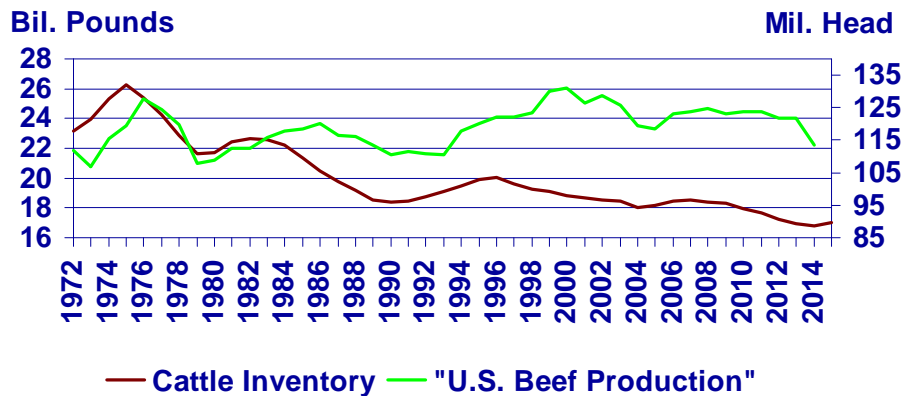
# U.S. Cattle Inventory (January 1)



Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center

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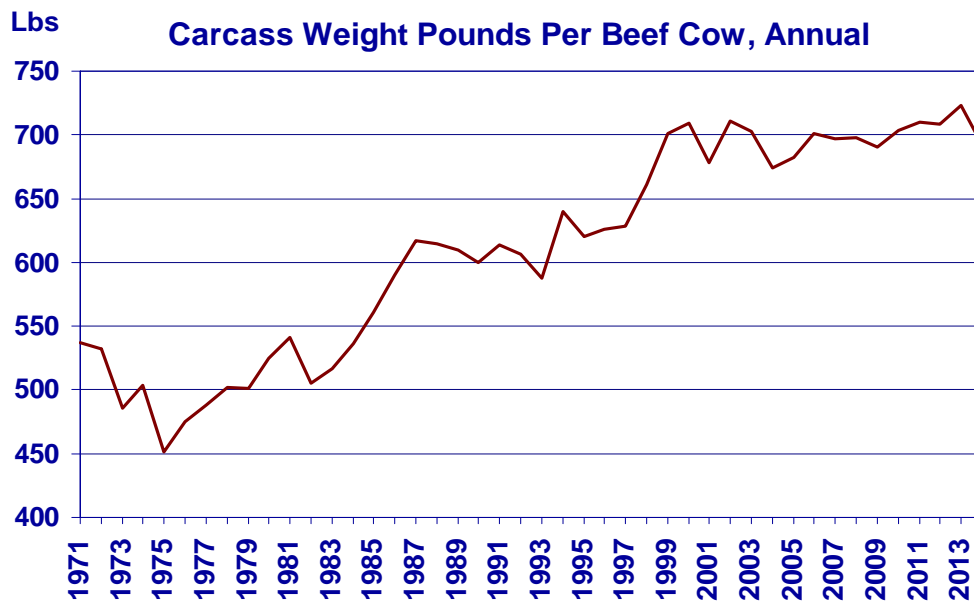
# “US Beef Production” vs. Cattle Inventory (January 1)



2015 January 1 Inventory equals 89.8 million head  
 (increase from 2014 inventory of 88.5 million head)  
 (2014 calf crop was the lowest since 1950, 33.90 million head)

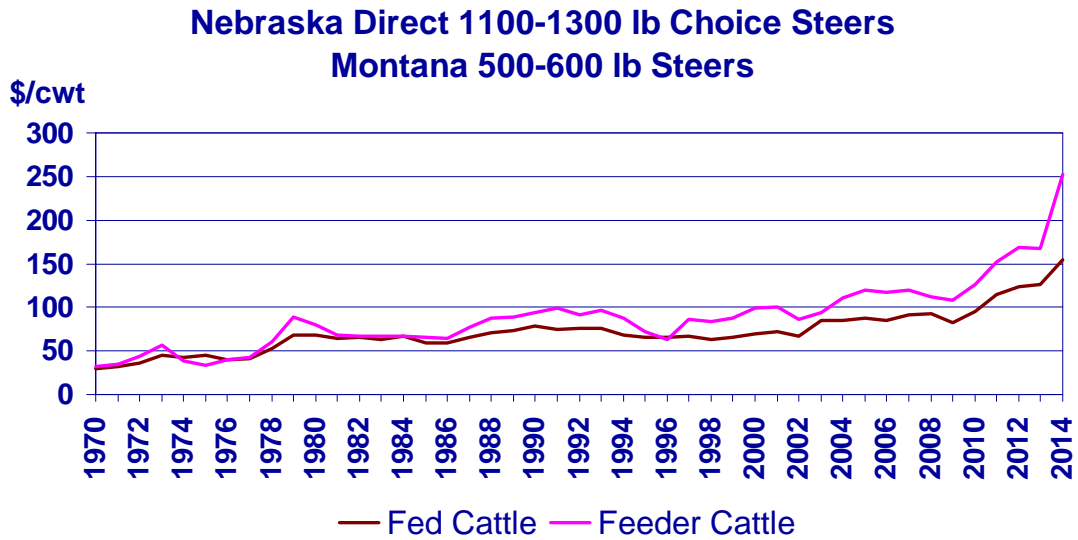
Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center

# Productivity of U.S. Beef Cow Breeding Herd



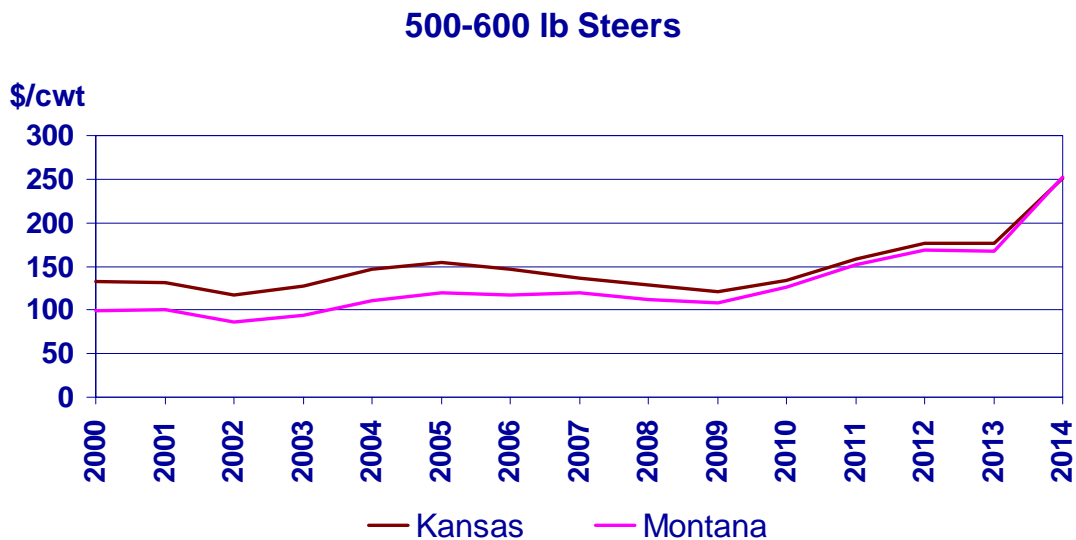
Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center

# Nominal Fed And Feeder Cattle Prices



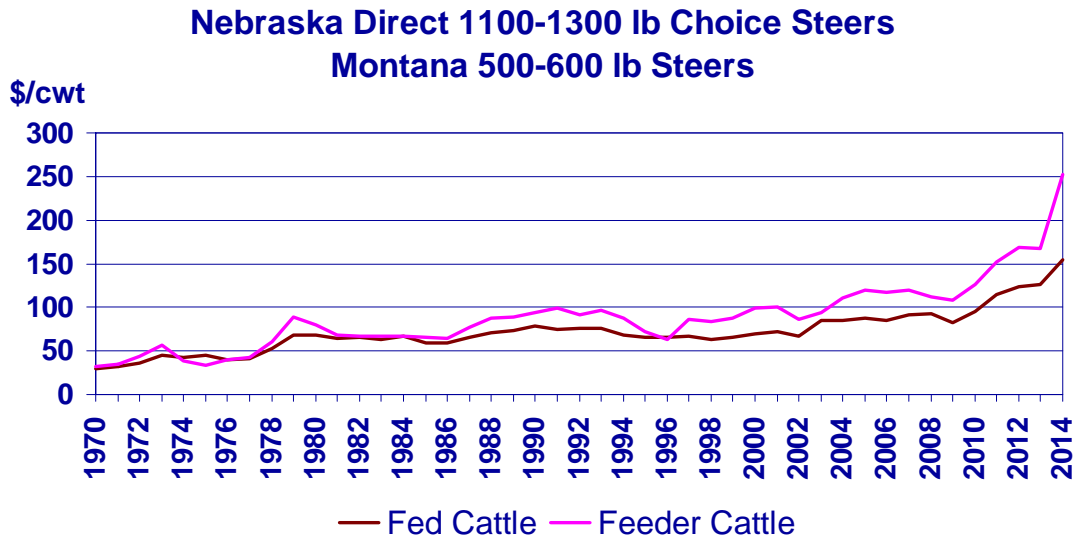
Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center

# Nominal Feeder Cattle Prices



Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center

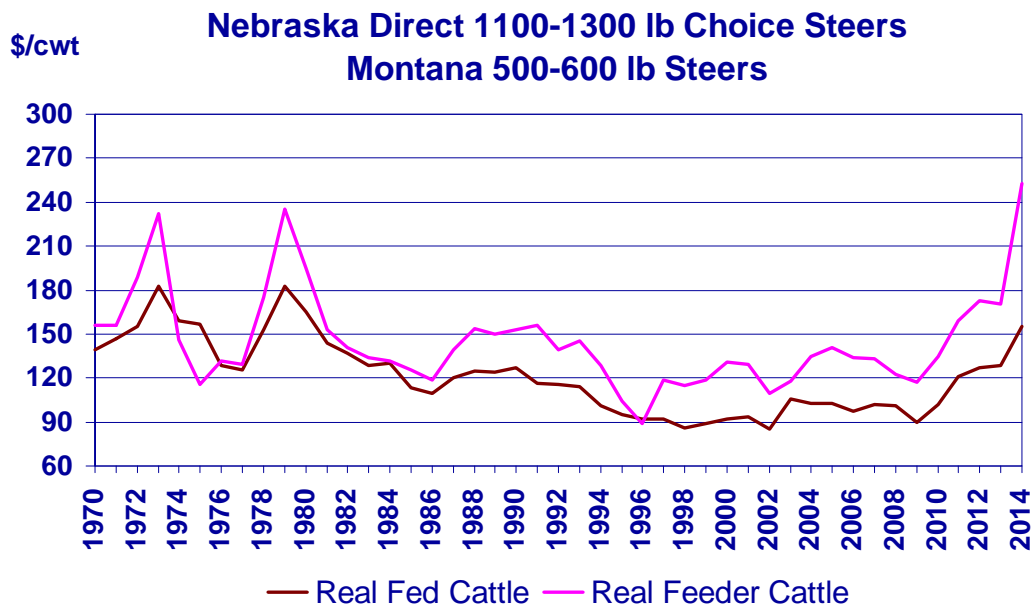
# Nominal Fed And Feeder Cattle Prices



Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center

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# Real Fed And Feeder Cattle Prices



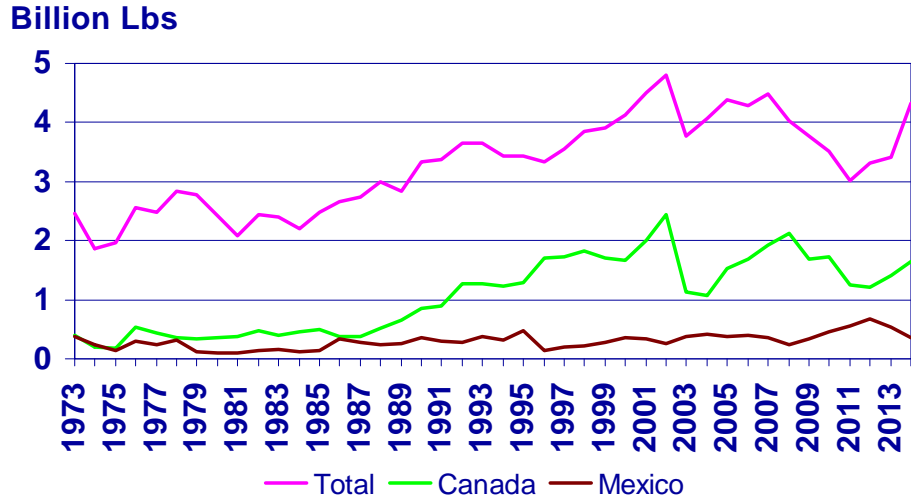
Source: Livestock Marketing Information Center (2014=100)

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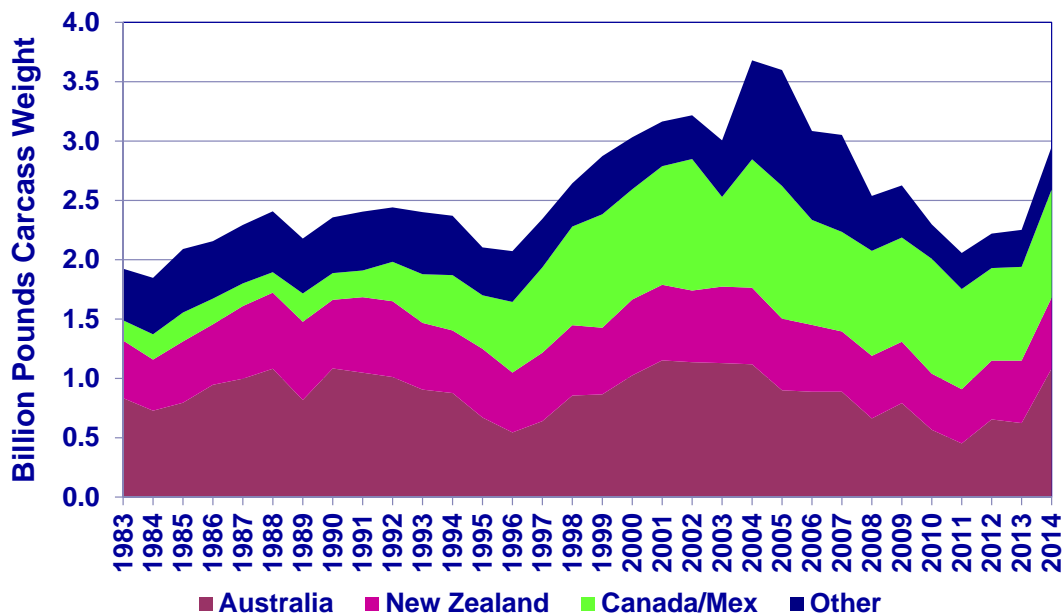
# U.S. Beef, Veal and Live Animal Imports

Annual, Billion Lbs, Carcass Weight Basis



Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center

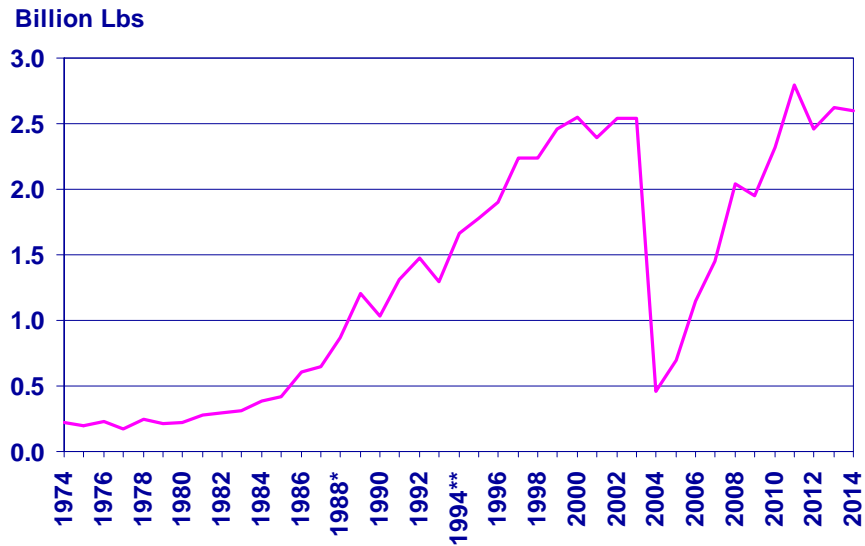
# U.S. Beef Imports By Source



Source: Livestock Marketing Information Center

# U.S. Beef, Veal and Live Animal Exports

Annual, Billion Lbs, Carcass Weight Basis

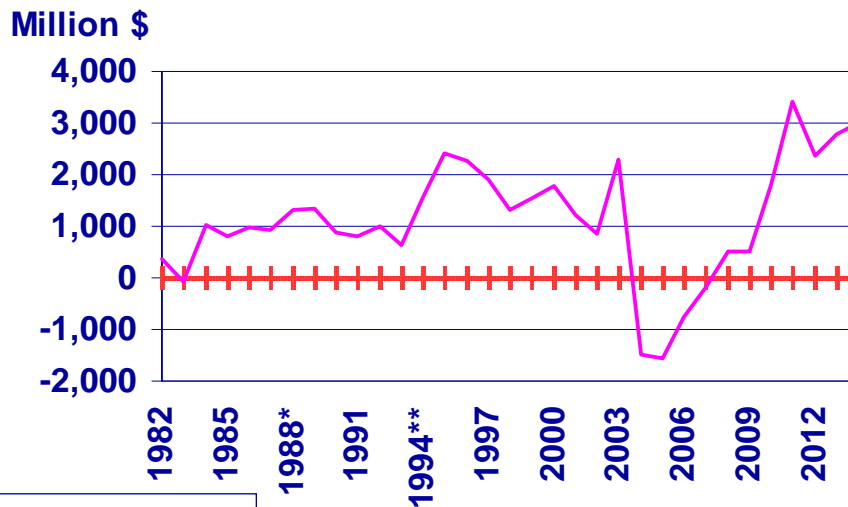


\*CUSTA      \*\*NAFTA

— Total

Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center

# Value of U.S. Beef, Veal and Live Animal, By-Product Net Imports/Exports



\*CUSTA      \*\*NAFTA

— Total

Source: Livestock Marketing Information Center & MSU Agricultural Marketing Policy Center

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## Demand Has Increased

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1. Domestic demand is a little stronger over the past several years
  - a. Of course, per capita consumption is lower (not a demand decline)
  - b. It has to be because we don't have as much around
  - c. Price allocates
2. Foreign demand is increasing
  - a. Increasing incomes
  - b. Increasing population
  - c. These are slow effects

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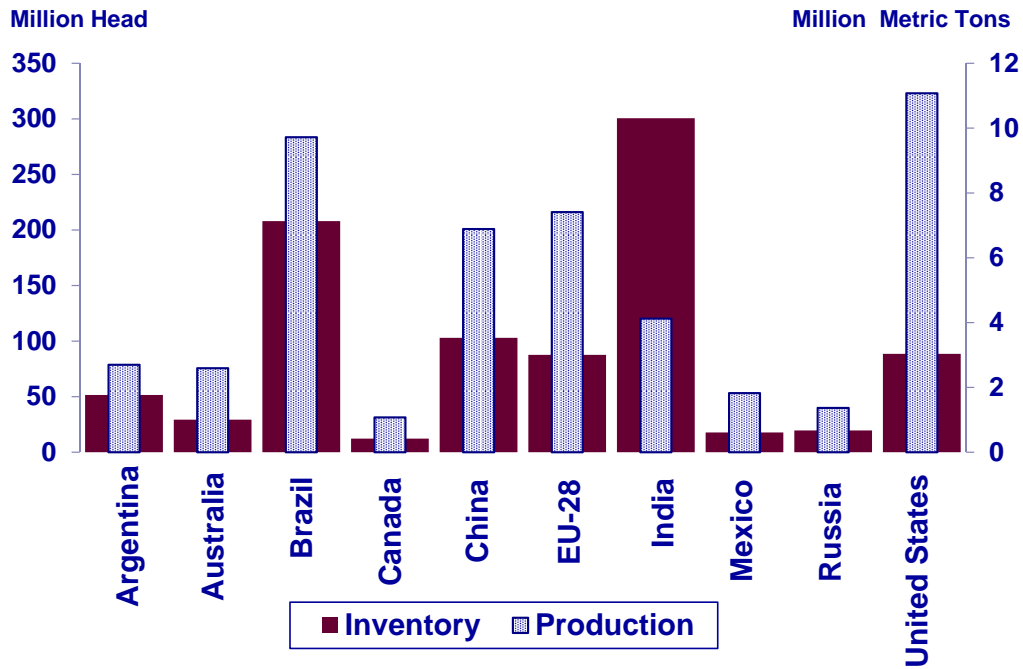
## Supply Has Declined

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1. **Cost factors**
  - a. **Drought**
  - b. **Feed costs**
  - c. **Grazing availability**
  - d. **Labor costs**
2. **Alternative production factors**
  - a. **Crop profitability**
  - b. **Crop insurance**
  - c. **Age**
3. **Structural factors**
  - a. **Full time versus part time**
  - b. **Larger cows**

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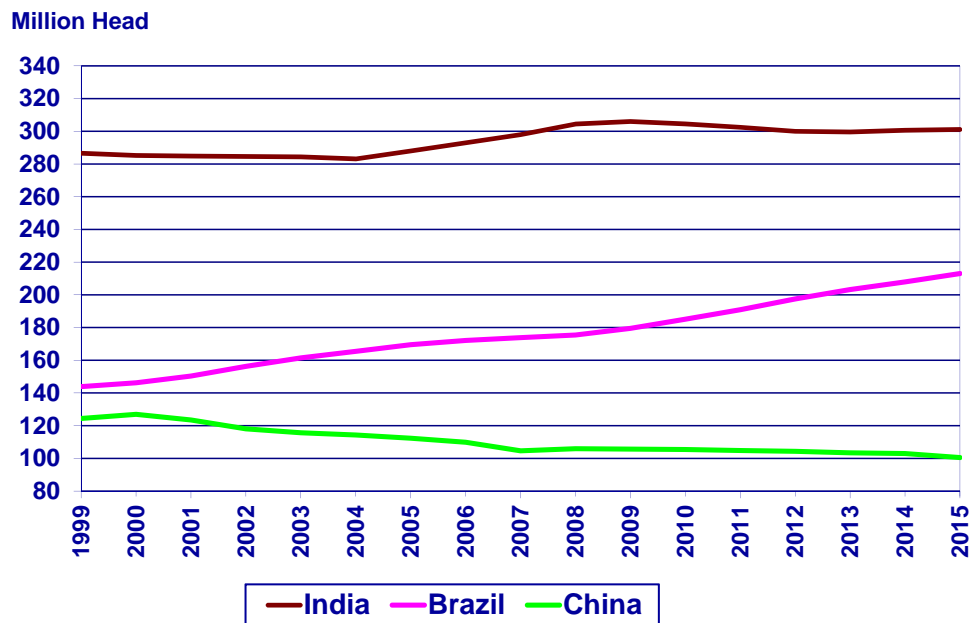
# Cattle Inventory Increases/Beef Production



Source: Foreign Agricultural Service

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# India, Brazil, China Cattle Inventories



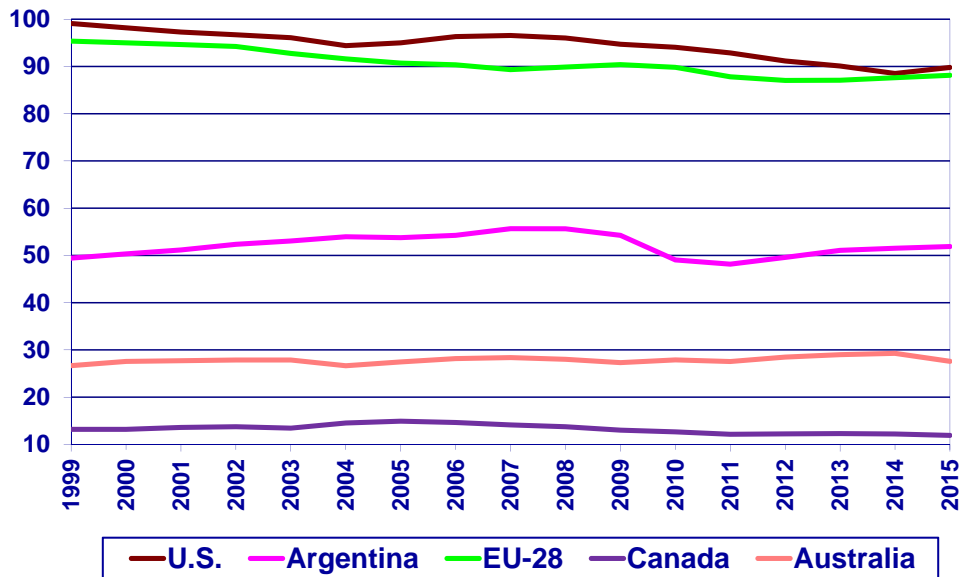
Source: Foreign Agricultural Service

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# U.S., Argentina, Australia, EU-28, Canada Inventories

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Million Head



Source: Foreign Agricultural Service

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## OUTLINE

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## American Philosopher

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## American Philosopher

**Yogi Berra**



# **It's Déjà Vu All Over Again!**

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## **American Philosopher**

**Yogi Berra**



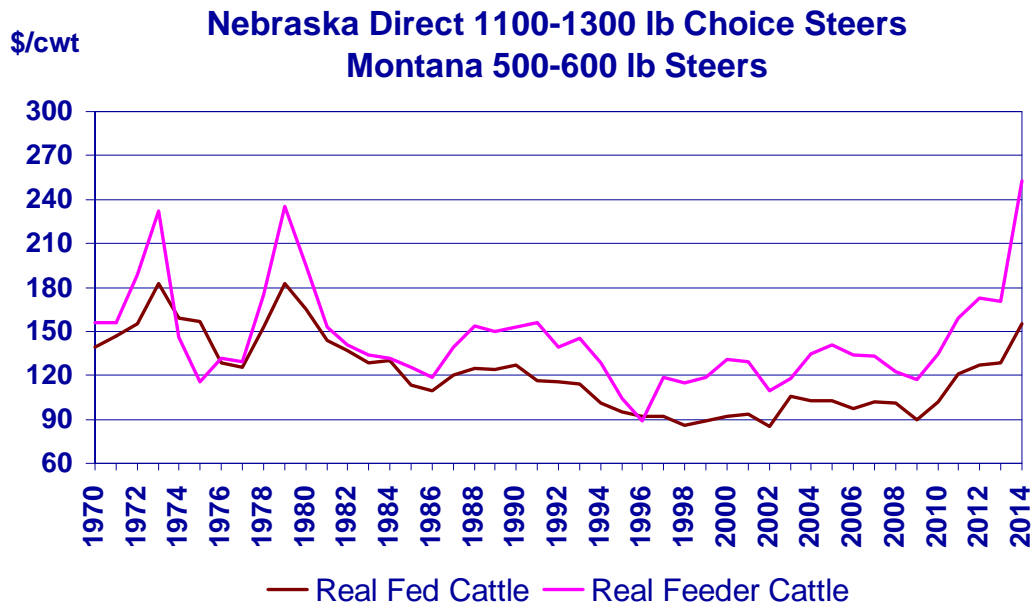
## **Déjà vu All Over Again?**

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- 1. If demand is not impacted by disease scares or lower incomes
  - a. Cattle prices will remain strong until beef supplies increase****
- 2. We have seen these types of prices on 3 occasions
  - a. 1951, 1973, 1979****



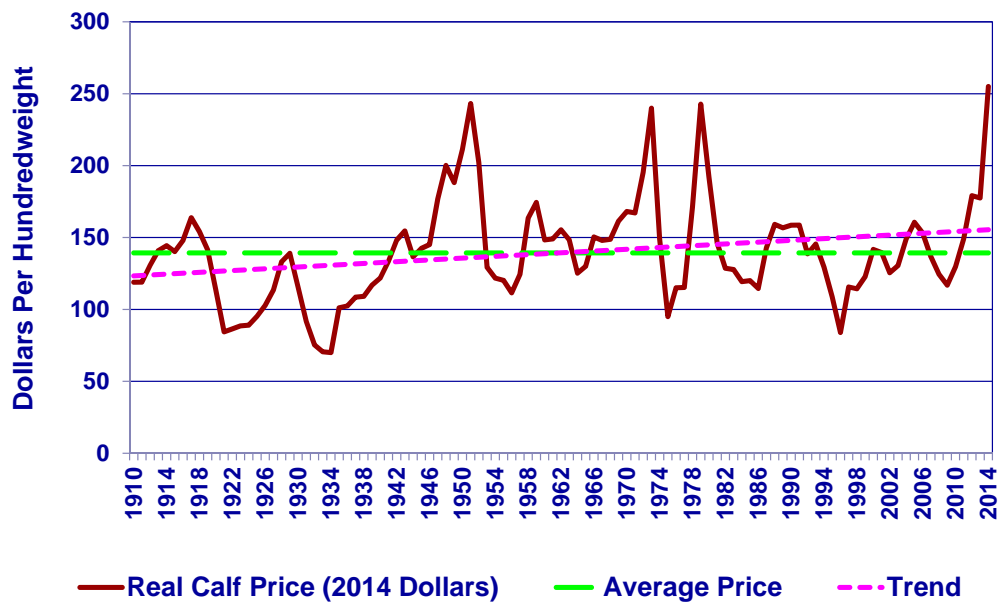
# Real Fed And Feeder Cattle Prices



Source: Livestock Marketing Information Center (2014=100)

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# Real Beef Calf Prices



Source: Livestock Marketing Information Center (2014=100)

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# Previous Price Spikes

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1. Real price spikes occurred in 1951, 1973, 1979
  - a. All were years of low cattle numbers
    - Followed herd liquidation
    - Start of herd expansion
  - b. But no more so than some other years in the cycle

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## 1951 (\$243/cwt)

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1. Initiation of the Korean War
  - a. Concerns of food security following terrible supply disruptions during World War II
  - b. Potential for a new World War
  - c. Countries purchased agricultural commodities as a hedge
2. By 1954, calf prices were below the long run average of \$139/cwt

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## **1973 (\$240/cwt)**

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- 1. 1972 Russian grain deal**
- 2. Reductions in Peruvian fish meal**
- 3. Declines in world production of other food and feed grains**
- 4. Beef sector was expanding**
  - a. Hog sector had contracted**
  - b. OPEC quadrupled oil prices**
- 5. High prices were short-lived as demand declined**
  - a. By 1975, prices were only \$95/cwt**
  - b. Rebuilding peaked in 1975 at a record level of cattle inventory**

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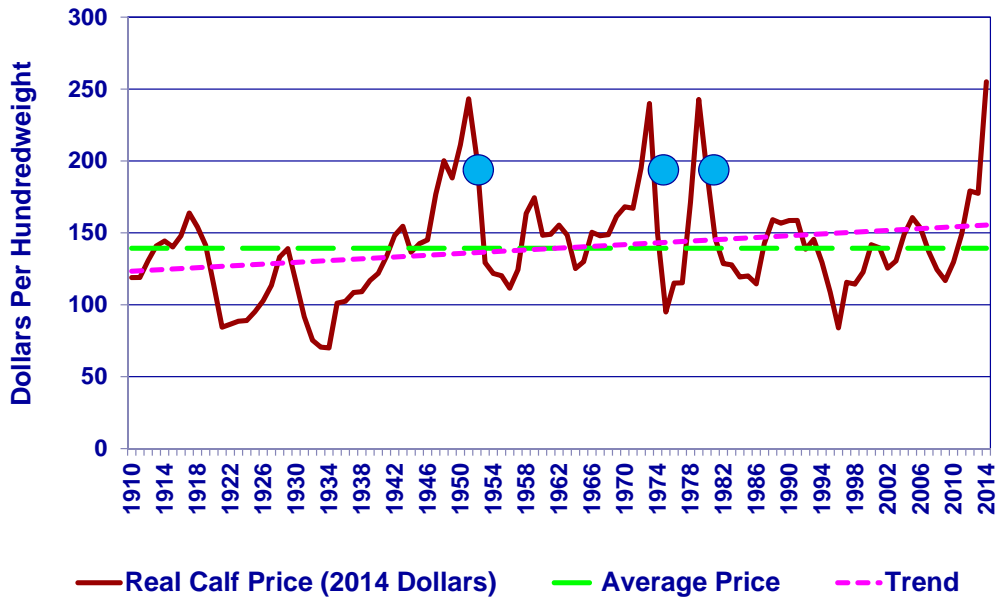
## **1979 (\$243/cwt)**

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- 1. 20 million head decline in cattle inventory (15%) between 1975 and 1978**
- 2. Herd rebuilding began**
- 3. 1979 OPEC oil shock increased costs and hurt demand**
- 4. Rebuilding lasted only two years before liquidation occurred**
- 5. By 1982, prices (\$132/cwt) were below long-run average**

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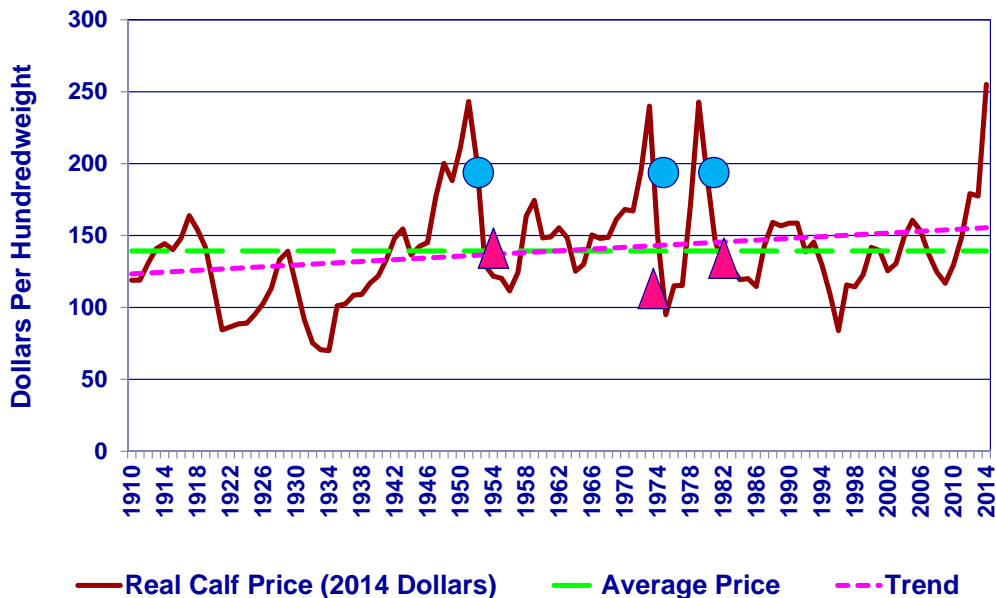
# Real Beef Calf Prices



Source: Livestock Marketing Information Center (2014=100)

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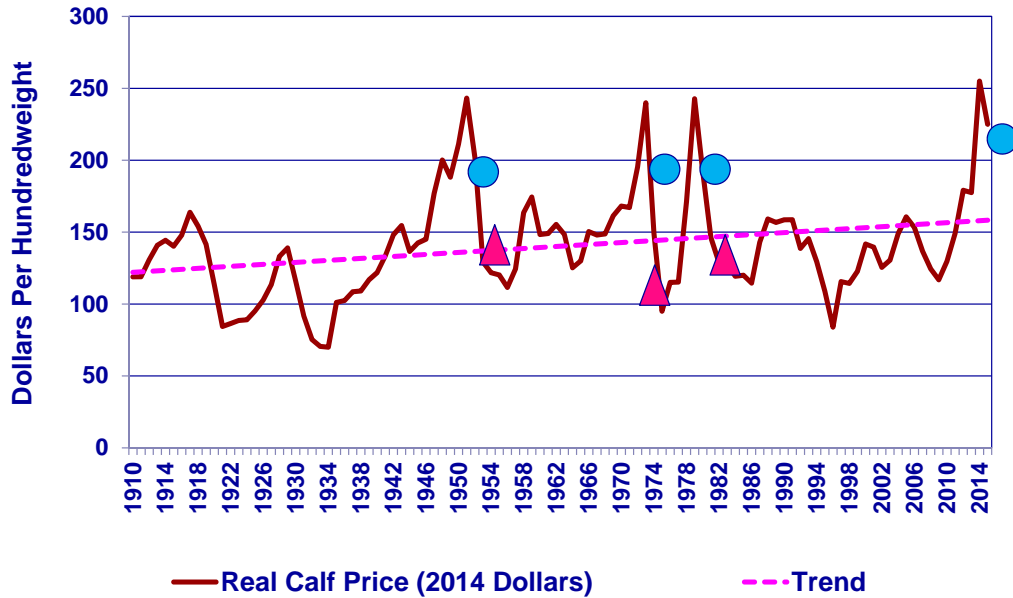
# Real Beef Calf Prices



Source: Livestock Marketing Information Center (2014=100)

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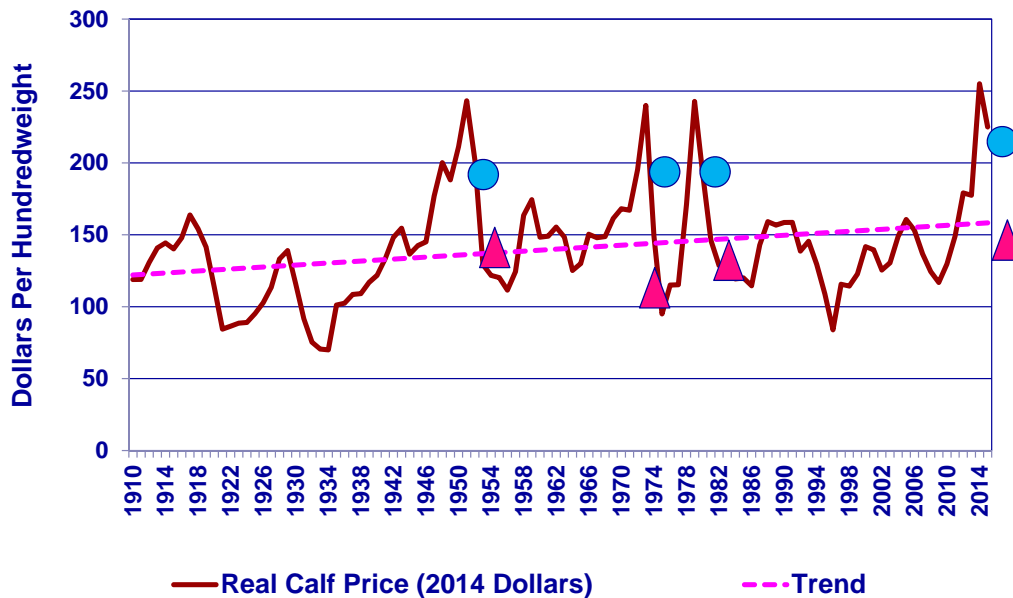
# Real Beef Calf Prices



Source: Livestock Marketing Information Center (2014=100)

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# Real Beef Calf Prices



Source: Livestock Marketing Information Center (2014=100)

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## 2014 (\$255/cwt)

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1. 8 million head decline in cattle inventory (10%) between 2007 and 2014
  - a. U.S. production is low
  - b. World production is flat
  - c. Demand is solid
2. Will the supply side shocks noted above reverse themselves?
3. Will substantial herd rebuilding occur in the U.S?
  - a. Elsewhere?

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## Questions?

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