

# **Economic Leakage in Virginia's Food Economy**

**Ken Meter**

**Crossroads  
Resource Center  
(Minneapolis)**

**Virginia Agriculture  
Summit**

**UVA/Charlottesville  
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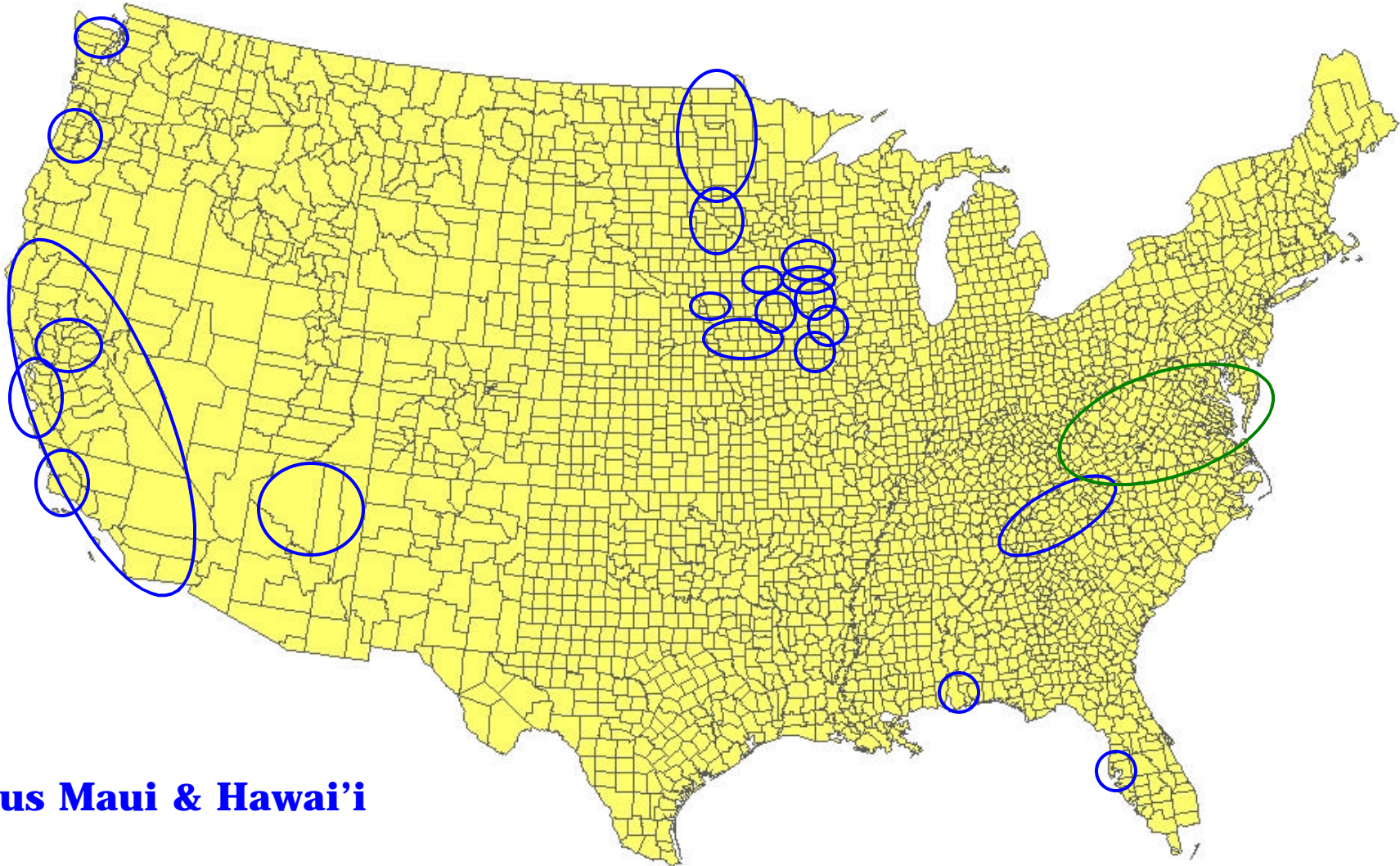


## **Financial partners:**

- **University of Minnesota**
- **Experiment in Rural Cooperation (SE Minnesota)**
- **Northwest & West Central Minnesota Regional Sustainable Development Partnerships**
- **Regional Food Systems Working Group (Value Chain Partnerships project) — Aldo Leopold Center for Sustainable Agriculture at Iowa State University**
- **Manitoba Food Charter (Winnipeg)**
- **FarmAid**
- **Northwest Area Foundation**
- **Northern Arizona University CES**
- **ALCES Foundation (Massachusetts)**
- **Prairie Rivers and Golden Hills RC&D districts (Iowa)**
- **Appalachian Sustainable Agriculture Program (NC)**
- **Community Alliance with Family Farms (California)**
- **Team Santa Rosa (Florida & Alabama)**
- **Cole Family Foundation & Sunnyfields Farm Institute (VA)**
- **Maui Land & Pine (Hawaii)**
- **University of Hawaii — Manoa**
- **Roots of Change Council (California)**
- **W. K. Kellogg Foundation (Michigan)**

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# “Finding Food in Farm Country” Studies



plus Maui & Hawai'i



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# **Regional Economic Analysis**

**Study food and farm economies  
from the perspective of  
communities**



**Local foods may be the  
strongest path toward  
community economic  
development**



# Vision for local food economies

**Build:**

**Health**

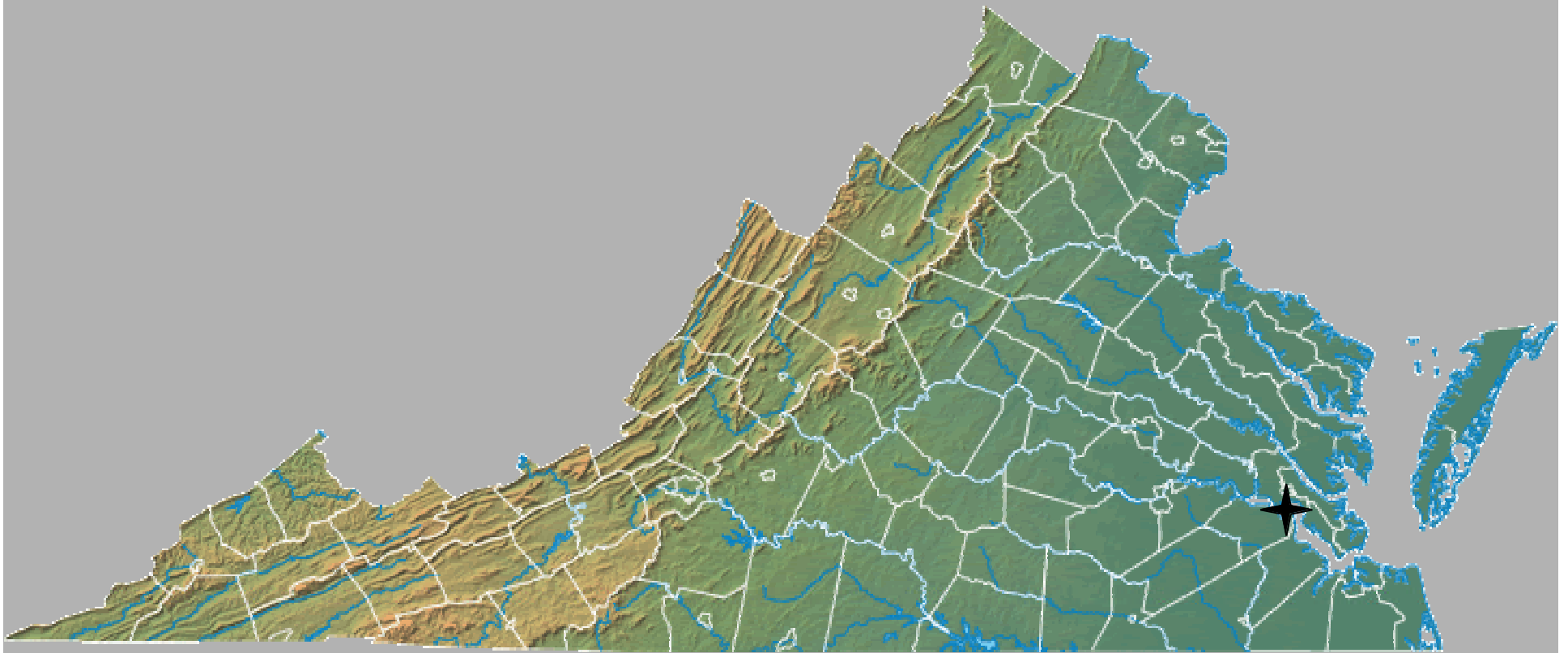
**Wealth**

**Connection**

**Capacity**



# 400 years of commodity agriculture



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Map: [geology.com](http://geology.com)





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**Photo: USDA**



**Virginia**

**47,000 farms**

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**Source: USDA Agriculture Census 2002**



## Virginia's rank in U.S.

- 4<sup>th</sup> in tobacco sales
- 5<sup>th</sup> in horse sales

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Source: USDA Agriculture Census 2002



## Virginia's rank in U.S.

- **4<sup>th</sup> in turkey production**
- **9<sup>th</sup> in broiler production**

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Source: USDA Agriculture Census 2002



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**Virginia**

**2,513 farms sell  
\$16.8 million of food  
directly to consumers**

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**Source: USDA Agriculture Census 2002**



**Virginia**



**This is 0.7% of farm sales**

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**Source: USDA Agriculture Census 2002**



**Virginia**

Osage Farms  
**JUST PICKED . . .**  
**LOCAL PRODUCE**  
OPEN 7 DAYS - 8am-6pm in Season

**Direct farm sales  
rose 52%  
1997 - 2002**

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Source: USDA Agriculture Census 2002



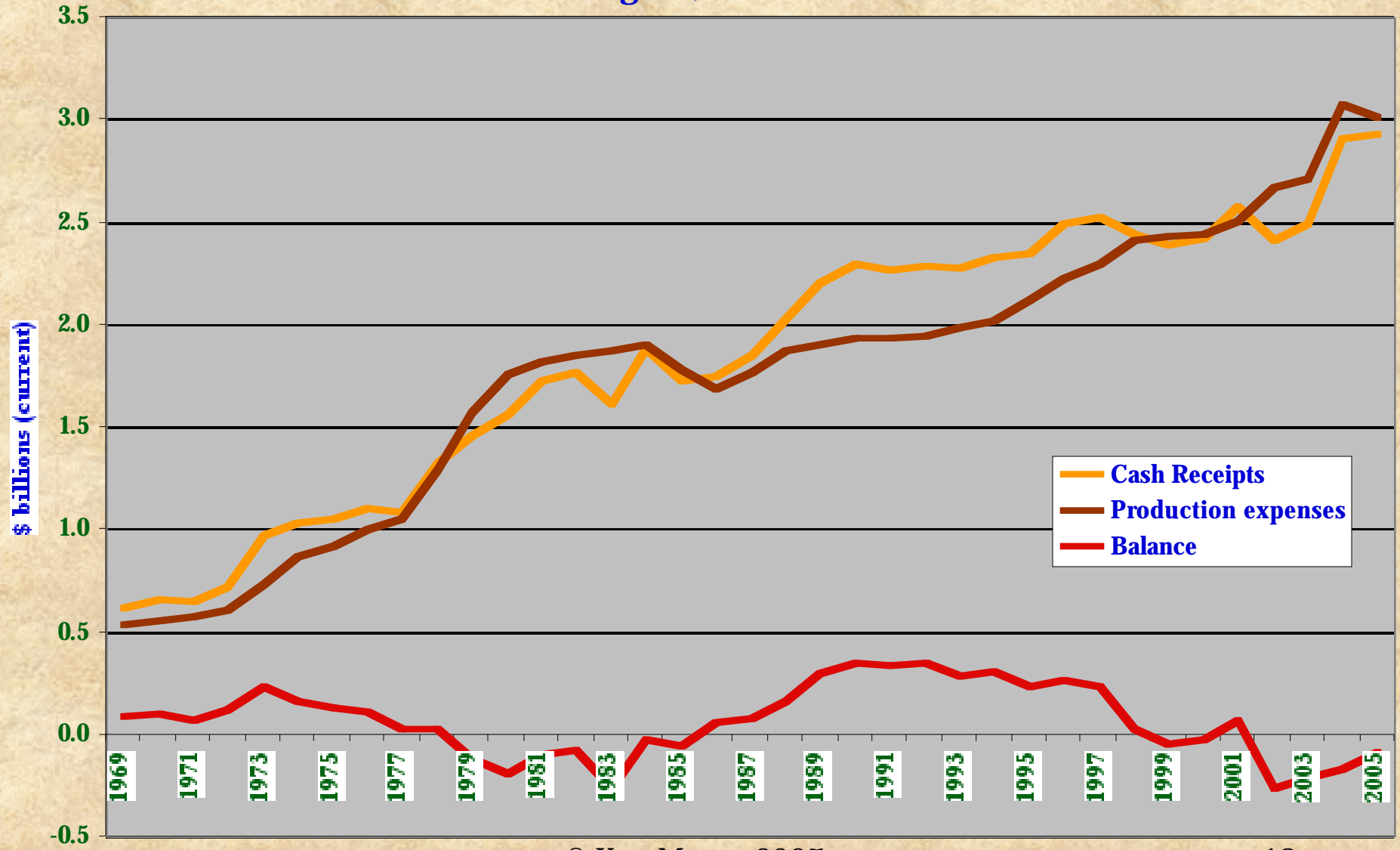


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## Farm Production Balance in Virginia, 1969-2005



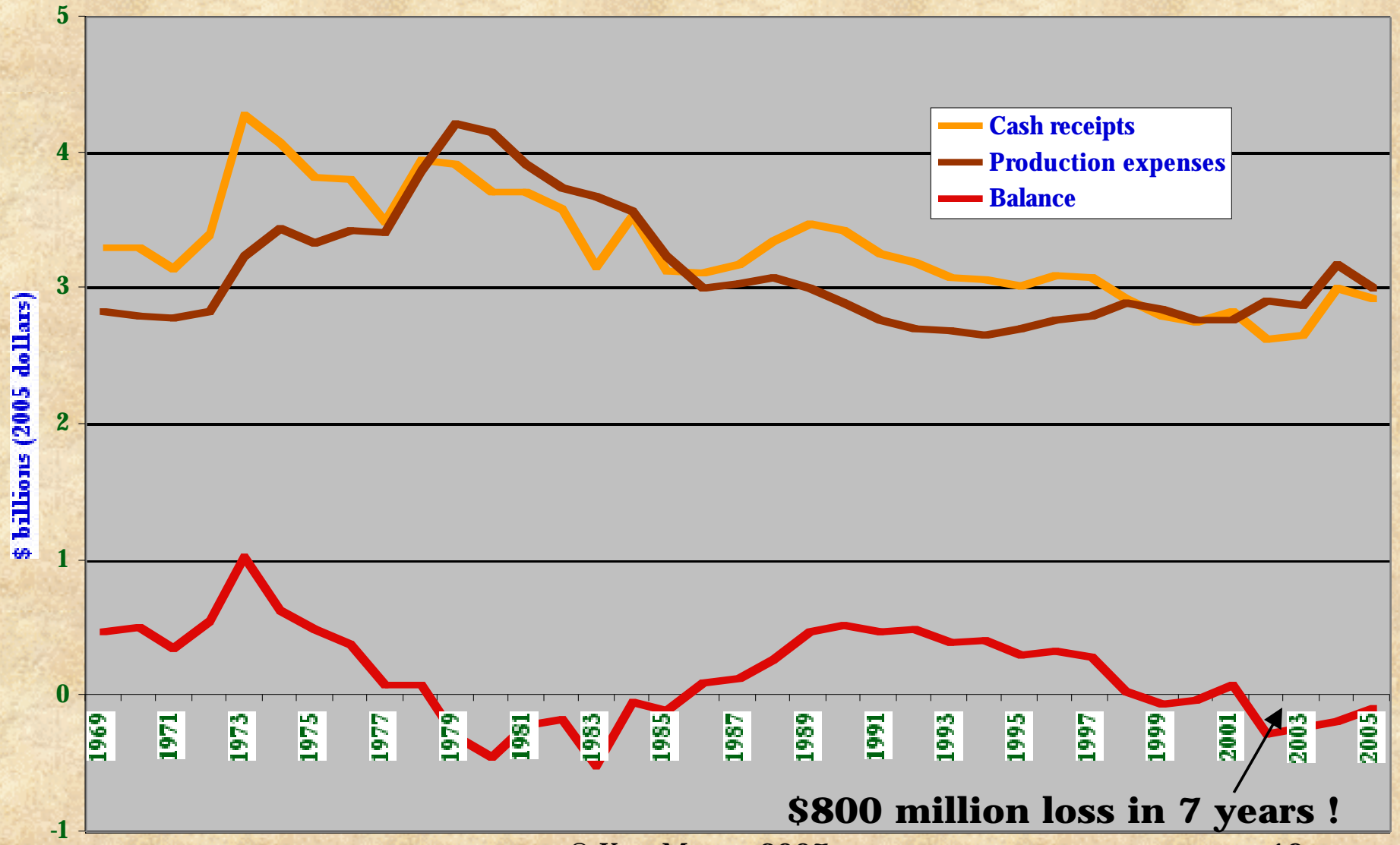
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Source: Bureau of Economic Analysis



## Farm Production Balance in Virginia, 1969-2005



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Source: Bureau of Economic Analysis



# Virginia's Food & Farm Economy

- **Virginia farmers produce \$2.8 billion of commodities per year**

**Yet...**

- **Spend \$2.9 billion to raise them**

**Lose \$110 million in production costs**

**Averages for (1999-2005)**

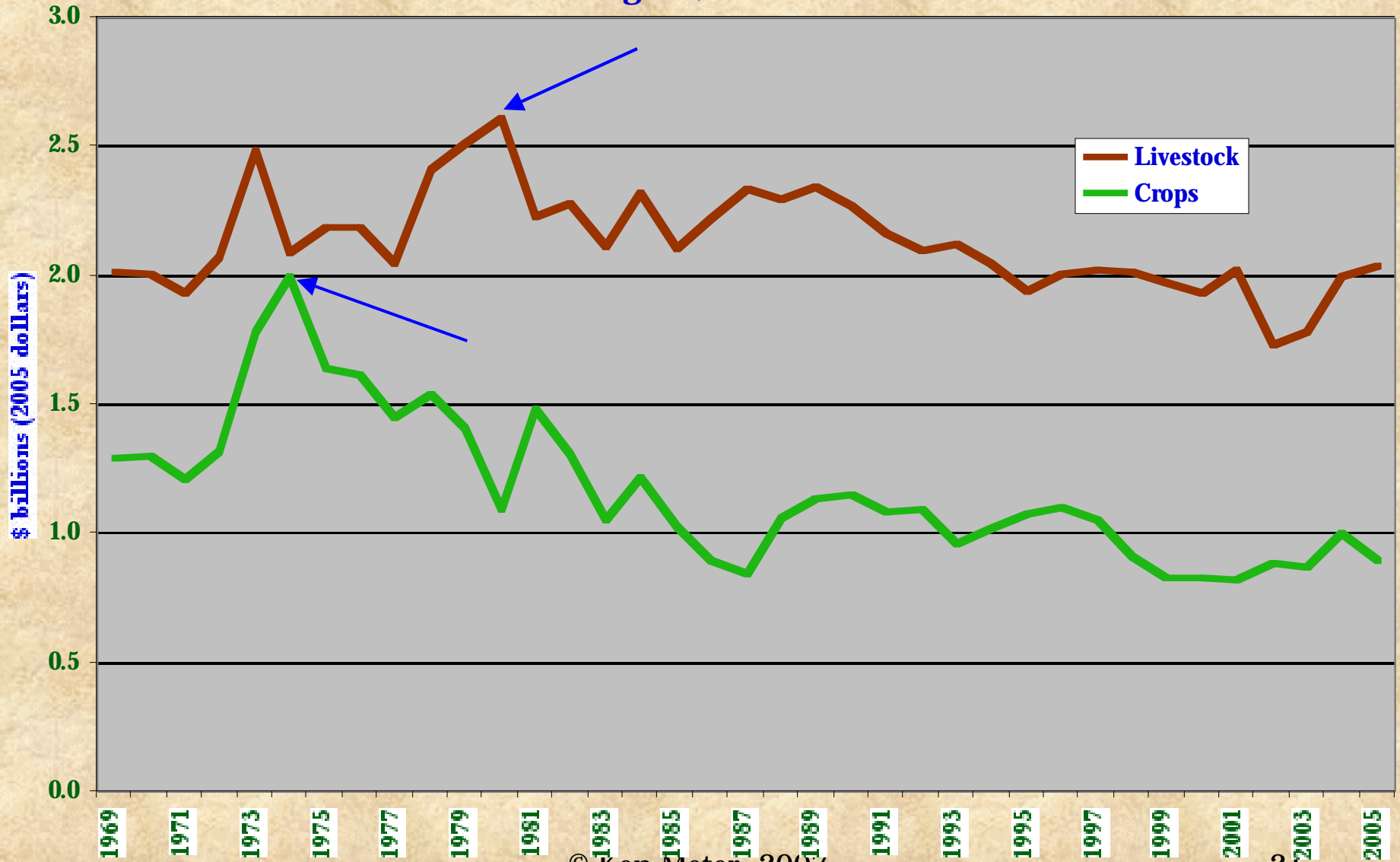
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**Source: Bureau of Economic Analysis**



### Crop and livestock sales in Virginia, 1969-2005



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**Virginia**

**54% of state  
farms reported  
net losses in 2002**

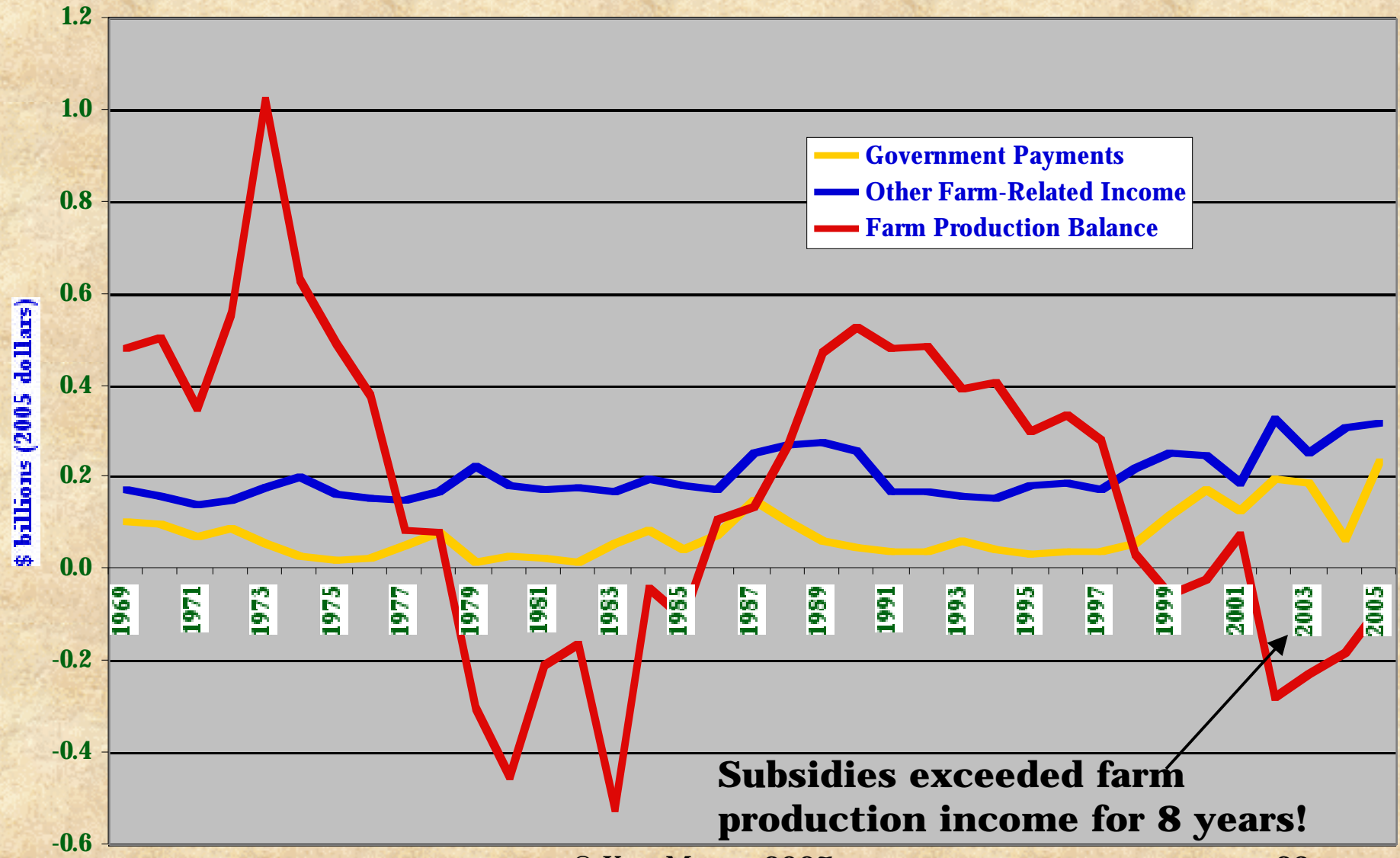
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**Source: Ag Census**



## Virginia farm income by type, 1969-2005

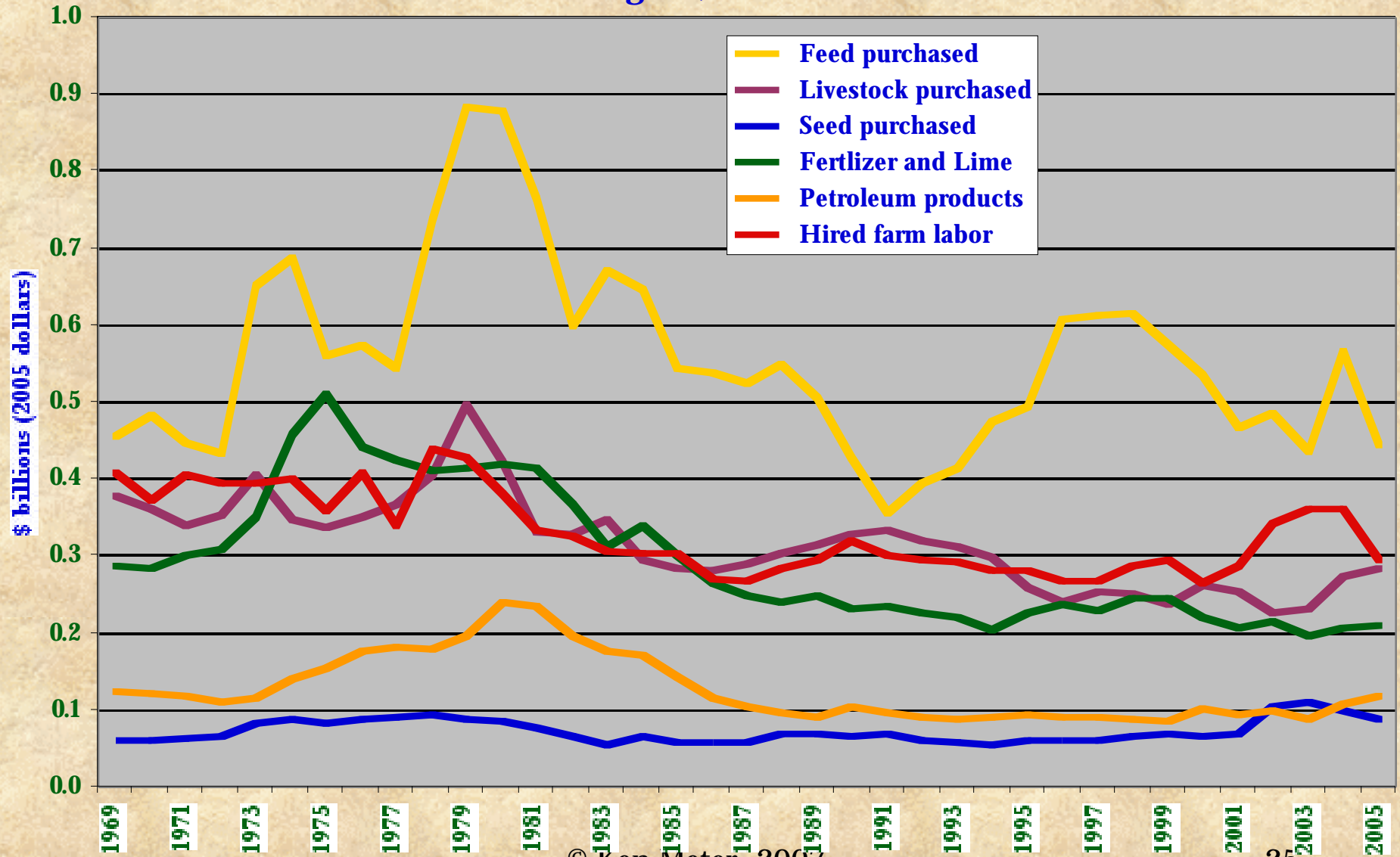








## Farm production expenses in Virginia, 1969-2005



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**\$1 billion of these farm  
inputs are purchased from  
outside the state each year**

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**Source: Ken Meter using data from Ag Census**



**Also a region of food consumers...**



**As Virginia farmers struggle...**

**Consumers spend \$14.8 billion  
buying food each year**



0 50 KM 50 Miles

**To eat at home: \$ 8.1 billion**

**To eat out: \$ 6.7 billion**

- **\$8.9 billion from outside state**

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Source: Census & BLS; map by geology.com



## Energy is a major cost

- **The average food item in the U.S. travels 1,500 miles from farmer to consumer**

© Ken Meter, 2009 **Source: Aldo Leopold Center**



# Energy in the Food System

**U.S. spends about \$139 billion each year...**

**...paying for the energy used to bring food to our tables**

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**Source: BLS; Department of Energy (estimates based on 1976 studies)**



## Finding Food in Virginia

### Markets for food eaten at home

	billions
Meats, poultry, fish, and eggs	\$ 2.0
Fruits & vegetables	1.3
Cereals and bakery products	1.1
Dairy products	0.9
“Other,” incl. sweets, fats, & oils	2.9



# **Finding Food in Farm Country**

**All told, Virginia...**

- **Loses \$110 million raising commodities**
- **Spends \$1 billion for outside inputs**
- **Loses \$ 8.9 billion buying food**

**Potential wealth lost each year**





# Finding Food in Farm Country

**Total loss is:**

**\$10 billion each year!**

**Three times the value of all  
commodities raised**



**The good news is...**

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## **Finding Food in Farm Country**

**If Virginia consumers bought 15% of their food directly from local farms...**

**...farms would earn \$2.2 billion of new income**



# Finding Food in Farm Country

**That is 78% of the market Virginia farms now serve — at a loss**



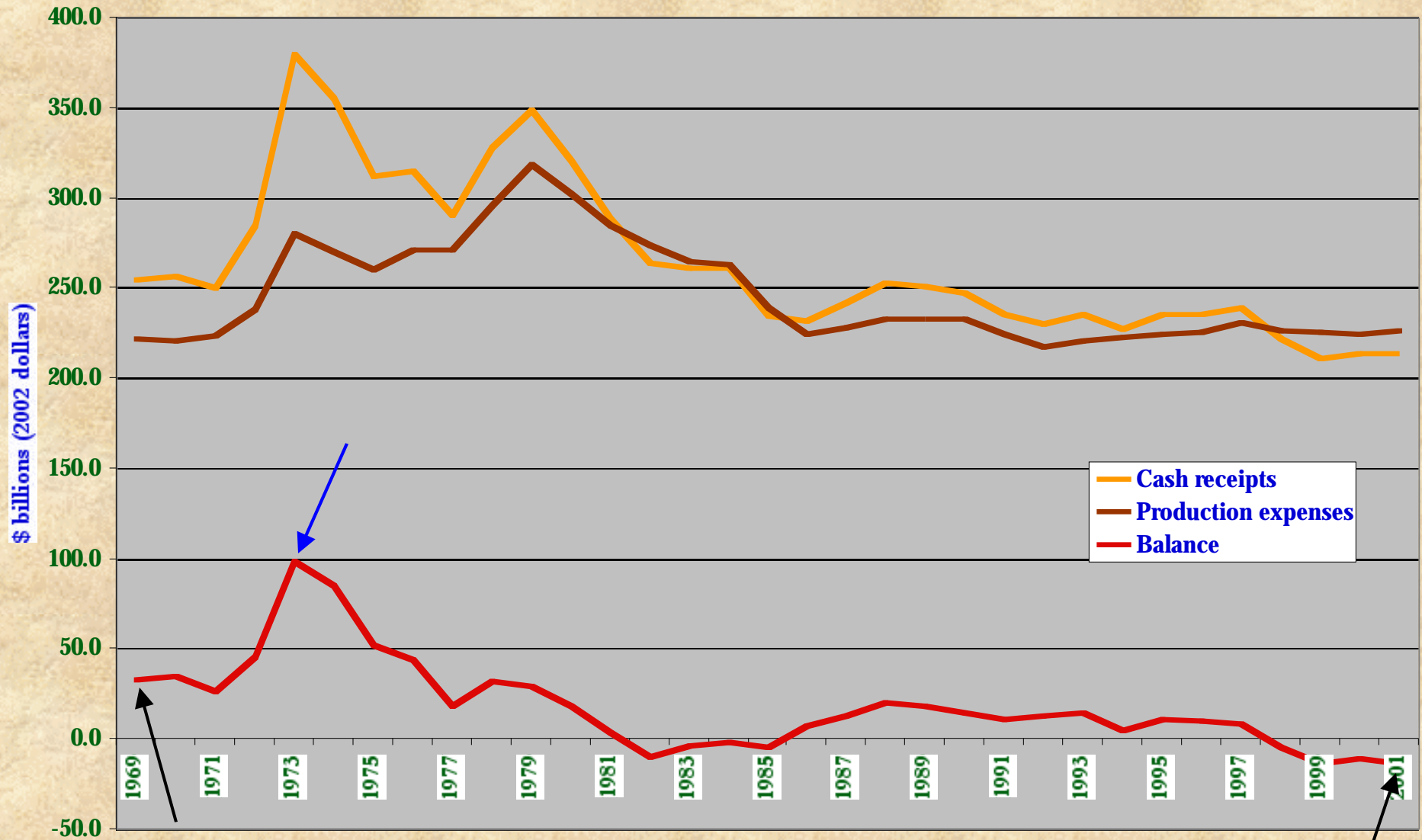
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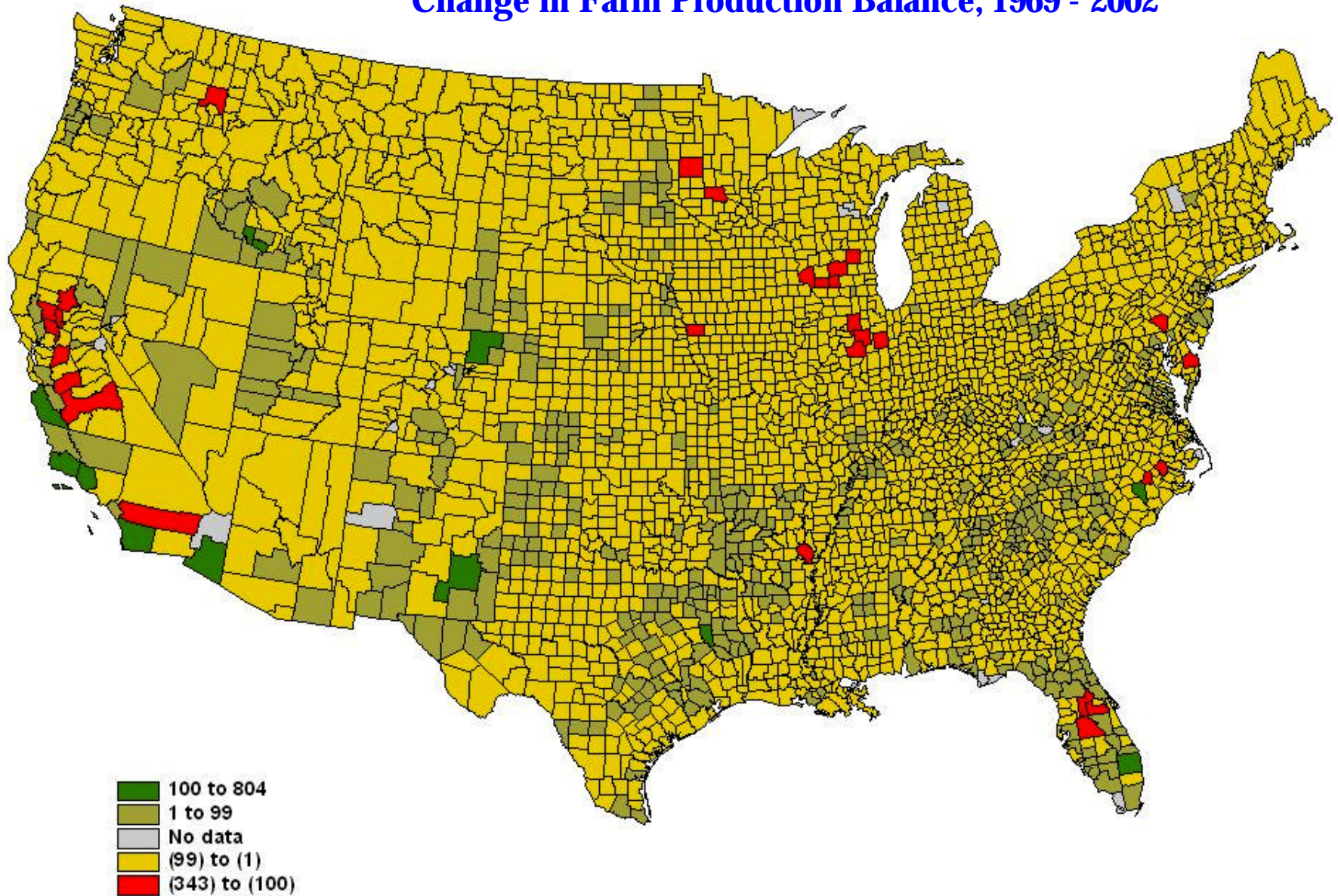
**Virginia is not alone...**



### U.S. Farm Cash Receipts and Production Expenses, 1969-2001

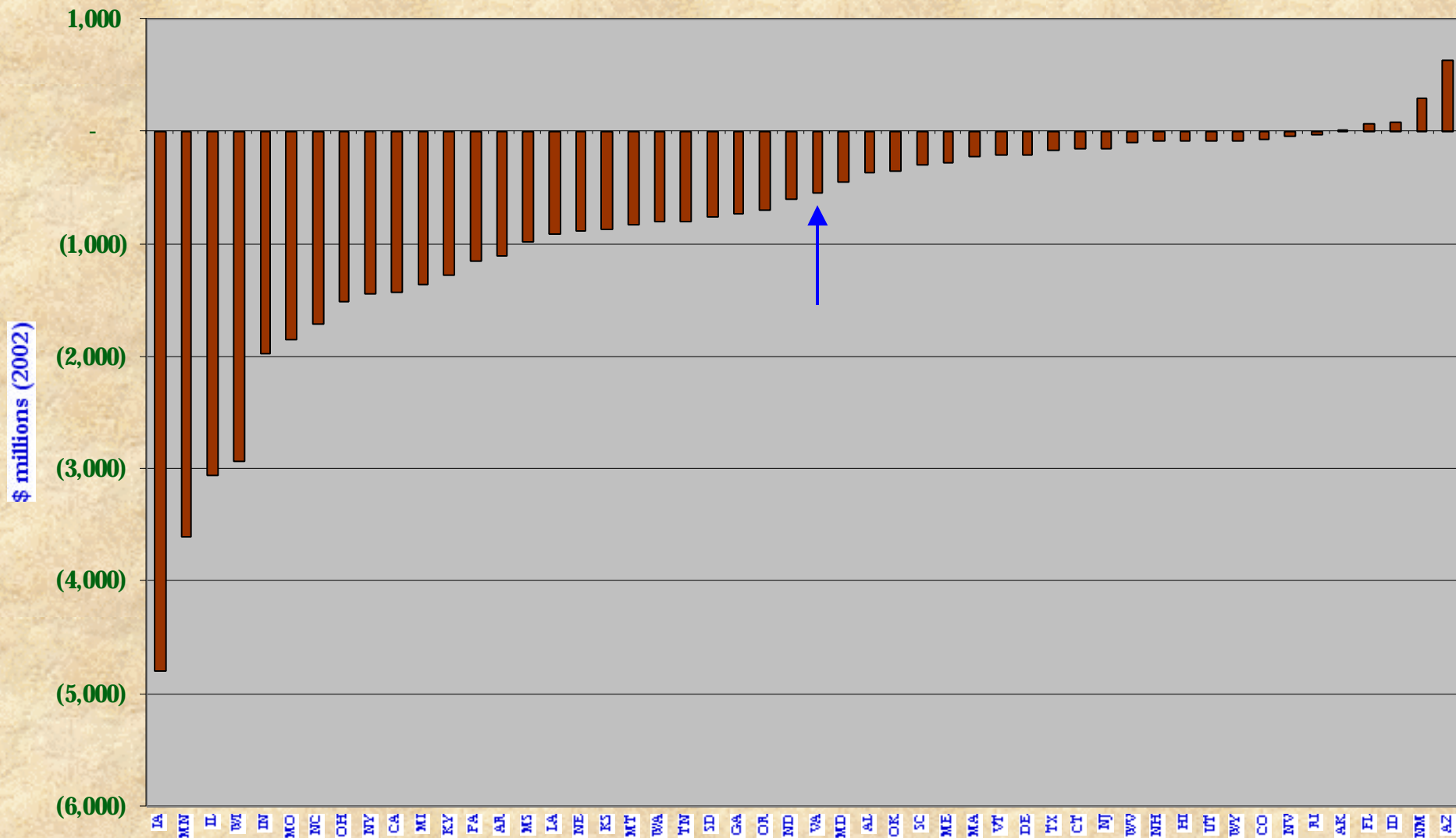


## Change in Farm Production Balance, 1969 - 2002



Map by Ken Meter, 2005

### Change in Farm Production Balance by State, 1969-2002



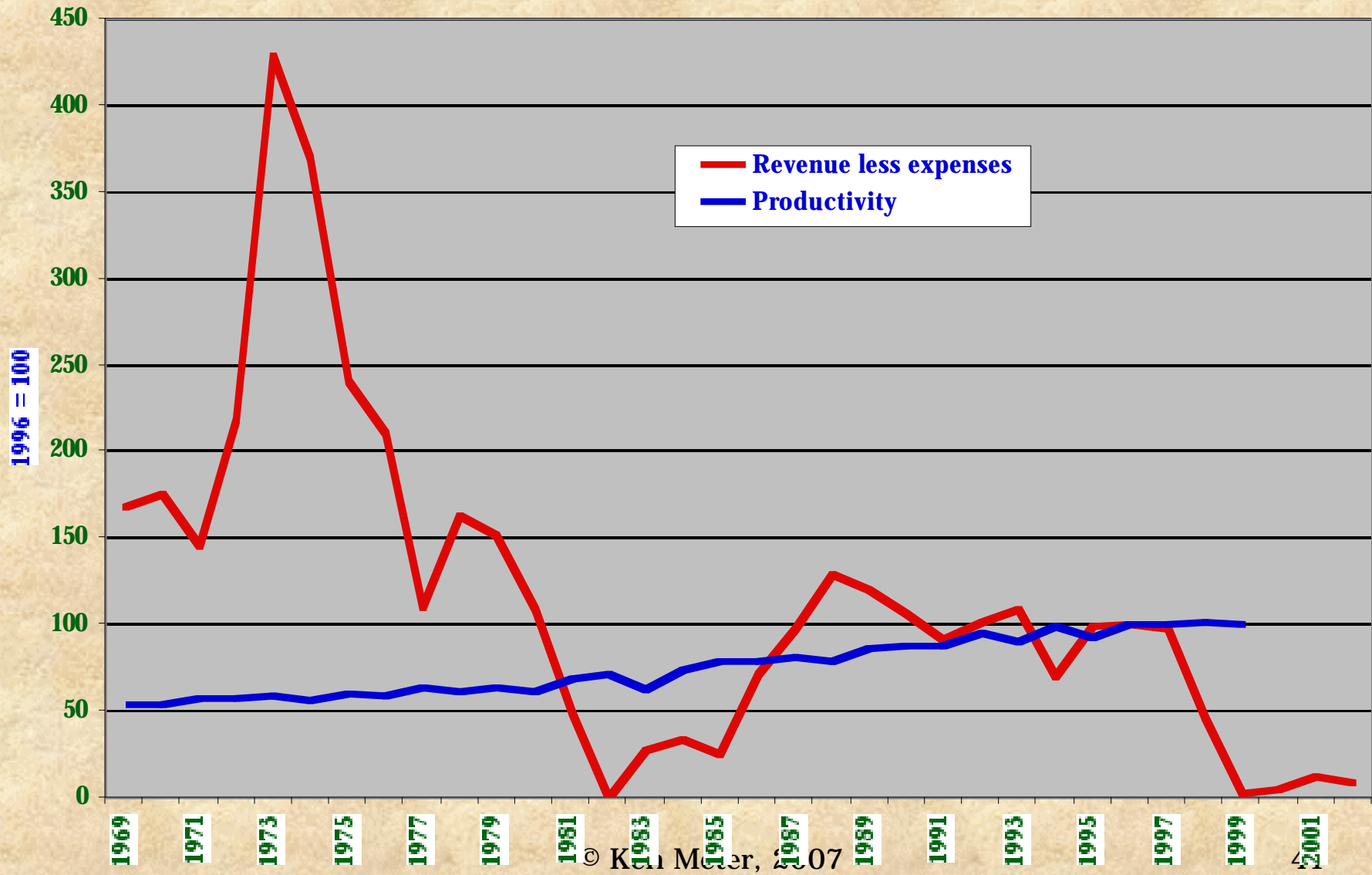
© Ken Meter, 2007

Source: BEA

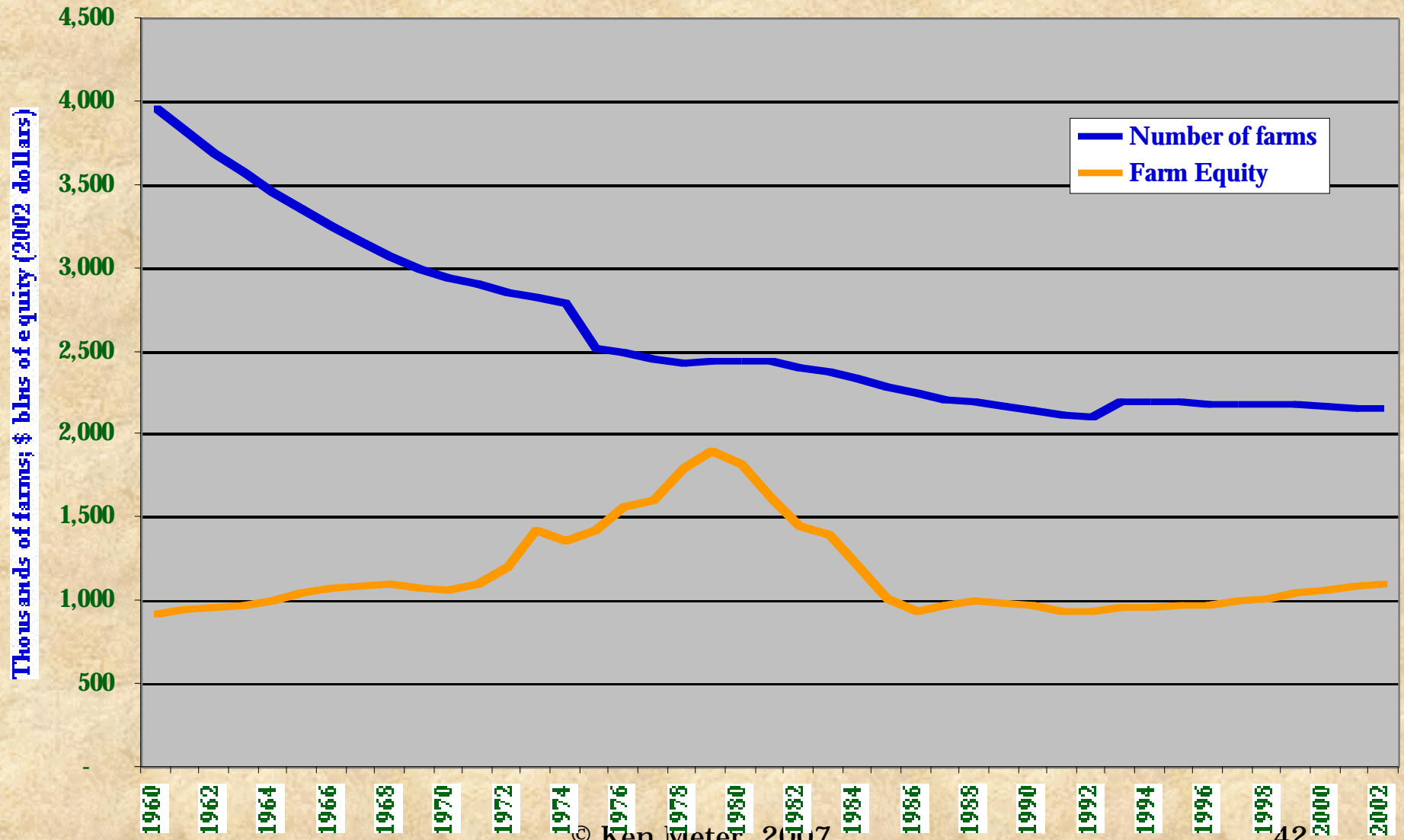




## U.S. farm income and productivity, 1969-2002



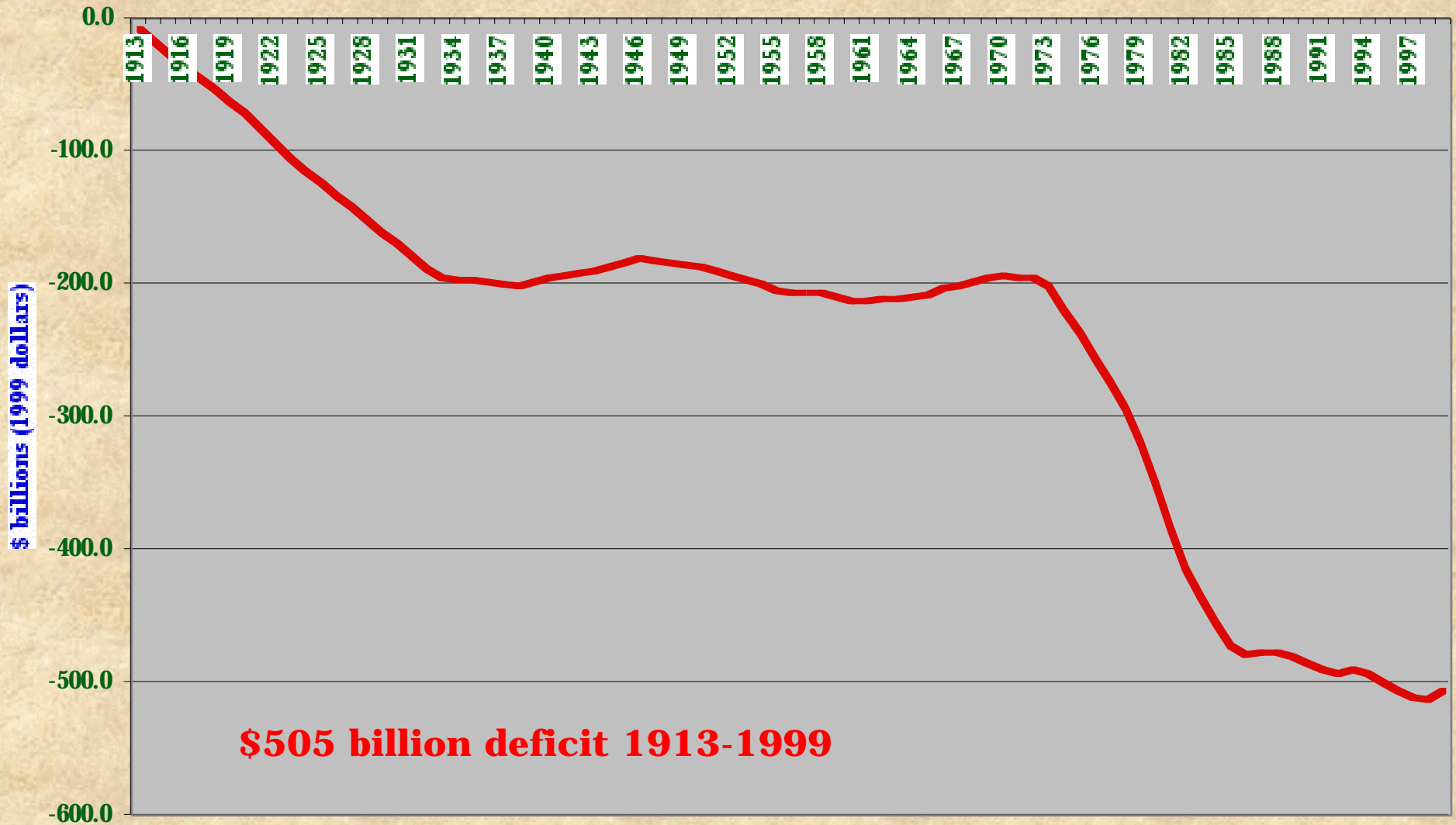
## U.S. farms and farm equity, 1960-2002



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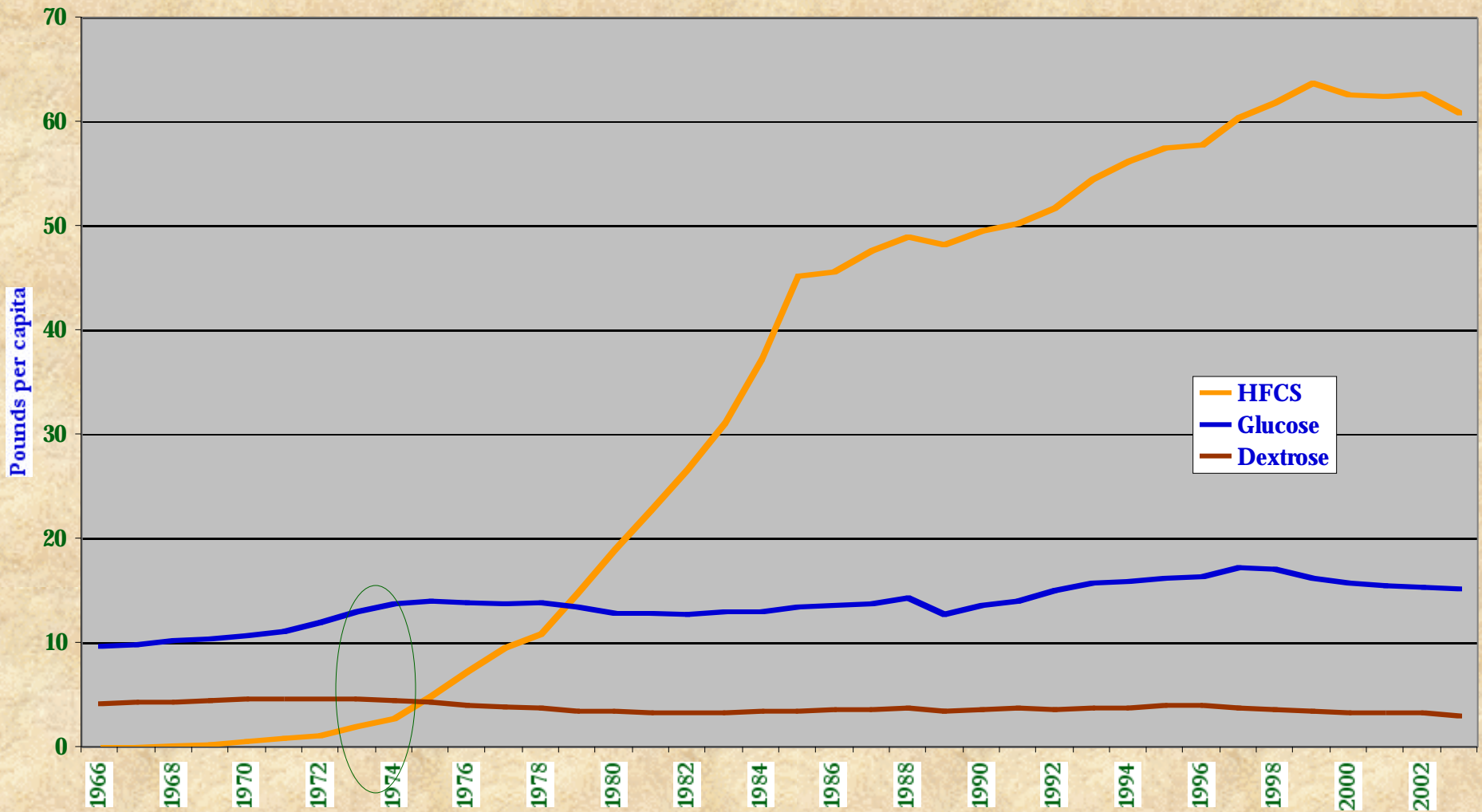


**Cumulative net cash flow, 1913-1999:  
farmer interest payments (out)  
less federal subsidies (in)**





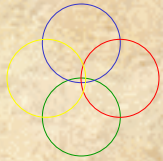
### Corn sweeteners consumed in U.S., 1966 - 2002



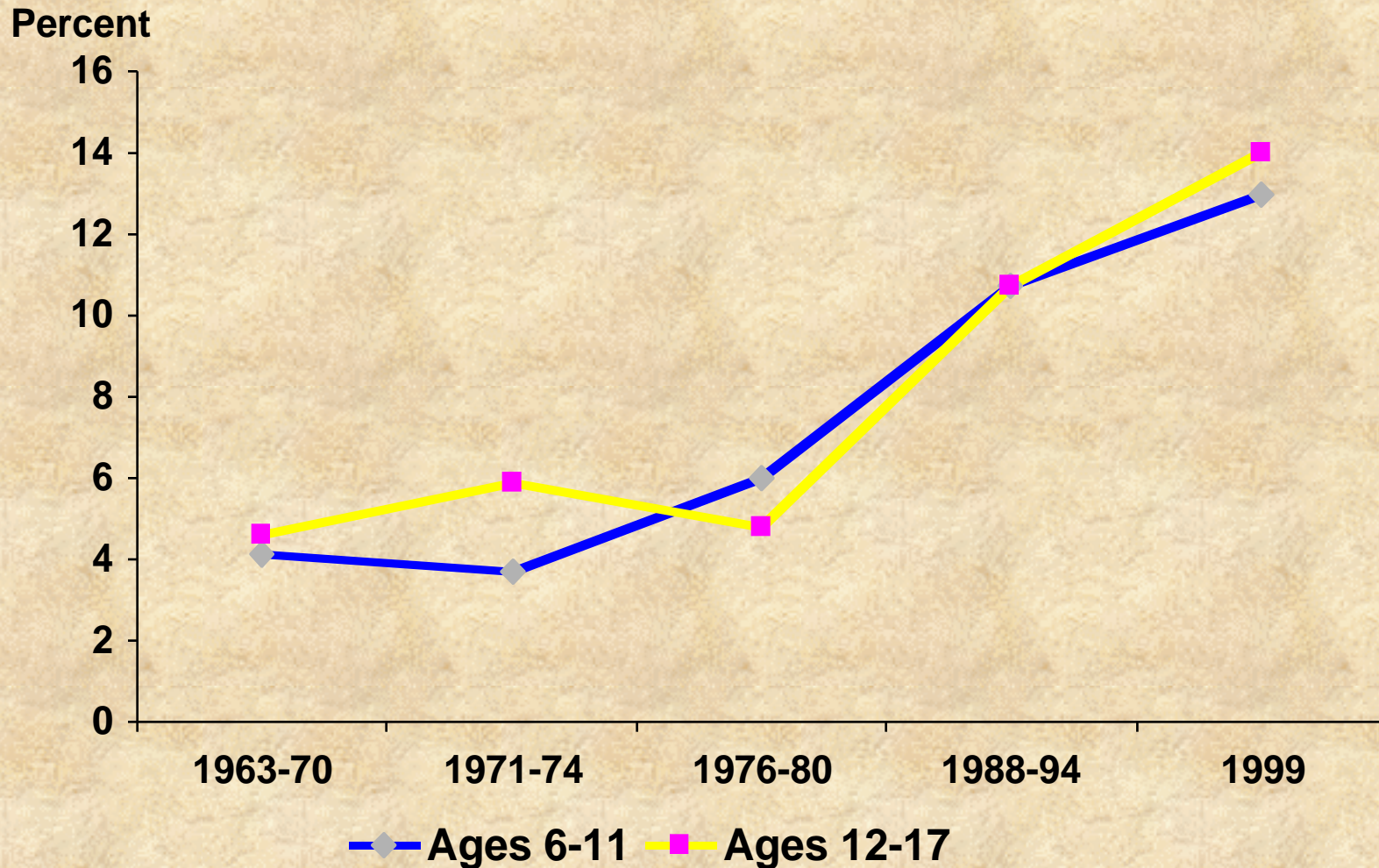
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Source: USDA/ERS — chart by Ken Meter, 2006



# U.S. Youth Who are Overweight Percent by Age



≥95th percentile for BMI by age and sex, based on NHANES I reference data  
Source: Troiano RP, Flegal KM. *Pediatrics*, 1998;101(3):497-504. NHANES  
1999, National Center for Health Statistics. Chart by Melinda Hemmelgarn



## **Consumption out of balance**

- **Over half of all adults overweight**
- **Half of elderly seeking medical care are undernourished**

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**Sources: Flegal, Wellman. Mural: The Food Project**



## Health suffers

- **5,000 deaths due to food poisoning each year in U.S.**

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**Sources: CDC/Walters**



## Health suffers

**Medical costs of obesity are \$118 billion per year—14% of what US consumers pay for food/year**

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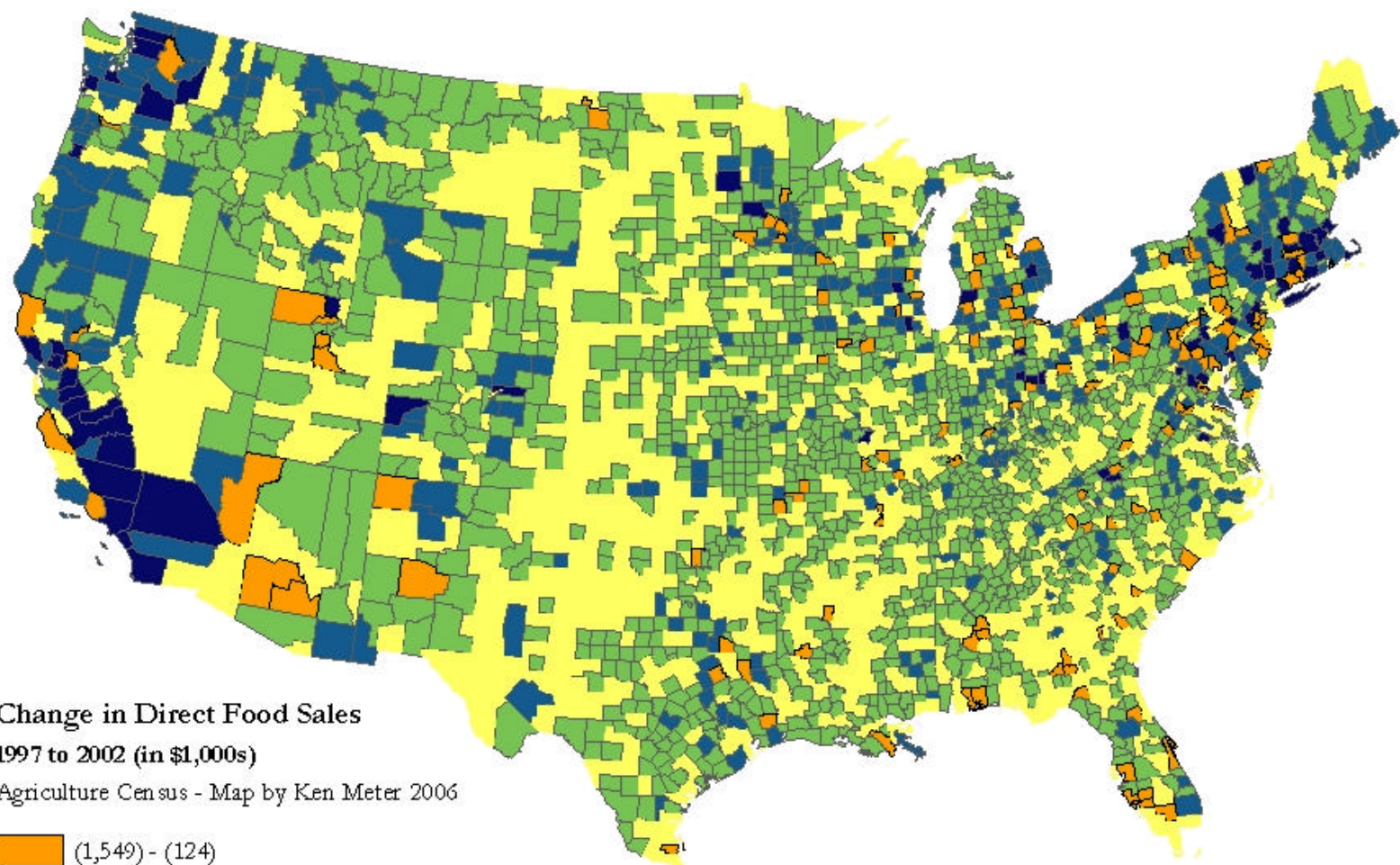
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**Source: Harvard Public Health/Colditz**





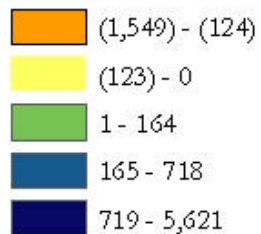
# Direct Food Sales



## Change in Direct Food Sales

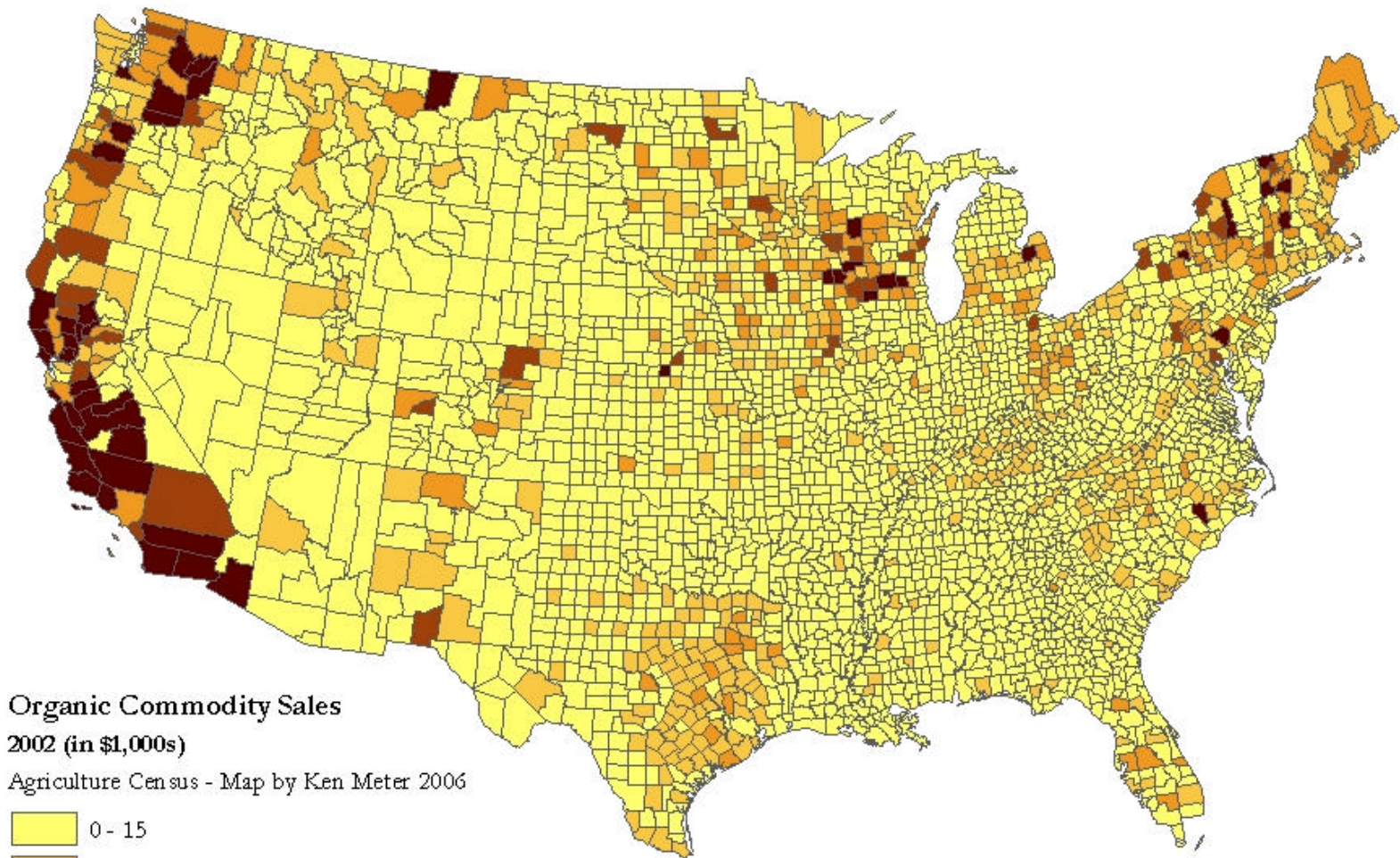
1997 to 2002 (in \$1,000s)

Agriculture Census - Map by Ken Meter 2006





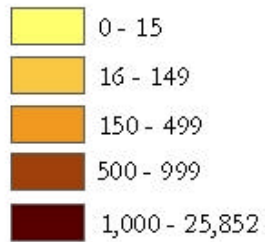
# Organic Sales



## Organic Commodity Sales

2002 (in \$1,000s)

Agriculture Census - Map by Ken Meter 2006





**20 years of coop organizing**

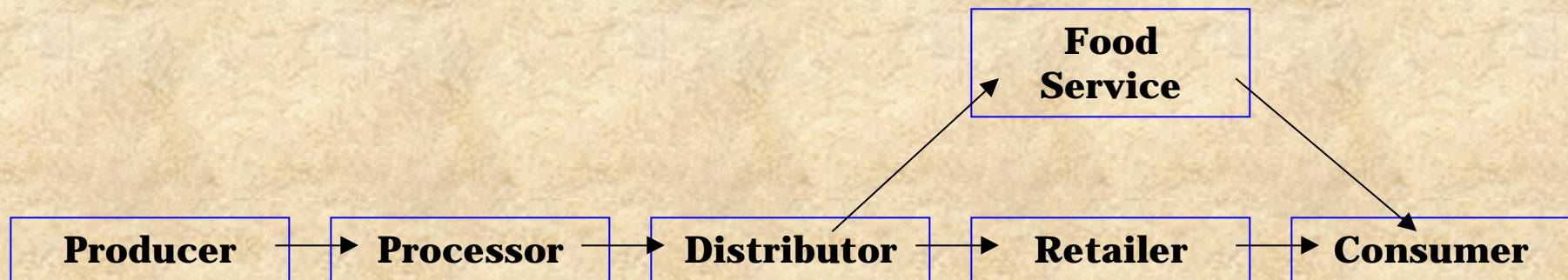
**800 farmer members**

**\$300 million sales (2005)**

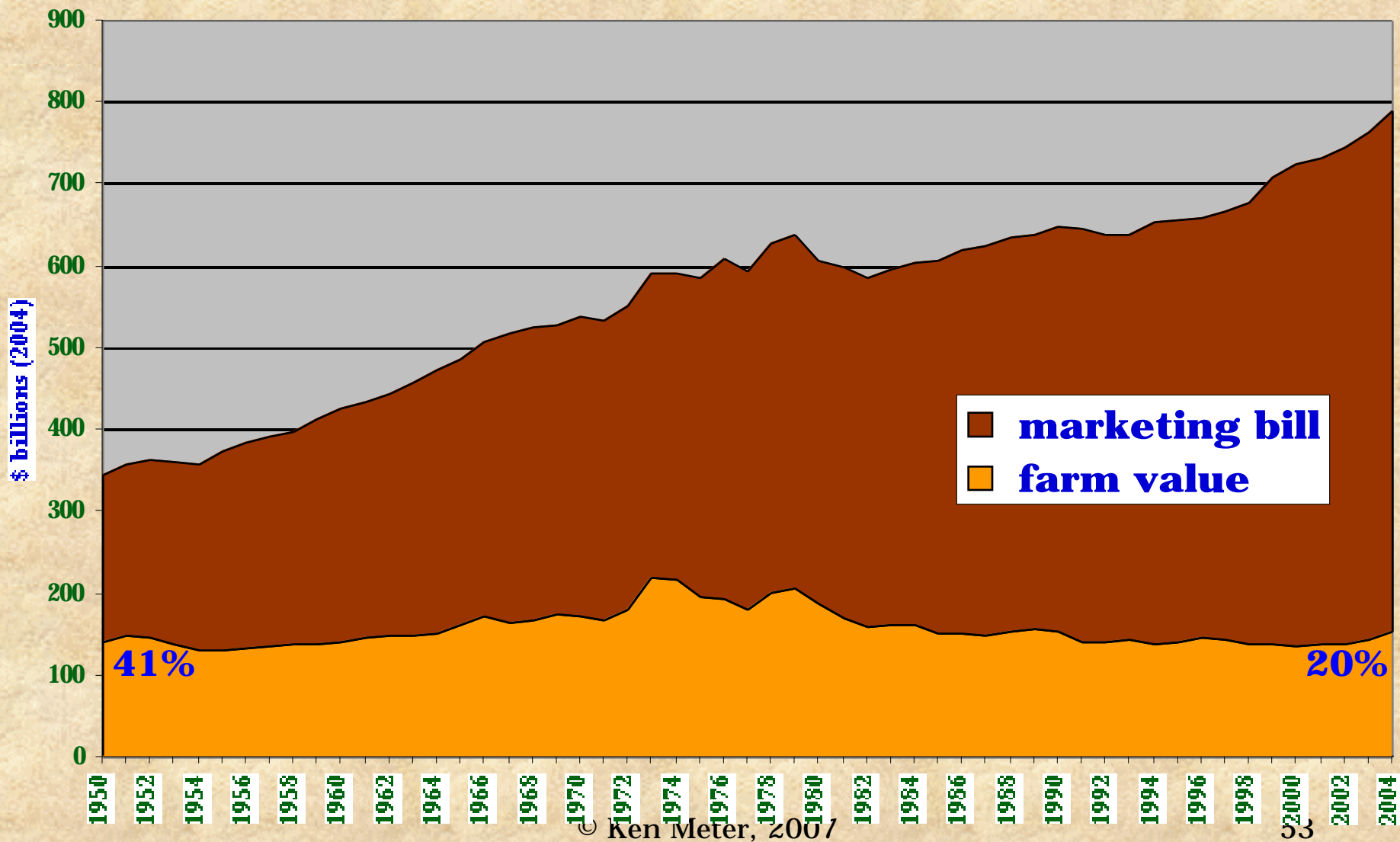
**milk/soy milk, cheese, orange  
juice, produce, meats, eggs**



## Value Chain



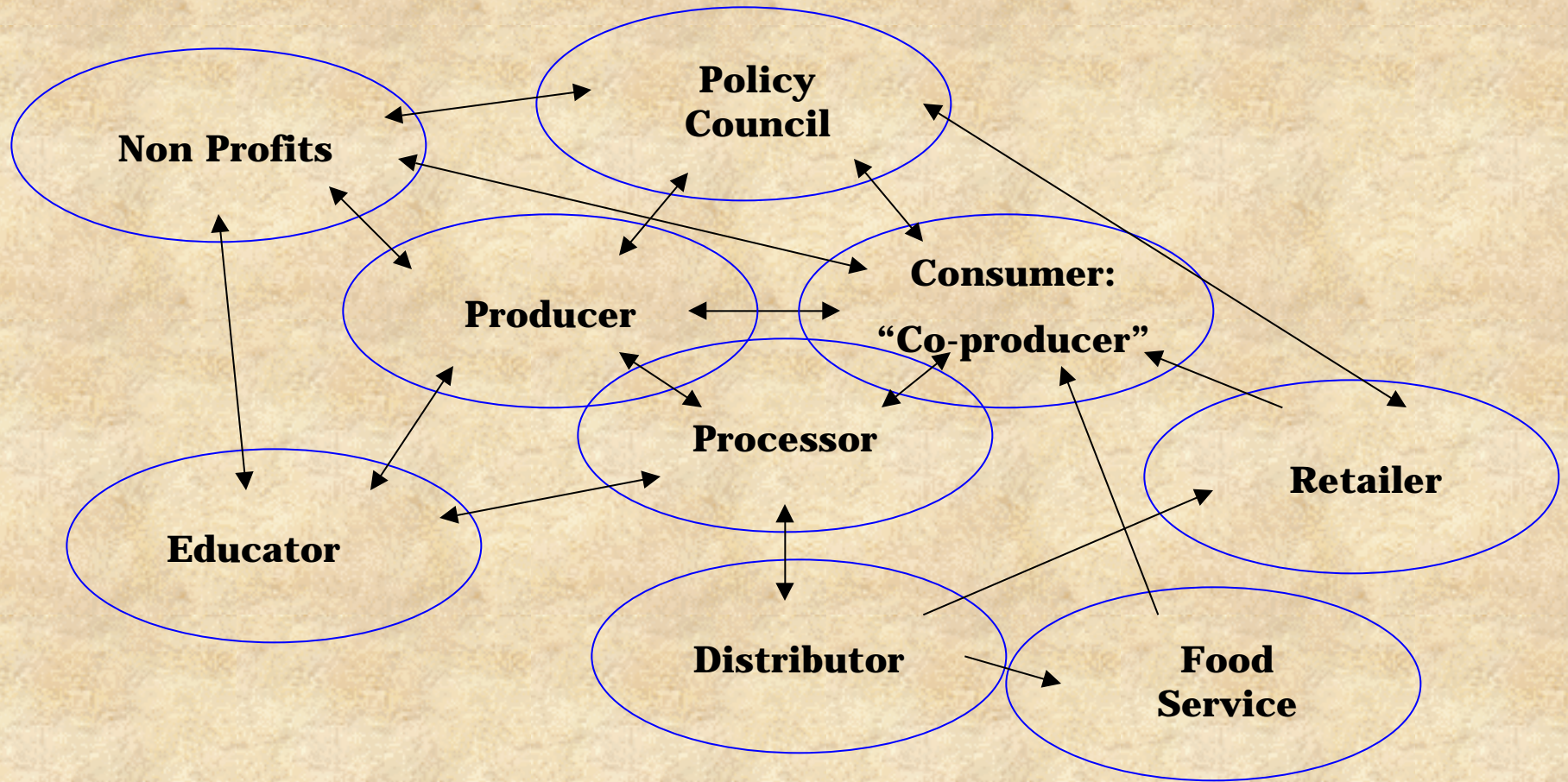
# Farmers' share of retail prices paid by consumers, 1950-2004



Source ERS; chart by Ken Meter, 2007



# Value Network





## **Community-based food & farm bill**

**Farmers cannot do this alone!**

- **Urban / Rural Partnerships**
- **From Consumers to Co-investors**
- **Food industry clusters —  
share risk & rewards**
- **Food (not farm) or rural policies  
that invest in communities  
not cash for commodities**

# **“Finding Food in Farm Country”**

**Ken Meter**

**(612) 869-8664**

**[kmeter@crcworks.org](mailto:kmeter@crcworks.org)**

**[www.crcworks.org/econ.html](http://www.crcworks.org/econ.html)**

