

Fertilizer Outlook

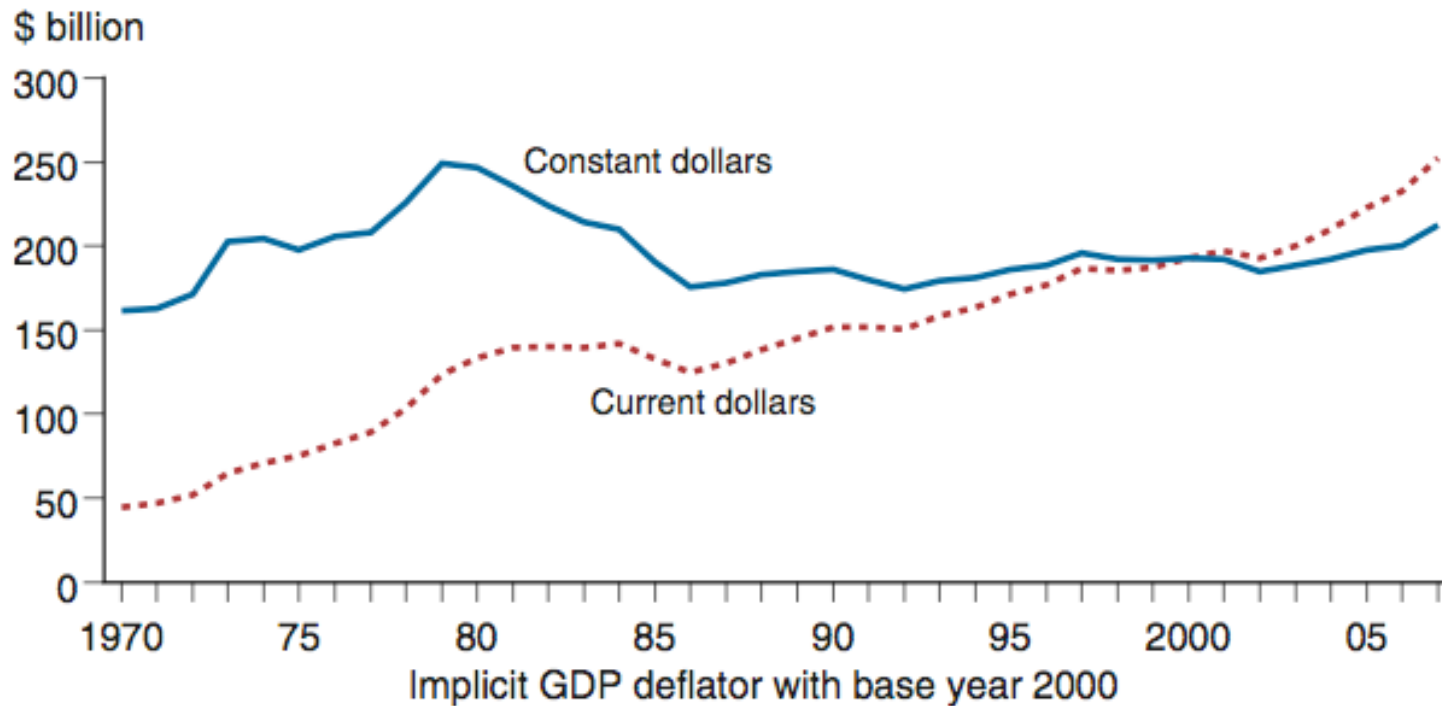
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Total production expenses

Total production expenses, 1970-2007



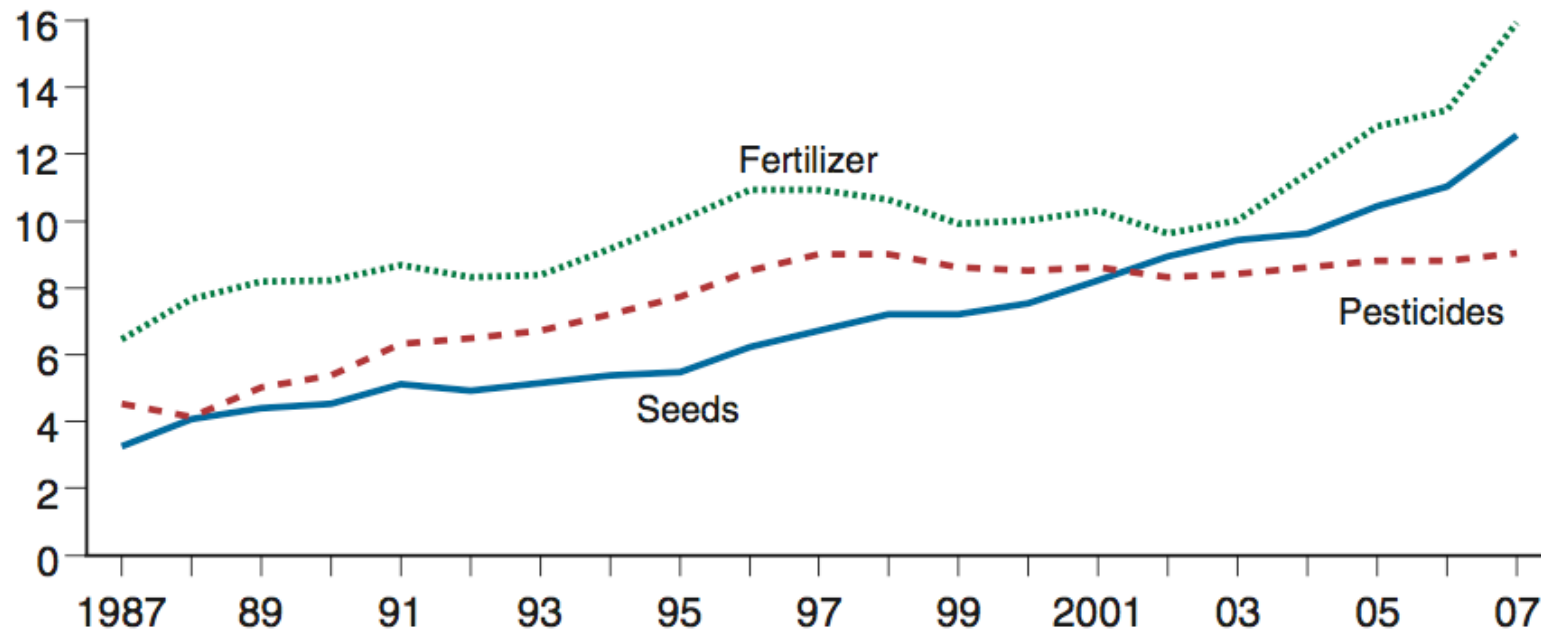
Note: 2007 forecast.

Source: USDA, ERS.

Some major crop expenses

Crop-related expenses, 1987-2007

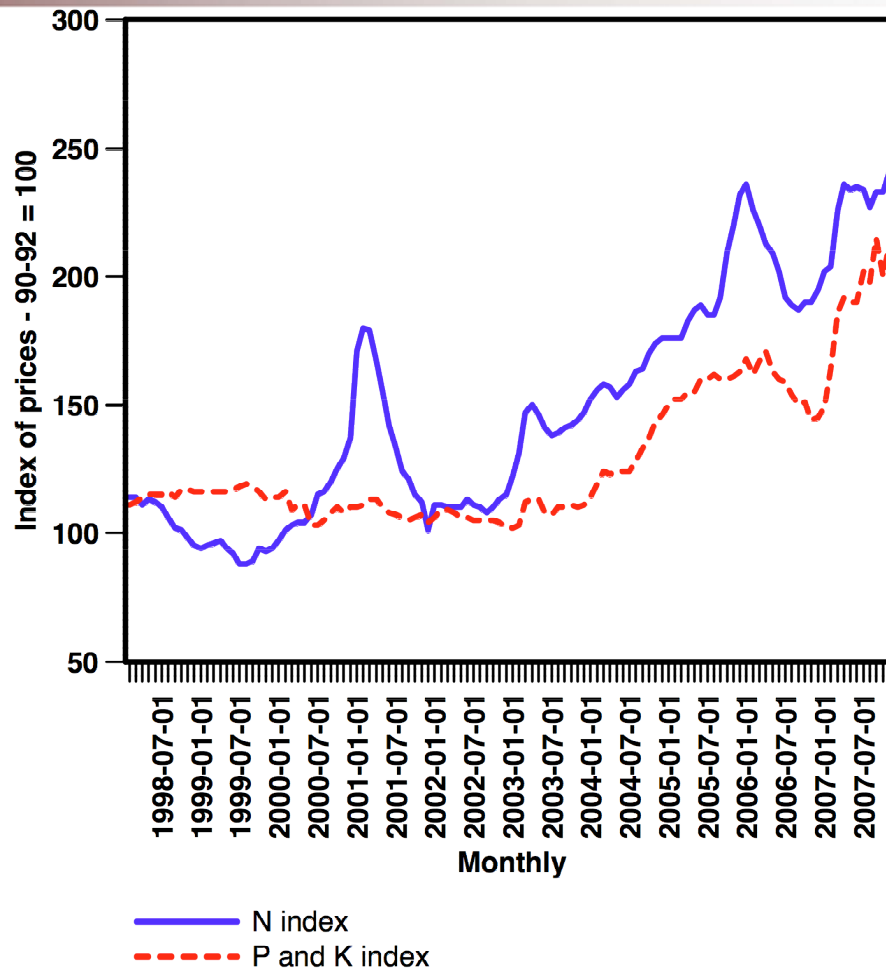
\$ billion



Note: 2007 forecast.

Source: USDA, ERS.

Historical index of N, P, and K



Expenses relative to crop

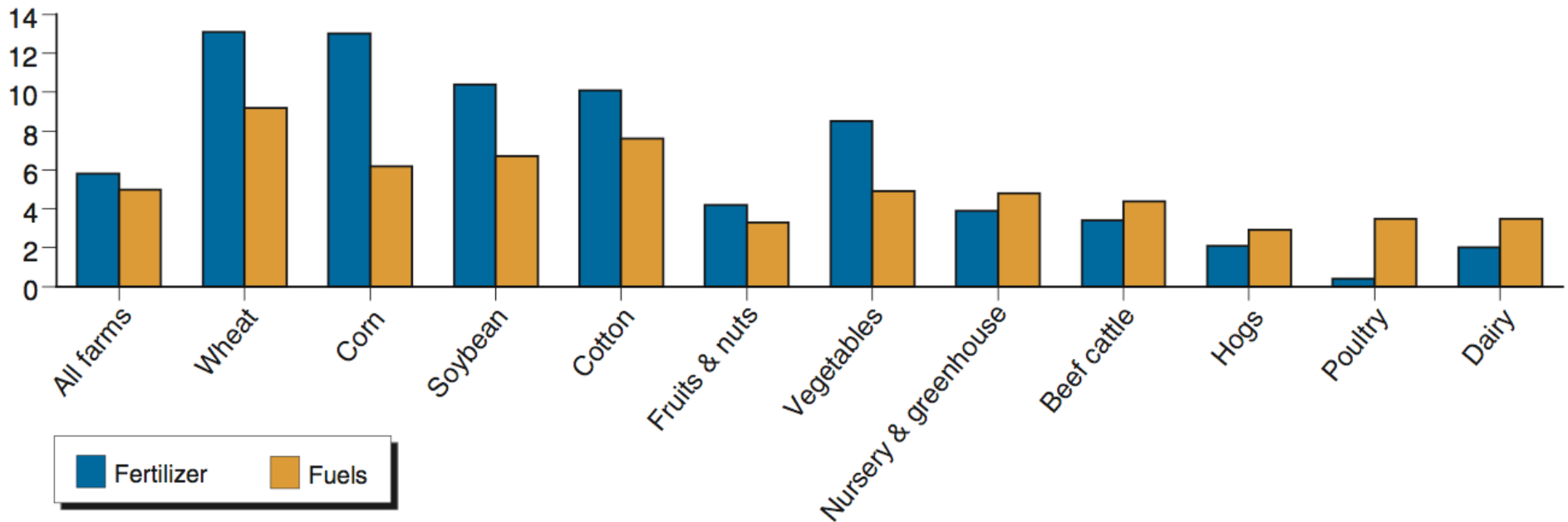
	Cotton	Corn	Soybeans	Wheat
Fertilizer	\$68	\$98	\$11	\$85
Fuel	\$38	\$16	\$12	\$9
Seed	\$73	\$52	\$33	\$24
Chemicals	\$97	\$50	\$39	\$40
Labor	\$26	\$12	\$10	\$7
Machinery	\$141	\$45	\$37	\$31
ALL	\$611	\$345	\$175	\$270

	Cotton	Corn	Soybeans	Wheat
Fertilizer	11%	28%	6%	31%
Fuel	6%	5%	7%	3%
Seed	12%	15%	19%	9%
Chemicals	16%	14%	22%	15%
Labor	4%	3%	6%	3%
Machinery	23%	13%	21%	11%
ALL	100%	100%	100%	100%

U.S. Fertilizer and fuel share

Fertilizers and fuels: share of total expenses by farm type, 2006

Percent of total expenses



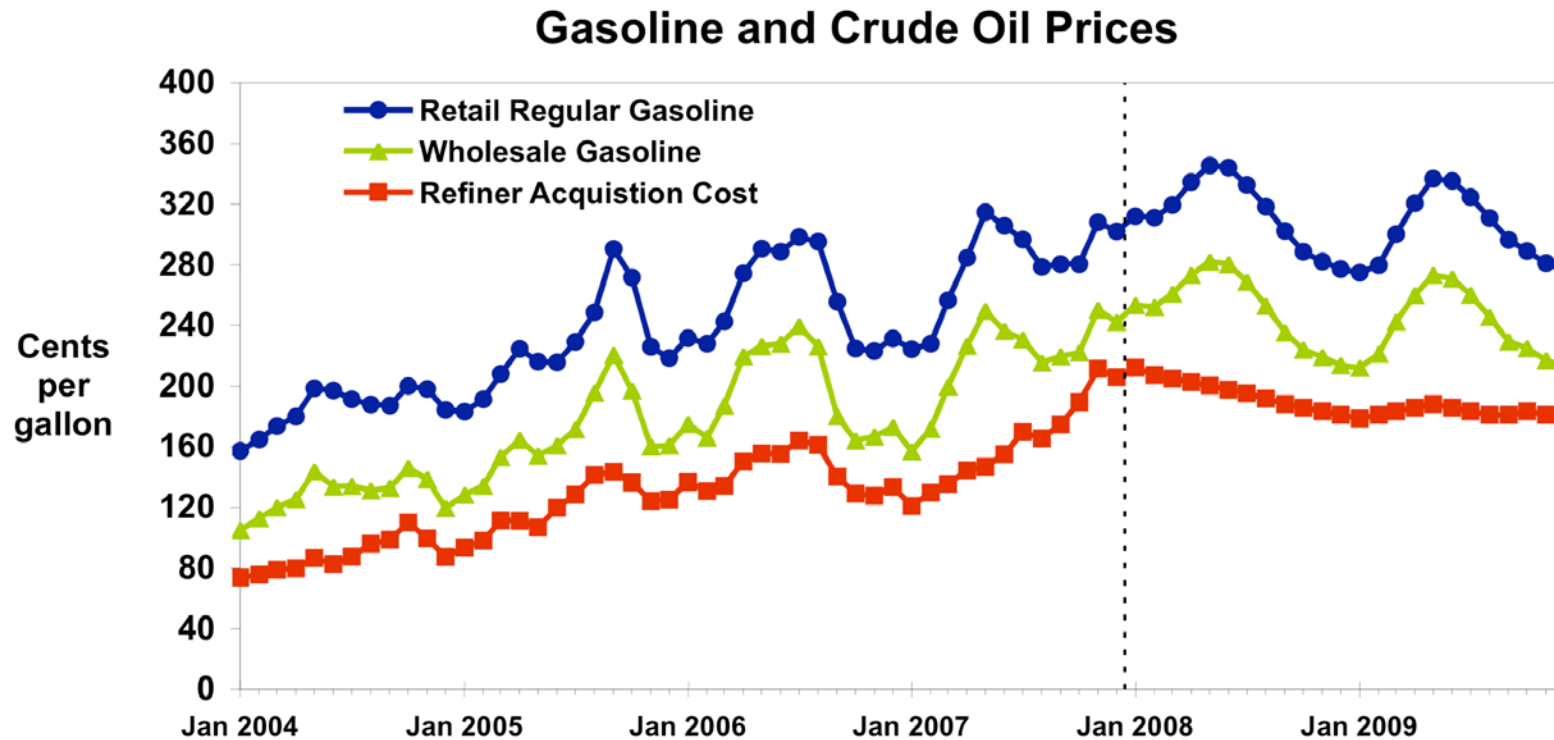
Source: USDA, Agricultural Resource Management Survey.

Oil and Gas



Source: Dwane Powell, North Carolina,
Raleigh News & Observer

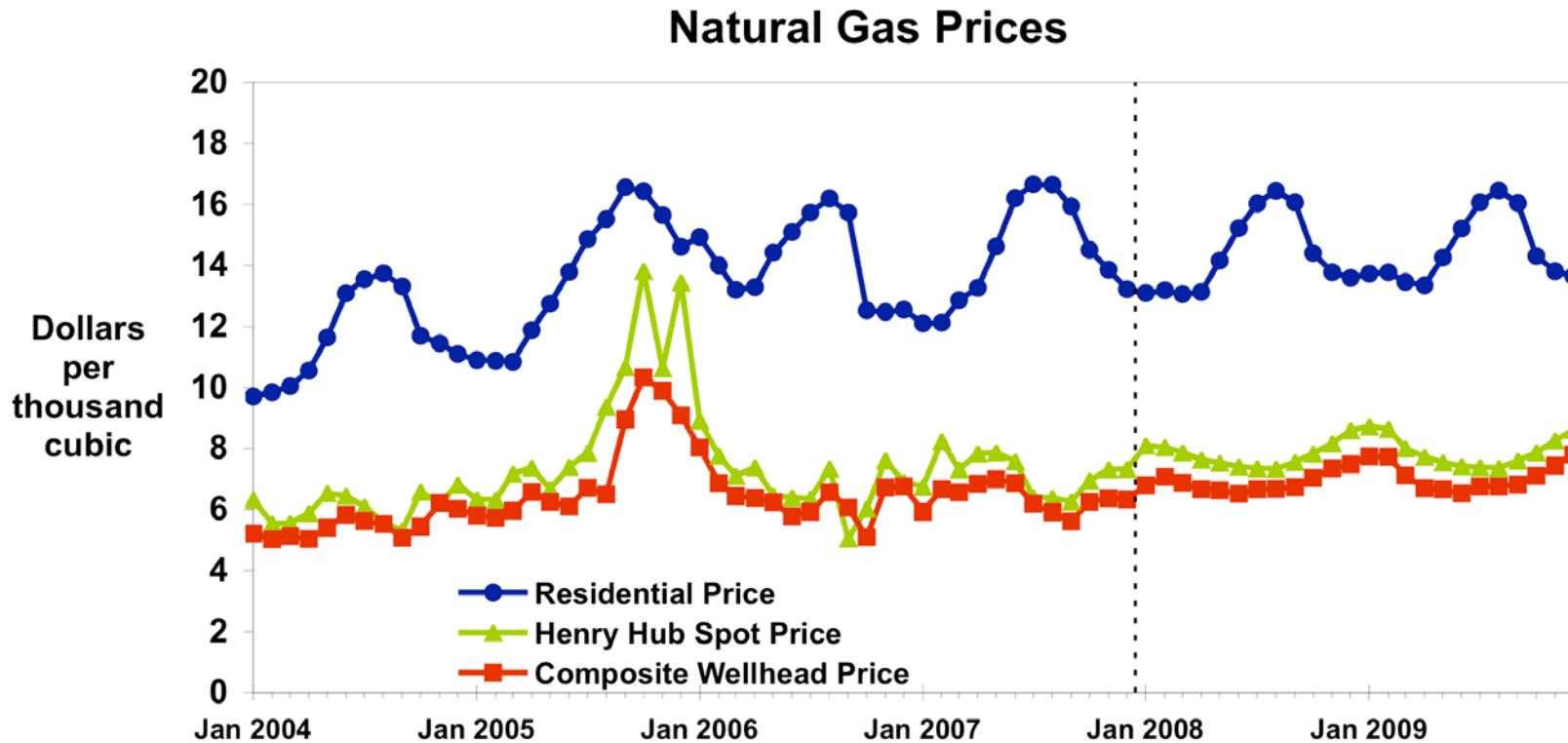
Predicted Gas and Oil Prices



Short-Term Energy Outlook, January 2008



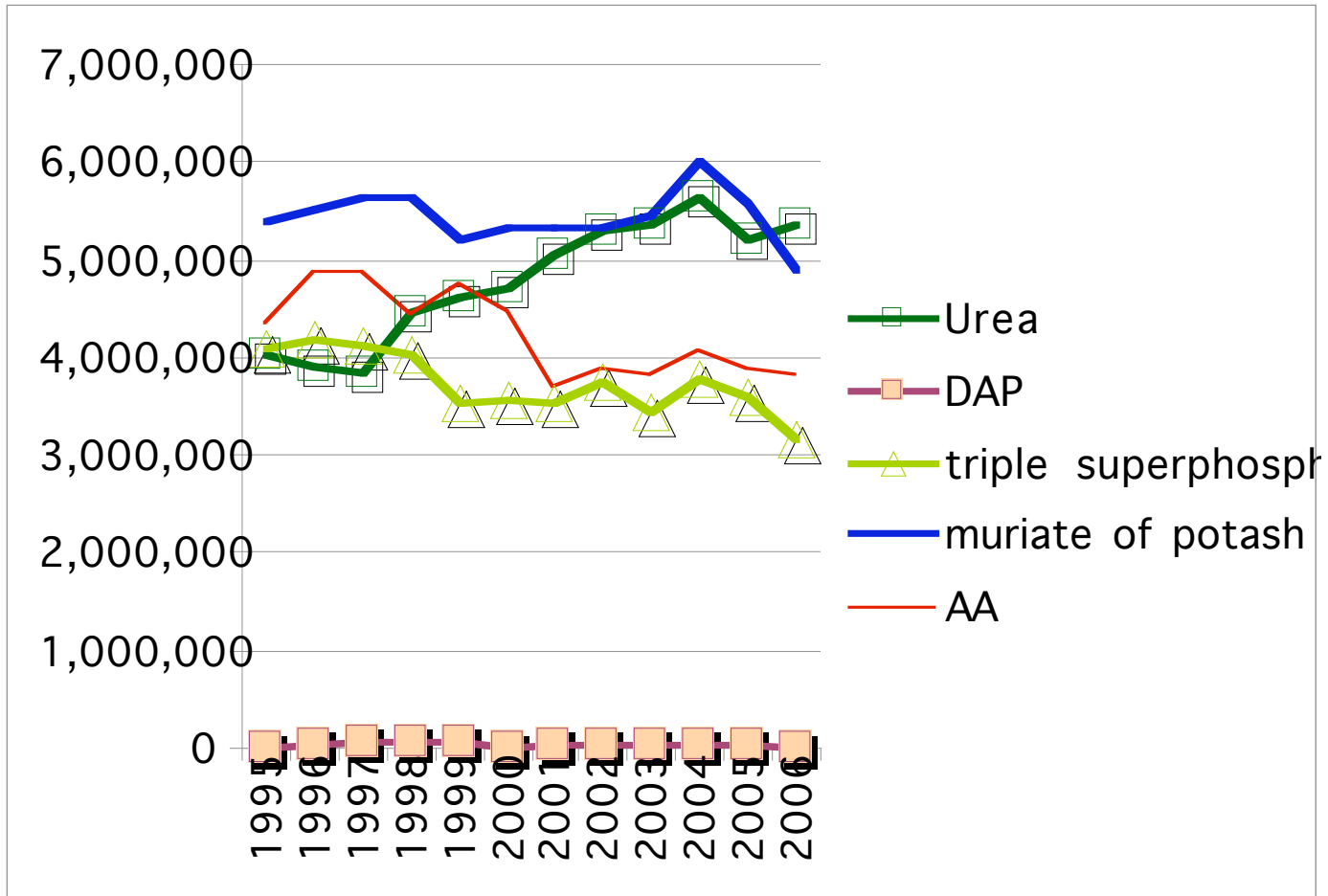
Predicted Natural Gas Prices



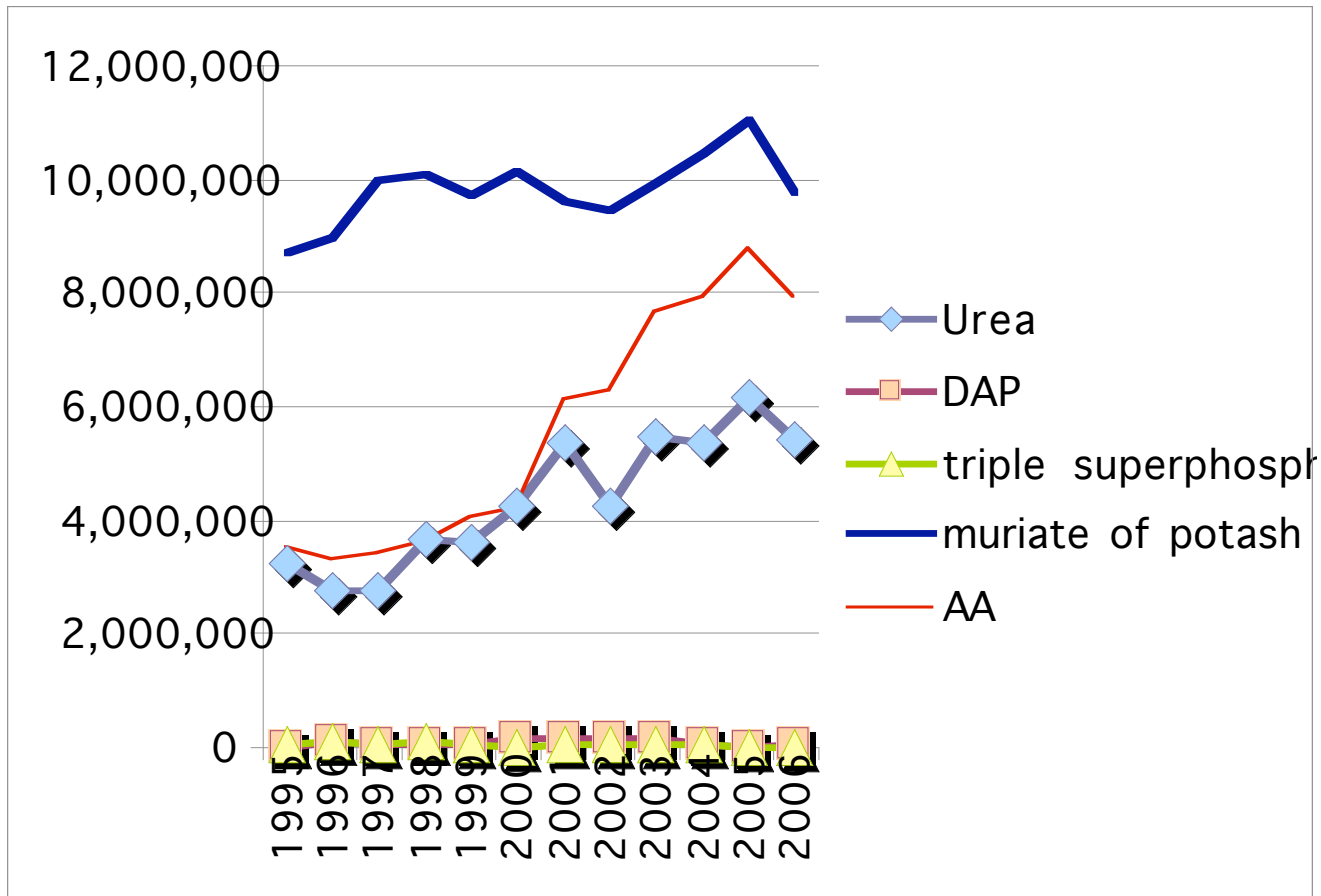
Short-Term Energy Outlook, January 2008



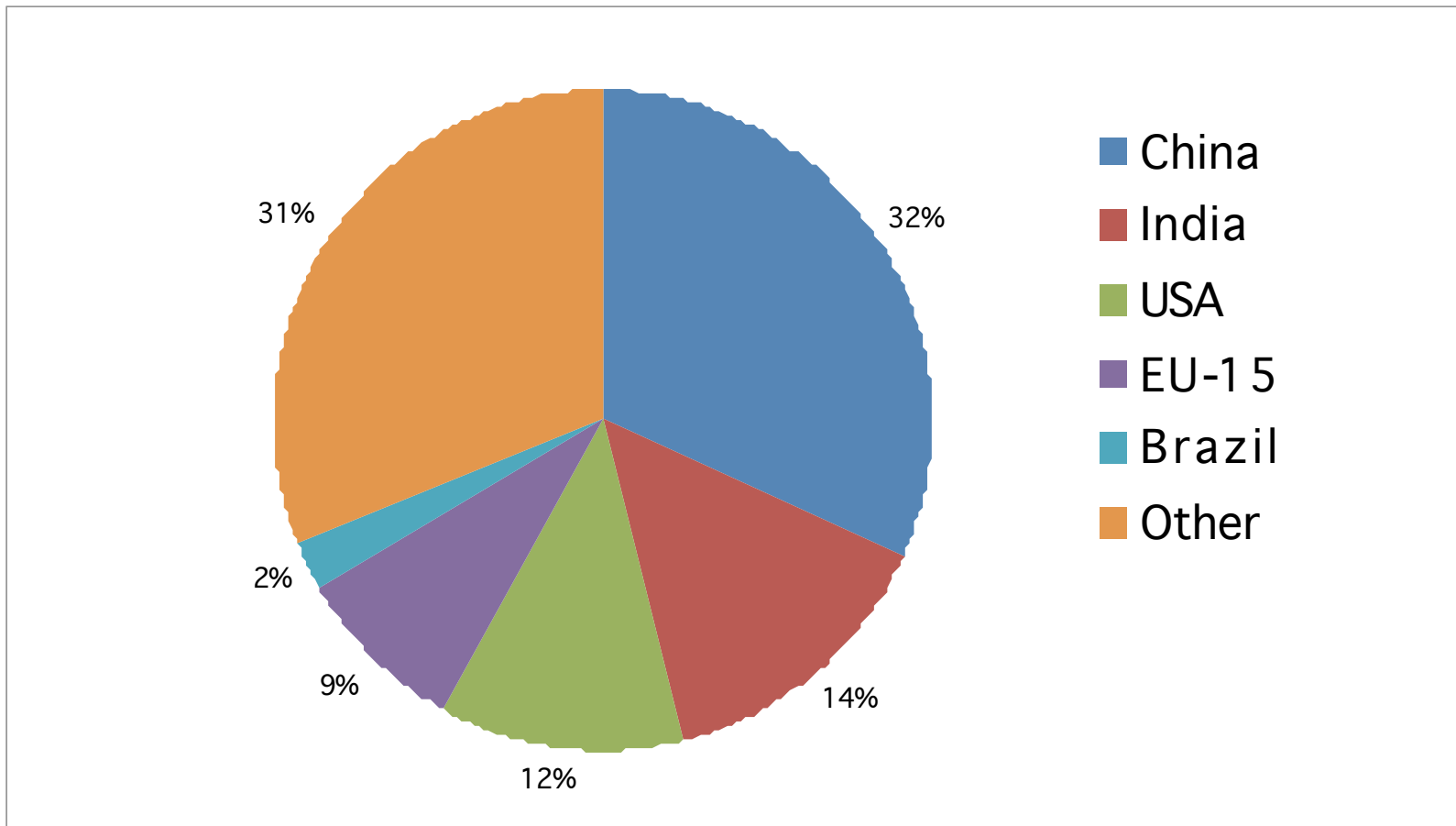
Fertilizer use



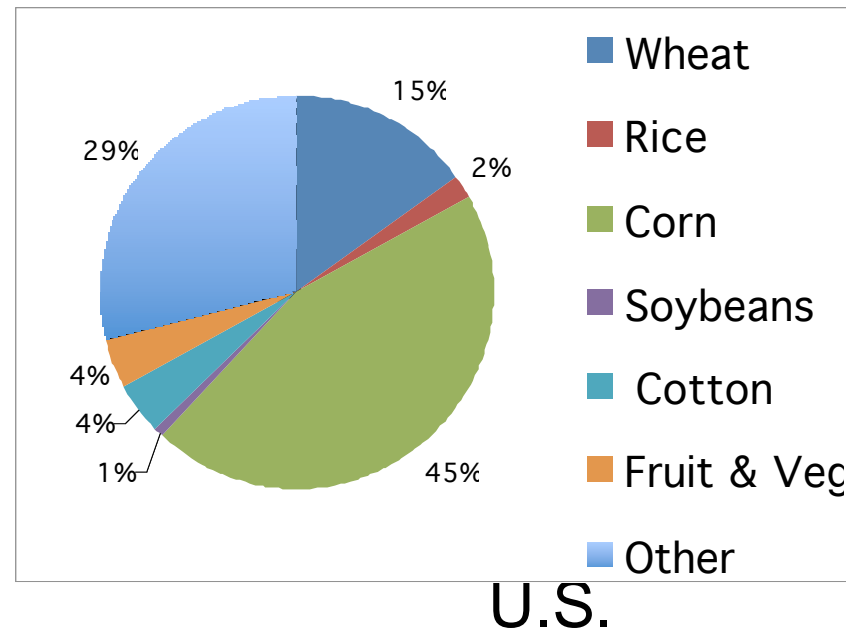
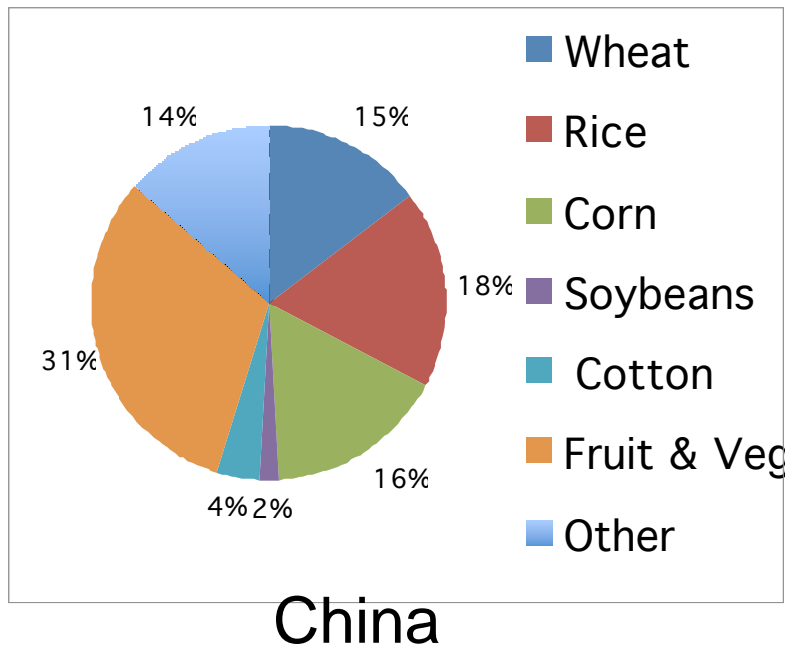
Fertilizer imports



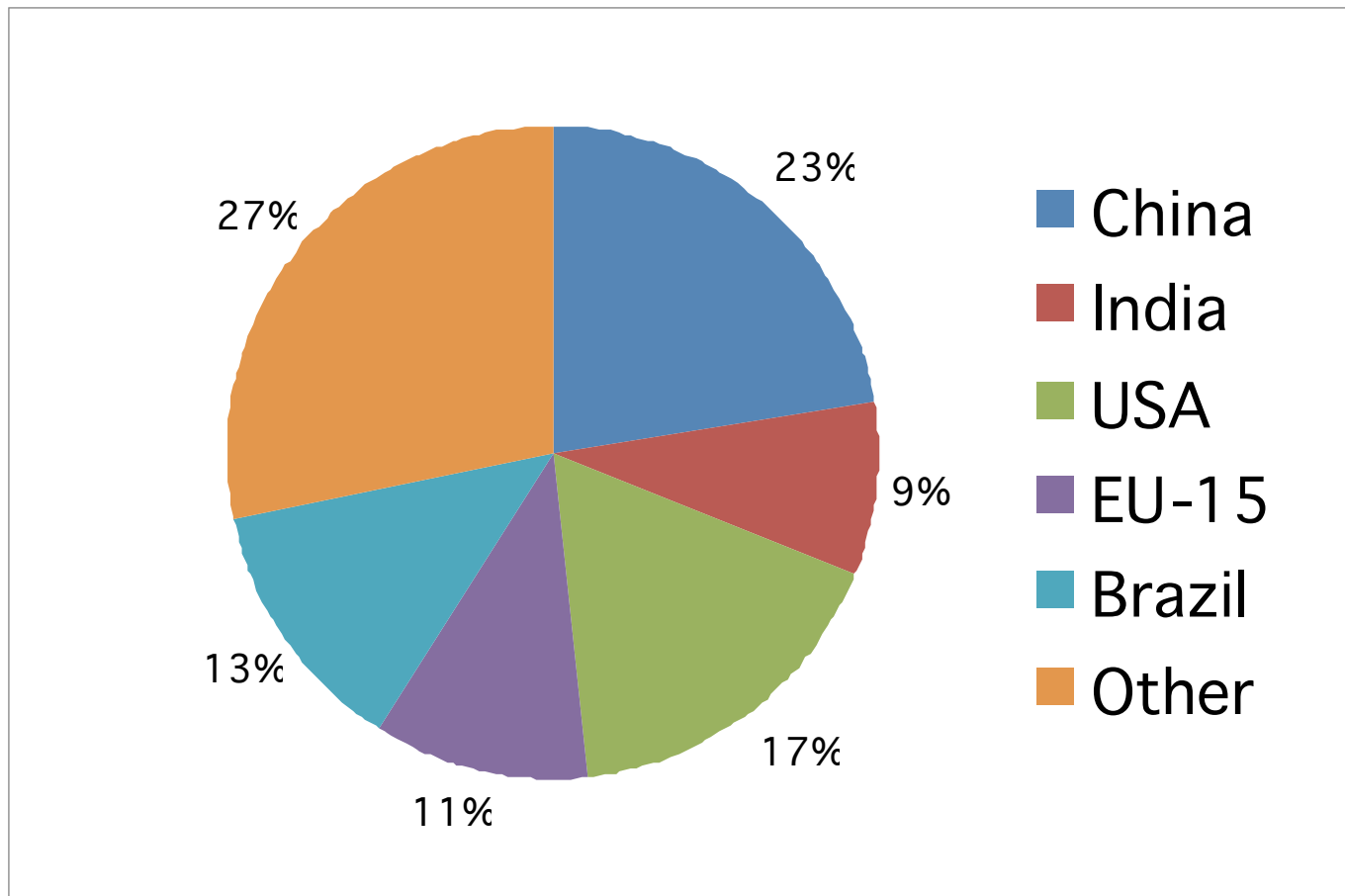
Nitrogen use



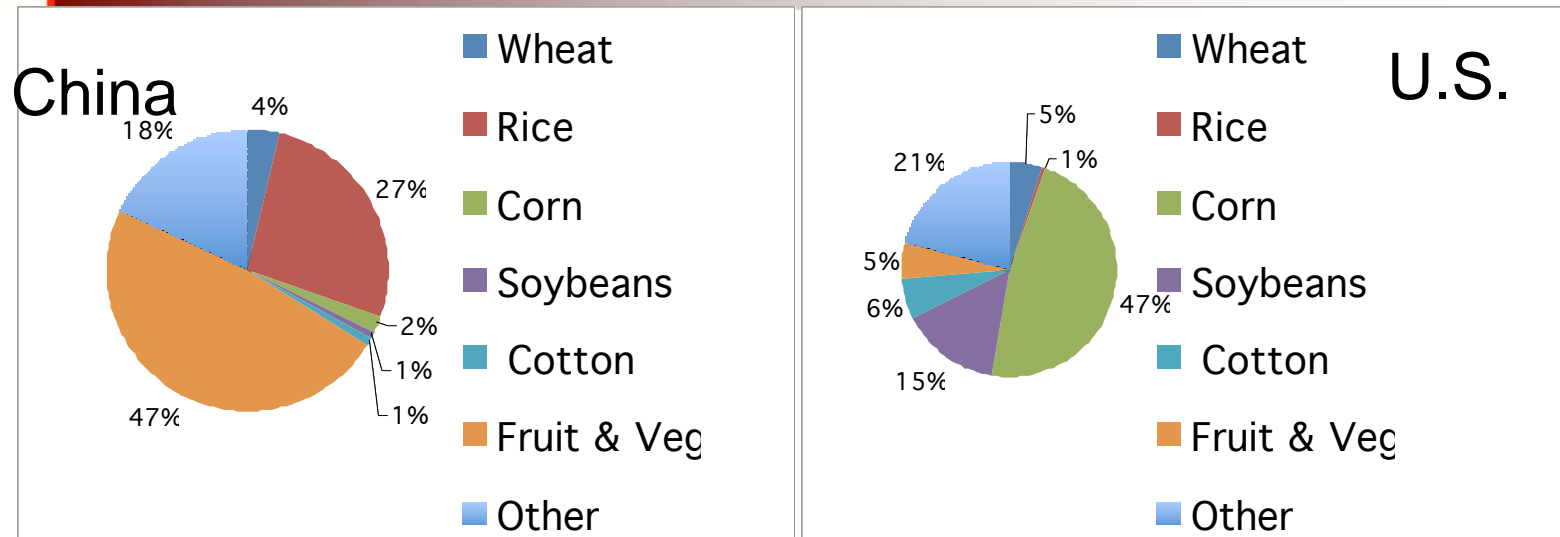
China vs U.S. nitrogen use



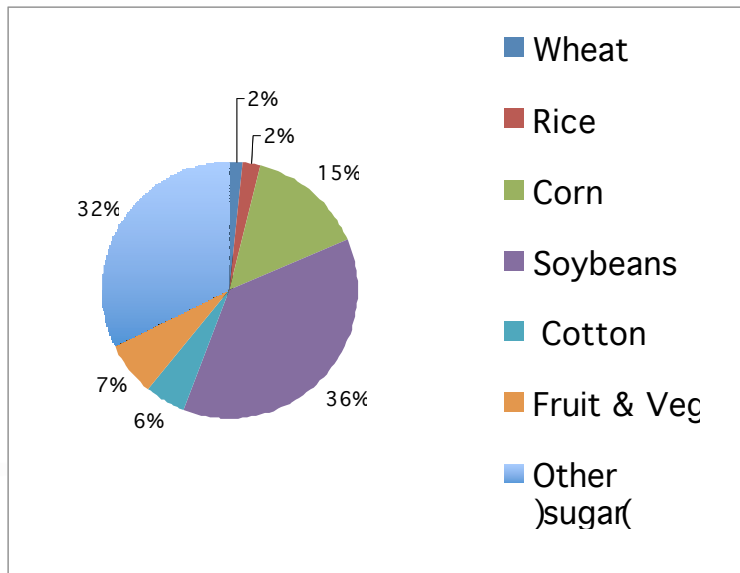
Potash use



China vs U.S. potash use



Brazil





Nitrogen use by crop (actual N)

- √ Cotton - 128 lb
- √ Soybeans - 0
- √ Corn - 190 lb
- √ Wheat - 115 lb

Acres planted - 2007 and 2008

√ 2007

- √ Corn - 93 million acres - up 19%
- √ Soybeans - 64 million acres - down 15%
- √ Cotton - 11 million acres - down 28%

√ 2008

- √ Corn - down
- √ Soybeans - way up
- √ Cotton - down (at least 10%)
- √ Wheat - up



Fertilizer Prices

- √ Changing daily (upward)
- √ Urea - \$455
- √ Am sulfate - \$265
- √ Potash - \$425
- √ UAN 32% - \$360
- √ DAP - \$560

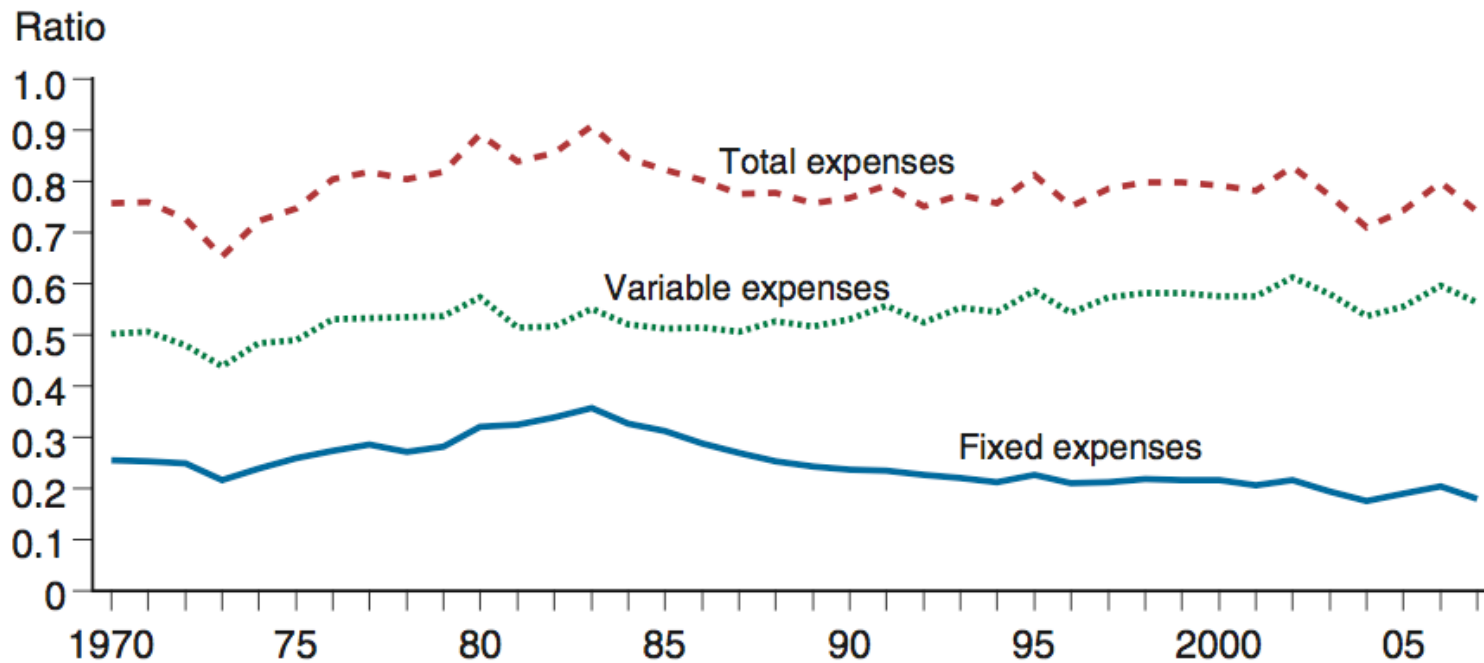


Why are fertilizer prices so high

- √ Strong demand
- √ Cheap dollar
- √ more imports
- √ supply problems in some parts of the world

Are expenses becoming too much

Ratio: Expenses/gross farm income, 1970-2007



Note: 2007 forecast.

Source: USDA, ERS.