

The Agricultural Outlook from A to W: Argentina, Brazil, China, and the WTO

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Crop Management Conference

December 17, 2004

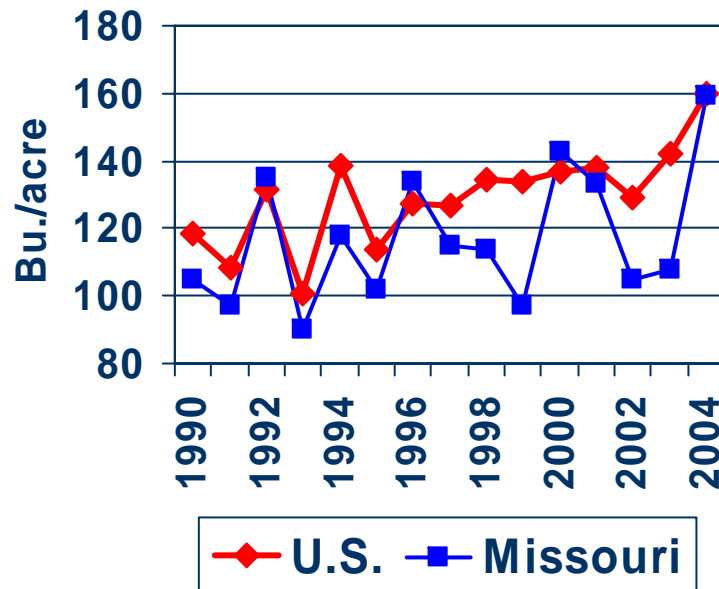
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Agenda

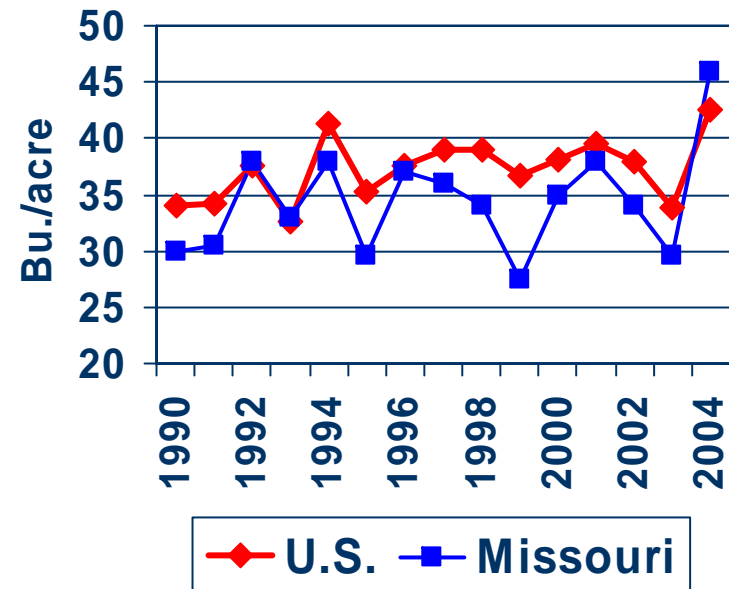
- Market outlook
- Effects of Argentina, Brazil, and China on world markets
- WTO, the budget, and other policy issues

Estimates of record yields drive the crop outlook...

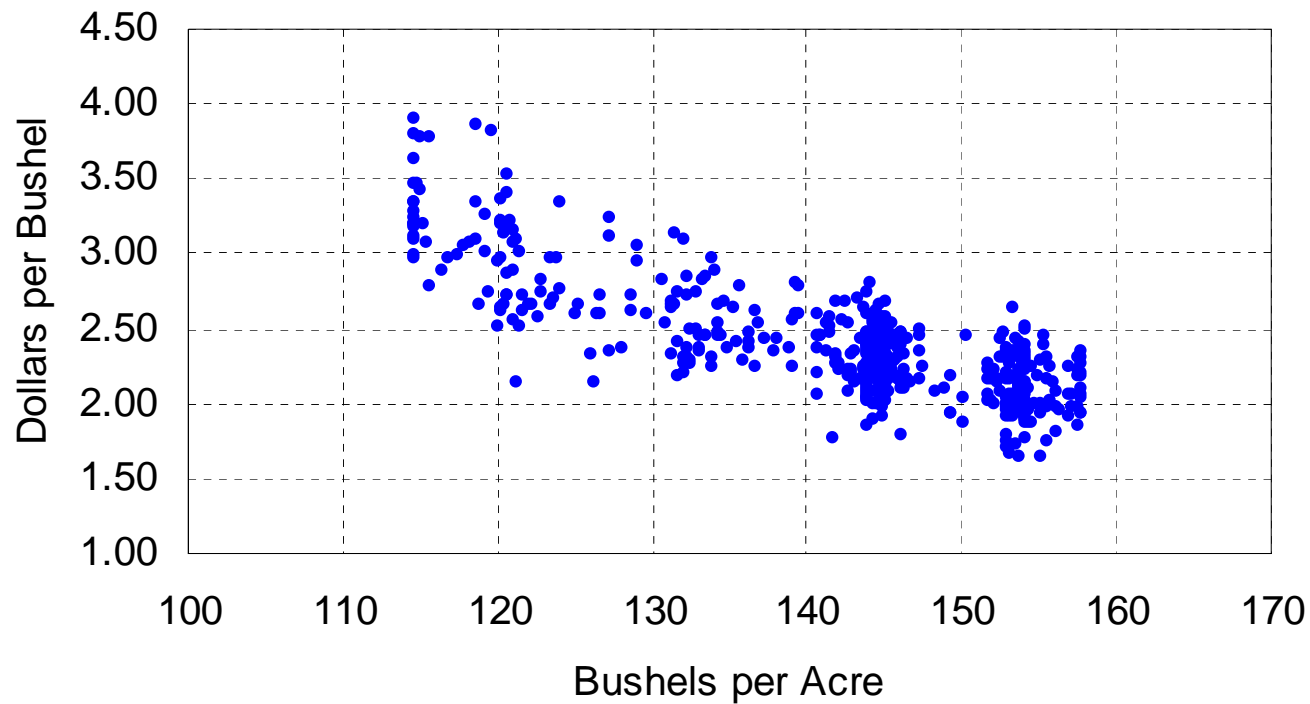
Corn yields



Soybean yields



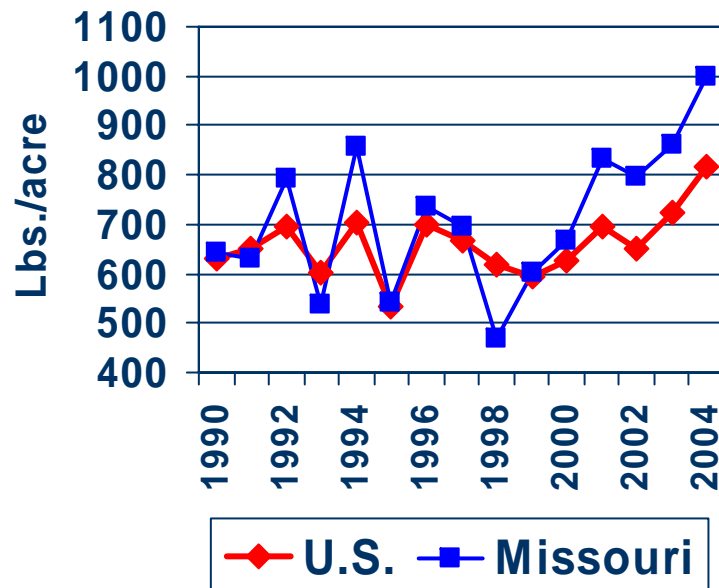
2004 corn yields and prices



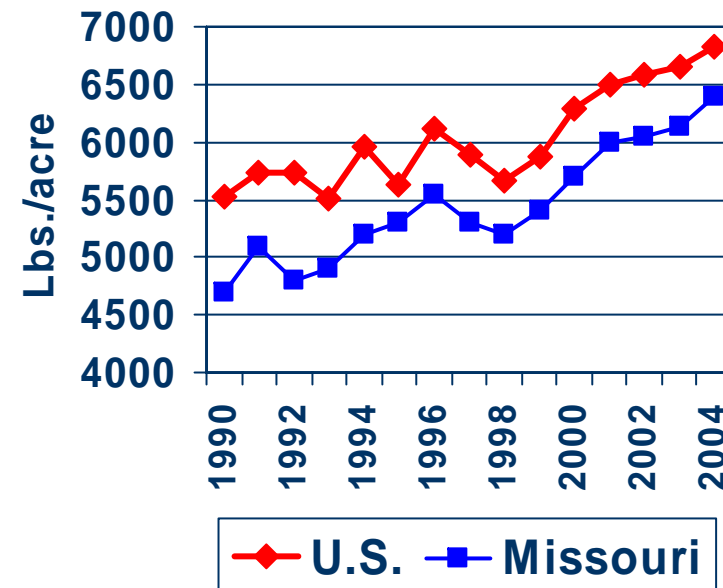
Jan. 2004 FAPRI estimates from stochastic analysis of 500 alternative futures

More record yields...

Upland cotton yields



Rice yields



Crop production up around the world (million metric tons)

	2003	2004	Change
World corn	620.7	695.8	75.1
World wheat	551.4	618.3	56.9
World soybeans	189.8	231.0	41.2
World rice	389.1	398.1	9.0
World cotton (million bales)	94.8	114.0	19.2

Source: USDA WASDE, Dec. 2004

Soybean production

Supply	2003	2004
U.S. area planted (mil a.)	73.40	75.07
(Missouri)	5.00	5.00
Area harvested (mil. a.)	72.48	73.99
(Missouri)	4.95	4.94
U.S. average yield (bu./a.)	33.9	42.6
(Missouri)	29.5	46.0
U.S. production (mil. bu.)	2,454	3,150
(Missouri)	146	227

Source: USDA "Crop Production" report, Nov. 2004

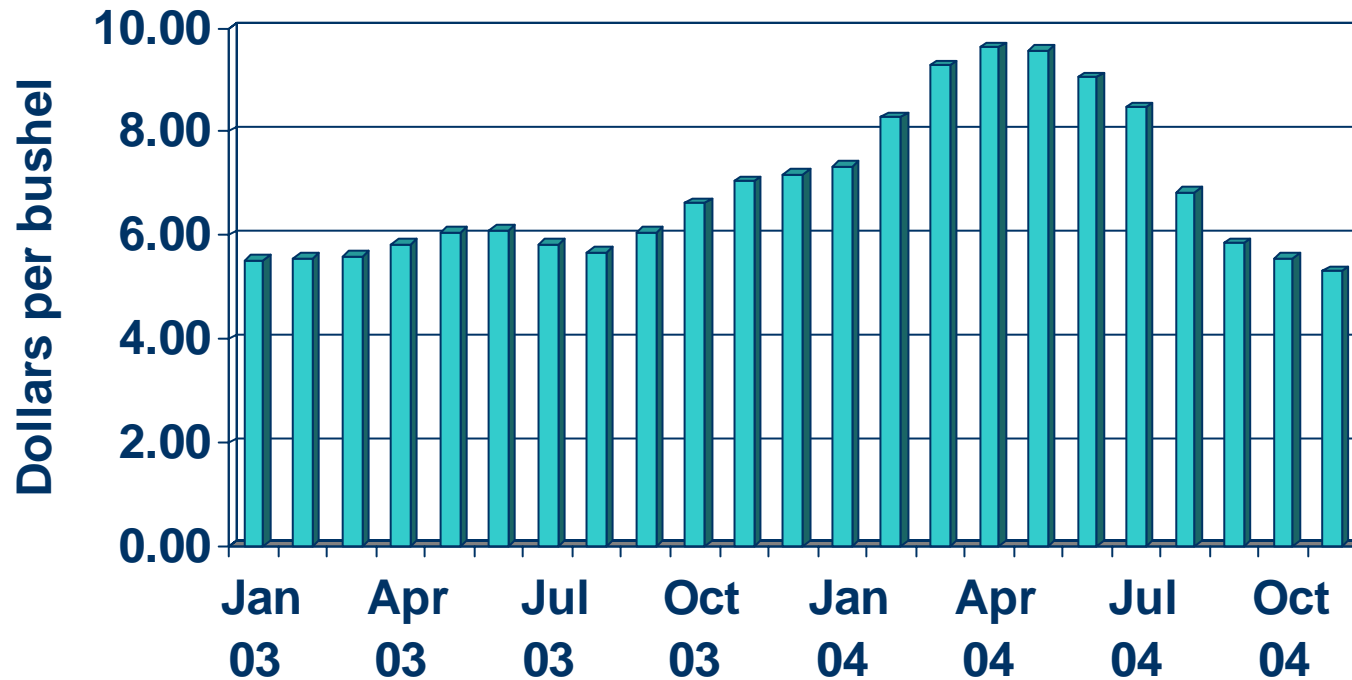
New record levels in **red**

Soybean supply and demand (mil. bu.)

Supply	2003/04	2004/05
Beg. Stocks	178	112
Production	2,454	3,150
Total (incl. imports)	2,638	3,269
Use		
Domestic	1,641	1,798
Exports	885	1,010
Total	2,526	2,808
Ending Stocks	112	460
Avg. Price/bu.	\$7.34	\$4.60-5.30

Dec. 2004 USDA estimates. New record levels in **red**.

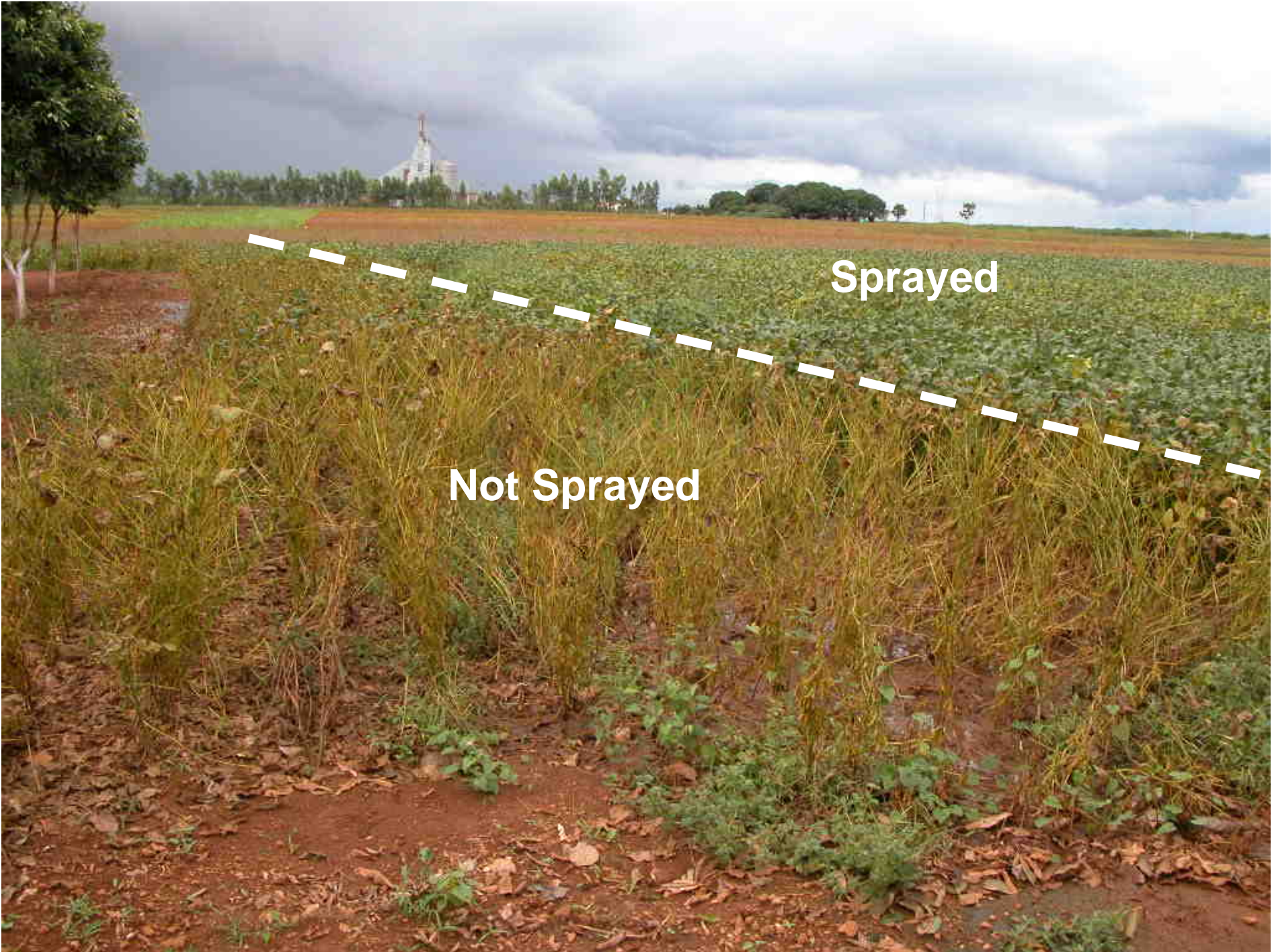
U.S. average soybean prices



Source: USDA "Agricultural Prices" report, Nov. 2004

Asian rust

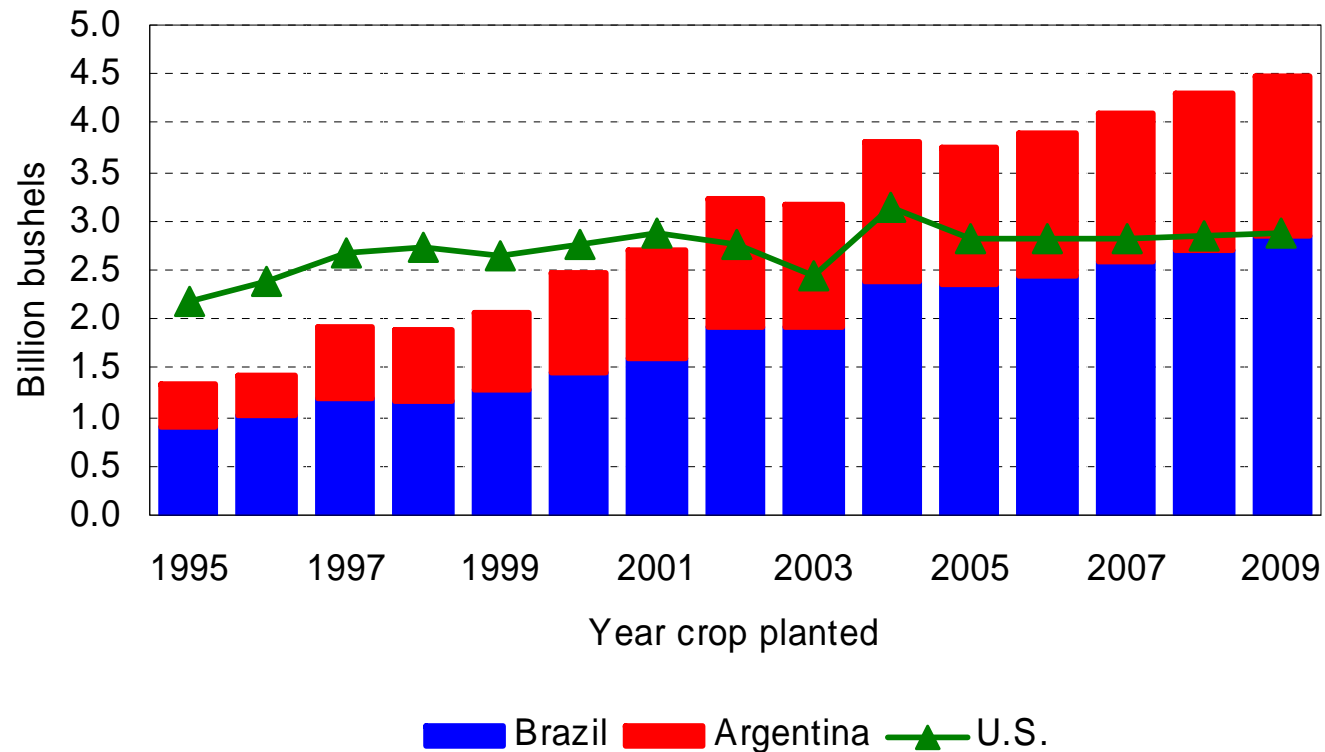
- We knew it would get here eventually—it's just here earlier than we had hoped.
- With proper fungicide treatment, does not have to cause yield loss.
- Treatment costs still uncertain—some have suggested \$15 - \$35/acre, more than one treatment may be needed.
- Extension personnel planning to use sentinel plots with early soybeans as an early warning indicator of the presence of Asian rust.



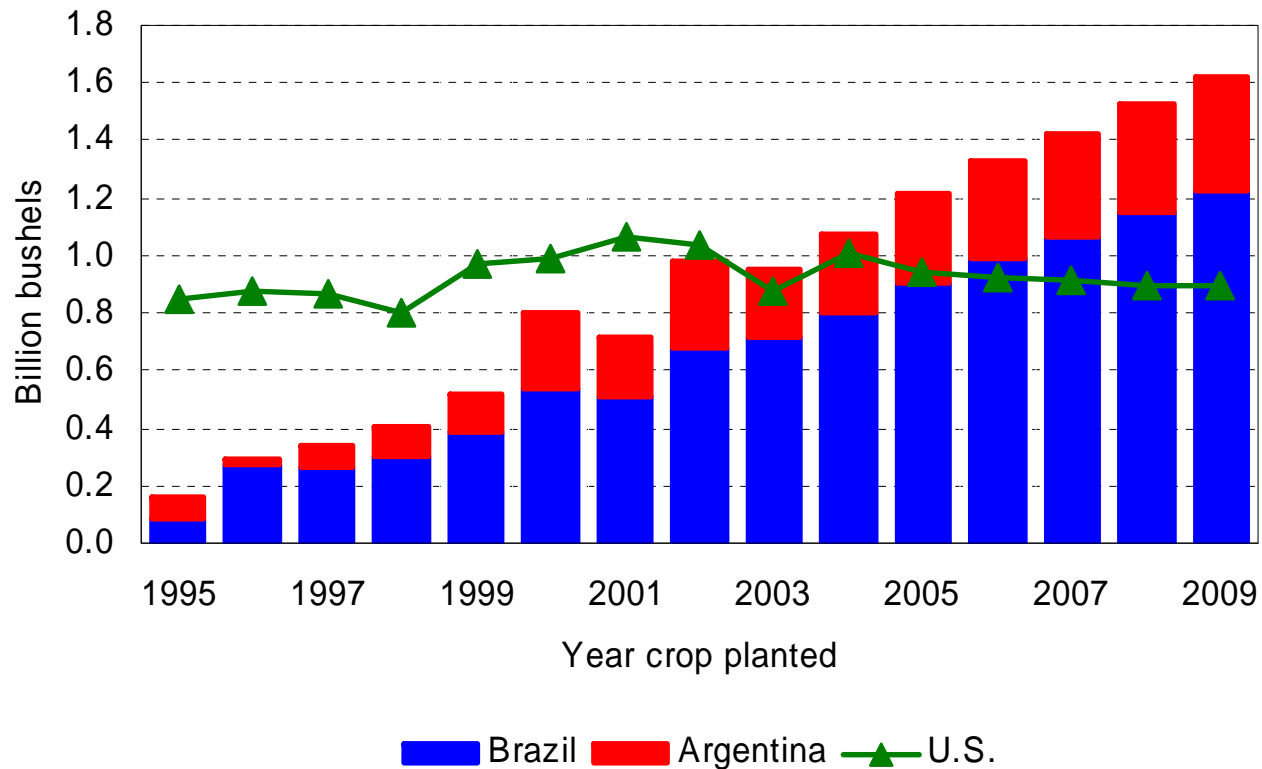
Sprayed

Not Sprayed

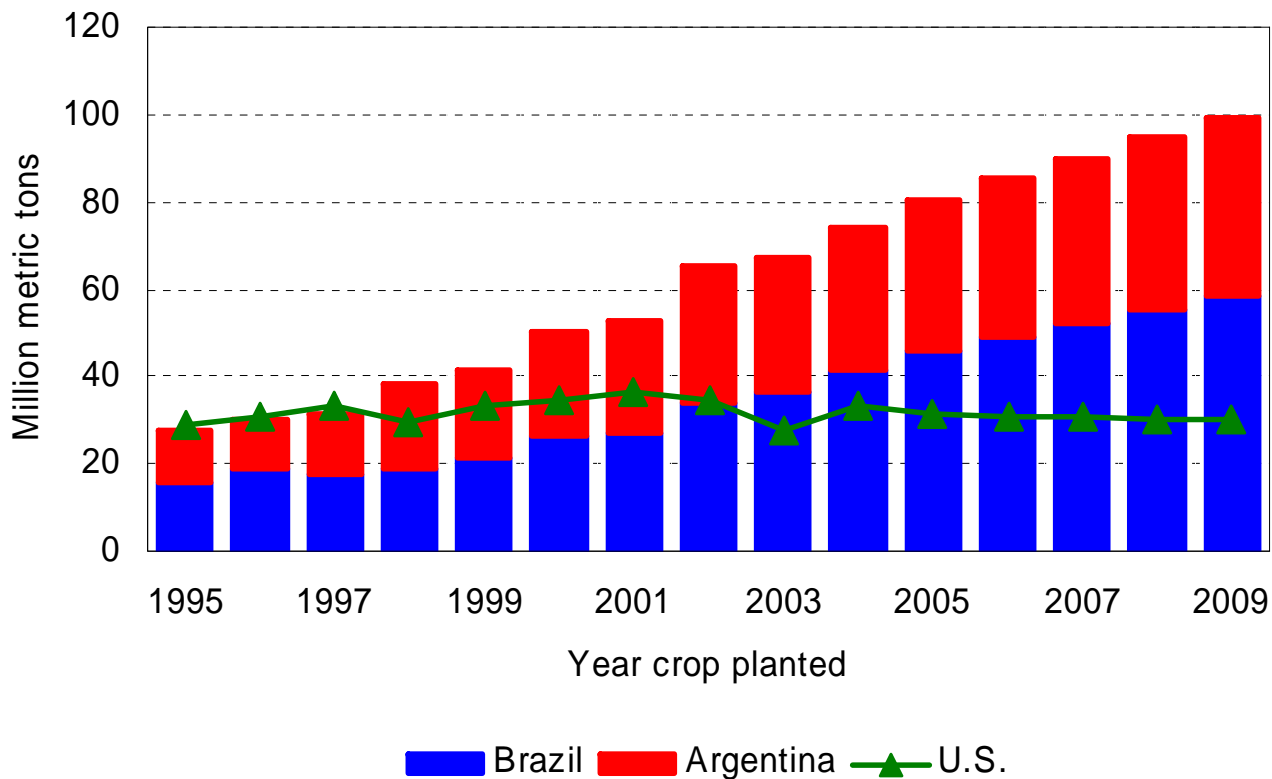
Soybean production



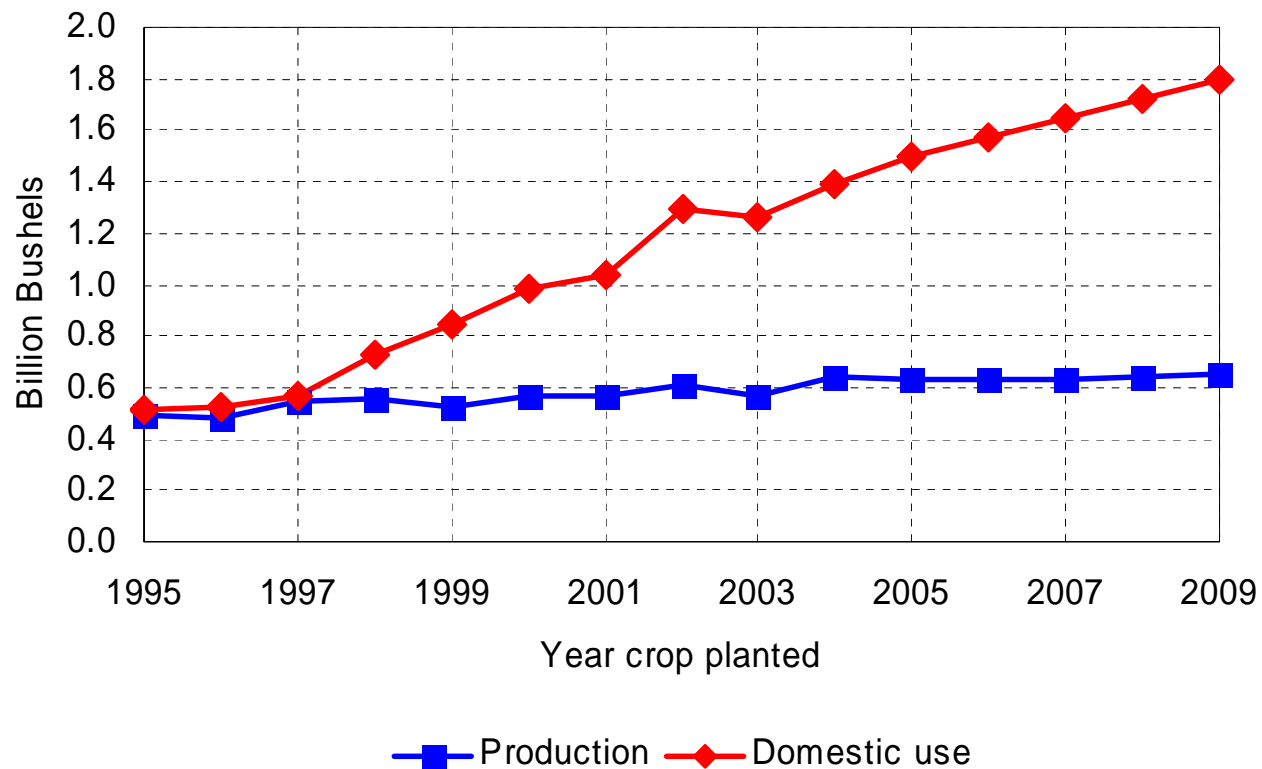
Soybean net exports



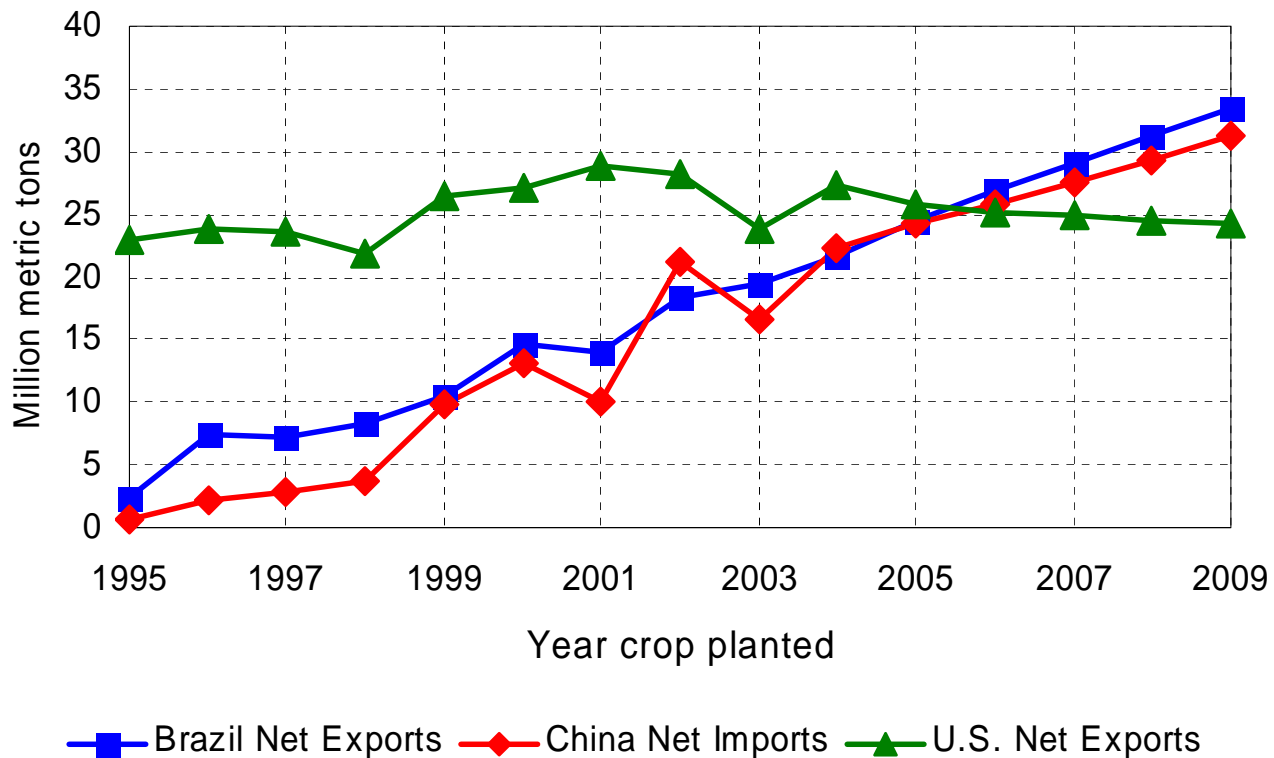
Soybeans + meal + oil net exports



Chinese soybean production and use



Soybean trade



Corn production

Supply	2003	2004
U.S. area planted (mil a.)	78.74	80.97
(Missouri)	2.90	2.95
U.S. area harvested (mil. a.)	71.14	73.31
(Missouri)	2.80	2.85
U.S. average yield (bu./a.)	142.2	160.2
(Missouri)	108.0	159.0
U.S. production (mil. bu.)	10,114	11,741
(Missouri)	302	453

Source: USDA "Crop Production" report, Nov. 2004

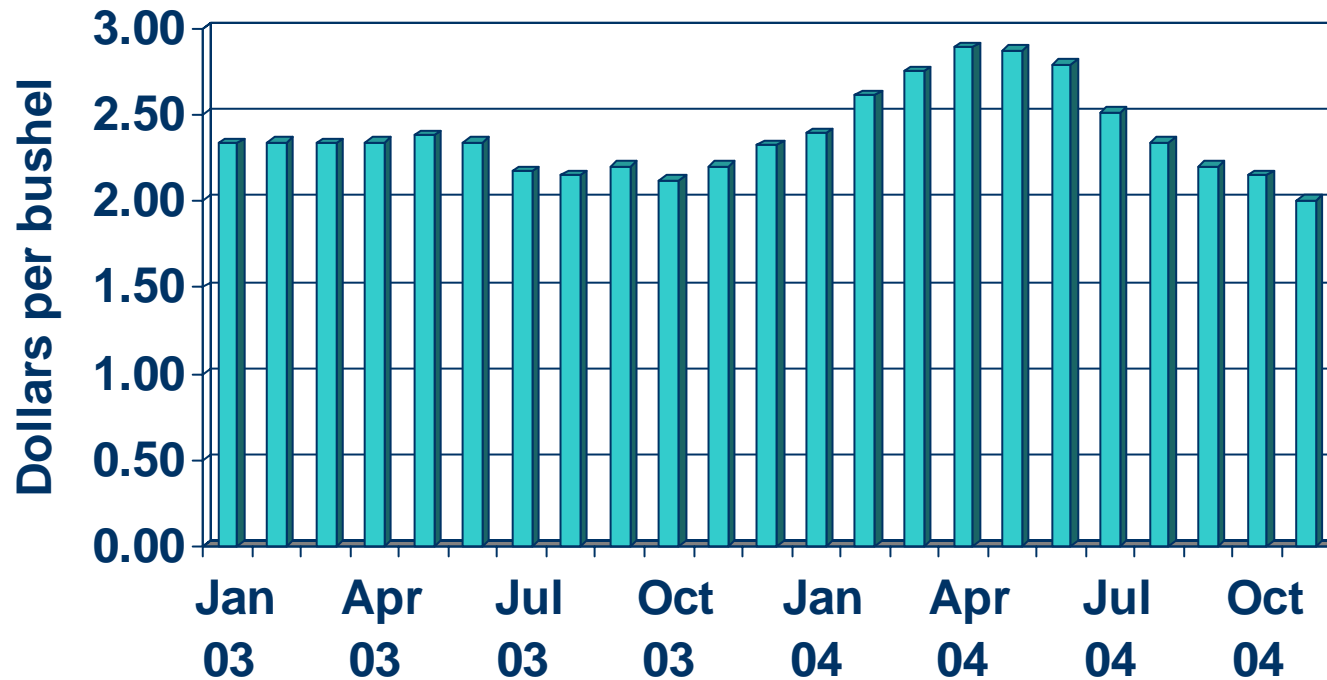
New record levels in **red**

Corn supply and demand (mil. bu.)

Supply	2003/04	2004/05
Beg. Stocks	1,087	958
Production	10,114	11,741
Total (incl. imports)	11,215	12,714
Use		
Domestic	8,360	8,870
Exports	1,897	2,000
Total	10,257	10,870
Ending Stocks	958	1,844
Avg. Price/bu.	\$2.42	\$1.70-2.10

Dec. 2004 USDA estimates. New record levels in **red**.

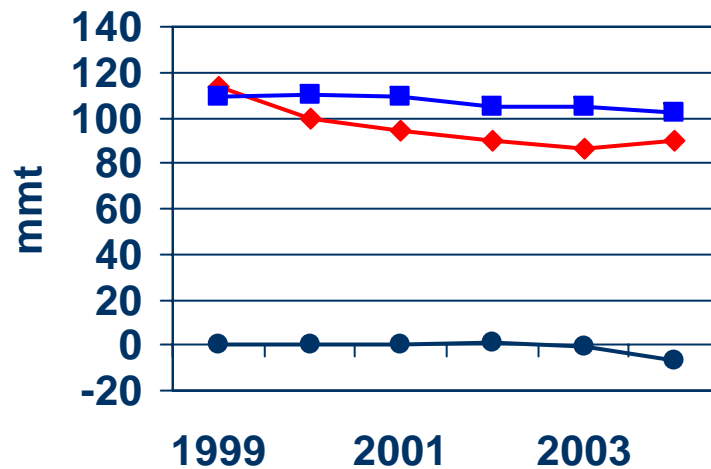
U.S. average corn prices



Source: USDA "Agricultural Prices" report, Nov. 2004

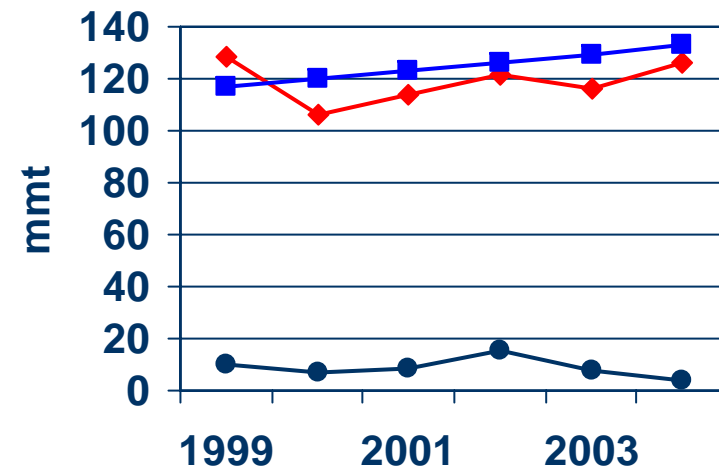
China grain supply and demand

Wheat



◆ Production ■ Consumption
● Net exports

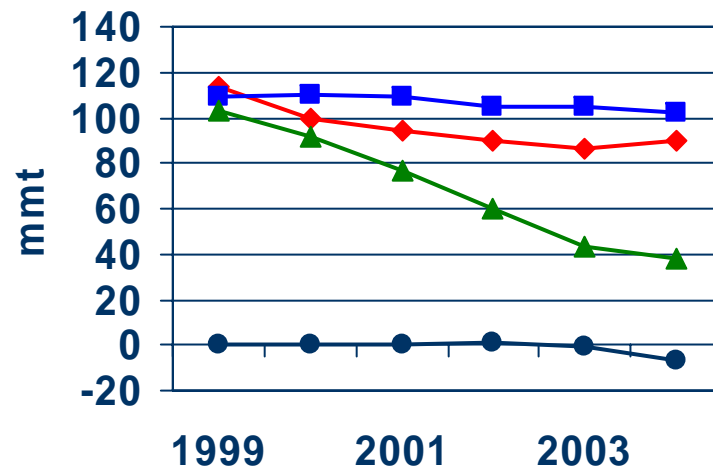
Corn



◆ Production ■ Consumption
● Net exports

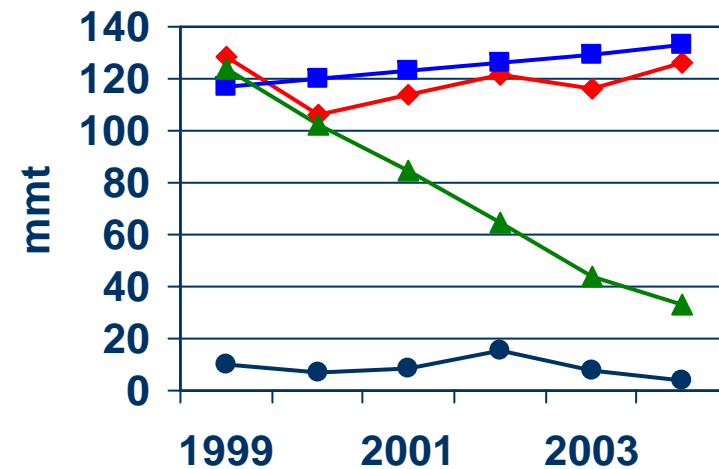
China grain supply and demand

Wheat



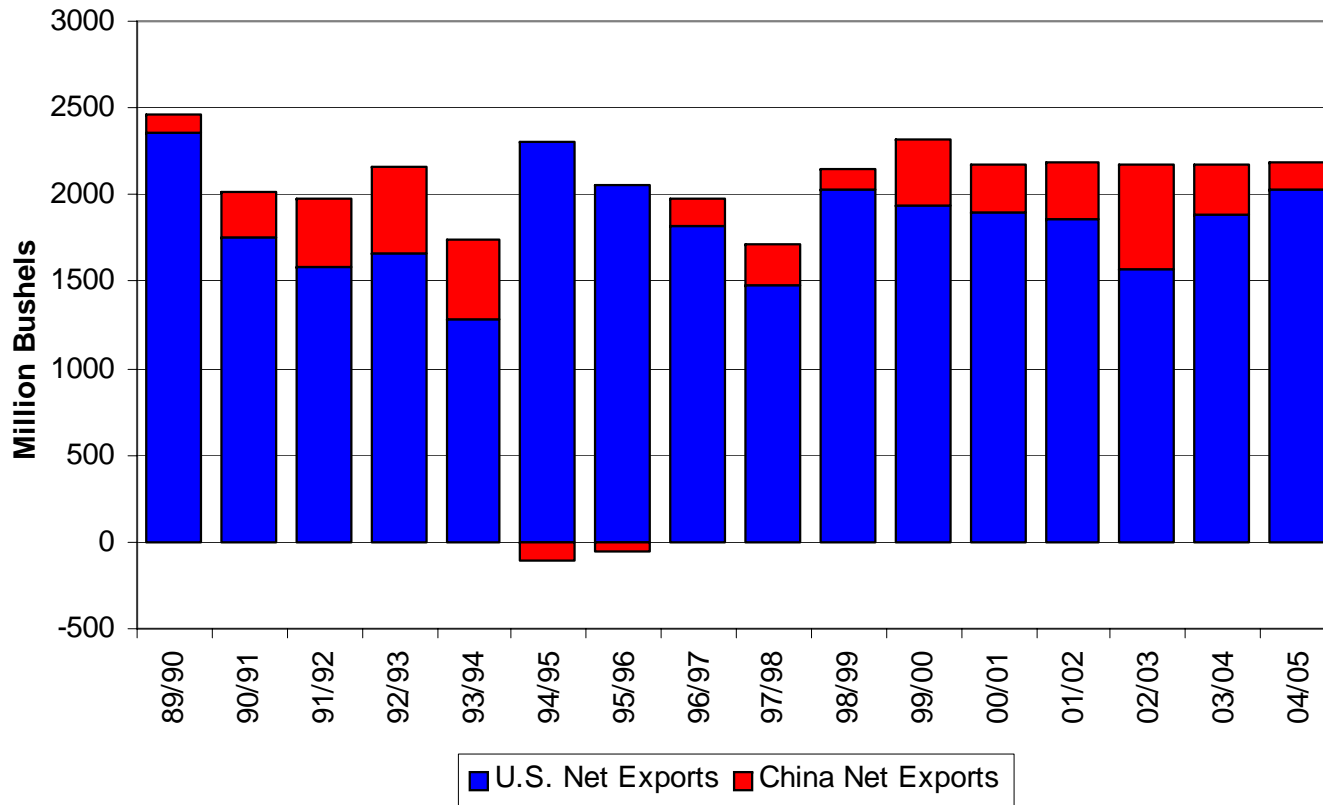
◆ Production ■ Consumption
▲ End. stocks ● Net exports

Corn

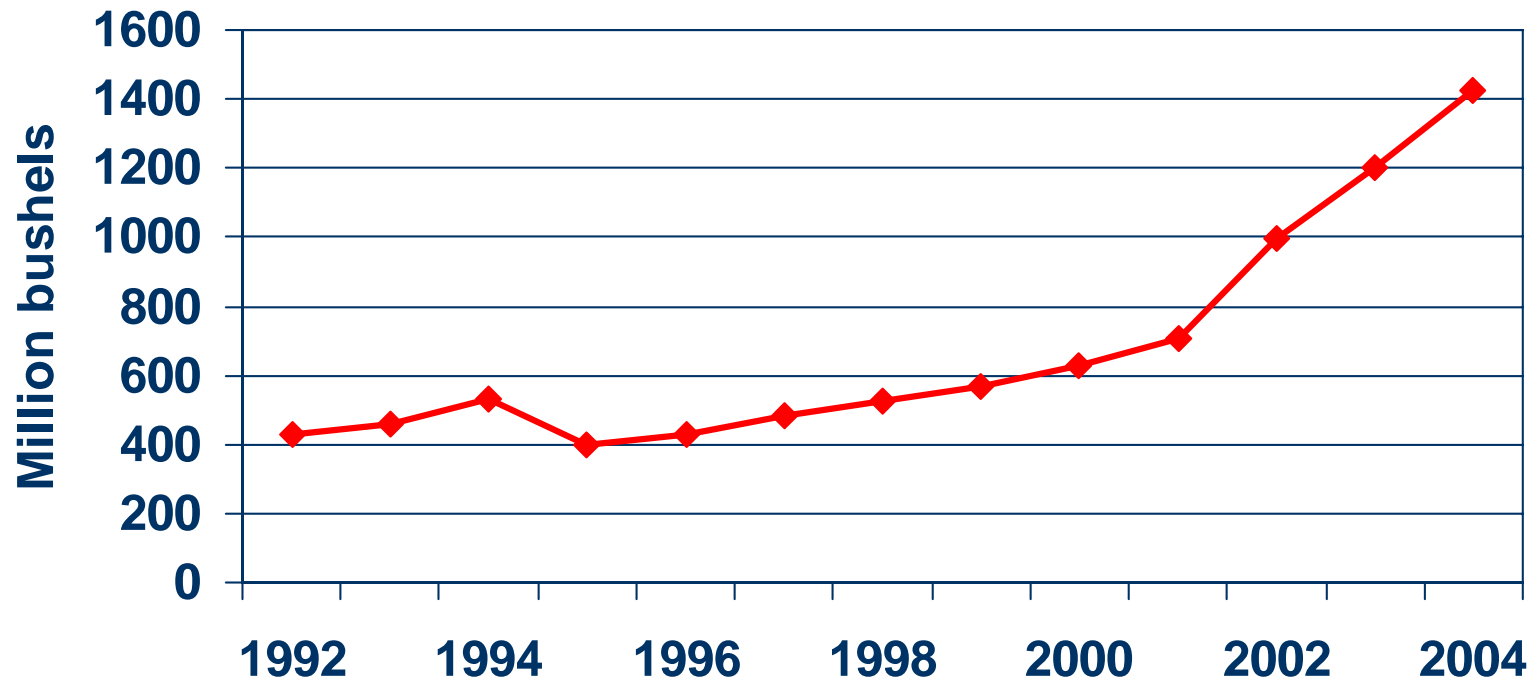


◆ Production ■ Consumption
▲ End. stocks ● Net exports

U.S. and China net corn trade

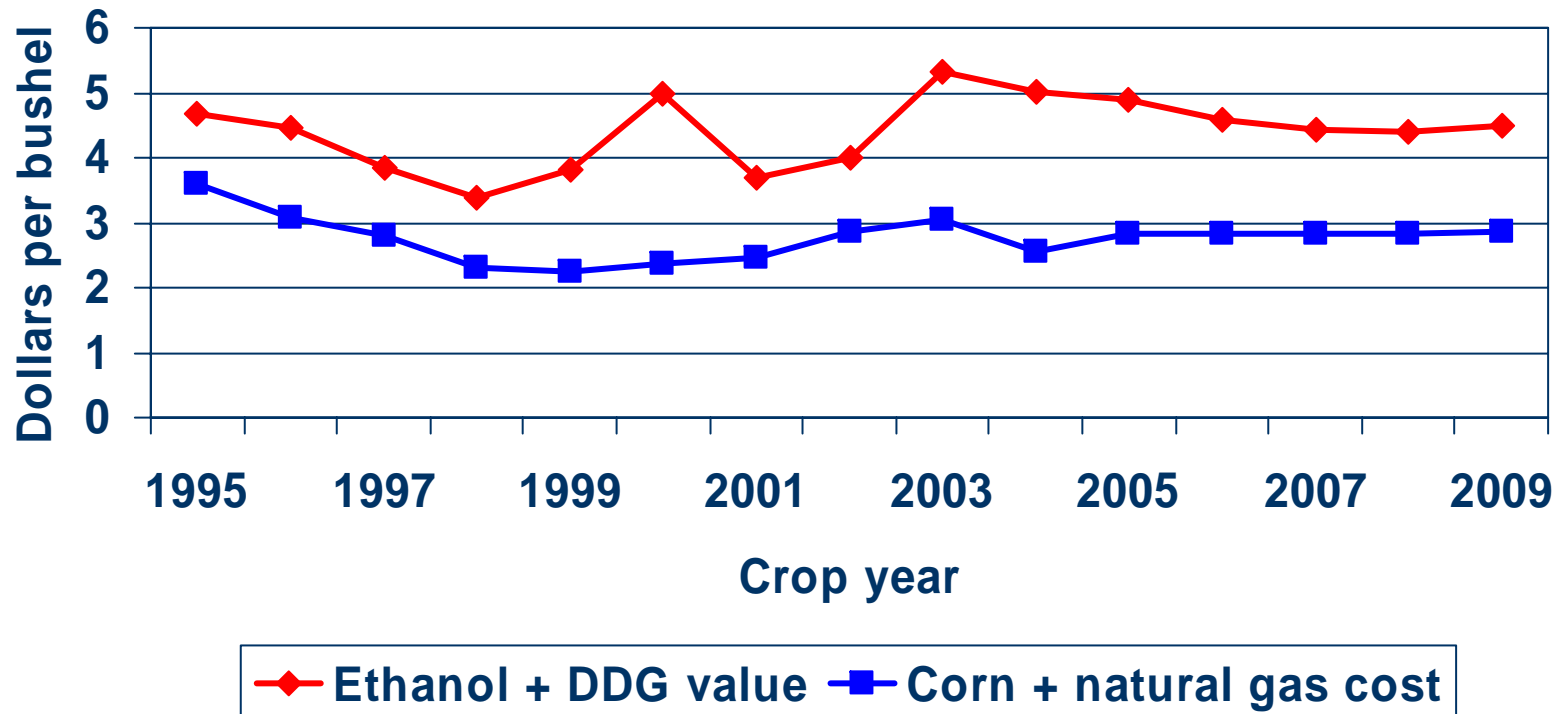


Corn used to produce ethanol



Source: USDA WASDE, Dec. 2004

Corn dry mill costs and returns



Upland cotton production

Supply	2003	2004
U.S. area planted (mil a.)	13.30	13.51
(Missouri)	0.40	0.39
Area harvested (mil. a.)	11.83	12.97
(Missouri)	0.39	0.38
U.S. average yield (lb./a.)	723	818
(Missouri)	862	997
U.S. production (mil. bales)	17.82	22.10
(Missouri)	0.70	0.80

Source: USDA "Crop Production" report, Dec. 2004

All cotton supply and demand (mil. bales)

Supply	2003/04	2004/05
Beg. Stocks	5.39	3.51
Production	18.26	22.82
Total (incl. imports)	23.69	26.36
Use		
Domestic	6.49	6.20
Exports	13.76	12.50
Total	20.25	18.70
Ending Stocks	3.51	7.70
Avg. Price/lb.	61.8 cents	42.5 cents

Source: Dec. 2004 USDA WASDE

Rice production

Supply	2003	2004
U.S. area planted (mil a.)	3.022	3.364
(Missouri)	0.176	0.196
Area harvested (mil. a.)	2.997	3.334
(Missouri)	0.171	0.194
U.S. average yield (lb./a.)	6,645	6,828
(Missouri)	6,130	6,400
U.S. production (mil. cwt.)	199.2	227.7
(Missouri)	10.5	12.4

Source: USDA "Crop Production" report, Nov. 2004

Rice supply and demand (mil. cwt.)

Supply	2003/04	2004/05
Beg. Stocks	26.8	23.7
Production	199.2	227.6
Total (incl. imports)	241.5	265.8
Use		
Domestic	114.1	119.0
Exports	103.7	105.0
Total	217.8	224.0
Ending Stocks	23.7	41.8
Avg. Price/cwt.	\$7.49	\$7.25-\$7.55

Source: Dec. 2004 USDA WASDE

Highlights for other crops

	Wheat	Sorghum	Hay
2003 Production	2,345	411	157.1
2004 Production	2,158	472	165.9
2003/04 Price	3.40	2.39	85.50
2004/05 Price	3.20-3.50	1.50-1.90	83.18

December 2004 USDA estimates, except for FAPRI projections of hay prices.

Wheat and sorghum in mil. bu. and \$/bu., hay in mil. tons and \$/ton

Direct and counter-cyclical payments

	Corn	Beans	Wheat	Cotton	Rice
2004/05 direct payment rates	\$0.28	\$0.44	\$0.52	6.67¢	\$2.35
2004/05 CCP trigger (target-direct paym't)	\$2.35	\$5.36	\$3.40	65.73¢	\$8.15
Dec. USDA price projection for 2004/05	\$1.90	\$4.95	\$3.35	<52.00¢*	\$7.40
Implied 2004/05 CCP	\$0.40	\$0.36	\$0.05	13.73¢	\$0.75

*USDA does not project cotton prices, but if prices are below the 52.0 cent/lb. loan rate, it would trigger maximum CCPs

FAPRI planted acreage projections

	2004	2005	Change
Corn	81.0	80.5	-0.4
Soybeans	75.1	72.9	-2.2
Wheat	59.7	60.6	0.9
Upland cotton	13.5	13.2	-0.3
Rice	3.4	3.2	-0.2
Hay (harvested)	61.6	62.5	0.9
6 others	20.3	21.5	1.2
Sum of above	314.5	314.5	0.0

Note: These projections were prepared in mid-November and assume only modest soybean rust effects.

Crop summary

- Big crops usually mean lower prices
 - U.S., world expect bigger grain, oilseed, cotton crops in 2004 than in 2003
 - Result has been sharp price decline
- Soybean rust could be important factor in 2005 and beyond
- Expect increasing competition from producers in Brazil and Argentina
- Long-term, corn markets supported by strong demand growth—China and ethanol

Livestock and poultry supply and use

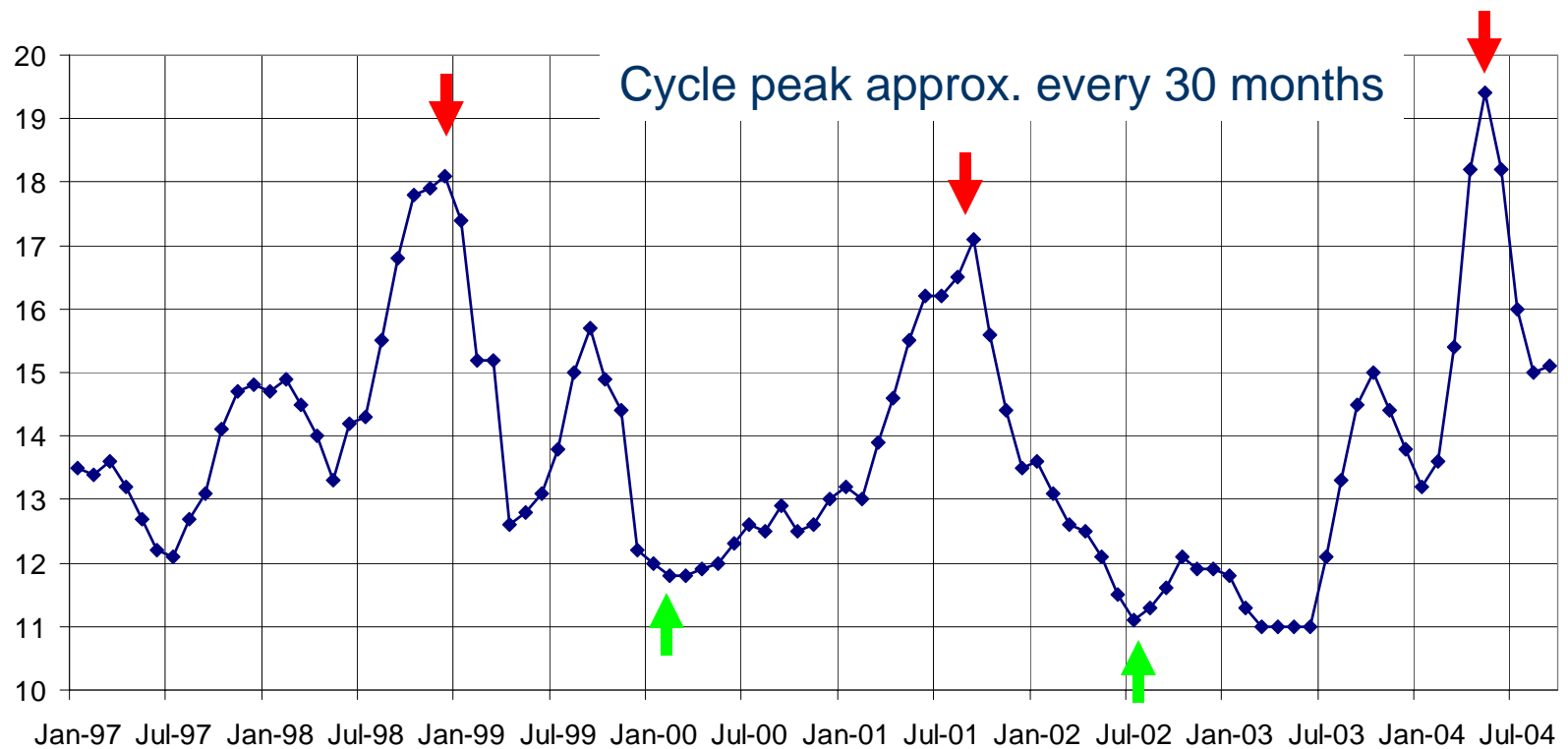
Supply	2003	2004	2005
Beef production	26.3 bil. lb.	24.5 bil. lb.	24.9 bil. lb.
Beef exports	2.5 bil. lb.	0.4 bil. lb.	0.6 bil. lb.
Beef consumption/cap.	64.9 lb.	65.5 lb.	65.9 lb.
Nebraska steer price	\$84.69/cwt	\$84.60/cwt	\$85.00/cwt
Pork production	20.0 bil. lb.	20.5 bil. lb.	20.8 bil. lb.
Pork consumption/cap.	51.8 lb.	51.7 lb.	52.0 lb.
Nat'l 51-52% lean price	\$39.45/cwt	\$52.79/cwt	\$49.00/cwt
Poultry consumpt./cap.	100.4 lb.	103.2 lb.	104.1 lb.
Chicken wholesale	62.0 ct./lb.	74.2 ct./lb.	72.5 ct./lb.

Source: USDA WASDE, December 2004

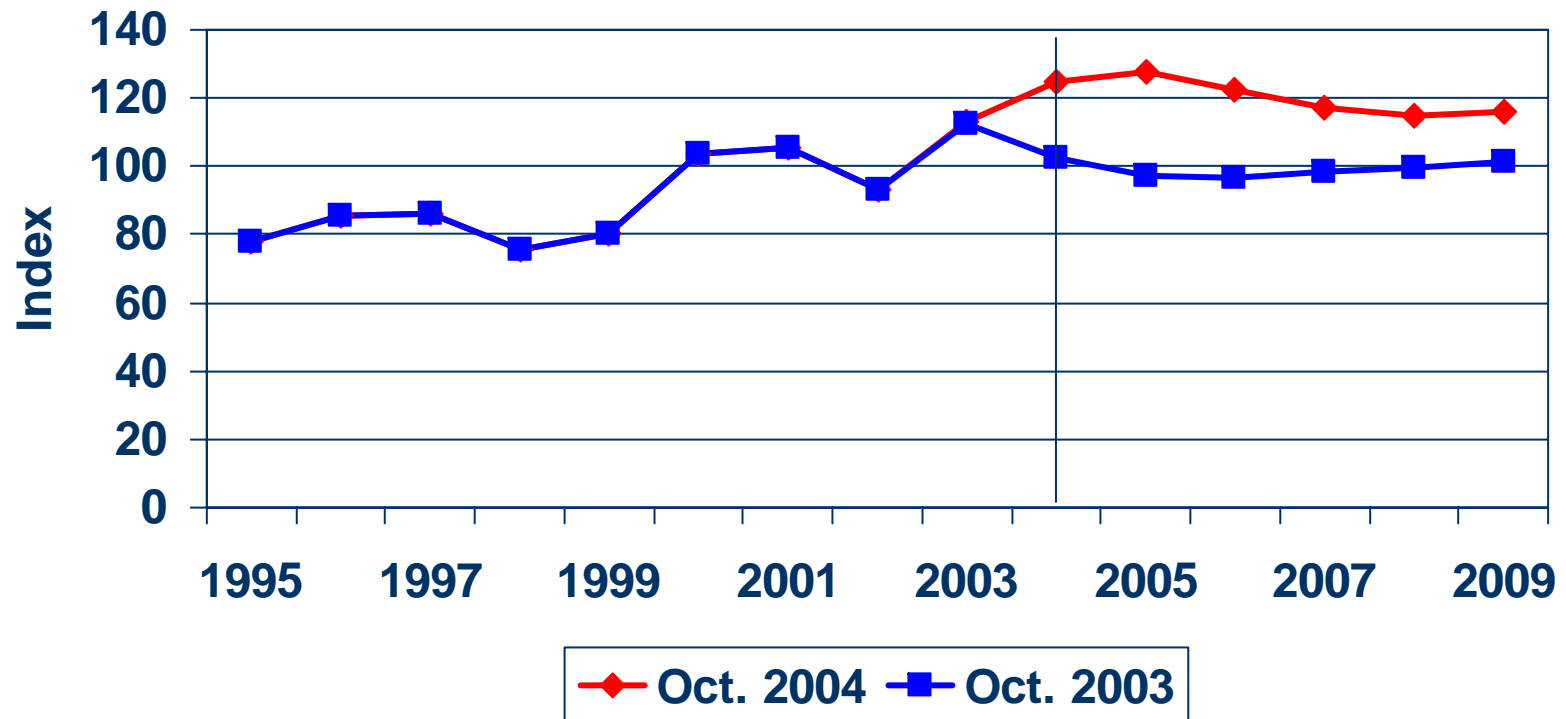
What do apparent changes in demand patterns mean?

- Data seem to suggest demand shifts
 - Meat demand is surprisingly strong—in 2004, higher prices and consumption at same time
 - In contrast, wheat, sugar demand is weak
- Fad or permanent shift?
 - Makes a huge difference for future consumption, prices, farm income
 - Some survey-based research suggests interest in Atkins diet may have peaked—but meat demand remains strong

U.S. all-milk price

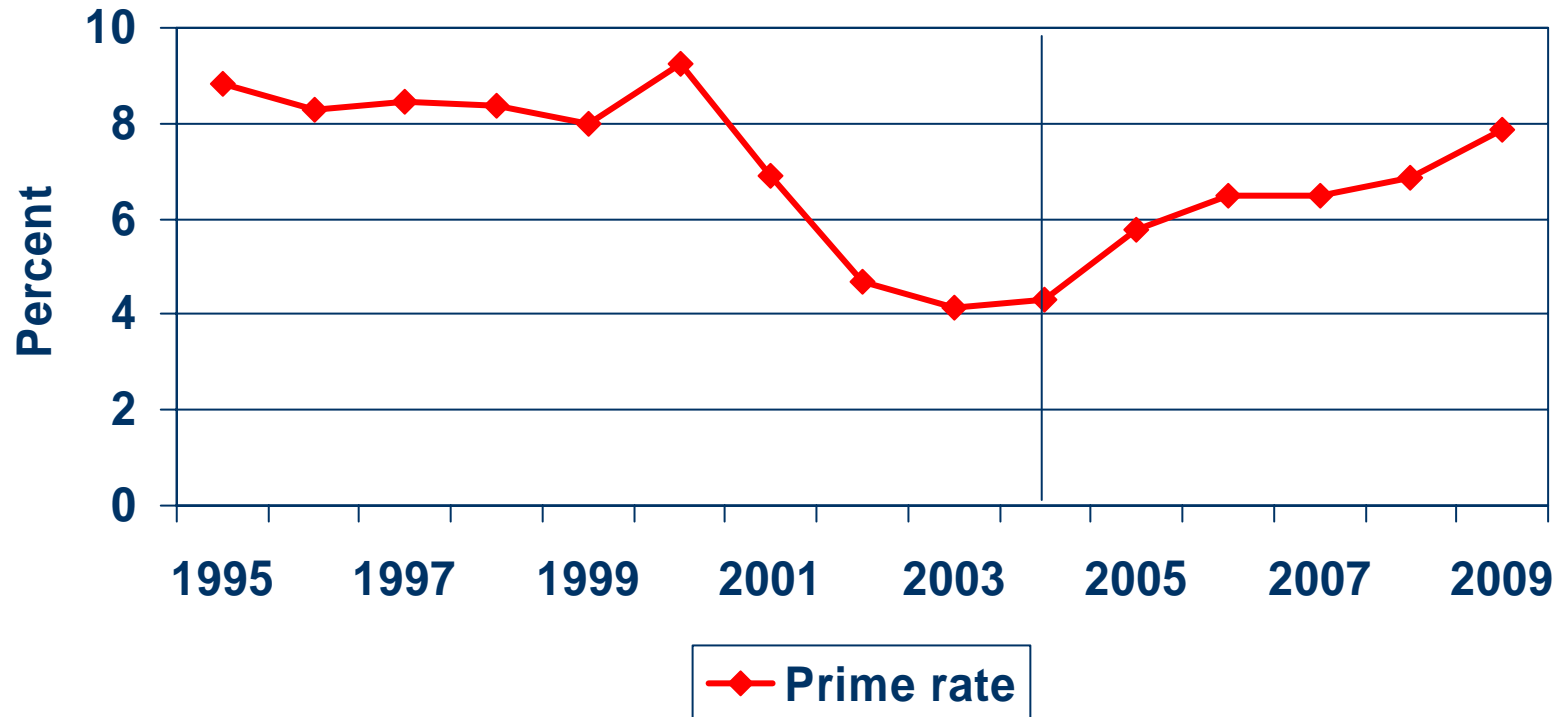


Producer price index for fuels



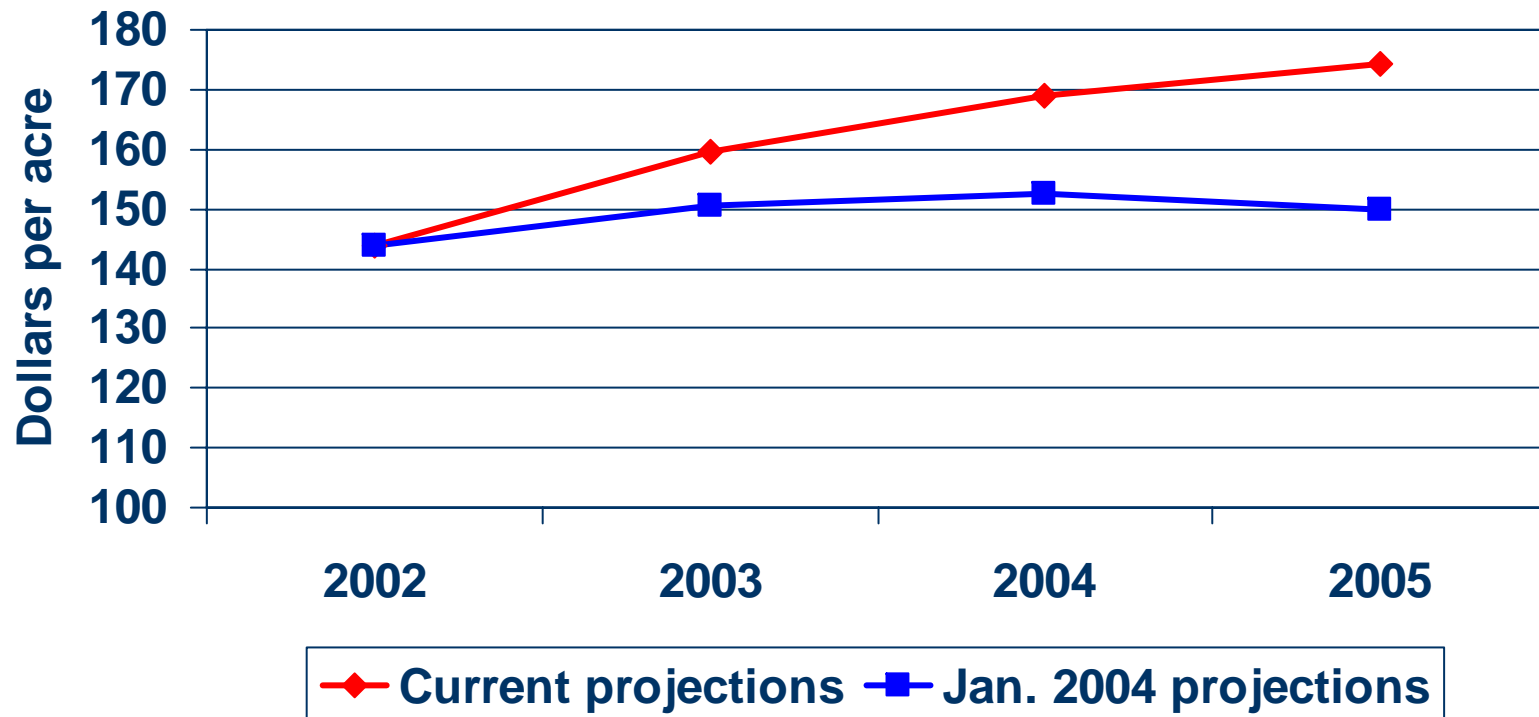
Source: Global Insight projections

Interest rates



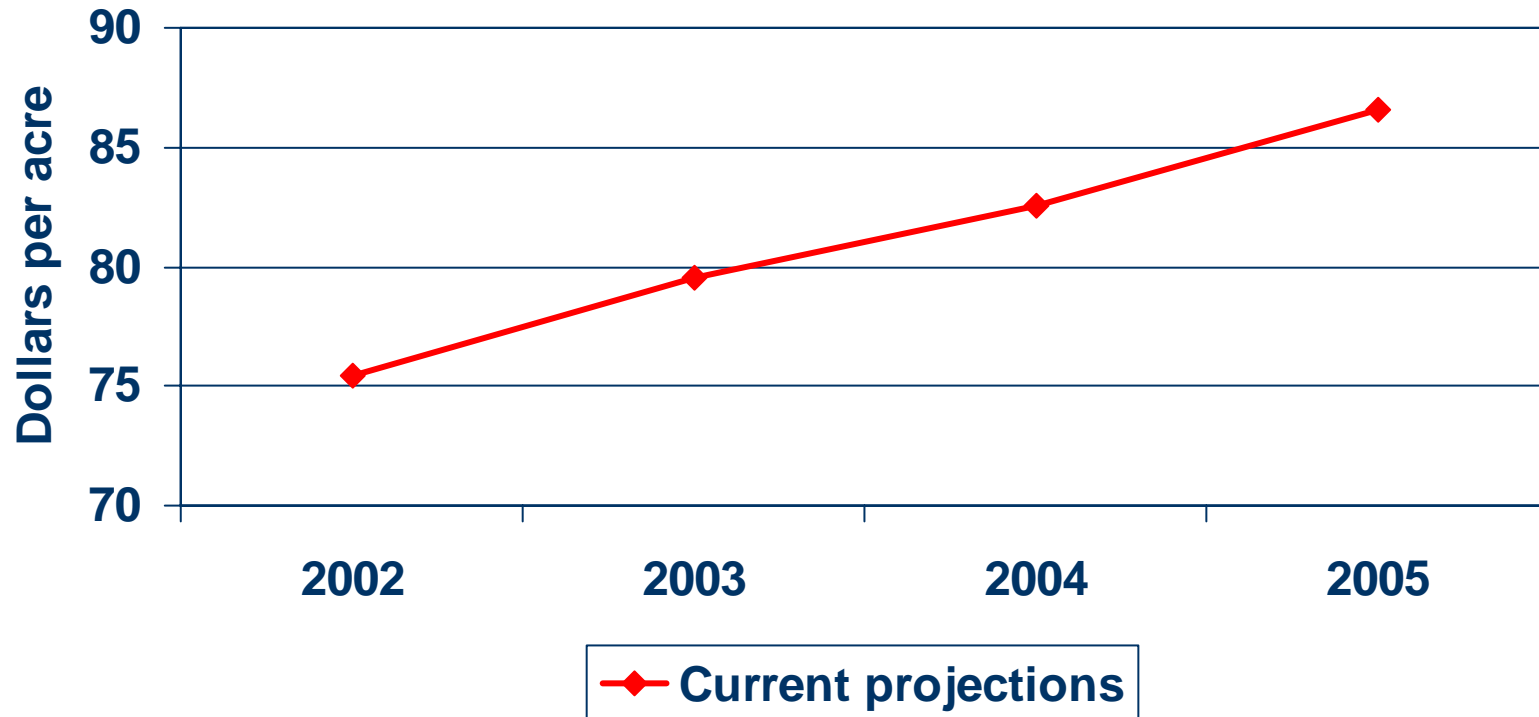
Source: Global Insight, Oct. 2004

U.S. corn variable production expenses



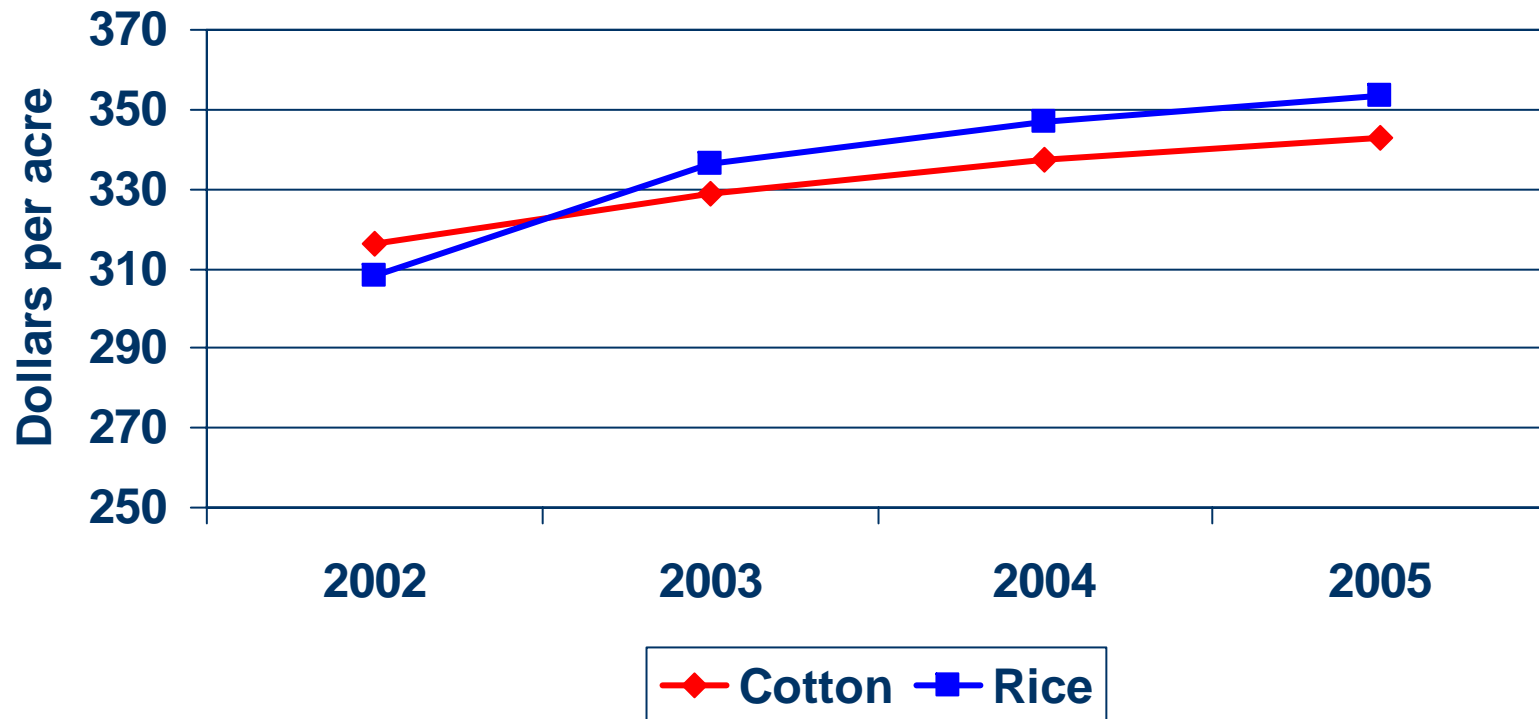
Source: FAPRI estimates based on USDA data and Global Insight macroeconomic projections

U.S. soybean variable production expenses



Source: FAPRI estimates based on USDA data and Global Insight macroeconomic projections. Soybean rust effects could lead to significantly higher 2005 costs than shown here.

U.S. cotton and rice variable production expenses



Source: FAPRI estimates based on USDA data and Global Insight macroeconomic projections

Bad news/good news on input costs

- Bad news
 - Fuel and fertilizer prices are higher than expected
 - Low interest rates probably won't last
 - Soybean rust could be expensive to control
- Good news
 - Some hope that energy prices will moderate
 - Interest rates still relatively low

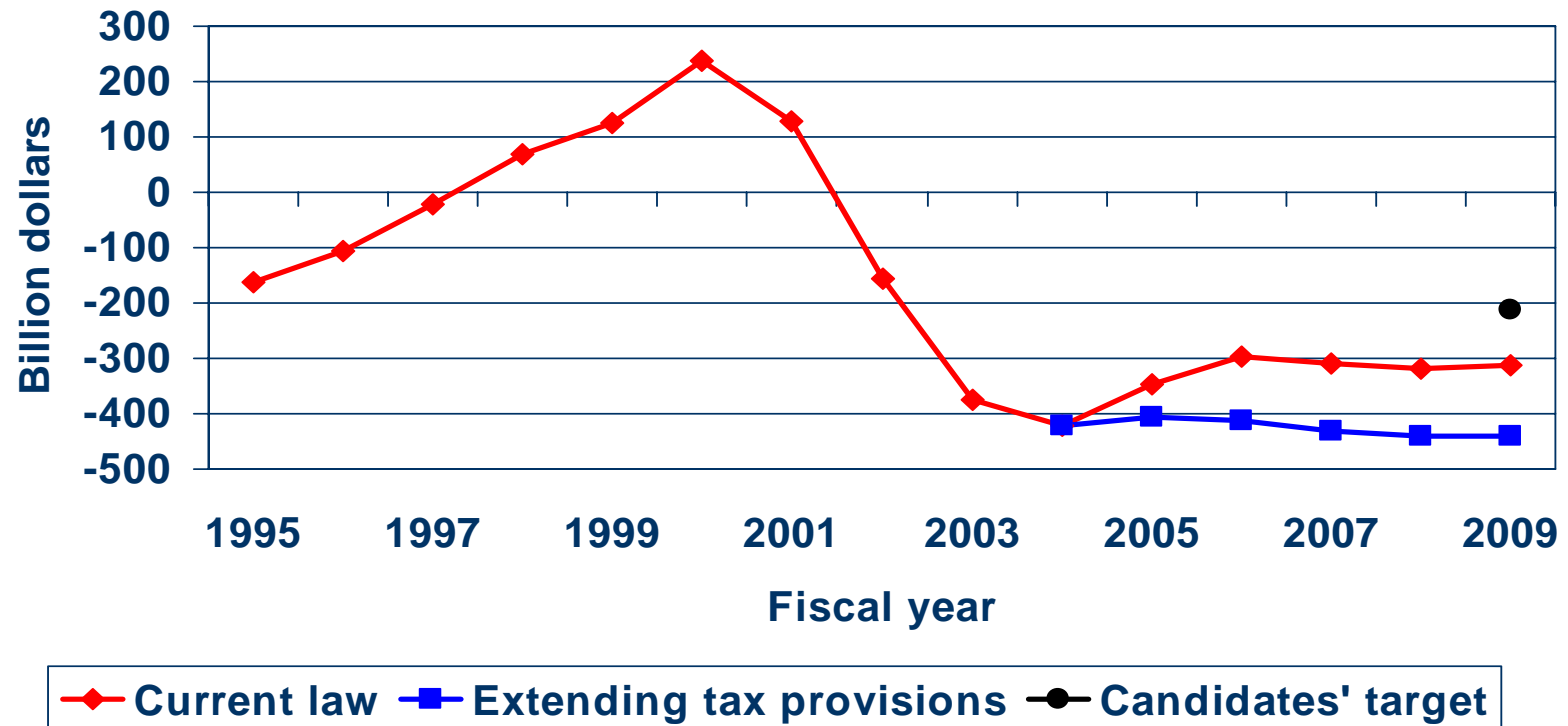
And on the farm policy front

- As always, it's about as hard to predict 2005 policy developments as it is to predict 2005 weather
- But here are some things to watch
 - Election effects
 - Budget debate
 - WTO cotton case
 - WTO framework agreement

Election implications for key players in Washington

- New Secretary of Agriculture: Mike Johanns of Nebraska
- Cochran (R-MS) will probably head Appropriations, so will no longer chair Senate Ag. Committee
- New chair of Senate Ag. likely to be Saxby Chambliss (R-GA)
- Daschle (D-SD) lost, so Reid (D-NV) is new minority leader in Senate
- Stenholm (D-TX) lost, so Peterson (D-MN) will probably be new lead Democrat on House Ag. Committee

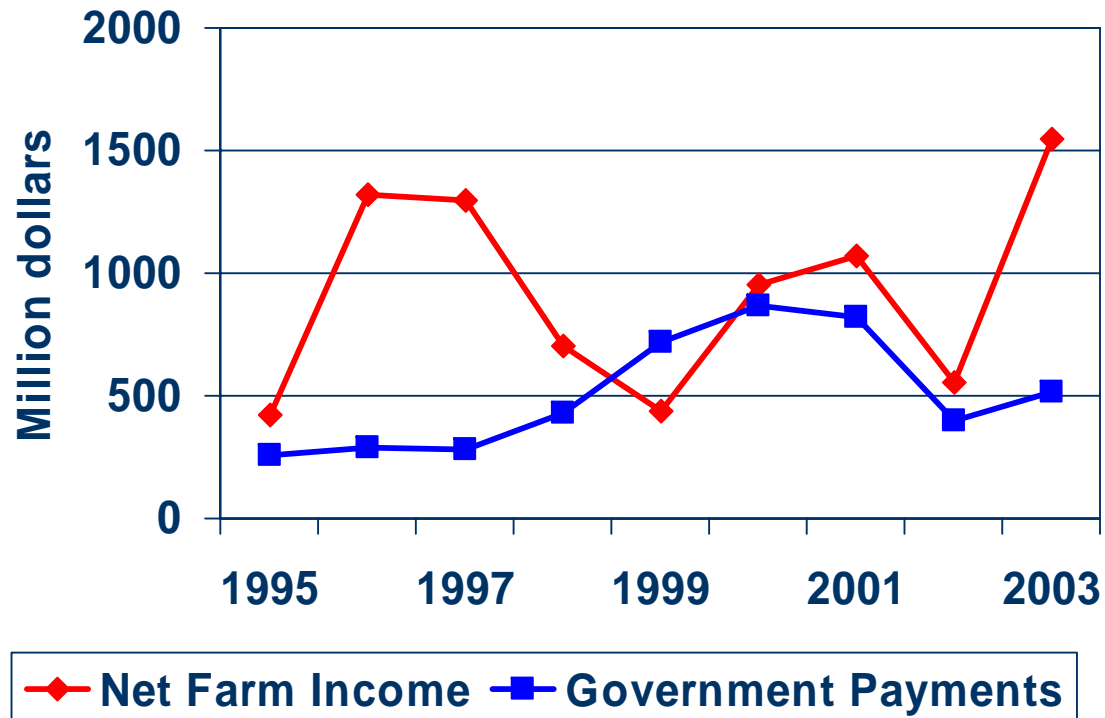
U.S. federal budget surplus/deficit



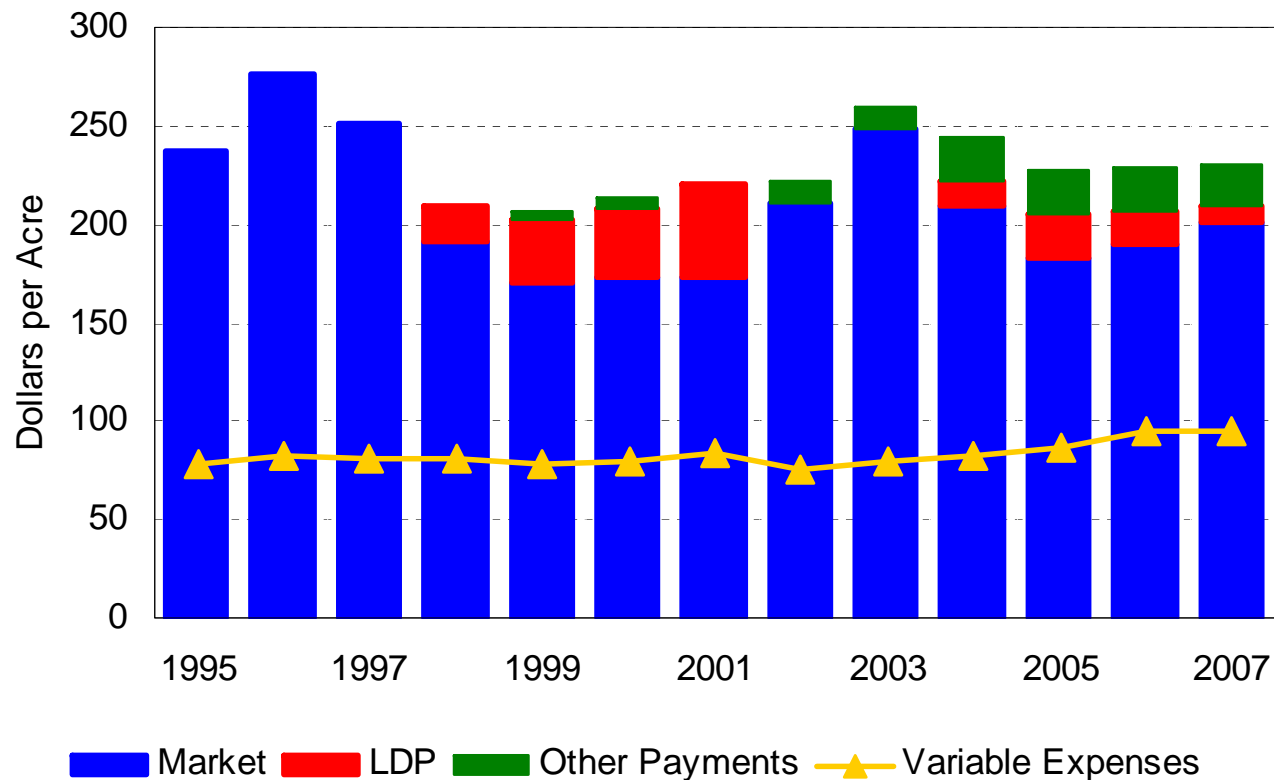
Budget concerns and implications

- Current conventional wisdom on the Hill: 2005 will be budget-cutting year
 - Early betting line was that this would occur regardless of election outcome
 - But by no means is it a sure thing
- Ag. programs likely to be affected if there is a large budget cutting effort
 - Likely to be “shared pain”
 - Mix, depth of cuts very hard to anticipate

Missouri government payments and net farm income

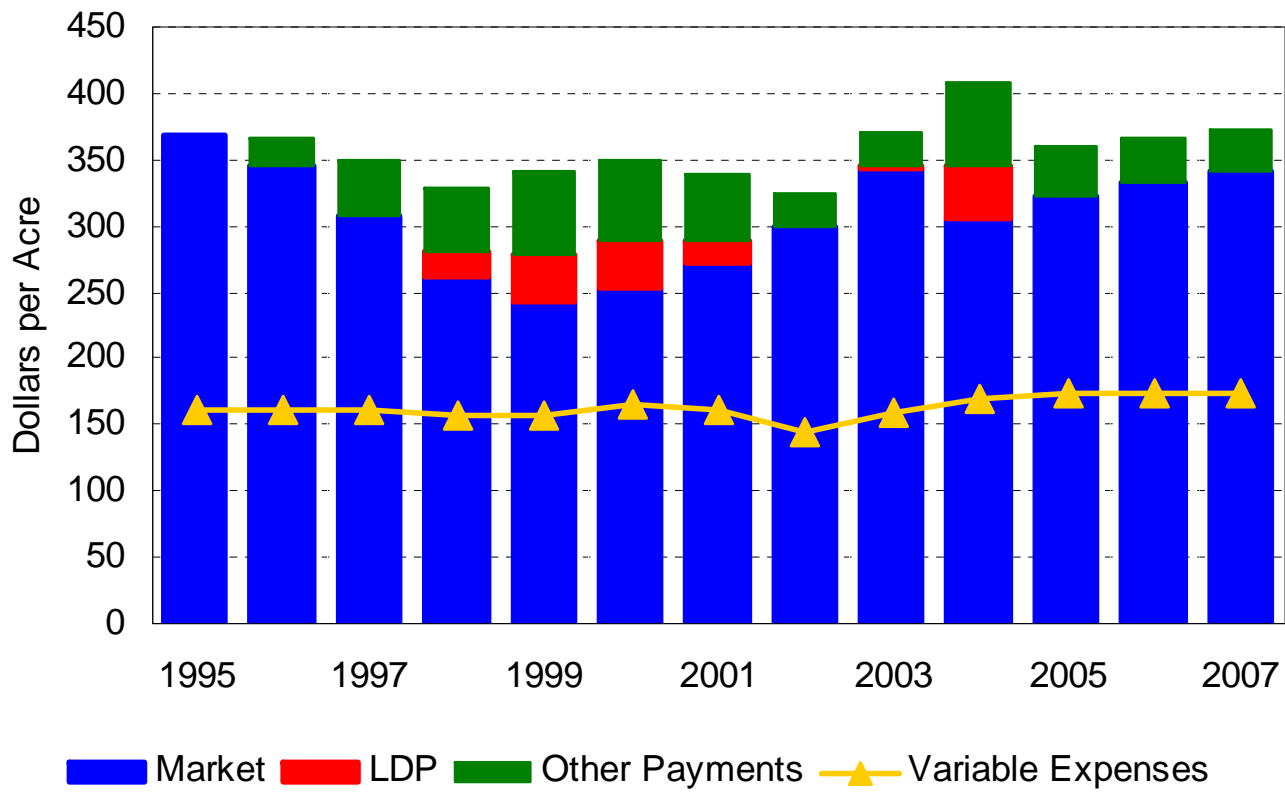


U.S. average soybean returns



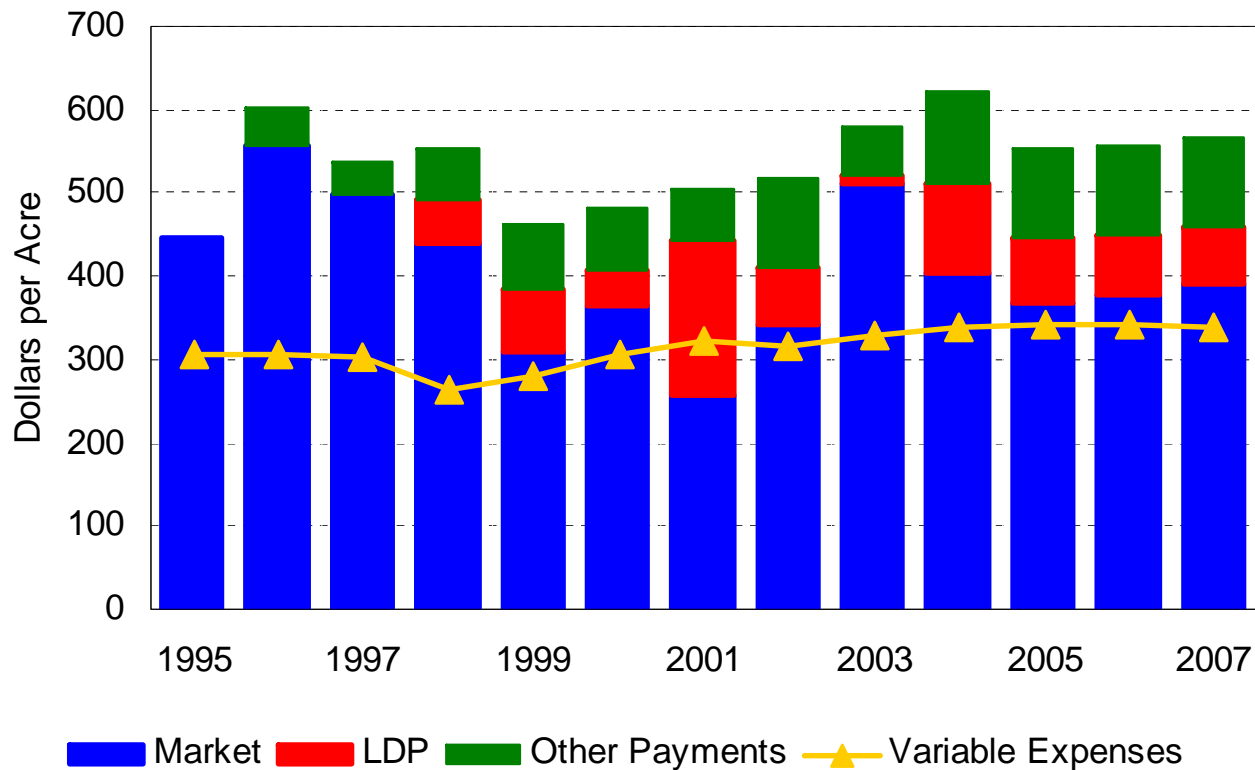
FAPRI November 2004 estimates

U.S. average corn returns

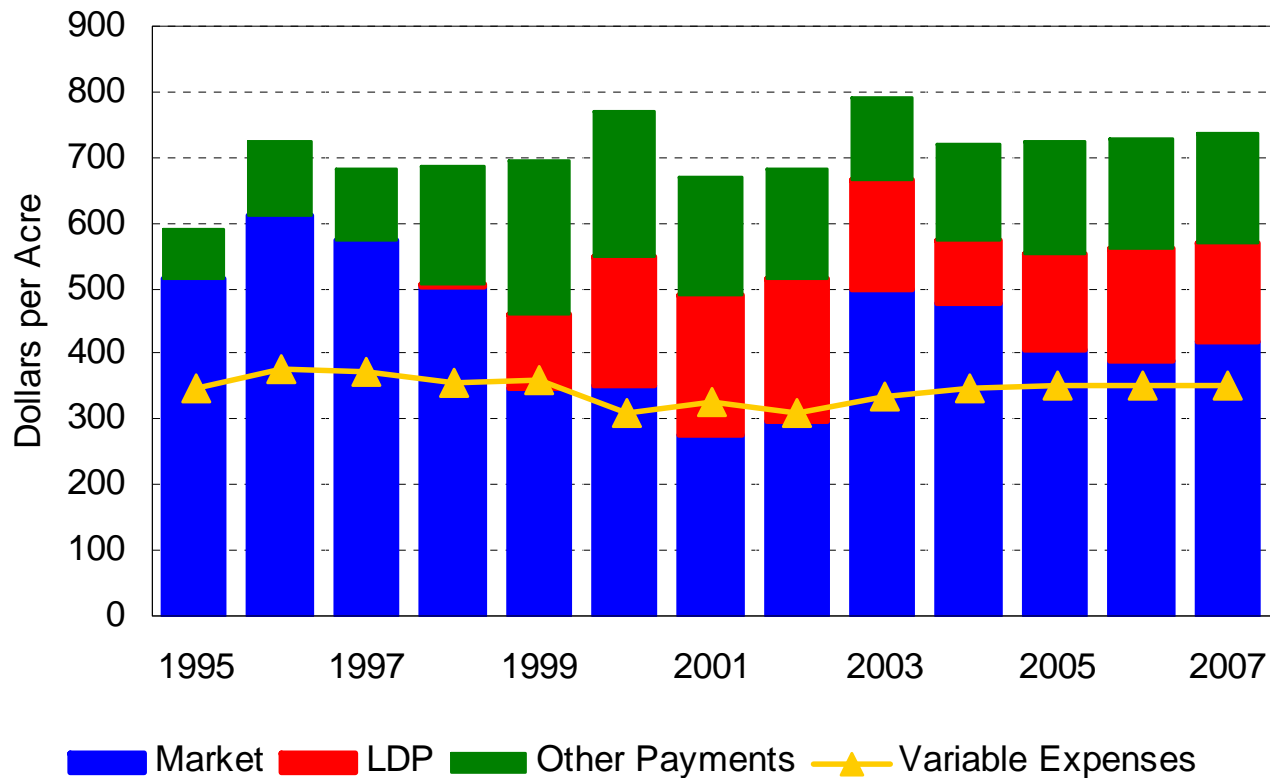


FAPRI November 2004 estimates

U.S. average upland cotton returns



U.S. average rice returns



FAPRI November 2004 estimates

Brazilian WTO cotton case



Brazilian WTO cotton case

- Brazil challenged various programs supporting U.S. cotton producers and exports
- WTO panel has found in favor of Brazilians on many points
- Appeal is currently under consideration

The Brazilian argument in a nutshell

- U.S. policies have encouraged U.S. production and exports of cotton
- This has lowered world cotton prices, harming Brazilian cotton producers
- At least some of these U.S. policies violate WTO rules
- The U.S. should change those policies or be forced to offer compensation

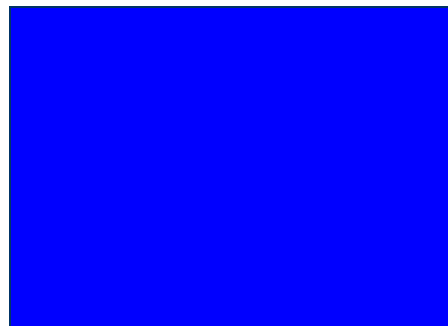
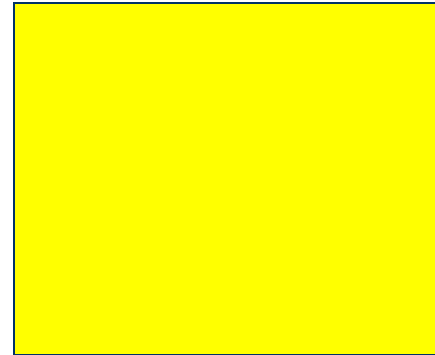
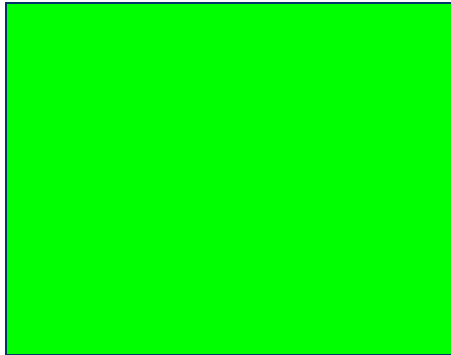
Some key findings

- Panel found that
 - Step 2 program (provides payments to users of U.S. cotton) violates WTO rules
 - GSM export credit program for certain commodities (cotton, soybeans, and some others) is a prohibited export subsidy
 - U.S. programs not protected by “Peace Clause”
 - U.S. increased support to cotton since 1992
 - So U.S. should change programs that hurt Brazil by encouraging U.S. production and exports

What happens now

- U.S. appealed in late October
 - Appeal will not be resolved until early 2005
 - If U.S. wins appeal on all counts, end of story
- If U.S. appeal fails on some or all counts
 - Will have some time to enact changes to bring policies into compliance
 - If fail to do so, Brazil and other countries entitled to compensation, and can raise tariffs if not provided
 - But remember: policy changes aren't "automatic" when a country loses a WTO case (e.g., EU beef hormone case)

WTO framework agreement



WTO framework agreement

- August 1 agreement in Geneva on a framework for a new WTO accord
- Provides an outline of what an eventual agreement may contain
- But it's mostly an agreement to keep negotiating
- In agriculture, covers producer support measures, export competition, and market access (tariffs, etc.)
- Press reports that the framework will have particular impacts on farm policy are premature at best

Export competition & market access

- Countries promise to eliminate export subsidies
 - This mainly affects the EU—dairy & sugar more than grains, oilseeds, and cotton
 - U.S. would have to make changes in our export credit program
- Countries promise to do more to open markets
 - Lower tariffs, increase tariff-rate quotas
 - Make biggest changes in most protected markets
 - BUT, countries can designate “sensitive” and “special” products for which they wouldn’t have to open markets as much
 - AND, there are no numbers (% reductions in tariffs, etc.) in the framework agreement on market access

Domestic support

- OK, this part gets complicated
- Support categorized as
 - Green box: “minimally” trade distorting (food stamps, research, conservation, and maybe direct payments)
 - Amber box: subsidies and price supports tied to production (marketing loans, milk price supports)
 - Blue box: in between (under framework agreement, counter-cyclical payments would qualify)
 - “*De minimis*”: subsidies that don’t exceed 5% of value of production

Support reduction requirements

- Total of blue, amber, and *de minimis* must be reduced 20% from the **bound** level as soon as the agreement goes into force
- But remember that bound level for U.S. is sum of
 - \$19.1 billion old limit amber (excluding *de minimis*)
 - \$10 billion or so in the new blue box limit
 - Several billion in commodity-specific *de minimis* support
 - \$10 billion or so in non-commodity specific *de minimis* support
- No limit on green box

Why 20% may effectively be 0

- 20% required immediate cut is relative to a large (say, \$40-\$45 billion) bound number
- No U.S. policy changes are likely to be required to comply
 - Actual subsidies are far lower than \$40 billion by almost any accounting
 - Even our regular amber box support is well below \$19.1 billion now (especially if CCPs don't count)
- Like reducing the speed limit from 100 to 80 when your car can't go more than 70

So should I care about this?

- Final agreement will almost certainly require more cuts than just the 20% down payment
 - Developing countries (led by Brazil, India) have been very insistent that U.S. and EU must make real reductions if there is to be agreement
 - Cotton has been singled out for special attention
- Even if overall limits appear not to be a problem, there could be commodity-specific limits
 - What happens if prices drop sharply and LDPs increase dramatically for a given crop?

Next steps

- Negotiations continue, likely to intensify in 2005
- Original target of agreement this year won't happen
- Meeting in Hong Kong in Dec. 2005 is the next “big event,” and negotiators will want progress by then
- But most think a full agreement is unlikely before 2006 at the earliest (could run into U.S. farm bill calendar—current bill expires in 2007)
- Other countries could follow Brazilian example and file cases under current rules if they are unhappy

Don't panic, but pay attention

- Arguably, the only clear outcome so far is that countries have agreed to continue negotiations
- While we have a framework, fine print will determine the implications for U.S. agriculture
 - More access to other markets and no EU export subsidies could mean higher commodity prices
 - But this could be offset by more imports of some commodities and reduced subsidies
 - Impossible to predict balance for U.S. agriculture as a whole or for particular sectors based solely on framework

Policy summary

- WTO and U.S. farm policy outlook is uncertain
- Real pressures on farm policies from
 - Brazilian WTO case
 - August WTO framework agreement
 - Budget deficit
- Too soon to panic or jump to conclusions
- But important policy changes could come