Global Policies and Risk Management

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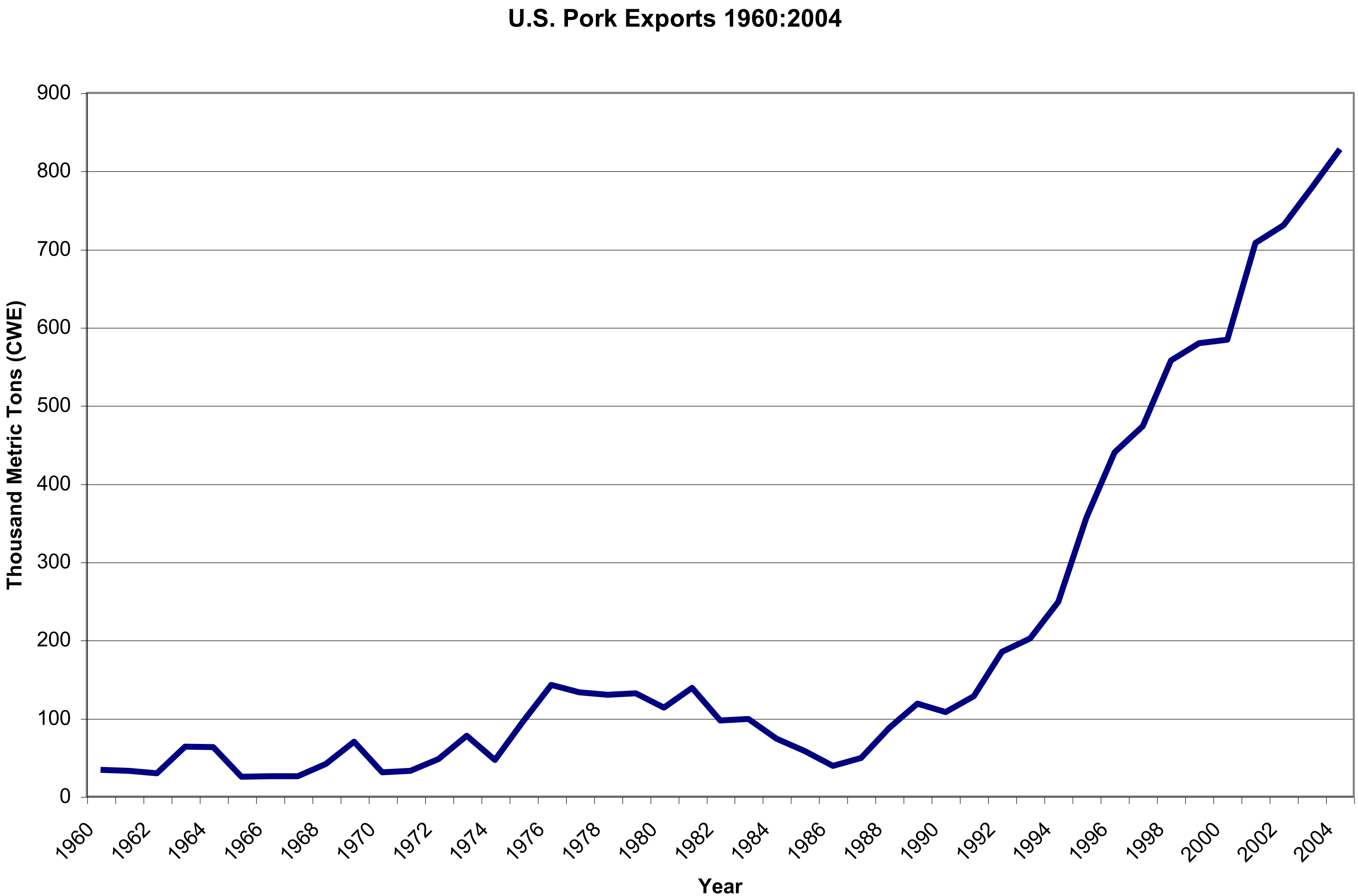
Overview of Talk

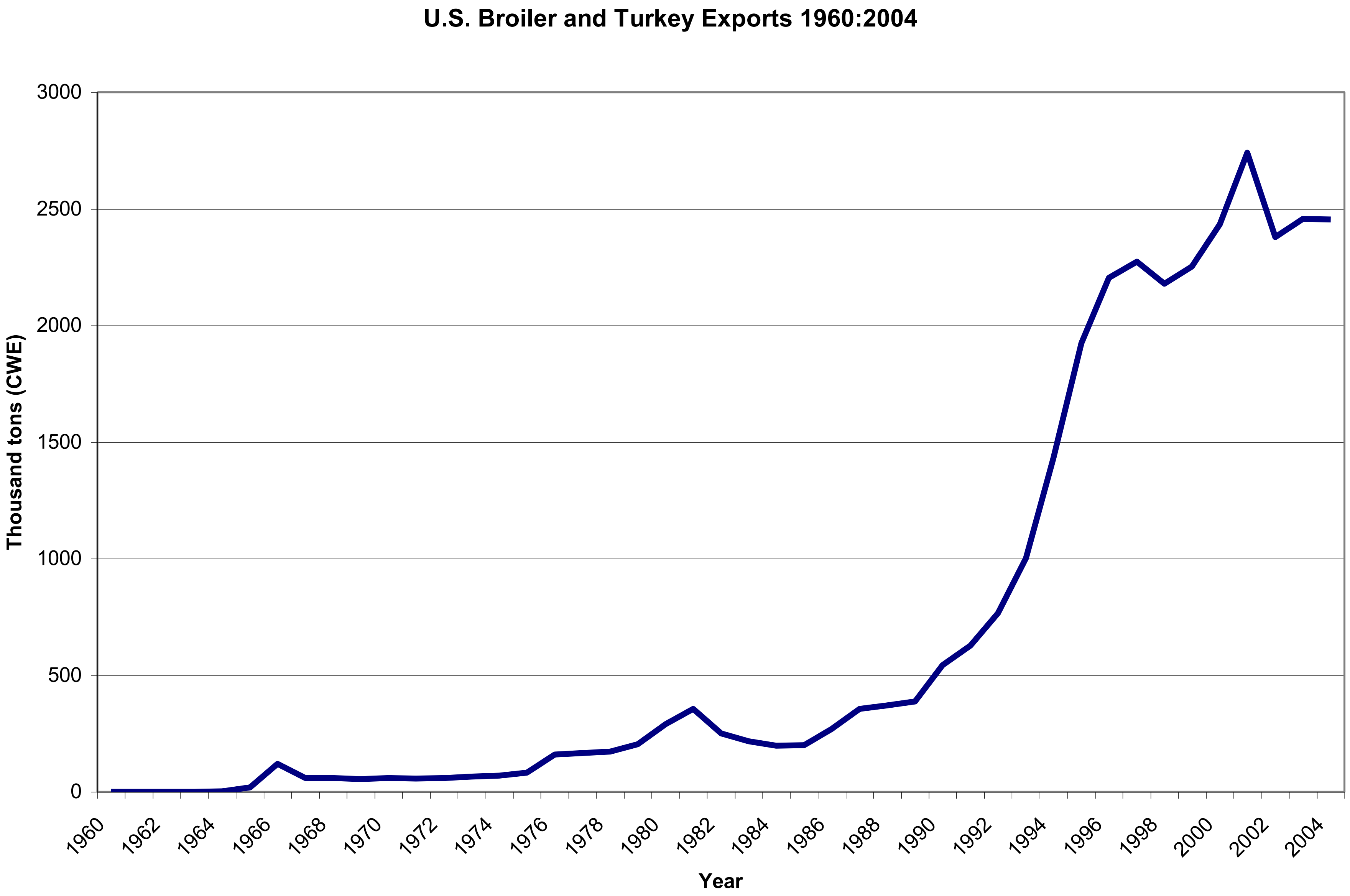
- Review status of WTO talks
  - Framework agreement
  - WTO cotton ruling
- Review proposal to make U.S. farm programs more acceptable to WTO
- Another perspective on outlook for corn supply/demand balance
- Review crop insurance outlook for 2005 and 2006

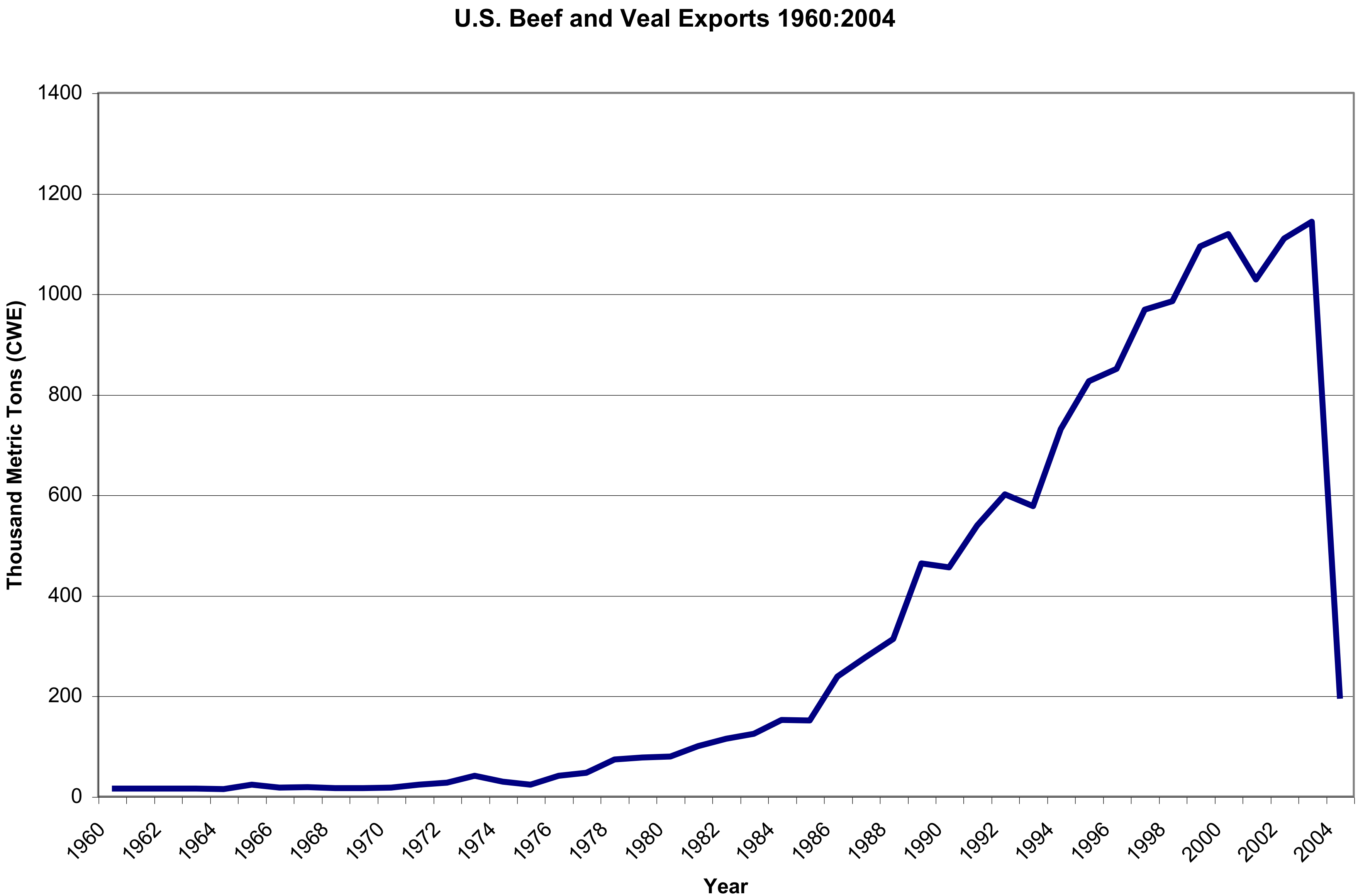
Status of WTO Negotiations

- Late July agreement keeps negotiations going
- Old agreement:
  - Amber box expenditures capped at $19.1 billion in support (LDPs, MLAs, CCPs, tariff support)
  - No limit on blue box (old deficiency payment or green box (AMTA, DPs)

What are the benefits of an agreement?


U.S. Pork Exports 1960:2004
Thousand Metric Tons (CWE)
0
100
200
300
400
500
600
700
800
900
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
Year


U.S. Broiler and Turkey Exports 1960:2004
Thousand tons (CWE)
0
500
1000
1500
2000
2500
3000
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
Year


U.S. Beef and Veal Exports 1960:2004
Thousand Metric Tons (CWE)
0
200
400
600
800
1000
1200
1400
1960
1962
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
Year

New Framework Agreement

- Highlights include:
  - “Boxes” are kept
  - New definition for the blue box
  - 20% cut in support as a “downpayment”
  - Further future cuts as negotiated

CCPs to the Blue Box

- CCPs plus LDPs could exceed amber box limits
- US negotiated CCPs into the limited blue box.
- Previous loopholes will be tightened a bit, but overall we have an increase in flexibility
- Likely that US can negotiate “cuts” without having to cut anything.

Cotton Finding is the Wild Card

- Brazil brought a complaint about US cotton subsidies to the WTO panel.
- Old WTO agreement held countries harmless if
  - amber box spending was below the cap, *and*
  - Crop specific spending was below the base period spending (peace clause)
- WTO panel ruled that cotton spending exceeded the base period, and

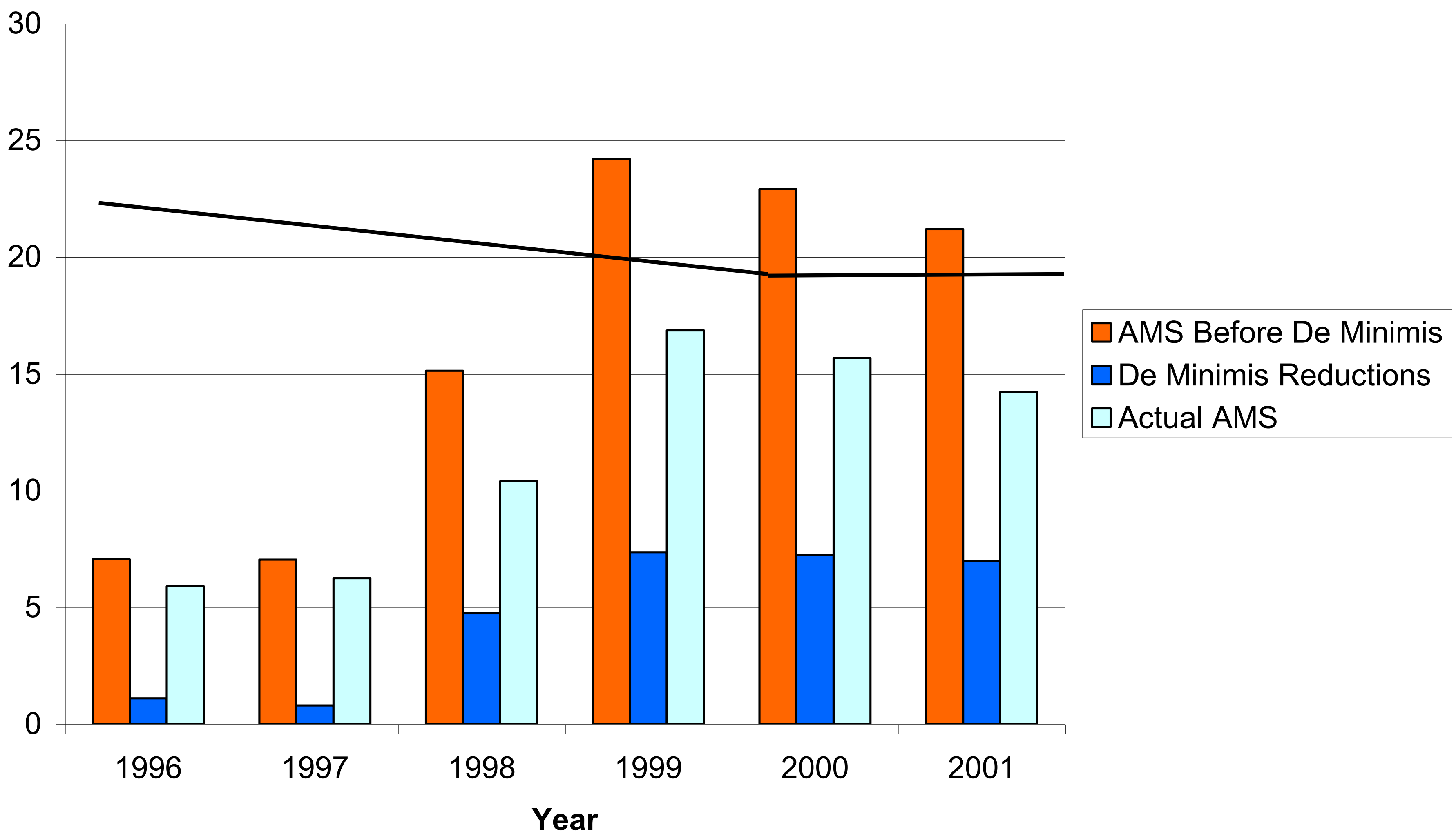
WTO Cotton Finding

- Brazilian cotton producers were harmed by U.S. subsidies
  - Export subsidies (step 2) should be immediately ended
  - LDPs lowered world prices, causing harm to Brazilian cotton farmers
  - AMTA and DPs "do not fully conform" to Green Box guidelines because of restrictions on fruit and vegetable production.

Will Cuts be Necessary?

- The 20% “down payment” can be made without affecting anything
- Subsequent cuts may lead to some program adjustment
- But added flexibility in the framework should lead to minimal required changes.

How the U.S. Met Its AMS Limits



Outlook

- US and EU will not have to make many changes
- Why should we expect importing countries to change?
- Grand deal is for US and EU to cut domestic support in return to market access

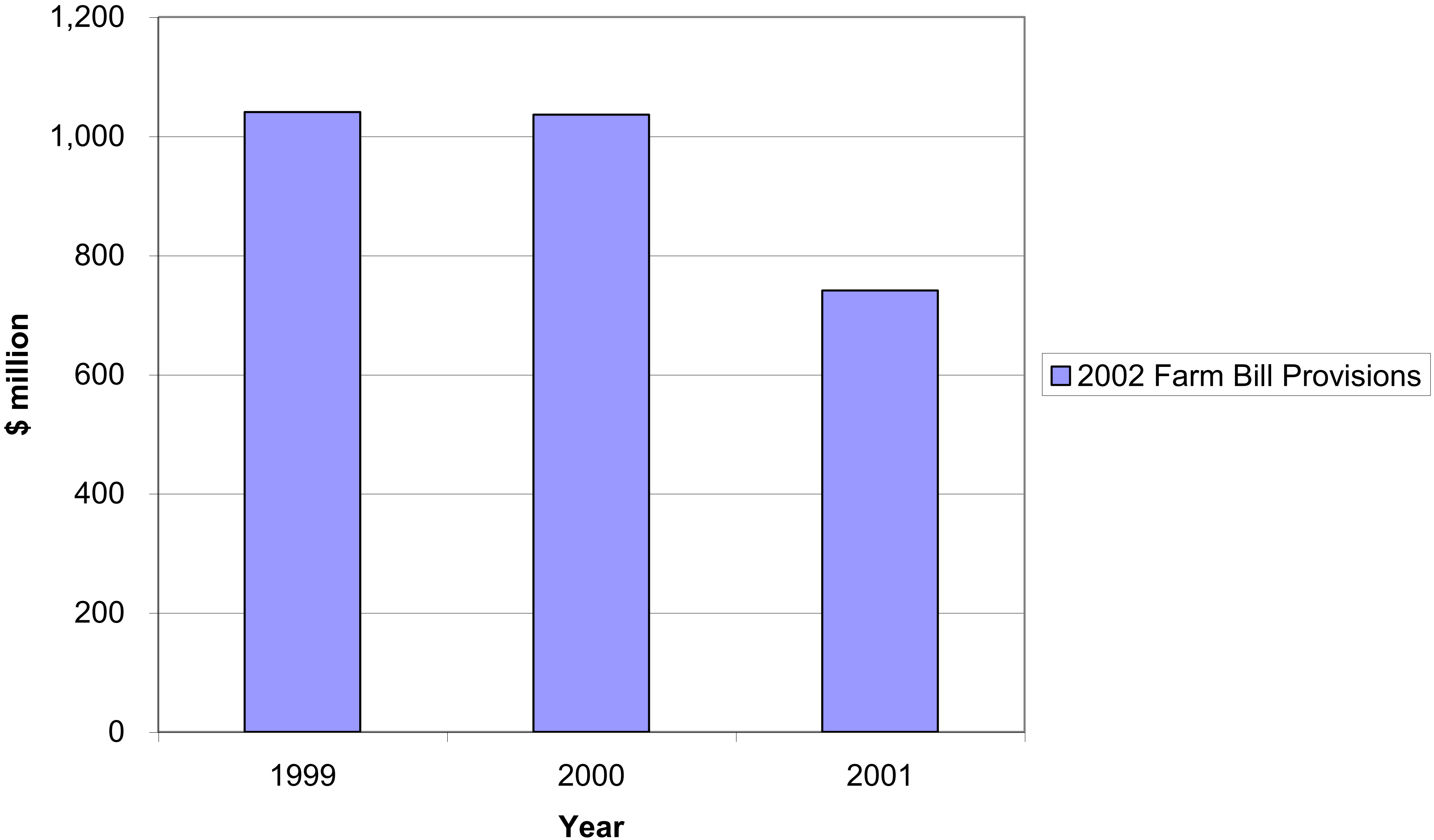
An Alternative Path

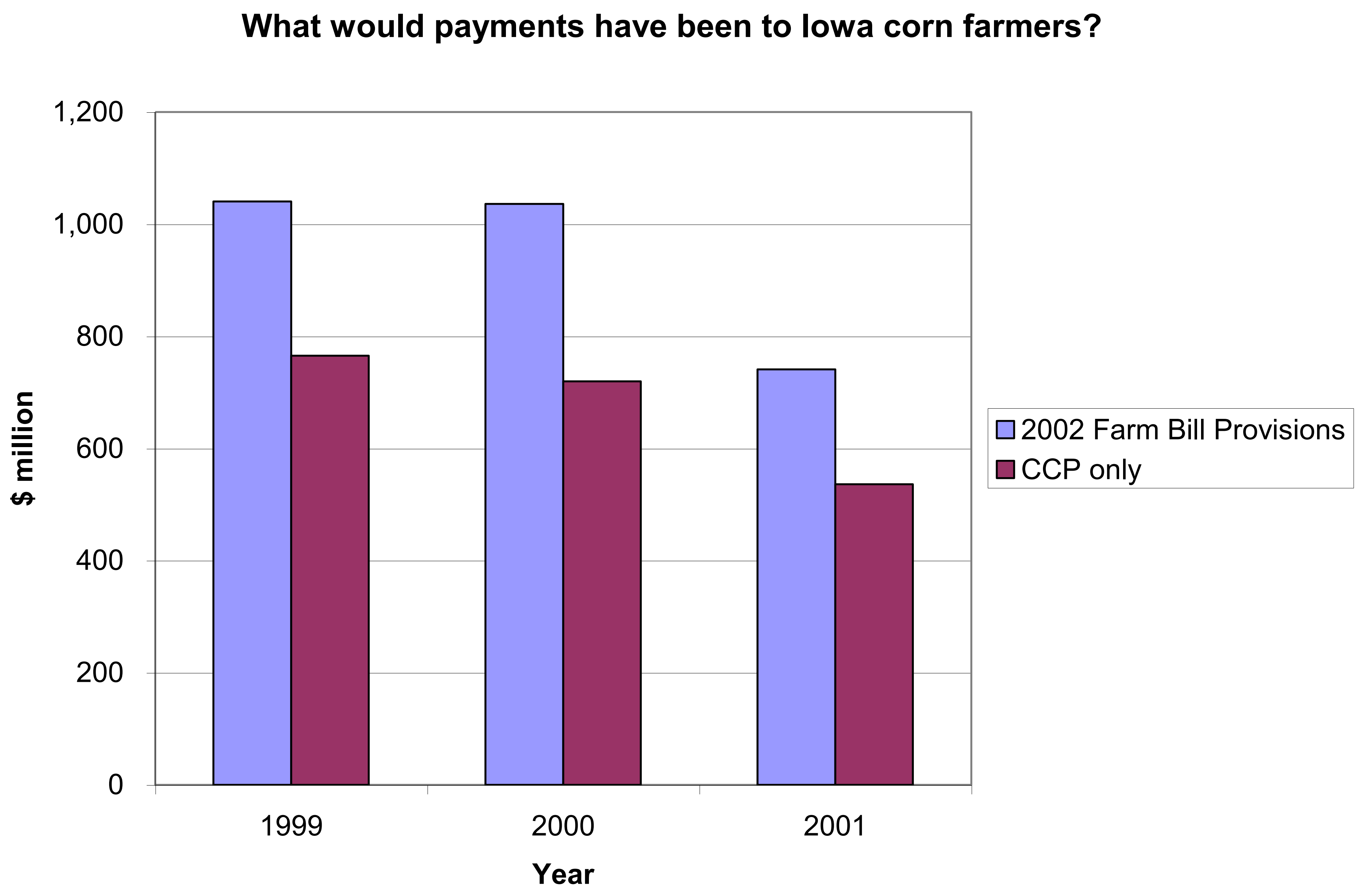
- Marketing loan program the worst offender in the US.
- EU and others view the CCP more favorably because they are based on a fixed amount of production.
  - CCPs are decoupled from production levels so they should not influence production decisions at the margin.

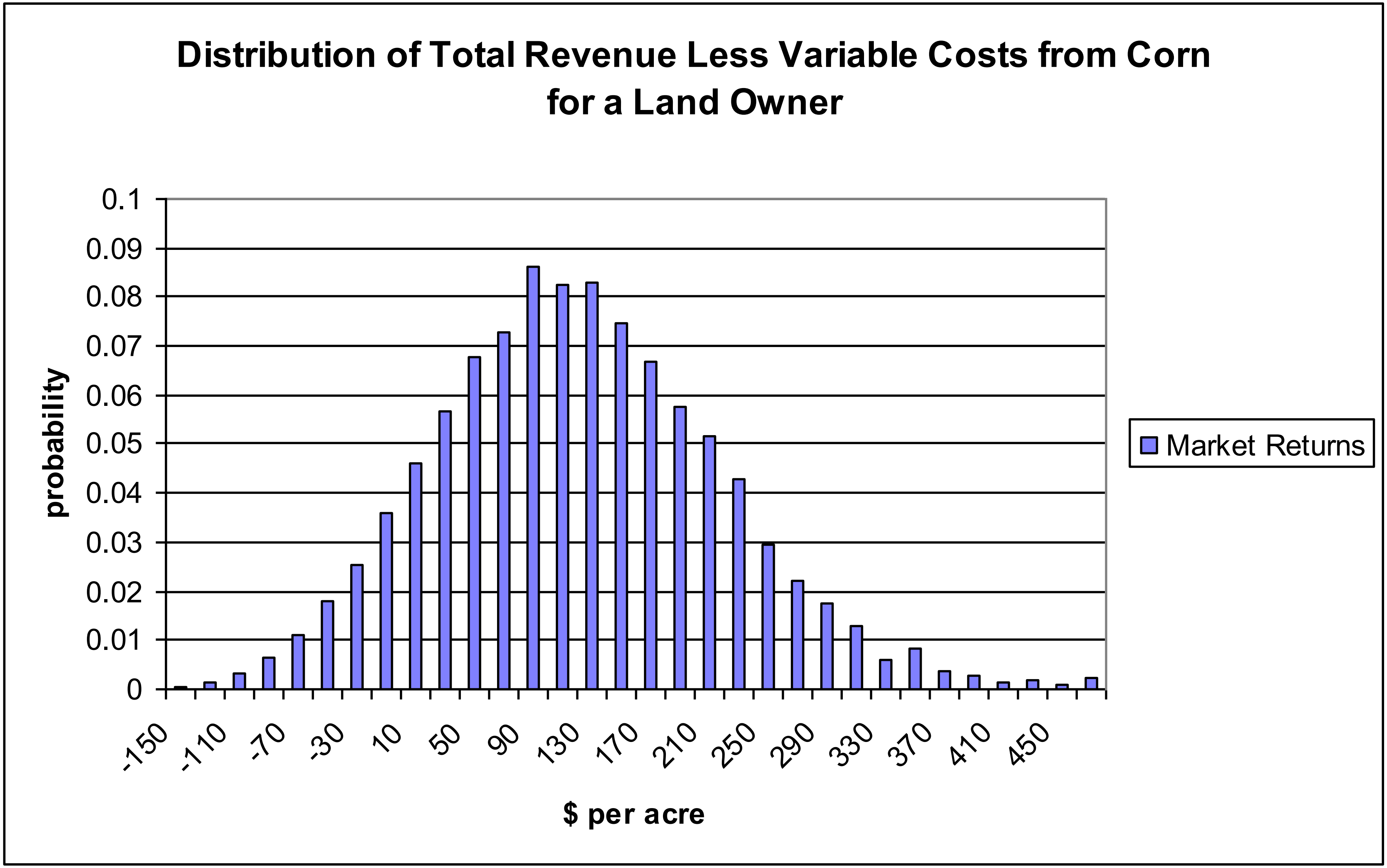
An Alternative Path

- LDPs pay out when price is below the loan rate
- CCPs pay out when price is below the effective target price.
- Why not replace LDPs with CCPs?
  - US would then be in a leadership position rather than a defensive position with regards to domestic support
  - What would be impact on farmers?

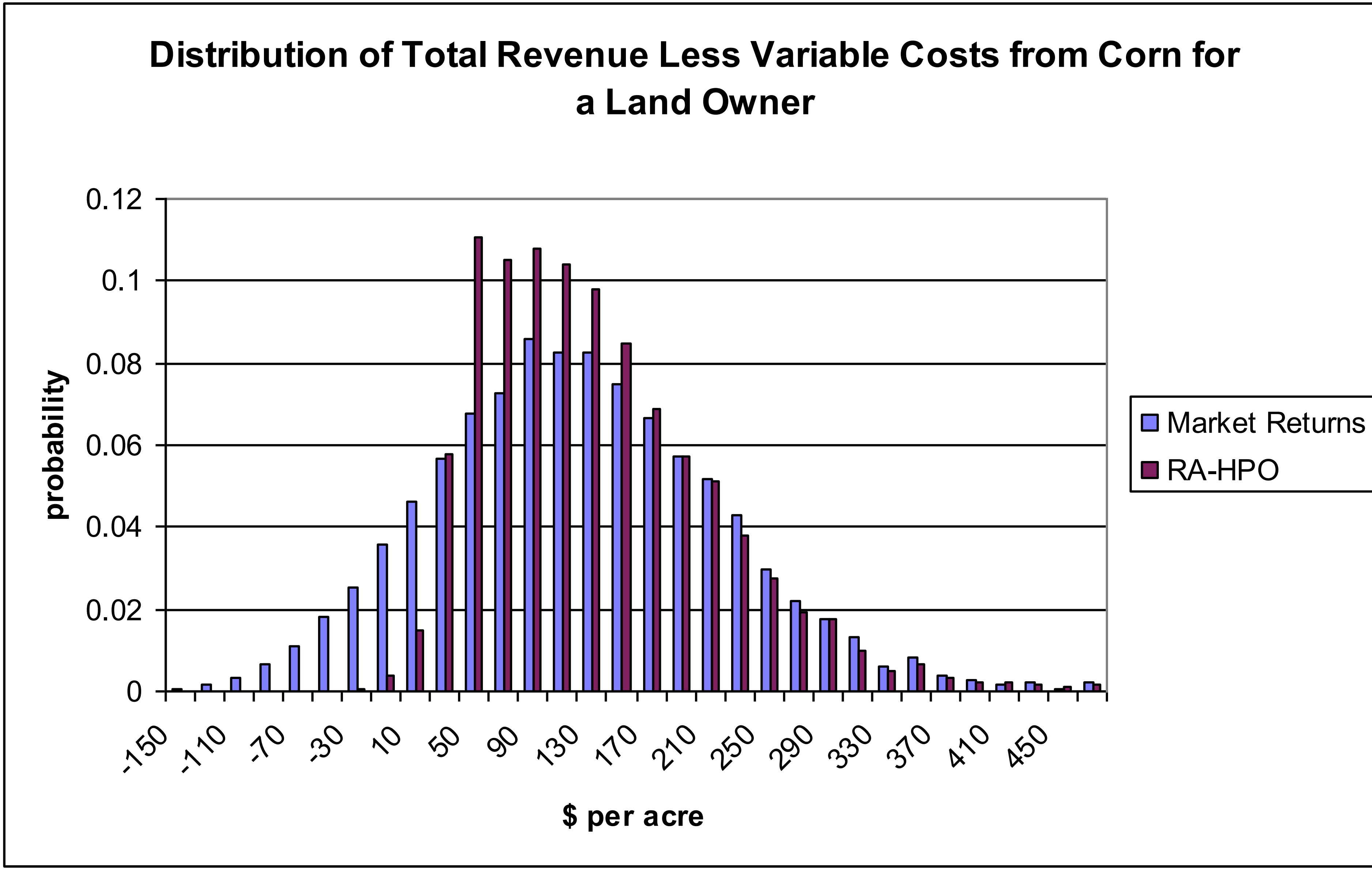
What would payments have been to Iowa corn farmers?



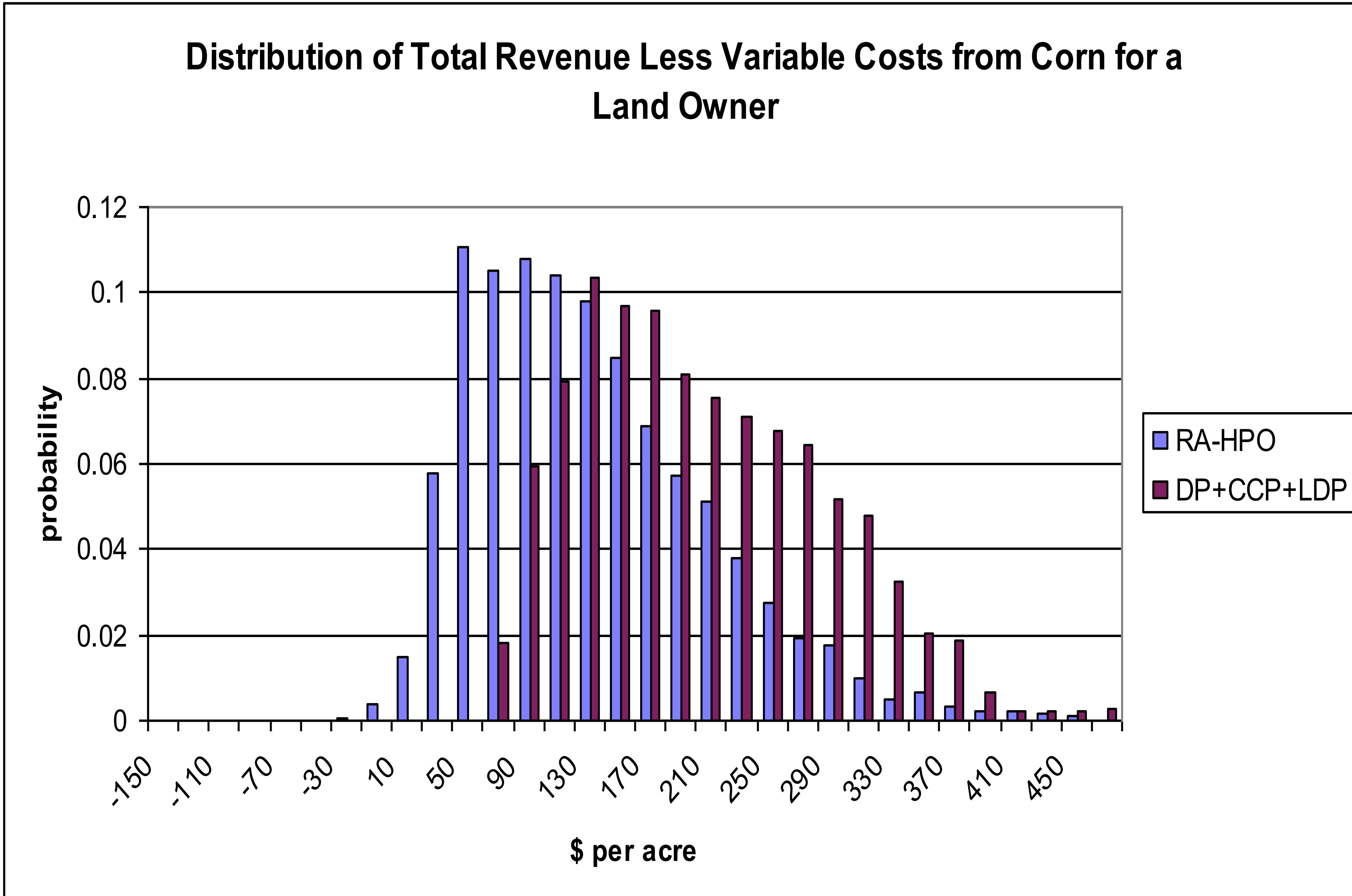

What would payments have been to Iowa corn farmers?
1,200
1,000
800
600
400
200
0
$ million
1999
2000
2001
Year
2002 Farm Bill Provisions
CCP only

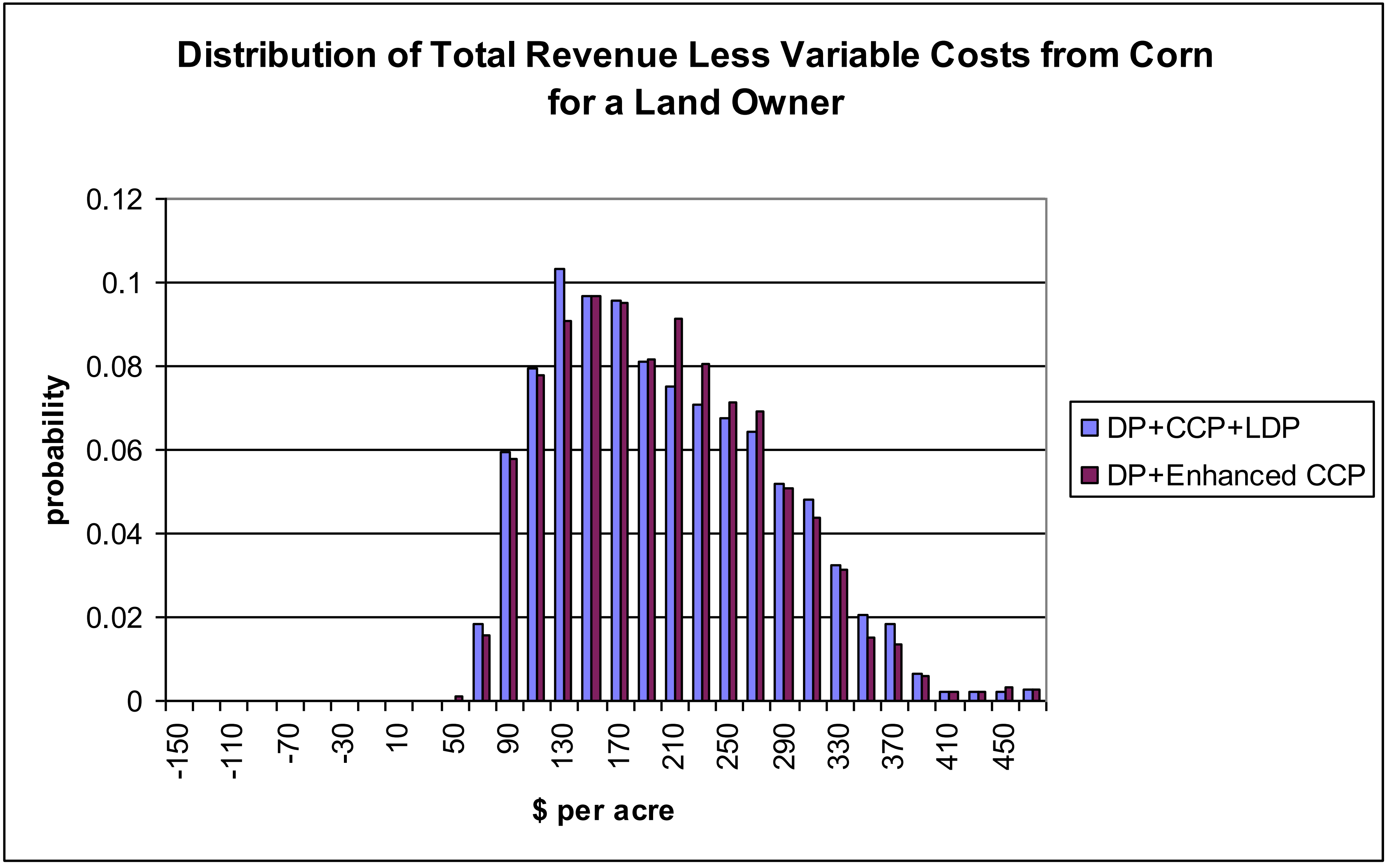


Distribution of Total Revenue Less Variable Costs from Corn for a Land Owner
probability
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-150
-110
-70
-30
10
50
90
130
170
210
250
290
330
370
410
450
$ per acre
Market Returns



Distribution of Total Revenue Less Variable Costs from Corn for a Land Owner
probability
0.12
0.1
0.08
0.06
0.04
0.02
0
-150
-110
-70
-30
10
50
90
130
170
210
250
290
330
370
410
450
$ per acre
Market Returns
RA-HPO

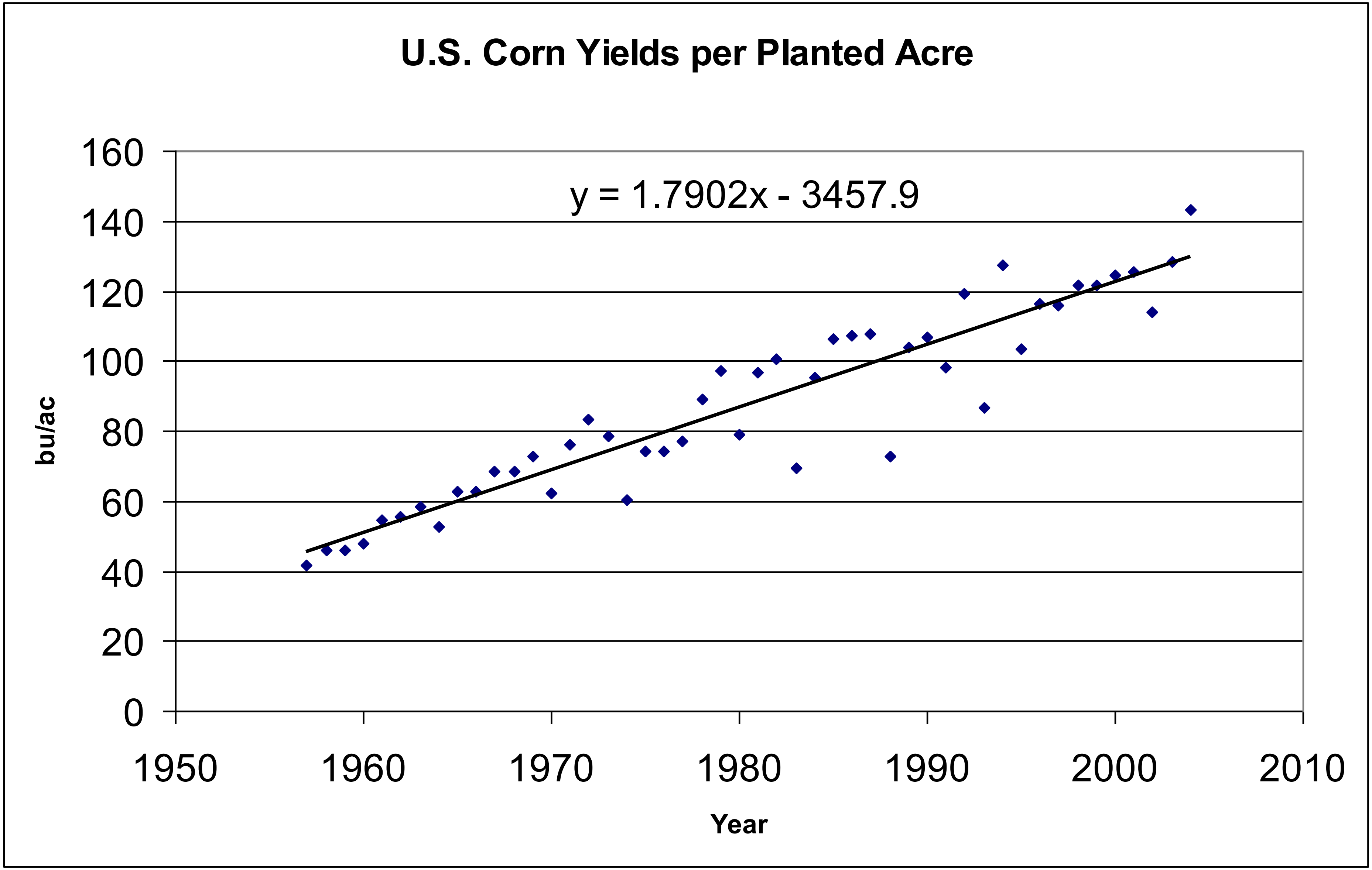

Distribution of Total Revenue Less Variable Costs from Corn for a Land Owner
probability
0.12
0.1
0.08
0.06
0.04
0.02
0
-150
-110
-70
-30
10
50
90
130
170
210
250
290
330
370
410
450
$ per acre
RA-HPO
DP+CCP+LDP

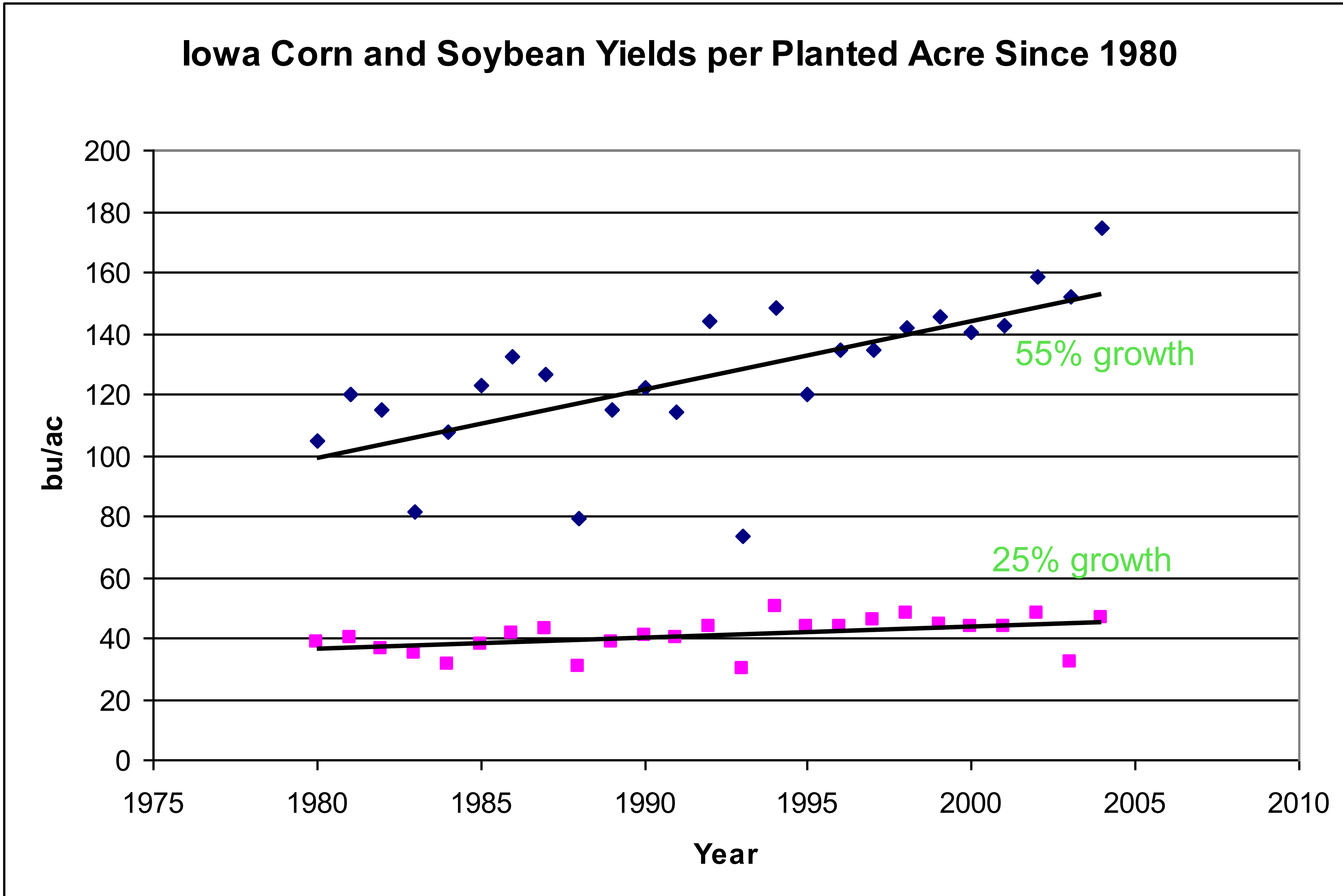

Distribution of Total Revenue Less Variable Costs from Corn for a Land Owner
probability
0.12
0.1
0.08
0.06
0.04
0.02
0
-150
-110
-70
-30
10
50
90
130
170
210
250
290
330
370
410
450
$ per acre
DP+CCP+LDP
DP+Enhanced CCP

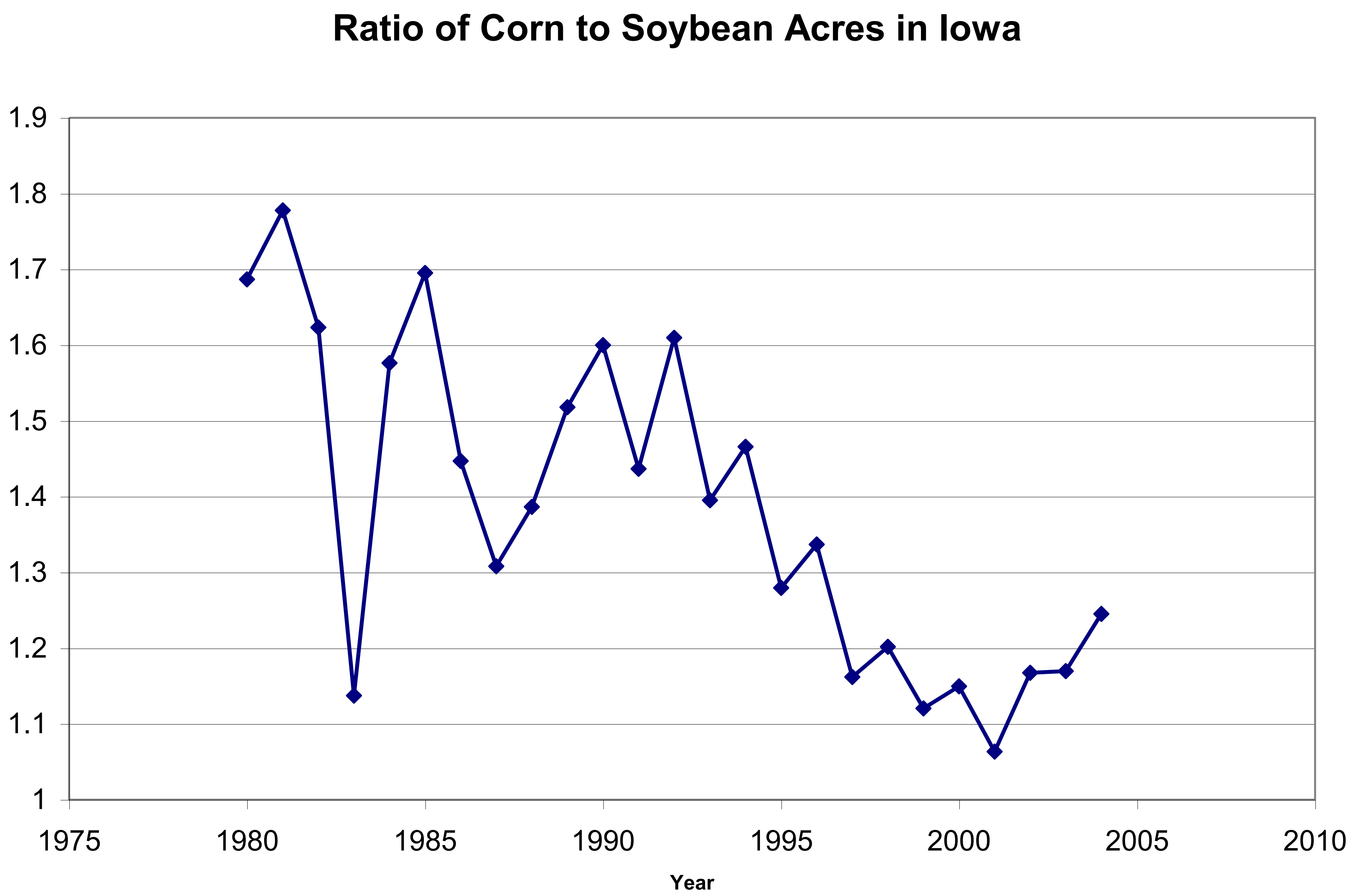
Will we run out of corn?

- Depends on
  - Trend yields of corn and soybeans
  - Weather patterns
  - Growth in meat exports, ethanol use and per-capita meat consumption

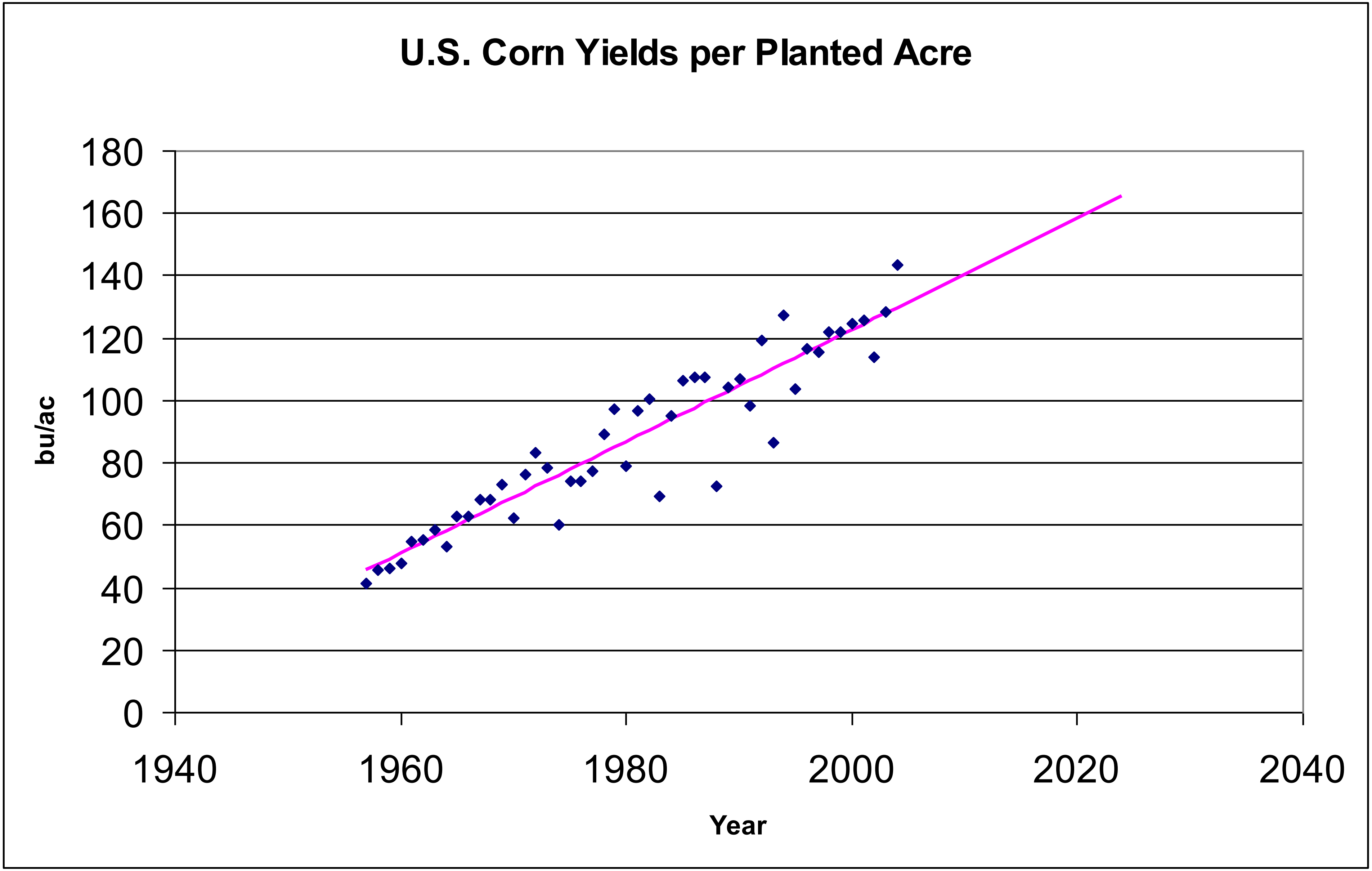
Increased demand causes increased supply

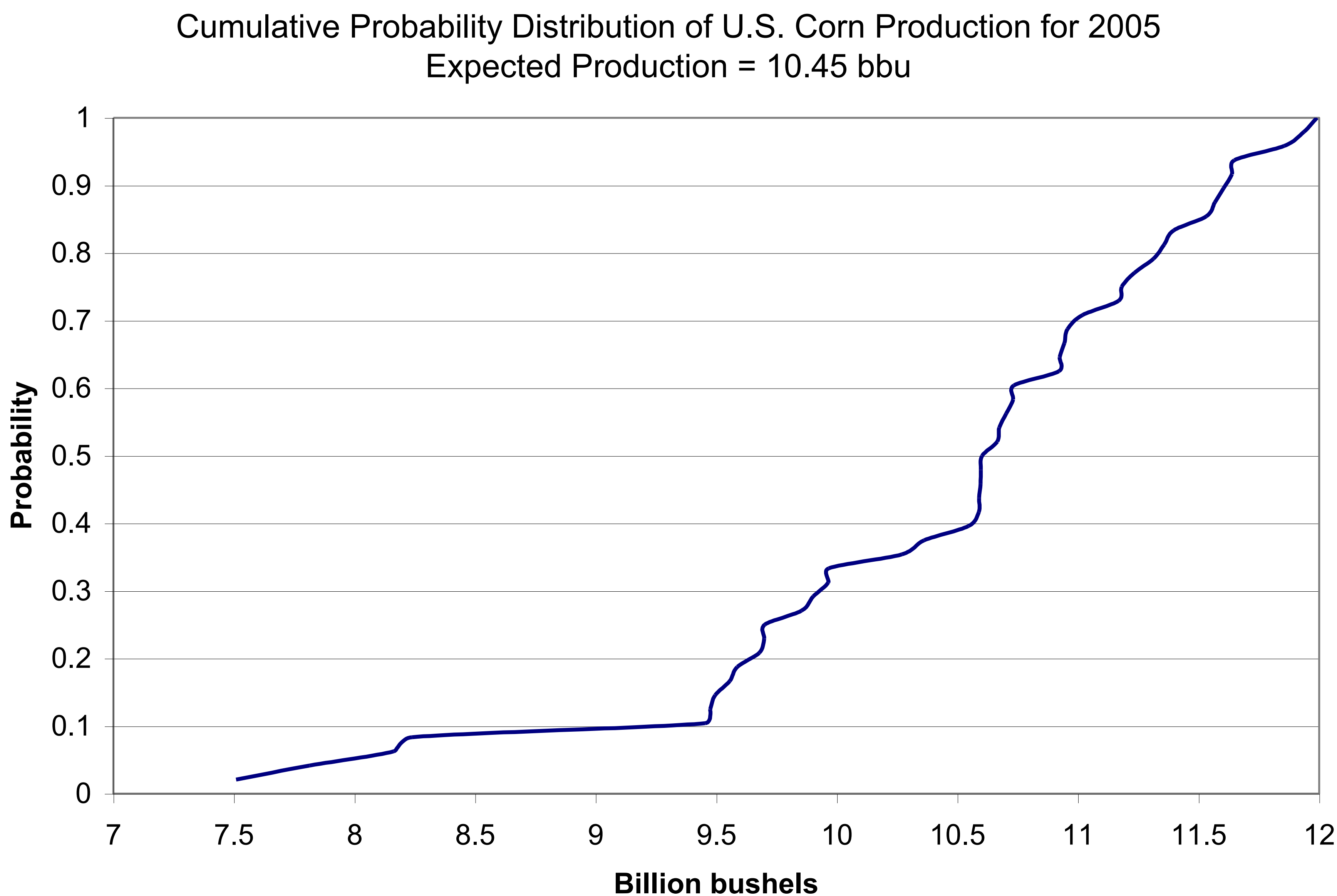

U.S. Corn Yields per Planted Acre
y = 1.7902x - 3457.9
160
140
120
100
80
60
40
20
0
bu/ac
1950
1960
1970
1980
1990
2000
2010
Year

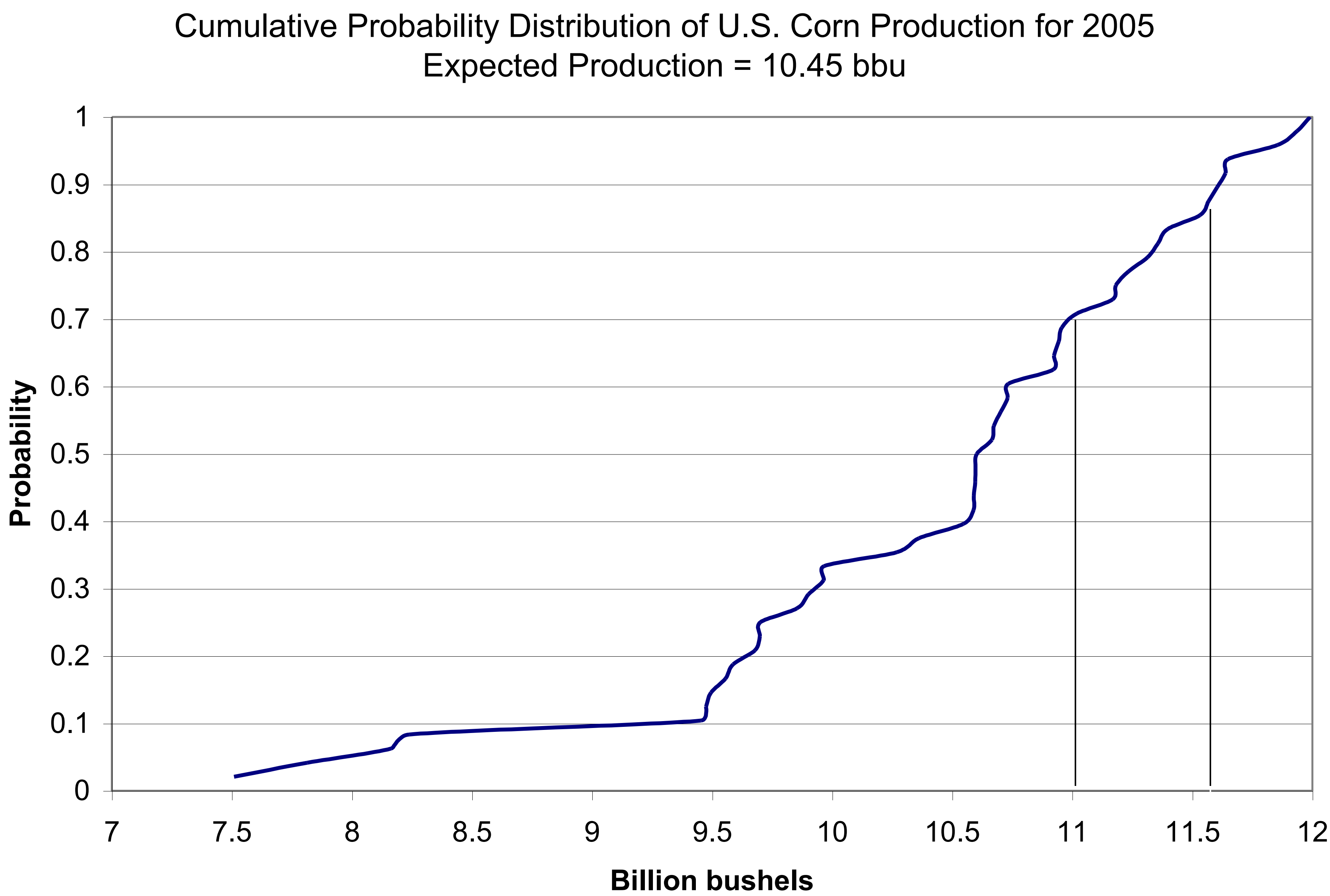

Iowa Corn and Soybean Yields per Planted Acre Since 1980
200
180
160
140
120
100
80
60
40
20
0
bu/ac
1975
1980
1985
1990
1995
2000
2005
2010
Year
55% growth
25% growth

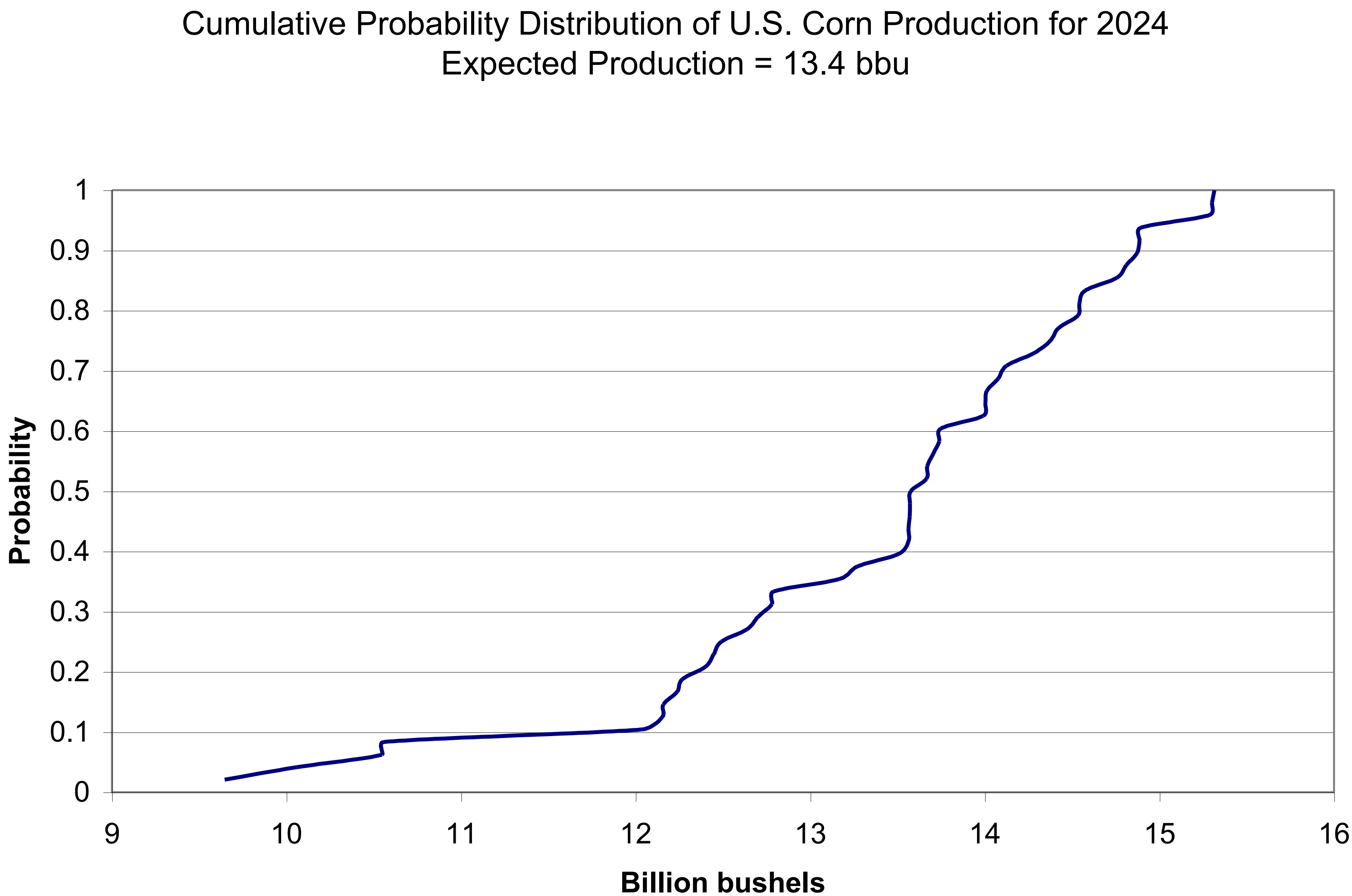


Ratio of Corn to Soybean Acres in Iowa
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1
1975
1980
1985
1990
1995
2000
2005
2010
Year

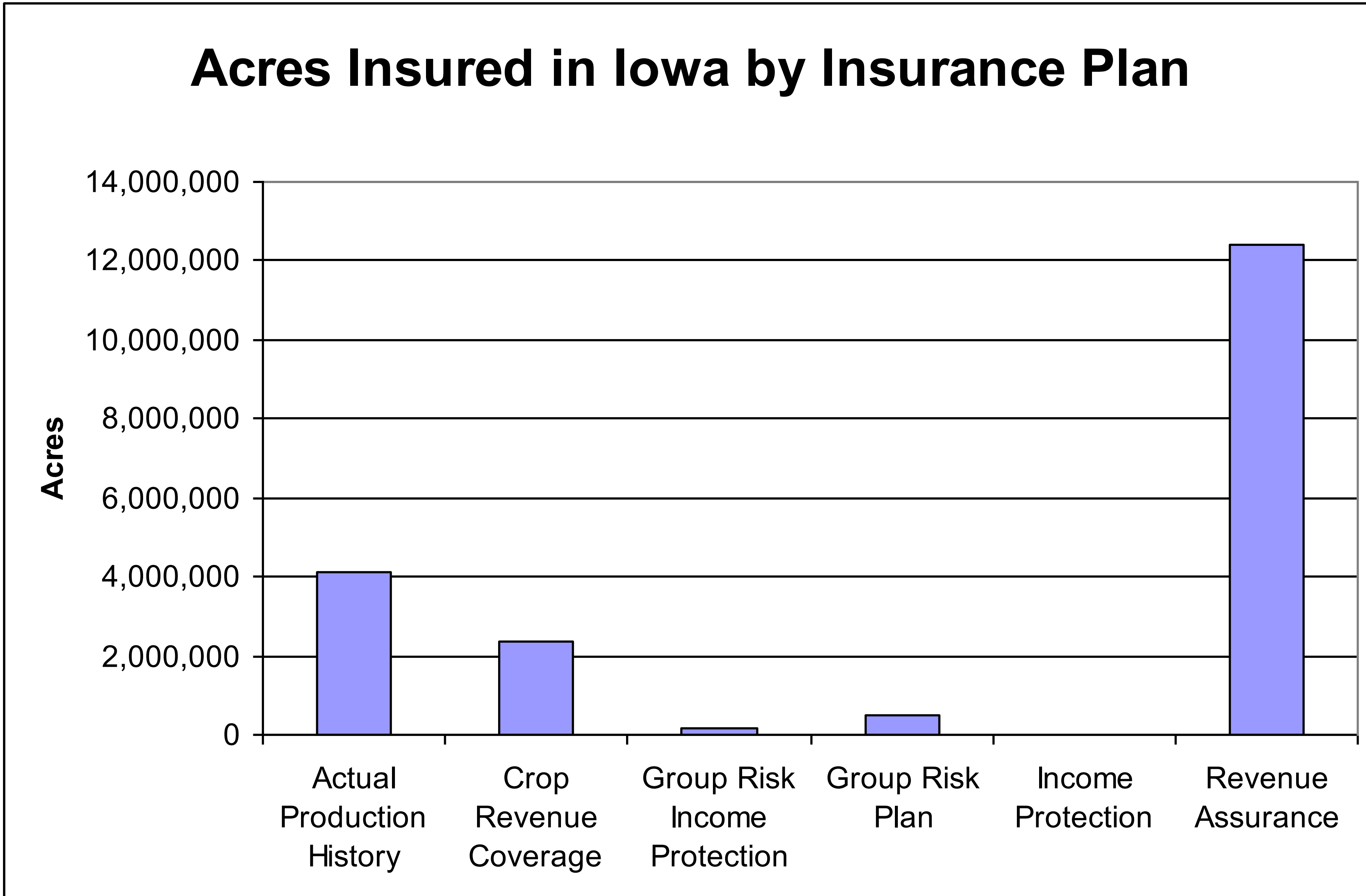

U.S. Corn Yields per Planted Acre
bu/ac
0
20
40
60
80
100
120
140
160
180
1940
1960
1980
2000
2020
2040
Year

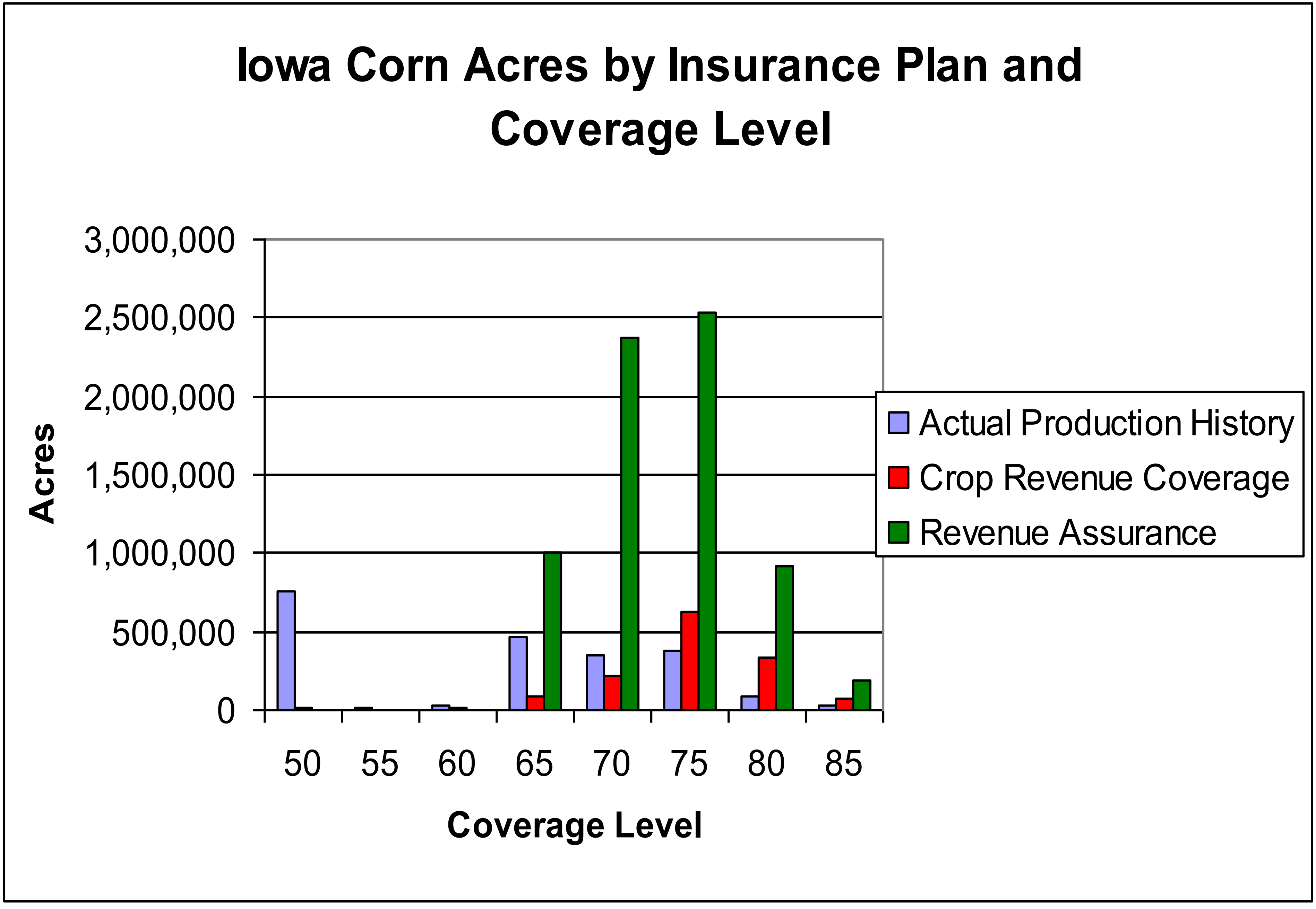

Cumulative Probability Distribution of U.S. Corn Production for 2005
Expected Production = 10.45 bbu
Probability
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
7
7.5
8
8.5
9
9.5
10
10.5
11
11.5
12
Billion bushels

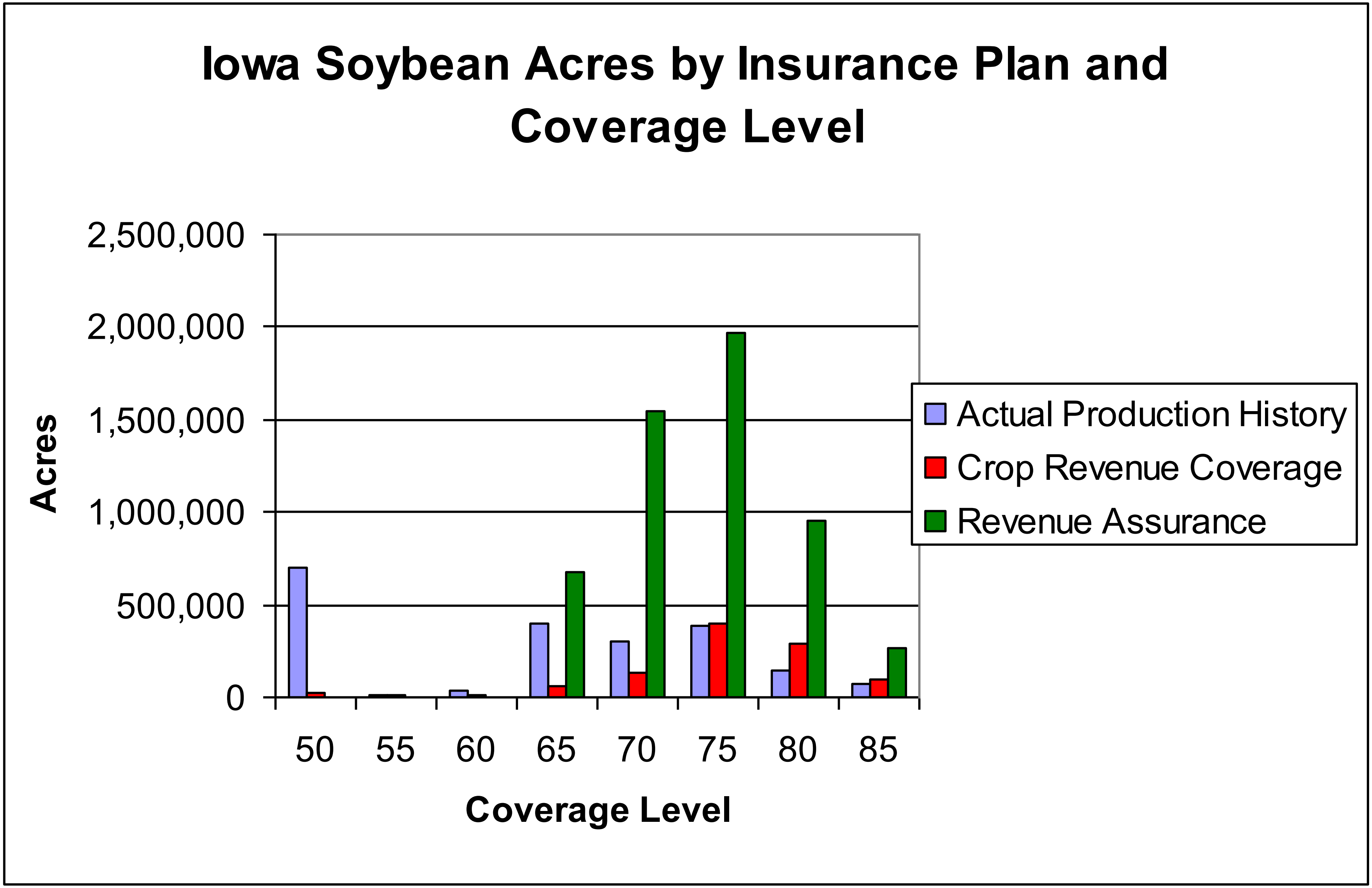

Cumulative Probability Distribution of U.S. Corn Production for 2005
Expected Production = 10.45 bbu
Probability
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
7
7.5
8
8.5
9
9.5
10
10.5
11
11.5
12
Billion bushels



Cumulative Probability Distribution of U.S. Corn Production for 2024
Expected Production = 13.4 bbu
Probability
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
9
10
11
12
13
14
15
16
Billion bushels


Acres Insured in Iowa by Insurance Plan
Acres
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Actual Production History
Crop Revenue Coverage
Group Risk Income Protection
Group Risk Plan
Income Protection
Revenue Assurance


Iowa Corn Acres by Insurance Plan and Coverage Level
Acres
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
50
55
60
65
70
75
80
85
Coverage Level
Actual Production History
Crop Revenue Coverage
Revenue Assurance



Iowa Soybean Acres by Insurance Plan and Coverage Level
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
Acres
50
55
60
65
70
75
80
85
Coverage Level
Actual Production History
Crop Revenue Coverage
Revenue Assurance

GRIP and GRIP-HRO

- GRIP guarantee =

  Factor*CBOT Springtime Price*Expected County Yield

- GRIP-HRO guarantee =

  Factor*CBOT Fall or Spring Price*Expected County Yield

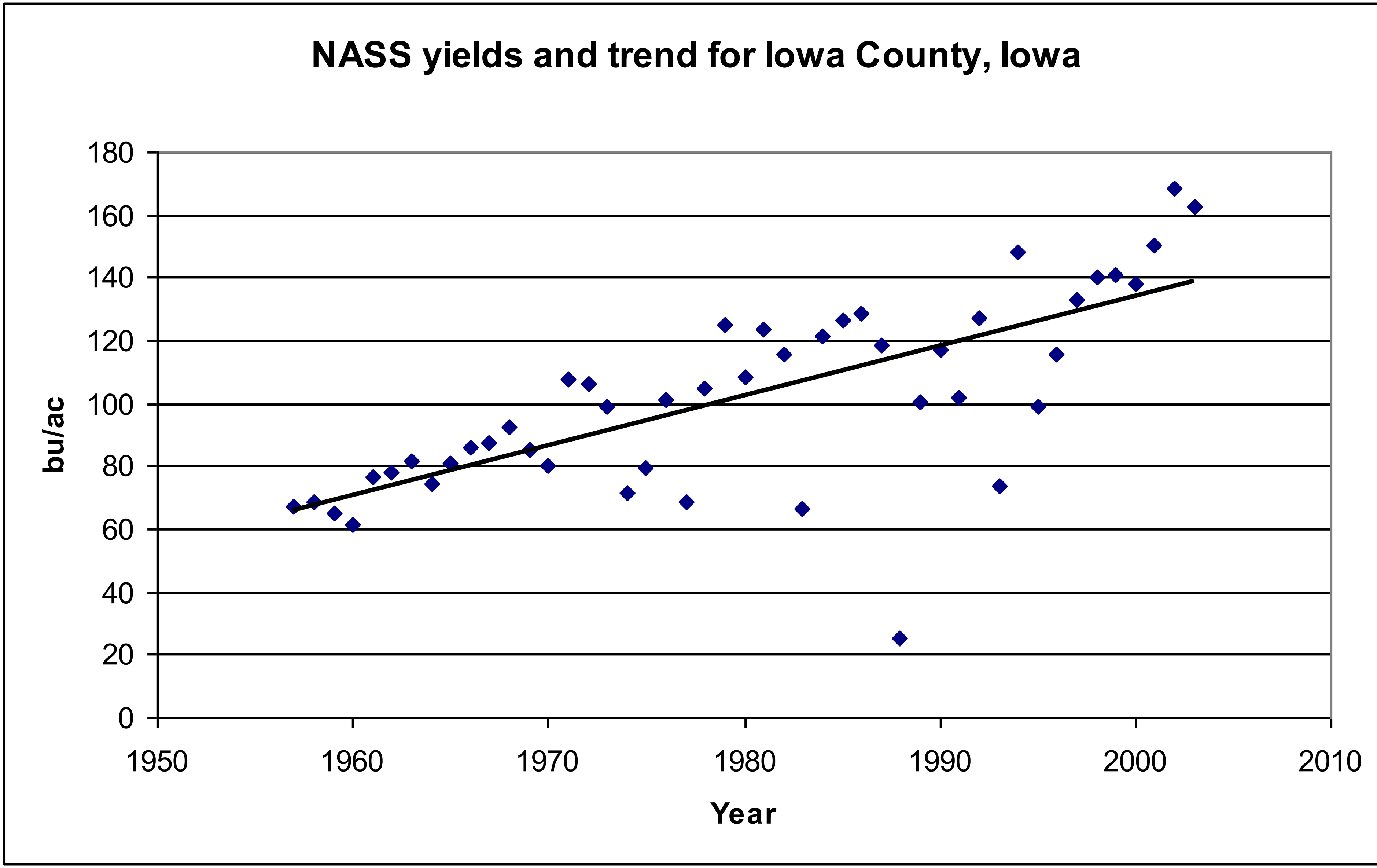
Factor lies between 0.6 and 1.5.

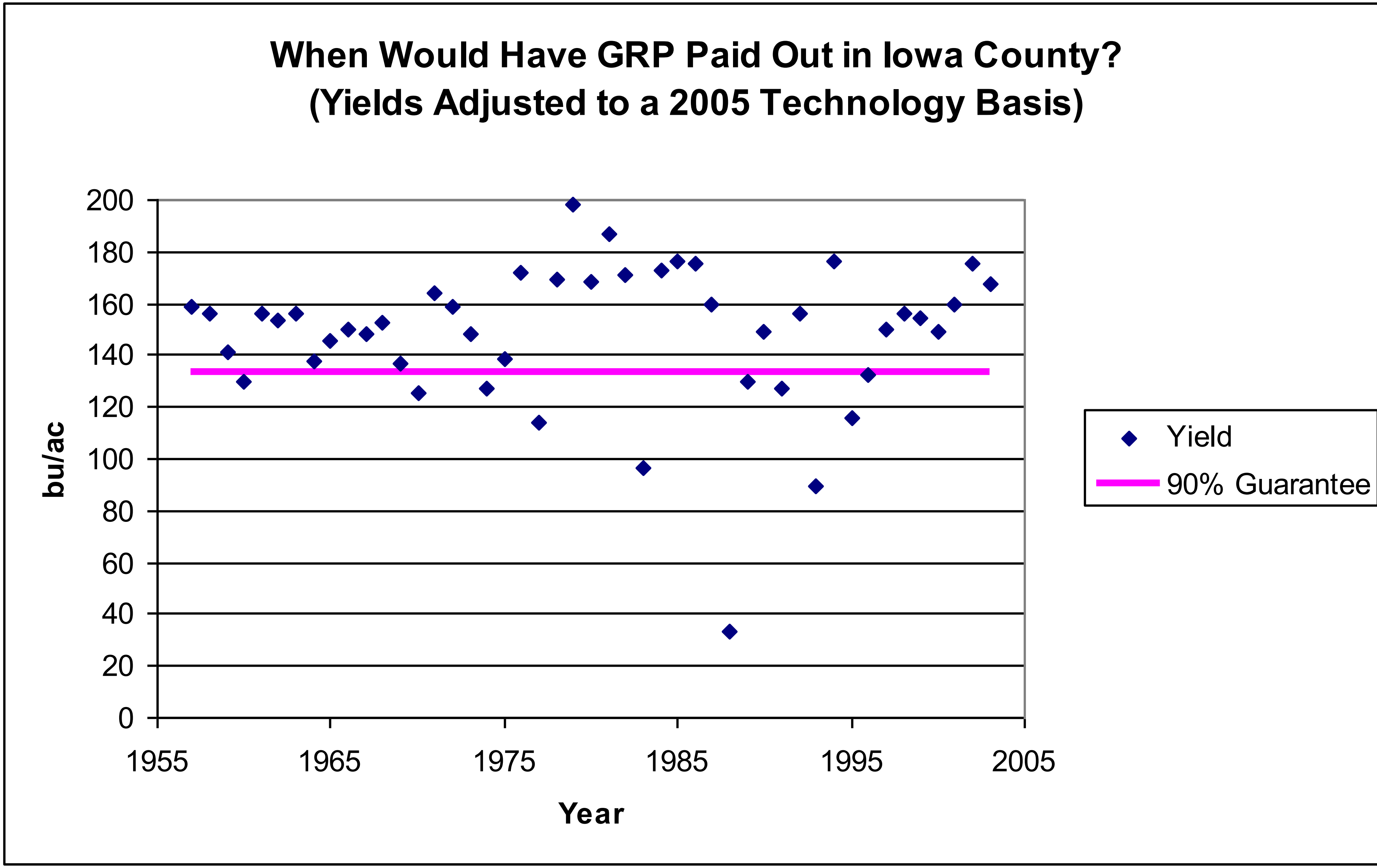
Who Should Buy GRIP?

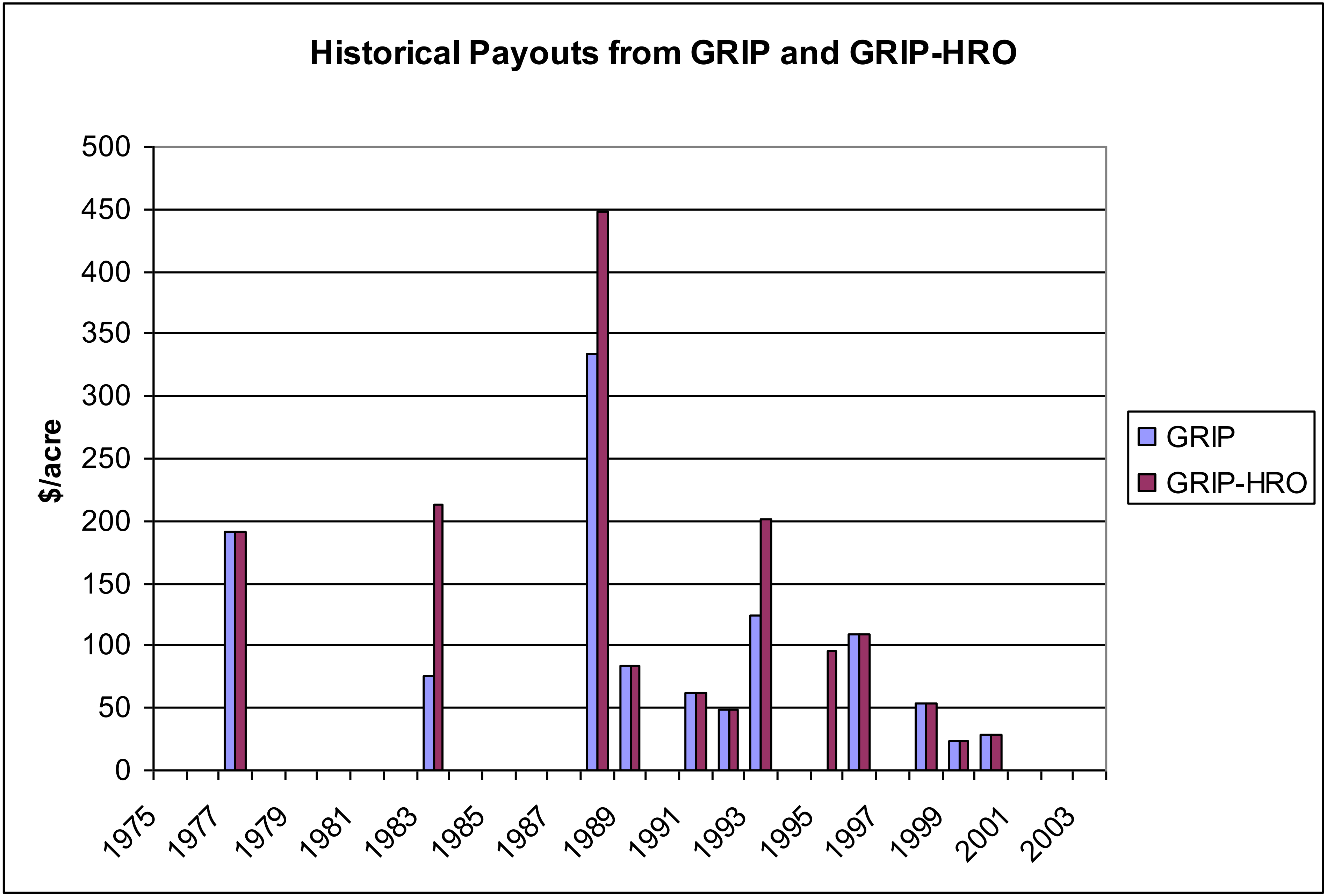
- Farmers who do not have a representative APH yield
- Farmers who are lower risk than that assumed in APH program
- Farmers with yields that are highly correlated with county yields

GRIP and GRIP-HRO in Iowa County (Expected Yield = 148 bu/ac)

	Maximum Coverage Per-Acre	Total Premium	Producer Premium
GRIP	533.16	31.08	13.99
GRIP-HRO	533.16	46.22	20.80


NASS yields and trend for Iowa County, Iowa
bu/ac
0
20
40
60
80
100
120
140
160
180
1950
1960
1970
1980
1990
2000
2010
Year


When Would Have GRP Paid Out in Iowa County?
(Yields Adjusted to a 2005 Technology Basis)
200
180
160
140
120
100
80
60
40
20
0
bu/ac
1955
1965
1975
1985
1995
2005
Year
Yield
90% Guarantee


Historical Payouts from GRIP and GRIP-HRO
$/acre
500
450
400
350
300
250
200
150
100
50
0
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
GRIP
GRIP-HRO

Payoff from GRIP and GRIP-HRO

- Total payout = 6.7% of liability for GRIP and 9.2% of liability for HRO from 1975 to 2003.
- Premium rate = 5.83% of liability from GRIP and 8.67% of liability from GRIP-HRO.
- Since 1975, rate of return = 15% for GRIP and 6.6% for HRO.

Subsidized rate of return for GRIP and GRIP-HRO

- Producer premium rate = 2.6% and 3.9%.
- 2005 Premium = $14/acre for GRIP and $21 for GRIP-HRO
- Historical payback = $36 and $49.
- Rater's expected payback = $31 and $46.
- Expected return = $22 or $17 per acre for GRIP, $18 or $15 per acre for HRO.

What about RA?

- Long-run loss ratio in Iowa about 0.70 for individual coverage.
- Premium subsidy rate = 55%.
- Thus for every $100 in producer premium, farmers should expect to receive back about $155.
- Or for a $12 per acre premium, expected return = $18.60 or $6.60 per acre.
- For every $100 in premium for GRIP, should expect to get back $122 or $17 per acre. for full coverage.

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