

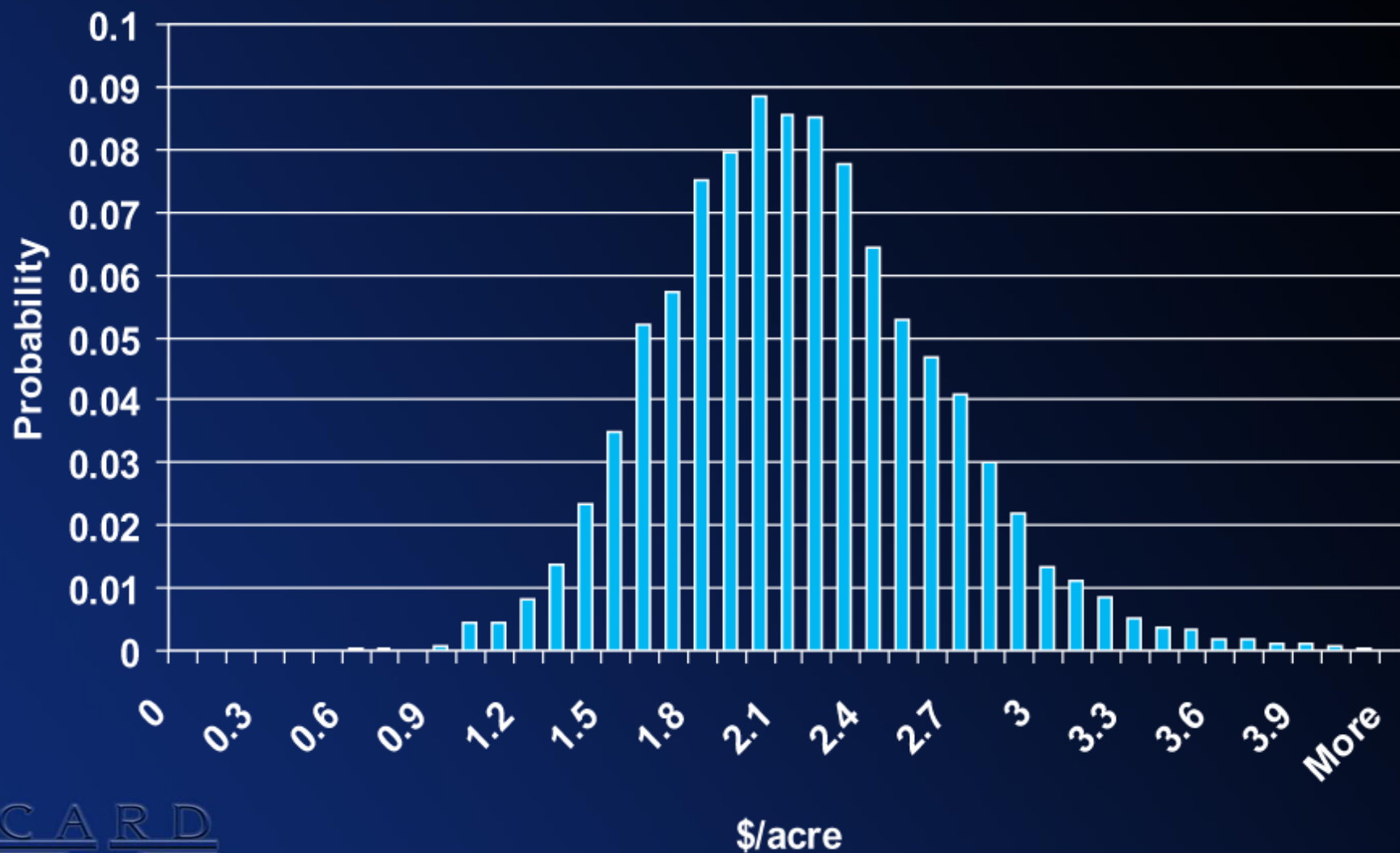
The Crop Producer's Risk Management Decisions

Bruce Babcock and Dermot
Hayes

Iowa State University



Corn Harvest Prices Projected on March 1



“Time” in the Corn Market

Corn

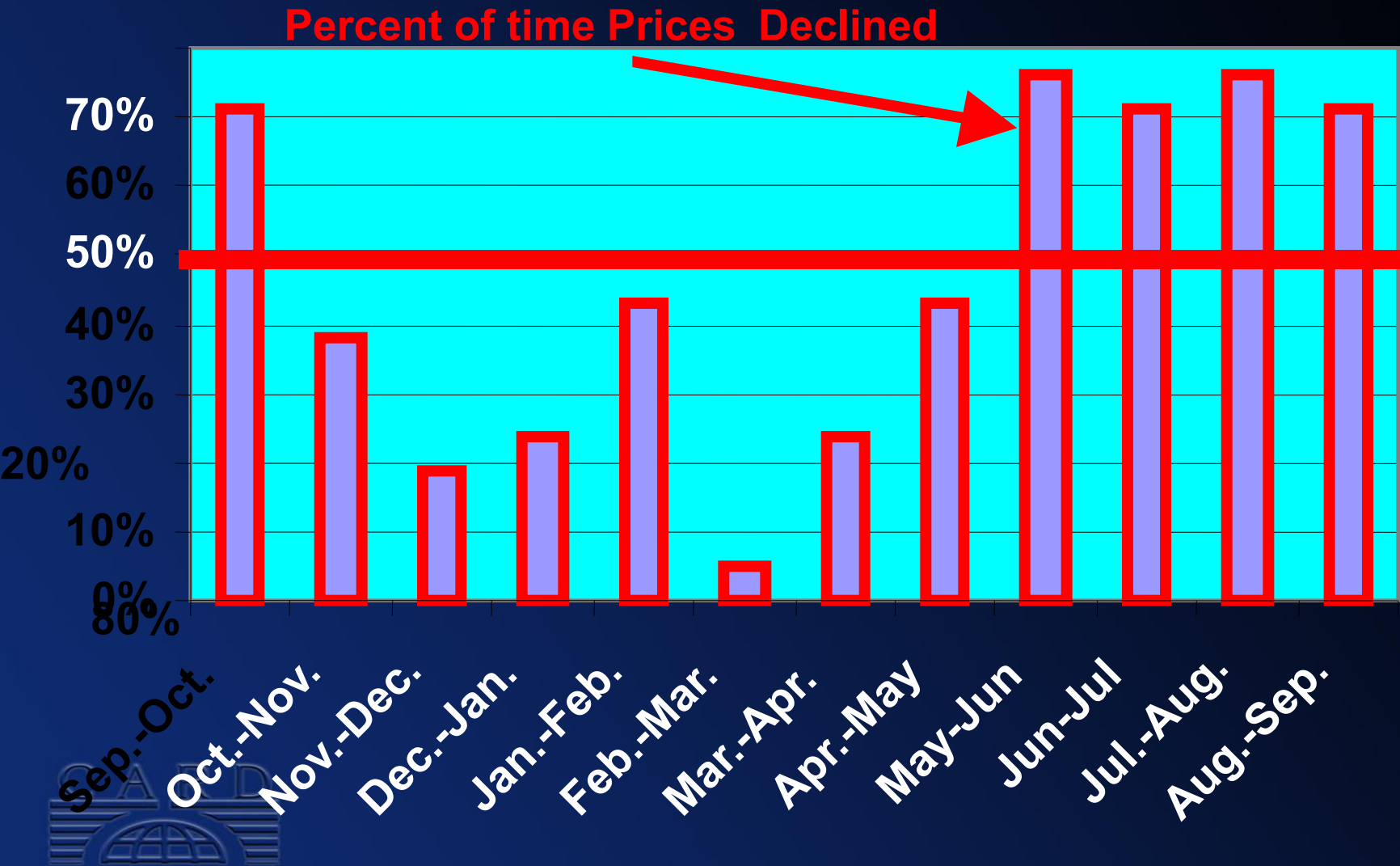
Time Adjustment vs Approximate Date



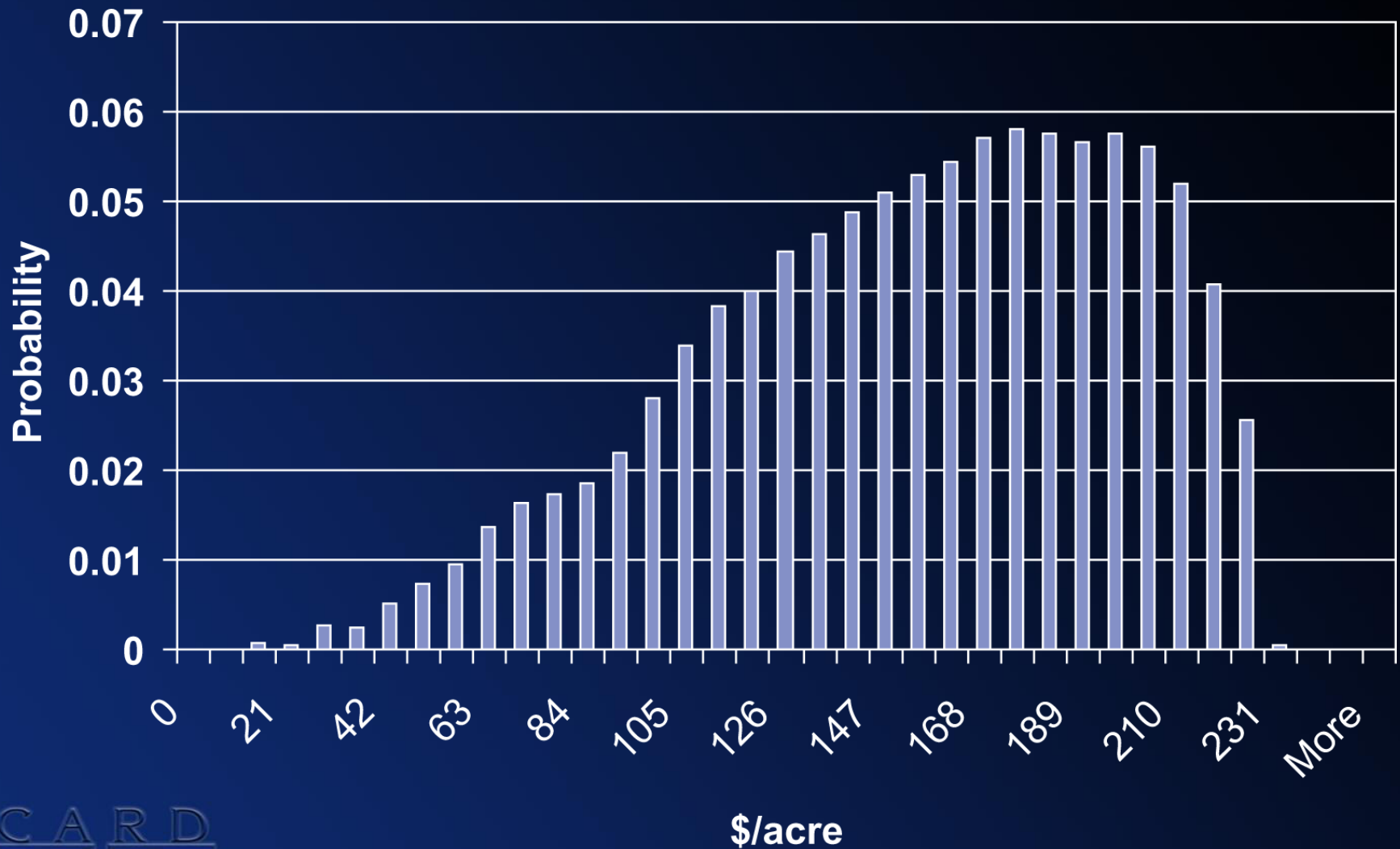
— Time Adjustment

— Actual Time Remaining

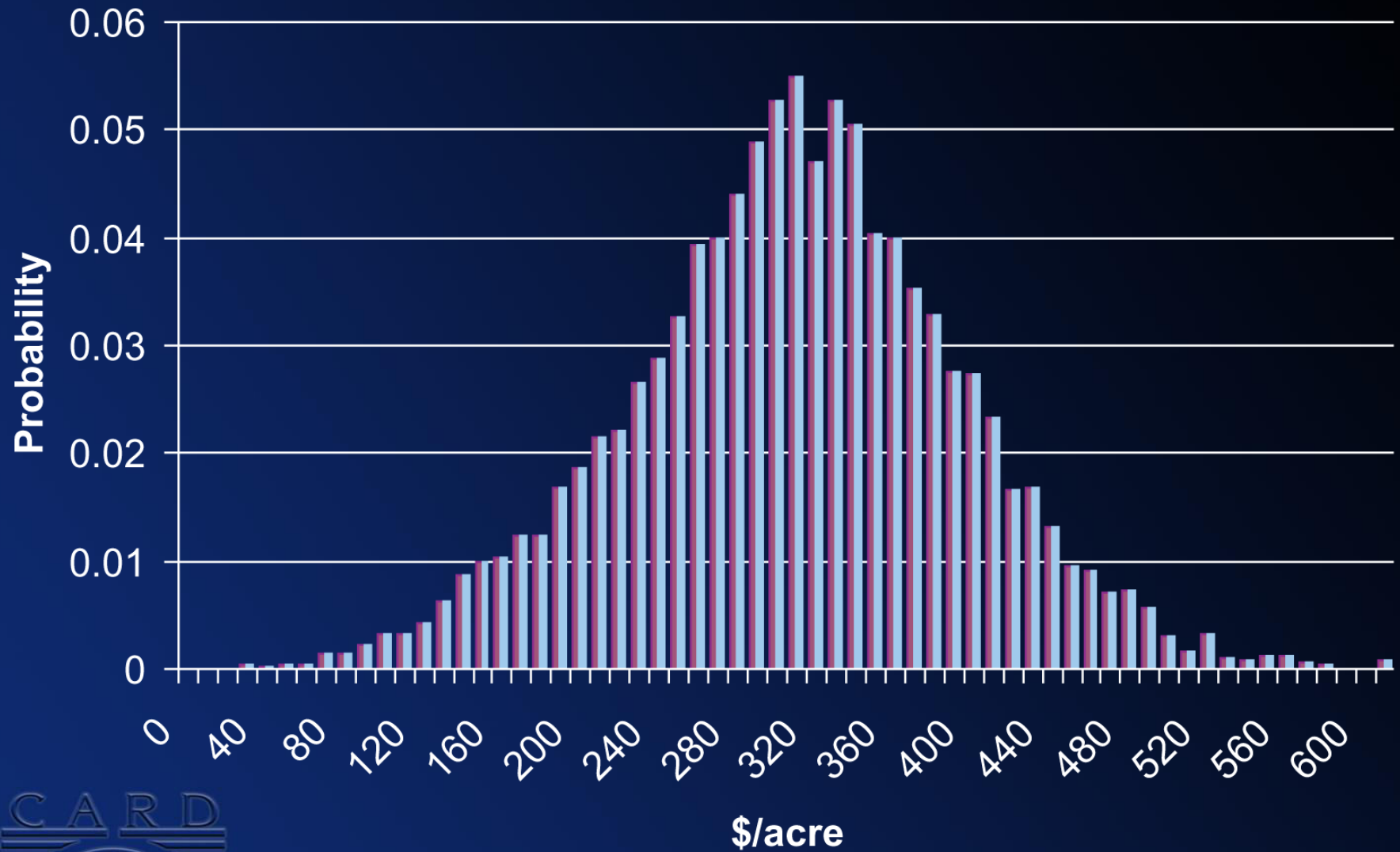
Monthly Iowa Corn Price Declines, 1979-80 Through 1999-00 Marketing years



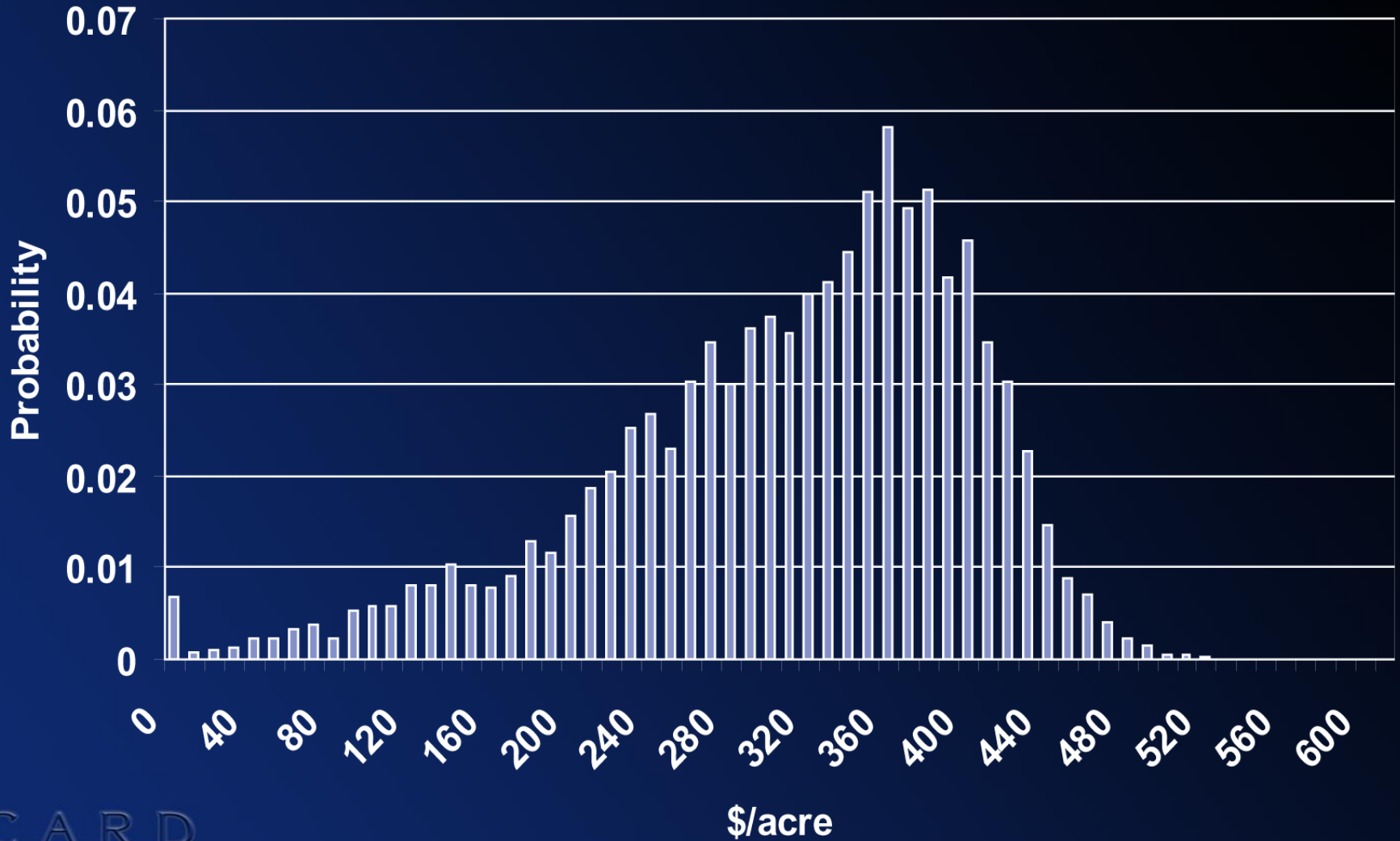
Distribution of Harvested Yields on March 1



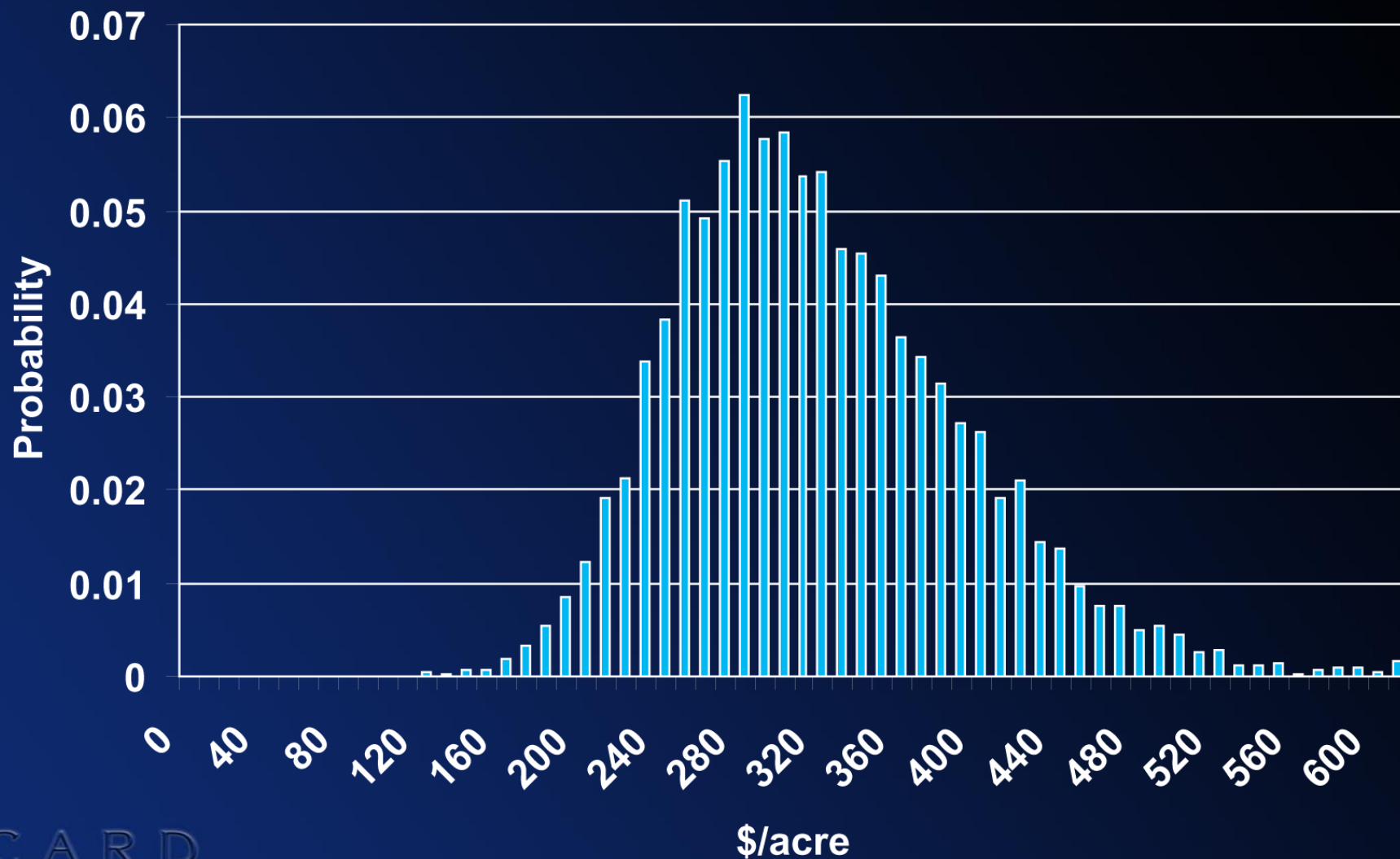
Distribution of Corn Market Revenue



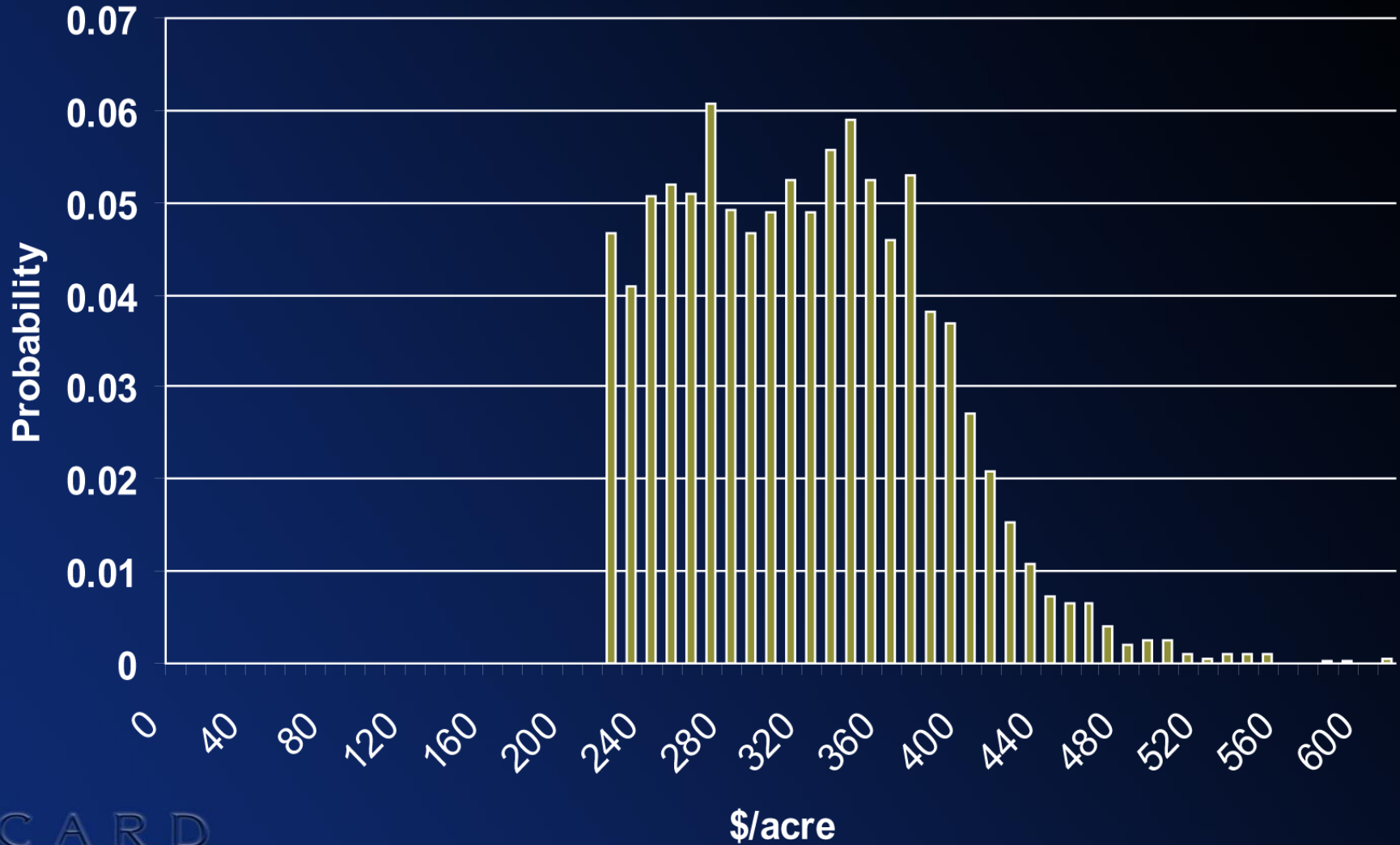
Revenue with Price Hedge



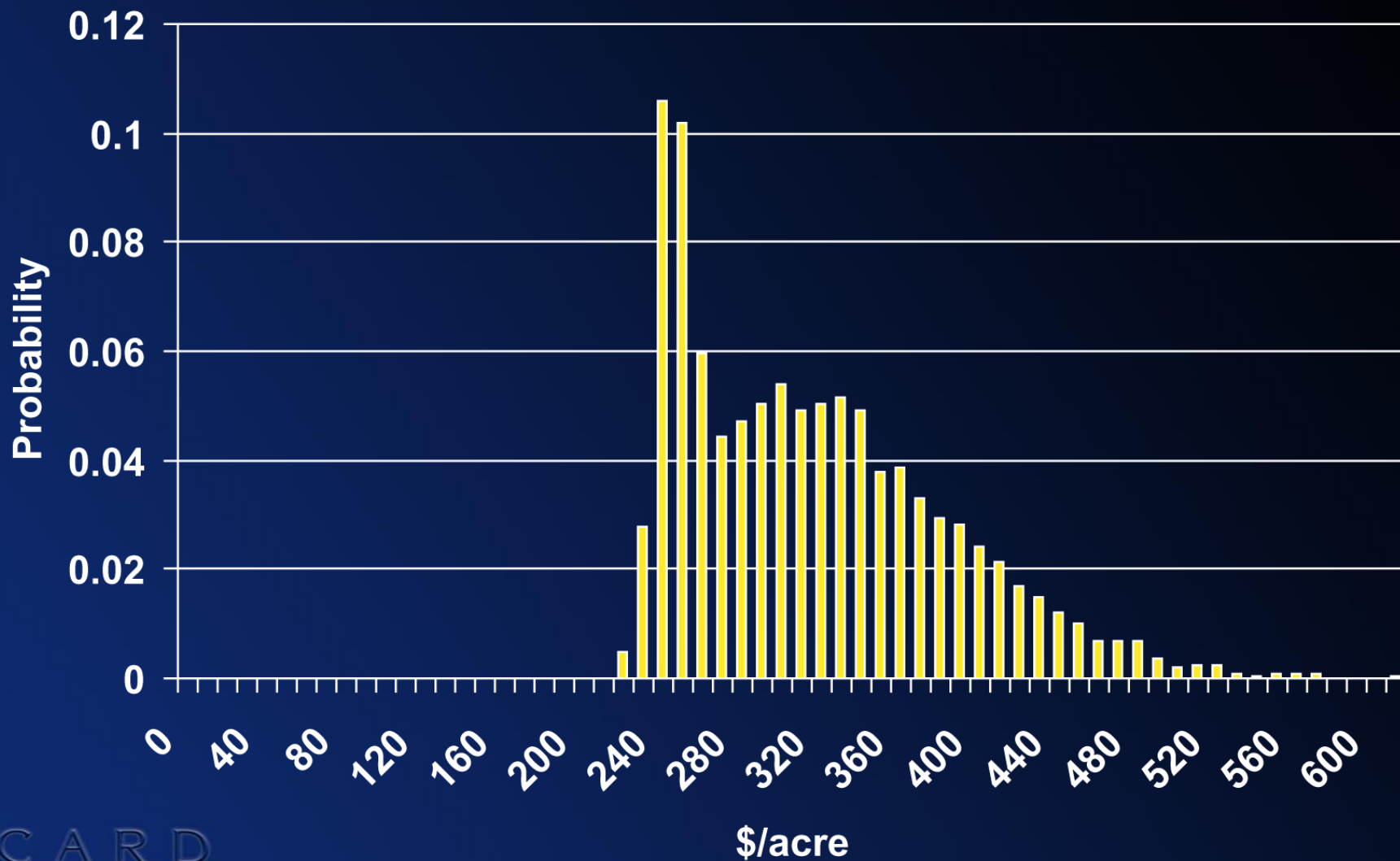
Revenue with Yield Insurance



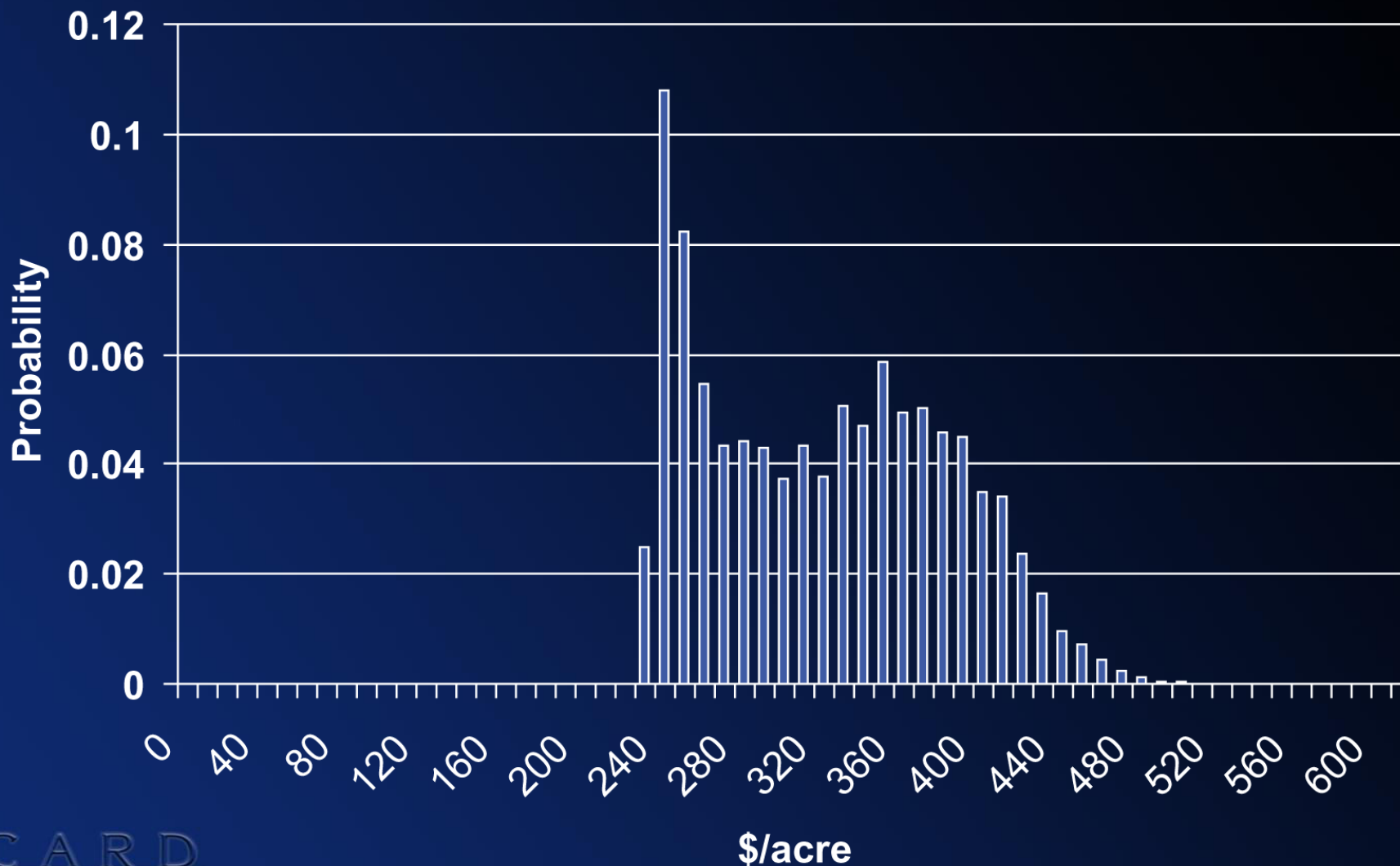
Revenue with Yield and Price Insurance



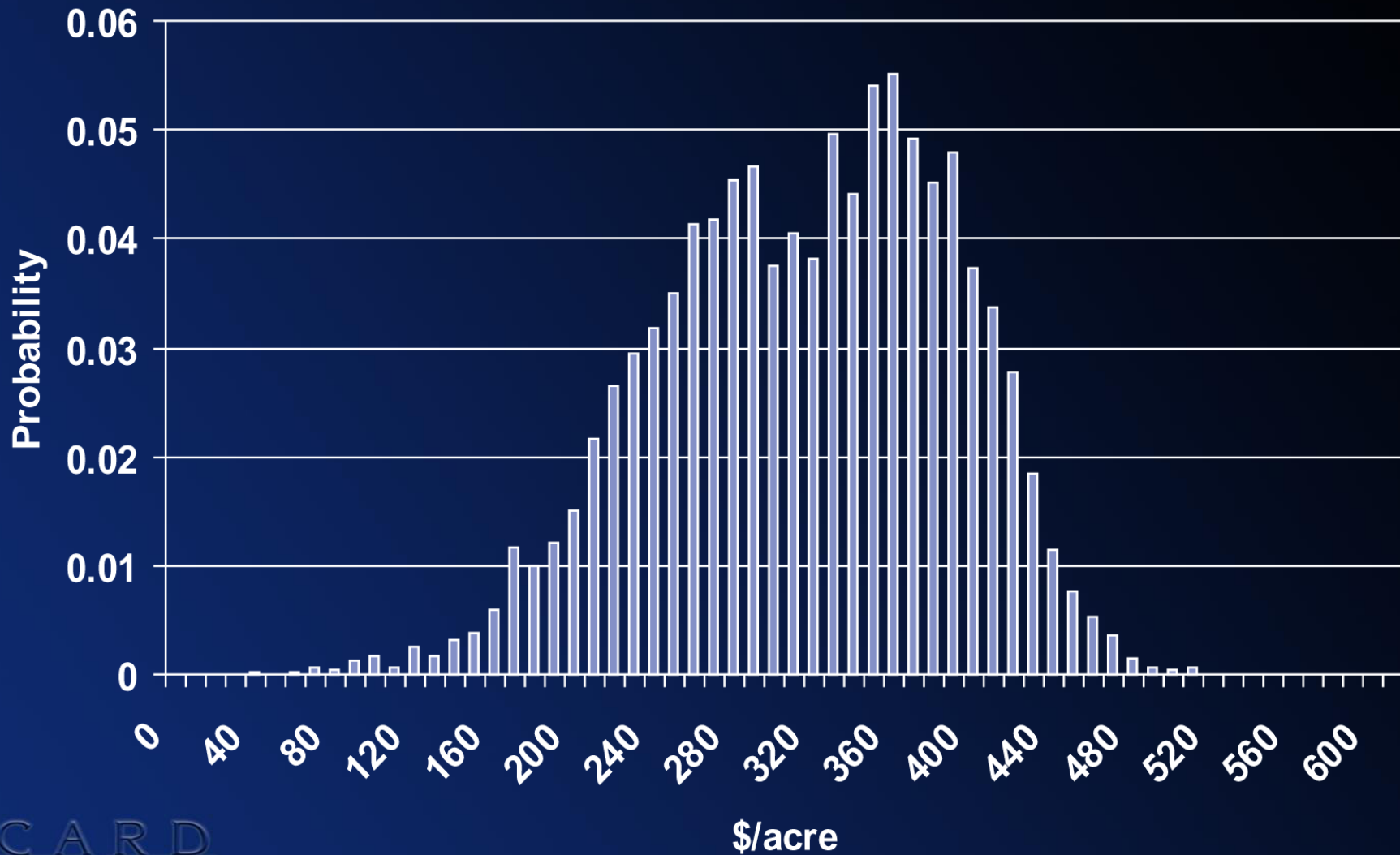
Revenue with Revenue Insurance



Revenue with RA-HPO and Price Hedge



Revenue with RA and Price Hedge



Iowa Corn and Soybeans Crop Insurance Decision in 2003

| Product | Acres Insured |
|------------------------------|---------------|
| Actual Production History | 6,525,920 |
| Crop Revenue Coverage | 1,725,168 |
| Group Risk Income Protection | 22,502 |
| Group Risk Plan | 283,791 |
| Income Protection | 6,959 |
| Revenue Assurance | 11,331,780 |
| Total Insured Acres | 19,896,119 |
| Total Planted Acres | 22,800,000 |

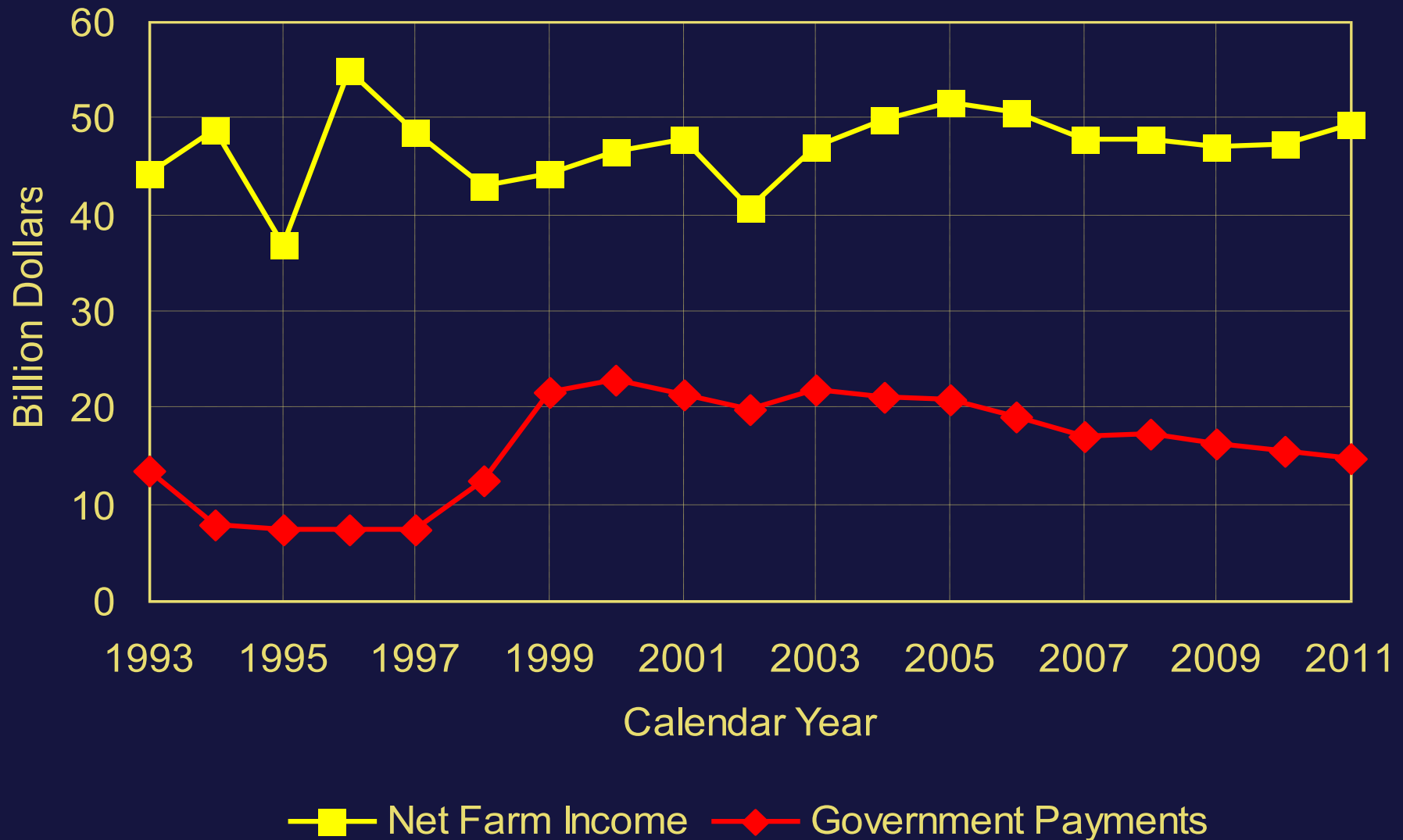


Government Programs

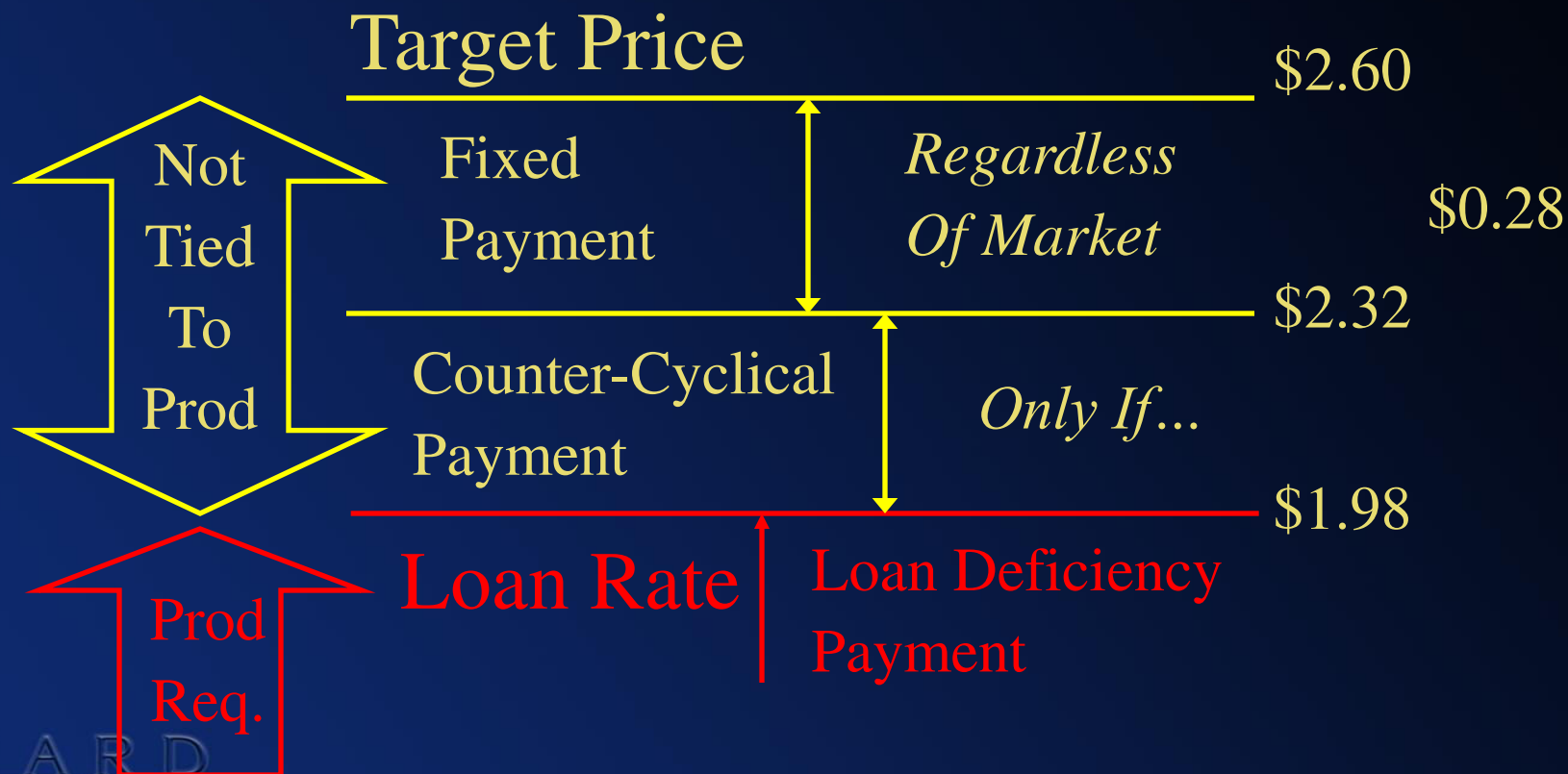
- Four primary forms of government support
 - LDP: Price guarantee on all harvested bushels (Iowa corn at about \$1.90 per bushel)
 - CCP: Price guarantee on a fixed number of bushels for prices between \$1.90 and \$2.24 per bushel.
 - DP: Guaranteed payment of about \$30 per acre (\$0.19 per bushel)
 - Crop insurance: pays off when yield or revenue is low



Net Farm Income and Government Payments



Structure of Payments for Corn

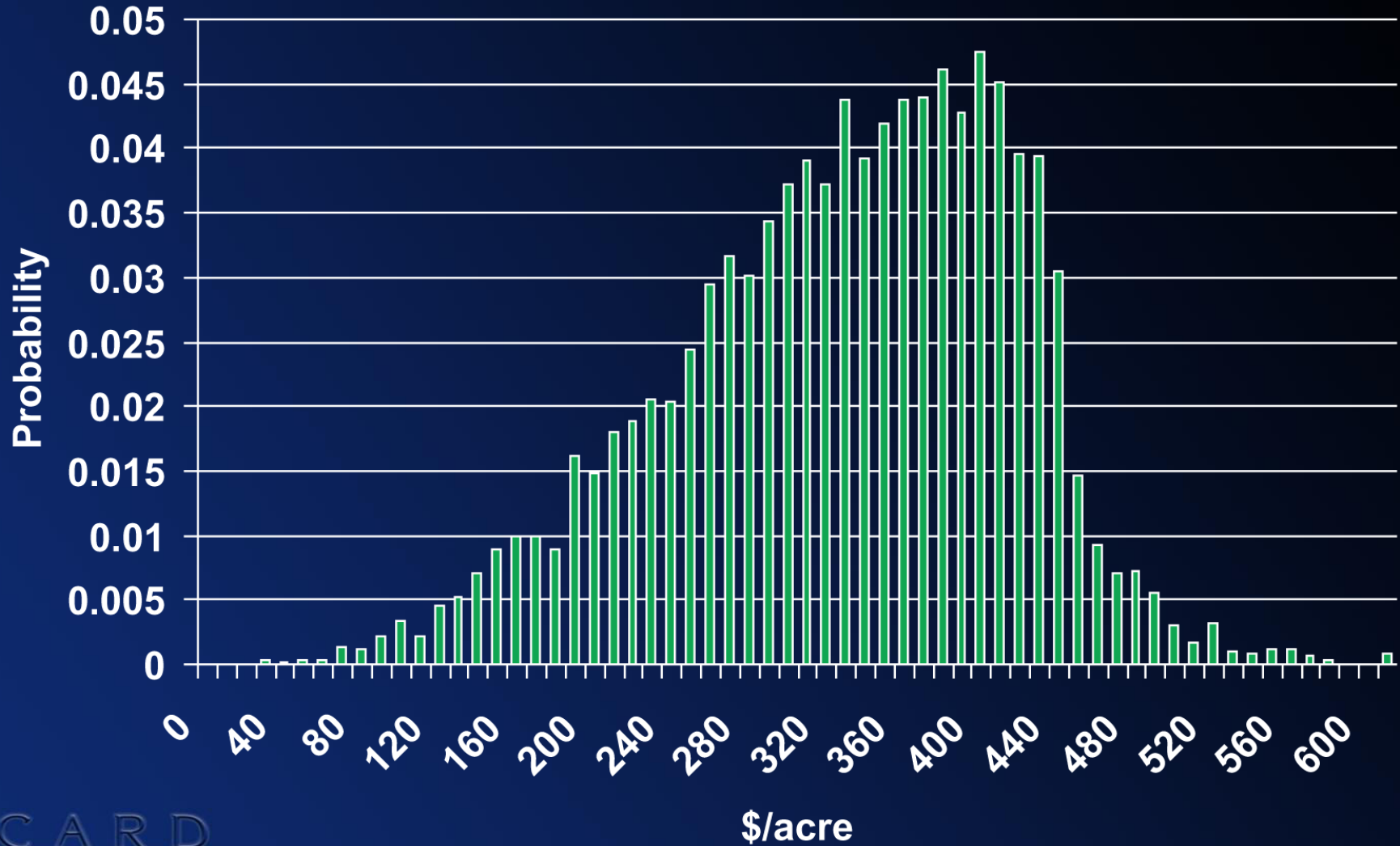


Purpose of Farm Programs

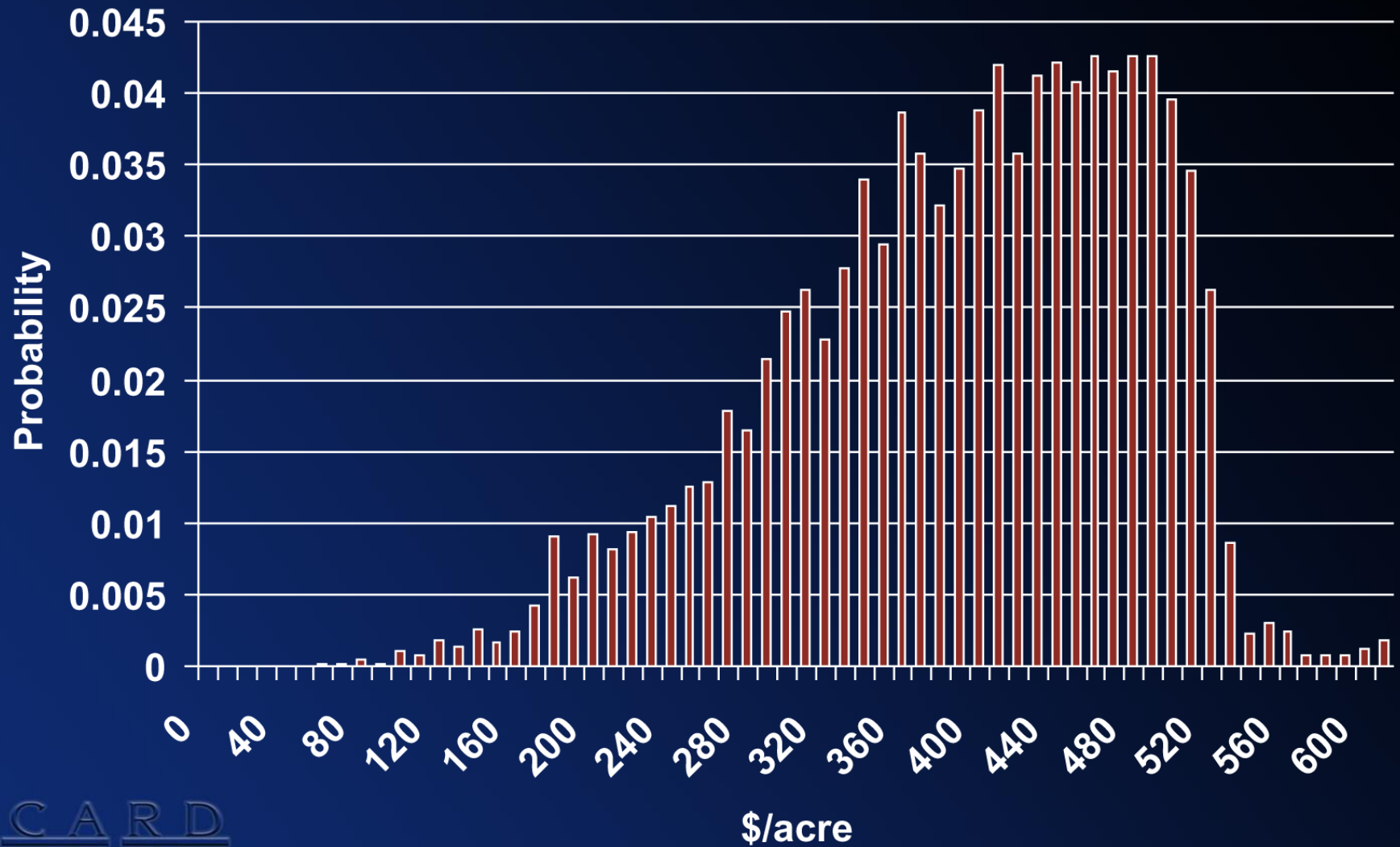
- Commodity programs (DP, LDP, CCP)
 - ❖ support aggregate income of sector
- Crop Insurance
 - ❖ support farmers' individual incomes



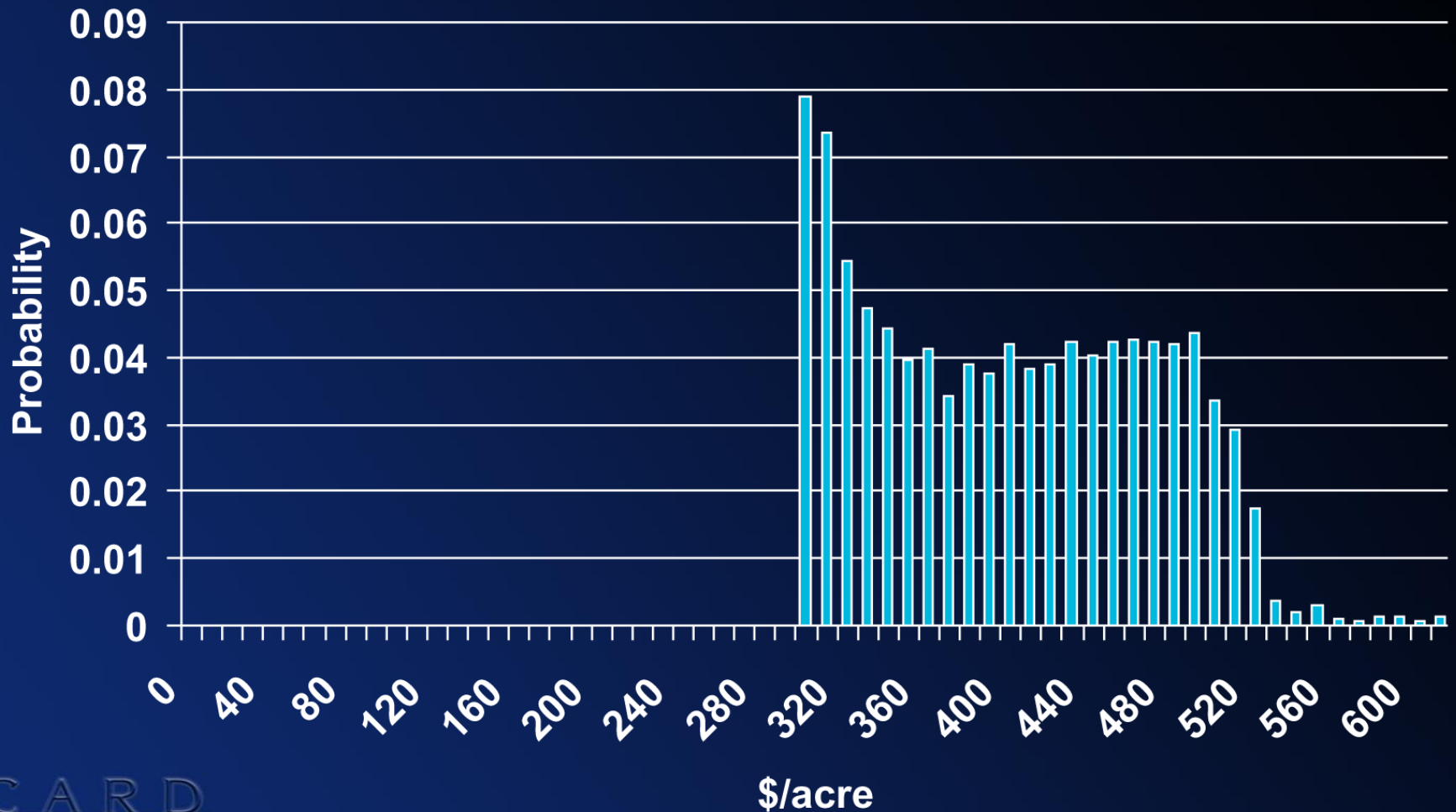
Revenue with LDP



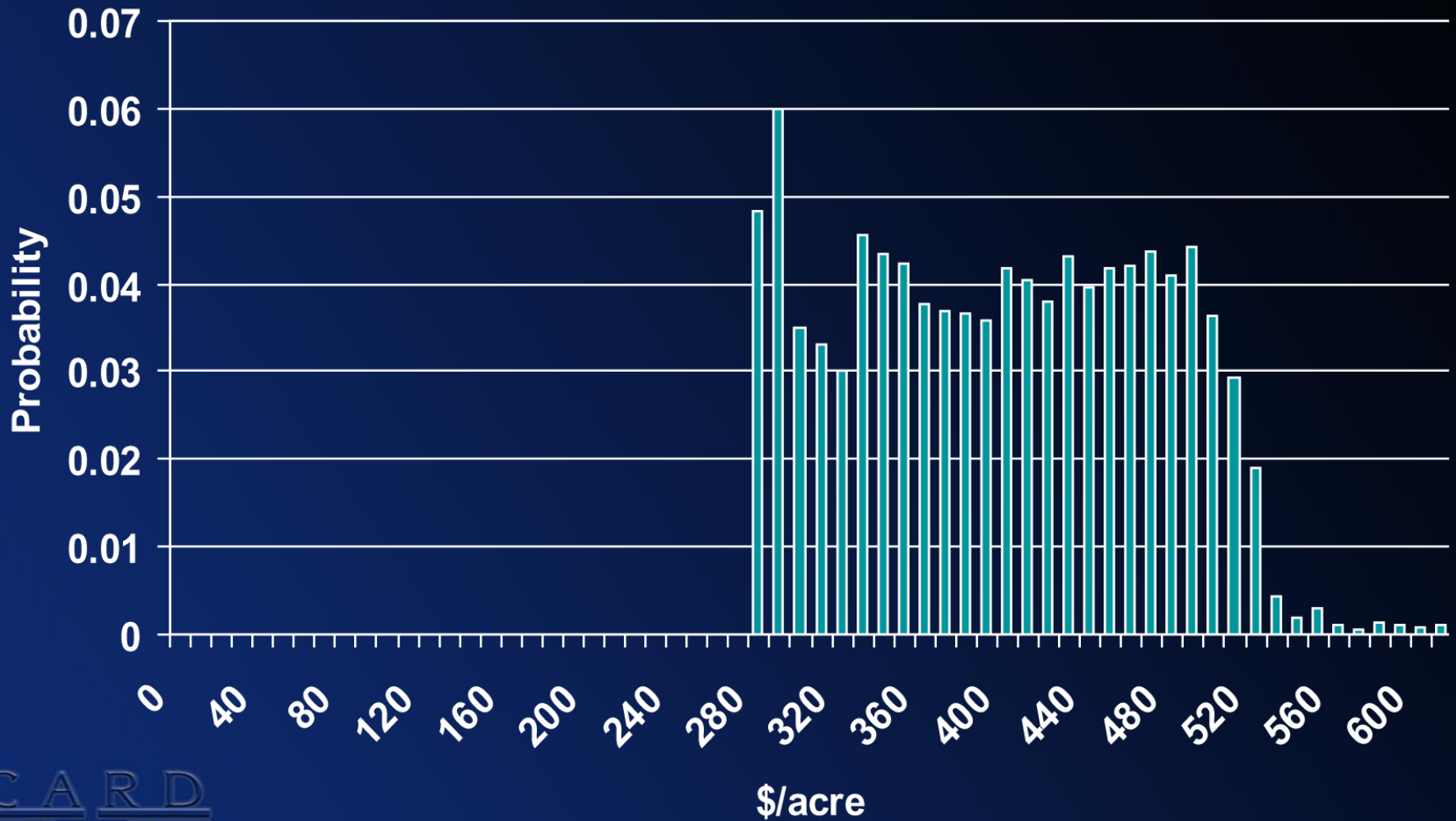
Revenue with LDP, CCP, and DP



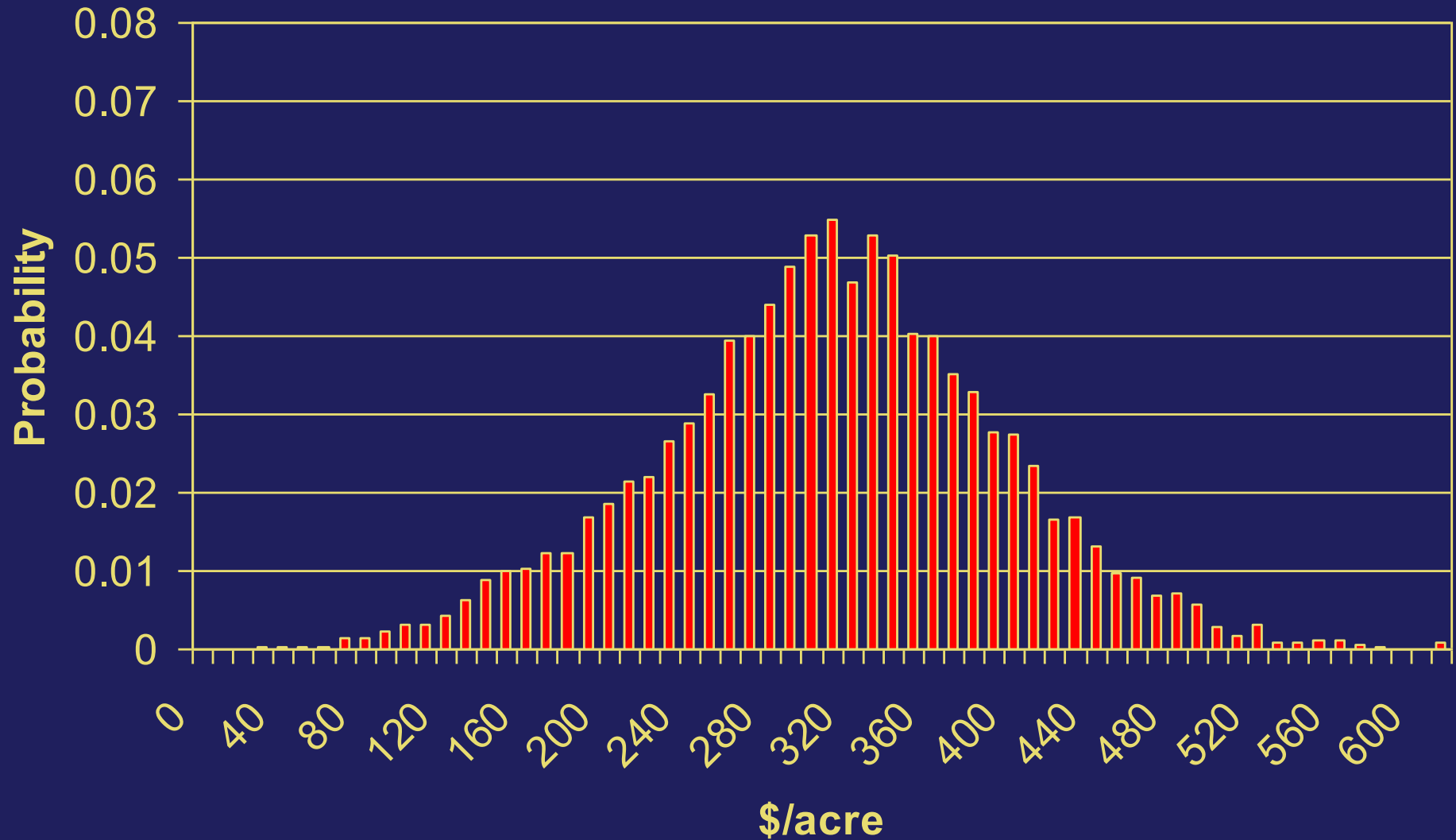
Revenue with Yield Insurance and Government Payments



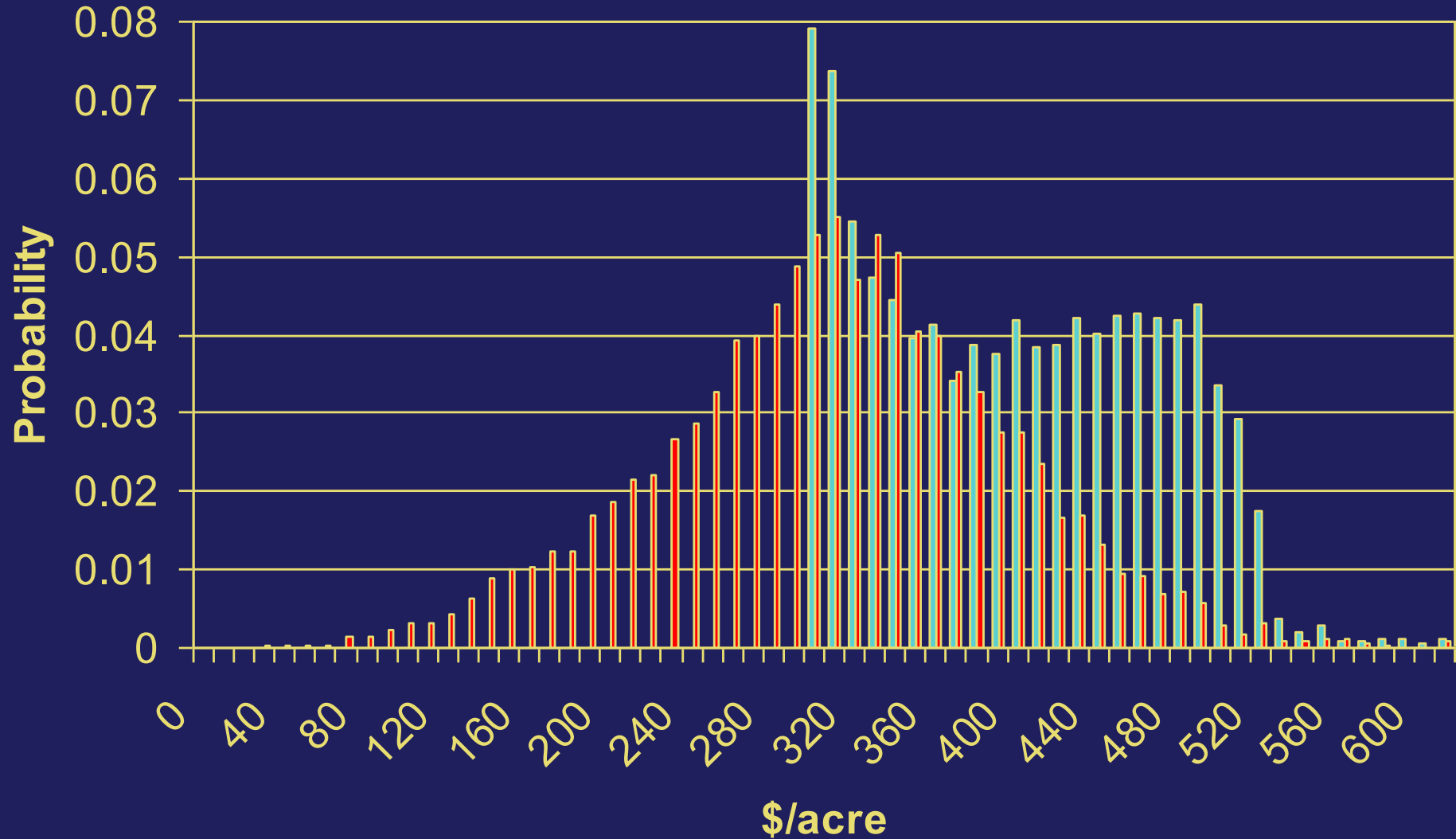
Revenue with Revenue Insurance and Government Payments



Distribution of Revenue without Government Payments



Change in Risk from Crop Insurance and Government Payments



Is the “Farm Problem” Fixed?

- Farmers have raised their expectation of revenue
- Investment decisions and land rental agreements will reflect higher profitability
- What happens when revenue is less than projected?

