

# Federal Milk Marketing Order Reform: Effects on Tennessee Dairy Farms

Stephen P. Slinsky, James A. Whaley  
& Kelly H. Tiller

Agricultural Policy Analysis Center  
The University of Tennessee

# Federal Milk Marketing Orders

## Purpose And Objectives

- To Stabilize Market Conditions
- To Benefit Producers And Consumers By Establishing And Maintaining Orderly Marketing Conditions
- To Assure Consumers Of Adequate Supplies Of Pure And Wholesome Milk

# Federal Milk Marketing Orders

- 31 Federal Milk Marketing Orders (Regions)
- Established Minimum Pricing Formulas For Each Class Of Milk
- Established Class I Price Differentials To Encourage Production In Milk-Deficit Regions

*Reforms mandated by Federal Agriculture Improvement and Reform Act of 1996.*

# FMMO Reforms

## Final Rule

- Consolidated 31 Federal Milk Marketing Orders Into 11 Orders
- Reclassifies Milk Into Four Classes According To Use
- Revises The Minimum Pricing Formulas For Each Class Of Milk
- Changed The Class I Differential Formulation

# FMMO Reforms

## Final Rule Was Not So Final

- Producers Protested Class I Price Differential In The Final Rule
- Protests Led To Court Injunction Against Final Rule Implementation
- In Addition Final Rule Could Not Get Through Appropriations

# The Consolidated Appropriations Act, 2000

- Mandated Immediate Implementation Of The Final Rule
- Mandated That Modified Option 1A Be Used For Formulating Class 1 Price Differentials

# Research Objective

- Estimate Farm-Level Financial Implications of FMMO Reforms For Tennessee Farmers

## Motivation:

- From 1982-1997, The Number Of Tennessee Dairies Has Declined By 74%

## Specific Questions:

- Will Tennessee Dairies Be Better Off Under The Revised Final Rule Than Current And/Or Final Rule Provisions?
- Will FMMO Reforms Help Tennessee Dairies Survive?

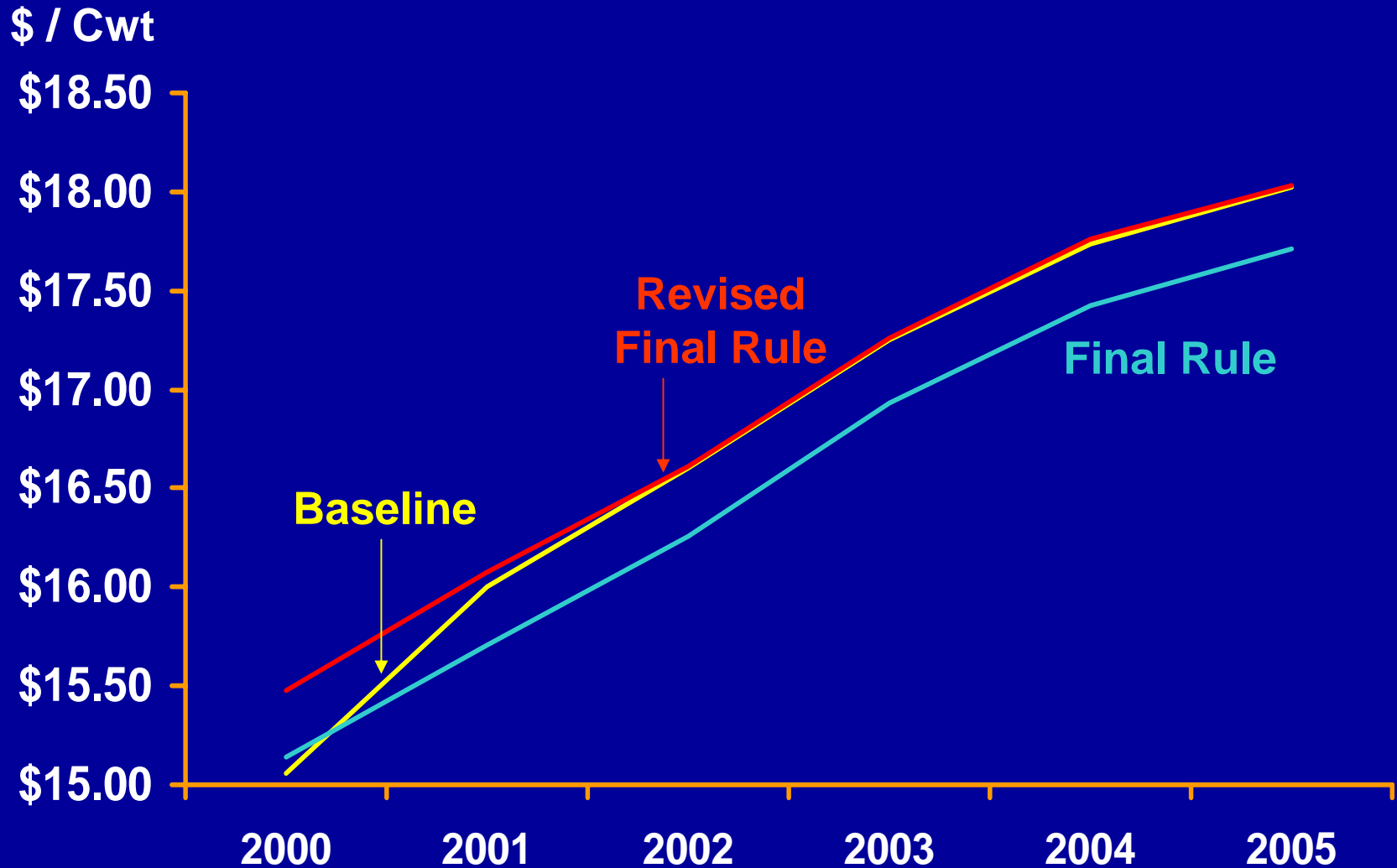
# Methodology

- Farms Analyzed Using FLIPSIM Farm-Level Policy Model
- Deterministic Analysis
- Estimation Period Is 2000—2005
- Using USDA's All-Milk Price Projections For Baseline, Final Rule, And Revised Final Rule Scenarios

# Methodology

- Simulate Financial Impacts Of Projected All-Milk Prices For Two Representative East Tennessee Dairies Under
  - Current FMMO Provisions
  - FMMO Provisions Under The “Final Rule”
  - FMMO Provisions Under The Consolidated Appropriations Act, 2000 (“Revised Final Rule”)

# USDA Milk Price Projections



# TnFARMS

## Representative Farms Approach

- Each Farm Represents A Typical Dairy Operation In A Particular Region
- Development Relies On Farmer Input
  - Production Levels, Expected Yields, Prices, Management, Financial Data
- Farm's Rations Consistent With Dairy Specialists' Recommendations

# TnFARMS

## Representative Dairy Farms

### Greene County Dairy Farm

Milks 100 Cows

Average Production =  
18,600 Lbs/Year

### Monroe County Dairy Farm

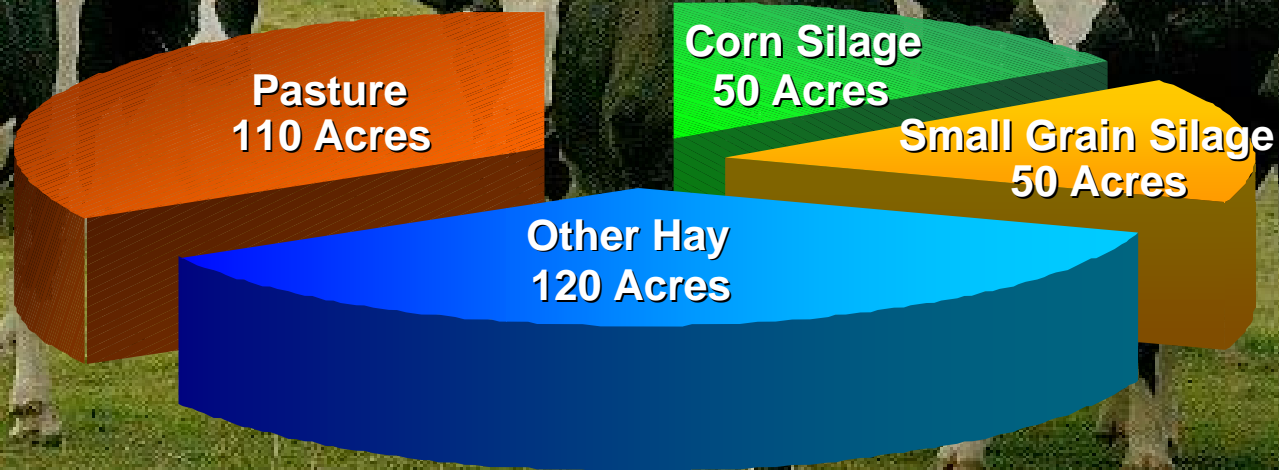
Milks 110 Cows

Average Production =  
18,455 Lbs/Year



# Greene County Dairy Farm

100-Head Dairy Operation



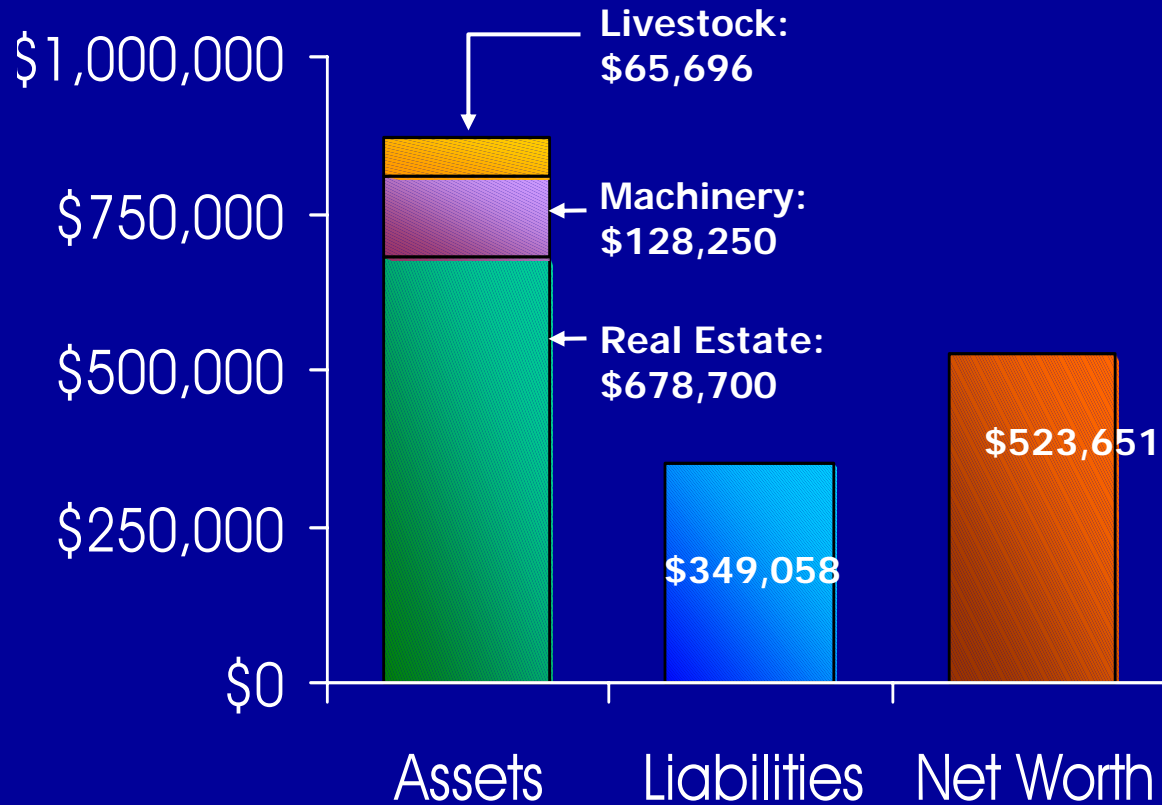
## Basic Assumptions

18,615 cwt./yr Milk Production  
No BST

40% Debt Load  
No Off-Farm Income

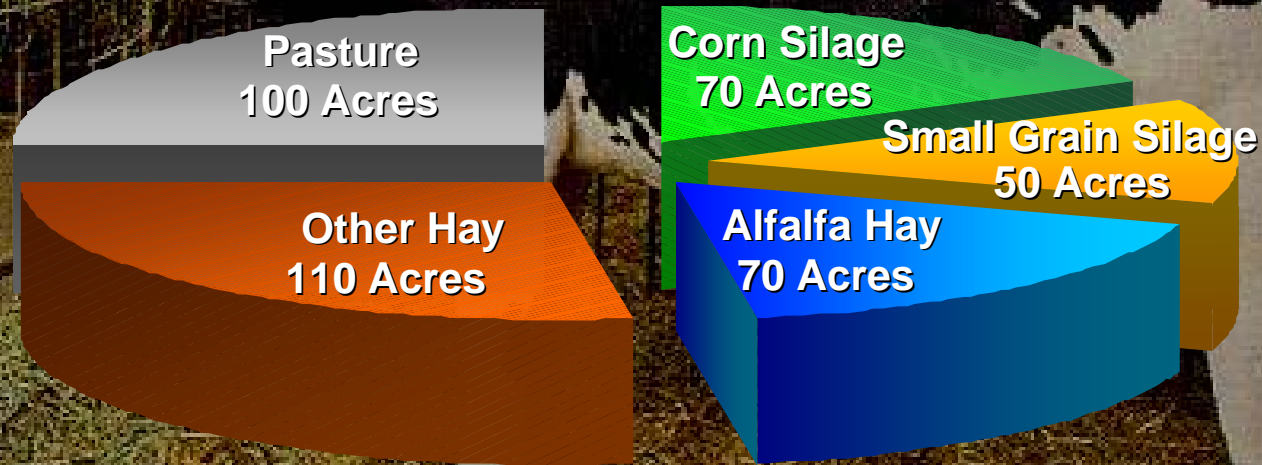
All Bull Calves Sold After Two Days

# Greene — Assets And Liabilities



# Monroe County Dairy Farm

110-Head Dairy Operation



## *Basic Assumptions*

20,037 cwt./yr. Milk Production

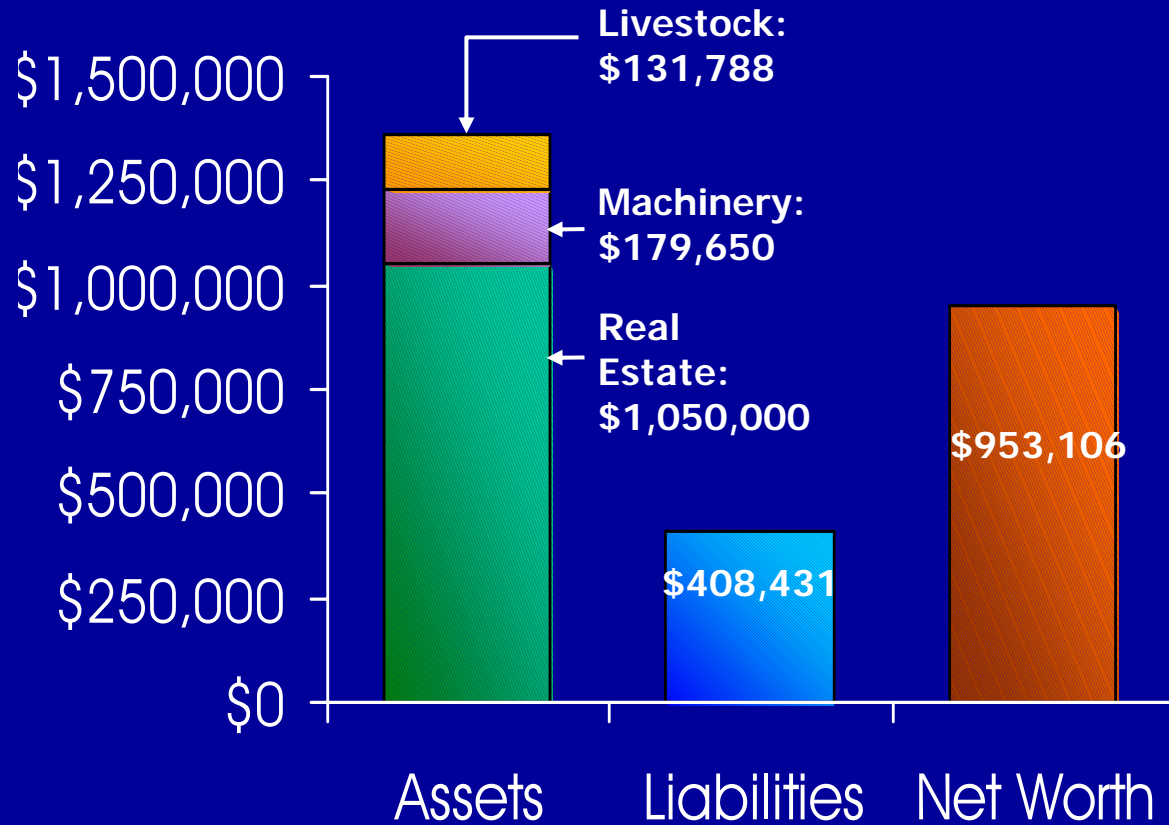
No BST

30% Debt Load

No Off-Farm Income

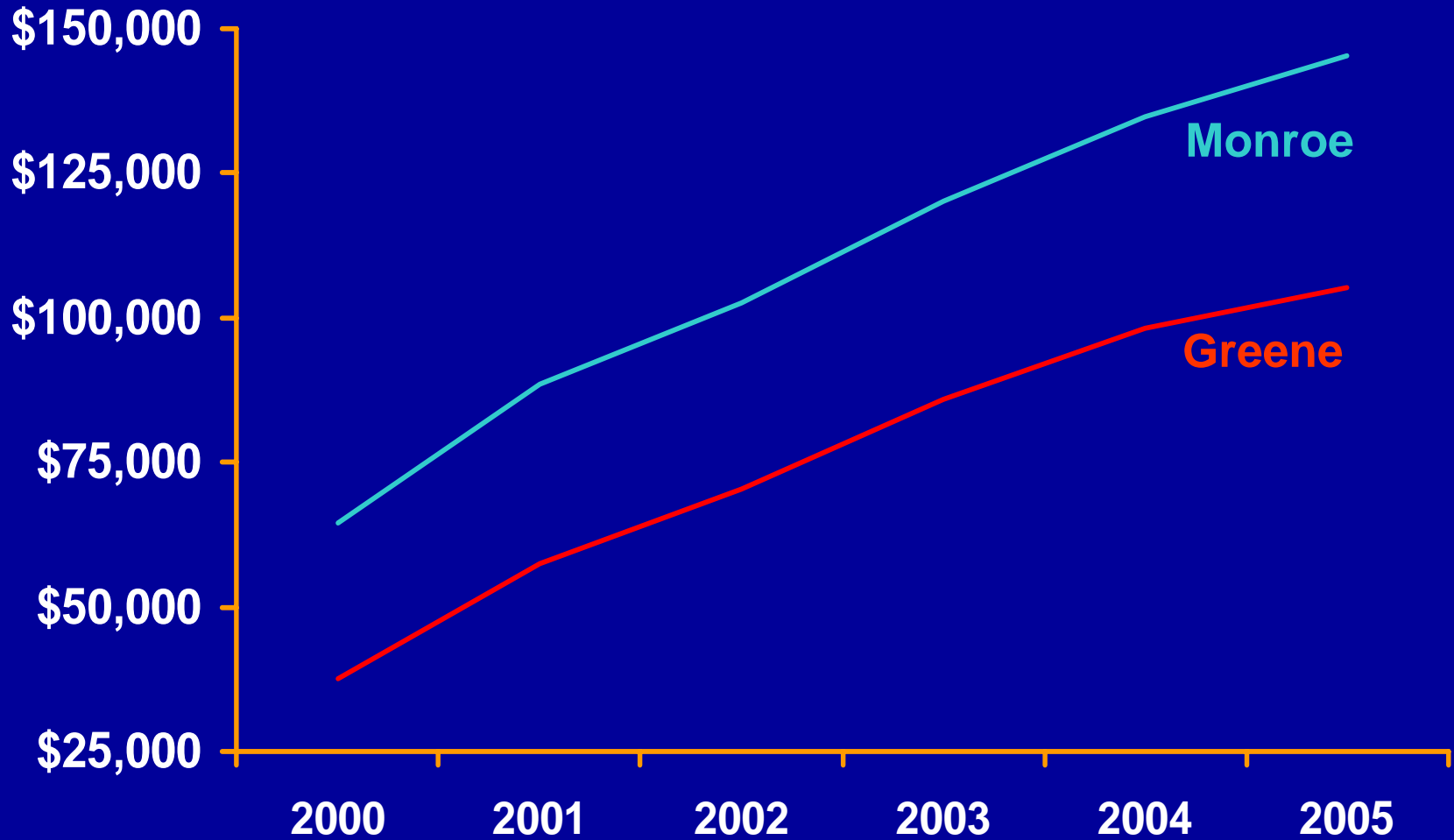
Hold One-third of Bull Calves For Sale at 7 to 8 Months

# Monroe — Assets And Liabilities



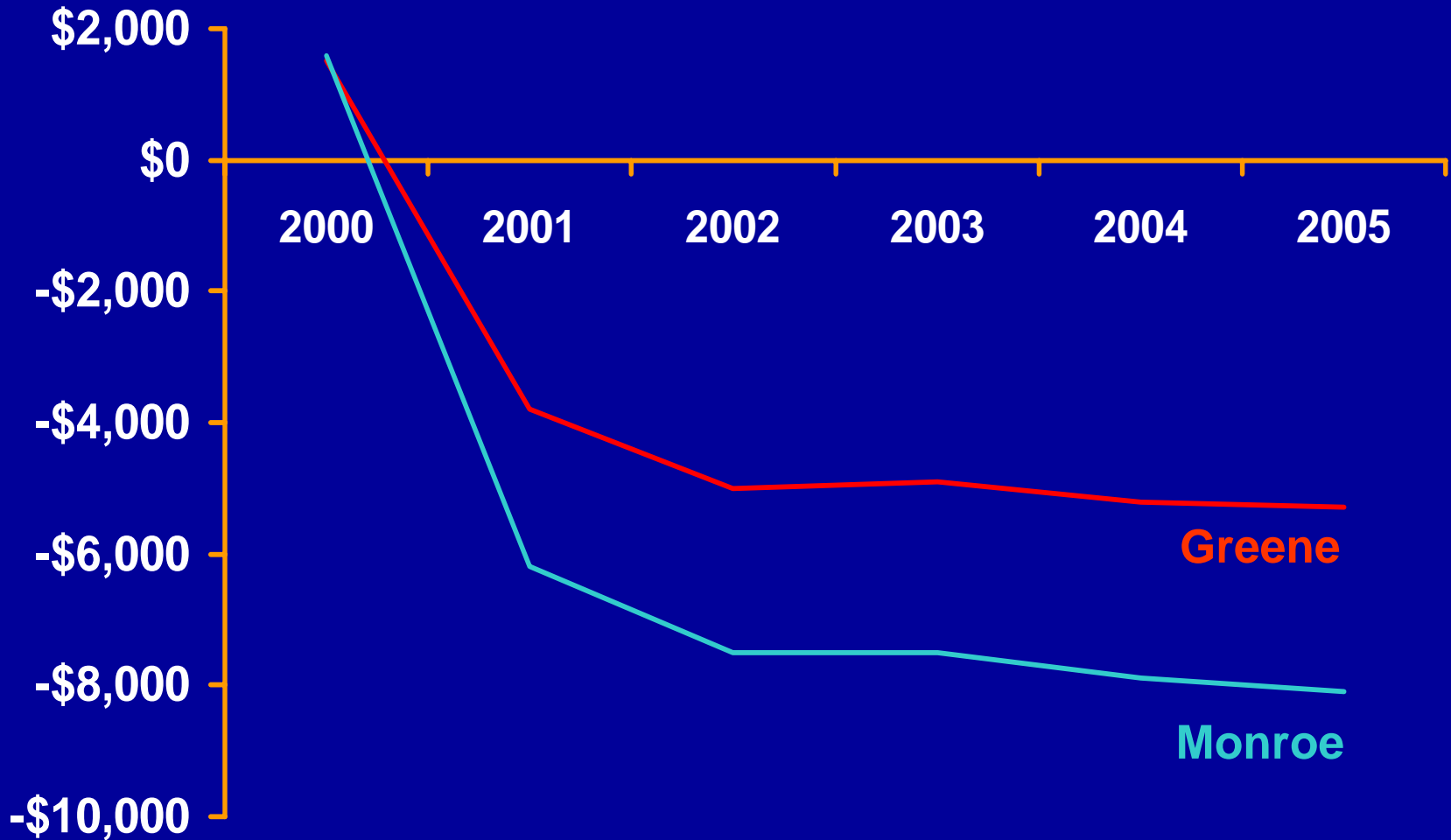
# Baseline

## Net Cash Farm Income



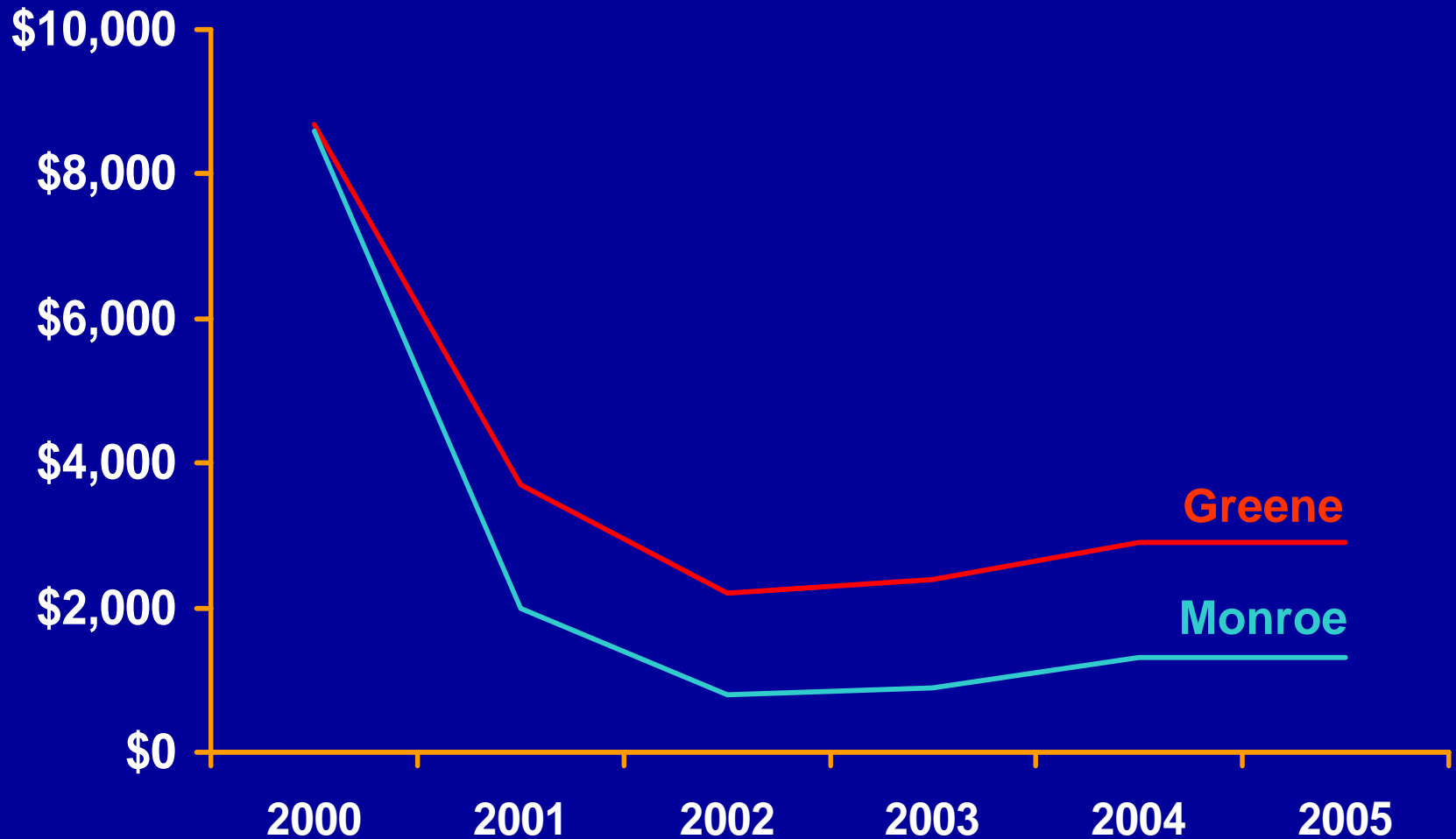
# Final Rule

## Change In Net Cash Farm Income



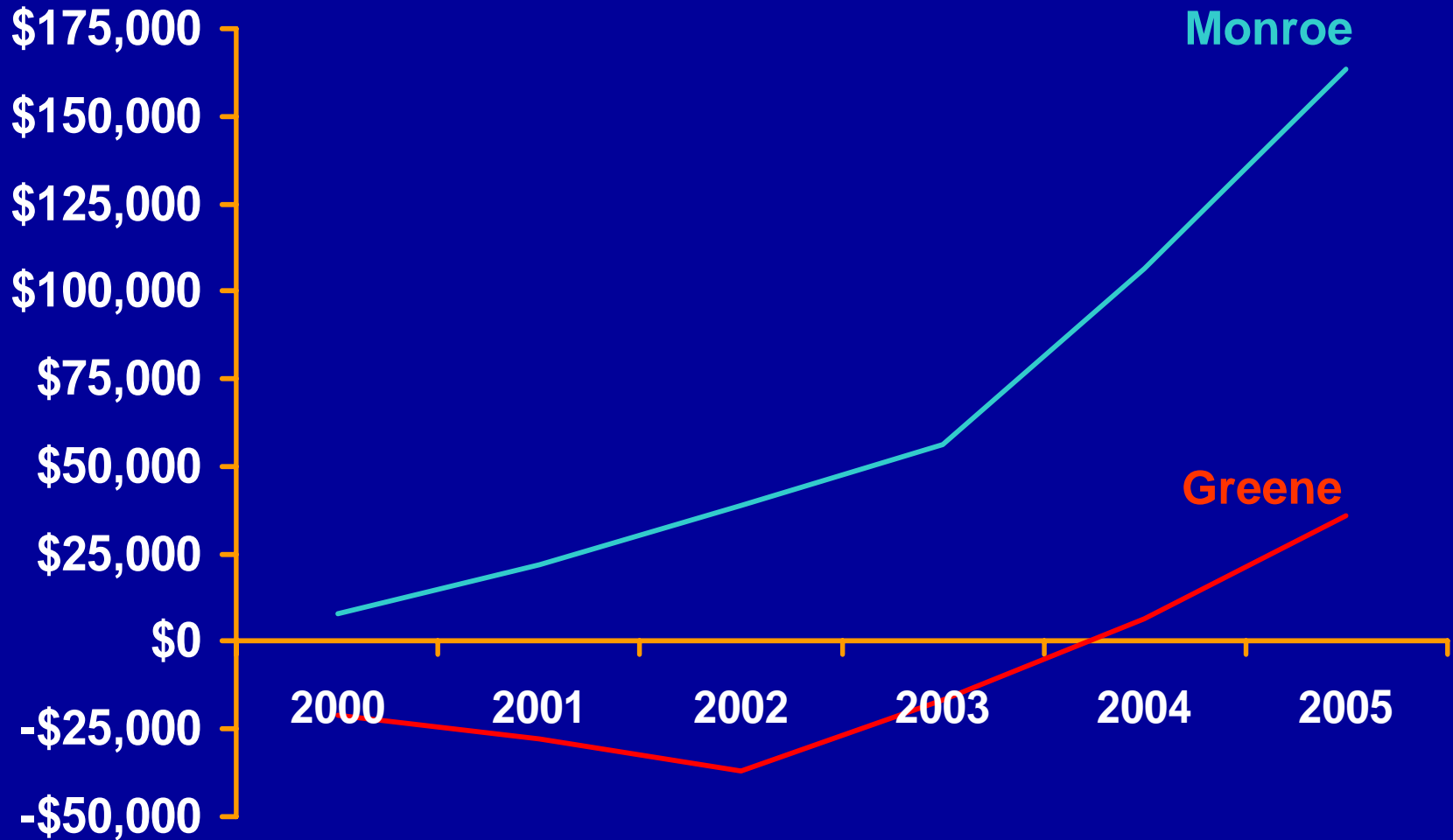
# Revised Final Rule

## Change In Net Cash Farm Income



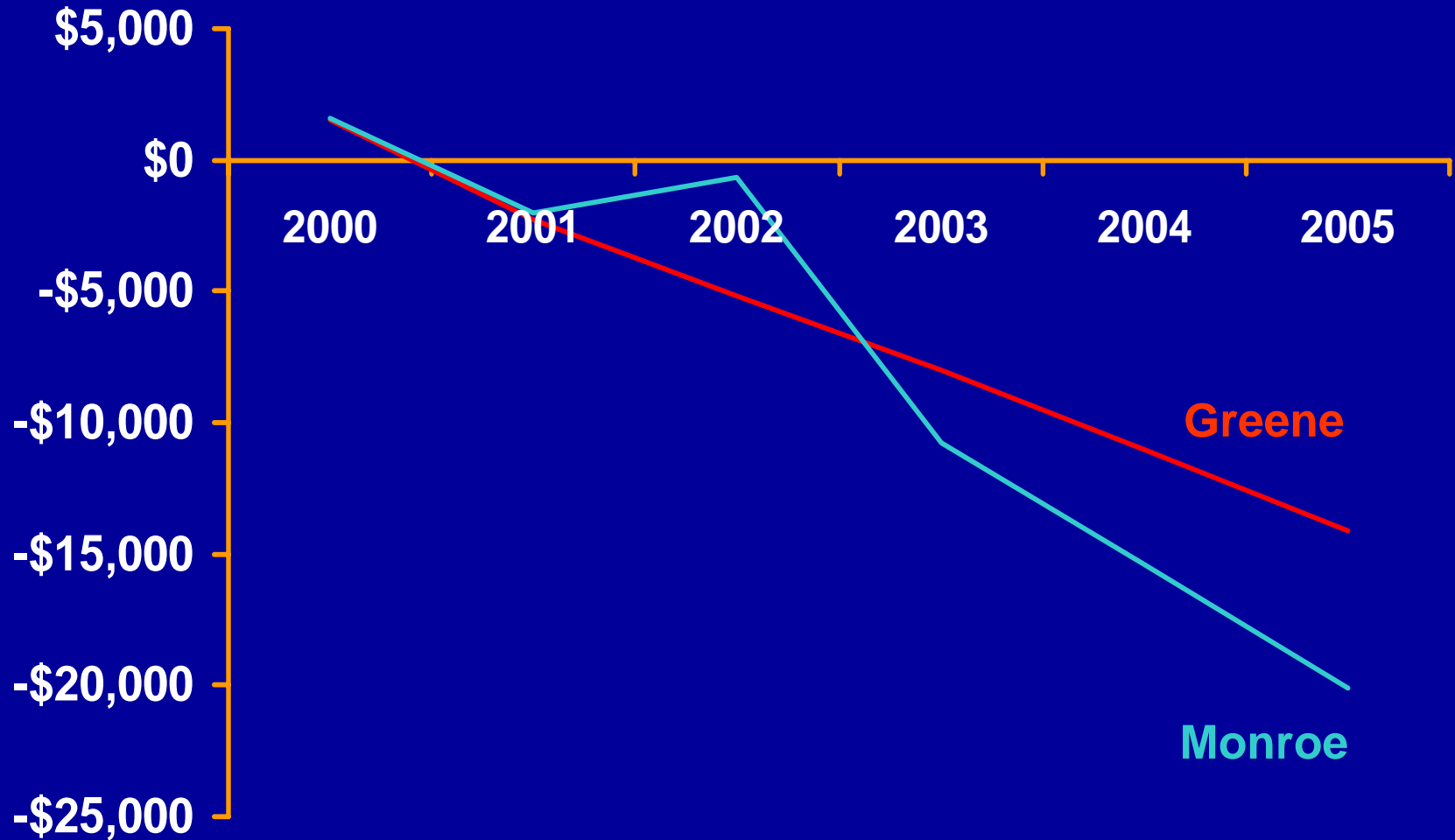
# Baseline

## Ending Cash Balance



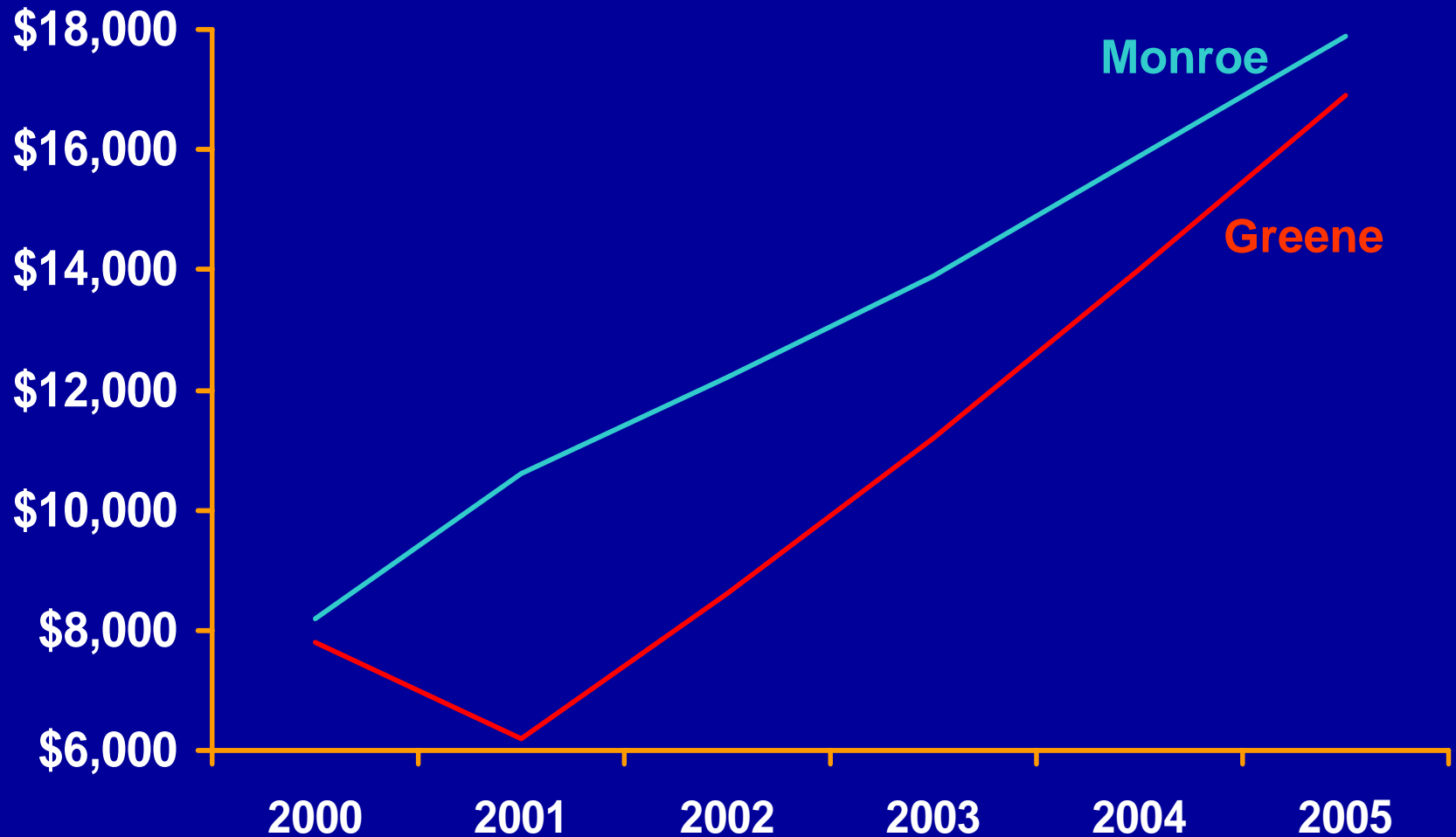
# Final Rule

## Change In Ending Cash Balance



# Revised Final Rule

## Change In Ending Cash Balance



# Summary Of Results

- Break-Even Price For All Milk Is \$16.19/CWT
  - Average Price Under Final Rule Is \$16.52
  - Average Price Under Revised Rule Is \$16.87
- Net Cash Farm Income Slightly Higher Initially, Trending Lower Than Baseline Under Final Rule
- Net Cash Farm Income \$8,000 Higher Under Revised Final Rule Initially, Then Declining, But Still Above Baseline

# Summary Of Results

- Ending Cash Balance Negative Until 2004 Under All 3 Scenarios
- Higher Debt Load Causes Ending Cash Balance To Decline In Short Run
- Financial Ratios Improve Over Period, Primarily Due To Rising Milk Prices
- Revised Final Rule Provisions Are Positive For Greene Dairy Farm

# Summary Of Results

- Break-Even Price For All Milk Is \$14.68/CWT
  - Average Price Under Final Rule Is \$16.52
  - Average Price Under Revised Rule Is \$16.87
- Net Cash Farm Income Initially Higher Than Baseline Under Final Rule, Trending Below Baseline
- Net Cash Farm Income \$8,000 Higher Under Revised Final Rule Initially, Leveling Off About \$3,000 Higher Than Baseline

# Summary Of Results

- Ending Cash Balance Increasing In Baseline, Increasing But \$20,000 Lower In Final Rule Due To Reduced Receipts And Accumulating Debt
- Ending Cash Balance Higher And Increasing Under Revised Final Rule
- Financial Ratios Improve Over Period
- Farm Is Better Off Under Revised Final Rule, But Option 1A Not Detrimental To Farm

# Summary Of Results

- Contrary To Many Farmers' Belief, Final Rule Provisions Not Likely To Bankrupt Farms
- Tennessee Dairies Somewhat Better Off Under Revised Final Rule Provisions
- Farms' Financial Position Improves As Milk Prices Trend Upward
- Debt Structure, Efficiency, And Management Figure Prominently Into Farm's Survivability/Profitability (Not Just Price)

# Paper & Presentation Available

<http://apacweb.ag.utk.edu>

Follow Links To

- Recent Presentations
- Recent Publications