



Analysis of Decoupled Subsidies

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Focus on Decoupled Payments”
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Analytical Challenge

- What is a decoupled payment?
 - Ex post or ex ante?
 - A consistent definition would advance dialogue among economists and policy makers
- Lack of a model that systematically incorporates decoupled payments in a consistent way

Diverse approaches to analyzing decoupled payments

OECD

conceptual framework emphasizing static effects; risk and dynamic effects; income, wealth, risk effects
empirical approach that emphasizes outcomes

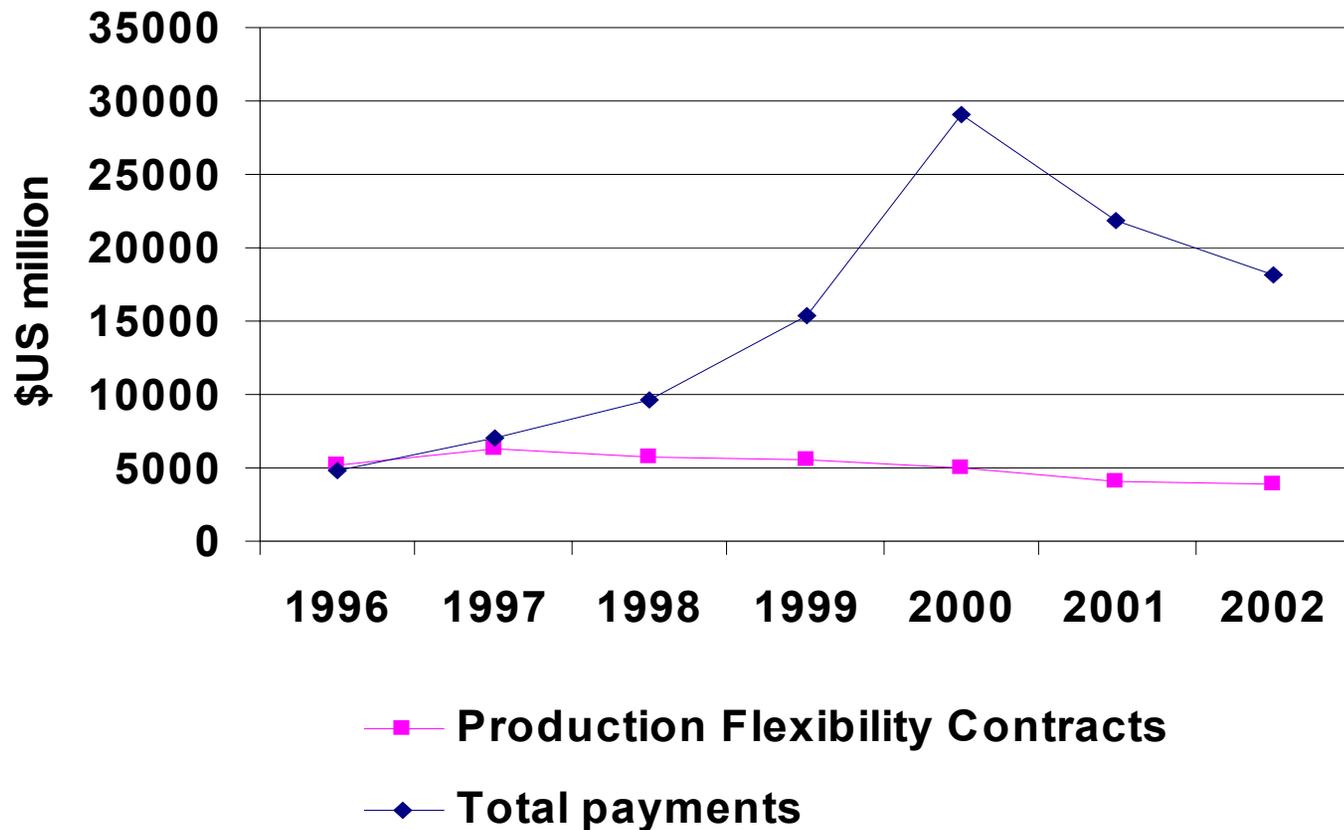
U.S. 2002 farm bill analysis - no marginal price incentives, qualitative assessment of potential wealth/investment effects

ERS decoupling report: Descriptive analysis of characteristics of farms, households and markets that could influence the response to direct payments

Simulations of payments, based on economic theory and calibrated models, e.g., Roe, Somwaru and Diao, 2003

Econometric analyses of land use, payment pass-through, labor allocations

Decoupled payments: One-third of farm payments in FAIR Act



Source:AO, 11/2002

Motivation for ERS Decoupling Project

- Proposals for limits to decoupled payments in Doha Development Agenda
- Decoupled payments argued to be production and trade distorting because:
 - may increase on-farm investment
 - may increase risk-tolerance of farmers
 - may create expectations about eligibility rules for future payments
 - may interact with “market failures” and be effectively coupled

Approach in ERS “Decoupling Project”

Implementation definition -

“lump-sum” redistribution of income -- individual is unable to take actions that influence eligibility for or level of payment

Non-distorting outcome rests on strong assumptions

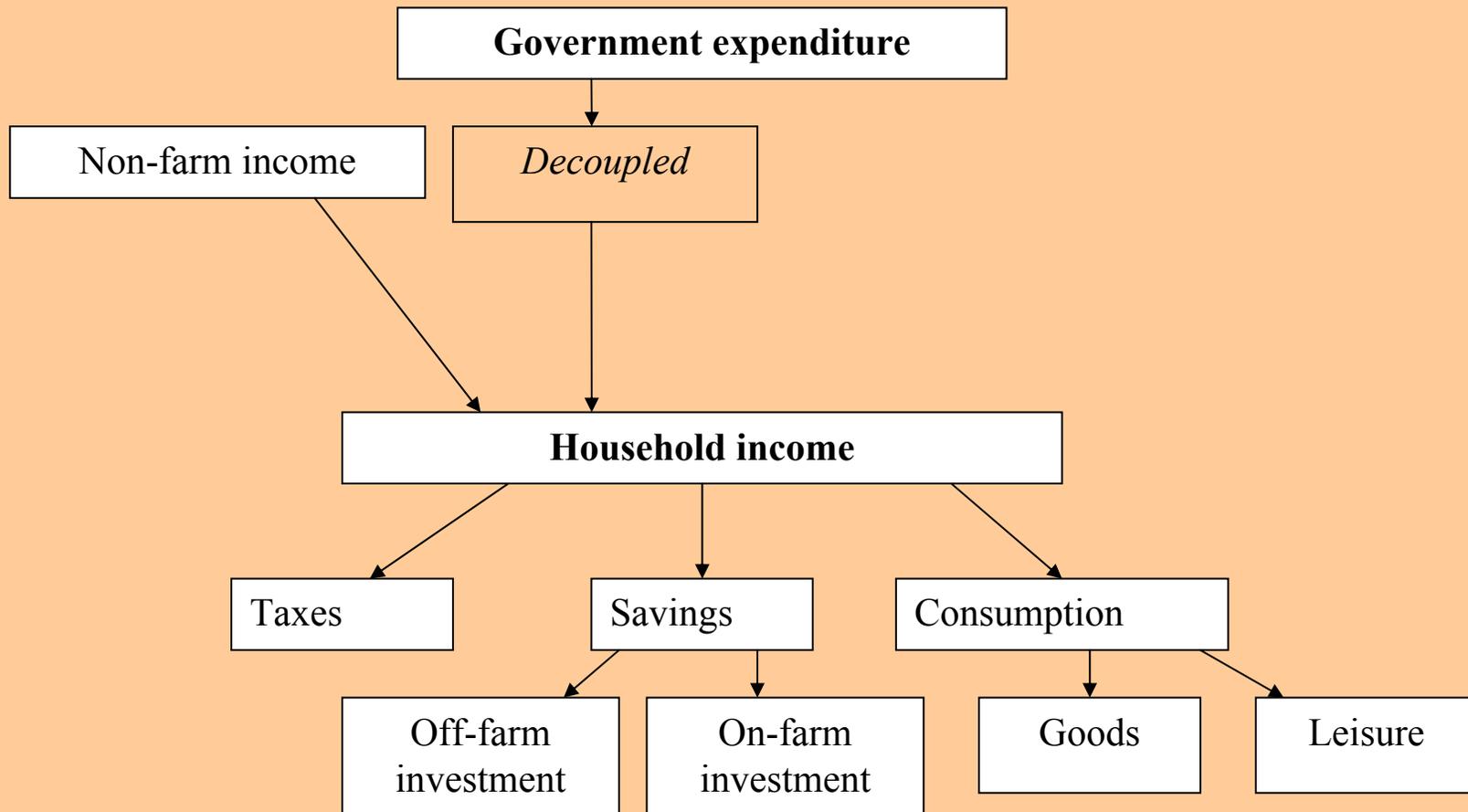
e.g., perfectly competitive markets, complete markets for factors and risk, perfect information

Conditions not likely to hold in real world – means market setting is important focus of analysis

Implementation definition – allows us to term a payment “decoupled” and still look for production effects; consistent with WTO’s implementation criteria for decoupled support

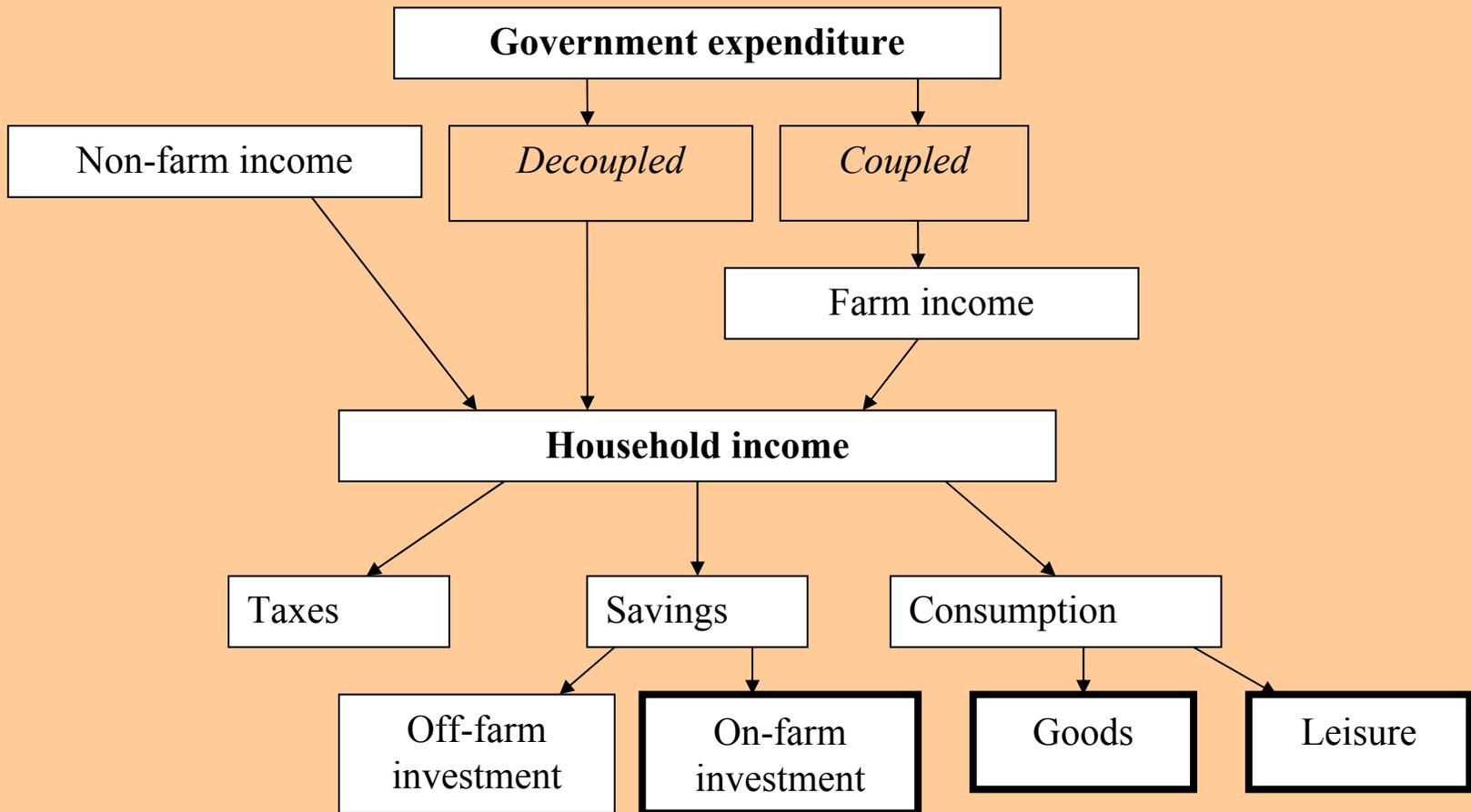
Conceptual Framework:

Flow of household income and expenditure



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Agricultural Resource Management Survey (ARMS)

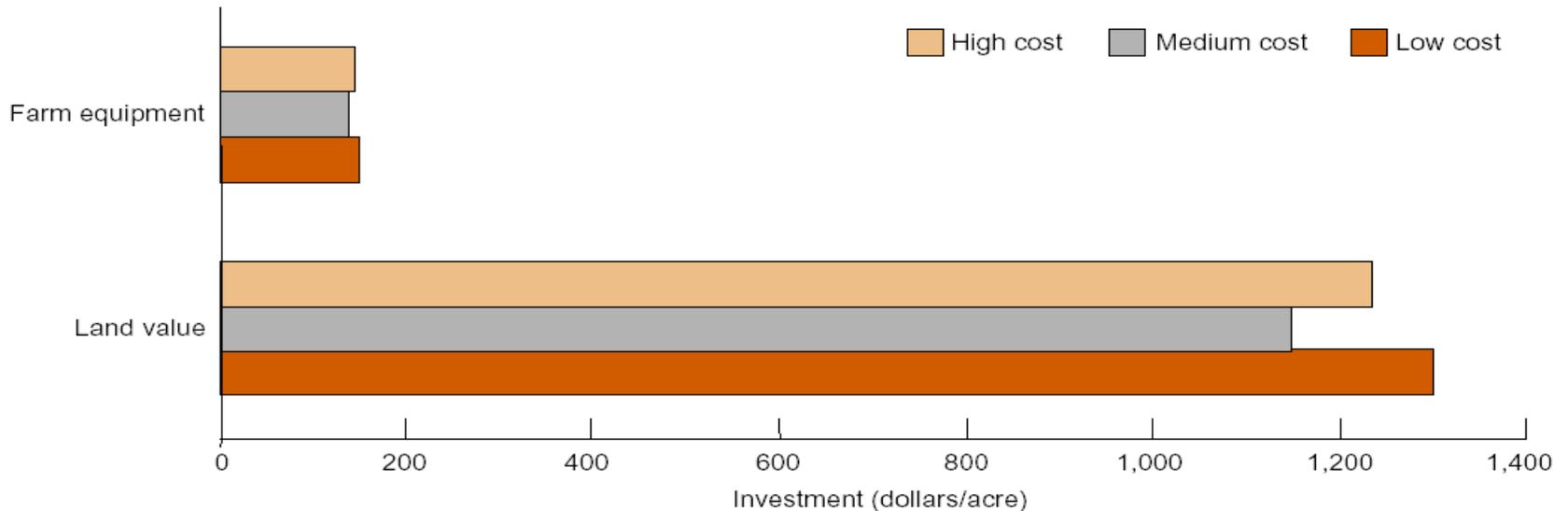
- Survey of agricultural households, since 1996
- Collects data on agricultural resource costs and use, farm financial conditions, and the characteristics of farm operators and their households (age, education, off-farm work)
- Cross-section, not a panel survey

Approaches in ERS studies

- Use ARMS data to describe consumption, savings and investment behavior of households
- Use ARMS and FCRS data to estimate household labor response to decoupled payments
- Use ARMS data to describe investment related to cost structure (high versus low cost producers)
- Use Ag Census to estimate payment pass-through

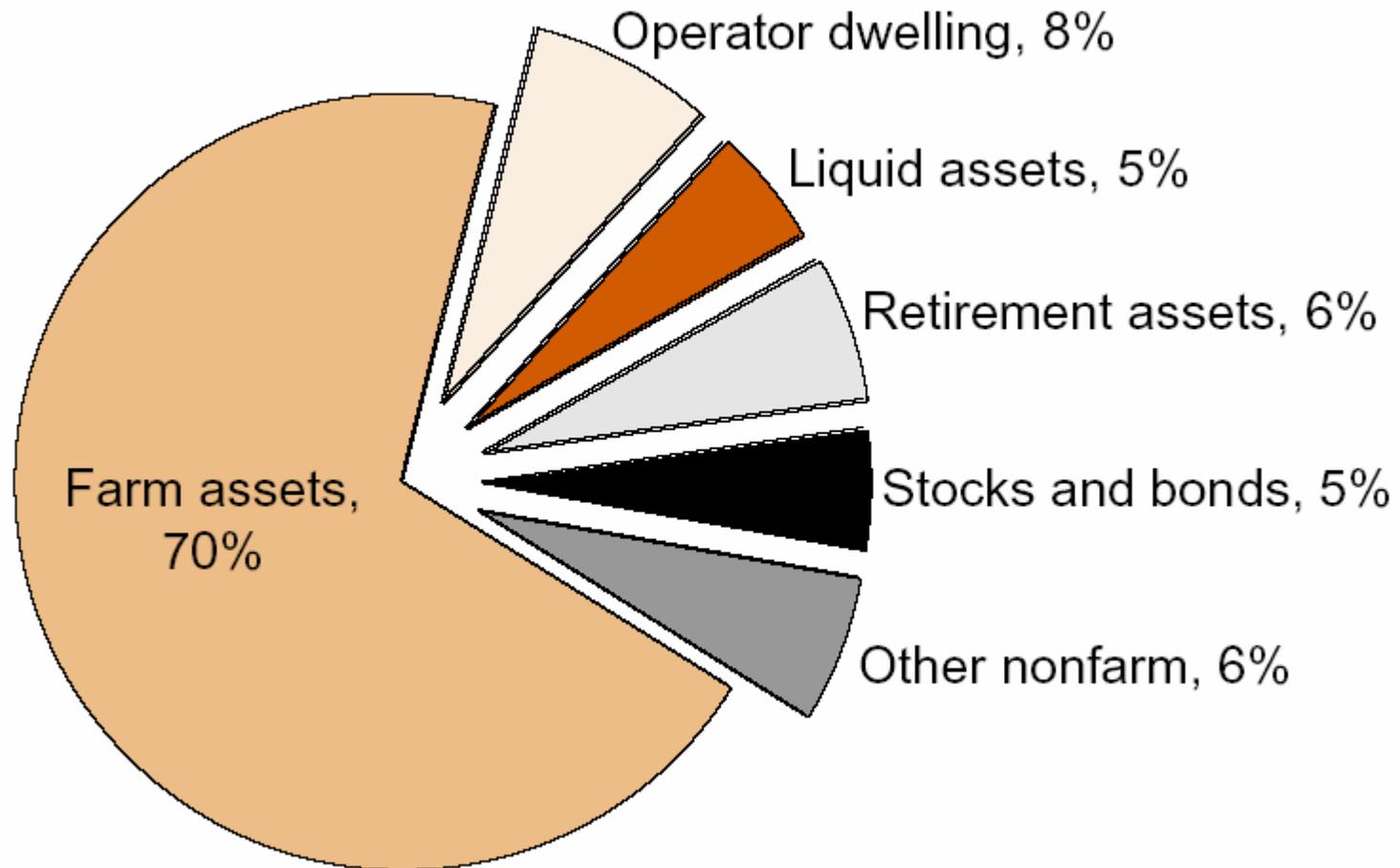
Findings from recent research: Evidence of capital constraints

Among participants, there is no evidence of capital constraint (investment per acre) related to cost of production



Source: ARMS, 1999.

Farm households with PFCs allocate savings across an investment portfolio



Note: Average assets = \$768,710.
Source: ARMS, 1999.

Findings from recent research: On-farm labor allocations

- Decoupled payments cause..

Leisure hours to increase about 9 hours per year on average;
effects on on-farm work negative but statistically insignificantly
- commercial farms, 1998-2000
(Dewbre and Mishra, 2002)

- *On-farm labor hours to increase* - about 50 hours per year on average - all farms, 2001
(El-Osta, Ahearn and Mishra, 2004)

Findings from recent research:

Land-markets

- PFC payments increase land values 8 percent (Roe, et al.)
- PFC payment pass-through in 1997 from tenants to landlords is 33 percent, compared to 22 percent for 1992 (more coupled) payments (Roberts, et al.)
- Pass-through diminishes potential for production distortions, or benefiting operators.
- Low pass-through a puzzle – rigid land markets or production distortions?

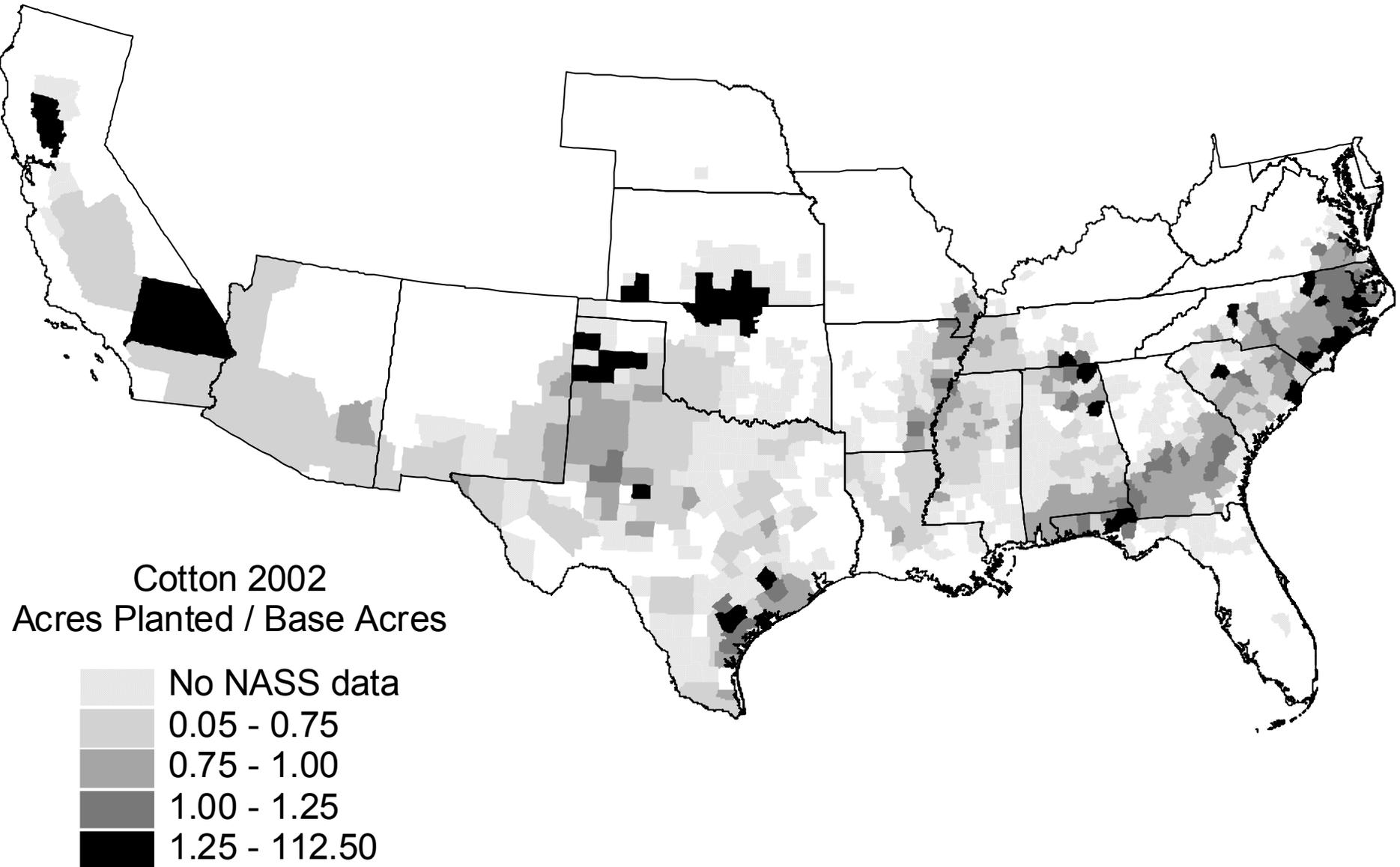
Planting Flexibility

Weakening the link between base acres and production

Share of production flexibility contract acres planted in 2001

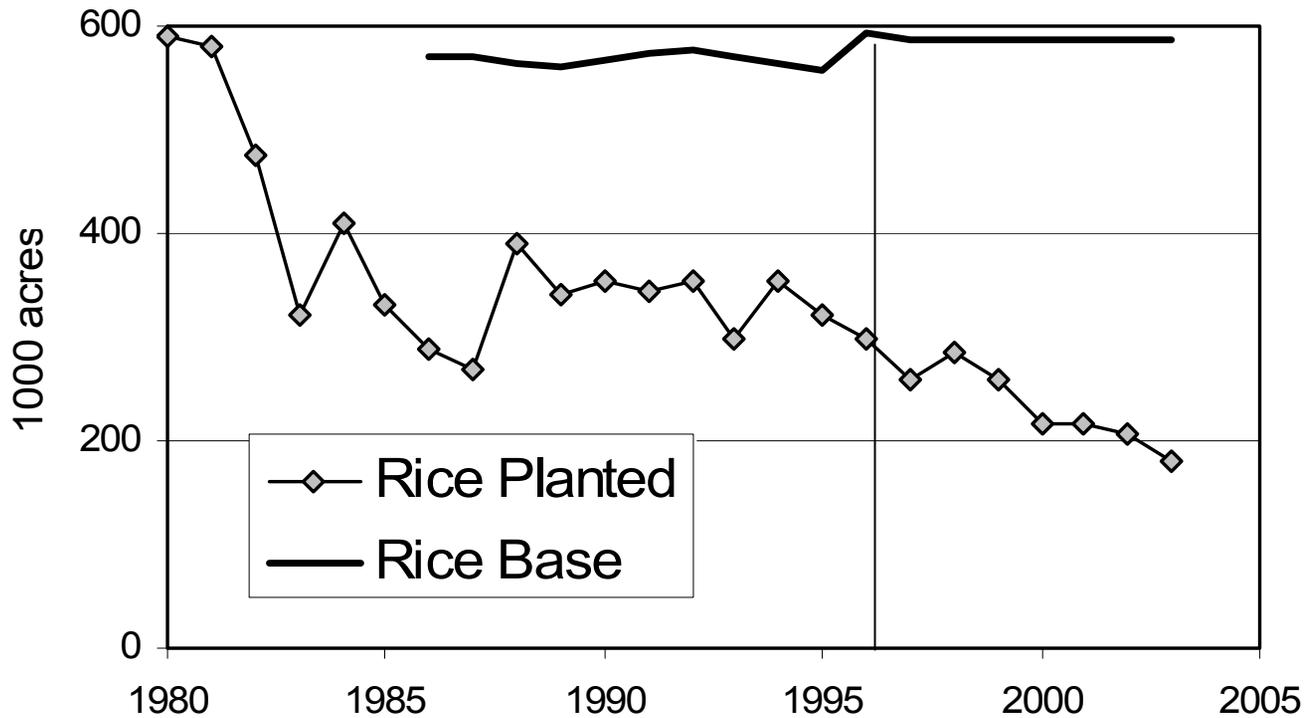
	PFC acres	Acres planted to PFC crops	Percent of acres planted to PFC crops
	million acres	million acres	percent
Wheat	78.2	59.6	76.2
Rice	4.1	3.3	80.5
Upland cotton	16.2	15.5	95.7
Corn	81.5	75.8	93
Sorghum	13.5	10.3	76.4
Barley	11	5	45.5
Oats	6.5	4.4	68
Total	211	173.9	82.4

Figure 6. 2002 Cotton Planting relative to Cotton Base



Planting Flexibility - Texas Rice

Texas Rice Area: 1980-2003



Future Directions:

- Changes in farm policy context calls for broadening the analytical framework beyond farm production model –
- Extend analysis to encompass the microeconomic behavior of households
- Model-building that includes household behavior (consumption, savings, investment, time allocation) and farm model
- Data and models – still in early stages

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