

Local Ownership in Biofuels Production: A Strategy for Rural Development?

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Overview for Talk

1. Argue that some of the reasons suggested for promoting local ownership are problematic
2. Talk about market structure: winners and losers of biofuels policy
3. Suggest a role that local ownership *can* play
4. Suggest possible alternatives to more effectively leverage federal biofuels policy

Preliminaries

- ▶ Rural development is the policy objective, not local ownership *per se*
- ▶ Federal biofuels policy is aimed at *energy independence* and *conservation*...not rural development
- ▶ Local ownership is a tool for state and local governments to leverage federal biofuels promotion policy
- ▶ Is it an effective tool for this purpose?

Local ownership benefits

“Double Dividend” Hypothesis Local ownership promotes rural development by enhancing the impact of local economic activity

“Diversification” Hypothesis Ownership of corn-ethanol refining capacity is a good risk management strategy for corn farmers

Problems with the "Double Dividend" Hypothesis

- ▶ Profits can be negative!
- ▶ Handicapping from local ownership
 - ▶ Equity and scale
 - ▶ Risk bearing
 - ▶ Lack of complementary businesses units
 - ▶ Centralized marketing and administrative support
- ▶ Can locally owned facilities compete in the long-run?
- ▶ It's not as simple as taking profits from one pocket and putting them in another
- ▶ **Aside:** Is this the right place for cooperative activity?
 - ▶ Competition/Capital

Problems with the "Diversification" Hypothesis

- ▶ In simple terms, substitute price risk in farming for price risk in the ethanol market.

$$\begin{aligned}\text{Corn Producer's Joint Profit} &= \text{Corn Price} - \text{Farm Inputs Price} \\ &\quad + \text{Ethanol Price} - \text{Corn Price} \\ &= \text{Ethanol Price} - \text{Farm Inputs Price}\end{aligned}$$

What Can Local Ownership Do?

- ▶ Reward from good investment is fully absorbed by community
- ▶ Redistribute economic surplus (which arguably is largely the result of federal subsidies and trade restrictions) within the biofuels market segment
- ▶ Winners and losers from federal biofuels policy
 - ▶ The Actors:
 - ▶ Retailers, Distributors, Blenders
 - ▶ Ethanol Producers
 - ▶ Farmers, Landowners, Farm Input Suppliers
 - ▶ Local Communities
 - ▶ How are "policy rents" distributed across these actors?

Distribution of Gains and Losses

Group	Percent Share of Gains from Subsidy	
	Short Run	Long Run
Corn Producers	16	78
Ethanol Producers	61	34
Ethanol Buyers	31	21
By-product Buyers	1	9
Feed/Export Buyers	-13	-75

Source: Gardner, B., "Fuel Ethanol Subsidies and Farm Price Support," *Journal of Agricultural and Food Industrial Organization*, vol. 5(2), 2007.

Local Ownership Share At 25 percent of capacity locally owned, 15% of federal subsidy is captured through local ownership in the short run, and 9% in the long run (assuming feed buyers aren't local!).

Policy Alternatives

1. Encourage organization among farmers and landowners who supply inputs: Add value in assembly
2. Targeted property taxes (on plants and farmland owners):
“Siphon off” policy rents into public coffers
3. Assist with negotiations for siting rights: Ensure that communities capture locational value