

CSA Market Power: Implications of Geographic Isolation and Non-Pecuniary Producer Motivations

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Outline:

- Introduction:
 - Local Food Market
 - Alternative Food Networks
- Community Supported Agriculture
- New Empirical Industrial Organization
- Spatial Differentiation
- Conventions Theory

Local Food Markets: Re-spatializing the food system

- Movement that set out to oppose the status-quo of the industrialization of agriculture.
- Seeking to fill the Geographic and Ideological gaps left by industrial agriculture.
- Alternative Food Networks.
 - Transparency
 - Quality
 - Embeddedness
 - Localness

Alternative Food Networks: Four General Trends

1. Tend to have significantly shortened distances between producer and consumer.
2. The size and scale of the farm is smaller, usually organic or holistic as compared to agribusiness oriented farms.
3. Utilize alternative food purchasing venues like cooperatives, farmers' markets, and Community Supported Agriculture (CSA).
4. Exhibit a commitment to the social, economic, and environmental considerations of food production (Jarosz, 2008).

Community Supported Agriculture (CSA)

- Re-establishment of human connection at the meeting place of agricultural production and food consumption.
- ‘Commensal Community’ (Kloppenburg, 1996)
- Counter-Hegemonic

Do (can?) CSA producers exhibit Market Power

- Little attention has been paid to marketing and behavior of CSA producers.
- Traditionally, CSAs have an inherently finite market area.
 - Members travel to the farm to get their boxes.
 - Thus the development of the 'commensal community' identified by Kloppenburg
 - This has started to change as producers provide multiple pick-up locations.
 - Losing the commensal community?
 - Moving back to an 'atomistic market relationship'?
 - Does it matter?
- Is there then variation between producers and is this variation visible in their willingness to exert market power?

New Empirical Industrial Organization (NEIO)

- Direct, empirical measure of market imperfection.
- Typically used in the considering the effects of market concentration and potential monopolies of large firms
- Lass et al. (2004) applied it to CSA's and found that the producers under consideration exerted less than 4% of available market power.
 - Speculates that despite that apparent opportunity to exercise market power, they do not significantly for potentially altruistic reasons.
- Can we use what Lass et al have found and dig into both the true ability and willingness to exercise market power?

NEIO: Determining the Degree of Market Power Exercised

Basic Profit Maximization Eqn:

$$\pi = p(q, Y)q - C(r, q, E);$$

$p(q, Y)$ is inverse demand function

q = number of shares sold

Y = a vector of demand shifting exogenous variables

$C(r, q, E)$ = total cost

r = vector of input prices

E = a vector of exogenous factors that affect farm production

NEIO: Determining the Degree of Market Power Exercised

From the FOCs we can identify a λ which is an index of departure from perfect competition ($\lambda \in [0, 1]$) Where 0 is perfect competition and 1 is monopoly.

Done through the estimation of the supply and demand equations.

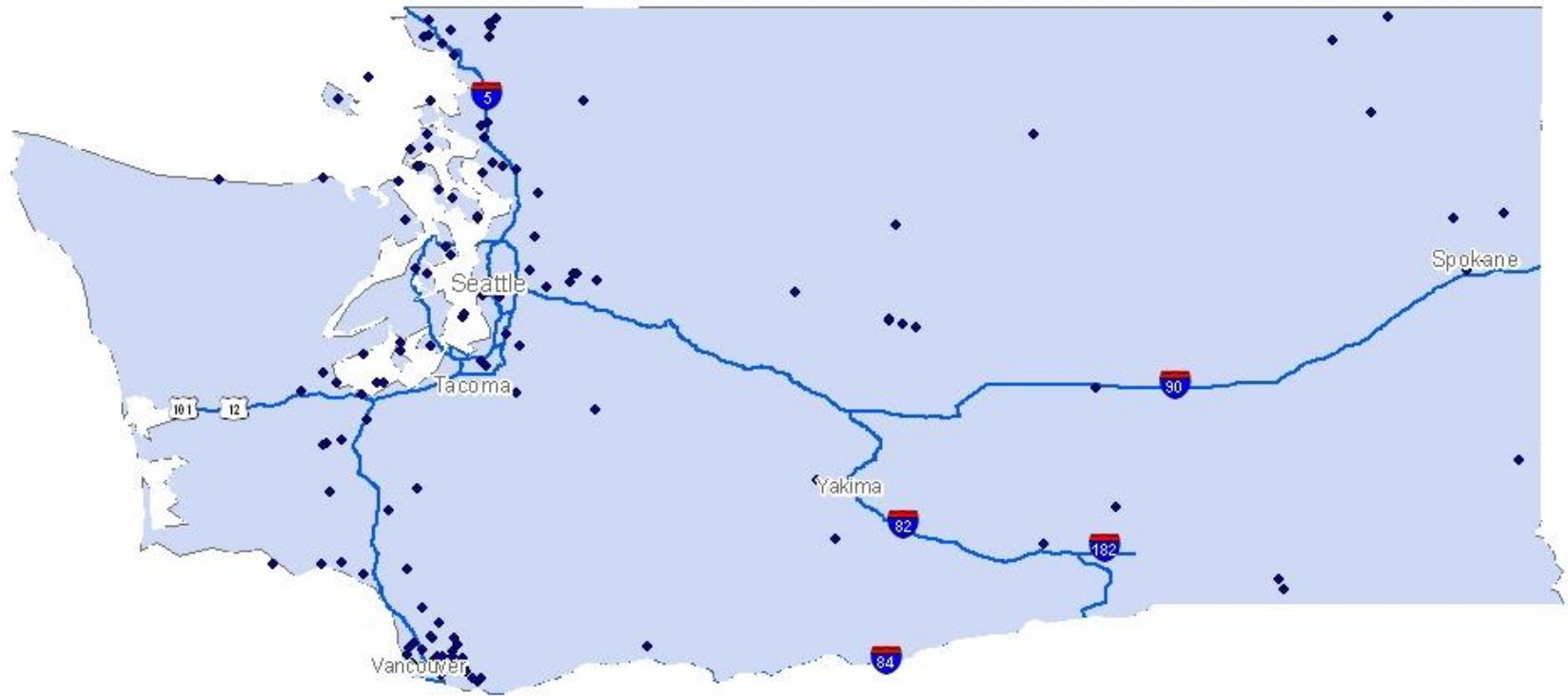
CSA in Washington State

- Washington has the third most Certified Organic Farms, behind only CA and WI, with 886 (organic and exempt).
- Sixty (60) of these producers operate a CSA or some kind of subscription service (NASS, 2008).

CSA in Washington State

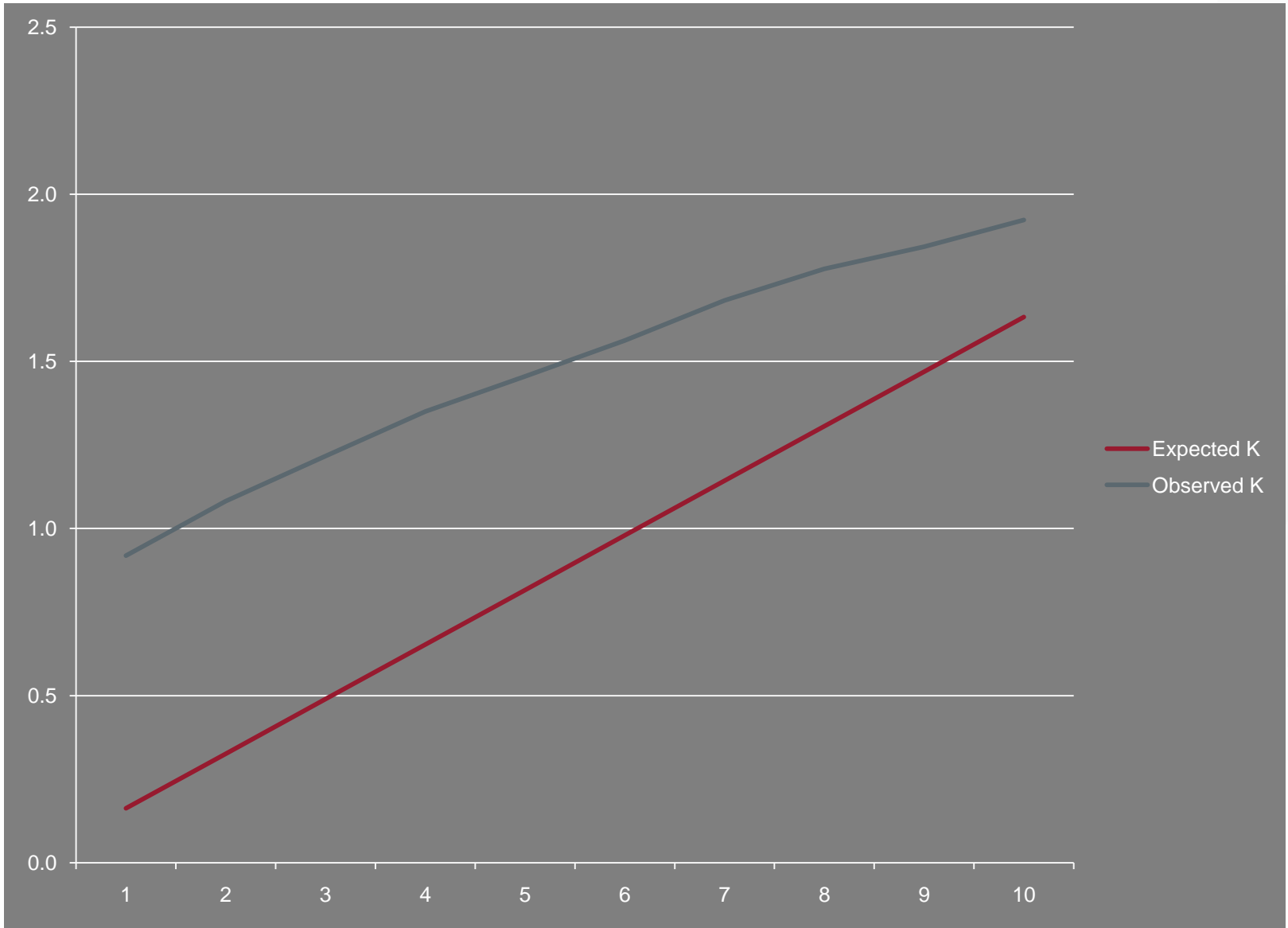
- 2008 Survey of all Certified Organic Producers in Washington
 - Of the 349 who returned the survey (56% response rate), 60 participated in a CSA.
 - None ran only a CSA
 - 25 ran a CSA in addition to marketing via conventional routes (wholesale)
 - All but 3 ran some other form of Direct-to-Consumer marketing in addition to their CSA

Washington State CSA's

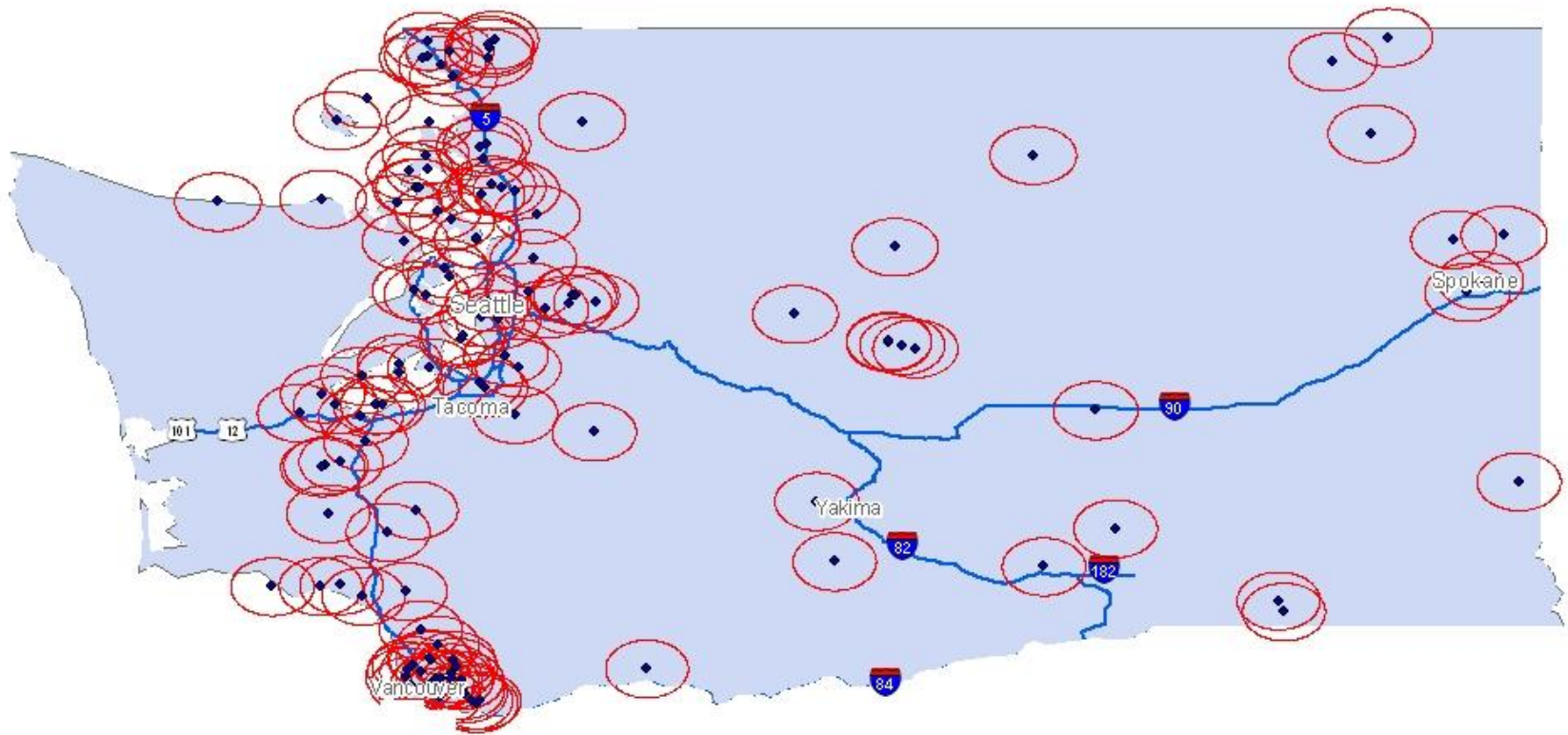


◆ CSA Locations





Washington State CSA's

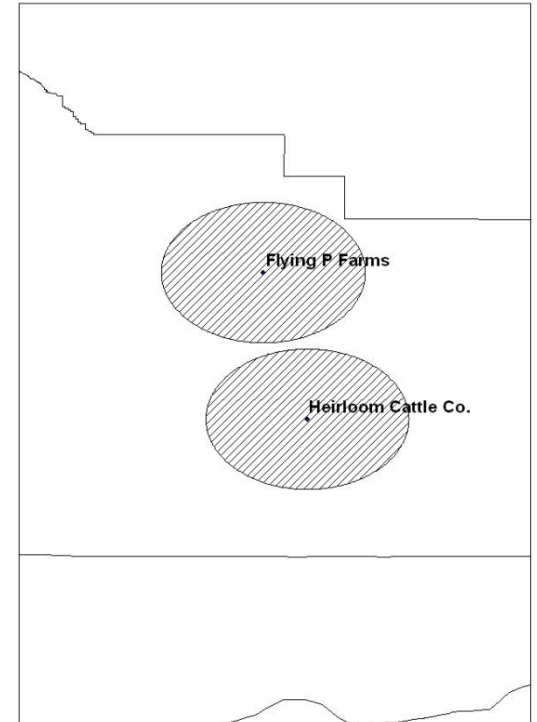
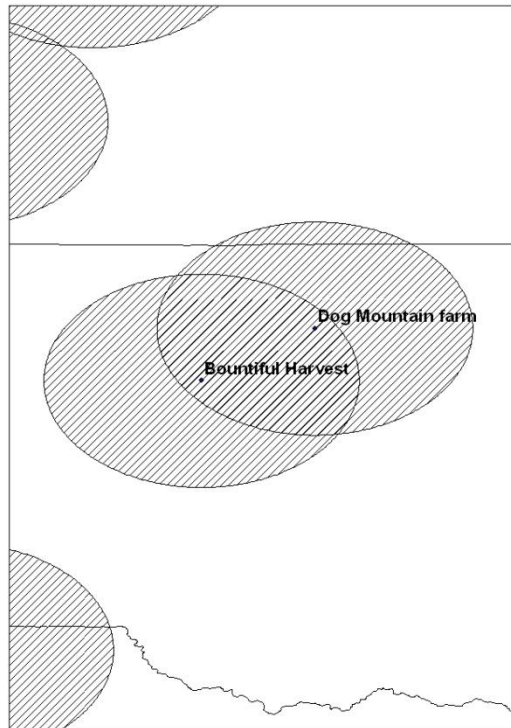
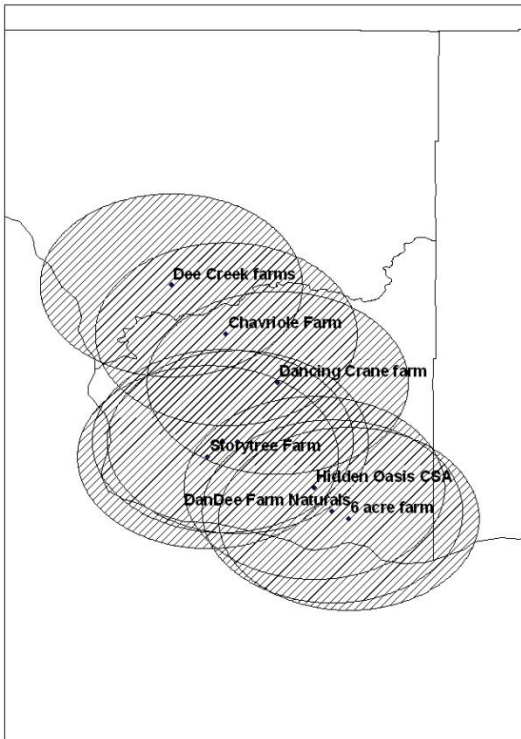


• CSA Locations

□ 10 Mile Buffers



Varying Degrees of Overlap



How do these CSA locations thus affect λ ?

- The spatially isolated market assumptions may not hold everywhere.
 - CSAs themselves are clustered
 - 'Typical' CSA consumer may also be clustered.
- Producers broadening their 'local' by increasing their delivery sites.
- Suspect that as the degree and quantity of overlaps increases, thus λ decreases.

Conventions Theory (CT):

- Developed as a socio-economic perspective on social interaction by French scholars
 - Sociologists: Boltanski, Desrosieres, Pharo...
 - Economists: Eymard-Duvernay, Favereau, Thevenot
- Explanations located in the negotiated interchange among actors that established shared understandings of the parameters within which the exchange occurred.
 - Optimizing more than profit?

Applying Conventions Theory:

- **Market performance**
 - Prices (and the capacity to claim a price premium)
- **Industrial efficiency**
 - Efficiencies in production and distribution to set standards
- **Civic Equality**
 - Contribution to good of civil society
- **Domestic Relations**
 - Personal Relationships (actual or virtual)
- **Inspired**
 - Higher ideal based on passion, emotion or creativity
- **Renown**
 - Public opinion and general social standing
- **Green** (Thevenot, 2000)
 - Contribution to good of the environment

How do we begin to get at the convention(s) of producers:

Factors	Mean Scores on a scale from 1 ("Not Important") to 5 ("Very Important")	Likely Convention
Price Premiums for certified organic products	4.07	Market
Consumer Demand for organic products	4.06	Industrial
Economic sustainability of farm	4.05	Market
Land stewardship / environmental sustainability	4.04	Civic/Green
Quality of organically grown produce	3.85	Renown
Health of Consumers	3.81	Civic/Green
Personal, family, or farm worker health	3.71	Civic/Green
Community values / quality of life	3.65	Civic/Green
Challenging, intellectually appealing	3.34	Inspired
Reduced dependency on large corporations	3.24	Civic/Green
Philosophical or spiritual reasons	3.22	Inspired
Local marketing opportunities for certified organic products	3.18	Civic/Green
Means of farm diversification	2.99	Market
Customer or buyer required organic certification	2.98	Market
Humane treatment of animals	2.94	Civic/Green
Interest in learning new production methods	2.94	Domestic
Desire to pass farm to next generation	2.91	Domestic
Social justice / equity concerns	2.71	Civic/Green
Opportunities to network with other farmers	2.65	Domestic
Reduced input costs	2.38	Market
Overseas marketing opportunities for certified organic products	1.81	Industrial

Nonresponses ranged from 8 to 25

What can we then hypothesize about producers under various worlds:

- **Market performance/Industrial efficiency**
Exercises the highest degree of λ ; likely the largest producers in an area, with highest number of locations.
- **Civic Equality/Green Values**
Exercise lower levels of λ than the Market and Industrial oriented CSAs; variable size.
- **Domestic Relations/Inspired/Renown**
Exercise the least λ , likely the smallest of producers.

Conclusion:

- As CSAs become a popular avenue for those seeking 'local' means of food acquisition, it is likely that increasingly market oriented producers will begin (and even have begun) to offer this option.
- NEIO in conjunction with CV and geographically enabled models can elucidate the production spectrum and thus its impact on the structure of the market.
- Next Steps....