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Expanding The Farmer's Share of the Food Dollar: Exploring the Potential Effects of Emerging Food Supply Chain Models

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In response to growing public interest in regionally-focused food systems, a proliferation of business models for expanding sales into these markets is occurring. Given that some of the growth in regional food systems is anchored in the idea of increasing the share of the food dollar retained by farmers, if not their allied business associates and communities, it is important to understand how different models address those goals.

Figure 1 illustrates three commonly discussed food system models (direct marketing, intermediated markets, and commodity food chains) in the context of one key indicator that is also of interest to a variety of food system stakeholders: the farmer's share of the retail dollar. Although there are always exceptions to the rule, it is fairly generalizable that these food enterprise models also vary in terms of the managerial control retained by the producer(s), and pricing power the producer(s) may have within markets or in negotiating the value of their product. Finally, the market value potential as defined by the total share of food dollars spent in different market channels. Currently, commodity markets represent the most common markets for food, although direct and intermediated market shares have expanded over the past decade.

Figure 1: Dollar Bill Series in Local Food Business Models

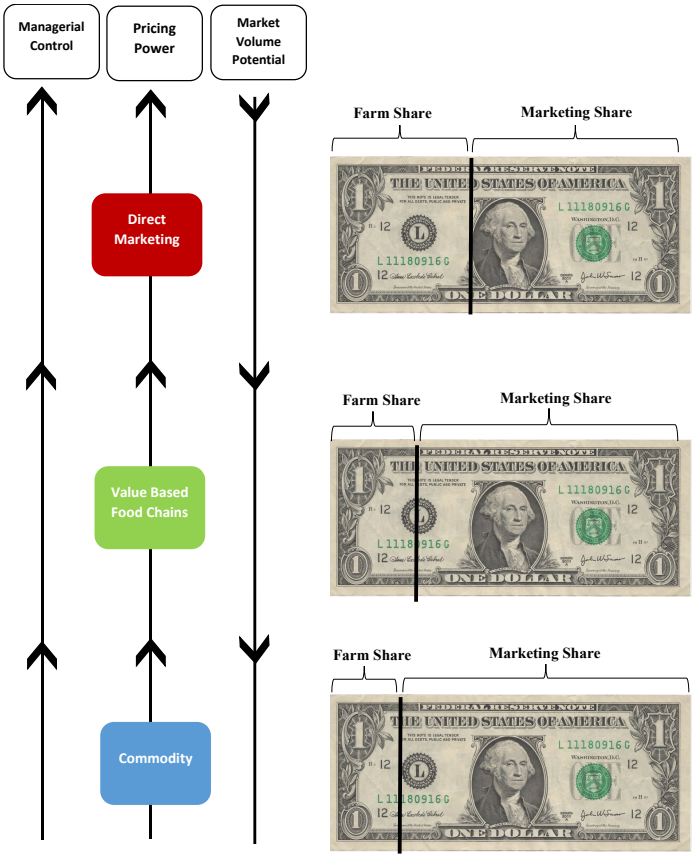

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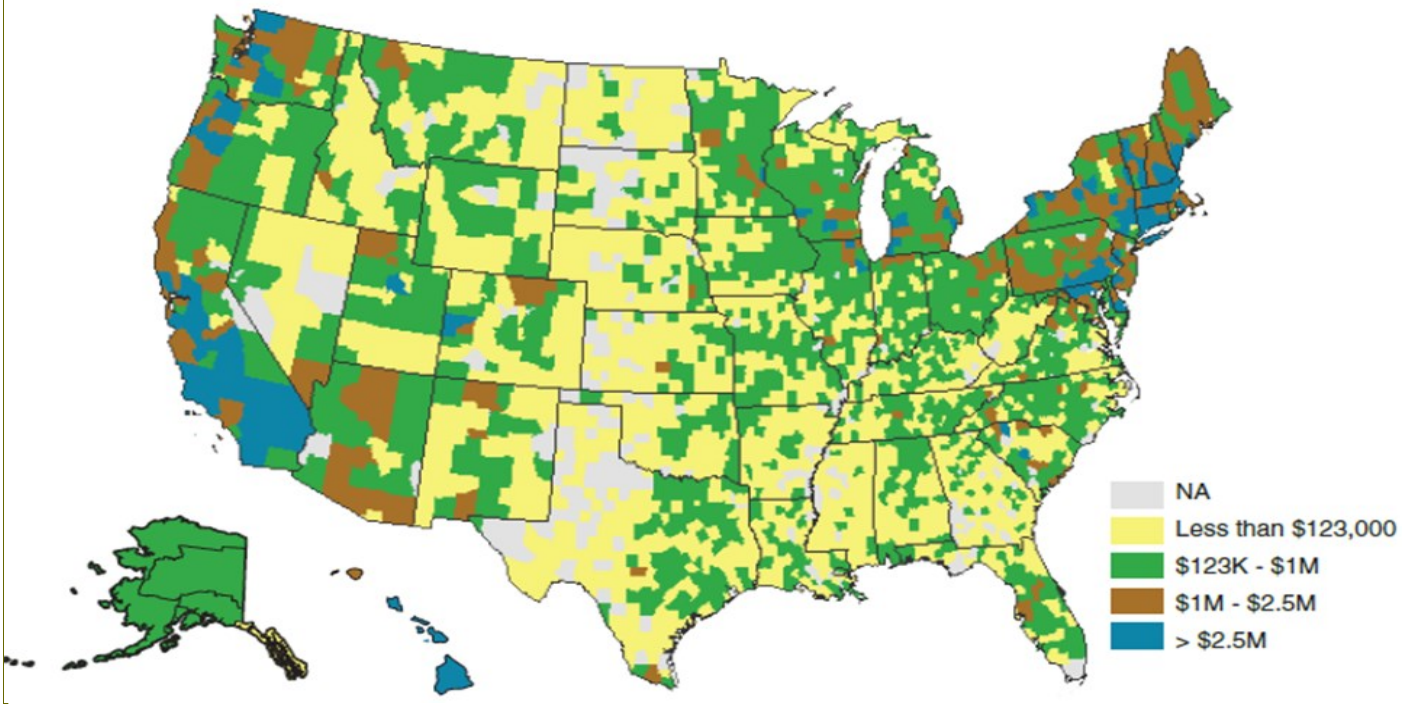
Figure 2. Direct to Consumer Sales, by County 2012



Source: Low et al, 2015

Due to shorter supply chains and greater market autonomy, enterprises focused on sales through farmers' markets, community supported agriculture, roadside stands and online marketplaces allow the farmer to capture more of the value added and marketing margin associated with their products. These outlets allow the producer to maintain a high degree of managerial control and influence over their pricing, but also typically have relatively low sales volumes and limited ability to scale up due to the challenges of managing all of the supply chain logistics

Figure 1 shows that, as we move from direct marketing to intermediated markets, we expect that farmers are able to retain some of higher value per unit associated with direct marketing, while enabling larger volumes of sales due to collaborations, cooperative enterprises, or other organizational relationships that allows for the aggregation and/or more broad distribution of individual farmers' outputs. Managerial control ranges from full control to shared/limited control, depending on the type of intermediated market. Farmers have a medium degree of control over their pricing, as they are now competing in the wholesale market. In general, farmers participating in intermediated markets receive a smaller share of the food dollar, when compared to direct marketing outlets. Yet, since market volume potential in wholesale channels is much higher, this can be a successful business model for many producers.

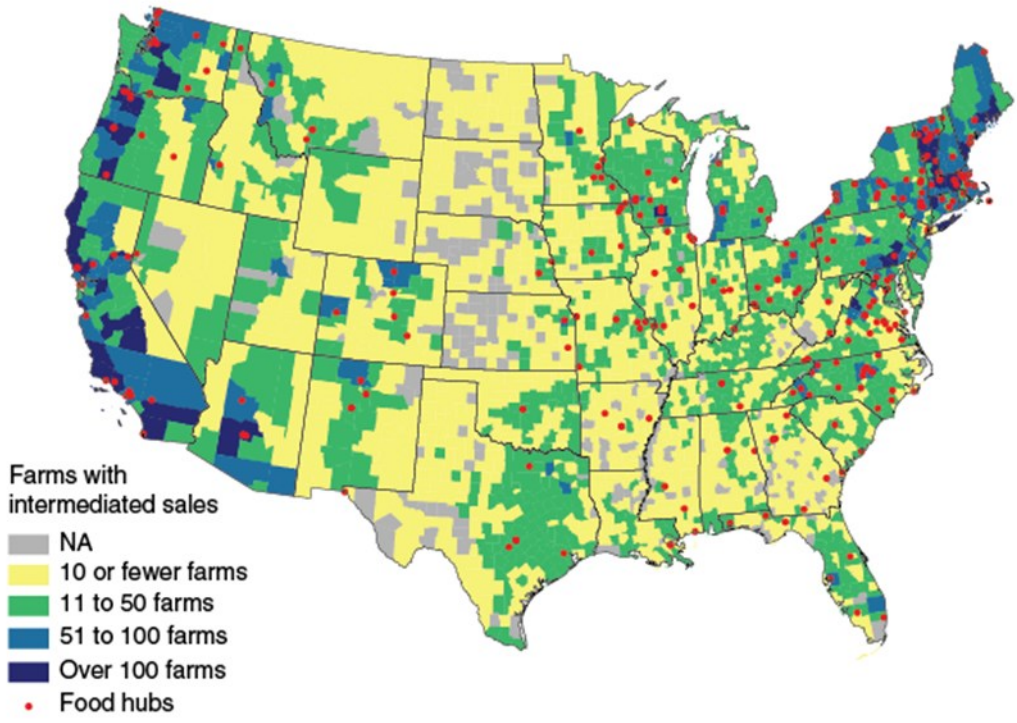
Table 1 provides another way to consider the differences between different marketing models in three dimensions that may also influence the local economic contributions and financial viability of enterprises that adopt such models. As direct marketing's generally smaller scale may lead to more labor intensive management, customer service (to serve niche markets), and local orientation, such enterprises may have a great relative impact in their regional economies, although potentially at the expense of farm profitability.

In comparison, Table 1 shares that intermediated supply chains may still have a more local orientation (because of managerial control retained by producers), but margins may decrease in efforts to scale up into more wholesale buyers and accounts. It should be noted that farms participating in intermediated food chains are generally found in urban areas, as seen in Figure 3. In 2012, although less than 30 percent of local food farms reported selling through intermediated food chains, they account for almost 80 percent of all local food sales (Low et al., 2015).

Table 1: The Flow of Money among Different Local Food Models

	Direct Marketing	Interrmediated Markets	Commodity Markets
Differential Expenditure Patterns	Larger share of expenditure spent on labor, marketing, and in local economy	Larger share of expenditure spent on labor, marketing, services, and inputs	Higher capital expenditures and purchased inputs, less money spent in local economy
Competitive Advantage	Returns to intensive management, niche market differentiation	Returns to quality differentiation, localized networks	Returns to extensive management, technical and scale efficiency
Potential for Regional Economic Spillovers	Larger labor income and local expenditure may expand farm labor household income and support local businesses	Larger local inputs and labor costs may expand multipliers to households and enterprises	Margins may be slim and expenditures may be spent outside region, but volumes of sales are high
Community Development Implications	Enhanced linkages between farmers and consumers generate social and political capital	Expanded opportunities for entrepreneurship, regional identity/branding	Larger farms garner political capital; high volume allows linked businesses to operate at capacity

Figure 3. Farms with Intermediated Sales (2012) and Food Hubs (2014)



Source: (Low et al., 2015)

The last broad marketing strategy considered here is a commodity food chain, characterized by independent marketing transactions with traditional wholesale distributors or shipping point markets. While farmers maintain ownership of their farms, they lack managerial and pricing control beyond the farm gate due to pressures to maximize throughput within distribution companies, which carry many different product lines and do not differentiate agricultural products at the farm level (in other words, production differentiation generally happens through marketing rather than based on product attributes). The relatively smaller operating margins generally leads farmers to increase production in the hopes of increasing profits through higher volumes, lower input costs due to economies of scale, and risk management through forward/future contracting and government support programs.

Figure 1 shows that farmers in this category receive the smallest share of the food dollar in a relative sense as all marketing activities are left to those downstream in the supply chain. Due to the large market potential, open market access, and government/research incentives associated with this category, many farmers have chosen to pursue this business model. Table 1 would suggest that the viability of these farms is relatively more dependent on technical ability and scale aspects of efficiency, so it may feel like a greater sense of control to production-oriented operators. Yet, the search for scale (and the general move to mechanization) and lower input costs often through bulk purchases that are nonlocal may lead these firms to be less linked to their regional economy.

To further explore local and regional food systems, we previously proposed a typology of business models that expanded the simple three-regime schematics above, and employ representative categories (Figure 4). Our typology builds on a schematic first developed by The Ag of the Middle group to categorize value chains (now reframed as intermediated markets to be consistent with USDA terminology) in the early 2000's (http://www.agofthemiddle.org). Revisiting our discussion from above, if one assumes similar price points and fewer market intermediaries, the direct marketing categories represent high-margin outlets that may return a larger share of the consumer dollar to the participating farmers.

Figure 4. A Classification Scheme of Local Food Business Models

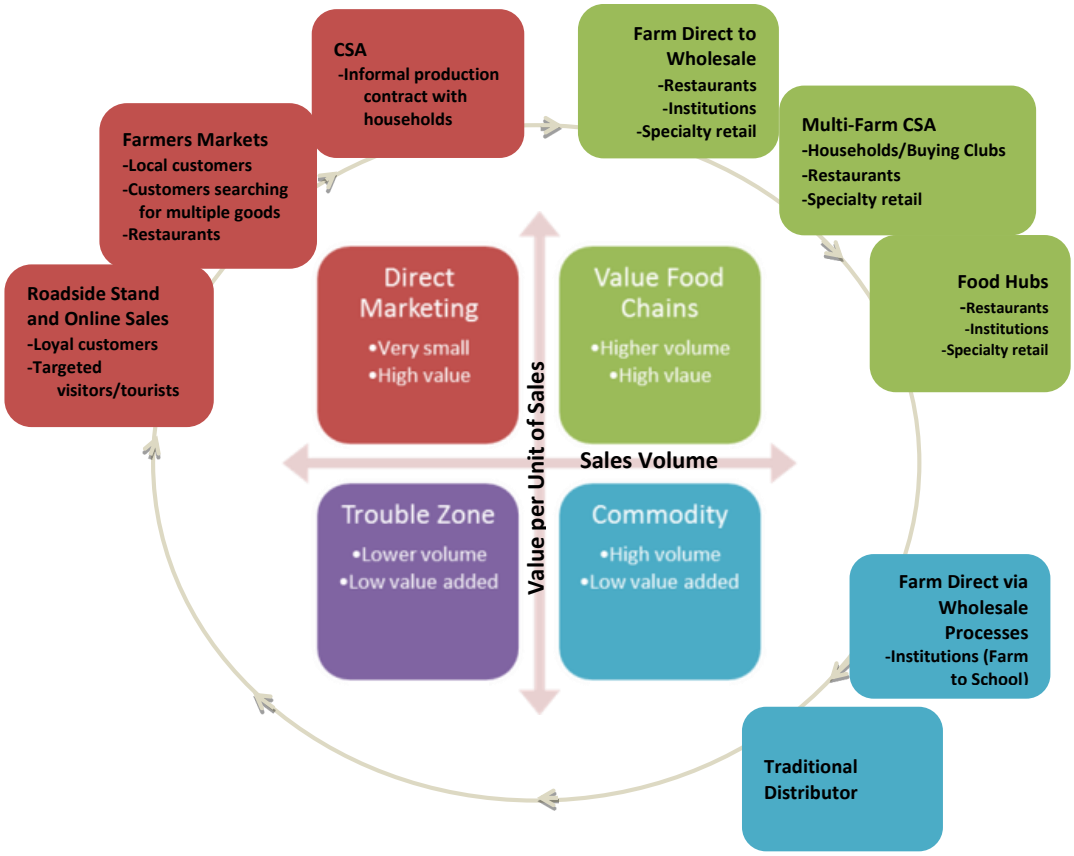


Figure 4 represents a variety of the most common food system enterprises, both local and non-local. The typology can be divided into four quadrants using the sales volume as the horizontal dimension and the value-added (operating profit margin) per unit of sales as the vertical dimension. The types of models are ordered, and connected by arrows, to represent common evolutionary steps that operations may take if their current marketing choice or portfolio evolves with plans to expand or decrease in scale, as new marketing opportunities appear or financial challenges arise. The top two quadrants (and their subcategories) will be the focus, as they correspond most directly to the business ventures found in local and regional food systems, and as Low, et al. (2015) reported, these intermediated sales may also be the future for growth in these markets. increases in technology, production management and agronomic practices.

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